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EPIC
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Comparing School Transportation Costs Across District Contexts

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INTRODUCTION

Students from low-income areas face significant challenges getting to school. Students in low-income households are disproportionately less likely to have consistent access to a car and have fewer options to get to school (Klein & Smart, 2017). Students in rural areas face additional challenges due to less availability of public transit, poorer road conditions, and the need to cover greater distance between their home and their school (Gottfried et al., 2021). This highlights the importance of school-provided transportation for students in low-income areas and rural areas. Sixty percent of students who are economically disadvantaged ride the bus to school, compared to just 45% of their more advantaged peers (Bureau of Transportation Statistics, 2021). Students who are economically disadvantaged, along with students in rural areas, also face longer commute times to school and have fewer alternatives to get to school, which are associated with decreased attendance and increased likelihoods that students switch schools. (Blagg et al., 2018; Cordes & Schwartz, 2019; Sanderson-Edwards, 2023).

SCHOOL TRANSPORTATION AND LOCAL CONTEXT

School transportation is a highly context-specific issue for school districts as district geography, population density, and weather all have large impacts on the school transportation options required and the costs associated with them (Arsen et al., 2019; Augenblick, Palaich and Associates, 2022). As a result, many districts' transportation needs reflect the number of students in the district who get to school by bus along with the physical size and road conditions of the district itself (Howley et al., 2001; Gottfried et al., 2021).

In Michigan, school districts do not receive state funding specific to their transportation costs, such as bus maintenance or to hire bus drivers, which can create large disparities in school transportation financing. A result of this is that districts with higher school transportation costs spend a larger proportion of their general funds on school transportation (Arsen et al., 2019; MI School Data, 2022). In an effort to reduce disproportionately high transportation costs, some school districts have endeavored to cut costs by providing city transit passes, offering gas cards, and contracting with rideshare companies for students who do not take the bus (Johnson, 2022; Bergal, 2015; Cornwall, 2018). Evidence on the efficacy of these efforts is mixed because most public transit initiatives increase student attendance by making transportation more accessible, but may have longer commutes, which can negatively impact student attendance (Munoz & Sandoval, 2022; Stein & Grigg, 2019; Wexler et al, 2021). In addition, Gross & Denice (2021) found that these programs could increase disparities in transportation access between lower- and higher-income students as low-income students may not live near public transit.

Michigan State law requires that districts provide transportation to students who are not able to walk to school, but the local challenges associated with transportation and its associated costs can make it difficult for districts to navigate this requirement (Arsen et al, 2019; Speroni & Lenhoff, 2023). For rural districts, small changes in state funding for transportation can force them to draw on other funding sources that can in turn have large impacts on whether discretionary programs are funded (Chambers, 2019; Perkins, 2023). In addition, many students in urban and suburban districts have had to take longer bus rides in recent years because of a nationwide school bus driver shortage (Edmonds, 2023), which has caused frustration for families and also been linked to increased absenteeism among students (Davis, 2022; Levin, 2023; Sanderson-Edwards, 2023).

ACCESS TO TRANSPORTATION IS ASSOCIATED WITH IMPROVED STUDENT ATTENDANCE

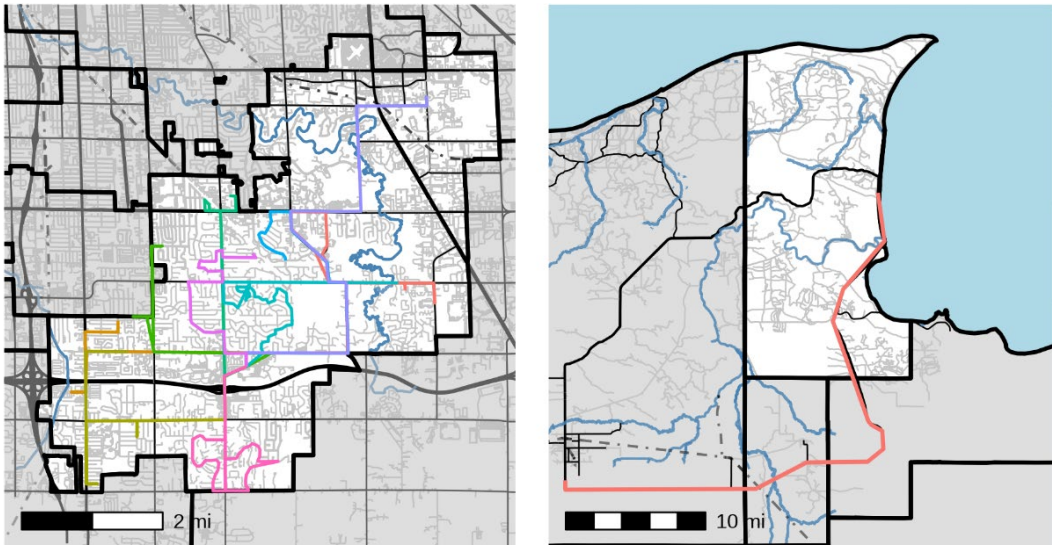
A large body of research links school transportation and student absenteeism, which is an issue given that absenteeism is strongly associated with student achievement (Gottfried, 2009; Aucejo & Roman, 2016; Gershson et al., 2017). Descriptive research on this question indicates that access to transportation is associated with higher attendance rates, although the relationship varies by students' household characteristics (Gottfried, 2017). In addition, Sanderson-Edwards, (2023) found causal evidence that greater access to school transportation decreased absenteeism for students who are economically disadvantaged. This body of evidence suggests that policies to increase access to transportation, especially for chronically absent students, would lead to greater student achievement.

SCHOOL TRANSPORTATION IN MICHIGAN

Like other states, there is substantial variation in Michigan school districts regarding the service area and road conditions related to school transportation. This is illustrated in the maps in Figure 1. These maps present selected bus routes from Kentwood Public Schools (KPS), a suburban district of more than 9,000 students near Grand Rapids, and Whitefish Township Community Schools (WTCS), a rural district in Michigan's Upper Peninsula that serves just 53 students. As KPS has a higher population density, the school district requires more bus routes, though each is relatively short. In contrast, WCS only offers one bus route. However, this bus route is more than 20 miles in each direction, and students at the first stop will ride the bus for almost 90 minutes before they arrive at school.

Figure 1: Comparison of Kentwood and Whitefish School District Bus Routes

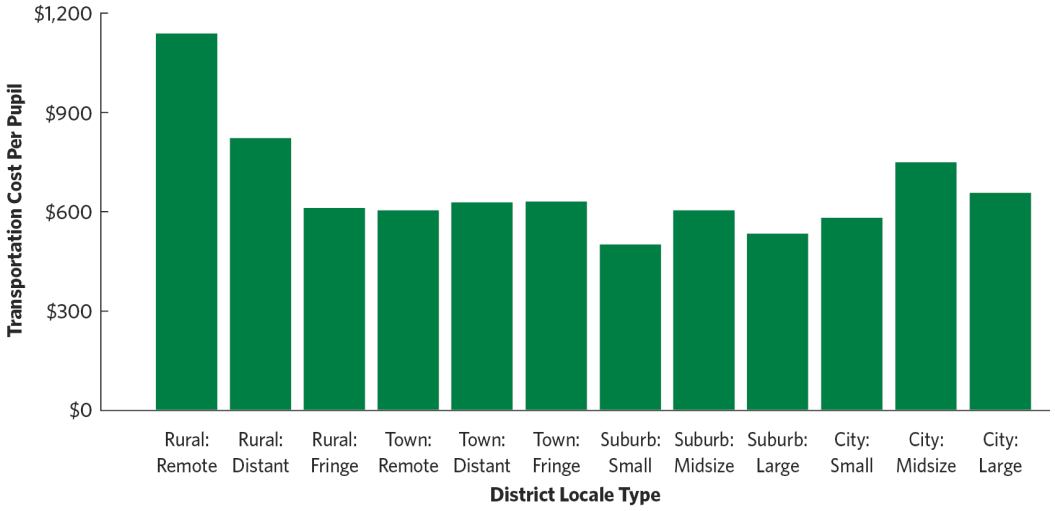
Kentwood Public Schools ***Whitefish Township Community Schools***



Notes: Bus route information collected from Kentwood Public Schools and Whitefish Township Community Schools websites. Different colors in the map of Kentwood Public Schools represent different bus routes. In addition, Whitefish Township Community Schools offers public transportation outside of its school district boundary to accommodate students in very rural areas near the district boundary.

These maps also hint at other differences in the transportation context between suburban and rural schools. Whereas students in KPS might have many options to get to school including public transit, driving, or school transportation, some students in WTCS may only be able to get to school by bus. In addition, inclement weather may delay the single bus route in WTCS more frequently, and more severely, than in KPS. At the same time, KPS relies on a larger number of bus drivers and so may be more vulnerable to absences or vacancies. These factors lead WTCS and KPS to face meaningfully different transportation challenges.

Figure 2: Michigan Transportation Costs Per Pupil by Income Decile



Notes: Data drawn from MI Schools Data school expenditures, 2022 for school transportation aggregated to the district locale type level.

In addition to variation in transportation context, there is significant variation in transportation costs per student across geographic areas. This is demonstrated in Figure 2, which shows average transportation costs per-pupil across locales as defined by the U.S. Census Bureau. These locales are defined in order of population density and proximity to an urban area. Districts classified as "Rural: Remote," the areas furthest from population centers, face the highest costs per pupil of school transportation (Geverdt, 2015).[1] This shows that districts like WTCS above, which serves an area defined as "Rural: Remote," can have very high transportation costs relative to urban and/or suburban districts.

ENDNOTES

[1] "Rural: Remote" school districts are defined as those that are more than 25 miles from an urbanized area and more than 10 miles from an urban cluster. See NCES, (2015) for more detail on this and other local definitions.

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