

RECRUITMENT AND RETENTION OF SCHOOL BUS DRIVERS  
IN RURAL SCHOOL DISTRICTS: A QUALITATIVE STUDY

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The purpose of this study is to investigate the challenges faced by rural public-school districts in maintaining sufficient school transportation staffing. In particular, the study explores the existing practices and perceptions of transportation personnel and bus drivers in rural public-school districts as they pertain to transportation staffing. A central goal of this study is to determine what, if any, strategies are used by districts to recruit and retain drivers in these districts and what factors influence drivers' employment decisions. The study was conducted in three rural public-school districts located in northern Indiana. A qualitative research design was used, including interviews and focus groups comprising 25 participants. Three findings were obtained from the analysis. First, school districts generally do not use formal recruitment strategies to attract bus drivers. Second, school districts engage in supervisory practices that they believe create favorable conditions to increase bus driver retention. Third, policy factors, particularly related to bus driver licensing, significantly impact these districts' ability to on board new bus drivers. It was found that school districts should target their recruitment efforts to a specific population likely to enter their profession, rather than putting efforts into broad-based recruitment. Moreover, it is incumbent upon administrators to maintain positively perceived working conditions to retain existing drivers and be viewed favorably by potential drivers in the community. Existing regulatory policies prevent individuals from seeking and obtaining

licensure to become bus drivers and require review to increase the labor market of potential drivers.

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## **Chapter 1: Introduction**

School districts across the nation have struggled to fully staff their transportation departments. Professional organizations have confirmed this phenomenon. In a 2016 survey of members from the National Association for Pupil Transportation (2016), 52% of the respondents, two-thirds of whom were transportation directors or supervisors, stated that the current bus driver shortage was their primary concern, while another 34% said it was a major problem, but not their worst problem. Other trade magazines and newspapers have confirmed this shortage (DeNisco, 2015; Glavan, 2016; Hooper, 1999). Today school districts are still struggling to find a sufficient number of drivers. In a joint survey conducted by the National Association for Pupil Transportation, the National Association of State Directors of Pupil Transportation Services, and the National School Transportation Association, 65% of the respondents said that bus driver shortage is their primary problem, with 51% of them stating that their specific shortage was “severe” or “desperate” (National Association of State Directors of Pupil Transportation Services, 2021).

Bus driver staffing shortage can be financially costly. A month-long strike by New York city’s school bus drivers costed the district \$20.6 million, as the students were forced to take taxis and public transportation to get to school (NYC Bus Strike Ends, Costing Millions, 2013). The strike, an intentional staffing shortage, illustrated the difficulty of replacing large numbers of school bus drivers on a short notice. Non-strike-related staffing shortage also create significant disruptions to student learning. In 1996, “nearly 1,000 of the 50,000 students who take a bus in Chicago were stranded after the first day of school ended because 35 of the district’s 1,900 drivers had not shown up for work” (Manzo, 1996, p. 5). In Chicago, the issue was unanticipated school bus driver truancy.

Bus driver staffing shortages can also be costly in terms of student time. At the end of the 2015–2016 school year, an urban district in Indiana only had 100 bus drivers to fill 144 bus routes. The Director of Transportation Greg Haltom said, “We’ve had to hold students numerous times at a school, and then have another driver go back and pick them up when they are done with their [normally scheduled] route” (Moberger, 2016, p. 1). Thus, for these students, an insufficient number of drivers resulted in waiting at school or a longer bus route at the expense of student time. In discussing the effects of school consolidation on rural school districts and the often resulting lengthy bus rides, one researcher noted that, according to policymakers, “the cost of students’ time is assumed to be zero” (Howley & Smith, 2000, p. 2).

If it results in longer or doubled bus routes, bus driver shortage can lead to lower student achievement. Lu and Tweeten (1973) found that the test scores of 4th-grade students in their study declined by 2.6 points for every hour spent on the bus. Bard et al. (2006) documented cases in rural districts where student bus rides exceeded one hour and twenty minutes in length. Cordes et al. (2022) came to similar conclusions. Rural students may be affected differently by bus driver shortages. Furthermore, rural school districts’ administrative structures may be affected more acutely by bus driver shortages, which may adversely affect student learning. In rural schools, administrators are often tasked with a multitude of other fiscal, transportation, and building operation tasks, in addition to instructional leadership activities (Kamrath, 2015; Wylie & Ernestine, 1991). Yet, if a teacher or a principal is removed from the classroom or the office to drive a school bus route or must scramble to rearrange bus routes due to a sudden or planned lack of school bus drivers, their energy and attention are diverted away from instructional leadership activities, which is not optimal for supporting student learning (Fink & Resnick, 2001; Horng & Loeb, 2010).

## Background

So far, only a few formal studies have explored school bus driver staffing. School transportation as a whole has been largely ignored as a subject of interest, study, and research. Cox (2014), a senior fellow at the Heartland Institute, noted,

“In the U.S. Department of Transportation’s National Transportation Statistics neither the terms ‘school’ nor ‘school bus’ appear in tables summarizing the number of vehicles (Table 1-11), vehicle travel (Table 1-35), passenger travel (Table 1-40) and others. At the same time, there is far more complete information on virtually every other form of travel.”

Where research does exist, school transportation literature “principally considers the costs of, equipment for, and maintenance of, and management of transportation systems” (Howley & Smith, 2000, p. 8). Researchers rely on less formal sources when discussing school transportation. In attempting to gather data on the total number of school bus drivers nationwide, the National Center for Educational Statistics (2016) cited the trade magazines *School Bus Fleet* and *School Transportation News* as a source of data. Alexander (1990) published “Public school pupil transportation: Rural schools” in the *Journal of Education Finance* and cited statistics from the *School Bus Fleet* as the only available data to bolster one of his claims.

Howley and Smith (2000) explained a possible rationale as to why little research has been conducted on the issue of rural school busing:

“A discussion of the 20<sup>th</sup>-century school consolidation and professionalization trends and of the dominant, functionalist framework for educational research suggest that the functionalist tradition privileges some topics of research over others. In particular, the concerns of rural families and communities about busing, often raised in protest to long bus rides and rural school closures, were in opposition to the prevailing views of professionals and functionalist researchers and, therefore, unlikely to provide much research interest.”

Research and exploration into school consolidation’s negative ramifications for rural communities and, by extension, rural bus routes and bus drivers may have raised serious objections to the push for school consolidation. Therefore, researchers may have avoided this area of scholarship. This

quote speaks particularly about rural schools' transportation systems but can broadly apply to school transportation staffing and the paucity of research exploring related phenomena.

## **Purpose**

The purpose of this study is to explore how rural public-school districts in Indiana recruit and retain drivers, the knowledge of which will assist schools in meeting their transportation needs. School transportation is a neglected area of research and, thus, a worthy topic of study. I focused on rural public-school districts because they are seldom studied and are a unique context. For this study, a smaller subset of school districts was explored as individual cases, allowing for an in-depth description of their school transportation staffing. Public schools in Indiana were chosen because they uniformly operate under the same statutory provisions regarding equipment and driver regulation found in the Indiana state statute (I.C. § 20-27). They also fund their buses and bus drivers from the same uniform system of local property taxes. Until December 2018, when the data were collected, these funds included the Transportation Fund (I.C. § 20-46-4) and Bus Replacement Fund (I.C. § 20-46-5). While some private and charter schools meet the definition of rural, their transportation funding mechanisms and public expectations regarding pupil transportation differ from those of traditional public schools.

Rural districts are often small in size (National Center for Educational Statistics, 2014), and their administrators are regularly tasked with a multitude of responsibilities, often including fiscal, transportation, and building operation tasks less often given to administrators in larger districts (Kamrath, 2015; Wylie & Ernestine, 1991). Thus, their instructional leadership duties were more likely to be detrimentally affected due to interruptions from transportation needs. This study examined Indiana school corporations that enrolled fewer than 1,000 students in the 2013–

2014 school year, the most recent year for which all relevant data were available (National Center for Educational Statistics, 2016).

Rural districts were chosen because they are more dependent on school buses for students to attend school due to the nature of their student populations. One study estimated that of all school buses on the road daily, “busing in rural areas today comprises at least 75% of the total miles” (Zars, 1998). For this study, rural districts were defined by the National Center for Educational Statistics (2016).

To approximate a common labor market and similar employee characteristics, three school districts that met the qualifications of being rural, public, and in Indiana that all lie entirely or partly within one county were chosen.

This study provides superintendents, transportation directors, and human resource personnel in rural public-school districts in Indiana an in-depth picture of how compensation and other non-wage factors affect the recruitment and retention of school bus drivers. Because little research exists on this topic currently, the findings are informative to school administrators as they attempt to recruit and maintain a sufficient number of school bus drivers. While what is relevant to this small group of districts may not be directly applicable to other school districts or larger urban and suburban districts, all administrators struggling with transportation staffing will find this information valuable for their purposes.

### **Research Questions**

This study explored the difficulties of attracting and retaining qualified bus drivers to rural school-district settings and sought to answer the following questions:

- How do three rural public-school districts in Indiana recruit and retain school bus drivers?

- What strategies do these rural public-school districts use to recruit and retain drivers, given the policy and district conditions surrounding them?
- What factors influence a driver's decision to remain in these districts?

## **Chapter 2: Literature Review**

### **Introduction**

For the literature review, we adopted Indiana University's library system to gather relevant research data. The search databases used in this review included Google Scholar, EbscoHost, and OneSearch; in addition, library research assistants were used to scan scholarly journals not available through online databases. Key terms included bus driver, school bus driver, and school transportation. The search results were reviewed, and relevant studies were analyzed to determine how they can further inform this study.

The purpose of the literature review is to identify what is known and not known about the recruitment and retention of school bus drivers. I have organized this discussion around various factors that the literature suggests can contribute to successful recruitment or improved retention. These include policy, district, and driver factors. A summary of this discussion will then be used to articulate a framework that will guide the analysis presented in this study.

### **Policy Factors**

Policy factors, such as school transportation funding, transportation and equality of educational opportunity, and regulatory oversight for school bus drivers and school bus equipment, affect the conditions surrounding successful recruitment or improved retention of school bus drivers. The literature surrounding these policy factors is explored here.

### **School Transportation Funding**

Funding policy influences the recruitment and retention of school bus drivers. Increased funding potentially means higher wages for transportation staff, newer buses for school corporations, and better equipment for students. Public funding for school transportation first began when the Massachusetts legislature appropriated funds for busing in 1869 after primary

schooling was made compulsory for all school-age children (Mills, 1972). “The two reasons contributing to the acceptance of tax-supported pupil transportation programs were: (1) The good business sense of the American people, what many could do alone inefficiently, the community could do as a whole more efficiently, and (2) the faith of the American farmer that his children would be afforded the same educational opportunity as their wealthier urban counterparts (Anthony & Inman, 1986, p. 415). At its inception, school transportation was created to provide equal educational opportunities to rural students through financially efficient means. Evidence suggests that school transportation is still achieving its intended purpose. Based on an analysis of data from the 2017 US Household Survey, rural students living beyond fifteen miles from their school are more likely to take the bus to school rather than drive, as are students from lower-income households (Adanu et al., 2020). The need for bus drivers still exists, and funding policy plays an important role in acquiring the required number of drivers.

School transportation funding is a decision left to individual states (McDonald & Howlett, 2007), making each state’s policy for transportation funding unique and meaningful to the bus driver labor pool. These funding systems were developed over time and became political challenges for state legislators, as growth in transportation expenditures consistently exceeded the growth rates for overall enrollment (Killeen & Sipple, 2001). This concern was particularly acute in rural areas where school consolidations created geographically large districts, and a greater share of districts’ educational budgets was typically spent on transporting children to and from school as compared to non-rural school districts (Alexander, 1990). Hanley (2007) found that school consolidation could result in an overall transportation cost increase of between 1% and 10%. In response to rising costs, policymakers and researchers have attempted to find more efficient and equitable funding policy mechanisms to account for different district features. They



calculated transportation costs using variables such as per-pupil costs and linear density of transported population, road conditions, wage rates, dispersion of school buildings, economies of scale, total bus miles traveled, square miles of districts, form of ownership, and type of school (Alexander, 1990; Baker & Duncombe, 2004; McKeown, 1978; Verstegen & Knoeppel, 2012; Zeitlin, 1990). State-level funding decisions affect how districts structure their bus routes and the overall transportation practices. These big-picture decisions, which are driven by funding, trickle down to the bus driver's daily lives and matter when districts are recruiting bus drivers.

Policy also dictates which students schools need to transport. Some states require uniform pupil transportation for all students, some states release districts from the obligation of busing students who live within a certain distance from school, and other states allow districts to charge fees based on certain criteria (McDonald & Howlett, 2007). States can also chose to not fund school transportation (*Kadrmas v. Dickenson*, 1988). However, few, if any, states have exercised this option. Instead, the majority of students in the United States take the school bus, with 54% of parents utilizing school transportation to get their children to school (National Association for Educational Statistics, 2016). American school buses are collectively the largest transportation system in the world, transporting 26 million students daily (Cox, 2014; National School Transportation Association, 2013). The ubiquity of bus systems in the country, picking up students who live close by and those who live very far away, means that there is a continual need for districts to staff their bus driving positions. The specifics of who must be transported are determined by each state's policy; thus, the overall funding policy environment for retention and recruitment of school bus drivers is unique to each state.

### *Indiana School Transportation Funding*

Indiana's funding is local funded, and thus varies considerably by district under current state statute. Districts may charge parents busing fees for activities, but they may not charge fees to cover regular school transportation costs (Hoagland v. Franklin Township Community Schools, 2015). Rather than receiving funds earmarked for transportation from the state, Indiana districts pay for the majority of district transportation costs through local property taxes (Boyland & Bourke, 2012). Prior to budget year 2019, these taxes were levied for the Transportation Fund and the School Bus Fund at rates deemed appropriate by local school boards within certain limits. These funds were used to pay for transportation personnel and equipment. Annual revenue was limited by a maximum levy calculated by a state formula and a property tax cap limited by district-assessed values. These two limits created financial hardships for districts with historically higher property tax rates (Stokes, 2011) and resulted in one district's attempt to dispense with school transportation completely (Boyland & Bourke, 2012; Hoagland v. Franklin Township Community Schools, 2015). However, prior to 2019, districts in Indiana could rely on a specific portion of their local property taxes to cover transportation costs, including paying for bus drivers.

In 2019, the revised fund compositions, Transportation Fund, and Bus Replacement Fund were merged with the Capital Projects Fund to form the Operation Fund. Transportation, district administration, custodial, maintenance, and capital project funding were henceforth appropriated from the Operation Fund, which continues to receive its revenue through local property taxes governed by the previously mentioned revenue limitations (I.C. § 20-46-4; I.C. § 20-46-5). With the Operation Fund now covering a wider gamut of programing, money previously allocated toward bus driver salaries and equipment could be shifted to other district needs. Indiana districts could eliminate transportation costs completely by discontinuing buses, as previously mentioned

(Hoagland v. Franklin Township Community Schools, 2015; Kardish, 2015), freeing up money for other district expenses. No district has pursued this recently, as it would likely result in students openly enrolling to a district where busing was provided, resulting in a reduction in state tuition support (Michael et al., 2009). Policies related to transportation funding in Indiana have changed dramatically over the last few years, and little research has explored the specific school transportation policy environment in Indiana and how it may affect districts' ability to meet their transportation staffing needs.

### Transportation and Equality of Educational Opportunity

School transportation has been used as a means to promote social goals and outcomes. These outcomes include increased opportunity for rural students who live further away from population centers through school district consolidation, racial equality of opportunity for students of color through busing and school choice, and equality of opportunity for special populations through statutory requirements. These policy choices affect school transportation and influence the recruitment and retention of bus drivers.

#### *School Consolidation*

State policies encouraging or requiring school consolidation have affected the environment for bus driver recruitment and retention. As discussed previously, improved roads and transportation technology meant that pupils could be safely transported over longer distances in less time, allowing for greater economies of scale. States passed legislation advocating consolidation to capitalize on these cost-saving opportunities and provide greater equality of opportunity for far-flung rural students (Smith, 1972). Research on school size, student achievement, and operational efficiencies has encouraged rural districts to consolidate even further (Duncombe & Yinger, 2007). While viewed as beneficial overall for student learning, a large-scale

study of school consolidation did not find “significant economies of size for transportation” (Duncombe & Yinger, 2007, p. 361). Transportation costs increased, and consolidation was politically unpopular with families because of long school bus rides for their children (Spence, 2000; Zars, 1998). According to Killeen and Sipple (2001), studies that encouraged consolidation failed to account for the opportunity cost of families’ and students’ lost time. Lu and Tweeten (1973) noted a decrease in student test scores with an increase in the length of the school bus ride. Longer rides for students also translate into longer routes for bus drivers. Consolidation with neighboring districts might also affect other transportation personnel, resulting in the sharing of other transportation services and personnel, such as a mechanic, bus barn, or bus administrator. A state transportation study highlighted concerns about unseen costs and a loss of local control due to consolidation (Minnesota Department of Administration, 2013). There are mixed data regarding whether consolidation reduces overall expenses, with one study finding no support for the prediction that consolidating non-instructional services significantly decreases service spending (DeLuca, 2013). Policies encouraging school consolidation thus have implications for available funding with which to compensate bus drivers and are likely to affect working conditions for school bus staff, as well as shaping the work environment for potential school bus drivers.

### *Court-ordered Busing*

Court-ordered busing also affects school transportation staffing. Schools in Charlotte-Mecklenburg, Detroit, South Bend, Boston, Louisville, and other urban districts were placed under court-ordered desegregation, with busing as the primary means of increasing achievement for historically disadvantaged African-American students and achieving racial population balance (Eaton, 2001; Reber, 2005; Wells & Crain, 1999). Court-ordered busing was not popular (Orfield, 1995; Pride, 2000), and by the 2000s, court-ordered busing for desegregation phased out (Welner

& Spindler, 2009). Many studies have explored the consequences of desegregation (Eaton, 2001; Reber, 2005; Swanson, 2017), and some research has explored the experience of students on these buses (Garcia et al., 2021); however, very little research has explored the logistical aspects of school transportation and staff involved. Zars (1998) suggested that the results of early studies of busing are tainted, as most research into busing stopped in the early seventies because “no researcher wanted to wade into a situation where their work could be used indirectly to promote or quash school desegregation” (p. 4). This can explain some of the paucity of literature surrounding school transportation and school transportation staffing during this period. Because bus drivers were the key personnel in enacting these unpopular court-ordered busing policies, these policies are likely to affect the desirability of bus driving positions and affect recruitment and retention.

### *School Choice*

Busing continues to be used by school districts and states to promote greater equity of educational opportunities through school choice initiatives, where students may be permitted to choose a school far from their home. A student’s distance from school deters them from choosing magnet, charter, and other district schools of choice, while school bus availability increases the likelihood that students will enroll in a non-neighborhood school (Gross, 2019; Schwartz et al., 2021). The students on these longer choice routes are disproportionately Black, and the long ride has deleterious effects on their attendance (Cordes et al., 2022). Designing school transportation systems around this level of choice improves equality of opportunity at the price of increasing the complexity of school transportation systems for the school staff who operate them, including drivers.

### *Special Student Populations*

Specific student populations receive regulatory considerations that impact transportation. The McKinney-Vento Act (1987) requires the school where the child presents themselves as homeless to work with the school where the child was attending to allow the student to continue attending their school of origin (Pavlakakis & Duffield, 2017; Wilkins et al., 2016). The law makes no exceptions for students who present behavior issues and for those whose new homeless location presents logistical challenges for a district's transportation operations. The law provides a funding mechanism to pay for these added costs through existing Title funds (Wilkins et al., 2016). Students with special needs also impact school transportation. The Individuals with Disabilities Act (2004) requires schools to transport students with disabilities from home to school based on their unique needs as determined in their Individual Education Program. Special transportation is required for students who may require wheelchair lifts or an instructional assistant for medical or behavioral needs, and any deviation from the student's Individual Education Program for more than 10 days constitutes a change in placement, which is a violation of the student's rights (Hensel, 2006). In both instances, school districts have limitations placed on their ability to make changes to their transportation programming and impact the school staff who run these programs on a day-to-day basis.

Research conducted outside the United States also indicates that school buses or school busing can be useful in addressing social inequalities and affect bus driver recruitment and retention because of their effects on driver working conditions. Urban planners have noted that well-designed bus systems increase student school attendance in Pakistan (Lodhi & Rana, 2021) and Sri Lanka (Abdullah et al., 2022), necessitating well-trained bus drivers to execute the complex system. Busing is currently being used in Denmark to better integrate students of color into their

public school system in a similar fashion to the court-ordered busing that occurred in the United States (Damm et al. 2021). Driver self-perceptions were negatively affected when they were required to implement this politically unpopular policy (Damm et al., 2021). Research on buses and schooling from Austria and Germany has found that increases in the quality of busing services result in increased bus ridership in rural areas (Beyer et al., 2018). In Australia, busing in rural areas may increase attendance in kindergarten-age students (Gottfried et al., 2021), and researchers have even proposed using school buses to transport non-pupils as a modified public transport system in order to decrease social inequality (Stanley, 2021). What all these international studies hint at but do not cover is how increasing demands and expectations of bus drivers within these systems may change the nature of these positions and affect the political entity's ability to recruit and retain personnel.

### Regulatory Oversight

Other regulatory oversights also affect the environment for school transportation and influence recruitment and retention. These include professional licensing requirements for drivers, regulations for school bus design, and regulations regarding bus driver equipment usage.

#### *Professional Licensing Requirements*

Policy regarding professional licensing requirements for drivers influences school bus driver recruitment and retention because it limits who can and cannot operate buses. These regulations have grown significantly and currently require a commercial driver's license and a state certificate. This profoundly influences the supply of drivers in school districts. As an example of how much they have increased, in 1988, Iowa and Wyoming permitted 16-year-old high-school students to drive school buses as part-time jobs under an exemption from child labor laws and commercial driver's license rules. Other states had similar rules. At the time, 1,200 of South

Carolina's 6,000 school bus drivers were 17-year-olds (Associated Press, 1988), and removing their eligibility diminished the available pool of bus drivers. Further restrictions were forthcoming. The most recent change was the Moving Ahead for Progress in the 21st Century Act, which was signed into law in 2012 and added more regulations for potential drivers, including requirements for certification of in-district trainers and a more in-depth Commercial Driver's License (CDL) skill test (PL 112-141, 2012). This law also cemented into place the requirement of extensive under-the-hood knowledge test items that some professionals believe are not required for operating a bus safely. "Knowing about these mechanical operations is the job of the mechanic, or whoever else actually maintains the vehicle, it's a driver's job to deliver students" (Materazzo, 2017, p. 2). With the school bus driver shortage caused by the COVID-19 pandemic, the federal government temporarily allowed states to opt out of the under-the-hood portion of the test in the hopes of relieving the severe shortage of drivers (Wisconsin Department of Transportation, 2022). States also have unique licensing requirements in addition to the Commercial Driver's License. In Indiana, this includes coursework for pre-service training, hours of observation and driving without students, and a yearly online course where regulatory updates can be provided (Indiana Public Law 123, 1977). Drivers must also maintain a valid Medical Examiner's Certificate from a licensed physician stating they meet certain health requirements (American Association of Motor Vehicle Administrators, 2005). As will be discussed later, bus drivers often suffer from poor physical health, and this requirement may be a barrier to retaining bus drivers later in their careers. More recently, COVID-19 vaccination requirements resulted in bus drivers exiting the profession or threatening to exit (Putterman, 2021). Other school bus drivers' lifestyle choices are also affected by policy. Fully licensed bus drivers live by a strict 0.04 blood-alcohol limit, which is less than the 0.08 standard for regular drivers. Some jurisdictions mandate a zero-tolerance policy for



alcohol consumption among bus drivers (Vinsel, 2012). These policy factors shape the labor pool for potential school bus drivers.

### *School Bus Design Regulations*

Policies regulating school bus design affect bus drivers' experiences. The original school bus was a horse-drawn carriage designed and operated according to the prerogative of the local contracted farmer. Over time, the carriage was replaced with a motorized coach. By the 1927–1928 school year, only 12% of the students were brought to school through horse-drawn carriages (Mills, 1972). The piecemeal adoption of mechanized school transport became standardized when Frank Cyr, a member of the Faculty of the Teachers College at Columbia University, convened a national conference in West Virginia and articulated a set of 44 rules all buses should adhere to, including length, aisle width, and the classic school bus yellow color (Cyr, 1946). The National Congress on School Transportation has continued this work, meeting periodically, promulgating these minimum standards, and improving upon them as technology improves, including improved fuel systems, crash protections, and lights and warning systems (National Congress on School Transportation, 2015). The consistency and thoroughness of this organization and uniform adherence by bus manufacturers have resulted in standardized buses across the country, with small variations and requirements from individual states (Indiana Administrative Code 575, 2018) and no formal oversight at the federal level (National Congress on School Transportation, 2015). In practice, this means that bus drivers can very easily move to any district or state and operate the same type of equipment with little training. The standardization has resulted in school buses being the safest vehicles on the road, experiencing the lowest crash rates of all types of vehicles, the majority of which do not lead to injury. Fatality and injury rates are 3.5 and 5.4 times lower than overall vehicle crash fatality and injury rates (Yang et al., 2009). Thus, policy surrounding bus

design means that school bus drivers can look forward to a physically safe driving experience wherever they choose to be employed.

### *School Bus Usage Regulations*

Further research has studied aspects of bus safety, including various aspects of design and construction that matter for recruitment and retention efforts for school drivers. Student seatbelts on school buses are required in California, Florida, Louisiana, New Jersey, New York, and Texas (Lou et al., 2011), which are recommended but not required by the National Highway Traffic Safety Administration (Federal Register, 2011; National High Traffic Safety Administration, 2016). If students are required to wear seatbelts, bus drivers are required to compel them to wear seatbelts, thus adding another task to the bus driver's regular duties. Existing research from North Carolina, Australia, and Alabama has noted students' seat belt usage rates to be ranging from 45% to 65%. In one study, 9% of seatbelt usage was deemed inappropriate because the seat belts were improperly worn, negating safety (Lou et al., 2011). A follow-up study found that seat belt usage increased when bus drivers checked belt usage often (Lou & Mehta, 2013), but this practice would also increase bus driver responsibility. In one study outside the United States, in Tacna, Peru, seatbelts for drivers on public buses were required, but only 77% of them wore seatbelts (Miñan-Tapia, et al. 2021), with similar rates obtained for non-seat-belt usage among drivers in Mumbai (Khaddar et al., 2020). For passengers on public transport buses, a study in Ghana found that only 33% of the passengers reported wearing their seatbelt (Okyere et al., 2021). Policy surrounding seatbelts and bus safety would clearly affect the bus drivers' working conditions and likely have an effect on recruitment and retention.

As seen in the literature review, policy factors do affect the conditions surrounding successful recruitment or improved retention of school bus drivers. These factors include funding

policies for school transportation; policy surrounding equality of educational opportunity; and policy surrounding regulation of driver licensing, buses, and their usage. These policies broadly shape the potential labor pool for school bus drivers.

### **District Factors**

District factors affect the conditions surrounding successful recruitment or improved retention of school bus drivers. Such factors include location; funding; driver compensation; supervisor practices, such as empathy, onboarding practices, support with students, driver duties, and routing practices; autonomy; equipment; and the use of private contractors. The literature surrounding these district factors is explored here. Broadly, these factors are often the product of those reviewed in the previous section and reflect the district's response to the federal and state policy environments.

### **Location**

School district location affects bus driver recruitment and retention. Rural locations often have difficulty attracting the required number of professionals to serve their sparse and remote populations when compared to their urban and suburban peers. This is true for healthcare workers (Terry et al., 2022), non-profit professionals (Walters, 2021), and attorneys (Statz & Termuhlen, 2020), which are all in short supply in rural areas. Rural schools face similar challenges recruiting and retaining certified staff, especially in high-need areas, such as math and science (Hammer et al., 2005; Lassig et al., 2015; Roberts, 2004). While some research has attributed rural schools' difficulty in recruiting teachers to low salaries (Monk, 2007), other factors likely affect recruitment and retention.

Rural school districts tend to be more remote, further from population centers, and less densely populated than urban and suburban districts (National Center for Educational Statistics,

2016). These qualities mean that there are fewer individuals available within the local labor market and likely fewer individuals with specific credentials. This affects the recruitment of teachers who are often recruited from a distance and required to commute great distances or relocate (Lassig et al., 2015), as well as school bus drivers who must maintain specific licensure, as was discussed with policy factors. As Bendici noted, “If an individual district has 50 buses and they lose five drivers, they are in trouble. In many cases, they won’t find five other people available who are qualified with a commercial driver’s license” (2016, p. 2). Thus, a district’s remote location limits the number of likely drivers available and, therefore, elevates the importance of these staff relative to their peers in the district. This impediment is compounded by a school bus driver’s typical schedule, which involves an early-morning and late-afternoon route with a break during the middle of the day (Hooper, 1999). This schedule would likely discourage drivers who do not live near the district from seeking employment.

Rural school buildings also tend to be located further away from students’ homes (Beeson, 2001), increasing bus route lengths and shifting the nature of the expectations for employment. Routing practices will be explored in more detail in a later section. However, what is important to note at this time is that longer routes covering large swathes of terrain increase behind-the-wheel time for drivers and can create more challenging working conditions for bus drivers. This creates disincentives for applicants who might otherwise apply. In a study on the experience of rural bus drivers as compared to their urban and suburban peers, Howley et al. (2001) noted that with the overcrowded conditions and diversity of ages in the rural route, parents felt that the driver could not do all that was needed to monitor and control students’ behavior. Several parents noted that the lack of supervision made the bus an unruly place. This issue was of particular concern because the route traversed hilly secondary roads, requiring the driver to concentrate on the road conditions.

One parent in the study explained that the driver was erratic and sometimes irritable because of the difficulty of the job. These long rural routes inconvenience families whose children spend a larger percentage of their waking hours in transport to their remote houses and whose family schedules are altered as a result (Fox, 1996). This extended time with students and close relationships with families can play out positively or negatively and will be discussed in a later section. These conditions certainly shape the pool of individuals willing or unwilling to work under such conditions.

The district's location also affects the operational and staffing structure of a school. Rural and remote schools tend to be smaller than their urban and suburban peers (National Center for Educational Statistics, 2016). Because of their size, rural schools have fewer overall staff members who are responsible for a broader array of tasks (Franklin, 2012). Thus, school administrators at rural schools may be in charge of factors such as day-to-day operations of a campus, instructional leadership and curriculum, recruiting bus drivers, managing bus drivers, and student discipline for transportation. Limited administrative staffing partially results from the district's location and affects recruitment and retention of bus drivers (this will be covered in depth in Supervisor Practices but deserves mention here).

Another aspect of a district location that matters for the recruitment and retention of bus drivers involves broader labor market issues. Because the population is more thinly spread over a wide geographical area in rural areas, there is potential for monopsony, which occurs when there is only one buyer for a good or service (Robinson, 1969). Bus drivers who have a unique license that can be utilized in a school context have few buyers for their services. If a monopsony exists, the district's rural and remote context can allow administrators to depress wages for school bus drivers because these drivers have no alternative means of capitalizing on their unique license.

Existing research has discussed the concept of monopsony in education for teachers (Boal, 2009) and other professionals (Hirsch, 1995), with mixed results. While no research exists for educational support staff at this time, including bus drivers, this may be a relevant factor for recruitment and retention. An article from the American School Board Journal once quipped, “Whether you’re in the country, the city, or the suburbs, whether the economy’s booming or bustling, it’s never been easy to recruit and retain good school bus drivers” (Hooper, 1999, p. 42). However, the literature indicates that the district’s location does influence recruitment retention of school bus drivers.

### Funding

Having already explored how policy affects the funding available to school districts for bus drivers, we can look more specifically at how it can shape the recruitment and retention of bus drivers at the district level. Pupil transportation constitutes a significant percentage of the school budget, with estimates ranging between 4% and 10% (Alspaugh, 1996; McDonald & Howlett, 2007; Zeitlin, 1989). Rural schools expend a greater percentage of their overall budget on transportation than non-rural schools (Alexander, 1990) because low enrollment levels and large geographical sizes occur simultaneously (Monk, 1984), meaning that there is less money available in rural and remote districts to fund transportation. How districts allot their transportation dollars also affects recruitment and retention. Miller (1989) estimated that 70% of the cost of school transportation is in the form of wages but did not differentiate between drivers and other non-driving transportation staff. A North Carolina study found that bus driver salaries consumed 41% of a school district’s transportation budget (Sexton et al., 1994). Another state-initiated study from Florida placed school bus drivers at 2.06% of all personnel expenditures (Richmond, 2014). How districts allocate their available funds among different employee groups matters for attracting and

keeping individuals as potential bus drivers. This funding availability shapes the opportunities available for activities such as recruitment, retention, and performance bonuses. Funding availability also affects what types of equipment, facilities, and upkeep a district invests in, which in turn influence bus drivers' overall working experience.

### Driver Compensation

Higher salaries generally result in higher levels of employee retention (Michael et al., 2016), and higher levels of pay bear a positive relationship with job satisfaction (Judge et al., 2010; Lambert et al., 2001), and thus, they likely influence the recruitment and retention of school bus drivers. Higher compensation levels for teachers have been shown to increase their retention (Csellack, 2003; Pan, 2006); however, there is little information on how salary affects school support staff, including bus drivers, who constitute approximately one-third of the school employees (Conley et al., 2010) and account for 40% of every dollar spent (Eggers et al., 2005). For truck drivers, a somewhat related field, raising wages has been found to increase employee satisfaction and decrease driver turnover, but only to a limited extent (Min & Lambert, 2002). We also know that insurance benefits matter, too. Generally, adding benefits, such as health insurance, long-term disability, and pension contributions, also increases levels of employee retention (Saranya, 2016), and schools that provide these benefits to support staff, including bus drivers, see increased retention and improved morale (Dickhart, 2005). Thus, compensation matters. However, the literature on school bus driver compensation is scarce.

Trade journals in the field of school transportation indicate the importance of wages for retaining drivers. In an opinion piece for the *School Bus Fleet*, five out of the six reasons why bus drivers quit were related to insufficient compensation (Morrison, 2015). However, we lack a granular picture of what school bus drivers are actually paid. Government data provide some

information. The Bureau of Labor and Statistics (2022) lists \$19.32 as the mean hourly wage for school and Employee Bus Transportation workers. A comprehensive benchmarking study by the Minnesota Department of Education completed nine years earlier found the average hourly salary of a school bus driver to be \$14.32 (2013), indicating that wages have increased over time with inflation. The same Minnesota study noted that the statewide average for hourly benefits was \$2.07, with 70% of full-time bus drivers and 39% of part-time bus drivers in districts receiving benefits. There is no information from the Bureau of Labor and Statistics covering insurance and other non-wage benefits, which are a significant part of school employees' compensation (Dickhart, 2005). Compared to school bus drivers, local government bus drivers, excluding schools and hospitals, make an hourly mean wage of \$26.12 (Bureau of Labor and Statistics, 2022), which is significantly higher than that earned by school bus drivers. Thus, while compensation matters, there are also other factors within the power of school districts beyond wages that shape the labor pool and result in drivers choosing to drive a school bus instead of a transit bus.

### Supervisor Practices

Supervisor practices also matter for recruitment and retention but have not received significant exploration in the literature. As discussed earlier, rural and remote schools tend to be smaller than their urban and suburban peers (National Center for Educational Statistics, 2016). Because of their size, rural schools have smaller numbers of overall staff members who are responsible for a broader array of tasks (Franklin, 2012). Administrators at rural schools may be in charge of the day-to-day operations of a campus, instructional leadership and curriculum, recruiting bus drivers, managing bus drivers, and student discipline for transportation. Supervisors often split time between transportation management and managing other aspects of school operations. One survey showed that school administrators can spend up to one-third of their time



managing an in-house transportation program (Crates, 2009). The time and focus these administrators have available to dedicate strictly to transportation management is limited in rural schools and would affect the experience of potential and existing school bus drivers in the following ways.

### *Supervisor Empathy*

Supportive, attentive, and emotionally intelligent supervisors tend to retain employees (Eisenberger et al., 2002). Strong interpersonal trust improves employee loyalty (Matzler & Renzl, 2006). Research has shown this to be true in various contexts, including a major university (Noranee et al., 2021), child welfare settings (Johnco et al. 2014), logistics and package delivery (Keller et al., 2020), and truck drivers (Fournier et al., 2012). Research from the food services sector notes that employee retention improves when supervisors make allowances for balancing work and non-work demands and are supportive of family situations requiring flexibility (Phillip et al., 2021). Worker loyalty improves with supportive work–life policies in many work contexts (Roehling et al., 2001). In school settings, administrative support correlates with higher levels of teacher retention (Brown & Wynn, 2009; Boyd et al., 2011). Transit bus drivers in Belgium were less likely to resign if they experienced social support in their working environment from their employer (Lannoo & Verhofstadt, 2016). While the literature is mostly silent regarding school bus drivers, one article from the *American School Board Journal* did make specific mention of using family-friendly practices to recruit drivers by allowing them to bring up to two preschool children on the route to avoid having to provide childcare (Hooper, 1999). Thus, administrators who are attentive to their drivers' family needs influence recruitment and retention.

### *Onboarding Practices*

The time and effort supervisors put into recruitment, retention, and training matters and is affected by the time the administrator has available for such tasks. For this research, I broadly describe them as “onboarding,” and they are an important part of the support system for drivers who are successfully recruited. Research in the business field clearly indicates this phenomenon, as large firms are more likely to have dedicated human resource personnel to recruit and retain employees, while small firms are more likely to use upper management in the recruitment process (Barber et al., 1999). Administrators splitting their time between various tasks likely have less of it available to devote to onboarding school bus drivers. Districts can and should insist on adequate training for every school bus driver (Miller, 1989). Moreover, we know that individuals who have a positive onboarding experience, including training and a realistic understanding of job expectations, tend to remain in those positions (Breugh, 2008; Morse & Popvich, 2009). This is true in the field of education for certified teachers (Keese et al., 2022; Luke, 2014; Reeves et al., 2022). A study of commercial bus drivers in the United Kingdom noted that a streamlined onboarding process reduced turnover (Emerald Group Publishing, 2009). However, not much is known about onboarding practices for school bus drivers. A doctoral dissertation examining districts’ driver training programs noted that they do not meet national standards for adequacy (Crews, 1997). Earlier in the literature, we discussed the many steps required to obtain appropriate licensure, and we can surmise that the level of attention administrators provide as part of this process matters for successfully onboarding and retaining bus drivers.

### *Support with Students*

Administrative support with student discipline is viewed positively by certified teachers (Borman & Dowling, 2008) and positively influences their retention (Tickle et al., 2011). In

addition, the context of a school bus is a unique place for student behavior. In rural districts, younger children are often on the bus with older children (Howley, 2001), and many younger children witness inappropriate behaviors beyond their level of maturity (Jewett, 2005). Bus drivers witness bullying and attempt to prevent its recurrence (Allen et al., 2003; Goldin & McDaniel, 2018; Raskauskas, 2005; Sampasa-Kanyinga et al., 2016). Bus drivers themselves are subject to bullying, resulting in more stress on the job, anxiety, emotional exhaustion, and cynicism (Goodboy et al., 2016). However, bus drivers often perceive that their concerns are not taken seriously by administrators (Brown et al., 2021). Attempts to address bullying and other antisocial and dangerous behaviors through positive behavioral and intervention supports are appreciated by drivers and viewed positively (Collins & Ryan, 2016; Kennedy & King, 2019). However, according to deLara (2008), bus drivers do not believe that administrators care enough about discipline issues on the bus and that they should have more authority to remove bullies and restructure seating arrangements without administrative intervention (Goodboy et al., 2016). Bus drivers also desire more frequent communication from the administration regarding student health and family concerns (deLara, 2008).

Existing literature in other transportation-related fields does not easily apply to school bus drivers. Students who ride the bus may have no desire to come to school. Transit bus drivers have passengers who choose to ride, and truck drivers have passive cargo. In discussing truck driver retention, Min and Lambert (2002) concluded that working conditions are a significant retention factor and recommended that, to improve truck driver working conditions, trucking companies should sever ties with customers who are the sources of irregular long hauls, long waiting times, and high lump sum (loading and unloading fees charged to the driver or driver's company for not unloading) costs. These methods are incompatible with school districts, which are unable to forgo

transporting students who have challenging behavioral issues or who reside in isolated or far-flung parts of the school district. In a state such as Indiana, where student enrollment drives funding, administrators have every incentive to keep disruptive students enrolled. How administration assists bus drivers in handling these students influences recruitment and retention.

### *Driver Duties*

Smaller and rural districts may use bus drivers and other transportation staff to perform other duties in addition to bus driving. Districts also sometimes share duties with neighboring districts to most effectively use human capital. One researcher noted, “Would using bus drivers for other tasks such as mail runs and deliveries be more economical than using office staff or a delivery service? And if your fleet is too small to keep a full-time mechanic busy, you might be able to save money by sharing a mechanic with another district rather than paying for more than you need or sending your buses to an outside shop for maintenance” (Leeds, 1999, p. 47). These decisions affect the recruitment and retention of bus drivers, as sharing services, including a mechanic, a bus barn, or a bus administrator, may create a lack of clarity regarding the chain of command and involve a loss of local control (Minnesota Department of Administration, 2013). Districts have also explored and implemented the combination of positions, such as cafeteria, custodial, and instructional assistant jobs, with bus driving responsibilities to make the position full time (Leeds, 1999; Perkins, 1988). Districts have even been encouraged to “train athletic coaches to drive school buses” to save on having to hire extra drivers (Minnesota Department of Administration, 2013, p. 63). Whether supervisors structure their districts in such a way would have significant consequences for the experiences of bus drivers in terms of wages, hours, and duties and would likely affect a district’s ability to recruit and retain school bus drivers.

## *Routing Practices*

How a transportation director decides to organize bus routes influences the recruitment and retention of bus drivers. As discussed earlier, transportation occupies a significant portion of the district's budget. The most common overall strategy to shrink transportation costs is to reduce the overall number of miles driven and, by extension, the number of routes and drivers (Bolick, 1991). Computer-aided bus routing is effective in reducing transportation costs using ever-advancing computer systems (Hargroves & Demetsky, 1981; Park & Kim, 2010; Verderber, 1974). One example includes limiting pupil travel time to a maximum of 75 min (Sexton et al., 1994). "Anywhere from 10-15 percent of your transportation budget is affected by how efficiently you use your fleet" (Stover, 1986, p. 34). A reduction by five vehicles and five routes can reduce costs and lower the number of drivers required. *The American School Board Journal* noted that "One California district reduced its special education transportation costs by twenty percent, a savings of \$1,100 per student" when it switched to an automated system (Leeds, 1999, p. 46). That being said, algorithms that may route drivers more efficiently and adapt to in-time conditions may vary and present a challenge for bus drivers in executing their duties. They may also result in safety concerns, as school bus crashes are more likely to occur on nonroutine routes (O'Neal et al., 2014).

Applying such a software affects bus drivers' daily work and reduces their input in determining how to carry out their routes. Nevertheless, a more efficient use of buses means that the routes that remain are longer and have more students on them. Additionally, the use of software and technology to optimize routing may remove autonomy from drivers and require them to utilize new and different equipment and processes as part of the modern transportation system. Another common practice, according to a North Carolina study, noted the use of take-home buses as a means of reducing the total number of miles driven on a bus. By strategically placing drivers on

routes closer to where drivers live and allowing these drivers to park their buses overnight at their houses, the district can reduce total mileage (Sexton et al., 1994). North Carolina instituted many of these cost-saving routing changes en masse. After four years of implementing these efficient improvements in 1989, the state had reduced the number of buses it operated from 13,321 to 12,807, a difference of 424 buses despite the overall student population increasing during the same period. The state considered this program a huge success, as superintendents and transportation managers had been “finding ways to combine routes and adjust schedules” (ibid p. 103). For North Carolina, 424 fewer bus routes meant that the state needed 424 fewer bus drivers.

Districts can also avoid hiring their own bus drivers completely, as some urban and suburban districts have utilized public transportation and even taxis when financially sensible and logistically feasible (Cordes & Schwartz, 2019). Neighboring school districts have sometimes been encouraged to share transportation responsibilities where geographically possible, especially in the cases of special-need students or areas where school district boundaries create this possibility (Minnesota Department of Administration, 2013). When districts engage in these cost-saving routing practices, they affect the complexity of administering transportation programs, as well as recruitment and retention of bus drivers.

### *Driver Autonomy*

Transporting students to schools is a complicated process. While the transportation director ultimately oversees the entire system, bus drivers are responsible for executing the daily details. Many of these practices and decisions previously mentioned, such as routing and student management, could be left to individual drivers, or they could be more narrowly circumscribed by district policy or administrative directives. The level of autonomy provided to bus drivers could vary by district. Research has shown that teachers place a high value on autonomy over curriculum

and student support when evaluating job opportunities (Gunther, 2019; Pearson & Moomaw, 2005). Autonomy is a relevant factor in job satisfaction and retention in other professional contexts (Gahlawat et al., 2019; Kim et al., 2019; Lim, 2007). High levels of autonomy improve job satisfaction when a task grows in complexity (Chung-Yan, 2010). The degree to which bus drivers have autonomy over their daily responsibilities influences recruitment and retention.

### Equipment

The type of equipment a district uses and how it maintains that equipment influences bus driver recruitment and retention. There have been many advances in school bus technology since the first horse-drawn carriage was used to transport students (Mills, 1972). We previously discussed how school buses are largely uniform across the United States due to standardization and regulations (National Congress on School Transportation, 2015). Small differences do exist in construction and design, which districts have discretion over, which will be discussed here.

A broader overview of the literature has found relevant factors for public-sector bus drivers. Long-term exposure to seated, whole-body vibration can cause low-back disorders, and seat suspension design can improve or lessen this (Blood et al., 2015). Back pain negatively affects driver well-being (Gangopadhyay, 2012). A study from Rio De Janeiro found that bus seat design, maintenance of the bus seat, and mirror placement affected bus driver experience, and the high noise levels on public transit buses caused discomfort to drivers (Portela et al., 2013). A study in Addis Ababa, Ethiopia, noted that transit bus drivers did not wear their seatbelts in a safe manner, despite reporting that they did so (Takele et al., 2022). Studies situated internationally have also shown that the ergonomics of the driver seat and mirrors can affect levels of bus driver distraction (Querido et al., 2012; Salmon et al., 2011). Seatbelts may be optional for students in some states, depending on policy, but they are not optional for drivers. Research conducted in other countries

has indicated that the type and placement of seatbelts on public transport affect a driver's likelihood of wearing it and wearing it properly (Takele et al., 2022). However, little formal research exists surrounding other school bus equipment that may influence bus driver recruitment and retention. We do know that onboard camera systems are available for student monitoring (Campbell, 2001), stop arm cameras exist to deter other vehicles from passing a bus while unloading (Spurrier & O'Keefe, 2019), the choice of air brakes or hydraulic brakes affects driver experience and licensing (Funk et al., 2012), and the decision to invest in air conditioning affects driver comfort (Mastros, 2019). These are factors that matter for bus driver recruitment and retention.

How districts choose to maintain those buses over time varies and affects recruitment and retention. Industry standards for school districts for bus maintenance procedures are relatively well known (Brinker & Bense, 2011). These include regular check-ups and routine maintenance. Districts that choose not to follow these standards can find themselves with an unreliable fleet with frequent breakdowns and missed student pickups (Camp, 1989; Stover, 1986). While the research does not indicate how this affects drivers, we can surmise that the quality of equipment would affect bus drivers' working conditions and thus recruitment and retention.

#### District Usage of Transportation Contractors

One cannot explore the literature surrounding school transportation without encountering the use of private contractors. As of the 2015–2016 school year, 36% of buses in the United States were contractor-owned (U.S. State by State Transportation Statistics, 2017). As they basically subsume all or almost all of the administrative apparatus for school transportation, whether a district uses a contractor influences the recruitment and retention of bus drivers. Many districts have found outsourcing their transportation advisable from an efficiency standpoint (McGuire &



Van Cott, 1984; Miller, 1989; Stover, 1986), as specialized administrators can focus on their strengths and remove non-instructional tasks from school administrators. School districts have also been known to contract out a portion of their districts' transportation services, handling some parts of the district's busing in-house with their own bus drivers and contracting out other parts to a transportation company. A noted challenge for transportation directors in this scenario regarding recruitment and retention was preventing driver poaching between the two entities when one entity was perceived to have superior working conditions or wages (Hooper, 1999). However, outsourcing to contractors creates drawbacks, and some districts do not find it worthwhile (Pullen & Pitts, 1995). For example, outsourcing can result in a loss of control over aspects of school operations that might affect the school's mission. Outside contractors also create a less clear chain of command regarding responsibility and culpability (Bushweller, 1994; Lyons, 1995). Whether the contractor or the district is ultimately in charge of the driver matters for bus driver recruitment and retention. Moreover, the existence of nearby or possible contracting could cause drivers to leave seek employment elsewhere either because prefer working directly for a school district or because a contractor may be paying higher wages with better benefits than their local districts.

Whether a district appears to use contractors also appears to be affected by the district location. According to Lazarus and McCullough (2005), "In-house provision of transportation was not shown to be more costly than outsourcing in either rural or non-rural locations; however, small, rural districts were much more likely to provide pupil transportation in-house than other types of districts" (p. 1). The authors attributed this to large contractors having little interest in contracting opportunities in rural school districts. However, in a state-funded case study of school transportation in Minnesota, the two examples of rural districts (both were rural districts with over 2,000 students) contracted out their transportation services (Minnesota Department of

Administration, 2013). Evidence suggests that some rural districts must find the arrangement beneficial, though the use of contractors did not look much different from districts managing their transportation in-house. In this case study, the contractors

“essentially worked for the district and kept the same drivers. An important consideration for all involved in changes to transportation that affect bus drivers is that people form close attachments to bus drivers and transportation office personnel, whether they are district or vendor employees. People like these employees. When changing vendors or replacing a district operation with a contractor, it may be possible to make it a contract requirement for the new vendor to offer jobs to existing employees of the previous employer within the first 45 days.” (Minnesota Department of Administration, 2013, p. 33).

In rural districts, bus drivers are a visible part of the community who have more permanence as employees than is presupposed when districts contract out their transportation services. Management changes may result in the same driver running the route the same way under the direction of a different supervisor. The realities of local politics may buffer the perceived efficiency of the private sector. Contractors add another layer of administration that may affect bus driver working conditions, but districts can still have considerable say in how daily operations are executed. Contracts are drawn up, including setting a “maximum time” a student can be on the bus as well as dictating portions of driver compensation (Minnesota Department of Administration, 2013, p. 21 & 32). Thus, whether a district uses a contractor influences bus driver recruitment and retention, but for rural schools, it might not matter as much.

### **Driver Factors**

The previous sections demonstrated how policy and district factors influence the recruitment and retention of school bus drivers. Factors specific to individual driver characteristics and their personal circumstances also matter. Such factors include personal characteristics, status as school employees, part-time employment, proximity to the school, and family circumstances. The literature surrounding these driver factors is explored here.

## Personal Characteristics

The personal characteristics of individuals who choose to become and remain school bus drivers are predictive of those who will become bus drivers in the future. The available literature on school bus driver characteristics is sparse. The National Center for Educational Statistics database groups school bus drivers with all other school support staff, rather than treating them separately (National Center for Educational Statistics, 2017). They are given similar treatment in the Bureau of Labor and Statistics (2022) database and grouped with other types of bus drivers. According to Zippia (2022), an online statistics platform that compiles data from numerous public databases on employment, there are 168,661 school bus drivers employed in the United States. Of these, 55.3% are women, with an average age of 57 years. Thus, school bus drivers tend to be older, female, and those approaching retirement age. Based on the higher-than-average age, we can assume that many of them entered the profession later in life or as a second career rather than immediately upon entering the workforce. We can also assume that many continue to work as drivers beyond the typical retirement age. Legal research has indicated that it is difficult to force school bus drivers into retirement (Jones, 2011), which may further skew the average bus driver age upward. These factors begin to paint a portrait of a typical current school bus driver and provide a picture of individuals likely to become bus drivers in the future.

Other research has provided a picture of school bus drivers' physical and mental health. While drivers may disagree, scholars contend that school bus drivers tend to be overweight and have lower levels of physical activity (Yeary et al., 2019). Along with cafeteria and custodial staff, school bus drivers are more likely than teachers to experience a lost-time work injury and qualify for workman's compensation (Schofield et al., 2022). The working conditions of a school bus are stress-inducing and may contribute to drivers' worse-than-average health (Goodboy et al., 2016).

These risk factors include uncontrolled noise, out-of-seat student activity, and bullying, including students bullying one another and those bullying the driver (Goldman & Peleg, 2010). Drivers' ability to intercede to reduce these negative student behaviors is limited based on a lack of administrative support and work-condition factors; namely, the driver is engaged in piloting the bus and is unable to admonish students in time with student misbehavior (Brown et al., 2021). Such encounters may contribute to negative mental health outcomes for school bus drivers, including anxious driving, emotional exhaustion, and cynicism (Goodboy et al., 2016). An existing bus driver and future bus driver must manage these aspects of the position to maintain employment, shaping the labor pool for school bus drivers.

There is more information available on other types of bus drivers. Transit bus drivers, for example, must maintain similar licensures and operate similar equipment in the course of their duties. Age and experience affect bus driver performance, with transit bus drivers tending to have fewer accidents after the first three years of driving, after which the likelihood of drivers causing an accident increases with age (Blom et al., 1987). As with school bus drivers, transit bus drivers tend to have worse physical health than typical individuals. Common medical conditions include hypertension, diabetes, and lower back pain (Hirata et al., 2012). Bus drivers have few breaks for eating and psychological needs in the course of their duties, and they often ingest less healthy, fatty snacks as a coping mechanism. The double work of accepting passenger payments and driving on city roads is psychologically stressful (Querido et al., 2012). As mentioned earlier when discussing equipment, bus drivers often have low back pain, which negatively affects their well-being (Gangopadhyay, 2012). They also suffer discomfort from poor mirror placement and high noise levels (Portela et al., 2013). In addition, drivers are not honest about their seatbelt usage (Takele et al., 2022). A Scandinavian study noted that bus drivers and truck drivers tend to be

overweight, and attempts to coach them toward healthier lifestyles have proven unsuccessful (Puhkala, 2015).

Research from South Korea has noted that individuals avoid becoming bus drivers due to low social recognition and low job satisfaction, including work-hour satisfaction, income satisfaction, negative passenger behavior, and road congestion (Kwon et al., 2019). Perception of the position clearly affects the appeal of becoming a transit bus driver. This may directly correlate with school bus drivers who enter the profession knowing they will face negative passenger behavior from their students. When compared to their non-driving peers, such as mechanics and clerical workers in public transportation, transit bus drivers exit the profession due to different forms of burnout (Restrepo et al., 2015). These physical and psychological conditions affect the well-being of bus drivers and result in higher levels of turnover, absences, and accidents (Tse et al., 2006; Useche, 2017). Ultimately, individuals do not desire to enter the transit bus driver profession, and individuals who do become transit bus drivers are more likely to leave the profession due to the unique and challenging characteristics of the position. These factors likely translate to school bus drivers and affect the pool of available labor.

### Bus Drivers as School Employees

School bus drivers are school employees serving children and communities, which is a different context than public transit or charter buses. Bus drivers are classified as non-certified support staff, which constitute one-third or more of all school employees (Conley et al., 2010) and 40% of every educational dollar spent (Eggers et al., 2005). Little research has explored support staff (Richmond, 2014), but what we do know is instructive for bus driver recruitment and retention. Schools are unique employment contexts that can provide non-monetary employment benefits for all workers, not just teachers. Support staff, including school bus drivers, can

contribute positively or negatively to student engagement levels and the school's mission (Blatchford et al., 2009, 2011; Reed & Salazar, 1998). Support staff can exercise positive leadership in school contexts (Maxwell et al., 2009). Dixon (1995) noted that even school bus drivers can have a meaningful impact on a school's culture. Thus, the opportunity to positively affect students' lives through a community institution, such as a school, could affect the labor pool of potential school bus drivers.

### Part-time Position and Other Employment

The number of hours worked and timing of hours worked matter for school bus drivers. The Bureau of Labor and Statistics (2022) noted that school bus drivers' hours are limited by the school schedule. Some drivers make multiple route runs if schools in their district have staggered starting times or if students need transportation to other activities. This part-time, variable work schedule could encourage and discourage individuals from becoming school bus drivers. For some, the position may not be financially viable because of limited hours, but for others, the part-time position may make the position more attractive (Hooper, 1999). Because the school context offers other employment opportunities, some districts have been encouraged to train coaches to drive buses or add cafeteria, custodial, or instructional assistant positions to bus driver responsibilities in order to make the position full-time (Leeds, 1999; Perkins, 1998). Whether districts offer these options to prospective drivers or whether drivers can obtain other part-time employment conducive to a school bus driver's schedule likely affects the number and type of individuals who seek employment as a school bus driver.

### Proximity to the School Community

School context also matters for other reasons, as school bus drivers can play an important role in the broader school community based on where a driver resides. Drivers develop strong and

positive relationships with families over time, as they often keep the same routes for years. One study noted, “They [drivers] know the kids from preschool to adulthood. They get invited to the kids’ weddings” (Minnesota Department of Administration, 2013, pp. 50–51). Bus drivers are often the first and last person from the school a student sees every day (deLara, 2008), and they sometimes know students from their first day of kindergarten until they graduate from high school. Drivers are often able to spot student safety concerns because they are the only school employees who lay eyes on the students’ home (Downes & Roberts, 2018). When community members know the driver, this can provide familiarity if it is positive and concern over the driver’s age and other personal characteristics if the relationship is less than positive (Ramage & Howley, 2007). An individual who values such long-standing relationships with students and families may be encouraged to remain a bus driver, despite some of the challenges of the position noted earlier.

Living within or near the school community also affects the labor pool for school bus drivers, as it can make the position more or less time-consuming. Supervisors will often assign a bus driver on a specific route based on where that driver lives, allowing the driver to park a bus on their personal property and begin the route from home (Sexton et al., 1994). This used to be the case when high-school students were allowed to drive school buses (Perkins, 1988). The economic benefits of this arrangement are clear for the driver, who receives a reduced commuting time and distance, and the district, which reduces unproductive travel time and routes driven. This also has the added social benefit of placing consistent drivers within close proximity to the school district and the schools’ students and families for a long period (Minnesota Department of Administration, 2013). Supervisors have an incentive to recruit drivers who live in or near the district, and those same individuals may have an added incentive to become school bus drivers due to these mutually beneficial circumstances.

## Family Circumstances

An individual's family circumstances also affect whether they can easily pursue employment as a school bus driver. As has been noted, the school schedule requires unusual working times, along with mid-day breaks (Hooper, 1999), which affects the labor pool for those who might consider driving. Districts have been encouraged to recruit individuals with school-age children (National Association for Pupil Transportation, 2016). An article from the *American School Board Journal* noted that "Professional women who have chosen, while their children are in grade school or younger, to drive a bus, then return to their careers once they're older" (Hooper, 1999, p. 42). A driver quoted in a newspaper discussing this setup noted, "It's awesome, because the kids, they can be with me and at the same time I can earn money. I don't have to pay daycare" (Canadian Broadcast Company, 2022). Close relatives, such as grandparents, aunts, uncles, or cousins, might also benefit from driving students who are close relatives and assisting with child supervision. Bus drivers might also be seeking part-time income while their yet-to-be-retired spouse continues to work (Sexton et al., 1994). Convenience factors related to family matter for individuals who may consider becoming school bus drivers.

## **Conceptual Framework**

To inform the analysis presented in this study, a conceptual framework describing the factors associated with bus driver recruitment and retention was developed from the literature review in the preceding sections. The framework rests on factors related to policies, districts, and drivers.

With regard to policy factors, these factors set opportunities for districts to make strategic choices about their recruitment practices and introduce potentially adverse conditions that contribute to a driver's decision to pursue employment elsewhere or in another professional field.



As illustrated by the literature, policy factors include systemic funding history and policy for school transportation (Alexander, 1990; McDonald & Howlett, 2007; Killeen & Sipple, 2001) and state-level funding (Boyland & Bourke, 2012; Stokes, 2011); policy leveraging school transportation as a means of achieving equality of educational opportunity through school consolidation (Doncombe & Yinger, 2007), court-ordered busing (Eaton, 2001; Reber, 2005; Wells & Crain, 1999), school choice policy (Gross, 2019; Schwartz et al., 2021), and special populations (Gottfried et al., 2021; Individuals with Disability Act, 2004; Hensel, 2006; McKeinney-Vento, 1987; Pavlakis & Duffield, 2017); and regulatory oversight of school transportation, including commercial drivers' licensing (American Association of Motor Vehicle Administrators, 2005; PL 112-141, 2012), school bus design (National Congress on School Transportation, 2015), and equipment usage, particularly seat belts, stop arm usage, break type and air conditioning (Funk et al., 2012; Lou et al., 2011; Lou & Mehta, 2013; Mastro, 2019; Spurrier & O'Keefe, 2019).

District-level factors define the organizational-level working conditions that might influence whether a driver seeks employment with a district or chooses to remain employed in the district. As illustrated by the literature, district-level factors related to the district's location (Beeson, 2001; Franklin, 2012; Hammer et al., 2005; Hooper, 1999; Lassig et al., 2015; Monk, 2007; National Center for Educational Statistics, 2016; Statz & Termuhlen, 2020; Terry et al., 2022; Walters, 2021); district allocation of funding (Alexander, 1990; McDonald & Howlett, 2007; Richmond, 2014); compensation and benefits (Bureau of Labor and Statistics, 2022; Morrison, 2015; Saranya, 2016); supervisor practices such as empathy (Hooper, 1999; Matzler & Renzl, 2006), onboarding practices (Breugh, 2008; Morse & Popvich, 2009), support with students (Brown et al., 2021; Collins & Ryan, 2016; deLara, 2008; Howley et al., 2001; Kennedy & King,

2019), driver duties (Leeds, 1999; Perkins, 1998), routing practices (Bolick, 1991; Park & Kim, 2010; Stover, 1986); driver autonomy (Chung-Yan, 2010; Gunther, 2019; Gahlawat et al., 2019; Lim, 2007; Pearson & Moomaw, 2005), district selection, and maintenance of equipment (Campbell, 2001; National Congress on School Transportation, 2015; Spurrier & O’Keefe, 2019; Takele et al., 2022); and whether a district chooses to use private contractors (Bushweller, 1994; Hooper, 1999; Lyons, 1995).

Driver-level factors weigh heavily on driver staffing levels within a school district and influence whether and to what extent the school system can provide transportation that supports student learning. As highlighted in the literature, these factors include drivers’ personal characteristics, such as age, gender, health, and well-being (Goldman & Peleg, 2010; Goodboy et al., 2016; Jones, 2011; Kwon et al., 2019; Tse et al., 2006; Useche, 2017; Yeary et al., 2019; Zippia, 2022); their status as school support staff (Blatchford et al., 2011; Dixon, 1995; Maxwell et al., 2009); whether they have other employment (Hooper, 1999; Leeds, 1999; Perkins, 1998); their proximity to the school community (Downes & Robers, 2018; Minnesota Department of Administration, 2013; Sexton et al., 1994); and other family circumstances (Hooper, 1999; National Association for Pupil Transportation, 2016).

Taken together, these three factors describe conditions that influence district behavior and employee behavior, and thus, explain the potential for recruitment as well as retention of individual drivers, as illustrated in Table 1 below. These factors are considered both independent and codependent and thus define the relevant conditions in this study. In total, they provide an analytic lens through which to understand the perspectives of participants who are employed as district administrators or school bus drivers.

**Table 1**

*Conceptual Framework*

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| <b>Policy Factors</b>  | <b>District Factors</b>  | <b>Driver Factors</b>   |
|--|--|---|
| <ul style="list-style-type: none"><li>● Funding<ul style="list-style-type: none"><li>○ Indiana Funding</li></ul></li><li>● Equality of Opportunity<ul style="list-style-type: none"><li>○ Consolidation</li><li>○ Court-ordered Busing</li><li>○ School Choice</li><li>○ Special Student Populations</li></ul></li><li>● Regulatory Oversight<ul style="list-style-type: none"><li>○ Driver licensing</li><li>○ Bus design</li><li>○ Equipment usage</li></ul></li></ul> | <ul style="list-style-type: none"><li>● Location</li><li>● Funding</li><li>● Driver Compensation</li><li>● Supervisor Practices<ul style="list-style-type: none"><li>○ Supervisor Empathy</li><li>○ Onboarding Practices</li><li>○ Support with Students</li><li>○ Driver Duties</li><li>○ Routing practices</li><li>○ Autonomy</li></ul></li><li>● Equipment</li><li>● Usage of contractors</li></ul> | <ul style="list-style-type: none"><li>● Personal characteristics</li><li>● Status as School Support Staff</li><li>● Part-time Employment</li><li>● Proximity to School Community</li><li>● Family Circumstances</li></ul> |

### **Chapter 3: Methodology**

I conducted a qualitative study of transportation directors and school bus drivers employed in three rural school districts located in the State of Indiana. This study investigated how the participants perceived that their district sought to recruit and retain bus drivers. Although most research focuses on staffing conditions related to classroom instruction, there is an increasing interest in staffing challenges associated with school transportation. This study draws upon semi-structured interviews and focus groups to understand what, if anything, three rural school districts do to recruit and retain drivers. The study is informed by three research questions:

- How do three rural public-school districts in Indiana recruit and retain school bus drivers?
- What strategies do these rural public-school districts use to recruit and retain drivers, given the policy and district conditions surrounding them?
- What influences a driver's decision to remain in these districts?

Below, I discuss the study design as well as the analytic process I used to complete this research.

#### **Research Setting**

I completed this study with staff who were employed in three public-school districts. The districts were described as rural according to the National Center for Educational Statistics (2014). I selected these districts because of their size, locale, and proximity to one another. Rural districts face unique operational challenges given both their size and the limitations imposed on them. These districts are unique because they represent a fraction of the state's school districts. Based on state data, out of the 153 rural school districts in Indiana, only 72 were considered small. This means that the districts face unique challenges associated with funding, staffing, and operating their transportation systems (Kamrath, 2015). The three districts were purposefully selected for this study because of their relevance to the research questions posed and because of the unique context surrounding these districts in terms of state policy.

As illustrated in Table 2 below, the districts ranged in size from 680 to 867 students, with students enrolled in Kindergarten through Twelfth Grade. The student populations were primarily White, with Hispanic populations ranging from 2.7% to 47.4%, including small numbers of other demographic groups. Free/Reduced Lunch percentages ranged from 28.5% to 77.8%, and students qualifying for English language learner services and special education services ranged from 0.3% to 32.5% and 9.7 to 19.9%, respectively. The districts’ geographical footprints ranged from 114.77 to 224.55 square miles.

**Table 2**  
*District Characteristics*

|   | District 1 | District 2 | District 3 |
|---|------------|------------|------------|
| Total Square Miles                      | 114.77     | 224.55     | 131.70     |
| Grades Served                           | K-12       | K-12       | K-12       |
| Student Enrollment                      | 680        | 731        | 867        |
| <i>Student Demographics</i>             |            |            |            |
| White                                   | 94.2%      | 86.6%      | 49.6%      |
| Black                                   | 0.8%       | 0.8%       | 0.2%       |
| Asian/Pacific Isl.                      | 0.0%       | 0.4%       | 0.0%       |
| Hispanic                                | 2.7%       | 9.2%       | 47.4%      |
| Multi-Racial                            | 2.2%       | 2.7%       | 2.7%       |
| Native American                         | 0.2%       | 0.3%       | 0.0%       |
| Eligible for Free / Reduced Lunch       | 28.5%      | 39.4%      | 77.8%      |
| Eligible for English Language Learner   | 0.3%       | 2.5%       | 32.5%      |
| Eligible for Special Education Services | 16.5%      | 17.9%      | 9.7%       |
| Percentage Students Transported by Bus  | 57%        | 61%        | 66%        |

*Note: Data obtained from the Indiana Department of Education and district sources*

### **Research Participants**

The study included 25 research participants, including 9 transportation directors and 16 school bus drivers. The participants included 9 men and 16 women. The participants ranged from 29 to 68, as shown in the table below. In total, all nine transportation directors participated in the interviews, and 16 out of 26 possible bus drivers participated in the focus groups. All drivers held a Class B CDL license with S and Air Brake endorsements according to the Bureau of Motor

Vehicles (American Association of Motor Vehicles, 2005) and had a standard certificate according to the Department of Education’s Office of School Transportation (Office of School Transportation, 2016).

**Table 3**

*Interview/Focus Group Participants and Driver Demographics*

|  | District 1      | District 2      | District 3      |
|--|-----------------|-----------------|-----------------|
| Total Participants                                 | 6               | 13              | 6               |
| <i>District Driver Information</i>                 |                 |                 |                 |
| Total District Routes                              | 6               | 10              | 10              |
| Male Bus Drivers                                   | 3               | 3               | 1               |
| Female Bus Drivers                                 | 3               | 7               | 9               |
| Mean District Bus Driver Age                       | 60              | 53              | 56.4            |
| Median District Driver Age                         | 62              | 59              | 53              |
| Driver Age Range                                   | 45-67           | 29-67           | 46-68           |
| Average Years of Driving Experience                | 11.3            | 15.2            | 15.4            |
| Driver Compensation (Daily Rate)                   | \$74.07-\$80.36 | \$78.07-\$80.36 | \$65.00-\$92.65 |
| Benefits Eligible <sup>a</sup>                     | No              | No              | Yes             |
| District Drivers with Take Home Bus                | 6               | 10              | 9               |
| Drivers with Additional Income Source <sup>b</sup> | 4               | 8               | 8               |

*Note: <sup>a</sup> District 1 offered life insurance but not health insurance. District 2 offered no insurance. District 3 offered health insurance and life insurance.*

*<sup>b</sup> Additional income sources include the following in-district positions: substitute teacher, cafeteria staff, school secretary, and school maintenance worker. Additional income sources include the following outside employment positions: excavator, delivery driver, house painter, tow truck driver, farmer, hairdresser, water softener representative, and hardware store employee.*

## Data Collection

Data collection included semi-structured interviews and focus groups with participants, as well as document retrieval from the school district’s website and through requests made to the participants directly. Prior to data collection, the study plan was submitted to the Indiana University Institutional Review Board (IRB) for review and approval.

### *Semi-Structured Interviews and Focus Groups*

I conducted semi-structured interviews with nine transportation directors employed in the three districts plus focus groups with 16 school bus drivers employed in the same districts. Most

interviews with transportation directors lasted between 30 and 60 min; however, one interview lasted 90 min. The interviews involved a set of questions designed to understand how the district viewed issues related to driver recruitment and retention. The focus groups lasted between 45 and 60 min and involved a set of questions designed to understand the conditions that the drivers perceived increased the likelihood that they would be retained, as well as the steps being taken by the district to recruit them for their positions. Both interviews and focus groups also sought to understand what factors influenced recruitment and retention. The questions were informed by the literature and the study's conceptual framework.

Two interviews were conducted and focused on different aspects of school transportation. The first interview focused on recruitment and retention, with a particular focus on logistics and operations. The second interview focused on recruitment and retention, with a particular focus on issues related to human resources. The interviews are provided in Appendix C. They were conducted between June and November 2018. All but one of the interview was held at the participants' school district. These interviews were recorded using a digital recorder and later professionally transcribed. I also conducted a focus group with bus drivers from each participating district. The protocol can be found in Appendix D. Bus driver focus groups were conducted in a room provided by each district on campus and lasted 45 to 60 min.

#### *Document Collection*

Throughout the study, I requested documents and other artifacts. These included district documents, such as the district's driver manual or official policies related to driver recruitment, employment, compensation, evaluation, and retention. Table 4 provides a summary of the documents retrieved from each district.

**Table 4**  
*District Documents and Artifacts*

|                            | District 1     | District 2 | District 3     |
|----------------------------|----------------|------------|----------------|
| Transportation Handbook    | Y              | Y          | N <sup>a</sup> |
| Compensation Summary Sheet | N <sup>b</sup> | Y          | N <sup>b</sup> |
| Bus Driver Contract        | Y              | Y          | Y              |

*Note: <sup>a</sup> District 3 indicated that they were still working on creating a Transportation Handbook during this study.*

*<sup>b</sup> Districts 1 and 3 did not have a summary document containing their wages, but the information was obtained through follow-up questions during the interviews.*

## **Data Analysis**

I completed a thematic analysis of the data. This process involved moving progressively from lower to higher levels of inference through a six-step process, which was outlined by Braun and Clark (2006). First, I transcribed the interview recordings into a Microsoft Word document. Once done, I read across the dataset to become familiar with it (Riessman, 1993). I then uploaded the interview data to Dedoose, a web application built for qualitative data analysis.

Next, I applied a first round of coding focused on concepts found within the conceptual framework. Policy, district, and driver factors directly discussed by participants or referenced by them were coded. This process ensured that relevant extracts were captured for later use in the thematic analysis (Saldaña, 2009). Miles and Humberman (1994) noted that coding is part of the analysis, and these recursive reviews of the data allowed for a thorough review and re-review of all relevant participant comments. The use of Dedoose software allowed for individual extracts to be coded with multiple factors, as these extracts often overlapped in how they were related to the three lenses identified in the framework.

A second round of coding applied new codes to those previously identified. These codes grouped the statements into related categories. For example, extracts relevant to district factors were grouped as supervisory practices. Supervisory factors included statements about how the administrators were related to drivers and supported drivers and how they assigned duties to these



drivers. Because of the prevalence of these factors in the data, multiple codes were often applied to single extracts.

Once the second round of codes was applied to the data, I utilized Dedoose software to collate the coded extracts based on different factors. This allowed some codes to be refined, separated, or discarded (Braun & Clark, 2006). At this stage, I solidified my identification of the relevant categories by referring back to the literature. This allowed me to identify practices or factors that prior research had defined as important. At this stage, I also identified practices or statements that were similar or different to determine whether they were representative of all or just some of the participants. This helped identify views that were representative of the three districts as well as those that were unique to a specific district.

Finally, I examined the categories and gauged their relevance and importance based on the number of times the factor was mentioned and the level of meaning ascribed to that factor by the participants. The factors mentioned occasionally and by a few participants were discarded. The factors that received significant mention but were confined to one individual or one particular district were discarded. As factors were discarded and minimized, other factors came to prominence due to the preponderance of coding examples across districts as well as participants ascribing significant meaning to these factors. The most prominent factors that were coded were then organized into broad categories that served as the final themes. The final themes were then crafted into statements that answer the research questions of this study and are articulated in the Findings chapter.

### **Limitations**

All research studies have limitations (Marshall & Rossman, 2006). In qualitative research, researcher bias is considered a potential limitation due to the researcher's close relationship with

the subject being studied (Yin, 2009). In this study, I served as both a school administrator in a rural public-school district and a regular bus driver. This can not only create “rapport with participants so multiple perspectives can be collected” (Baxter & Jack, 2008, p. 556) but also contribute to bias. As an administrator and a driver, I have similar experiences with focus group participants and administrators working with transportation (Peshkin, 1988). To guard against this and validate my findings, I conducted member checking with district superintendents who were not involved with transportation (Lincoln & Guba, 1985). I also reported preliminary findings to two colleagues in non-case-study districts to “test tolerance for contrary findings during the collection phase” (Yin, 2009, p. 72). Both confirmed that the findings were reflective of the analysis and not of my own views as an administrator and a driver. In addition, this study was limited to three rural school districts. This context is unique and thus may not carry other districts that are larger or differently situated. Thus, while many of the variables related to school transportation staffing are uniform across the state, the study is meant as a particularized description of these cases. As such, one should orient to the findings as being both situated and partial.

## Chapter 4: Findings

The purpose of this study was to explore the recruitment and retention of bus drivers in rural public-school districts. The qualitative data analysis produced the three principal findings outlined here. First, school districts did not use formal recruitment strategies to attract bus drivers. Second, school districts engaged in supervisory practices they believed created favorable conditions to increase bus driver retention. Third, policy factors created barriers to successful recruitment and retention for districts. I will discuss these findings in greater detail below.

### **Finding 1: School Districts Generally Did Not Use Formal Recruitment Strategies to Attract Bus Drivers**

Districts in this study did not generally use systematic recruitment strategies to attract bus drivers to their local labor pools. Instead, the participants described recruitment practices that were largely informal and dependent on the social relationships of the drivers, as well as the conditions within the district. In particular, the participants described using strategies such as road signage, newspaper advertisements, web advertising, word-of-mouth advertising, and recruiting through social connections. Exceptions to these informal strategies included strategic applicant filtering and re-assigning driving responsibilities to other roles. I will discuss each of these strategies below.

#### Districts Used Informal Advertising Strategies to Recruit Drivers

An analysis of the interview data suggested that the districts used low-cost, passive recruitment strategies to recruit drivers. Eight of the nine administrators who participated in the study provided examples that included using signs posted near the roadway, using parked buses to advertise, and using callouts on the school's digital signage in front of a school's campus to attract prospective school bus drivers. As Margaret, a transportation secretary in one district, noted, "We haven't really done anything to attract drivers other than have our signs up." Drake, a

transportation director in the same district, noted, “Everybody’s in the same boat. I think everybody in our area, maybe in the entire state, we just don’t have enough drivers. Nobody wants to drive. I’ve got a sign out front, it says bus drivers wanted.” Drake’s comment highlights one of the tensions in trying to recruit drivers to the district. While the districts took action to attract drivers, the requirements of the position itself often detoured prospective drivers from applying. Bill, an assistant transportation manager in a different district, echoed the use of signs along well-traveled roads and observed that this strategy was in use in many state contexts, including Alabama. As he noted, “Alabama’s got signs along the interstate, we need bus drivers for any corporation here.” His comment suggests that this strategy is not only in use in the corporations in this state setting but may also be more widely used in other state settings. In total, these quotes illustrate the kind of advertising strategies that the districts employed, as well as the limitations that these strategies have relative to their success in increasing the number of drivers available in their labor pool. Chris, an assistant transportation director, noted that districts could potentially expand on the use of signs by parking school buses in front of district facilities. As he noted, districts could “park a bus with a big banner out front.” Much like the use of signs, however, this strategy was informal and largely a matter of convenience.

Bus drivers were familiar with the district’s informal advertising activities and referenced them in their descriptions of the factors that led to the successful recruitment of drivers. An analysis of comments from a focus group of 10 school bus drivers found that six drivers referred to the informal advertising efforts of their district. Some of these comments referred to the use of billboards, while others highlighted compensatory factors, such as a specific hourly wage. Lisa, a driver, noted, “You can see billboards all over. They’ve got them in Mustard County.” Conner, another driver, stated, “Andy and I over the years have traveled the state, and there are signs all

over!” Janet, a driver in the focus group, noted, “They’ve got [billboards] in Klondike, and they say \$18.75 per hour.” These comments suggest that the drivers were aware of the efforts being undertaken by the districts to recruit peers into their driver pool. The comments highlight the extent to which the districts used different strategies to attract drivers. These strategies might be unique to small districts. Unlike larger districts, which might have far more advertising efforts underway, smaller rural districts might have one only or two due to their lean operating budget.

The analysis also suggests that many of the low-cost, passive recruitment strategies used by the districts neither required substantial investment nor depended on significant district staffing. Strategies such as purchasing advertisements in newspapers and using the district website were one of the most often cited expenses for driver recruitment. The districts in this study were all rural school districts with limited central office staff and very small discretionary budgets. Thus, they lacked significant resources to implement large recruitment programs. The preference among administrators was thus to use strategies that did not require substantial resources to implement or sustain. Drake, a transportation director, offered the most compelling justification for the use of this strategy. As he recalled,

Our local paper is two days a week. It’s a waste of time. I spent roughly \$800 from the 1st of January to May advertising for custodial help. I couldn’t get anybody because they don’t buy the paper. So, now I went up to Eddyville and had him make me signs. One of them says bus drivers, and one says minibus drivers and custodians. And I did that because my counterpart [in another district], that’s what he did, and it worked fairly well. It has. It cost me \$400 for the signs, and I’ve hired 4 or 5 people just off the signs. Custodians and minibus drivers.

Given the costs associated with newspaper advertisements, school corporations appeared to be shifting toward different, lower-cost advertising strategies. Samantha, a transportation secretary, noted that website advertisements had become more common and were replacing newspaper advertisements. As she noted, “I think we’re only advertising on our website now, we used to advertise in the newspaper, but I think we’re going to just do our website advertisement. I think

that's what a lot of people are moving to." Thus, while the districts clearly did not utilize recruitment strategies that were time-or resource-intensive, they were carefully considering the cost of the strategies they used and the potential that these strategies held for increasing the number of drivers.

While low-cost, passive recruitment strategies were common, comments from drivers indicated that they were not universally successful. Conner, a driver in the district, recalled a newspaper advertisement placed by his district, "They had something in the paper, but they didn't say whether it was a white or yellow bus position." Given that rural districts may lack a dedicated human resources department to clearly articulate job descriptions for job postings, individuals tasked with crafting and publishing job postings may lack the requisite understanding of school transportation logistics to accurately advertise the position. This lack of specificity may hinder the successful recruitment of district drivers. Data from the focus group indicated that district efforts to advertise were not evident to all bus drivers within the district. Jasmine, a driver who had been in the district for over five years, noted seeing something on "Facebook . . . but I've never seen anything else [advertising]." Janet, another driver in the district, shared, "I don't really think they [administration] do enough advertising for bus drivers." These comments indicate that districts may advertise very little, and there may be minimal communication between supervisors and drivers regarding advertising as a strategy to attract new drivers to the district.

In one striking contrast to informal strategies, the analysis suggested that the directors might filter applicants intentionally from their online application systems and retrieve applicants who would fit open driver positions to increase their driver labor pool. As James, a transportation director, noted,

The last driver that we had that I hired for the woman who retired, I hired her. She'd actually gone through the Applitrack and it came to me, and I printed it off and put it right

here on my desk just in case. Because, always, anybody that applies to drive a bus I print it off and keep it in a folder, that way I can come back to it.

As this comment suggests, transportation directors were acutely aware of the shortage of qualified applicants and thus worked to tag or store applicants that could be well-suited for a driver's position at a later date. While not a universal strategy, it could be that directors are engaging in this practice to maintain some kind of applicant pool for possible openings.

### Leveraging Social Relationships and Networks to Recruit Drivers

One of the complicated factors associated with driver recruitment was the absence of school district infrastructure. The districts in the study lacked a large human resource system and had to depend on social relationships or networks of drivers to recruit for open positions. Seven out of the nine administrators who participated in this study viewed this as a strategy that puts the onus of recruitment on drivers themselves. Transportation directors saw drivers as part of their human resource system and encouraged them to "talk it up." As Drake, a transportation director, noted, "I like for my drivers to talk it up. It's a good job, and a good way to make some extra bucks. And that's worked because I've got one driver now whose daughter is going through the system to get their license." Comments from the drivers point to the value of these informal connections. For example, drivers often spoke of the value of recruiting drivers from the same family. As one driver noted, a husband and wife both drove in the same district. Similarly, another driver noted that he knew of a mother and a daughter who both drove in the same district. In one district, the daughter of an existing driver was seeking licensure. Finally, in another district, two sisters drove for adjacent districts each. As these statements and examples illustrate, informal networks and strong social ties could explain why rural school districts have some success recruiting and maintaining drivers.

For the most part, the drivers understood that they were part of their district's informal human resource network and were actively involved with informal recruitment efforts. An analysis of comments from two bus driver focus groups with six total participants revealed four drivers who made explicit mention of either recruiting drivers for the district or being recruited themselves. Jessica, a driver, noted, "We talk to anybody we know. Farmer's wives are perfect." Abigail, a driver, stated, "I'm not a cold call salesman, but I talk to a lot of people." Later, she added, "It's the perfect mom job. I have moms who are not super young. They're looking for some extra income but they're scared to death to leave their kids." These statements illustrate that, while broad and informal, the drivers showed selectivity in their recruitment efforts, targeting individuals with specific traits or life circumstances they deemed conducive to driving a school bus. Nicole, a veteran bus driver, recalled how she had been recruited: "Cindy actually talked me into it [becoming a driver]. She used to be a driver, too." This comment provides an example of an existing bus driver successfully recruited by a bus driver and suggests that drivers have been a part of the districts' recruitment efforts in the past.

The drivers also potentially benefitted from being part of the district's informal human resource system, because it provided them with opportunities to choose their colleagues or shape conditions in their workplace. The administrators noted that the drivers may be motivated to use their knowledge and position as recruiters to deflect adverse changes in their working conditions. James, a transportation director, stated, "I think they [the drivers] know that if we don't have our routes filled with drivers, their routes are going to get bigger. They're doing [recruiting] to protect themselves." The administrator recognized that existing drivers understood that if a replacement driver could not be found, working conditions in the district might deteriorate due to longer routes and more crowded buses. Thus, it was often in the driver's interest to engage in recruitment



activities. One of the considerations for the districts involved situations in which a driver left and a replacement was needed quickly. The administrators who participated in the study noted that using social relationships among drivers was often the surest way to recruit when timing mattered. Samantha, a district's transportation secretary, noted that word-of-mouth connections could result in hiring a driver on short notice.

One of our hires said they had a friend of a friend and he drove in Kandiyohi County. And at the time we were full. But then all of a sudden in late July we needed a driver, and we had a connection and a driver. We let our drivers know to talk to friends that would be a great fit and would want to work here. It's like anything, you want everyone to mesh well together because our drivers do have to work well together. So that's why I think word of mouth is, especially in a small school system, the best way to get drivers.

This example illustrates how this word-of-mouth strategy could be used to fill a last-minute bus driver opening, in addition to other strategies the administrators employed.

While the use of social relationships was commonly used to recruit drivers, not all districts indicated that these strategies were successful. Jason, a transportation director, noted that the informal nature of his district's recruitment practices did not produce the number of drivers he needed. As he observed, "[Our strategy is] more by word-of-mouth, which obviously isn't working really well because we don't have a lot of drivers. . . . You're not going to have people come knocking down your door to become bus drivers." As this statement illustrates, leveraging social relationships may not be successful at recruiting the required number of drivers, and some intentionality on the part of administration is necessary to garner the interest of potential drivers.

#### Using Staff Reassignment and Role Expansion to Increase Drivers

Although districts generally focused on recruiting drivers as stand-alone positions, some expanded their pool of drivers by reassigning driver responsibilities to other professional roles and staff in their district. Such role expansion was common in the districts. For example, two of the three districts required their transportation directors to obtain a school bus license to maintain their

position. This requirement ensured that, at a minimum, the transportation director was available to act as a substitute driver when another was unavailable. In both districts where this requirement existed, the transportation director also served as the district's athletic director. Noting the challenge this created, Samantha, a transportation secretary, said, "We actually had an athletic director who was told part of her job would be transportation director, and you have to get this [school bus license]. She outright refused and she's not here anymore." One district did not require its transportation director to maintain a bus license. The most veteran transportation director, Drake, stated, "Would I drive a bus if I was out there looking for a job? No way. I wouldn't do it." This individual also served as the maintenance director for the district and had been in the position for over 40 years. This suggests that while some districts placed a high value on adding and maintaining additional substitute bus drivers to the district's available pool, rural districts also weighed the need for substitute driver capacity against the value certain provided by the employees to the district as a whole.

### Summary of Finding 1

As discussed above, the interview data demonstrate that the districts in this study did not generally use systematic recruitment strategies to attract bus drivers to their local labor pool. Instead, the participants described recruitment practices that were largely informal and dependent on the social relationships of the drivers, as well as the conditions within the district.

### **Finding 2: School Districts Engaged in Supervisory Practices they Believed Created Favorable Conditions to Increase Bus Driver Retention**

The participants noted that improving driver retention among bus drivers was an important step in ensuring that they had drivers available. The districts generally tried to avoid creating conditions that would potentially contribute to a driver's decision to leave. Many of these factors

centered on the role of administrators. Supervisor practices most likely to influence the drivers' decisions to remain in their districts and to avoid seeking employment elsewhere included support from student behavior management, practices that allow for bus driver autonomy, outreach activities, practices that support proximity to family, and the softening of non-critical expectations. The analysis results indicated that there are some practices adopted by the administrators that may have contributed to a driver's desire to leave their district's employment. These practices included a lack of support with student management, a lack of authority to discipline student behavior, and a lack of communication regarding the information the bus drivers deemed essential to their responsibilities. I will discuss each of these behavior types below.

#### Supervisor Support with Student Behavior Management

Student behavior was one of the most often cited working conditions that contributed to a driver's decision to leave their district. Thus, administrative support with student behavior management was an important factor within districts that contributed to increased driver retention. Seven out of nine administrators provided examples that illustrated their belief in the importance of supporting drivers in student behavior management. As Drake, a transportation director, stated, "Frustration is the reason they [bus drivers] would want to leave if they don't get the support for [student] discipline. That's one reason I support them one hundred percent." Margaret, the transportation secretary in the same district, shared an example of what that support looked like in practice: "He [the transportation director] will contact the drivers first to get their input before he goes further [with an investigation of a student discipline issue]." These comments suggest that the supervisors are aware that the bus drivers appreciate administrators who intentionally include their input in the process of addressing student management issues. Jamie, a transportation director, shared his practice of "pulling the tape" to verify a bus driver write-up and protect his bus

drivers from upset parents. He continued, “What we don't want is the kids going home lying, fabricating something, or not telling the whole truth. Once we started making that a practice, I think they [bus drivers] understood we were doing it to protect them.” The standard equipment on school buses includes video surveillance equipment, which can be reviewed to verify an occurrence on a school bus. This comment indicates that the supervisor was willing to take the time to bolster the bus driver’s write-up with ocular proof to fully support the driver’s discipline decision. Another example of what this support with student behavior management looked like in practice was shared by Martha, an assistant transportation director: “We’ve rode buses before. If the kid’s being a problem, we’ll ride the route.” Rural districts with lean budgets had limited transportation staff. Despite this limited staffing, these comments suggest that administrators in the participant districts who were cognizant of the need to retain drivers invested the time and energy necessary to provide this personalized level of support with student management to district drivers to increase bus driver retention.

Administrator support for student behavior management was also viewed by drivers as creating favorable conditions for bus driver retention based on an analysis of interview data across three focus groups comprising 16 total drivers. Comments from a focus group with three bus drivers highlighted some of these practices. Jessica, a driver in the district stated, “You [bus driver] have to make a parent contact to suspend [a student] for five days. A lot of parents ignore your calls, so she [transportation secretary] will mail it [discipline notice] via certified mail.” The administration was willing to assume the costs and clerical work of certified mail, suggesting that even districts with tight finances were willing to prioritize this type of follow-through. Nicole, a bus driver, noted, “I got paid really well there [another corporation], but I didn’t have the backing from my transportation director. That makes a huge difference in being happy.” Katie, another

driver added, “My niece drives there [neighboring district] and says it’s horrible. The administration has no backbone like ours.” These comments suggest that supervisor practices that support drivers with student discipline are highly valued by drivers and may be more valued than compensation for bus driver retention.

### Practices that Allowed for Bus Driver Autonomy Improved Driver Retention

Creating working conditions that supported bus driver autonomy was another strategy used by the districts to improve driver retention. In the case of school transportation, autonomy meant allowing the bus drivers to make impactful decisions about how they executed their driving responsibilities without requiring direct input from their administrators. In comments from two focus groups with six drivers, four drivers expressed this preference. For example, in a scenario where a district lacked enough drivers to run the end-of-day routes, the drivers would “double up,” as Lindsay, a bus driver, described it. The drivers would split up and share students from the absent driver’s route to ensure that every student received a ride home. Jessica, a bus driver, recalled, “We had a bad situation where a sub driver forgot. Our transportation director was panicking. We [bus drivers] separated the students the best we could and got everyone home. Our transportation director couldn’t thank us enough.” Larger districts with more automated systems may have the capacity to reroute students on short notice and handle such uncommon scenarios with minimal organizational input from drivers. The districts in this study lacked such digital infrastructure and instead relied on manpower to adjust to on-the-ground situations. The drivers had more specific knowledge to address such last-minute challenges. The quote suggests that the bus drivers were grateful for their administrator’s appreciation. Another interchange between two bus drivers illustrates a driver’s preference for decision-making authority in how they run their route:

Jessica: The Transportation Director always wanted it to be the first kid on, last kid off. Just because of respect for the group. I was driving from my house to the sand bar. That’s

six miles from my house, just so I could do the first and last. I told him it was wasting fuel and time. It was wasting my time. So now it's the first one on and the first one-off. If your parents don't like it, then they can take you.

Nicole: That's how I run mine.

Jessica. But he never used to allow us to do that. The last couple of years he's let us.

Consistency of routing order on lengthy rural routes has implications for students' time spent on the bus. Route designs that may be more equitable timewise for different students may be inefficient timewise for bus drivers. In this instance, the administrator had existing preferences that valued equity "because of respect for the group." However, the comment "He never used to allow that" indicates that administrators could be shifting practice to allow drivers more autonomy to fit driver preference.

#### Supervisor Outreach and Monitoring Activities

Comments from bus driver focus groups also provide examples of outreach activities in which administrators involve themselves in day-to-day transportation processes and proactively communicate with drivers in an attempt to support them. An analysis of comments from two bus driver focus groups with six drivers found comments from five drivers who spoke positively about such outreach activities. Jessica, a bus driver, noted, "If kids get mixed up on certain buses, he [administrator] will drive around, locate them [the student], and take care of it." Based on the information collected from the transportation secretaries in advance of focus groups and interviews, none of the districts used routing software. Instead, the districts depended on human interactions and clerical work to update routing specifics and communicate and execute routing changes. This system sometimes resulted in students getting on incorrect buses, which required sorting out. The bus drivers appreciated administrative assistance during these times. The interchange between bus driver focus group participants describes more of what this supportive outreach looked like in practice.

Nicole: He [transportation director] meets us out here every day at 2:45 before the students come.

Jessica: He's at the high school every morning, and if there are problems, he's going to be all over it.

Nicole: You can talk one-on-one with him about any little thing. He's right there.

Jessica: Any questions or concerns.

Interviewer: And it seems like he's really on it?

Jessica: He is. He gets frustrated with us a lot. But he keeps coming back.

Nicole: He'll block traffic with his truck because he doesn't like random vehicles going behind buses. At the high school he has one bus that parts in the middle so traffic can't go past.

These comments suggest that drivers appreciate how readily available their administrator is every morning and afternoon and his apparent willingness to “be all over” their problems. The bus drivers acknowledge that their administrator can be “frustrated” with them but is still willing to provide the support they desire, which suggests that the administrator’s disposition is less important than their willingness to ultimately provide the support. Another interchange from a different focus group of bus drivers demonstrates similar outreach in practice.

Abigail: I like the small school atmosphere. I was able to talk to [Assistant Transportation Director] out there while he was directing traffic this morning, and I think he was actually listening.

Lindsay: He listened to me, too.

Carol: He said he'd do my route next Friday.

These comments suggest that drivers appreciate their administrators being available to “actually listen” to what bus drivers have to say and be willing to provide assistance by driving a route when needed. With the limited staffing of rural districts, administrators are often stretched thin between competing responsibilities. This indicates that they are willing to take the extra time necessary to be available to their bus drivers to increase the chances that the drivers will remain in the district. Martha, an Assistant Transportation Director, provided examples of her district’s retention-based outreach. She recalled, “We [administrators] treat them [bus drivers] amazingly. We do things for them for bus driver week. . . I had all the kids make cards for them and thank them, and we gave them little candy bags.” These activities indicate that the administrators were willing to invest their

time and students' time to make the bus drivers feel like they were supported and appreciated in their roles.

The administrators recognized how support for student behavior management, driver autonomy, and outreach may work together to provide the bus drivers with a sense of pride and ownership in their work and increase their retention. James, a transportation director, articulated his perspective on what this support looked like in practice.

We try to empower them [bus drivers] a little bit. We tell them that it's just like having a classroom of kids. You're in charge of your bus. You're in charge of your kids. I'm not going to come in the bus and tell you how to do your job necessarily. When you need help, we're there for you. We're there for you with the discipline, as long as you're writing those things up. But we try to give them [bus drivers] more power so that way they take a little bit of pride in what they're doing. Plus, they're the ones that are going to have to drive the route anyway. So you try to give them the option of how they want to do it.

This quote suggests that there are boundaries attached to this administrative support. The administrator will not dictate how to do the bus driver's job "necessarily" and will support them with discipline "as long as you're writing things up." However, administrators lean in the direction of empowering their drivers with ownership of their route and responsibilities, which may in turn increase bus driver retention.

#### Supporting Connections and Proximity with Family

Beyond working conditions, the administrators also recognized the drivers' desire to spend time and be closer with family as a factor affecting bus driver retention. Many drivers attached their driver responsibilities to those involving their families. Unsurprisingly, an analysis of the interview data found six of the nine administrators engaged in practices that allowed for the comingling of family and transportation activities. Samantha, a transportation secretary, recalled, "She [recently added substitute driver] wants to sub for us, mostly athletic trips, because she has grandkids [in the school district]." This comment illustrates the administrators' recognition of the



driver's family circumstances. Margaret, a transportation secretary in a different district, recalled, "Back in the days when they [bus drivers] had children going to school here, bus drivers would pretty much get to pick which sporting events and field trips they wanted because they had their own kids." This quote illustrates how family circumstances often resulted in drivers coming into the district as employees. Both examples illustrate how administrators recognize the importance of family and personal circumstances as one way to leverage that appeal to meet district transportation needs. The comments also suggest that the practice is changing. However, demographic trends in the study districts may make this practice less effective in the future. The median age of bus drivers in this study's districts was 56, which suggests that many drivers engaging in this practice would be transporting grandchildren rather than children. The administrators also spoke of drivers choosing specific school trips for other personal reasons. Samantha, a transportation secretary noted, "Last year a driver drove to a volleyball game in Decorah, met her husband there, went out to dinner, and did a few other things while getting paid for a field trip." These comments indicate that the administrators, despite the added cost and extra miles on school vehicles, were willing to permit personal business as part of school business as a way to support practices that value families, and thus, create favorable employment conditions. By doing so, they would increase the likelihood of the drivers remaining within their districts.

The driver pool was small enough for the administrators and drivers to maintain an acute awareness of their coworker's unique family circumstances. The comments from two bus driver focus groups, including six drivers, indicated bus drivers appreciated administrative practices that took family circumstances into account. These practices included preferential selection for field trips and sporting events and assistance from the administration with route coverage. Abigail, a bus driver, recalled, "For twenty years I've driven all of my kids' field trips and all of their ball

games and got paid for some of it.” Jessica, a bus driver in a different district, stated, “Margaret’s [administrator] awesome. She takes very good care of us. Usually, when I had kids in volleyball and softball, I drove all of them. Cathy, she drove all her [kids sports trips].” These comments suggest that the drivers appreciated special considerations from administrators, which allowed them priority to drive their children’s activities. The focus group comments also indicated that the administrators were willing to offer flexibility to the drivers to accommodate unique family circumstances. A conversation between two bus drivers details a noteworthy example of this:

Abigail: One year, very last minute, my husband’s boss said he’d get us on a plane to Cancun. Mind you, I had no subs, nobody who could run my route. I contacted my parents, and my parents all took their kids to school so I could go. And I received many texts that said, ‘You go. We got this.’ because it was a group text. They [parents] were all in agreement, and the other bus drivers picked up some of my shuttle kids.

Lindsay: For me, it may come down to that. I put my paperwork in March to pay for this cruise, and Chris [Assistant Transportation Director] said, ‘Don’t worry about it.’ It may be that you [pointing to another driver] may have to pick up my morning and afternoon kids on Route 73.

Abigail: It will get done.

Lindsay: And Jacob [another driver] can take some of my high schoolers.

To leave for a last-minute vacation, the first driver, Abigail, used a combination of parents and other district drivers to meet the district’s transportation needs, because “I had no subs, nobody who could run my route.” She had been permitted to do this by her administrator. The second driver, Lindsay, was planning a similar trip, and her supervisor said, “Don’t worry about it.” This interaction illustrates the high degree of flexibility administrators may be granting bus drivers to accommodate family situations, even if the outcome involves significant deviation from standard operating procedures and requires the administrator to cover the regular duties of a bus driver for an extended period. This suggests that administrators are willing to offer considerable flexibility to drivers for family and life circumstances to maintain their driver labor pool.

As further support for drivers, districts often allow drivers to use take-home buses as a personal convenience. In preparation for focus groups and interviews, the bus driver participants’

home addresses and district boundaries were collected. The analysis result indicated that 25 out of the 26 bus drivers lived within their district boundaries or within five miles of their district boundaries. These same 25 bus drivers took their buses home and parked them on their personal property. An analysis of administrator interview data and bus driver focus group data suggests that this practice was adopted by the administrators and appreciated by some drivers. Chris, an assistant transportation director, noted, “If they want to, they can take them home at night. And this year, all of them take them [home].” In assigning drivers to specific routes, Drake, a transportation director in a different district, stated, “I try to do it geographically from where they live. I try to keep it as close to their home as possible.” In rural districts, students are often spread out over a large geographical area. These comments suggest that districts favor the practice of allowing take-home buses along with strategic route placement, which could be a cost-saving measure for districts, reducing the miles driven from the bus’s starting point to the first stop. The bus drivers received the benefit of a take-home vehicle and reduced commute time. Jessica, a bus driver, stated, “It’s nice. We get to take our buses home every day.” Katie, a bus driver, recalled being moved to a different route: “I’m a half a mile from my first stop, where I used to be eleven miles.” Corrine, a bus driver, noted that she passed on job offers to drive a neighboring district with allegedly higher pay because “I get to take my bus home, I’m staying.” These comments suggest that take-home buses are a relevant factor affecting bus driver recruitment and retention. As a meaningful counter-example, while validating the findings, it was discovered that one driver who was not permitted a take-home bus had since begun driving for the neighboring school district in which he resided—a district that then offered him a take-home bus. This example suggests that drivers are willing to travel some distance for employment but switch to a district closer to home based on district practices.

### Supervisors' Softened Non-Essential Expectations to Improve Driver Retention

One challenge districts face is the limited capacity for sudden fluctuations in their regular bus driver pools. An analysis of the interview data suggests that in such circumstances, driver retention could be critical to district operations. Drake, a transportation director, noted, "They've got leverage and they know it. If I had two drivers that walked out right now, I'd be in trouble. I don't know what we would actually do." Bill, an assistant transportation director, added, "All bus drivers have to do is threaten to quit, and they [other administrators] bend over backwards and overlook them not handling their responsibilities." These comments suggest that bus drivers possess some degree of power over supervisors due to the shortage of available replacements. Thus, administrators may be willing to overlook non-critical expectations to retain bus drivers. An interaction among bus driver focus group participants notes one such instance.

Lisa: She [pointing to Jasmine, another driver] got threatened that they were going to withhold her paycheck if she didn't turn her paperwork in.

Jasmine: I did. I actually quit my job over it [withholding pay for not turning in paperwork]

Lisa: She turned in her letter of resignation, and Dr. Woodson [the superintendent] called her in and said, 'You cannot do this, you cannot quit.'

In this striking scenario, district expectations and protocols involved withholding pay for missing paperwork. The policy was followed, and pay was withheld. The driver resigned in protest, and the superintendent responded with a personal appeal to retain the bus driver. It worked because the bus driver was still employed with the district as of the time of this study. This suggests that administrators are willing to be flexible and even overlook some non-critical procedural expectations to avoid potential disruptions in district services due to insufficient drivers.

### Insufficient Follow-up Regarding Student Discipline

One administrator behavior that may have contributed to conditions that caused drivers to leave involved a perceived lack of support with student discipline. Six of the nine administrators in the study provided examples that included lack of follow-up with student discipline and placing

procedural hurdles in the way of disciplining students as the drivers deemed appropriate. When referring to complaints from bus drivers, Chris, an assistant transportation director, shared,

Probably student discipline. Student behavior. Because drivers don't see the whole picture, so when we discipline a kid at school, they say 'Why am I doing this? You didn't do anything to the kid.' All we [administrators] can do is discipline the behavior. We can't make the kid not do something. We have to follow through with what we said we were going to do. So the biggest complaint, I would say, is student behavior, and then making sure that we as administrators do something about it.

This comment indicates that the administrators understood that the bus drivers desired seeing evidence of supportive actions in addressing disruptive student behavior but lacked the full picture of how student behaviors could be reasonably addressed. Consequences from administrators “can't make the kid *not* do something” and, thus, may appear ineffective in the eyes of bus drivers. In a district where student discipline was handled by building principals, rather than bus drivers or transportation administration, Bill, an assistant transportation director, noted, “The administration [referring to principals] won't stand behind a bus driver. When it comes to students, you've got to write them up three times. And then, do they [principals] really address the problem, or do they just hope it vanishes?” Kathy, the transportation secretary in the same district, shared her perspective on this administrator practice: “We have a new discipline procedure that we started this school year. I don't know if it's better now. I think it puts more stuff on the driver.” A system of warnings prior to severe consequences, such as removing a student from school transportation, is required by law to meet due process standards and is thus necessary based on the policy environment. These comments suggest that bus drivers were unaware of this legal standard or felt that they were meeting it with less documentation. The added responsibility of writing up a discipline referral, as prescribed by the administrators, was viewed as unsupportive and illustrated practices that were likely to contribute to a bus driver's decision to leave.

### Limitations on Driver Authority

Another factor that might contribute to a driver's decision to leave involved a lack of autonomy to manage student conduct and a lack of follow-up regarding how discipline was handled. In the analysis of data from a focus group of 10 drivers, seven drivers shared this viewpoint. Jasmine, a bus driver from this focus group, summarized their collective sentiments as follows:

It'd be okay if we were allowed to discipline them [the kids] and kick them off ourselves. But we have to turn it over to the principal, who says it wasn't a serious enough offense and lets them back on the bus. Well, he [the principal] just took away all of our authority. The kid thinks, 'I don't have to listen to you, all I need to do is suck up to the principal.'

This comment indicates that drivers desire the authority to remove students from their buses for disciplinary reasons. This suggests that they view their loss of authority with displeasure and believe that this practice can lead to further disruptive student behavior as the students gain a sense of impunity. The studied districts differed in their procedures for removing students. Those who allowed their drivers more direct authority in removing students received fewer negative participant comments from bus drivers regarding this practice. Follow-up regarding how discipline was handled was also viewed as important. Lindsay, a bus driver, noted, "The follow through I think is the biggest thing. If it's the elementary principal, if it's the high school principal, if it's the superintendent, I think they need to get the form [discipline form] back to us. I don't feel like we should have to wait a week and see what's going on." In rural schools, where building and transportation administrators handle multiple responsibilities, following up and adjudicating student discipline for bus infractions may not be their highest priority, which may negatively affect bus driver retention.

### Insufficient Supervisor Communication

Bus drivers described other practices that were likely to contribute to a driver's decision to leave. These included insufficient communication from administration regarding changes in student placement as new students were added to bus routes and a lack of sharing of knowledge of student health issues.

An analysis of comments from a focus group of 10 bus drivers found six drivers providing examples of insufficient communication. As Conner, a bus driver in this focus group, noted, "If you don't show up at the [student's] house that morning, they [the parents] will call the school and the school will finally decide to tell you." Lola, a driver in the same focus group, added, "And they [the school] will say you forgot to pick up a student this morning." Rural districts with limited budgets and limited specialized staffing neither use professional routing software nor have separate software to track student placement on buses. The return on investment in terms of both administrator time and money may not justify the cost for a small district. The administrators reported using binders and other paper-based methods to track student bus assignments. Information on newly enrolled students and recently unenrolled students and their bus assignments worked through school offices and different transportation personnel before ultimately being conveyed to bus drivers. These comments suggest that the districts' procedures sometimes resulted in missed pickups on a student's first day, displeasing the student, the parent, and the bus driver. A lack of communication regarding student health issues was also noted by the bus drivers. Karen, a driver in the district, described a student with a unique medical situation that she became aware of when a parent contacted her: "That would have been nice to know." The bus drivers referred to other instances where student health concerns were not shared, including student allergies, cardiac conditions, and specified procedures for interceding when a particular student had a seizure. These

student health issues could manifest themselves negatively during student transport, putting the students' health in danger and making the bus driver culpable. Rural districts may lack the software to track and quickly communicate such student conditions and may struggle with follow-up in such circumstances due to their limited budget, a lack of specialized medical staffing, and concerns about violating HIPPA laws. These limitations of rural districts may negatively affect bus driver retention.

### Summary of Finding 2

As discussed above, the districts generally tried to avoid creating conditions that would potentially contribute to a driver's decision to leave. These conditions were shaped by administrator behavior and included support with student behavior management, practices that allow for bus driver autonomy, outreach activities, practices that supported proximity to family, and the softening of non-critical expectations. Administrator practices that may have contributed to a driver's desire to leave included a lack of support with student management, a lack of authority to discipline student behavior, and a lack of communication regarding the information the bus drivers deemed essential to their responsibilities.

### **Finding 3: Policy Factors Created Barriers to Successful Driver Recruitment and Retention**

Policy factors also explain some of the issues school districts experienced when recruiting and retaining bus drivers. These factors establish a context that surrounds the district and thus inform the ways in which they can recruit drivers, the support available to them to assist drivers, and the expectations that they must place on drivers. Six out of the nine administrators who participated in the study suggested that federal and state transportation policies influenced the onboarding process of new bus drivers. These factors included the multistep process required to



obtain a bus license, aspects of the three-day required class, and the difficulty of passing the CDL skills test.

#### Bus Licensing May Hinder Districts from Onboarding New Drivers

The administrators routinely described the difficulties associated with obtaining a bus driver license as a major impediment to their efforts to recruit new drivers as well as to onboarding drivers who had applied. This entire process was heavily regulated by federal and state transportation policies. Thus, it was one of the most direct ways that policy factors contributed to the driver pool. Kathy, a transportation secretary who was the key contact in her district for interested individuals seeking appropriate licensure, noted, “They’ll [potential bus drivers] act interested, but they won’t follow through. Usually, they take the three-day class, and they get their permit test done, and then they start to fizzle.” Margaret, a transportation secretary in another district, stated, “We’ve had maybe two or three in the last two years that started it and didn’t even get through the CDL part of it.” The process of acquiring a license involves multiple steps, including three-day training, two trips to the Bureau of Motor Vehicles, in-person training, and a physical and a skills test. A school bus license is a commercial driver’s license, whose regulations are governed by the U.S. Department of Transportation and implemented at the state level. In Indiana, the yellow bus card is regulated by the Indiana Department of Education. Rural districts with limited budgets and limited personnel may lack the resources to provide follow-up and support to shepherd potential drivers through this process. Chris, an assistant transportation director in a different district, shared, “A lot of it is the process of getting a CDL and getting the ability to drive. For the pay you make, you’ve got to really be dedicated to getting the work done.” Margaret, a transportation secretary, added, “The only thing we pay for is the skills test. . . They do their three-day class. The thing is, now they don’t have any close to us. So you have to travel

quite a ways. The last one ended up going to Indy, getting a hotel, and spending money.” These comments suggest that financial incentives are not sufficiently motivating for bus driver candidates to be willing to diligently complete the many steps in the process. Districts do not receive any state or federal funding to assist in complying with these training mandates; thus, any costs districts and drivers would incur in training must be paid for at the expense of other district priorities. Additionally, rural districts may be located further away from a site where the three-day training is offered. These time and cost factors may present barriers for districts attempting to onboard new drivers into their labor pool.

The interview data indicated the three-day training required by the state is itself a policy requirement that creates barriers to successfully onboarding new drivers. Chris, an Assistant Transportation Director, recalled,

We had one driver who was interested. They went to the three-day in-service class. I don't know who was doing the in-service, but after the first four hours, they essentially put the fear of God into these drivers. She [driver trainee] left, called us and said, 'I can't do this.'

A bus driver participant in a different district recalled a similar example, noting, “This girl took her class a long time ago. Six months ago. She took the class and said she was afraid to drive.” The three-day class incorporates rules and regulations and details regarding how buses should travel the roads, pick up and drop off students, and some of the life-threatening consequences that have resulted from driver errors. Districts large and small have no control over the content of the coursework or how instructors present it. In its current form, the course may be a barrier for districts attempting to successfully hire drivers.

An analysis of the interviews suggests that the CDL skills test was also a significant barrier to districts onboarding new drivers. As James, a transportation director who was required to obtain the license as part of his position, stated, “That [the CDL test] was a little rougher than I thought

it would be. . . I drug it out a little bit, but in the end, I finally conquered it.” Jason, another transportation director who was in the process of obtaining the license as a requirement of his position, shared, “I’m feeling the pressure of having to pass.” This evidence suggests that even individuals who are transportation directors themselves, with access to district resources, approach the bus licensing process with an understanding of its difficulty and with a level of anxiety. Margaret, a transportation secretary, recalled, “Five years ago we had one person that had to go three times [to take the CDL test], and we got a DVD disc that we gave them to practice.” The participant districts provided handbooks, other educational resources, and training in advance of the skills test. Despite this assistance, evidence suggests that drivers had difficulty passing the test, making their entrance into the labor pool impossible. Drake, a transportation director in the same district, elaborated on the CDL skills test, “Do I care whether or not you know what the radiator is? No. Or the starter? Doesn’t matter. That part [the pre-trip inspection] needs to go away, and that would help a lot. People are scared of that [the pre-trip inspection].” Despite the pre-trip test being required by the state and federal policy as part of obtaining a CDL license, this comment indicates that the pre-trip inspection portion of the test is overly difficult and not beneficial in preparing drivers for real-life responsibilities. Instead, it may deter drivers from pursuing a bus license. As noted in the literature review, during the acute school bus driver shortage following the COVID-19 pandemic, federal regulators allowed states to waive the pre-trip portion of the Commercial Driver’s License test for school bus drivers to make the process easier for new drivers. Indiana chose not to pursue this waiver, and the requirement still exists and is likely continuing to be a barrier to districts attempting to increase their number of drivers.

### Summary of Finding 3

As reviewed above, policy factors explain some of the issues school districts experienced when recruiting and retaining bus drivers. Both federal and state transportation policies, including the multistep process required to obtain a bus license, aspects of the three-day required class, and the difficulty of passing the CDL skills test, are relevant factors.

### **Summary of Findings**

The findings of this analysis indicate that the studied school districts did not use formal recruitment strategies to attract bus drivers. Rather, they engaged in supervisory practices they believed created favorable conditions to increase bus driver retention. Policy factors created meaningful barriers to successful recruitment and retention for the districts. I will discuss the implications of these findings in the next chapter.

## Chapter 5: Discussion

School districts do not use formal recruitment strategies to attract bus drivers, nor do districts create retention incentives or programs for them. Instead, these districts rely on informal advertising, social relationships, and other staff members to meet the challenges associated with their driver shortage. Driver support is often accentuated through supervisory practices believed to create favorable conditions for drivers that potentially contribute to improved retention. These practices include support with student management, increasing bus driver autonomy, supervisor outreach to bus drivers, support for bus driver community connections, and reduction in burdensome expectations that are not essential. While limited to the studied districts and participants, the analysis suggests some factors that contribute to driver turnover. These include limited support for issues related to student discipline and insufficient communication from supervisors. At the district level, the state's bus driver licensing requirements, including pre-service training and the commercial drivers' license test, were both significant barriers to onboarding new drivers and, thus, potentially a factor that reduces the number of available drivers.

The findings from this study broadly affirm much of the discussion presented in the existing literature. Consistent with prior research, driver dissatisfaction with low levels of supervisor support appears to be an important predictor of turnover (Brown et al., 2021; deLara, 2008; Goodboy et al., 2016). Working conditions, including limitations on driver autonomy, contribute negatively to driver retention (Chung-Yan, 2010).

However, this study also challenges the existing literature by suggesting that current administrative practices do not align with those recommended by scholars. According to the literature, drivers generally appreciate administrative support with issues such as student management and prefer to be actively involved in behavior improvement initiatives (Collins &

Ryan, 2016; Goodboy et al., 2016; Kennedy & King, 2019). Strikingly, some administrators in the study ignored or disregarded the importance of supporting drivers with these issues. This negatively affected their district's ability to retain drivers and, thereby, exacerbated the challenges associated with staffing their routes.

The findings from this study contribute new understanding about why this disconnect between research and practice exists. Prior studies have suggested that bus drivers appreciate proactive involvement and attention from their administrators, particularly in assisting with student management, yet administrators do not consistently provide this support (Collins & Ryan, 2016; Goodbye et al., 2016; Kennedy & King, 2019). However, as revealed in the rural settings reflected in this study, administrators may lack sufficient time and resources to provide the desired support. In fact, the administrators in this study's rural districts were responsible for multiple tasks in addition to transportation, such as maintenance, athletics, and other operational matters. This is consistent with prior research on rural schools (Barber et al., 1999; Franklin, 2012). This negatively impacts employee retention, which has been confirmed by prior research (Eisenberger et al., 2002) and, thus, negatively affects driver retention in this rural context. Knowing that the administrative structure affects retention efforts creates opportunities to improve district organizational structures to address this challenge.

Another important contribution of this study is that it illuminates the staffing and transportation challenges associated with rural schools and communities. Much existing literature on school bus drivers has been conducted in urban areas and larger school districts (Collins & Ryan, 2016; deLara, 2008; Goodboy et al., 2016), in international contexts (Goldman & Peleg, 2010; Gottfried et al., 2021), or involves non-school bus drivers (Kwon et al., 2019; Tse et al., 2006; Takele et al., 2022; Useche, 2017). This study adds to the small body of existing literature

relevant to school bus drivers in rural contexts (Howley & Smith, 2000; Howley et al., 2001; Yeary et al., 2019) and provides information specific to Indiana and its unique policy context. The findings from this study thus provide leaders and policy-makers with important clues about the staffing needs and challenges associated with rural areas. Assuming that this information was addressed in policy or practice, it can lead to improved funding for rural schools, as well as greater differentiation in support for districts with such few resources.

At the broadest level, this study also illuminates and contributes to the discussion of employment in rural settings. Rural employers have difficulty recruiting and retaining qualified professionals, including healthcare professionals (Terry et al., 2022), non-profit professionals (Walters, 2021), attorneys (Statz & Termuhlen, 2020), and certified teachers (Hammer et al., 2005; Lassig et al., 2015; Monk, 2007). The findings indicate that administrators are also struggling to find the required number of school bus drivers, adding another type of employee to the existing list of difficult-to-fill positions in rural areas.

As a final point, the study also fills a gap in the literature by exploring the perspectives of the drivers themselves. Prior work has not widely reported on how drivers feel about their recruitment and retention, illuminating how essential informal recruitment efforts are for maintaining a full driver workforce for rural schools. While some research brushes light on an administrative perspective on bus driver recruitment (Hoover, 1999) and other literature tangentially discusses bus driver job satisfaction (deLara, 2008), this is the first study that directly addresses bus driver perspectives on recruitment and retention. The importance of informal advertising, word-of-mouth recruiting, and social relationships for district recruitment and retention efforts provides new perspectives for improving district practice.

## **Implications for Policy**

Because education transportation is heavily regulated, this study has important implications for policy, particularly policies related to bus driver regulation and driver licensing. This policy requirement created significant barriers for the districts. It stipulated who can drive a bus, what their age must be, and what physical characteristics are required, among other stipulations (Associated Press, 1988; American Association of Motor Vehicles, 2005). These requirements are important because they shape who can be recruited, hired, and deployed in service of the district's transportation needs. A significant implication is, thus, that in constrained labor markets, shortage could be the result of difficulty entering the position rather than an absence of available, willing, and employable individuals.

Because drivers are responsible for safely transporting large numbers of students, they are held to high physical standards of health, including obtaining a medical examiner's certificate signed by a physician (American Association of Motor Vehicle Administrators, 2005). Yet, the literature indicates that the average age of a bus driver is 57 (Zippia, 2022). According to existing research, drivers tend to be overweight and have lower levels of physical activity than other individuals (Yeary et al., 2019). This matters because administrators appear to be filling their available positions with individuals who may not meet the physical standards required and who will have a shorter overall duration in the workforce, adding to further needs for more bus drivers in the near future.

Closely related to health and physical requirements, the study also reveals the difficulty associated with the Commercial Drivers' License Test for school bus drivers. Currently, there is no research exploring the test, and it is not known whether the score associated with the test leads to or contributes to safer conditions. The test requires an exhaustive pre-trip inspection, which



industry professionals in trade journals deem superfluous and a barrier to obtaining new drivers (Materazzo, 2017). The findings of this study indicate that the test is difficult and is a significant barrier to entry. There is no existing research exploring whether the current test improves driver outcomes on the road, as well as student safety. In fact, the pre-trip requirement was waived during the COVID-19 pandemic and suspended for a period, only to be reinstated (Wisconsin Department of Transportation, 2022). This matters because this requirement may be unnecessary to ensure student safety and severely hamper the district's ability to meet its driver needs.

Within the state where this study was conducted, pre-service training adds another barrier to onboarding potential drivers, especially in rural areas where the three-day training may require distance travel and a hotel stay, because the training location is in an urban center. No research so far has explored the hardship this regulatory requirement creates for districts in rural areas. The content from the three-day class frightened potential drivers unnecessarily and painted an inaccurate picture of day-to-day experiences. Research literature indicates that presenting prospective employees with realistic job previews increases retention and employee satisfaction (Breaugh, 2008; Morse & Popvich, 2009). Presenting potential drivers unlikely examples of extreme accidents and student misconduct likely serves to discourage them from continuing their training and pursuing roles as drivers.

### **Implications for Practice**

Rural districts recruit bus drivers from a very specific subgroup of the population who are older, looking for part-time income, and have community connections. Efforts to formally advertise beyond this population are a poor use of resources, which are less likely to result in additional drivers being added to the labor pool. Individuals will not relocate or commute to a rural district to drive a school bus. Thus, district recruitment efforts need to focus on individuals who

are already present in the community and are most likely to join the bus driver labor pool, especially those with family and community connections.

Administrators in rural districts already behave as if they know this, as evidenced by the prevalence of informal strategies currently in use to attract new bus drivers to the district. Bus drivers understand this, too, as the findings demonstrated that some drivers were actively involved in informal recruiting efforts to improve their own working conditions. The administrators could improve their effectiveness by being more explicit about using these recruitment tactics and more formally engaging bus drivers in the process of soliciting potential drivers. This could involve providing specific training, handouts, literature on the licensure process, and information on what types of individuals bus drivers should target, such as individuals with small children or grandchildren in the district. This would further add to the preferred autonomy and agency of bus drivers as employees in the district, taking more ownership and responsibility for their district's success, and would likely result in a larger pool of available bus drivers.

Districts also need to be more upfront and proactive regarding their onboarding process to turn potential drivers into actual drivers, as the findings indicated that many potential drivers became confused by the process and never followed it through to completion. The districts should clearly articulate the many steps required during the licensing process and provide support and follow-up to potential drivers. This will likely involve more monetary and time resources, which are lacking in rural schools. Additionally, rural districts do not have the manpower to employ a professional trainer or create detailed and orderly training files that are updated as laws and processes change. Districts need to prioritize this. Putting in the time up front to organize the onboarding process will result in less time spent in day-to-day and week-to-week scrambling to address the consequences of having an insufficient number of drivers, such as rerouting busses,

doubling up buses, and having the administrator substitute as a driver because of a shortage of substitutes. In rural districts, the process of guiding a potential bus driver through the process fell to a veteran bus driver, along with a more knowledgeable administrative assistant, as a secondary responsibility. This process needs more structure and leadership, lest potential drivers start the process with eagerness and become discouraged and fail to complete the process.

The interviewed drivers in this study had been frightened by the three-day class required by the state, and potential drivers who had apprehensions about supervising a busload of students had their fears further fed when attending the three-day preservice training, which included videos of extreme student misconduct. Yet, many participants discussed the joys of driving, getting to know students on a personal level, and their intimate connections to the school community. There is room for administrators to market and highlight these more pleasant realities to potential bus drivers; thus, the full joys of the position are evident and not overshadowed by false perceptions of the position.

Administrators need more time to attend to these tasks. Administrators tasked with organizing transportation in rural districts are busy with many other responsibilities. In addition, existing bus drivers desire support, organization, and communication from their supervisors, yet they also desire the autonomy to operate their buses as they see fit. These two factors are conflicting. It would behoove rural districts to examine their administrative structure to ensure that their transportation administrators and other individuals who interact with the bus drivers have the time necessary to support them fully and balance these competing needs. How the district handles student misconduct and supports its drivers will be part of the district's local reputation. It will be known and either help or hurt a district's ability to recruit and retain bus drivers. Local administrators who are organized, supportive, diligent, and work well with their drivers are likely

to retain those drivers and be perceived more highly by other potential drivers who exist in the community. Being proactive in these regards will help to increase the likelihood that local interested individuals will be willing to seek out employment as bus drivers and follow through with the process of obtaining a license.

It is also worth noting these findings may not be as applicable in suburban or urban contexts. The large number of bus drivers in suburban or urban districts likely diminishes the close social relationships and detailed knowledge of fellow drivers' routes evident among focus group participants in this study. Close relationships and intimate knowledge of districts' transportation operations contributed to and facilitated some of the favorable working conditions found to increase retention. Bus driver autonomy, in particular, was enhanced because of drivers' knowledge of the overall transportation operations in the district. This knowledge would be too vast and complex for individual drivers to learn and remain up-to-date in a district with more than ten drivers.

### **Directions for Future Research**

Administrative structures in rural districts need further exploration. All three districts studied utilized their administrators in different ways to oversee their transportation departments, with transportation directors doubling as athletic directors, maintenance directors, and handling other duties. Other staff involved in the day-to-day transportation operations were also involved in various clerical and maintenance duties. The structure likely affects a districts' ability to recruit and retain bus drivers, and a broader study of many districts would enhance our understanding of best practices for rural schools.

It is clear that the pre-trip inspection portion of the commercial drivers' license test is a barrier to onboarding new drivers. However, the findings were taken from a very small sample of

administrators and drivers. Harvesting of data to ascertain the number of individuals who take the test, fail the test, and pass the test would help provide more evidence as to whether this is truly a barrier or whether it is perceived as a barrier. If a large number of test takers fail the test, it would also provide policymakers with data to support a change in the requirement.

This study was conducted in rural schools, but evidence from the media suggests that urban and suburban school districts are struggling to maintain a driver workforce, too. Districts more closely situated to one another would likely have a different labor market context, as they could attract drivers from neighboring districts with higher wages and better working conditions but would also have greater competition from similar occupations, such as transit bus drivers. Thus, a similar study exploring the perspectives of drivers and administrators would provide meaningful findings for administrators in other contexts.



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## Appendices:

### Appendix A: Participation Letter

Dear Superintendent,

My name is Dan Zylstra, and I am the principal of Indiana school. In addition to my administrative responsibilities, I am also a doctoral student at Indiana University, Bloomington. I am writing to invite you to participate in a qualitative research study on the complexities of school transportation staffing in rural, public school districts in Indiana. Your district meets the narrow criteria I have designed for my study.

Your district's participation will involve the following: A detailed questionnaire reviewing the fine points of transportation in your district, two 60-min interviews with three different transportation-related personnel in your district, and one 60-min focus group including regular school bus route drivers. As I proceed and gather data from other districts, there will likely be follow-up emails or phone calls to gather further information based on what is discovered through the course of my research.

If you agree to participate, you will be asked to provide me the names of three individuals in your district (non-bus drivers) who are knowledgeable about transportation procedures and details and are currently serving as administrators or quasi-administrators. One of these can be you. I hope to interview all three individuals in your district on the same day. I will ask you to provide me a suitable time and place to conduct a focus group with five bus drivers after their morning route or before their afternoon route. During the interviews and focus groups, I will be taking notes and digitally recording what is said. I will provide post-interview and focus group transcripts to the participants to assure accuracy.

Participation is completely voluntary, and I will anonymize individual quotes and specifics to each district as much as is possible with such a small group of participants. All transcripts and files will be kept secure.

I will follow-up with a phone call or email within a few days. Meanwhile, if you have any questions, I can be contacted at [djzylstra@gmail.com](mailto:djzylstra@gmail.com) or 708-341-2155. Thank you for your consideration.

Sincerely,

Dan Zylstra

## Appendix B: Detailed Transportation Questionnaire

### District Detail Questions (Sent ahead of time and followed up with a phone call)

#### Big-Picture Questions

1. Does your school district contract out all or part of its student transportation services?
2. Does your school district share student transportation services with any other entity?
3. Are your district's bus drivers represented by a collective bargaining agreement?
4. Does your district use routing software or professional services to map its bus routes or perform any other transportation-related tasks? If so, what software or professional services does your district use?

#### Compensation Questions

1. How are your district's drivers compensated for their daily bus routes (e.g., mileage, per hour, and combination). How are substitute drivers compensated for driving a daily route? What are these rates of compensation?
2. How are your district's bus drivers compensated for bus driving responsibilities beyond their daily routes? These include field trips, sporting events, and hours spent training new bus drivers. What are the rates of compensation?
3. Do your district's bus drivers receive benefits, including health insurance, dental insurance, and retirement contributions. If so, what are the district's and drivers' respective costs of these benefits?
4. Does your district compensate bus drivers for the time required to take their annual summer safety training (online through Moodle)? If so, how does the district compensate bus drivers for this?
5. Does your district assist bus drivers with the costs of their required bi-annual CDL physical? If so, how much does the district contribute toward this cost?
6. Does the district own its school buses outright, or does the driver own some or all of the school buses?
7. Does the district allow bus drivers to take their buses home at the end of their routes? If not, where must buses be parked overnight or during the day?
8. What aspects of bus maintenance and bus cleaning are bus drivers responsible for in your district?
9. Do any bus drivers in the district have other responsibilities for which they receive compensation? If so, what are those responsibilities (e.g., custodians, cafeteria staff, instructional assistants, teachers, who also drive bus either full time or as substitutes).

#### Acquiring a License

1. Does your district compensate bus driver trainees for the required initial 20-h pre-service training course? If so, how does it compensate them?
2. Does your district compensate bus driver trainees for the required 4-h they spend observing a veteran bus driver per IDOE requirements? If so, how does the district compensate them?
3. Does your district compensate bus driver trainees for the required 8 h they spend training under the supervision of a veteran driver? If so, how does the district compensate them?

4. Does your district compensate bus driver trainees for the Bureau of Motor Vehicle costs associated with obtaining a CDL (\$17 for a learner's permit and \$42 to upgrade the license to a CDL)? If so, how does the district compensate them?
5. Does your district compensate bus driver trainees for the time necessary to travel to a CDL testing facility to take the skills test necessary for obtaining a CDL? If so, how does the district compensate them?
6. Does the district cover the \$100 CDL testing fee for a driver to attempt a skills test? Does the district cover this cost of subsequent tests if the driver trainee does not pass the test?
7. Are there any other ways the district financially supports bus driver trainees as they move through the process of obtaining a license? If so, what are they?

Other Questions:

1. Are there any other ways your district compensates bus drivers monetarily that have not been covered in this survey?
2. Are there any other non-monetary benefits your district offers drivers not listed on this survey? Examples could include free admission to district sporting events, use of school bus for personal reasons, and school district apparel.
3. Does your district have a transportation or bus driver handbook or other documentation outlining district policies or details of transportation policy? If so, could you provide a copy?
4. Would you be able to provide a deidentified list of current route drivers and substitute drivers with the following information:

Position: Are they a regular route driver or a substitute route driver?

Years of Service: How long have they driven in your district?

Age: Provide their birth year or their current age.

Address: What is the physical address where they reside?



## Appendix C: Interview Protocol

Date \_\_\_\_\_

Time \_\_\_\_\_

Location \_\_\_\_\_

Name of Person Being Interviewed \_\_\_\_\_

Position of Person Being Interviewed \_\_\_\_\_

**Interviewer:** Hello, my name is Dan Zylstra. I would like to thank you for agreeing to participate in my study on school bus driver recruitment and retention. I will be asking a series of questions concerning your districts' practices surrounding recruitment and retention of school bus drivers.

Some questions are very specific. If you don't know the answer, that's okay. Just say you don't know. Not everyone in the district knows this level of detail. If you're unsure, mention that you're not sure and give the answer you believe is most accurate. I want to learn about your district's transportation setup with Class B CDL drivers, its efforts to keep current drivers employed, and its strategies to deal with shortages and recruit new drivers to fill empty seats. Please relax and remember that you are free to express your beliefs, opinions, feelings, and concerns at any time. The information you provide will be made anonymous in the final research, and you will be given a chance to verify a transcript of the interview to check for accuracy.

## Interview 1: Logistics/Transportation Operations Prompts

1. Describe your district's daily transportation operation.
  - a. *How many routes are there?*
  - b. *How many buildings and stops are there?*
  - c. *How many drivers do you have on staff, both regular and subs?*
  - d. *How many students ride the bus (percentage or number if available)*
  - e. *What's the geographical spread of your district?*
  
2. What does the process of making and updating your bus routes look like, and what considerations come into play when making detailed decisions?
  - a. *Do you use routing software to map the routes?*
  - b. *Are their maximum route lengths and drop-off and/or switch points?*
  - c. *Do you consider driver preference or personalities when making the routes? (do you avoid mixing certain students and certain drivers)*
  
3. What are your district's procedures for dealing with non-routine transportation issues?
  - a. *How does it schedule substitute drivers?*
  - b. *What is the procedure for handling student discipline?*
  - c. *Who takes care of maintaining the fleet?*
  - d. *Who is one call for mechanical breakdowns in emergencies, and what does that look like in terms of response time?*
  
4. What are some regularly occurring challenges you experience in managing your district's transportation operations?
  - a. *Do you always have a sufficient number of drivers, and what do you do if you don't have enough drivers?*
  - b. *Do you field many parent complaints, and what are the common complaints?*
  - c. *Do you field many complaints from drivers, and what are the most common complaints?*
  - d. *Do you have capacity issues on routes related to student transiency? Are some routes less crowded/fuller because students move unexpectedly?*
  
5. Are there any other topics you'd like to cover regarding your district's transportation logistics and operations?

## Interview 2: Logistics/Transpiration Operations Prompts

1. Describe your past, current, and potential bus drivers in terms of their employment status.
  - a. *Do they have other jobs besides driving a bus?*
  - b. *What did they do before they drove bus?*
  - c. *What did those who left do afterward?*
  - d. *Are there patterns of typical employment, and if so, what are those patterns?*
  
2. Talk about some of the challenges you face in getting new bus drivers.
  - a. *Is it difficult to find people who want to drive in the first place?*
  - b. *Who is in charge of bus driver training in your district?*
  - c. *Is it difficult getting driver trainees through all the training?*
  - d. *How big of a barrier is passing the CDL test? How often do trainees not pass the test? Where else do trainees get stopped in this process.*
  - e. *What other challenges do you recognize in getting new drivers?*
  
3. Once a new driver obtains a license, what is the process for them to be assigned to a specific full-time route and other driving responsibilities?
  - a. *Must they drive as a sub first before they get a full-time route?*
  - b. *What factors affect where drivers are assigned and how many additional responsibilities they can be granted (e.g., seniority, driver's ability to handle challenging students, and driver location)?*
  - c. *Why do you place specific drivers where they are?*
  
4. Why do you believe your bus drivers continue working for your district?
  - a. *Are the pay and benefits competitive and sufficient?*
  - b. *Do they like the working conditions (hours, hauling kids)?*
  - c. *Do they have ties with the community and district that keep them engaged?*
  - d. *Do they not have other options for similar pay and benefits?*
  - e. *What are the reasons bus drivers have given for quitting driving for your district?*
  
5. Are there any other topics we've not discussed regarding your district's transportation logistics and operations that you feel are pertinent to the recruitment and retention of school bus drivers?

## Appendix D: Bus Driver Focus Group Prompts

### Bus Driver Focus Group Prompts

1. Why did you decide to become a bus driver, and why have you decided to remain a bus driver?
  - a. *Are the compensation and benefits attractive?*
  - b. *Are your current life circumstances favorable to this occupation?*
  - c. *Do you enjoy the position most days?*
2. Talk about the process of getting your license.
  - a. *Who trained you?*
  - b. *What barriers did you face along the way?*
  - c. *Have you or other drivers had difficulty maintaining the licenses? If so, what created this difficulty?*
3. How do your district's compensation and working conditions compare to other districts and other occupations?
  - a. *Are the wages and benefits comparable?*
  - b. *Are the hours and working conditions comparable?*
  - c. *Are there any perks or pluses that are unique to your district, or your type of district?*
  - d. *Are there any responsibilities you must shoulder that other districts' drivers are not required to shoulder? And what are those?*
4. What are the greatest challenges to driving a school bus in your district and in general?
  - a. *Is there a lack of administrative support with student discipline?*
  - b. *Are the early hours and split shift an inconvenience?*
  - c. *Are safety issues related to being responsible for so many students a concern that weighs on you?*
  - d. *Are there specific aspects of your responsibilities that make your job difficult?*
5. Are there any other aspects of your job related to recruitment and retention of bus drivers that we haven't covered that you'd like to discuss?

## **Resume/Curriculum Vitae**

**Daniel James Zylstra**

### **POST-SECONDARY EDUCATION:**

Doctor of Education, 2022 GPA 4.0/4.0

*Indiana University – Bloomington, Indiana*

Specialist in Education, 2017 GPA 4.0/4.0

*Indiana University – Bloomington, Indiana*

Master of Education, 2010 GPA 3.96/4.0

*University of Illinois – Urbana-Champaign, Illinois*

Bachelor of Arts, 2005 GPA 3.6/4.0

*Dordt University (formerly Dordt College) – Sioux Center, Iowa*

### **PROFESSIONAL LICENSURE:**

State of Iowa Master Educator License/Professional Administrator License

Folder 964822

Educator: 5-12 Music (145) & K-8 Music (144)

Administrator: PK – 12 Superintendent & AEA Administrator (171)

Evaluator (190)

PK – 12 Principal / PK-12 Special Education Supervisor (189)

### **PROFESSIONAL EXPERIENCE:**

*Pella Christian Schools – Head of Schools July 2022 – Current*

- *Provide complete district-level leadership for a pre-12 private school of 780 students*

***West Central School Corporation – Superintendent*** July 2019 to June 2022

- *Provided complete district-level leadership for a small, rural, public school district*

***West Central Elementary School – Principal*** July 2012 to June 2019

- *Managed all aspects of a K-5 elementary school*

***School City of Hammond – Music Teacher*** August 2007 to June 2012

- *Instructed K-5 students in general music at various buildings*

***Pella Corporation – Process Operator*** July 2006 to July 2007

- *Provided leadership and window assembly on the large-fixed assembly line*

***Lansing Christian School – Music Teacher*** August 2005 to June 2006

- *Taught K-6 general music and 5–8 instrumental music*

**PROFESSIONAL ACCOMPLISHMENTS/COMMUNITY INVOLVEMENT:**

Indiana Small and Rural Schools Association, Board Member – 2020–2022

Community Foundation of Pulaski County, Board Member – 2016–2020

Bethel Christian Reformed Church, Deacon – 2020–2022

Pulaski Alliance for Community Education, Board Member – 2020–2022

West Central Education Foundation, Secretary – 2019–2022