



The Mind Trust

Transformative education. Rooted in equity.

Protecting School Choice: How Flexibility in Transportation Can Improve Access and Efficiency

November 2021

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About this Report

Methodology

To build this report and the resulting recommendations, The Mind Trust conducted multi-faceted research across a number of areas:

* **Data Analysis**

Statewide data, including analyses of data reported by national studies and data provided by the Indiana Department of Education (IDOE) via public records requests or retrieved from the IDOE website, provided insights into the historical financial investments, and current policy or structural burdens experienced by school systems in managing transportation systems.

* **Field Interviews**

Interviews with experts were conducted to gain a better understanding of the national landscape of school transportation. These included specialized management entities, transportation vendors, public transit experts, and nonprofit organizations.

* **Literature Review**

We reviewed existing literature, including research publications, reports, issue briefs, news articles, and state and federal law, policy and regulations pertaining to school transportation and innovative solutions across the country.

* **Focus Groups**

In order to better understand a sampling of existing pain points, opportunities, and values for the future of school transportation in Indiana, we conducted focus groups of both students and parents in Center Township.

Special Thanks

We wish to give particular thanks to Ben Kleban, independent consultant and lead author and researcher for this report. We also wish to recognize the support and partnership of EdChoice and Institute for Quality Education.



Introduction

Indiana is a national leader in education innovation with one of the most comprehensive school choice landscapes in the country. The state has expanded school options for students and families, including inter-district choice, magnet schools, charter schools, virtual schools, “Innovation Network Schools”¹, choice scholarships to attend non-public schools, adult education schools, and schools for special populations. Families across the state have enthusiastically enrolled in these options and demand continues to grow across all school types.

Despite these developments in Indiana’s education system, Indiana’s approach to school transportation has largely remained unchanged. The traditional yellow school bus is generally the only form of school transportation utilized throughout the state. While schools in many parts of the country leverage a diverse portfolio of vehicles to efficiently meet various student transportation needs, Indiana’s regulatory environment remains highly restrictive. Human ingenuity has fueled technological revolutions in transportation in other sectors—such as electric and natural gas-powered vehicles, ride share services, and new mass transit solutions—but school transportation systems have not benefited from analogous innovations that could result in improvements in access, efficiency, quality, and safety. It is time for that to change.

For years, Indiana public schools have struggled to optimize service quality and financial sustainability of school transportation while managing rising costs, inefficient routing, “one size fits all” vehicle fleets, and chronic bus driver shortages. The ongoing effects of COVID-19 have exacerbated the challenges as cancelled contracts, significant route reductions, driver shortages, and strikes created meaningful interruption to service for students and families. Public charter schools, which are smaller entities without the bargaining power of larger school corporations, have often struggled disproportionately with vendor instability and the unexpected, undesired transition to in-house management when transportation contracting is unavailable. Due to these disruptions, schools may not offer adequate transportation options, causing some families to have to select a school that may not be the best fit for their student.

These disruptions to school transportation in Indiana must be addressed urgently as school transportation not only impacts what school choices families can make, but is also a significant factor in student achievement. Research has shown that chronic absenteeism can lead to lower academic performance and contribute to higher high school dropout rates.² Transportation systems play a critical role in ensuring many Hoosier children, especially the most vulnerable, are able to choose and access high-quality schools with timely attendance each day.

In light of these obstacles and dynamics, this research brief presents a comprehensive analysis of the transportation challenges faced by Indiana school systems with a series of recommendations for mitigating these obstacles by implementing creative strategies and policy solutions. These recommendations call for government agencies, educational leaders, and policymakers to envision a 21st century school transportation system that strengthens and protects Indiana’s rich school choice landscape. Commitment to flexibility and collaboration will advance this vision and leverage available assets and resources most efficiently—ultimately to the benefit of students and families.

Values

Viable solutions for improving Indiana’s school transportation system require balancing educational values that often create tension. For example, if a school system tried to lower costs by reducing the number of children who have access to free transportation, it is likely that the financial benefits would be offset by an untenable result—unequal access to educational opportunities.

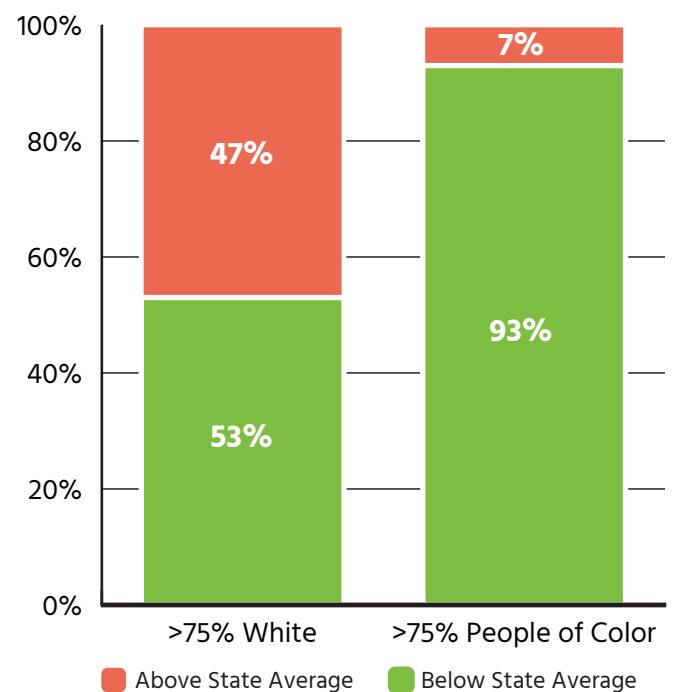
To properly balance systemic variables that may counteract each other, it is important to establish a set of “non-negotiables” that establish constraints for new transportation solutions in alignment with educational values. Indiana has a strong history as a national leader in providing school choice to all families in an effort to provide educational equity. The following non-negotiables should be honored to balance school choice, autonomy, access, and equity in redesigning an outdated transportation system:

- * The safety of students should always be prioritized over cost-efficiency goals.
- * All students attending public schools who do not live within one mile of their chosen school, whether district-operated or charter schools, should be offered some form of free transportation from anywhere within the school corporation’s geographic boundaries.
- * School choice policies should ensure students have sufficient opportunity to attend high-quality schools, with transportation serving as the means to realize that access.
- * The transport time for any student to a public school should not exceed one hour and should ideally be shorter for younger students.³ Research has shown that students with longer commutes experience higher absentee rates.⁴
- * Schools should have autonomy to establish start and end times for the school day based on the needs of their students and communities, however this report recommends collaboration across schools for maximum effect on routing efficiency.
- * Collaboration and partnership among all school types, including traditional school corporations, independent charter schools, Innovation Network Schools, and nonpublic schools is critical to improve service delivery, reduce costs, and enhance transportation infrastructure more broadly.

A world-class vision for any school system ensures students have high-quality school choices close to home. For too many students in Indiana, particularly students of color, a quality school close to home remains out of reach. While research has shown most Indiana students live within 30 minutes of a non-traditional school option, thousands of Hoosier students live in “schooling deserts”, as defined by drive times of more than 30 minutes to a highly-rated school. There is also evidence to suggest these “deserts” disproportionately impact students of color.⁵ For example, across all 11 school corporations and charter schools—hereinafter referred to collectively as “local education agencies (LEAs)”—in Marion County, only 7% of K-12 schools located in neighborhoods whose residents are primarily people of color are performing above the state average on state exams versus 47% of schools in primarily white neighborhoods (Figure 1).⁶

Figure 1

Marion County Concentration of Schools in Primarily White Neighborhoods (2018-2019)



Source: Indiana Department of Education Data Center and Reports. Author calculations based on the 2019 ILEARN and ISTEP+ state exam results for grades 3-8 and grade 10, respectively, and 2019 racial demographics for Marion County neighborhoods compiled by IndyVitals and shared via email on June 25, 2021.

A school transportation system can be a powerful tool to help mitigate “opportunity gaps” some children have in accessing high-quality schools, especially students whose neighborhood school is not high-performing. For example, students in New York City who choose schools outside their neighborhood zones typically attend higher-performing schools than what exists in their neighborhood, with bus riders benefiting the most from gains in school quality.⁷ As long as there are students without high-quality neighborhood schools, Indiana should prioritize creating access to better options and enhance that access with innovative transportation solutions. Indiana’s long-term vision for education should ensure a high-quality school is accessible within a reasonable distance from every child’s home.

Background & Analysis

School Choice in Indiana

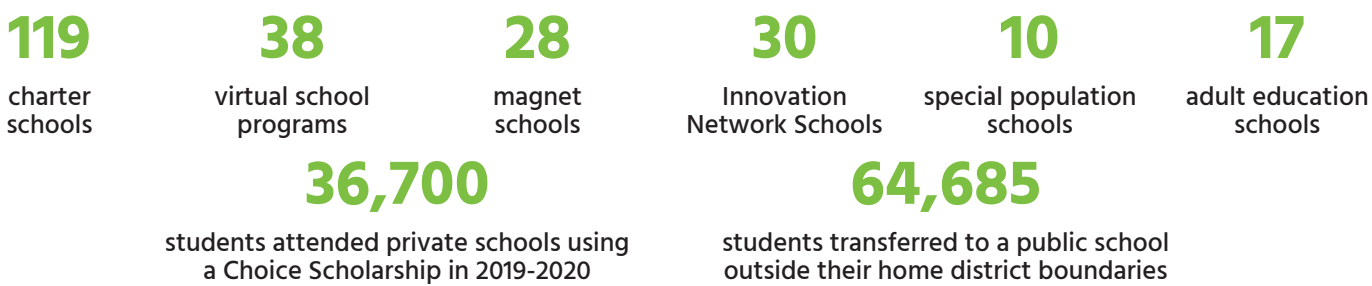
The public education system in Indiana has changed dramatically over the past 20 years with the expansion of school choice. The largest form of school choice, “inter-district” transfers, allowed 64,685 students (5.7 percent of public and private school students) in 2019-2020 to transfer from their school corporation of legal residence to a public school outside their home school corporation boundaries.⁸ Until 2007, home school corporations were required to pay for transportation for these students to transfer to other school corporations.⁹ It is worth noting the original inter-district transfer policy appears to have valued the potential for transportation to fully enable school choice, though this policy expired in 2007.

Indiana’s charter school law was first enacted in 2001. Between 2009 and 2011, Indiana grew the number of charter school authorizers and launched a set of programs that greatly expanded publicly-funded school options for Hoosier parents. Indiana now has 119 charter schools¹⁰, 38 virtual school programs¹¹, 28 magnet schools¹², 30 Innovation Network Schools¹³, 10 special populations schools, and 17 adult education schools¹⁴, with management of these schools shared by both nonprofit organizations and traditional school corporations.

In addition to a diverse portfolio of public school options, Indiana has the largest school voucher program in the country.¹⁵ Ten years after the original school voucher legislation passed in 2011, 36,700 Hoosier students attended private schools using a Choice Scholarship (voucher) in 2019-2020.¹⁶ Recent legislation has expanded the Choice Scholarship beyond low-income families to include the majority of middle-class families in the state.¹⁷

Contrary to research that has demonstrated the impact transportation can have in empowering real parent choice,¹⁸ the state has generally not offered or provided legislative support for transportation solutions for its school choice programs. Indiana’s Supreme Court has ruled school corporations are not required to bus students to and from school,¹⁹ though school corporations are required to provide transportation to students attending nonpublic schools or charter schools located in rural school corporations when those students reside on regular bus routes of the school corporation.²⁰ School voucher, and inter-district

Indiana Schools by the Numbers as of 2021-2022



choice programs do not generally offer free transportation to students attending these programs. Many charter schools offer transportation but do not have access to the local tax dollars school corporations use to pay for transportation expenses. On average, Indiana’s school choice programs have not had an inflationary effect on school transportation costs.²¹

Indiana should consider new public investments in school transportation infrastructure and innovations that produce cost savings. This will allow LEAs to reinvest those savings in expanded transportation supports that empower families to fully access all their educational options.

Expenditures Analysis

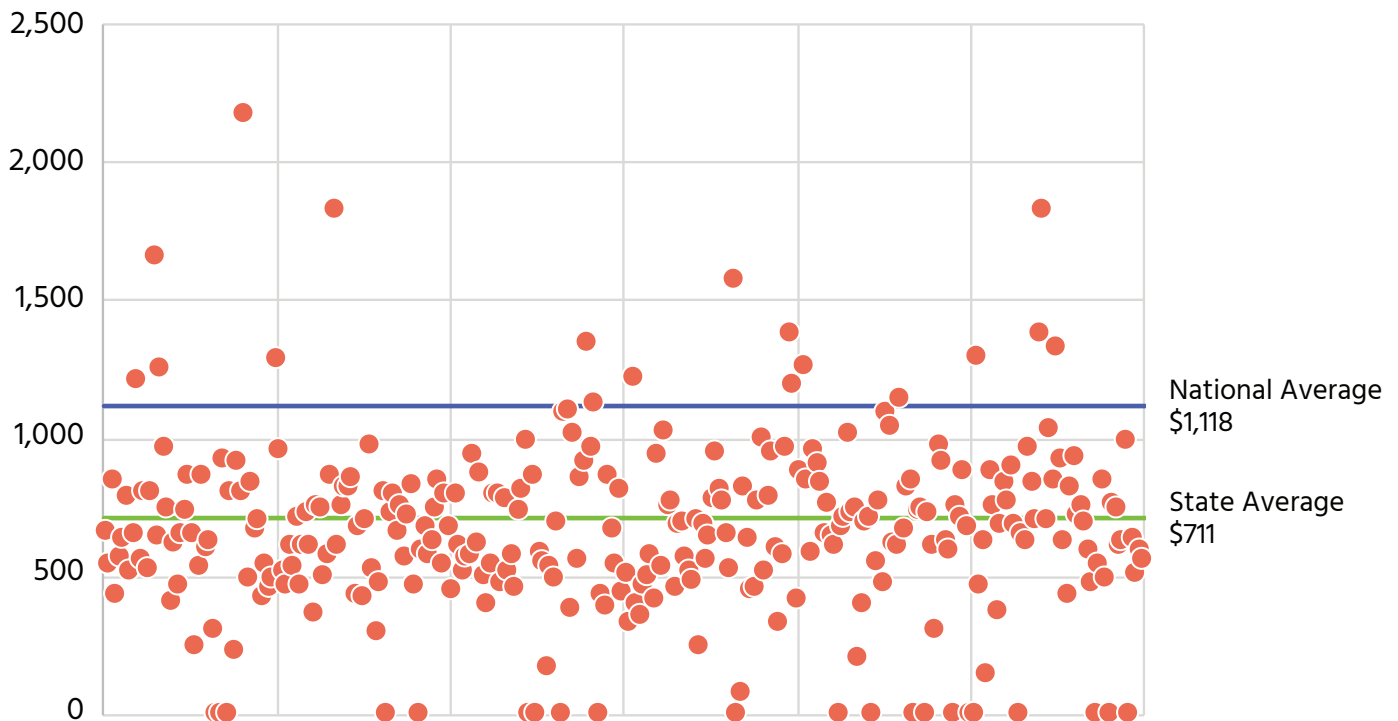
Spending Per Pupil

In Indiana, approximately 650,000 public school students ride 13,365 yellow school buses to and from school every day. This represents about 60% of the total student population in the state—well above the national average of 47%.²² In 2017-2018, the national average per pupil spending on school transportation was approximately \$1,118²³, whereas the average spending per pupil on school transportation in Indiana was only \$711 per pupil.²⁴ Though the overall statewide average spending per pupil on transportation is relatively low, several LEAs have spending levels well above both state and national averages. For example, DeKalb County Eastern Community School Corporation spent \$2,056 per pupil on school transportation in 2018-2019. James and Rosemary Phalen Leadership Academy, an Indianapolis charter school, spent \$1,371 per pupil on school transportation in 2018-2019. Charter schools that offer school transportation must pay for these services out of general education revenues, since local tax revenues that have historically been used by school corporations for transportation are not shared with charter schools.

Approximately 7% of LEAs in Indiana are spending more than the national average per pupil on school transportation (Figure 2).

Figure 2

2017-2018 Transportation Spending Per Pupil - All Indiana School Districts



Source: Author calculations based on Form 9 expenditures; IDOE public records request.

Many factors contribute to variations in total spending per pupil levels, including the lack of a legal mandate for all students to receive free transportation,²⁵ differences in geographic areas served by corporations, differences in ridership demand across corporations, and variability in structure and management approaches.

Statewide, increases in transportation spending over time have also slightly lagged the national average, adjusted for inflation. The average statewide spending per pupil by school corporations on transportation increased by 5% between 2008-2009 and 2017-2018, while the national average spending per pupil increased by 8% over that same time period.²⁶ However, the rates of cost increases over time have also varied substantially between school corporations. About 30% of Indiana school corporations, including Indianapolis Public Schools (IPS), experienced increases in inflation-adjusted spending per pupil by more than 20% between 2008-2009 and 2018-2019.

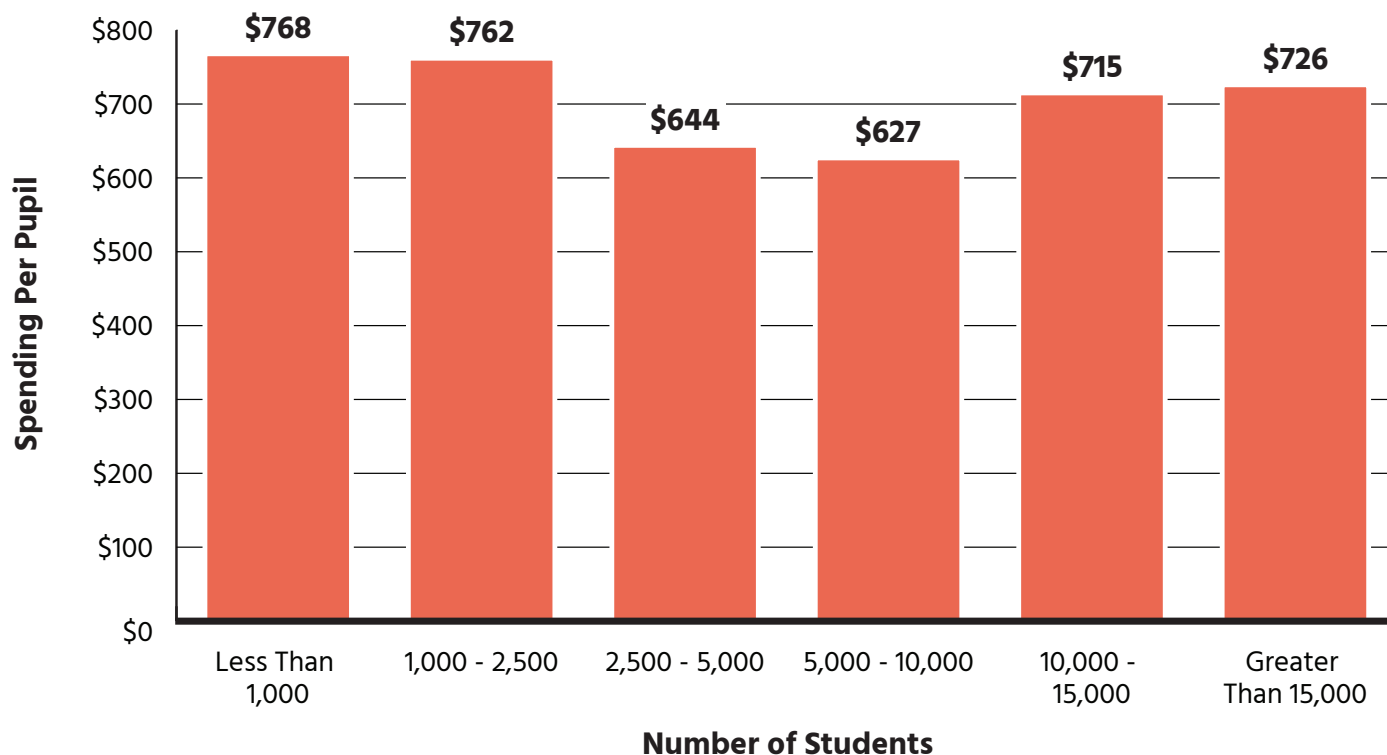
Economies of Scale

There is some evidence of economies of scale in school transportation in Indiana, but the size of an LEA does not guarantee lower transportation spending per pupil. Excluding IPS, which has some unique characteristics affecting transportation costs, school systems in Indiana appear to gain some benefit from economies of scale in school transportation, on average, with the greatest savings realized by school corporations serving between 2,500–10,000 students (Figure 3).

The chart below suggests there may be some economies of scale gained by larger LEAs enrolling more than 2,500 students. However, this trend is not consistent across all LEAs. The two largest LEAs in the state have very different spending patterns. In 2018-2019, Fort Wayne Community Schools (FWCS) spent only \$627 per pupil on school transportation, well below the state average. In contrast, IPS spent more than twice that amount (\$1,435 per pupil).

Figure 3

2018-2019 Average Transportation Spending per Pupil (Excluding IPS)



Source: Author calculations based on Form 9 expenditures; IDOE public records request. Enrollment from IDOE data reports. <https://www.in.gov/doi/it/data-center-and-reports/>

It is likely that economies of scale are an opportunity for larger school systems to benefit from, but that many other factors influence spending levels, some of which may counteract scale benefits. As shown in Figure 4, there are several differences in characteristics between FWCS and IPS that impact school transportation spending patterns. For example, ridership demand, as defined by the proportion of enrolled students that are provided school transportation in a district, is likely significantly higher in IPS than FWCS due to the district’s unified citywide enrollment system and the ability of many IPS students to receive transportation to a school outside their neighborhood. This would at least partly explain why IPS operates twice as many buses per 100 students than FWCS (Figure 4).

The complexity and interconnectivity of systemic cost drivers require transportation solutions that properly balance efficiency gains with educational values—especially school choice. The potential cost savings from economies of scale, such as through consolidation of services across adjacent geographies, may be desirable strategies to pursue, but should not be at the expense of choice, autonomy, and maximizing student access to quality schools.

Figure 4

Comparison of the Two Largest Districts in Indiana (2018-2019)

	Indianapolis Public Schools	Fort Wayne Community Schools
Transportation Spending Per Pupil	\$1,435	\$627
Land Area (square miles)	79	145
Enrollment²⁷	26,410 <small>does not include non-LEA Innovation schools</small>	29,404
% of Students Who Qualify for Free/Reduced Lunch	65%	61%
% of Students With Disabilities	17%	16%
Primary Management	Contracted	In-House
Number of Buses	413	255
Number of Buses / 100 Students	1.8	0.9
“Walk Zone”	1 mile (K-6) 1.25 miles (7-8) 1.5 miles (9-12)	1 mile (K-6) 1.5 miles (7-8) 2 miles (9-12)
School Choice Policies	Students are guaranteed a school in their attendance zone. Students may attend a school outside their attendance zone through a lottery system (OneMatch) with transportation provided.	Students are assigned to a school in their attendance zone. Students may attend a school outside their attendance zone if space is available but transportation is not provided.

Sources: www.fortwayneschools.org; www.myips.org; www.in.gov/doe/it/data-center-and-reports; author calculations based on Form 9 expenditures (obtained from IDOE via public records request).

Management

Based on 2018-2019 financial reports, approximately 78% of Indiana school corporations manage school transportation primarily “in-house”, while 22% of corporations primarily contract with an external service provider.²⁸ Indiana school corporations managing school transportation primarily in-house spend approximately 14% less per pupil, on average, than corporations that primarily contract for transportation services. The average inflation-adjusted increase in spending per pupil between 2009 and 2019 was approximately double for corporations primarily contracting vs. managing transportation in-house. This suggests there may be a cost advantage for some Indiana school corporations to manage transportation in-house rather than contract with an external provider, but the trend is not universal. Figure 5 identifies the top ten LEAs in Indiana with the highest transportation spending per pupil in 2018-2019, demonstrating a nearly even split between those that manage transportation in-house vs. via contract.

Figure 5

Top 10 LEAs in Indiana with the Highest Transportation Spending per Pupil (2018-2019)

	Enrollment	Transportation Spending Per Pupil	Primary Management Type
DeKalb Co Eastern Com Sch Dist	1,346	\$2,056	In-House
Franklin County Com Sch Corp	2,267	\$1,824	Contracted
Brown County School Corporation	1,904	\$1,840	Contracted
Culver Community Schools Corp	815	\$1,509	In-House
Indianapolis Public Schools	26,410	\$1,435	Contracted
	does not include non-LEA Innovation schools		
Prairie Heights Com Sch Corp	1,280	\$1,434	In-House
Tri-County School Corp	700	\$1,396	Contracted
South Newton School Corp	843	\$1,265	In-House
Benton Community School Corp	1,757	\$1,263	In-House
Hamilton Community Schools	291	\$1,244	In-House

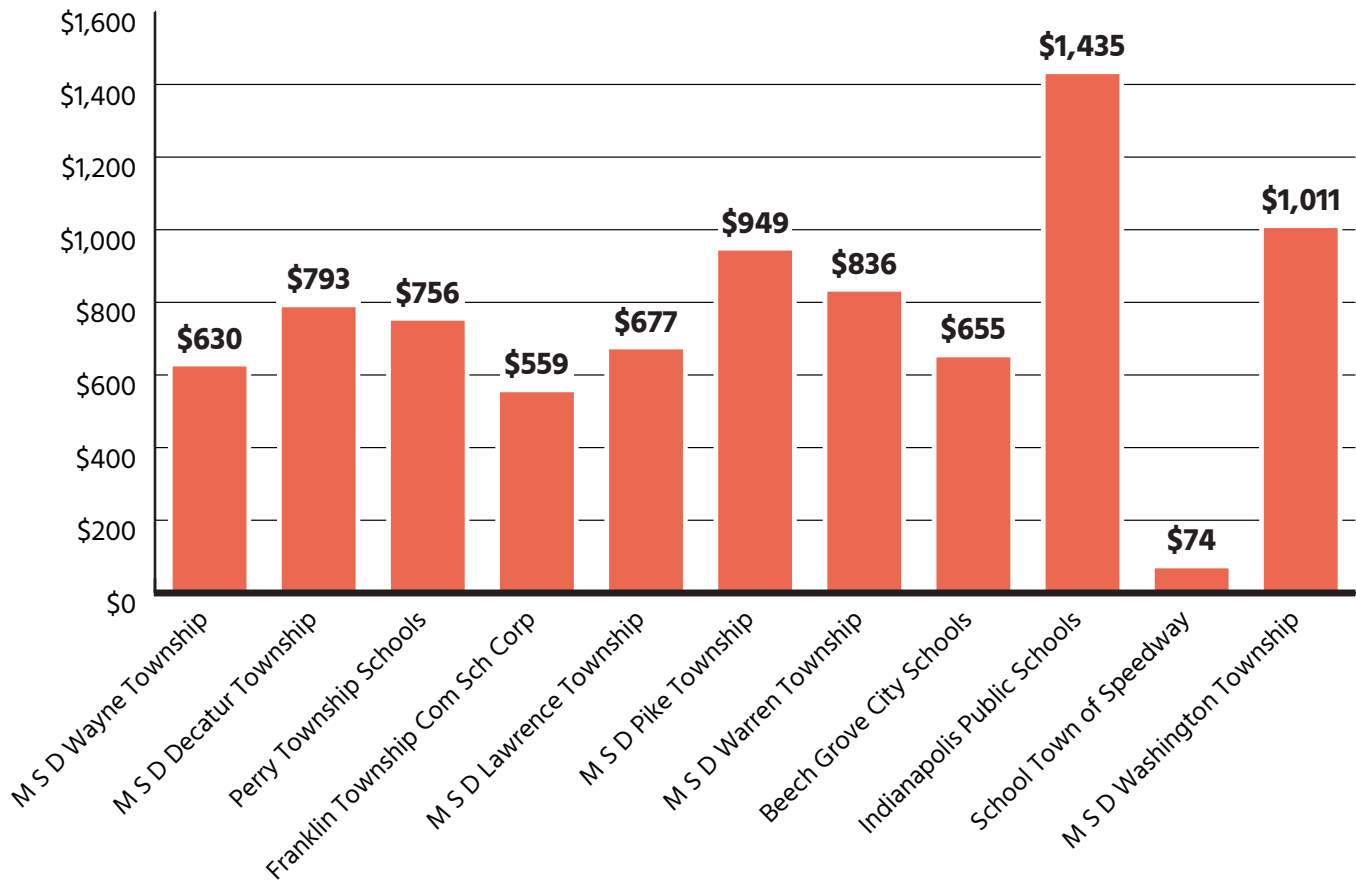
Source: Author calculations based on Form 9 expenditures; IDOE public records request.

School Choice

While difficult to quantify and compare across corporations, it is reasonable to assume that differences in enrollment policies are significant contributing factors to differences in spending per pupil. For example, through a centralized enrollment system called “OneMatch”, IPS offers students a choice of any school in the corporation, subject to certain placement priorities and seats available. In contrast, most students enrolled in the other ten Marion County school corporations must attend their neighborhood school in order to access transportation. Enhanced school choice policies and the resulting increase in the number of buses and routes required to serve its ridership are likely major causes for higher spending per pupil by IPS. IPS spends roughly twice as much as the average of the other ten Marion County school corporations on school transportation per pupil (Figure 6).

Figure 6

2018-2019 Transportation Spending per Pupil All Marion County Districts



Source: Author calculations based on Form 9 expenditures; IDOE public records request.

While IPS spending per pupil is higher than other neighboring districts, this is an example of where educational values such as offering parents school choice may take precedence over other goals such as financial efficiency. A fair assessment of how different school systems are managing school transportation must take these policy differences into account.

In addition, the relatively low levels of transportation spending by nine of the eleven school districts in Marion County begs the question of whether county level consolidation of transportation funding would address the existing challenges of cost and inefficiency, or whether adherence to values of flexibility, collaboration, and autonomy will make more meaningful inroads.

Bus Utilization

School systems with substantial ridership demand, whether driven by more open school choice policies or otherwise, often experience additional challenges in maximizing bus utilization, especially given Indiana’s current restrictions on allowable school transportation vehicle types and sizes. As noted by the IPS Transportation Director in an April 2018 presentation to the IPS Board of Commissioners, one of the primary drivers of higher spending levels in IPS included the number of buses in the system.²⁹ Likely driven by the school corporation’s enhanced school choice policies, IPS utilizes approximately three times the number of buses per 100 students than the other surrounding school corporations in Marion County (Figure 7).

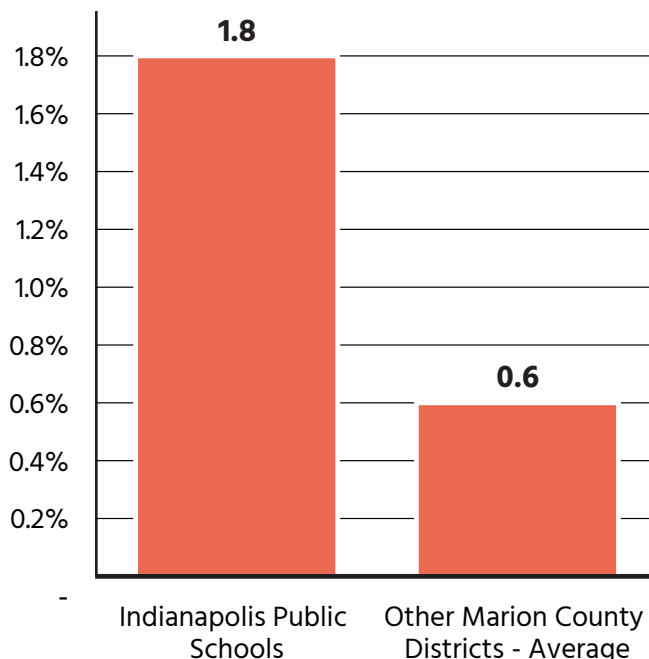
Increasing utilization of buses can lead to significant cost savings, since adding additional students to an existing route does not add additional costs to the system. School corporations like IPS with expansive school choice policies, higher rates of student mobility that may lead to frequent no-shows at bus stops, heavy ridership demands, and higher rates of traffic delays all limit how much traditional bus utilization rates can be increased. For example, a district like IPS with city-wide school choice has routes that travel greater distances than a traditional district limiting students to their neighborhood school. Buses on these longer routes cannot fill to 100% capacity before “timing out”—providing riders with untenably long ride times. At some point these buses get “filled with time” instead of filled with students.³⁰ Nevertheless, bus utilization rates can be monitored on an ongoing basis and optimized through responsive routing as needed for maximum budget efficiency. Leveraging shuttles, vans, and other appropriate vehicles for lighter routes is also an effective mechanism to save costs and to enable yellow buses to be utilized where they have maximum efficiency.

Multiple factors influence spending levels on school transportation across the state. LEAs should monitor, benchmark, and report detailed financial benchmarks to their school boards on a regular basis. Educational values may at times outweigh the value of cost efficiency, such

as with school choice policies in IPS. Nevertheless, LEAs must be fully aware of which aspects of their school transportation systems are above statewide and neighboring district cost benchmarks to manage these systems effectively while balancing the values of choice and autonomy and maximizing dollars for students in classrooms. Comparing and benchmarking metrics such as bus utilization, ridership demand, and route length, can be a useful exercise to identify best practices and solutions for optimizing school transportation systems.

Figure 7

School Buses per 100 Students



Sources: “IPS SY 2018-2019 Transportation Model - April 2018”, Board presentation, <https://go.boarddocs.com/in/indps/Board.nsf/Public>, 2021 Board replacement plans, <https://budgetnotices.in.gov/Default.aspx>. The IPS ratio is as of 2018, while the comparable ratio for Marion County is as of 2021.

History of Funding

In Indiana, local school corporations have historically raised funds for school transportation and bus replacement primarily via local property taxes (92%), as well as local taxes such as license excise taxes, financial institution taxes, and commercial vehicle excise taxes (8%).³¹ Following a tax policy overhaul in 2008, all local property tax levies were capped and school corporations are now required to seek voter approval to raise funds above those caps.

Prior to 2019, Indiana LEAs were required by state law to maintain separate transportation funds, accounting for both revenues and expenses dedicated to school transportation. After the approval of House Enrolled Acts (HEA) 1009 (2017) and 1167 (2018), school corporations transitioned from the maintenance of separate transportation funds to a consolidated “operations fund” that encompassed school transportation, among other purposes.³² This shift served to support LEAs by offering flexibility and autonomy in the use of revenues to best meet the needs of students and families.

School Transportation Funding Sources in 2017



School corporations have the ability to determine the levy amounts dedicated to school transportation or bus replacement, subject to maximum levels established by the state. As a result, the corresponding local funds raised for transportation have varied significantly across the state. In 2018-2019, the average statewide transportation fund revenue was \$781 per pupil, with a range of \$15 per pupil to \$2,477 per pupil.

Between 2008-2009 and 2017-2018, when transportation funds were still accounted for, Indiana school corporations accumulated a total of over \$400 million in cumulative surpluses when comparing dedicated transportation revenues to transportation expenses. As an example, IPS generated a surplus of approximately \$2.7M in dedicated property tax revenues vs. total expenditures on transportation in FY 2018-2019. IPS maintained fund balances for both transportation (\$13M) and bus replacement (\$5M) as of June 30, 2019.³³ These fund balances were transferred to the new consolidated operations fund structure at the beginning of the 2019-2020 school year and are no longer dedicated solely to school transportation purposes.

The \$400 million in cumulative surpluses generated in transportation funds by local school corporations supports an imperative for deeper public investment in transportation solutions and infrastructure that could have lasting long-term financial returns for schools and students.

School Transportation Challenges

Safety

Any policy or structural shifts must prioritize student and driver safety first, while recognizing the need for innovation. For decades, major school transportation regulatory authorities and national associations representing school transportation officials and contractors have made emphatic arguments for the primacy of yellow buses as the safest option available for students. The National Highway Traffic Safety Administration (NHTSA) claims the yellow school bus is the “safest vehicle on the road; your child is much safer taking a bus to and from school than traveling by car.”³⁴ Yet there is not sufficient data available to defend or refute this claim. **Crash statistics are not currently collected at the level of detail that would allow true comparisons between accidents involving yellow school buses versus other types of vehicles while transporting students between their home and school.** It is also difficult to differentiate the safety impact of different regulatory requirements placed on school transportation drivers and vehicles versus non-school-related drivers and vehicles. Further research should be conducted to better isolate and understand specific safety benefits of increased training, licensing requirements, background checks, drug testing, vehicle inspections, and vehicle safety design features, as it may be that extending these requirements to drivers of any type of school transportation vehicle could mitigate or eliminate any differences in predicted safety outcomes between yellow buses and other vehicle types.

Arguments promoting the safety of yellow school buses point to specialized design features, such as the yellow color, flashing red lights, stop-sign arms, and rollover protection features. It is worth noting that some or all of these features can be installed on any type of vehicle. The NHTSA has determined that crash protection through “compartmentalization” of large seat backs in yellow school buses is sufficient to keep children safe, even though these buses typically do not have seat belts. However, the National Transportation Safety Board (NTSB) concluded that “current compartmentalization... does not protect school bus passengers during lateral impacts with vehicles of large mass and in rollovers, because in such accidents, passengers do not always remain completely within the seating compartment.”³⁵ Following the investigation of two deadly crashes involving school buses in 2016, the NTSB now recommends that 42 states that currently do not require lap and shoulder belts on large school buses—including Indiana—begin to make this a requirement.³⁶ According to the National Association of Pupil Transportation, installing seat belts in school buses can cost between \$7,000–\$11,000 per vehicle.³⁷ Reducing the number of large buses in use by allowing differentiated school vehicle fleets would help mitigate this cost burden for corporations that comply, either voluntarily or involuntarily, with this recommendation in the future.

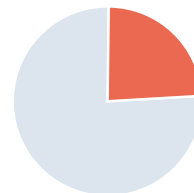
Despite the unavailability of data to support direct comparisons of safety statistics between yellow school buses and other vehicles used by public schools for school transportation, the American School Bus Council reports that “students are about 70 times more likely to get to school safely if they take the school bus instead of traveling by car”.³⁸ However, this data is based on NHTSA data comparing youth fatalities during school travel hours, regardless of whether those youth were traveling to and from school. The data also does not account for the stark differences in training requirements, licensing requirements, and vehicle inspections that apply to school buses but not regular passenger vehicles.

**Pedestrians were
more than
3X
as likely to be killed by school
vehicles than other vehicles.**

Between 2005 to 2014, there were more than twice as many school-aged children killed in school transportation-related crashes in “other vehicles” (130) vs. “school transportation vehicles” (53). However, both totals represent extremely small proportions of the total number of fatal motor vehicle traffic crashes over that same time period across the country (.03% and .015%, respectively).³⁹ Moreover, if drivers in non-yellow school bus vehicles leveraged by vendors or LEAs for student transportation such as cars, vans, or shuttles were held to similarly rigorous safety, training, and vehicle inspection standards as yellow school bus drivers, as is recommended by this report, it is likely that accident rates for these drivers and vehicles would decrease.

In addition to better understanding the true safety differences for occupants of yellow school buses and other vehicles while driving to and from school, it is also important to understand safety outcomes for non-occupants of those vehicles. For example, while the NHTSA data suggests there could be a lower fatality rate among school-aged occupants of school transportation vehicles, these vehicles appear to be less safe for pedestrians. In school transportation-related crashes between 2005–2014, pedestrians were more than three times as likely to be killed by school vehicles (183) than other vehicles (53). Though the direct effect of larger blind spots of certain vehicles on safety outcomes is difficult to quantify, the smaller blind spots of smaller vehicles are likely a safety advantage when compared to large yellow buses.

Bus stop safety is also an important concern. The NHTSA claims that “the greatest risk to your child is not riding a bus, but approaching or leaving one.”⁴⁰ About 24% of school bus injuries involve students getting on or off the bus. An average of seven school-age passengers are killed in school bus crashes each year while 19 are killed getting on and off the bus.⁴¹ Research found that 70 injuries and 17 fatalities in 2018–2019 were related to school bus crossings.⁴² Regardless of what vehicles are used to transport students to school, safety precautions must be taken at every step of the process—including ensuring children are safe getting to and from bus stops.



24%
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Vehicles

The iconic yellow school bus has dominated school transportation since 1939, when school transportation officials from across the country developed the first set of school bus standards.⁴³ The traditional yellow school bus has some benefits in providing safe home-to-school transportation for large numbers of students living in relative proximity to each other. However, especially when considering advanced technology and transportation innovations in recent years, it can also be a relatively expensive, inefficient, and environmentally damaging mode of transportation.

While Indiana state law defines a “school bus” as having capacity for more than 10 passengers, school buses manufactured according to federal motor vehicle safety standards are more commonly designed for 20 or more passengers.⁴⁴ Without the availability of smaller vehicles, LEAs across the state face the challenge to efficiently transport smaller numbers of students who may live in less populated areas or on the outskirts of the geography served. To transport these students, LEAs often must either run routes with large buses that are underutilized, or run longer routes to fill up large buses, resulting in longer ride times. Either scenario is sub-optimal in terms of cost, management, efficiency, and service quality for students and families.

To deliver on the vision of a high-quality school within one transit hour of every child’s home, LEAs must be empowered with the flexibility to differentiate transportation solutions that are most efficient for each child. However, Indiana policy and regulations do not afford LEAs the flexibility they need.

Federal regulations on school bus vehicle requirements apply only to the manufacture and sale/lease of new vehicles (with a capacity of more than 10) that are likely to be used for school transportation. Federal regulations do not prohibit the use of smaller vehicles for school transportation.⁴⁵ Federal regulations also require school bus drivers to hold a commercial driver’s license⁴⁶ (CDL) because most yellow school buses meet the definition of a commercial motor vehicle (CMV). This requirement is entirely dependent on the type of vehicle being driven with no federal requirement that school bus drivers hold a CDL if they are driving a vehicle that is not considered a CMV. The CDL requirement serves as an additional barrier to entry into the labor market for prospective new drivers, as training and licensure requirements can be costly and onerous.

Apart from the aforementioned federal regulations, the primary restrictive covenants in Indiana state law regarding the types of allowable school transportation vehicles are that they be considered either a “school bus” or “special purpose bus” by the state’s definition, and that they be designed for more than 10 passengers.⁴⁷ State law⁴⁸ delegates broad authority to the Indiana state school bus committee (Committee) to govern school transportation vehicle standards. While the Committee’s regulations align with federal motor vehicle safety standards⁴⁹, the Committee has established administrative regulations that are highly restrictive regarding the types of vehicles that may be used for school transportation⁵⁰ and describe in great detail the traditional “yellow school bus.”

Indiana state law allows for LEAs to utilize a “special purpose bus” to transport students between schools, to extracurricular activities, or to transport students with disabilities between their residence and school. By statutory definition, a special purpose bus has capacity for more than 10 passengers, but is typically smaller than a standard yellow school bus. However, Indiana statute requires that, when owned by a school corporation, a special purpose bus must have capacity for at least 30 passengers.⁵¹ While a special purpose bus offers an additional type of vehicle that may be used by an LEA in Indiana, the minimum capacity requirements do not allow for LEAs to tap into this opportunity where their usage would offer more efficiency and better service to students.

In contrast to Indiana, LEAs and contractors across the country are increasingly using smaller-capacity vehicles (large passenger vans, shuttles, minivans, taxicabs, and SUVs) to supplement traditional school bus service. A national survey conducted in 2015 found that the majority (58%) of states surveyed allow for home-to-school transportation on regular passenger vehicles (10 passengers or less).⁵² These vehicles can reduce ride times and costs for LEAs, especially when transporting students with special needs or who live in the outer bounds of a geography served. States that allow alternative forms of school transportation also maintain strict safety standards for these vehicles and drivers. For example, Illinois allows cars and vans to be used for school transportation, but all drivers must have a school bus permit, which can only be acquired by passing certain exams, criminal background checks, and drug testing among other requirements.⁵³ Pennsylvania also allows the usage of vans for school transportation and requires semi-annual state inspections. The vans used for school transportation are also subject to random vehicle and driver spot checks by state police.⁵⁴

Indiana state law prohibits the use of smaller vehicles for home-to-school transportation for most students, except for students experiencing homelessness, students receiving foster care, or students with disabilities. State law does allow for an “appropriate vehicle” to be used for school transportation when transporting seven or fewer homeless students or students in foster care to the same school corporation.⁵⁵ House Education Bill 1549, approved by the legislature in the 2021 session, recently expanded the allowable use of “appropriate vehicles” to be used for transportation of a student with an individualized education program. By the state’s definition, an “appropriate vehicle” has capacity of eight or less passengers and includes a car, truck, sport utility vehicle, or minivan.

If the state has deemed these vehicles “appropriate” for children who are among the most vulnerable, it is reasonable to consider expanding the allowable usage of these vehicles for students who are not homeless or receiving foster care.

Beginning July 1st, 2021, House Education Bill 1549 now enables school corporations to contract services through “Transportation Network Companies” (TNC), defined as companies that do business in Indiana and use a digital network to connect riders to drivers to request prearranged rides.⁵⁶ An expanded criminal history check and child protection index check must be conducted for every driver who transports students. Despite the added flexibility to contract with alternative transportation providers, recent guidance issued by the IDOE also advises school officials that if a school corporation contracts with a TNC for transportation services it would have to use a school bus or special purpose bus with restrictions on its usage (e.g. special purpose buses cannot be used for home-to-school transportation for most students), per IC 20-27-9-12.5.⁵⁷ TNCs typically use vehicles that would not qualify as a school bus or special purpose bus per state definitions. Therefore the addition of TNCs as allowable school transportation providers may be rendered effectively null without further legislative action.

The McKinney-Vento Education of Homeless Children and Youth Assistance Act (McKinney-Vento) sets requirements for transporting homeless students to and from school. The requirements aimed at maintaining stable educational environments for homeless children can put substantial pressure on LEA budgets. Under McKinney-Vento, corporations must provide transportation to and from eligible students’ schools of origin even if a student is living outside the origin school’s enrollment boundaries. This mandate often results in the need to run separate bus routes to pick up one student or a few students well outside a school’s normal enrollment zone. Allowing the use of smaller vehicles rather than full-sized school buses for these students is far more efficient and cost-effective. Further, collaborating across schools and school types, or centrally assigning shared routes across a geography to transport McKinney-Vento students has yielded great success in other states. In Minneapolis-Saint Paul, over 60 LEAs have partnered through the Center for Efficient School Operations (CESO) to centralize the transportation assignment, vendor management, and customer experience for McKinney-Vento students across the region.⁵⁸ Given that Indiana was recently ranked 42nd in the nation for its effectiveness in identifying students experiencing homelessness,⁵⁹ it is likely that the actual needs for McKinney-Vento-compliant school transportation are much greater than are currently being offered, only further strengthening the case for the state to allow for the most efficient transportation solutions available.

In addition to the cost and efficiency advantages of variably-sized vehicles within school transportation fleets, there are several possible alternatives to larger diesel-fueled buses that are more environmentally friendly and can reduce long-term operating costs. The average cost of a new full-size school bus is approximately \$90,000 and can cost between \$34,000 and \$38,000 per year to operate and maintain.⁶⁰ Yellow school buses typically get only 4–6 miles per gallon, resulting in high fuel costs and harmful environmental impacts, especially when compared to smaller and alternative vehicles. One estimate suggests school buses in the United States release 9 million metric tons of carbon dioxide into the atmosphere each year.⁶¹ The following solutions, in early adoption by some districts across the state, offer potentially more cost-effective and environmentally-sustainable alternatives to yellow buses:

- * **Propane School Buses** – A recent study by the U.S. Department of Energy found that school districts deploying propane-fueled school buses saved nearly 50% per mile for fuel and maintenance, while reducing harmful effects on the environment when compared to diesel-fueled buses. Propane buses eliminate an estimated 80% of the smog-producing hydrocarbon generated by diesel engines.⁶² While there is a higher capital cost to invest in both the buses and the fueling stations required (approximately \$16,000 per bus), school districts were able to pay for most of these expenses with federal grants.⁶³ Some Indiana school corporations have been acquiring propane buses, such as DeKalb Central, which expects an annual savings of \$3,250 per bus in operating expenses.⁶⁴ New Albany Floyd County Schools recently purchased nine propane-powered buses, paying only a third of the full price of \$132,000 per bus thanks to a state-administered Volkswagen grant.⁶⁵

- * **Compressed Natural Gas (CNG) Buses** – While CNG buses can cost \$25,000–\$35,000 more than a traditional diesel bus, government subsidies are available to help cover these costs and the reduced annual fuel and maintenance costs are substantial. After a 50 cent federal rebate on every gallon of natural gas used in CNG buses, fuel can at times cost nothing as supply ranges between 50 cents to \$1.00 a gallon.⁶⁶ Utah school corporations deploying CNG buses were found to have reduced nitrogen oxide emissions by nearly 88% vs. diesel buses, greatly improving air quality in their operation zone.⁶⁷
- * **Electric School Buses** – While electric school buses have zero emissions and can save a school system over \$6,000 per bus in annual fuel and maintenance costs,⁶⁸ a new electric school bus can cost \$230,000 to \$400,000—two to four times the cost of a diesel-powered school bus.⁶⁹ Similar to gas-powered buses, state and federal subsidies are often available to help subsidize the capital investments in electric school buses. Monroe County Community School Corporation recently acquired an electric bus and reported saving 6.5 tons in CO2 emissions and 275 gallons of diesel fuel in just 46 days.⁷⁰

Drivers

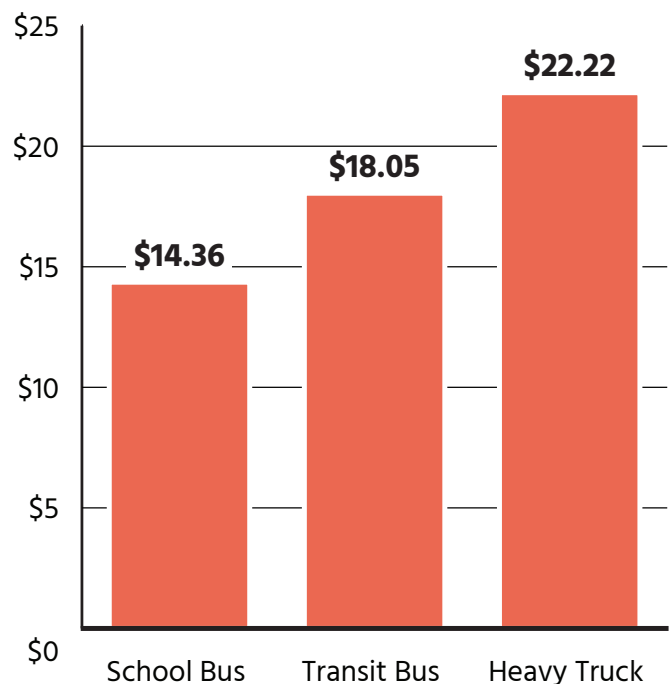
School systems throughout the country have increasingly been experiencing school bus driver shortages in recent years. In a recent National Association for Pupil Transportation survey, more than half of student-transportation coordinators nationwide described their school bus driver shortage as “severe” or “desperate”, and more than three quarters of respondents said the shortage is getting worse. Seventy-seven percent of respondents in the Midwest said they have altered services as a result of the shortage. Fifty percent of respondents said the rate of pay is a major factor affecting their ability to recruit and retain drivers, 45% cited the “length of time to secure a CDL”, and 38% cited the “hours available to work.”⁷¹ For instance, Massachusetts called in the National Guard at the start of the 2021-2022 school year to help with school bus driver shortages.⁷² Elsewhere, the Mayor of Chicago asked Uber and Lyft drivers to assist with school transportation gaps.⁷³

Indiana is experiencing similar challenges to the rest of the country. Pike Township Schools recently announced a move to online distance learning for two days per week after 10 bus routes were impacted by a shortage of drivers. Many Pike Township school bus drivers stopped reporting to work on September 30th, 2021, in protest over low pay, forcing the corporation to shut down school transportation entirely two days per week.⁷⁴ IPS was forced to pull back on plans to transition some students to the city’s public transit system, IndyGo, as IndyGo is experiencing driver shortages similar to many school systems.⁷⁵ Small and more rural districts have also dealt with driver shortages, such as Borden-Henryville School Corporation.⁷⁶ School transportation officials in Indiana and throughout the country identify the driver shortage as a long-standing problem exacerbated by the pandemic.⁷⁷ School corporations throughout the state are scrambling to deal with the shortages, implementing tactics like signing bonuses, paid training, higher wages, doubling up routes on the same bus, and deploying substitutes.⁷⁸

Historically in Indiana, school bus driver wages have been 20-35% lower than other professions requiring a CDL, making the school bus driver profession relatively uncompetitive as shown in Figure 8.⁷⁹

Figure 8

2018 Mean Hourly Wage of Professions Requiring a CDL-Indiana



Moreover, the cost and time required to obtain a CDL can be burdensome. Obtaining a CDL license and school bus driver certification can take four to six weeks, often at the prospective driver's own expense and dependent on the proximity, scheduling, and availability of the required training.⁸⁰ In addition to holding a CDL, the state of Indiana requires all school bus drivers applying for certification to complete a pre-service school bus driver safety course or have operated a school bus at least thirty days during the three-year period preceding the effective date of the school bus driver's employment.⁸¹ Further, employers require observation of a certified driver and behind-the-wheel training. After completing the required training, a school bus driver is issued a certificate and must attend an annual safety meeting to remain certified.⁸² State law also mandates all school bus drivers undergo physical examination by a medical professional registered by the Federal Motor Carrier Safety Administration's National Registry of Certified Medical Examiners.⁸³ State law requires school bus drivers to hold either a public passenger chauffeur's license or commercial driver's license. If drivers were to transport students in vehicles that qualify as "appropriate vehicles" by this report's recommended definition, they would not be required to hold a CDL but still would be required to hold a chauffeur's license.⁸⁴

All new drivers must take the pre-service course offered by the IDOE. The pre-service classroom instruction is offered online in consecutive two-week intervals through the end of 2021, and then transitions back to in-person training in February 2022.⁸⁵ Requiring new drivers to attend centralized training in-person on a restrictive schedule and in a limited number of locations throughout the state is likely not the most accommodating approach to maximize the number of new drivers who are trained and made available for hire. It would likely be more effective to maintain pre-service in both online and in-person formats and make the online format available "on demand" to accommodate prospective new drivers' schedules.

Facing growing driver shortages for the 2021-2022 school year, some Indiana school corporations are implementing substantial financial incentives to recruit and hire new drivers. FWCS is offering \$18–\$26.73 per hour, full benefits, free CDL training, a \$2,000 signing bonus, and a \$1,000 referral bonus to attract new drivers.⁸⁶ In addition to shifting to a tiered bell time schedule in response to the driver shortage, South Bend Community School Corporation is offering new hires a \$1,500 signing bonus.⁸⁷

Compounding the uncompetitive pay and onerous licensing and training requirements, school bus drivers are typically offered only about five work hours per day, leaving many unable to qualify for benefits or support their families without getting a second job. Moreover, given the awkward schedule of driving only in the mornings and afternoons with breaks in the middle of the day, it can be difficult for school bus drivers to find second part-time jobs that complement their school bus driver schedules. Many drivers are older people who use school bus driving to supplement their Social Security checks. Unfortunately, the health risks of the COVID-19 pandemic have scared many of these individuals away from continuing to drive a school bus.⁸⁸

Management

Several different management structures can be utilized by LEAs for school transportation:

- * **100% In-House** – The LEA retains full ownership of all buses, full responsibility for management of daily operations of school transportation, and directly employs all school transportation personnel. This structure may result in the lowest cost solution for acquiring the necessary vehicles, given that government entities can generally be expected to benefit from a lower cost of capital than private companies. However, in-house personnel costs may be higher versus contracted personnel due to compensation and benefits costs that are often higher in school corporations when compared to private businesses. Additionally, this structure mitigates the risk that a contractor will fail to provide the required number of vehicles or prematurely terminate services, leaving students unexpectedly without school transportation and LEA officials scrambling to maintain daily service.⁸⁹ Moreover, hiring drivers in-house, especially during periods where the labor market is in short supply, can offer more stability, less risk of mid-year disruptions to services, and promote longer-term retention of bus drivers. For example, when IPS announced in January 2020 it would not renew its transportation contract with Durham School Services for the 2020-2021 school year, 514 employees discovered their jobs would be terminated in June of that year, resulting in large numbers of drivers calling out sick and immediate major disruptions to bus services for students and families.⁹⁰

- * **100% Contracted** – The LEA contracts for all school transportation services, including both the physical assets and the personnel. All day-to-day operations are managed externally. This structure has the benefit of relieving the LEA of all school transportation responsibilities, but may not always result in the lowest cost solution, depending on the outcomes of contract negotiations. In addition, smaller and more rural LEAs may find few competitors available in the marketplace, which puts upward pressure on pricing. Contracting for school transportation also carries the risk of untimely contract terminations which can have a detrimental impact on student attendance and learning.
- * **Public Transit** – When such infrastructure is available, which is typically only in large urban areas with strong public transit, an LEA may choose to pay for students to ride public transportation to and from school. This approach can be cost-effective given the economies of scale of joining a larger transportation system. The fixed routing also offers the potential for more stability and lower costs, but may not meet the needs of individual students and families as effectively when compared to the adaptive routing of yellow school buses. Moreover, public transportation is generally only appropriate for students in Grade 7 or above, and therefore does not offer a system-wide solution. Some federal regulations limit the extent to which school transportation systems can coordinate with public transit. Federal “tripper service” regulations prevent transit systems from tailoring public mass transit route stops and schedules to accommodate the needs of school students.⁹¹
- * **Hybrid** – Many LEAs combine some or all of the above service models in different variations. For example, the LEA may retain full ownership of all buses and contract for the personnel services required to manage daily operations of school transportation. This structure maintains the benefits of bus ownership described above while potentially lowering overall personnel costs by contracting those services. However, an LEA choosing this structure still faces the risk of a contractor unilaterally terminating its services in an untimely manner.

One example of the detrimental impact of untimely, unilateral contract cancellations by transportation vendors was experienced recently by Rooted School Indianapolis, a small, independent charter school. The school is located on the city’s far eastside, but serves families who live across Marion County. Approximately two weeks before the 2020-2021 school year began, the school’s transportation contractor terminated its contract with the school. The school’s administration scrambled to find another solution and was able to enter a contract with another vendor but for nearly twice the price. Several weeks into the school year, the second vendor also cancelled its contract with the school with only seven days advance notice. The school was forced to immediately offer families financial incentives for driving their students to school in lieu of transportation services until it was able to purchase a bus and hire a driver in-house. This series of events led to significant learning disruptions for students as the school and families struggled to find last-minute solutions to the transportation needs of children. In some cases, the transportation disruptions led to a loss of enrollment as families were forced to seek other options due to the lack of bus service. This example suggests that small corporations and charter schools are disadvantaged when engaging transportation contractors, as these vendors may find smaller scale contracts undesirable, resulting in potential price gouging and unreliable commitments to provide services.

Based on a review of Indiana state police bus inspection records⁹², the state’s transportation vendor market has limitations that likely impact spending levels and LEA decisions about whether to manage transportation in-house versus via contract. While there are 19 companies with school bus inspection records in the state, 12 (63%) of these companies have fleets of less than 10 buses. Only three companies operate in the southern part of the state, all with less than 10 buses. The other 16 operate in the central or northern parts of the state, primarily near large urban areas. **As a result, smaller LEAs and those located in rural or southern parts of the state likely have the fewest alternatives available for managing school transportation and in-house management may currently be their best and/or only option.**

In addition to the more established delivery methods described above, new and alternative approaches to transportation management have arisen in recent years. The systems described below each offer unique value to a multi-modal transportation system that is responsive to ridership needs while limiting dependence on yellow buses:

- * **Specialized Management Companies** – Regardless of whether an LEA chooses to outsource or manage daily transportation operations in-house, increasing numbers of providers are offering centralized transportation management and/or system-wide technology solutions (e.g. [4MATIV](#), [Seon](#), etc.). These providers may enhance the quality and efficiency through specialization of core competencies and economies of scale for centralized management solutions such as technology platforms. Furthermore, specialized management companies have the potential to play a critical role in the future of collaborative transportation service delivery by serving as a lead liaison and coordinating body between schools of all types and their portfolio of available vendors.
- * **Transportation Network Companies (TNCs) (also known as “Ride Shares”)** – While the most commonly known TNCs (e.g. Uber and Lyft) provide transportation to adults, some TNCs ([HopSkipDrive](#), [Zūm](#), [RideAlong](#)) have begun offering school transportation solutions for children. HopSkipDrive provides transportation solutions for students who do not fit easily on traditional bus routes, while Zūm offers a diverse, multi-vehicle fleet that includes electric vehicles, buses, cars, and vans. Both companies have established software platforms where school systems can schedule rides for individual children and students and parents can access real-time updates on the status of the rides via their smartphones. RideAlong provides families, rather than schools, with direct door-to-door pick-up and drop-off services. These companies advertise safety precautions for drivers such as requiring caregiving experience, extensive background checks, and clean driver records. Some even offer technology that monitors unsafe smartphone usage while driving. While not a solution for all students, these options are a critical component in a multi-modal transportation system that aims to serve all students well and with optimum efficiency. To make businesses such as these eager to enter Indiana’s market, policy flexibility will be required.
- * **Alternative Transportation Providers** – Some companies, such as [Assist Services](#), provide alternative and personalized school transportation services for students requiring special support such as students experiencing homelessness and students with disabilities. These companies can also support out-of-district trips and multi-district coordination.
- * **Carpool Coordination Services** – [Commuter Connect](#) is a federally-funded organization that helps Central Indiana residents access alternative, affordable, and environmentally-friendly transportation options. Commuter Connect’s online database provides free accounts for individuals to upload their work hours and their home and work addresses to find carpool matches, vanpool matches, and bike buddies. Commuter Connect also operates a “School Pool” service that provides a coordinated match process for parents to find other families who live nearby and are interested in carpooling to school. While this service is currently primarily utilized by charter schools or nonpublic schools, school corporations could also participate in the service and may see benefits from reduced demand for bus transportation. In particular, carpools can be a powerful solution for families living within walk zones due to proximity to schools.
- * **Private Companies** – Companies like [Waze](#) or [Carpool World](#) offer carpool matching services in Indiana. These could also be utilized by parents to share rides to school rather than request traditional bus service.
- * **“Opt Out” Subsidies** – Facing increased driver shortages and cost overruns, a growing number of school systems across the country are offering direct payments to families who opt out of yellow bus service. Parents in Philadelphia were able to receive up to \$1,500 beginning in the 2020-2021 school year for opting out of bus service—more than 8,000 families signed up for the service.⁹³ Portland Public Schools offered monthly stipends of \$300 to families impacted by the cancellation of more than a dozen bus routes due to a driver shortage.⁹⁴ For students who live in the outermost geographic boundaries of an area served by a school, or network, opt-out subsidies may be a more desirable option for both the school and the student.

To meet its public promise to operate more efficiently, beginning in the 2021-2022 school year, IPS offers free IndyGo bus passes to selected high school students, in addition to those who opt-in to the program. Yellow bus service is no longer available to these students. Selected students have total journey times of no longer than 50 minutes. While the initial cohort was estimated to be about 600 students, IndyGo capacity constraints have limited the pilot cohort size to 195 students. IPS expects budget savings of approximately \$200,000 as a result of the program and intends to expand to include additional students over the next 1–2 years.⁹⁵

IPS reports that 87% of students selected for the program will have shorter ride times to and from school, with an average total journey time of 25 minutes. Ride times for these students on yellow buses can range from 60–75 minutes.⁹⁶ IndyGo does not likely have the physical assets, operational capacity, or infrastructure to serve as a complete substitute for IPS-provided transportation service for older students, but additional investment could be considered in the future to expand this partnership. Whether in urban, suburban, or rural communities, increased policy flexibility offers all school systems in Indiana the opportunity to explore potential partnerships in their communities, including with public transit agencies, alternative transportation providers, technology companies, and families themselves. Considering student transportation as one piece of a larger community transportation landscape offers opportunities to deepen partnerships, protect access to high-quality schools, and enhance and streamline school transportation services.

Routing & Scheduling

Several strategies for transportation routing can be utilized by LEAs:

- * **Demand-Response** – Traditionally, LEAs have offered “demand-response” routes that depend on parent requests for school transportation. These requests are highly unpredictable and place considerable strain on the day-to-day management of the system. Depending on the LEA’s policies and procedures for requesting bus stop additions or changes, it can be challenging to continually modify bus routes throughout the school year while also maintaining maximum efficiency and proper communication with parents about schedule changes for everyone on affected routes. Furthermore, school systems with significant student mobility struggle to maintain accurate rosters of all current home addresses and phone numbers. As a result, even if an LEA has robust capacity and technology to redesign bus routes on a real-time basis, inaccurate information about where students live, where they need a bus stop, or if they no longer need a bus stop makes both the design and communication of bus route updates difficult. Confusion about changes to bus routes can be a leading contributor to student truancy, ultimately impacting student outcomes including academic proficiency.
- * **Fixed Route** – A fixed route transportation system operates a predetermined set of routes on predetermined schedules that do not vary from day to day. Fixed route systems are the most common form of public transportation.⁹⁷ Some Indiana school corporations have begun to incorporate fixed routes in their transportation systems. For example, Goshen Community Schools implemented a new “hub stop” busing system in 2021 in pursuit of routing efficiencies.⁹⁸ A fixed routing structure has clear advantages in terms of cost, efficiency, and stability in addition to reducing the risk of communication breakdowns between schools and homes that result in students missing time at school. However, fixed routing is inherently less flexible and responsive to the changing needs of students and families and is likely to result in longer distances between individual homes and bus stops than is typically experienced with demand-response routing.
- * **Hybrid** – A school transportation system can use a combination of fixed route and demand-response routes. For example, Denver Public Schools supplemented its demand-response transportation system with the launch of an innovative fixed route system called “Success Express” beginning in the 2011-2012 school year. The system involved two circular fixed routes repeatedly travelled by the same buses for three-hour periods in the morning and afternoon. The system resulted in increased student access to schools with desired programs and charter schools, improved student attendance and lower truancy rates, and reduced overall school transportation costs.⁹⁹
- * **Walk Zones** – Most school systems establish “no bus zones” or “walk zones” for students who live within close proximity to a school. In some cases, school systems have these policies already in place but they have not been enforced when creating bus routes. Several Indiana school corporations, such as IPS and Greater Clark County Schools, have expanded walk zone areas and/or begun enforcing walk zones in recent years to capture cost savings, especially when facing driver shortages. FWCS cut its transportation budget by \$2.5 million in 2015-2016 by increasing the “no transportation zone” area from one mile to two miles from schools, requiring students living within two miles to walk or get a ride. The policy change affected 23% of the LEA’s enrollment and contributed to the LEA’s ability to sell 50 buses that year.¹⁰⁰

In addition to determining the most efficient routing strategy, school systems must also be intentional about the placement of bus stops to ensure student safety and maximize time efficiency. Ideal bus stop criteria developed by school transportation experts include the following characteristics:¹⁰¹

- * Reasonable walking distance and safe path to the stop
- * Adequate lighting
- * Sufficient space for students to wait at least 12 feet from the road
- * Corner stops located at intersections that are not too busy
- * Stops not near businesses that may pose a risk or are inappropriate for children, such as liquor stores, bars, adult entertainment, etc.

In addition to the features listed above, corner bus stops pose some potential advantages when compared to mid-block stops. **Corner bus stops offer the most options for routing and minimizing turns, resulting in time efficiency that can reduce ride times for students.** Corner bus stops also have safety benefits, such as more waiting area than mid-block stops that are clear of parked cars, better enabling visibility for drivers passing by.

Irrespective of routing strategies, some school systems implement tiered bell schedules, staggering start times for different schools in the system. The tiers are typically categorized according to grade level, where elementary schools start earlier than secondary schools. This approach can have several benefits, including:

- * **Cost Savings** – Staggered bell times reduce the number of buses and drivers required by deploying the same buses and drivers on multiple routes in the morning and afternoon. A tiered bell schedule with optimized routing implemented by Boston Public Schools resulted in a fleet reduction of 50 buses and \$5 million in annual savings.¹⁰²
- * **Mitigating Driver Shortages** – Driver shortages can be mitigated by reducing the number of drivers needed by collaborating on tiered bell times, as well as by offering flexibility in allowable vehicles, thus decreasing the number of CDL drivers needed in the landscape. Additionally, by increasing the amount of hours offered to drivers of multiple morning and afternoon routes, the pool of interested drivers may increase because drivers who are looking for full-time work may experience less pressure to find a second part-time job with abnormal hours.
- * **Later Start Times for Adolescents** – By assigning later start times to middle and high schools, LEAs can adhere to the American Academy of Pediatrics recommendation for adolescent school days not to start before 8:30 a.m. The Academy has determined insufficient sleep for older students leads to health and safety problems and negatively affects academic outcomes.¹⁰³

South Bend Community School Corporation (SBCSC) recently transitioned to a three-tier bell schedule in response to a persistent driver shortage. Prior to implementing the new system, SBCSC experienced anywhere from 18–37 driver absences per day. Driver absences would regularly result in 1–2 hour delays to the start of school, given the high proportion of the district’s students transported by school bus. The corporation changed the start time of elementary schools to 7:30 a.m., high schools to 8:30 a.m., and 9:30 a.m. for intermediate and academy classes. The changes resulted in 95% on-time performance with most drivers averaging 8-hour days that provide the stability of full-time work and benefits.¹⁰⁴

Tiered bell schedules do have disadvantages, particularly for parents. With this approach, afternoon activities for older students occur later in the day, which means many of those students get home much later in the evening. Earlier start times for elementary schools mean younger children may be waiting at bus stops at early hours in the morning when it is still dark. Earlier dismissals can conflict with families’ work schedules, resulting in higher childcare costs for working parents.

These challenges can be at least partially mitigated. After implementing a tiered bell schedule, FWCS transitioned some sports teams to meet before school instead of in the afternoon. FWCS also substantially expanded after school childcare through a partnership with the YMCA, with four times as many students participating in the program after the launch of the tiered bell schedule.¹⁰⁵

Along with the bell schedule changes, both South Bend and Fort Wayne began enforcing their no-bus policies for students who lived close to schools, resulting in more efficient routing and lower costs. In addition, Fort Wayne began restricting students who ride the bus from varying their routes home depending on their after-school plans.

While transitioning to a multi-tiered bell schedule can result in significant benefits, the downsides must be actively mitigated and care must be taken to be responsive to families' needs and concerns. The ideal balance of respecting school-based autonomy while benefiting from the efficiencies of central coordination can only be found through effective engagement and communication with students, parents, and school staff.

Data and Technology

While most public mass transit systems routinely track performance data such as cost per ride, percent utilization, on-time departures and arrivals, and length of ride times, school transportation systems often do not have the capacity or technology infrastructure in place to effectively track this data. This data can be powerful information to leverage toward improving route efficiency and quality of service while minimizing costs.

For example, a system for recording accurate ride attendance on every route is necessary to understand if a school system's bus ridership roster is current, if all stops are necessary or may need to be changed, and for monitoring the percent utilization of each bus on a daily basis. Higher utilization rates equate to reduced costs as fewer vehicles and drivers will be required overall when an LEA is running all routes at high utilization rates. Fuel costs and ride times can be better managed and limited when school transportation officials have real-time data on whether bus stops can be eliminated because riders have stopped getting on or off the bus at those locations.

GPS technology and routing software can be used to maximize routing efficiency and minimize ride times. GPS tracking systems also allow a school system to monitor actual ride times, traffic patterns that may slow buses down, and driver performance and conformity with driving the routes accurately as they were designed to be traveled. RFID (Radio Frequency Identification) systems, a technology whereby digital location data is captured via an object such as a student ID and transmitted to a central monitoring system, can be used to track rider attendance and improve safety by helping to locate students who may have gotten lost, missed the bus, or gotten on the wrong bus. GPS and RFID tracking can also be shared with parents via smartphone apps to help parents stay informed about where their students are while riding school transportation.

Despite the clear advantages in using these technology solutions, most school transportation systems lack such technology. Only 54% of respondents to a 2015 national survey of school transportation officials indicated that they use routing software programs for their school bus routing. Thirty-three percent reported using GPS to monitor their buses. Only five percent said they had equipped their buses with technology to track ridership and attendance.¹⁰⁶

In addition to GPS and RFID, several technologies are available to enhance the vehicle safety of school buses or other passenger vehicles used to transport students. Examples of these technologies include:

- * **School Bus Cameras** – Video recordings help schools monitor student behavior and driver safety issues. Cameras can also be used to monitor stop-arm violations (cars passing a school bus illegally).
- * **Blind Spot Monitors** – Alarm and/or video systems that help prevent collisions caused by school bus vehicle blind spots.
- * **Collision Prevention** – Sensor systems that trigger alarms and/or automatic braking when objects are sensed to be in danger of colliding with the vehicle.
- * **Electronic Stability Control** – Systems that detect whether a bus is at risk of a rollover or loss of control on a slippery surface and automatically intervene to help the driver maintain control.

Center Township Case Study

Schools in Center Township have consistently struggled to provide reliable and financially sustainable bus transportation to all students. Just as Indianapolis has built a uniquely robust school choice landscape, new and innovative school transportation solutions are also needed to ensure all families can access an excellent education.

In spring 2021, The Mind Trust (TMT) began convening autonomous schools to identify pain points and opportunities within school transportation systems. The needs assessment revealed that schools were struggling to access adequate services as vendors across the state have struggled to keep up with driver workforce demands. Furthermore, the current ambiguity in state law about whether charter schools are exempt from regulations regarding vehicle types allowed for school transportation has hampered their ability to fully meet the needs of students and families.

In response to the needs of schools surveyed, TMT established its first transportation pilot, intended to provide needed transportation support to four independent charter schools and one IPS Innovation Network School in Center Township. These schools were identified as high need and likely to have limited bargaining power for over-committed services from school bus vendors.

Central to the project was the engagement of a specialized management partner, [4MATIV](#), to support participating schools in reimagining what transportation collaboration across LEAs can achieve for schools and families. The pilot program centralized transportation services for all five schools under 4MATIV's management, with the goal of harnessing operational efficiencies and cost savings for schools. As a result, schools were able to redirect staff time away from transportation logistics to attend to other operational and academic priorities.

In partnership with 4MATIV, TMT established the following strategies and seeks to evaluate their impact through the pilot:

- * Centralized transportation service management, route development, and vendor management
- * Centralized operational management
- * Varied transportation delivery including: shared routes, shared buses, and multi-modal approaches
- * Cost and service efficiencies
- * Intentional collaboration among school leaders across sectors

In line with their entrepreneurial spirit, school leaders embraced the opportunity to collaborate to better meet the needs of students and to explore new and improved practices. However, the pervasive overextension of transportation vendors and chronic driver shortages threatened to derail the benefits of the pilot program.

In response to vendor needs, TMT launched an extensive bus driver recruitment campaign, "DriveIndySchools". Rather than find CDL drivers eager to drive school buses, a narrow market at any time, TMT leveraged deep partnerships with schools and communities to recruit individuals who were connected to schools and the communities they serve, and then train them to drive school buses. **A key lesson learned was that when those individuals were offered flexibility to serve in other roles within schools, thus maximizing the paid hours available to them, the candidate pool flourished with mission-minded individuals.**

Despite the benefits of the driver recruitment program and centralized management, there were no transportation vendors willing or able to serve the schools in the pilot. Center Township's transportation market is centered around yellow buses, limiting the availability of multi-use shuttles or vans to more appropriately meet the needs of smaller charter schools. **This left participating schools with no other choice than to purchase their own buses and shuttles to avoid losses in enrollment, and to narrow the scope of their transportation services, making it harder for families to access high-quality schools of their choice.**

The pilot continues to support schools through the 2021-2022 school year with routing and operational efficiencies, state compliance matters, and collaboration across LEAs. However, meaningful gains in cost efficiencies, service quality, and access to high-quality school choices will be limited without the policy and structural recommendations presented within this research brief.

Recommendations

Bringing school transportation into the 21st century with policy and structural shifts will protect access to high-quality options for students and solve many of the pain points felt by leaders and families at schools across Indiana.

Central to the recommendations that follow are much needed flexibilities to allow schools to respond to student needs while increasing their own efficiency and use of transportation funds. Further, while this flexibility is critical to solving existing challenges within the transportation system, without viewing school transportation as one piece of a much larger transportation system within our communities, few of these benefits will be realized. Solving this challenge requires collaborating within regions, across school types, partnering with existing private and public entities (like MPOs), and thoughtfully considering how to best leverage all transportation modalities.

A key structural recommendation explored is to centralize transportation modalities within given geographies. This could result in one specialized management entity operationally managing a diverse portfolio of vendors leveraging, acquiring, and responding to up-to-date data; liaising across school types within a region; and assigning routes and modalities to students across schools. To achieve this type of collaborative transportation landscape, many of the proposed recommendations would need to be adopted.

Safety

Policy Recommendations

The following policies should be pursued to ensure maximum safety for all drivers and vehicles used in school transportation, regardless of type:

- * Establish state policy requiring all motor vehicle accidents related to school transportation be reported in greater detail to enable ongoing monitoring of safety outcomes for different vehicle types and driver licensing requirements. For example, all police reports for school transportation-related accidents could be required to record the specific vehicle type and capacity, whether it was marked as a school transportation vehicle, what type of license the driver held, and whether it involved home-to-school transportation or another form of school transportation. This expanded public data would enable policymakers and school transportation officials to properly monitor the impact of various transportation strategies and make better informed decisions about vehicle and driver requirements in the future.
- * Require all vehicles used by transportation providers, including those with capacity of less than 11 passengers, to be marked as school transportation vehicles for traffic safety purposes, comply with reasonable safety standards, and be routinely inspected both on a scheduled and random basis.
- * Require anyone hired to drive children to and from school on any type of vehicle, regardless of passenger capacity, to undergo criminal background checks and pass periodic drug tests. In addition, establish the fingerprint background check, drug test, and driving record checks as a uniform standard for all operators.

Structural Recommendations

Indiana school systems must diversify their school transportation vehicle fleets to enable increased differentiation and quality of service, reduced environmental impact, and lower long-term costs, all while maintaining safe operations. Specifically, school corporations and charter schools should be empowered to implement the following strategies:

- * Best leverage traditional school buses by limiting their usage to routes that are heavily populated with riders. Allow for a combination of high bus utilization rates with ride times that do not exceed one hour.
- * Deploy smaller vehicles, including shuttles or large passenger vans with capacity of 10-15 passengers, to “right size” the vehicle solution best aligned with minimizing costs, maximizing efficiency, and reducing student ride times. Smaller vehicles may often be best suited for serving areas with low concentrations of riders, geographies that are farthest away from a school, rural routes in areas with lower population density, and/or homeless students, foster care students, or students with IEPs who require special transportation.
- * Apply for available state and federal government subsidies, such as the Indiana Volkswagen Environmental Mitigation Trust Fund,¹⁰⁷ to acquire and operate propane, CNG, and/or electric buses. More Indiana school systems should consider replacing diesel-powered buses with alternatively fueled buses in the years to come to take advantage of cost efficiencies and to reduce harmful environmental impacts.

Policy Recommendations

To fully enable the above recommendations for LEAs and to ensure efficient, high-quality, and safe transportation options for all children, Indiana should pursue the following policy initiatives:

- * Eliminate the requirement that public elementary and secondary schools may only use a “school bus” to transport children from home to school (IC 20-27-9-12.5).
- * Allow “appropriate vehicles” and “special purpose buses” to be used by school corporations, nonpublic schools, charter schools, private contractors, and TNCs to provide regular home-to-school transportation. Allow for these vehicles to be used for other purposes when not used for school transportation, subject to full-time compliance with safety standards (IC 20-27-9-12.5).
- * Modify the definition of an “appropriate vehicle” from having a capacity of eight or fewer passengers to a capacity of 15 or fewer passengers (IC 20-27-12-0.1).
- * Eliminate the requirement that special purpose buses, when owned by a school corporation, have capacity for at least 30 passengers (IC 20-27-2-10).
- * Maintain and expand government financial incentives to encourage LEAs throughout the state to acquire alternatively fueled buses, including propane, CNG, and electric buses.

Structural Recommendations

Clear opportunities exist to mitigate school bus driver shortages by implementing strategies that directly mitigate the barriers of low pay, lack of benefits, licensure requirements, and inadequate hours. For example, the Governor of New York announced new steps to tackle the bus driver shortage, including opening new CDL testing sites.¹⁰⁸ One Michigan school corporation mitigated its school bus driver shortage by guaranteeing drivers could work enough hours elsewhere in the corporation, including as custodians or food service workers, to qualify for health insurance coverage.¹⁰⁹

To address school bus driver shortages, Indiana school corporations should pursue the following initiatives as soon as possible:

- * Raise school bus driver hourly wages to a minimum of \$18 per hour or higher to be more competitive with other professions requiring a CDL.
- * Offer additional recruitment incentives, including signing bonuses and expanded paid-for training. Paid-for training should include preparation coursework to support new driver candidates to pass all required exams. New driver candidates should also be paid during corporation-administered training such as behind-the-wheel observations to ensure lengthy training periods do not cause candidates to drop out before completion.
- * Offer additional part-time and summer work within the school corporation to school bus drivers to enable drivers to qualify for benefits, when needed. School bus drivers who also work in schools during the middle of the day will have the opportunity to become more deeply engaged in the life of the school and build stronger relationships with students. This approach not only strengthens recruitment efforts but can also have a positive impact on schools and the students they serve.
- * Pay for these initiatives by identifying more efficient routing opportunities, tiering school day start and end times, and better enforcing existing school transportation eligibility policies, such as “no bus zones” within walking distance of a school.

Additionally, the IDOE should bolster the interventions of school corporations by considering the following strategies, all of which serve to reduce barriers to acquiring the necessary training and licensure to become a school bus driver:

- * Expand the number of CDL testing sites to ensure availability and ease of access throughout the state. As of April 2020, there were only 15 third-party CDL testing sites in the state of Indiana.¹¹⁰ For some corporations, the nearest CDL testing site is inconvenient if not inaccessible, making it an expensive venture for someone who is unemployed or earning a low hourly wage. For example, the nearest CDL testing site is over 80 miles away from the corporation central offices of MSD Warren County and South Spencer County. The IDOE should also subsidize the cost of the exams (currently ranging from \$75–\$150) to encourage more applicants to take and pass the test, or to retest if they are unable to pass it the first time.
- * Expand access to CDL training through online course offerings and frequent in-person training opportunities targeted in locations experiencing school bus driver shortages.
- * Make the mandatory IDOE pre-service class available “on demand” via an online platform and invest in the necessary technology infrastructure to handle the associated data management needs.
- * Establish “one stop shops” throughout the state for as many school bus driver requirements as possible, including physical examinations, drug testing, criminal background checks, driving history, paperwork, and test administration.

Structural Recommendations

Recommending a one-size-fits-all approach to school transportation management is not feasible due to variables specific to the local context of individual school corporations, nonpublic schools, and charter schools in Indiana. The availability and quality of transportation contractors in different parts of the state may vary substantially, as may the needs of different regions. In general, all Indiana LEAs should seek an approach to transportation management that minimizes costs and maximizes the quality and stability of services. This balance may best be found through contracted management, in-house operations, public transit solutions, or a combination of those options.

While the decision about whether to outsource services remains individualized, all school systems in Indiana should implement the following strategies:

- * Benchmark other public school transportation contracts throughout the state to understand pricing and terms vendors in the marketplace are offering different school systems. Given that school corporation transportation contracts are a matter of public record and typically require the approval of the public school board, this information should be gathered ahead of time to inform contract negotiations.
- * Regardless of whether vehicles are owned and drivers are employed in-house, LEAs should consider outsourcing to centralized management providers with advanced technology platforms and specialized expertise in developing efficient routing strategies. Performance-based contracts can be utilized with these companies to ensure accountability for delivering more cost-effective and high-quality services than the LEA could otherwise provide internally.
- * When contracting for transportation, LEAs should consider the engagement of multiple vendors rather than a single vendor for all routes. A multi-vendor approach contributes to a more robust local market for contracted services and mitigates risk of underperformance via diversification across providers.
- * Support the expansion of carpool coordination services via public funding and communications campaigns to raise both the awareness and availability of these programs.
- * Incorporate opt-out subsidies as part of a comprehensive school transportation strategy. To maximize the value of this approach, it is recommended that LEAs selectively offer opt-out payments to families who are outliers in a centralized system, either because these students live far away from their school or in underpopulated areas, resulting in low bus utilization rates and long ride times. The payments should be made on a per-mile basis and tied to actual attendance to ensure funds are used efficiently and appropriately. The amount of the payments offered should be differentiated and directly tied to the opportunity cost of providing the student with yellow bus service, resulting in both savings to the corporation and sufficient incentive for the parent to voluntarily opt out of yellow bus service. Students whose parents receive opt-out payments should still be able to utilize structured carpool opportunities and should maintain access to extracurricular, work placement, and field trip transportation.

Policy Recommendations

To support school transportation management strategies, Indiana policymakers should consider the following priorities:

- * While this report is not focused on state funding shifts, maintaining investments in public transit infrastructure will be important to encourage and accommodate integration of school transportation services with public transit solutions. Non-recurring capital investments by local and state governments can have lasting returns by helping schools prioritize resources for the classroom and shortening ride times for some students.
- * As noted earlier in this report, ensure state policy affords TNCs the flexibility to offer school systems a differentiated fleet of vehicles while also maintaining high standards for student safety. This will empower LEAs to better utilize TNCs, particularly for students who will experience substantially shorter ride times with direct home-to-school transportation as opposed to a yellow bus with multiple stops. By incorporating TNCs with smaller vehicles, a school system can also reduce total transportation costs and redirect these funds to the classroom.

- * Encourage and incentivize centralized, multi-agency coordination of school transportation, resulting in added value through improved efficiency and reduced costs. For example, federal regulations require every urbanized area with a population of 50,000 or more to have a designated Metropolitan Planning Organization (MPO). MPOs are responsible for conducting a collaborative transportation planning process among local government and governmental transportation authorities.¹¹¹ MPOs also administer related federal dollars. There are 14 MPOs in the state of Indiana.¹¹² Given their established role as a multi-agency coordinating body, an MPO is a logical entity to lead centralized planning efforts for improvements to school transportation systems when coordination among multiple government agencies is needed. Despite the potential for leveraging MPO capacity and funding for school transportation improvements, there is little evidence of this type of engagement across the country. Currently, school boards comprise only 6.8 percent of MPO governing board members across the United States.¹¹³



Routing & Scheduling

Structural Recommendations

Without changes to the current policy environment, Indiana school systems can implement the following routing and scheduling best practices to improve cost efficiency and service quality:

- * Supplement demand-response routes with fixed route “circulator shuttles” in an effort to minimize the number of demand-response routes that are necessary and reduce the total number of vehicles required overall. This approach is based on the “Success Express” model used by Denver Public Schools, but can be modified to adapt to the unique geography and context of each local LEA or leveraged collaboratively across LEAs to maximize efficiencies, particularly in school systems with expansive school choices offered to parents. As occurred in Denver, this system will likely result in an expansion of the number of students utilizing school transportation as students who attend schools that do not offer bus services will be able to ride the circulator shuttles and benefit from free transportation for the first time.
- * Enforce “walk zones” established by enrollment policies while ensuring student safety. Students within “walk zones” should still have access to centrally structured carpools or walking groups in addition to traditional passenger transportation.
- * Collaborate on tiered bell schedules across schools to reduce the number of drivers and buses required, expand the daily hours per driver, reduce costs, and align with the American Academy of Pediatrics recommendations for later start times for adolescents.
- * Whenever possible, utilize corner bus stops to help minimize route length and ride times and promote student safety.
- * Identify opportunities for yellow school buses to be shared by multiple schools and/or corporations when there are opportunities to reduce the overall number of buses required across the same geography or adjacent geographies served by those LEAs. Sharing buses results in a net benefit in financial resources becoming available that can be redirected to classroom instruction. Additionally, when schools that do not offer free transportation begin to participate in shared transportation opportunities, more public school students gain access to free transportation. In these scenarios, students who are unable to attend a school that does not offer free transportation may also benefit from an expanded array of school choices. Collaboratively leveraging transportation vehicles across school types is a benefit to schools both in highly populated areas as well as in more rural communities.



Data and Technology

Structural Recommendations

Strong mechanisms for data collection are critical to building an optimized transportation strategy. Strong collection should include: ridership, route optimization, and on-time departure and arrival. While technology solutions can be costly to implement in the face of budget limitations, the potential long-term benefits offer long-term returns on investment. The following recommendations would represent significant advancements in meeting the data and technology needs of school systems in Indiana to improve school transportation services and reduce costs:

- * Acquire GPS and RFID technology and implement the use of this technology across all school transportation vehicles and for all riders. This technology offers major benefits for managing performance and service quality, finding opportunities for cost reductions, communicating with parents, and keeping students safe.
- * Review internal corporation safety reports for the last several years and identify the most common characteristics of accidents involving school transportation vehicles to determine potential priorities for safety technology investments. For example, if a significant percentage of school bus accidents have historically involved collisions with objects in vehicle blind spots, consider prioritizing the installation/inclusion of blind spot monitoring technology in all school transportation vehicles.

Conclusion

To protect a strong school choice landscape, it is critical that Hoosiers leverage their innovative spirit to rethink and redesign the state's school transportation systems. A main lever for change will be policy updates that allow more flexibility for schools and districts to pursue safe, cost-effective, and modern transportation solutions. Systemic shifts can support these policy updates to address challenges like driver recruitment, management, and routing. Collaboration between school types will be essential to create a sustainable, effective transportation system. As Hoosier students and families continue to recover from the economic and academic impacts of COVID-19, Indiana should pursue solutions that aid in protecting and expanding access to high-quality schools to ensure a strong future for families and students.

Endnotes

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- 4 <https://education.jhu.edu/2019/05/mapping-the-connection-between-public-transportation-and-school-absenteeism/>
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- 21 <http://projects.cberdata.org/reports/SchoolSpendingChoice-20210611web.pdf>
- 22 https://fleetimages.bobitstudios.com/upload/_migratedeecomms/files/stats/SBFFB19-transportation.pdf
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- 24 All data referencing transportation spending or revenues per pupil by Indiana LEAs throughout this paper are derived from author calculations based on annual “Form 9” state financial reports (IDOE public records request) and enrollment reports obtained from the IDOE website: <https://www.in.gov/doe/it/data-center-and-reports/>. Includes expense accounts 27010-27910 “School Transportation” sub-category, transportation revenue accounts 1410-1440, 1995, and 3121, 51400 “School Bus Loans – Principal”, 52400 “School Bus Loans – Interest”, 53300 “School Buses – Principal (Leases)”, and 53350 “School Buses – Interest (Leases)”. Total spending also includes object codes 510-519 and fund accounts 410 “School Transportation Fund (inactive)” and 420 “(School Bus Replacement Fund (inactive))” if transactions in those fund accounts are not already associated with the identified expense, revenue, and object accounts. Statewide averages include school corporations only. Charter schools and other special programs were excluded from statewide averages due to variability in whether those LEAs provide transportation.
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