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Education on Wheels

Seizing Cost and Energy Efficiency Opportunities in Student Transportation

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Nova Scotia's Chief Medical Officer, Dr. Robert Strang, has emerged as a champion of active transportation that promotes the health and well-being of children and youth. Speaking in June 2014 at the Annual General Meeting of Community Transit-Nova Scotia, a non-profit transportation advocacy group, he supported public initiatives aimed at providing Nova Scotians with easier access to affordable transportation. "Sedentary behaviour is a health risk," he stated, then posed the key questions: "How can we build in options for walking and cycling in daily life? In rural environments, how can we promote active as well as public transportation?" He also saw a constructive role for school boards. "What if we took a different approach to schools and made them the centre of the community?" he asked. "Chignecto-Central Regional School Board has 20,000 students, 83 percent of whom ride the school bus. Is moving schools closer to students part of the solution?" In his talk, Dr. Strang rose to the challenge posed by Ray Ivany in his 2014 report, *Now or Never Nova Scotia*: "Let's develop healthy communities in Nova Scotia: safe, affordable, and connected socially.... A piece of the puzzle is taking a different approach to transportation" (Strang 2014).

Yellow school buses are currently viewed as "school board property," rather than as somewhat underused community assets. Community Transit-Nova Scotia, inspired by local initiatives in Queens County and the Antigonish region, is now urging the province and school boards to establish partnerships with municipalities to establish new community transit services using school buses during off-hours (Community Transit-Nova Scotia 2014). The overarching goal is to use capital assets better to expand the public transit network, primarily in currently unserviced districts of Nova Scotia. In addition to daily early morning and afternoon school runs, community transit activists see the potential to serve a different clientele — adults and seniors — needing a means to go to town for shopping and to get home from places of work. Instead of tethering yellow buses to limited school support services, it is time to consider public demand for services in rural and small-town Nova Scotia.

Conclusion and Recommendations

Supporting student learning in the classroom is, and should be, the priority for Atlantic Canada's publicly funded school systems. With student enrolment shrinking across the region and in all but a few growing communities, budget pressures are mounting to streamline operations and make the most efficient use of K-12 educational budgets. Although publicly disclosed data are sparse, student transportation costs are eating up a greater and greater share of provincial and school board education expenditures. Over the past thirty years, student transportation costs have grown from 4 to 5 percent of school district budgets to 7 percent or more (Nova Scotia 2014b). This rise in student transportation costs, reflected in overall costs and costs per student, is evident in Nova Scotia when comparing school boards and in New Brunswick when surveying reported increases in provincial costs for student transportation services (School Bus Fleet, various issues).

A thorough review of student transportation in Nova Scotia reveals that, unlike most areas of public education, this area of operations has escaped close scrutiny and, much like in Ontario, attracted "little strategic oversight by most school boards" (Ontario 2014, 2). Surveying Nova Scotia's eight school boards, it is clear that route planning continues to be delegated mostly to contracted or in-house operators. Some school boards, such as Chignecto-Central, Tri-County,

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Long School Bus Rides: Their Effect on School Budgets, Family Life, and Student Achievement. Rural Education Issue Digest.

Spence, Beth

More children are riding school buses longer distances than ever before, but this review of research on busing finds a surprising shortage of information on the subject, apart from safety figures and costs and efficiencies of the buses themselves. Historically, increased student transportation has been the by-product of school consolidation, but the cost of transportation is the most understudied issue in the consolidation debate. Rural children are most affected. They are the ones who most often have had their community schools closed, and they are the ones enduring the longest bus rides. In addition, rural school districts face higher transportation costs that may force them to choose whether to run buses or expand curriculum. Some research and much anecdotal evidence suggest that long bus rides have negative effects on family life, the ability of students to perform well in school, and students' ability to fully participate in the school experience. Additionally, no economic value is placed on children's time, nor is their time considered a significant issue in the debate over school closures, long bus rides, and the quality of education. More research on busing is needed, especially on the effects of long bus rides on children and families and on the correlations between long bus rides and dropout rates, student achievement, and parent participation. (Contains 37 notes.) (TD)

Descriptors: Academic Achievement, Bus Transportation, Consolidated Schools, Costs, Elementary Secondary Education, Family Life, Parent Participation. Quality of Life, Research Needs, Rural Schools, School Districts, Student Experience, Student Transportation



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Parents' Perceptions of the Rural School Bus Ride

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This article reports findings from a study of the perceptions of parents about the experience of long bus rides on their children. Twenty-six parents, whose homes were located on the longest bus route in a rural Midwestern school district, provided interviews regarding the experiences of a total of 37 students. In the analysis of the interview data, three themes emerged: (1) atmosphere on the bus, (2) length of the bus ride, and (3) safety. Notably parents expressed concerns about the fact that long bus rides exposed their young children to the unsuitable language and behavior of older students

Background

The busing of children to public schools is something we now take for granted, but not too long ago it was introduced as one of several reforms positioned to modernize the schooling that children received. Along with school consolidation, standardization of requirements for teacher credentialing, and various other efficiency measures, school busing enabled schools to become larger, more uniform, and more easily monitored by state regulatory agencies (Haas & Nachtigal, 1998). From the time of its introduction into the daily experiences of children, school busing as a technique for consolidating and modernizing schools has hardly been studied. Nor have its effects on children been systematically examined.

When busing of students has been at issue in school districts, administrators and policy makers have been obligated to reach decisions without being able to draw on a body of empirical research to help them determine the likely impact of busing policies on children. Too often, in the absence of systematic research, school leaders consider only the practicalities of bus rides rather than considering the effects of bus rides on students' school performance and home lives.

In 1869, the State of Massachusetts initiated the first program to provide public funding for school transportation. This program was limited in that it did not supply adequate funding to all public schools in the state (Hennessey, 1978). At that time, of course, transportation technology was limited to horse drawn wagons. The Massachusetts' initiative was a starting point, however, and several states followed Massachusetts' lead, using public funds in a similar manner. Nevertheless, it was not until 1919 that all of the United States were offering some form of funding for school transportation (Hennessey, 1978).

Whereas the provision of transportation to schools certainly gave greater numbers of children access to educational opportunities, at the same time, it enabled

policy makers to gain greater control over schools that had originally been organized and supported by local families (Henderson & Gomez, 1975). Without the introduction of busing to move students greater distances than could be traversed on foot, centralized "district" schools may not have come into existence. Former president of the National Education Association, Donald Morrison, stated "busing was perhaps the most significant factor in the transition from the one-room schoolhouse to the consolidated school" (Morrison cited in Hennessey, 1978, p.39).

According to Henderson and Gomez (1975), consolidated schools were attractive to many local rural leaders and residents. Some rural leaders believed that centralized schools would provide opportunities for rural residents to improve their standard of living by broadening educational opportunities. They perceived one room schools to be inadequate in comparison to centralized schools: "A one room school was considered a reproach to the community that tolerated it" (Henderson & Gomez, p. 17). Relinquishing local control of schools appeared to some policy makers to represent a fair trade. The benefits of consolidated schools were seen to outweigh the costs associated with the loss of local control.

Nevertheless, as consolidation efforts continued, larger and larger "districts" were created. And because they had already given up control of their local schools, residents of rural communities often had limited opportunities to influence policies and practices in the larger, more remote district schools. Ironically, as districts grew in size geographically, the loss of local control and of local support caused difficulty for school leaders (Pugh, 1994). Moreover, policy makers also believed that larger schools would reduce educational costs overall (Killeen & Sipple. 2000). Focusing on economies of scale, policy makers concluded that fewer schools of larger size would be less expensive to operate than more schools of smaller size, such as those serving many rural communities. Because policy makers focused on the benefits of school consolidation, however, they tended to overlook its drawbacks.

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interviewer adhered to a strict set of criteria when asking questions and recording responses. When parents responded to the prescribed questions, the interviewer acknowledged their responses and recorded them on a form that provided blank spaces for answers. Every effort was made to keep from assessing, and thereby influencing, the responses parents made, either verbally or with body language (Houtkpoop-Streenstra, 1997).

The use of a structured interview allowed parents to provide sincere responses to questions specifically focused on their perceptions of their children's bus rides (Government Accounting Office, 1990). These questions were placed early in the interview before the study's focus became apparent. Later questions were objective in nature, addressing demographics and not perceptions. Asking the subjective questions early helped to eliminate the possibility that the interviewer might lead parents to provide the sorts of answers that the research team was looking for. The practice of using follow-up questions, which is common in less structured interviews, might have given the interviewer opportunities to lead parents' responses. The structured interview procedures, therefore, reduced social desirability bias as well as assuring the greatest possible objectivity in collecting information from respondents (Fowler & Mangione, 1989).

The researchers obtained permission to pursue the study at a regular public meeting of the school district's board of education. One of the researchers then met with the school district transportation supervisor to identify the longest bus route and obtain a map of the route, including (1) a list of pick-up and arrival times at homes and at the school and (2) a list of the addresses of students on the bus route. Interviews were conducted at the parents' homes, usually during the late afternoon on weekdays or on Saturday afternoons.

The researchers used a systematic process of content analysis to examine the data collected from structured interviews (Neuendorf, 2002). This approach enabled the researchers to identify generalizations, or themes, evident across the data set (Krippendorff, 1980). In order to complete this analysis, the researchers grouped responses referencing the same issue into "meaning units". The frequency of each "meaning unit" was calculated as a percentage of the total number of responses. Then the researcher drew characteristic phrases from the data set to illustrate each theme.

Findings

Interview responses were categorized, revealing three major concerns: (a) atmosphere on the bus, (b) length of ride, and (c) safety. Table 1 lists these concerns and the proportions of responses categorized under each theme.

Table 1.

Proportion of Responses to Themes

o to Themes		
# of	Proportion of	<u>, </u>
Responses	Total Responses (80)	
36	45.0%	
35	43.7%	
9	11.3%	
	# of Responses 36	# of Proportion of Responses Total Responses (80) 36 45.0% 35 43.7%

Each concern (or theme) encompassed a variety of responses. Table 2 lists each theme and the responses that elucidated parents' concerns.

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Responses	Within	Each	Theme
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Theme	Response	Responses	% of Total Responses
Atmosphere]	Diverse Ages	10	12.50%
	Driver	6	7.50%
]	Language Content	6	7.50%
J	Profanity	5	6.25%
(Overcrowded	4	5.00%
5	Student Conflicts	3	3.75%
7	Too Loud	2	2.50%
Length 7	Γοο Long	23	28.75%
7	Too Early	5	6.25%
F	Iome Late	3	3.75%
H	Boring	2	2.50%
I	ong Day	1	1.25%
	Affects Performance	1	1.25%
Safety F	Rough Roads	3	3.75%
-	Veather	2	2.50%
S	upervision	2	2.50%
	Driver	1	1.25%
C	Other Cars	1	1.25%

As these data suggest, themes relating to "atmosphere" and "length of ride" predominated, and the theme relating to "safety" was less evident in the data.

When they mentioned specific "atmosphere" issues, parents focused primarily on the consequences of the fact that students of diverse ages (6th grade through 12th grade) all rode the bus together. One parent commented, "There are many age groups, and [my child] is exposed to fooling around. It's a negative environment." Because younger children were required to ride the bus with older students for relatively long periods of time each day, parents were concerned about the influence the older students would have on the younger ones. As one parent noted, "there are too many other bad kids ... [and] not many good influences."

Parents also reported that they were concerned about their younger children being exposed to the more "adult" topics discussed among the older children. They mentioned profanity and the sexual content of the language used by older children as the most objectionable behaviors of the older students. One parent explained that with "lack of supervision ... [her children] experienced sexual and physical harassment by many other [students]." Another discussed the fact that her children had been exposed to "vulgar language" and explained that they routinely were being picked on [and] called names."

Overcrowding (sometimes three children to a seat), noise, and conflicts between students were other concerns expressed by several parents about the atmosphere on the bus. One parent reported that because the ride was too long, "it gives her [the daughter] a headache. The bus is too loud."

According to another, the bus ride is unpleasant for her child because of "personality conflicts with other students." Another parent was a bit less specific, explaining that her child had "difficulties with the other students."

These concerns were linked to comments about the bus driver. With the overcrowded conditions and diversity of ages, parents felt the driver could not do all that was needed in order to monitor and control students' behavior. Several parents noted that "lack of supervision" made the bus an unruly place. This issue was of particular concern because the route traversed hilly secondary roads, requiring the driver to concentrate closely on road conditions. One parent explained that because of the difficulty of the job, the "driver is erratic and sometimes irritable."

Parents reported ride length as another significant concern. In fact, in the interviews with those parents who commented on ride length, this concern was always the first mentioned. According to one parent, the "roads take too much time in bad weather. [Children are] getting home late ... after dark." Another noted that "the too-long ride hinders [the child's] performance. He is worn out and sleeps a lot in class." Several other parents also voiced concerns about early departure times (e.g., a 6 am pick up time when school didn't start until 8 am) and late arrival times after school (e.g., a 5 pm arrival time when school ended at 2:55 pm). In addition, parents commented that long rides were boring. As one parent noted, "it's too long. [My children] do not like assigned seats." Another said, "They get restless." According to another, children were expected to read during the long bus ride, but her child "hates to read."

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Safety was another theme, but it was mentioned less frequently. Parents' concerns focused on rough roads (mountainous and twisting), adverse weather conditions, and the capability of the driver to handle the situation. According to one parent, "the former bus driver drove too fast on country roads. Safety [was] not a priority [for that driver.]". One parent described the problem caused by other drivers speeding on rural roads. She described a situation in which "cars are rear-ending the bus on hills. People drive too fast on the road." The parent elaborated by explaining that speeding drivers created a dangerous situation for the bus when it stopped to pick up children just over the crest of hills or around tight curves.

Interpretation and Implications

This study's findings correspond with several of the themes reported by Spence (2000a, 2000b). The themes she reported called attention to the plight of families in which children experience long and arduous bus rides. Problems associated with the length of bus rides, such as early morning departures, late evening arrivals, boredom, and fatigue, were reported in the present study as well.

In addition, the present study detailed parents' concerns about atmosphere on the bus, and these concerns were also similar to those reported by Spence (2000b). The West Virginia parents quoted in Spence's report expressed concern about young children riding buses with older students as well as concern about student conflicts during long bus rides. The problems associated with student safety and student conflicts were made worse when drivers were forced to focus on driving the bus under demanding conditions (Spence, 2000b). Atmosphere issues including diverse ages, driver supervision, inappropriate language, and student conflicts were, as discussed above, also reported by parents in the present study.

Even though safety issues were reported less frequently than concerns about ride length and atmosphere on the bus, parents in the present study did make points about bus safety that were similar to those recorded by Spence (2000b). Spence reported that parents worried about mountainous terrain and winding roads, especially in adverse weather. Parents in the present study reported nearly identical concerns about terrain and weather, adding, in one case, concern for motorists who drive too fast on rural roads.

Findings from this small-scale study as well as from related reports and studies suggest that the impact of long bus rides on school children is not a trivial concern and, therefore, deserves the attention of educational researchers and policy makers. Nevertheless, research to date has hardly been definitive. Additional research—including studies with larger samples and studies that examine associations between bus ride conditions and various relevant outcomes (e.g., homework time, family time, student achievement, extracurricular participation)—are clearly needed.

Implications for Practice

Funding restrictions and the propensity of many states to push for the consolidation of small schools and school districts are creating longer bus rides for many rural students. This study focused on only one bus route in one rural school district, and there are several implications for practice pertaining in particular to that district. These implications, however, are illustrative of the sorts of practical approaches that other similarly situated districts might want to consider.

Given evidence about the unhealthy social environment created on buses that traverse long distances with students ranging in age from early childhood through late adolescence, district officials might want to consider adding supervisors or monitors to buses with the longest rides, most difficult driving challenges, or most overcrowded conditions. These personnel could help maintain a better atmosphere on the bus by providing greater supervision than a lone driver is capable of providing. The additional supervision made possible by the use of monitors would allow the bus driver to focus fully on driving the bus on difficult roads under variable, and sometimes hazardous, weather conditions. Another modification the school district might consider would be the addition of bus routes. By dividing up long bus routes into several shorter routes, rides for children could be shortened.

Of course, under-funded rural districts might want to find ways to accomplish these changes without incurring additional expenses. Asking parents or "foster grandparents" to volunteer as bus monitors might be one inexpensive option. Furthermore, where bus drivers are paid for a half-day of work, dividing routes might be workable without incurring additional expenses for salaries.

Some rural districts have been able to limit school consolidation, and these districts may turn out to be fortunate. An accumulating body of evidence on small schools (e.g., Howley, 1996a, 1996b) shows the academic benefits associated with this policy decision. Findings about bus ride length—including those reported here—suggest that decisions about consolidation may also have an impact on children's physical and emotional well-being.

References

Babbie, E. (1990). Survey research methods (2nd ed.). Belmont, CA: Wadsworth.

Fowler, F. J., Jr., & Mangione, T.W..(1989). Standardized survey interviewing: Minimizing interviewer-related error. Newbury Park, CA: Sage.

Fox, M. (1996). Rural transportation as a daily constraint in students' lives. *Rural Educator*, 17(2), 22-27.

General Accounting Office (1991). Using structured interviewing techniques. Washington, DC: Program Evaluation and Methodology Division Report

- Haas, T., & Nachtigal, P. (1998). Place value: An educator's guide to literature on rural lifeways, environments, and purposes of education. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.
- Henderson, R., & Gomez, F. (1975). The consolidation of rural schools: Reasons, results, and implications A preliminary investigation. (ERIC Document Reproduction Service No. ED 111 578)
- Hennessey, G.J. (1978). The history of busing. *Educational Forum*, 43(1), 39-49.
- Howley, C. (1996a). Compounding disadvantage: The effects of school and district size on student achievement in West Virginia. *Journal of Research in Rural* Education, 12(1), 25-32.
- Howley, C. (1999b). The Matthew Project: State report for Ohio. Randolph, VT: Rural Challenge Policy Program. (ERIC Document Reproduction Service No. ED 433 175)
- Howley, C., Howley, A., & Shamblen, S. (2001). The experience of rural school bus rides. *Journal of Research in Rural Education*, 17(1), 41-63.
- Killian, K., & Sipple, J. (2000). School consolidation and transportation policy: An empirical and institutional analysis (Working Paper for the Rural and Community Trust Policy Program). Retrieved April 1, 2003 from http://www.ruralchallengepolicy.org.

- Lu, Y., & Tweeten L. (1973). The impact of busing on student achievement. Growth and Change, 4, 44-46.
- Neuendorf, K.A. (2002). The content analysis guidebook. Thousand Oaks, CA: Sage.
- Pugh, T. (1994). Rural school consolidation in New York State, 1795-1993: A struggle for control. (ERIC Document Reproduction Service No. ED 371 914)
- Spence, B. (2000a). Long school bus rides: Stealing the joy of childhood. Charleston, WV: Challenge West Virginia. Retrieved April 1, 2003 from http://www.wvcovenanthouse.org/challengewv/.
- Spence, B. (2000b). Long school bus rides: Their effect of school budgets, family life, and student achievement. Charleston, WV: AEL, Inc.
- Zars, B. (1998). Long rides, tough hides: Enduring long school bus rides. Retrieved April 1, 2003 from www.ruralchallengepolicy.org.zars busing.html. (ERIC Document Reproduction Service No. ED 432 419)
 Zoloth, B.S. (1976). The impact of bussing [sic] on student achievement: Reanalysis. Growth and Change, 7(3), 43-47.

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LONG RIDES, TOUGH HIDES ENDURING LONG SCHOOL BUS RIDES

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ABSTRACT

Initially driven by school consolidation and later augmented by the mandate to desegregate, school busing systems have grown monumentally all over the United States. Busing policy choices have been made and expanded without regard to the impact on the central enterprise of schools, which is student learning. Anecdotes from Montana, the Navajo Reservation, West Virginia, and Colorado are presented to describe long bus rides and the hardships that accompany them. Research on busing is reviewed and found to be scarce and insubstantial. Two of the most recent researchers have found that busing could be considered exploitation of children's time, and that students with large average times on buses report lower grades, poorer levels of fitness, fewer social activities, and poor study habits. Knowing more about the effects of busing might lead to better choices about closing, maintaining, or opening new schools in rural areas. Three questions are recommended for further research: what is the impact of long bus rides (over 30 minutes each way) on children's success in school? what is the effect of long bus rides on families? and what are the true costs of long bus rides for school districts? Riding the bus should not be just a 12-year task that children endure, but one that makes sense as an integral part of their successful and full education. (TD)



Long Rides, Tough Hides Enduring Long School Bus Rides

Belle Zars

If Shirley K. a mother in Yaak, Montana decides to keep her children in public school next year she will load her boys into the car before 6:30 am, drive for an hour to the ranger station to meet the bus that will take her older child to Troy High School. Once on the bus, her son will get to school in about one and a half hours: school begins at 8:30. From the ranger station, Shirley will go back to Yaak and drop off her younger child at the Yaak two-room elementary school also by 8:30. In the late afternoon she and her children will repeat the journey. "This is a real hardship for families," she said. "I see kids who are exhausted."

Back before the district trimmed the route and decided not to go all the way into Yaak to pick up the high school students, Shirley rode the school bus from the turnaround at the Yaak school to the ranger station where she worked. "The kids were shot," she said. "They slept all the way."

Her options are few, and expensive. She can board her older son in town. But who to trust? "A 16 year old needs parental guidance. Kids can get into trouble in town," she says. The district will pay \$8/day but that won't cover expenses. She can move into town herself. Finally she says, "I had to balance the value of Troy High School: We realized that Troy HS does not equal the value of his father."

Busing began as the carrot to the school consolidation stick. Transporting pupils was a concession to make school closure and district consolidation palatable. A century later busing became the tool to achieve the social goal of racially integrated schools. The busing system became increasingly extensive and pervasive: The rides got longer and longer.

Today in the United States 60% of all school children ride a school bus to and from school. It's a system of overwhelming magnitude. Twenty-three million children ride in 400,000 school buses that log over 21 million miles every day. The annual cost of the system is over \$10 billion. Before busing for school desegregation began in earnest, and back when most urban children walked to school, buses traveled 2.2 billion miles per year. Now they travel 3.8 billion miles per year. Although the numbers are not broken out for the very different purposes of busing, a good estimate would suggest that busing in rural areas today comprises at least 75% of the total miles.

In the Chinle School district in rural Arizona on the Navajo Reservation, 73 buses travel over a million miles each year transporting 4,200 students. Not far away in Monument Valley, high school students travel on the bus for 3 hours each way; children who attend Navajo Elementary in Blanding, UT travel for 2 hours and 15 minutes to get to and from school—a total of 4.5 hours on the bus every day. Paul Platero, a researcher with the Dine Department of Education, remembers riding the bus with children who were leaning out into the aisles asleep. "We would shake the kids awake: 'Your mom is waiting outside,' and get the kids off the bus."

In the rural South, school busing came with school consolidation in the early 1900s and was slightly expanded during the late 1960s and early 1970s as part of the effort to equalize funding and desegregate schools. Prior to desegregation there were situations in the South where two buses plied the same route because it was unacceptable for whites and African Americans to ride the same bus together. In other situations because schools that served African American children were funded at levels far below those of their white counterparts it was not uncommon for a school bus to pick up white children and drive by African American children walking to an adjacent school. In one commentator's mind, busing was the "red scare issue" of the civil rights movement. (Mills, 1973) It became the rallying cry to prevent integration and a huge amount of time and energy was spent trying to prove that busing was a financial burden, bad for children, against tradition and contradictory to the values of a neighborhood/community school. The topic of debate became busing, not the value of children attending school together.

Despite the notoriety of busing around desegregation issues, the primary reason for busing children is school consolidation. Thirty-one states passed laws to consolidate schools and soon after passed laws



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allowing public money to be used to transport students. In another 14 states consolidation and pupil transportation laws passed simultaneously. Closing schools was the goal; busing students to centralized schools was the tool, and a part of the package for the communities who were losing their schools and where students could no longer reasonably walk to school. (Mills, 1973)

Tucker County, West Virginia and Routt County, Colorado are two typical cases. In Tucker County in the 1920 there were at least 12 elementary schools and 4 high schools. There was virtually no transportation of pupils at public expense. Today in Tucker County there is one high school, one K-8 school and one K-4 school. The high school and the elementary/middle school are situated in the middle of the county, far from any town or settlement. Every student in the county now rides a bus to school. The school board employs 20 bus drivers, a mechanic and a bus superintendent to operate the system. Students in the settlement of Turkey Run, in the southeastern corner of the district get on a bus at 6:30 am, change buses at Parsons, and arrive at the high school at 8:10am. The average bus ride for all students K-12 is 45 minutes. Every year there are sudden storms where school has to be dismissed early and the buses hurry to deposit children in their homes. There is no second bus or provision for students from these areas to participate in extracurriculars.

In Routt County, Colorado, the story is very similar. In the early 1900s, and in some areas surviving into the 1950s, there were elementary schools in every corner of the county—over 45 in all. Everyone walked or skied to school. Occasionally in some of the districts a parent would transport children on a horse drawn wagon or sled to school. In the 1930s some of these parents were reimbursed by the district for bringing in children from more distant ranches and homesteads. In 1920 the push for consolidation began and today there are only 3 high schools and 4 elementary schools in the 2,300 square mile county. Nearly everyone rides the bus to school unless they happen to live in one of the three towns where the remaining schools are located. Students in the Elkhead area who used to walk a mile to a K-12 school now take the bus for just under 2 hours each way for elementary and high school. Many families found the long distances to school untenable. After losing ground economically, the loss of their schools and the prospect of long bus rides was the last straw. Nearly all the families in the Elkhead area moved away after the nearby schools closed.

Whether through benign neglect or a desire to stay away from hot topics, research on busing virtually stopped in the early 1970s. The last study of dubious merit, looking at the effects of long bus rides on student achievement, is quick to give an introductory caveat: "None of the students in the sample was being bused to achieve racial balance, so the results should provide insights into the influence of busing per se without the statistically confounding effect of currently emotional issues." (Lu & Tweeten, 1973) No researcher wanted to wade into a situation where their work could be used indirectly to promote or quash school desegregation. In the late 1960s Allen Zetler at Western Montana University wrote his dissertation on school buses and their effect on student success. He studied 812 rural Montana children and found that they "accommodated very well" to long bus rides and had the same rates of success in school as their short ride peers. He did not consider family background or socioeconomic status. Nor did he have a control group of similar students who were not riding the bus. Lu and Tweeten studied 440 bused and nonbused students in rural Oklahoma. They found that the longer the bus ride the lower the composite achievement score. However, like the Zetler study, they did not consider socioeconomic status of the children and their conclusions are no more definitive than Zetler's.

In Canada and Australia two researchers have looked into the costs and consequences of long bus rides. In a novel approach, Mark Witham, an Australian economist, computes the costs of closing schools and busing children to a central location. He poses the question: What is children's time worth? If we plan for them to ride the bus for 2-3 hours every day to save the money that would have been spent on the local school, how much do we imply their time is worth? He proposes calculating the number of hours of "lost opportunity time" that children spend on the bus per year divided into the anticipated savings from school closure. He concludes that the resulting low wages "could be considered exploitation of children's time." (Witham, 1997)

Michael Fox, a Canadian geographer, tried another approach to understand the effects of busing. He asked students and members of their families how they would spend their time if bus rides were shortened. He found that "time on the bus is considered to be empty time, with few possible activities to



engage in." Students said they would sleep, engage in social and recreational activities and work if they had more time. Families reported constraints on their time as they try to meet the demanding school bus schedule. According to Fox the data indicate that "as time on the bus increases, students participate in fewer non-essential activities (those activities other than sleep, personal care, school and the bus ride)... The individuals with large average times on a bus report lower grades and poorer levels of fitness, fewer social activities and poor study habits. The universal complaint by all students is the loss of choice in activities and the overall loss of sleep-time." (Fox 1996)

Although every school administrator and transportation coordinator I spoke with expressed concern about the costs—both financial and human—of the present system, none had examined the effects of busing on children and families or had looked for correlation between school achievement, parent participation, dropout rates or attendance with the length of the bus rides.

At the state level with millions of dollars every year being spent to bus children one would suppose that someone would look into the consequences of such a massive outlay of resources. I have not yet found any state reports or documents that seriously consider the effects of busing on schools, children or families. Most of the states' efforts concentrate on costs and efficiency of buses alone. Buses and miles driven are their units of measurement. In Texas, a state with a \$300 million school busing budget, there is one transportation director and his secretary to oversee the entire program. Texas does not keep track of the actual bus routes and no one documents the longest bus rides or miles driven. Like many states, the State Board of Education recommends no more than an hour ride for students, but that recommendation is widely known to be overlooked. Montana, a state with vast distances to consider, has a slightly more sophisticated system. In that state there was an effort to keep small schools with fewer than 10 students by guaranteeing them at least one teacher but that was rescinded a few years ago. Families are currently reimbursed for transporting children to school if they live over three miles from the school or bus stop. In some situations where families board their children in town, Montana provides \$8/day for the first child and \$5/day for each additional child to cover the costs of lodging and care. At one time Montana built and operated dormitories for students who lived a long way from school but these have since been abandoned.

Statistics on school buses tend to focus on the health of the bus rather than the health of the students who ride them. What statistics are gathered focus on tragic accidents and very narrowly discuss the issue of safety. On average 41 children die each year in school bus related accidents. About three fourths of these children are hit by the bus while they are either entering or leaving. Far more people are killed by school buses while they drive in their passenger cars. In the last 10 years, an average of 250 people per year are killed by hitting or being hit by school buses.

This focus on bus safety has led to important changes in bus design but no reduction in the number of miles ridden. Buses have been redesigned so that they don't collapse easily and students have been taught many lessons on how to avoid getting hit by a bus at the bus stop. There has been some debate over whether children should wear seat belts while riding school buses but most recently the opinion of the Transportation Department overseeing school buses is that seat belts are not an effective use of dollars and that more lives could be saved by teaching children how to behave in and around buses. School bus drivers now have to be licensed commercial drivers and many states require regular drug and alcohol testing. Unfortunately, poorer districts have not been able to purchase newer, safer buses and many districts are plagued by poorly supervised and unprofessional bus drivers. In rural Alabama, stories abound of buses breaking down and children walking or hitchhiking home. Children wait without the protection of shelters for buses that never arrive in the morning. And of course everywhere there is a plethora of stories about sex, sexual harassment, fires and violent fights on school buses. Obviously, bus drivers are not in a position to effectively supervise children while they are driving a 5-10 ton vehicle. Nor are they typically trained in classroom management strategies. In Round Top, Arizona where 85% of the district's roads are dirt and the rides are up to 80 miles each way, the superintendent reported seat covers ripped off, vandalism, harassment of younger children by older children and perennial fights. "It is a rare bus driver that can control 30 kids for 2 hours in a confined space," he said. "The long rides are harmful to kids: they are physically demanding. It's down time."

In many districts the response has been a system of punishment for infractions on the bus. Tonasket,



Washington is one example of a typical district's response to out-of-control situations on the bus. At the beginning of the year a note goes home to be signed by the parents and the child outlining the rules on the bus. On the first reported infraction the child is verbally warned and on the second a note goes home; the third and fourth incidents bring suspensions of 5 and 10 days respectively; on the next infraction the child is suspended from the bus for the remainder of the semester, or the year. One district with a similar system in Texas reported suspending 3 students from the bus for the year during the first weeks of school. All three students had no alternative transportation and, though technically they dropped out, they were effectively expelled.

Health issues have not been explored. In some ways it is ironic that the biggest feeding program in the country—the federal free and reduced breakfast and lunch program—has thoroughly documented the need for children to have healthy meals both before and during school, yet no one has investigated the effect of bus riding on children's eating habits. According to the families I spoke with, most children skip breakfast. Food and drink are not allowed on the bus. Many ride to school slightly nauseous and if breakfast is offered, turn away. One grown man reported throwing up on the bus all through his school years. A second health issue is going to the bathroom. Unlike most commercial buses, school buses don't have toilets. For students with rides over 30 minutes and through remote countryside, there is little if any opportunity to go to the bathroom. A few years ago a 35 mile bus run was abruptly interrupted on Interstate 40 when Navajo children traveling between Albuquerque and Canoncito had a "group reaction" to something eaten at school. The driver had to stop and allow the sick children to take care of themselves along the highway.

What is the effect of spending so many hours in a young life riding on a bus? Children, whose lively little bodies have been sitting in school all day, are also sitting for hours on a bus. This is not time when they can stand up, run, play or otherwise exercise. One source speculated that long rides contributed to overweight and obese students. Time on the bus is time lost. By the time they get home the playing part of the day is likely over. Students report getting on the bus in the dark and getting off the bus in the dark especially in areas with long northern winters.

Students traveling long distances on unimproved roads report asthmatic and allergy reactions from the dust and diesel fumes but these complaints have never been documented or verified. Students also complain about the lack of heating and cooling when riding buses in extreme temperatures. Children in Montana are not asked to ride the bus when temperatures drop below minus 20. Children in Texas are expected to ride the bus as normal even when temperatures are over 100. In Terlingua, Texas in the Chihuahuan desert, students rode the bus 80 miles each way to high school in Alpine from the pick-up point at the elementary school. Travel to the elementary school varied from a few minutes to over 30 minutes on dirt roads. High school attendance was rare. Students typically tried it for a year and then quit.

In Sharples, West Virginia when the state decided to close the local middle and high school and bus children over the mountain to the middle and high school in Chapmanville, students prepared for an 40 minute ride in good weather, over an hour in bad weather. They brought pillows on the bus and tried to sleep. The state immediately said that pillows were a hazard and forbade them on the bus.

Children and their parents react to these conditions in subtle and direct ways. To the irritation of school administrators parents often chose to keep their children at home rather than risk a bus ride. An example given was of a child not feeling well in the morning. If the school was nearby, the parent would probably send the child to school and know that if they got worse, or failed to get better, that the school could send the child home. A child with a long bus ride doesn't have that option. Another common coping strategy is to provide a newly licensed young person with a car to drive to school. Most rural high schools can report an enormous increase in the number of students who drive themselves, their friends and younger siblings to school. No one has calculated the miles that teens are driving when they could be riding the school bus, but this is a common concession to keep a disgruntled, tired-of-riding-the-bus student in school.

Among the avalanche of school closures in rural areas, there are a few schools that have been left open, or even built new, to prevent or alleviate the hardship of long bus rides.



In West Virginia where school closure has been the top educational priority of the state department of education and the governor for the past 10 years, Pickens K-12 School, is the only school that has won a school closure fight. The turning point in the decision was busing. State School Board members personally drove the single-lane gravel mountain road that students would take to the proposed consolidated school. They returned to Charleston and voted against the closure, admitting the road was dangerous and saying they did not want a school bus crash on their conscience.

For the last 100 years, Terlingua, Texas had a K-8 school and its high school students took the bus to Alpine over 80 miles away. Last year after a massive effort at private fundraising, Terlingua and neighboring San Vicente district built a modest five room high school. The school board and parents cite the long school bus ride as the cause of the incredibly high dropout rate of Terlingua students and the determining factor in the decision to build a high school.

Until recently, students from Navajo Mountain in southern Utah rode the bus to Blanding—a ride on mostly unimproved roads that took over 2 hours each way. In the 1970s and again in 1997, the Navajo Nation Tribal Council successfully sued the San Juan School District and forced the district to build an elementary school in the Navajo Mountain area and a high school in Monument Valley. Navajo leaders used civil rights law to protest the unequal treatment of their children who were suffering from the long rides to school.

Each of these cases is an exception and each school stands alone in defiance of the prevailing policies in their state. No one has carefully considered the effects of busing so in extreme cases like Pickens, Terlingua and Navajo Mountain the fight has been won by community people, school personnel, parents and students operating from their own common sense and direct experience.

There are three enormous questions about school busing in rural areas that rest undisturbed by research:

- 1)What is the impact of long bus rides (over 30 minutes each way) on children's success in school? Inside that question is a whole set of questions about whether children are tired at school when they ride a bus for a couple of hours, whether their ability to get their homework done is lessened; whether they can participate in important extracurriculars. We don't know what riding a bus for 1-6 hours a day, 180 days a year for 12 years does to a child's overall health and well being. Perhaps the effects are greater on some children than others and, if so, who is most affected? Recent research documents the importance of parents especially in young children's school success but we have no idea whether parents who live, for example, 80 miles from the elementary school are less able to participate in school activities and form a relationship with their child's teacher.
- 2) What is the effect of long bus rides on families? School busing has come to be seen as a necessary component of schooling in rural areas. Hence the school day extends for nearly 12 hours from some children. What are the gains and loses to family life and well-being? What contributions do the students make and fail to make to the family economy? In what ways do families share the financial burdens of long bus rides (for example by transporting students to bus terminuses and bus stops; providing vehicles for older students to drive)?
- 3) What are the true costs of long bus rides to school districts? Very little information is available on the actual cost of the school bus system either at the school, district or state level. Many districts float bonds to buy school buses and add to their indebtedness and possibly diminish the chances of other capitol improvements. County road departments improve and maintain roads where school buses travel. County Boards and state insurance funds absorb the costs of accidents, lawsuits and penalties. As mentioned above, parents often contribute directly to the costs of transporting students.

Conclusion

Initially driven by school consolidation and later augmented by the mandate to desegregate, school busing systems have grown monumentally all over the United States. Busing policy choices have been made and expanded without regard to the impact on the central enterprise of schools which is student



learning. Anecdotes abound and nearly everyone who has ridden a school bus has an opinion and a story to tell. But research is scarce and where it exists on school busing in this country, insubstantial. Whether a child rides a bus to school to promote desegregation, because the school that used to be nearby has closed, or simply because he or she lives in a sparsely populated area, we need to understand the true cost of that ride, to the student, the family and the school system. How far is too far? That question touches every bus riding student whatever the cause of their long ride. If we knew more about the effects of busing we might make better choices about closing, maintaining or opening new schools in rural areas. Riding the bus should not just be a 12 year task that children endure, but one that makes sense as an integral part of their successful and fullest education.

References:

Fox, M. (1996) Rural School Transportation as a Daily Constraint in Students' Lives. Rural Educator 17, 22-27.

Lu, Y and Tweeten L. (1973) The Impact of Busing on Student Achievement. Growth and Change . 4, 44-46.

Mills, N. (1973) Who's Being Taken for a Ride? In N. Mills (Ed.), The Great School Bus Controversy (pp.3-13). New York: Teachers College Press.

Witham, M. (1997) The Economics of (not) Closing Small Rural Schools. Paper Presented at Symposium on the Doctor of Philosophy for Candidates and Supervisors: A Focus on Rural Issues July 1997, Townsville, Queensland, Australia. 1-22. ED415036

Notes:

Information on Alan Zetler's work is from a telephone interview where he summarized his dissertation research and subsequent work. See also Thibeault, R.J., Zetler A.G. and Wilson, A. (1977) The Achievement of Bus Transported Pupils. *Journal of Teaching and Learning* 2(3), 17-22.

National statistics on number of children riding school buses, miles driven, accidents and financial costs come from National Highway Safety Administration, Washington DC. School Bus Safety Report, May 1993 p. 5. ED 364 978; and National Highway Traffic Safety Administration, Washington DC Schools Buses. Traffic Safety Facts 1992 1-5 ED364 977.

Information on the Navajo Nation's long school bus rides comes from "Statistics on Navajo Education 1993-1994" Dine Department of Education, Window Rock, AZ and from conversations and correspondence with Paul Platero, researcher, Dine Department of Education.

Over 25 interviews with rural school parents, principals, district transportation directors, superintendents and state transportation directors provided the anecdotal stories in this report. These interviews were conducted between June 1997 and June 1998.

Rural Challenge Policy Program, 1998

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Is Your Commute Killing You?

People with long commutes are likely to experience a myriad of health problems, according to a new study.



By Jason Koebler May 8, 2012 | 12:01 a.m. EDT + More

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Your commute might be killing you, according to a new study by researchers at Washington University in St. Louis.

That's because people who live more than 10 miles from their work are more likely to have high blood pressure than people with shorter commutes. People who commute more than 15 miles each way are much more likely to be obese, perhaps because people who commute that distance don't get enough daily activity.

[Study: American Obesity Epidemic Worse Than Feared]

"Most of the findings were fairly intuitive," says Christine Hoehner, the lead author of the study, which was published in the American Journal of Preventative Medicine. "But this is the first study to

show that long commutes take away from exercise and lead to conditions that are strong predictors of diabetes, obesity, and some cancers."

Even long commuters who found ways to get enough exercise were more likely to have high blood pressure than people with shorter commutes who get the same amount of exercise. That may be because commuting is a highly stressful activity—a 2011 study by Swedish researchers found that people who had long commutes to work were more likely to divorce, experience neck pain, and loneliness.

The Washington University study surveyed nearly 4,300 people in the Dallas-Fort Worth and Austin areas, where roads regularly rank among the nation's most congested. Nearly one in five people surveyed commuted more than 20 miles each way; about half commute at least 10 miles each way.

[The Top 15 Cities for Commuters]

"I think the traffic piece is important," Hoehner says. "Even with longer commutes, if you don't have the traffic, you don't have the day-to-day unpredictability and stress it causes."

Hoehner says it's likely that people who have long commutes have less time for exercise, sleep, and cooking, which can all lead to increased body-mass indexes and body fat content.

"That could be one of the mechanisms for these elevated numbers—they might not have the discretionary time to fit in exercise and cook healthy meals," she says. "People who have longer commutes would have to make an extra effort to find time for physical activity."

Outside of higher blood pressure numbers, long-commuters who can find time to exercise can mitigate most of the detrimental effects of their daily grind.

"The main message we're trying to get across is people need to find a way to build physical activity into their day, whether it's taking walking breaks at work, taking the stairs, or asking employers to be flexible about their schedules," she says.

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REL Midwest Reference Desk

Relationship Between Bus Ride and Academic Achievement & Rural Student Experience on Buses

May 2013

Questions

- 1. What is the relationship between the length of bus ride and academic achievement?
- 2. In rural areas, what do students commonly experience on bus rides?

Background

REL Midwest received a request for information on on the relationship between the length of bus ride and student achievement, the relationship between the proximity of school to a student's home and student achievement, and the impact of consolidating busing (PK-12) on student achievement.

Following an established REL Midwest research protocol, we conducted a search for research reports as well as descriptive and policy-oriented briefs and articles on the relationship between the length of bus ride and student achievement, the relationship between the proximity of school to a student's home and student achievement, and the impact of consolidating busing on student achievement. The search yielded no results on proximity of school to a student's home and student achievement, and the impact of consolidating busing on student achievement. As a result, after consultation with the requester, the search was modified to focus on (1) the relationship between the length of bus ride and academic achievement and (2) what students in rural areas commonly experience on bus rides. Sources included federally funded organizations, research institutions, educational research databases, and a general Internet search using Google and other search engines.

We also searched for appropriate organizations that may act as resources on this issue. We have not done an evaluation of these organizations or the resources themselves but offer this list for the requester's information only.

- 1. What is the relationship between the length of bus ride and academic achievement?
- Lu, Y., & Tweeten, L. (1973). The impact of busing on student achievement. Growth and Change, 4,44-46.

From the ERIC abstract: "Quantifies the impact of time spent riding a bus on 4th, 6th, 8th, and 11th grade students' achievement based on data from a 1970 Statewide survey of Oklahoma students. The null hypothesis was tested that busing has no effect on student achievement. Findings revealed that at an .01 level of significance, bus riding time reduces achievement for 4th and 8th grade students. The effects of socioeconomic status, television viewing, and after school work on achievement were also tested."

Note: REL Midwest is unable to locate a link to the full-text version of this resource. Although REL Midwest tries to provide publicly available resources whenever possible, it was determined that this resource may be of interest. It may be found through university or public library systems.

Spence, B. (2000). Long school bus rides: Their effect on school budgets, family life, and student achievement. *Rural Education Issue Digest*. Retrieved from http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED448955

From the ERIC abstract: "More children are riding school buses longer distances than ever before, but this review of research on busing finds a surprising shortage of information on the subject, apart from safety figures and costs and efficiencies of the buses themselves. Historically, increased student transportation has been the byproduct of school consolidation, but the cost of transportation is the most understudied issue in the consolidation debate. Rural children are most affected. They are the ones who most often have had their community schools closed, and they are the ones enduring the longest bus rides. In addition, rural school districts face higher transportation costs that may force them to choose whether to run buses or expand curriculum. Some research and much anecdotal evidence suggest that long bus rides have negative effects on family life, the ability of students to perform well in school, and students' ability to fully participate in the school experience. Additionally, no economic value is placed on children's time, nor is their time considered a significant issue in the debate over school closures, long bus rides, and the quality of education. More research on busing is needed, especially on the effects of long bus rides on children and families and on the correlations between long bus rides and dropout rates, student achievement, and parent participation."

Thibeault, R., Zetler, A., & Wilson, A. (1977). The achievement of bus transported pupils. Journal of Teaching and Learning, 2(3), 17–22.

From the abstract: "Examination of 40 randomly selected high schools in Montana re: the effect of transportation time and school size on student academic achievement revealed that the time spent on buses did not have a negative effect on learning but that the size of school did seem to have an effect."

Note: REL Midwest is unable to locate a link to the full-text version of this resource. Although REL Midwest tries to provide publicly available resources whenever possible, it was determined that this resource may be of interest. It may be found through university or public library systems.

2. In rural areas, what do students commonly experience on bus rides?

Fox, M. (1996). Rural school transportation as a daily constraint in student lives. *Rural Educator*, 17(2), 22–27.

From the ERIC abstract: "A study of how busing time to school affected daily activities in 64 rural households in Eastern Townships School Board, Quebec (Canada), found that household schedules altered according to distance from school, constraints on students' and families' activities increased as travel time increased, travel time was viewed as wasted time, and farm households were more constrained than nonfarm households."

Note: REL Midwest is unable to locate a link to the full-text version of this resource. Although REL Midwest tries to provide publicly available resources whenever possible, it was determined that this resource may be of interest. It may be found through university or public library systems.

Henderson, B. B. (n.d.). The school bus: A neglected children's environment. *Journal of Rural Community Psychology*, 12, 1. Retrieved from http://muwww-new.marshall.edu/jrcp/VE12%20N1/JRCP%20Henderson.pdf

From the abstract: "Many children and youth in rural communities spend significant portions of their lives on school buses. This paper reviews the limited empirical research on the school bus experience, presents some new exploratory data, and offers some suggestions for future research on the impact of riding the school bus on children and youth."

Howley, A., & Howley, C. (2001). Rural school busing (ERIC Digest). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. Retrieved from http://www.ericdigests.org/2002-3/busing.htm

From the article: "The familiar image of the yellow school bus making its way over a winding country road serves as an emblem of rural education in the United States. At the same time, its nostalgic connotations may contribute to the tendency to accept at face value the centralizing and standardizing agenda that rural school busing enacts. Policymakers and school administrators have routinely attached positive connotations to this agenda—improvement of school conditions, a higher quality of instruction, and robustness of outcomes. But do the projected improvements actually materialize? And, when they do, is there a hidden price tag? This Digest summarizes information that suggests that long bus rides are part of the hidden costs of school and district consolidation."

Howley, C. B., Howley, A. A., & Shamblen, S. (2001). Riding the school bus: A comparison of the rural and suburban experience in five states. Journal of Research in Rural Education.

17(1), 41–63. Retrieved from http://www.jrre.psu.edu/articles/v17,n1,p41-63. Howley.pdf

From the abstract: "This study examined the nature and experience of riding the school bus in rural as compared to suburban locales in five states (Arkansas, Georgia, New Mexico, Pennsylvania, and Washington). Information about the nature and

experience of the bus ride was provided by 1,194 elementary school principals who completed a survey instrument devised by the researchers. Results show differences that distinguish the school busing experience in rural and suburban locales by state. Among the most persistent findings from state to state are the following: Elementary schools in rural locales are (a) more likely than suburban schools to have longest rides of 30 minutes or more, (b) more likely to have attendance areas greater than 10 square miles, (c) more likely to have bus routes with rougher rides, (d) less likely to be located in districts that employ a full-time bus supervisor; and (e) more likely to include middle school and/or high school students on the same bus runs as elementary students. This study provides empirical confirmation of the comparatively adverse conditions that contribute to the concerns expressed by rural parents and communities about the length and potential dangers of rides experienced by students who attend rural elementary schools."

Jimerson, L. (2007). Slow motion: Traveling by school bus in consolidated districts in West Virginia. Arlington, VA: Rural School and Community Trust. Retrieved from http://eric.ed.gov/ERICWebPortal/detail?accno=ED499440

From the ERIC abstract: "Over the past several decades, West Virginia has closed scores of small, locally-based schools (primarily high schools), as part of district-level consolidation. These consolidations have affected families and students in numerous ways. Most notably, students living in outlying towns are now required to travel much longer distances to reach centralized high schools. Community members have voiced concerns that very long bus rides take a toll on students, their schoolwork, and the degree to which they can participate in after-school activities. Since further consolidation is presently being proposed statewide, the current lack of solid data about the impact of consolidation is problematic. This research by the Rural School and Community Trust (Rural Trust) is an effort to fill in some of the gaps. It is organized around eight research questions: (1) How do students get to school?; (2) How long is the morning commute?; (3) How many students travel over the state guidelines?; (4) How is engagement in extra-curricular activities affected by consolidation status?; (5) Travel time?; (6) Mode of transportation; (7) Very long bus rides?; and (8) How is consolidation related to students' aspirations to attend college? The following are appended: (1) County Demographics; (2) County Map of West Virginia; (3) Student Survey; and (4) Study Limitations."

Ramage, R., & Howley, A. (2005). Parents' perceptions of the rural school bus ride. *The Rural Educator*, 27(1), 25–30. Retrieved from http://www.jsasd.k12.pa.us/cms/lib6/PA06000068/Centricity/ModuleInstance/6204/2-S9-AStahl.PDF

From the abstract: "This article reports findings from a study of the perceptions of parents about the experience of long bus rides on their children. Twenty-six parents, whose homes were located on the longest bus route in a rural Midwestern school district, provided interviews regarding the experiences of a total of 37 students. In the analysis of the interview data, three themes emerged: (1) atmosphere on the bus (2) length of the bus ride, and (3) safety. Notably, parents expressed concerns about the fact that long bus

rides exposed their young children to the unsuitable language and behavior of older students."

Additional Resources

 Journal of Research in Rural Education http://jrre.psu.edu/

From the website: "The Journal of Research in Rural Education is a peer-reviewed, open access e-journal publishing original pieces of scholarly research of demonstrable relevance to educational issues within rural settings. JRRE was established in 1982 by the University of Maine College of Education and Human Development. In 2008, JRRE moved to the Center on Rural Education and Communities, located within Penn State University's College of Education, and is edited by Kai A. Schafft with associate editor Jacqueline Edmondson."

Additional Organizations to Consult

 Center on Rural Education and Communities http://www.ed.psu.edu/educ/crec

From the website: "The mission of the Center on Rural Education and Communities (CREC) is to conduct and support both research and outreach activities that address rural education and community-related issues in Pennsylvania, the nation and the world. Based within Penn State's College of Education, we take the land grant mission of our institution seriously in our commitments to providing education and service to the people of Pennsylvania and beyond."

 National Center for Research on Rural Education http://r2ed.unl.edu/index.shtml

From the website: "The long-term goals of the Rural Education Center are to (a) improve in rural settings students' acquisition of reading and science knowledge and skills by identifying effective practices that lead to the systematic provision of evidence-based instruction in rural settings; and (b) establish an infrastructure for conducting and disseminating nationally-relevant, cutting-edge research and leadership related to rural education.

The Center's immediate research objective is to identify and validate elements of a practically-relevant, research-based framework for teacher professional development, including mechanisms of delivery (e.g., technology-based distance delivery), in the rural context. The Center is invested in identifying effective school, teacher, and family supports to help advance the learning of students in rural settings, with a particular focus on reading and science instruction."

 National Rural Education Association (NREA) http://www.nrea.net From the website: "The NREA is the voice of all rural schools and rural communities across the United States. In an increasingly confusing system, we are at your service to help rural educators find and use resources you need to educate today's students. Whether you need to know about the current legislation that affects rural communities, have completed important research that needs to be published, or are looking for help with specific education needs you face within your community, our national organization can help. We are your advocates—your voice—in education. The NREA was originally founded as the Department of Rural Education in 1907. It is the oldest established national organization of its kind in the United States. Through the years it has evolved as a strong and respected organization of rural school administrators, teachers, board members, regional service agency personnel, researchers, business and industry representatives, and others interested in maintaining the vitality of rural school systems across the country."

National Rural Education Advocacy Coalition (NREAC) http://www.nreac.org

From the website: "The NREAC was created by state and national education organizations with a focus on the provision and maintenance of quality learning opportunities for the children in the public schools of rural America. Our mission is to represent the educational interests of those children to the Congress and the Executive Branch."

Organizations Concerned about Rural Education http://www.ruralschools.org

From the website: "Organizations Concerned about Rural Education is a coalition of two dozen education, farm, rural, technology and utility organizations that has been active since 1988. What brings us together is our common concern for the economic future of rural America, particularly, the education of rural children. Modern, effective schools are vitally important to that future."

Rural Assistance Center http://www.raconline.org/topics/schools/

From the website: "A product of the U.S. Department of Health and Human Services' Rural Initiative, the Rural Assistance Center (RAC) was established in December 2002 as a rural health and human services "information portal." RAC helps rural communities and other rural stakeholders access the full range of available programs, funding, and research that can enable them to provide quality health and human services to rural residents."

The Rural School and Community Trust http://www.ruraledu.org/

From the website: "The Rural School and Community Trust is a national nonprofit organization addressing the crucial relationship between good schools and thriving communities. Working in some of the poorest, most challenging places, the Rural Trust

involves young people in learning linked to their communities, improves the quality of teaching and school leadership, and advocates in a variety of ways for appropriate state educational policies, including the key issue of equitable and adequate funding for rural schools."

Keywords and Search Strings Used in the Search

- "Length of bus ride" OR school bus OR "rural transportation" OR "time spent on bus"
 AND student AND achievement OR experience OR constraint OR impact OR effect
- "School proximity" AND "student achievement" AND impact OR effect

Search of Databases and Websites

Institute of Education Sciences Sources: Regional Educational Laboratory (REL) Program, National Center for Education Statistics (NCES), Institute of Education Sciences (IES), IES Practice Guides, What Works Clearinghouse

Other Federally Funded Sites: Center on Instruction, National Center on Response to Intervention, National Center for Teacher Effectiveness, Trends in International Mathematics and Science Study (TIMSS), The Best Evidence Encyclopedia

Additional Data Resources: ERIC and EBSCO databases, JSTOR database, Google Scholar, Google, and general Internet search

Criteria for Inclusion

When Reference Desk researchers review resources, they consider—among other things—four factors:

- Date of the Publication: The most current information is included, except in the case of nationally known seminal resources.
- Source and Funder of the Report/Study/Brief/Article: Priority is given to IES, nationally funded, and certain other vetted sources known for strict attention to research protocols.
- Methodology: Randomized controlled trial studies, surveys, self-assessments, literature reviews, policy briefs. Priority for inclusion generally is given to randomized controlled trial study findings, but the reader should note at least the following factors when basing decisions on these resources: numbers of participants (just a few? thousands?); selection (Did the participants volunteer for the study, or were they chosen?); representation (Were findings generalized from a homogeneous or a diverse pool of participants? Was the study sample representative of the population as a whole?).
- Existing Knowledge Base: Although we strive to include vetted resources, there are times when the research base is slim or nonexistent. In these cases, we have included the

best resources we could find, which may include newspaper articles, interviews with content specialists, organization websites, and so on.

The Regional Educational Laboratory (REL) Reference Desk is a service provided by a collaborative of the REL Program, funded by the U.S. Department of Education's Institute of Education Sciences (IES). This response was prepared under contract ED-IES-12-C-0004 with IES, by REL Midwest, administered by American Institutes for Research. The content of the response does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

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N.B. education minister angry after learning French and English students have been sharing a school bus

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In a sign of how touchy bilingualism issues can get in New Brunswick, the province's education minister has vowed to take action after learning French- and English-speaking students have been travelling on the same school bus.

Under a long-standing policy the provincial government claims it is constitutionally mandated to provide separate buses for anglophones and francophones.

Dominic Cardy, leader of the provincial New Democratic Party, disagrees.

"A local-level compromise — that was apparently entirely agreeable to the parents and the community — is now being ditched because someone is playing politics," he said.

"I think it's a really unfortunate way to handle it."

This month, Mr. Cardy attracted fierce criticism for suggesting New Brunswick look at cutting costs by allowing the students to take the bus together.

On Thursday, the NDP said shared busing was already the norm at a school district in Richibucto.

The government, however, responded by immediately promising to stamp out what it dubbed an "administrative anomaly."

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In a statement to the *National Post*, Serge Rousselle, the education minister, said he has directed his department "to resolve this matter as soon as possible, and staff are already working on a solution."

The bilingual bus spat comes just as New Brunswick is planning drastic cuts to education to patch a \$500-million hole in its budget. This could include laying off teachers.

The government's position is that shared buses would violate the Charter of Rights and Freedoms. Although the Charter says nothing specifically about schoolbuses, Mr. Rousselle has said the province is "required to have an education system where the francophones can live in a complete French environment."

As proof, he has cited a 2000 Supreme Court of Canada decision in which Summerside, P.E.I., was ordered to build a French immersion school rather than force francophone children to be bused to a French school nearly an hour away.

Oddly, the decision actually states explicitly that schoolbuses should not be considered "educational facilities." As such, that would appear to place them outside the realm of the Charter, which mandates "minority language educational facilities."



'A local-level compromise — that was apparently entirely agreeable to the parents and the community — is now being ditched because someone is playing politics'

This is the position of Mr. Cardy, who told the National Post, if separate buses "are not clearly protected rights, what is the harm in looking at them?"

The education ministry policy might explain why busing costs are so high in New Brunswick.

A January report by the Atlantic Institute of Market Studies raised alarms these costs were rising disproportionately, citing separate buses as a cause.

"Few politicians or school officials have dared to even ask if the sharing of bus services, on a larger scale, might result in significant savings to provincial taxpavers," it said.

In the 2014-15 school year, New Brunswick will spend \$64.8-million to bus 90,000 students, or about \$720 for each student.

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In February, Fredericton mayor Brad Woodside attracted severe francophone criticism for tweeting, "bilingualism I understand, duality makes no sense ... this should be on the table Mr. Premier as we look to save money. You asked."

Mr. Cardy's criticism of the dual busing policy has drawn criticism from the federal wing of his party.

In an interview with Canadian Broadcasting Corp., Yvon Godin, a federal NDP MP, warned he "should not touch the issue with a 10-foot pole."

"It's not a good idea, it's not acceptable and the francophones will not accept it."

National Post, with files from The Canadian Press

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Busing costs climbed to \$58.7 million in 2014 from \$31.3 million in 1987. (CBC)

The report finds student transportation costs in New Brunswick almost doubled between 1987 and 2014, despite plunging enrolment.

Paul Bennett, a professor at St. Mary's University in Halifax, said there has been a pattern developing in New Brunswick to close schools and then bus students to new regional schools.

"Our report blows the whistle on the process and says it's time to take stock," he said.

"How much of our education dollar is going into the support of students outside the classroom in the form of what we call education on wheels?"

Busing costs climbed to \$58.7 million in 2014 from \$31.3 million in 1987.

School enrolment has plummeted to 102,579 in 2011-12 from 120,600 in 2002-03. This year, it will cost New Brunswick about \$64.8 million to bus about 90,000 students.

'Example of decisions ... that run counter to common sense'

Bennett points to the new location of Moncton High, about nine kilometres from its current location, as an example.

"The decision to build the new Moncton High School in Royal Oaks is a perfect example of decisions that are being made that run counter to common sense and add to the cost of student transportation," he said.

'The decision to build the new Moncton High School in Royal Oaks is a perfect example of decisions that are being made that run counter to common sense and add to the cost of student transportation.' - Paul Bennett, author AIMS report on school transportation

The report states the number of buses in New Brunswick increased to 1,237 in 2014 from 1,156 in 2009, despite the fact the number of students being bused declined to 74,055 from 85,000 during that time.

It also notes the provincial government operates more than 90 per cent of the bus fleet and has little or no involvement with municipal transit services.

New Brunswick also operates parallel bus systems in the anglophone and francophone school systems, which is also called into question.

"Few politicians or school officials have dared to even ask if the sharing of bus services, on a larger scale, might result in significant savings to provincial taxpayers," states the report.

Putting anglophone and francophone students on the same bus is one suggestion of Bennett's. But cabinet minister Victor Boudreau, who is the responsible for government's strategic program review, rejects that idea.

"We've been saying as a part of strategic program that everything is on the table with the exception of linguistic rights, which have been guaranteed by the Charter and the constitution," said Boudreau.

"And I actually think that particular example would fall under that.

"But otherwise I'm sure there are efficiencies that can be found within the busing system in the province of New Brunswick."

Other recommendations in the AIMS report include:

- Contract out transportation services to achieve lower costs per student.
- Use city-run transit systems by providing student bus passes for middle school and high school students.

In a statement to the National Post, Serge Rousselle, the education minister, said he has directed his department "to resolve this matter as soon as possible, and staff are already working on a solution."



National post, is

The bilingual bus spat comes just as New Brunswick is planning drastic cuts to education to patch a \$500-million hole in its budget. This could include laying off teachers.

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N.B. school bus cuts worry parents, mayor

CBC News Posted: Jul 23, 2009 7:26 AM AT Last Updated: Jul 23, 2009 7:12 AM AT

New Brunswick parents are worried about how their children will get to school this September after a budget cut in the Department of Education forced many school districts to restrict which students get to ride the bus.

For the last three years, Gary Hall's eight-year-old son got on the school bus to Royal Road Elementary School in front of their Fredericton home.

But a \$2-million cut in the education department's transportation budget this year means that Hall's five-year-old son, who is heading to kindergarten, and his brother will have to walk to school this fall.

Hall said he understands budget constraints but still wants his sons to take the bus to school.

"The bottom line is not dollars and cents: it's safety," he said.

"It's, in my opinion, safety outweighs a dollar every time."

Shelley McLeod, the manager of transportation for School District 18, said the Halls fall into an area that was provided courtesy bus service prior to the budget reduction.

"But when budgets are reduced courtesy services have to be reduced or eliminated in order to provide service for eligible [people]," McLeod said.

The provincial regulations for bus services say children who live more than 2.4 kilometres from their school have to be bused.

This year, District 18 will continue to provide service to some elementary students who live closer than the 2.4 kilometres from their schools. For Royal Road students, those who travel 1.9 kilometres and further will still be bused to school.

McLeod said the district's decision for this year is final.

Dieppe parent worried

Hall's situation is also being faced by parents in the Moncton area.

Paul Short said he's worried that his 12-year-old son Brandon and nine-year-old daughter Julia will now have to walk down Dieppe's busy Gauvin Road to school.

In previous years, the children took a 10-minute ride on the bus.

Short said it's not safe for his kids to walk down a street with heavy traffic. The father said the posted speed limit is 50 km/h but many vehicles are often speeding in the area.

"The majority of the drivers are exceeding that, probably 60, 70, 80 [km/h], I've seen," he said.

And it's not just parents who are upset about the possible changes.