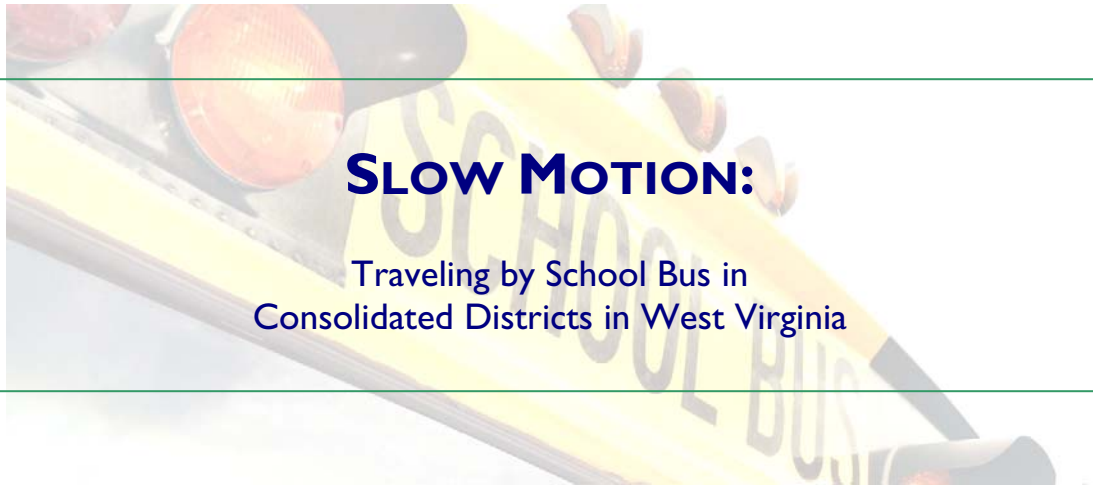

SLOW MOTION:

Traveling by School Bus in Consolidated Districts in West Virginia

A Publication of the Policy Program
of the Rural School and Community Trust

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49 minutes lost each day.

That's one price for being bused to a West Virginia high school in a district that has embraced school consolidation.

On average, school commute times are over 24 minutes longer *each way*, for students relying on school buses, as compared to peers fortunate enough to have other transportation options. Students in consolidated districts who have a car, or can catch a ride with family or friends have this additional time each day—to spend with family, participate in school related activities, do homework, study for an exam...or just catch up on some sleep.

This piece of information is one result of a survey given to all high school students in four West Virginia counties during 2006. This report summarizes the outcomes of the study, which investigated the lengths of school bus rides in West Virginia in districts with consolidated and non-consolidated schools, and the impact of this commute time on students' participation in extra-curricular activities.

Background

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. Consequently 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 (Spence, 2000).

The state of West Virginia has recognized that long bus rides are not desirable and the legislature has issued guidelines on maximum lengths of school bus rides. However, these recommendations are not mandatory and are not enforced. Recommended maximum one-way bus rides are 30 minutes for elementary school, 45 minutes for middle school, and one hour for high school students (Title 126, 2004). In spite of these recommendations, until recently, complete and up-to-date data on the length of bus rides was not available. As of 2002, however, district (county) transportation directors have been required to annually report bus ride lengths.

The latest available state report (for 2005) indicates that about 7.4% of West Virginia students ride school buses *over* the recommended times. This statewide average "override," however, does not offer a complete picture of bus rides around the state. Bus ride lengths vary dramatically by county—from a low override rate of .4% to a high override rate of 31.3%. In some schools, in some counties, very few students experience lengthy rides. In other counties, however, a very high percentage of kids ride the bus for extended periods of time. And according to the state data, *every* county in West Virginia has at least some students riding the school bus over the recommended times (*Transportation Times* 1-06, 2006).

Though the state busing report is helpful in providing a broad picture of bus ride lengths, it lacks some critical information. Conspicuously missing from the state reports is the actual length of bus rides. The state report indicates *how many* students (per county) endure overrides, but provides no data on the extent to which student travel exceeds the suggested limit. Do students ride one minute over the recommended maximum time…or one hour? Also missing is any information about the impact of long bus rides. For example, to what extent are long bus rides associated with decreased academic performance, dropout rates, and the ability to participate in extra-curricular activities?

Since further consolidation is presently being proposed statewide, the lack of solid data about the impact of current consolidation is problematic. This research by the Rural School and Community Trust (Rural Trust) is an effort to fill some of those gaps.

Methods

Site Selection

In West Virginia, each county is a distinct school district. We chose four counties (out of a total of 55) to investigate. Two of the counties (Greenbrier and Preston) have experienced significant consolidation and we designate them "High Consolidation" districts.[1] The other two counties (Fayette and Mason) have not experienced extensive consolidation, and we designate them "Low Consolidation" districts. Most of our analyses were conducted by comparing data from the two High Consolidation districts with that from the two Low Consolidation districts.

These districts were chosen because they are fairly representative of the state by geographic location, square mileage of the district, size of the resident population, per capita income, and population density. Appendix A describes the demographics of the four counties. The map in Appendix B indicates the county locations

Surveys

The research team decided that the most accurate data on commute times comes from those who know this best: the students. Thus we developed a survey that asked students about how they traveled to school, their travel times both before and after school, their participation in extra-curricular activities, and their aspirations about college attendance. Though we were also

[1] Greenbrier County has been consolidated since 1968. Preston County consolidated in 1991 (History of School Consolidation, 2006).

interested in other potential consequences of consolidation, such as grade point averages and dropout rates, we did not feel that a student survey would accurately reveal these factors.

Our one-page survey[2] was given to all high school students in the four counties. High school students were chosen for several reasons. First, most of the consolidation has occurred (at this time) at the high school level. Second, we believed that high school students would be more accurate about the time of their daily commutes than younger students. Lastly, we were interested in examining the relationship of the length of the bus ride and participation in extra-curricular activities for students in their teenage years. Research has shown that participation in extra-curricular activities is highly associated with engaging students in schooling and is one key element in combating adolescent alienation (Lipsomb, 2005; Mahoney & Cairns, 1997; O'Brien & Rollefson, 1995).

The surveys were purposefully designed to be short in order to maximize response rates. They were administered during homeroom (or advisory) periods in order to eliminate duplication.

Three of the districts administered the surveys during Spring 2006. The fourth district administered the survey in Fall 2006. For both time periods, the weather was mild and so the reported commute times can be considered the minimum. (Winter driving conditions in mountainous West Virginia almost certainly lengthen the commute time.)

Response rates were very high. Over 63% of enrolled high school students in these four counties returned the surveys (N=4,535). Response rates varied *by schools* from a low of 29% to a high of 85%. The average district-level response rate, however, was the same in both High Consolidation and Low Consolidation districts.

Analyses

Depending on the question, the investigator employed either a Z-test (comparison of two means), or an Analyses of Variance (ANOVA) when more than two treatments were being compared. Significance levels are indicated when appropriate. We did not conduct analyses on all 4,535 returned surveys. A number of surveys were deleted because of obvious errors (like "leave home at midnight") and/or no responses for a particular item. In spite of these deletions, the number of valid responses is very high and is indicated in each analysis.[3]

Results

We organized the results around eight questions. The first three questions concern basic information about student commutes to school: How do students get to school? How long is the morning commute? How many students travel over the state guidelines? The next four questions examine factors related to participation in extra-curricular activities: How is engagement in extra-curricular activities affected by consolidation status? By travel time? By mode of transportation? By very long bus rides? The last question considers student aspirations to attend college and its relationship to consolidation.

[2] See Appendix C for the survey instrument.

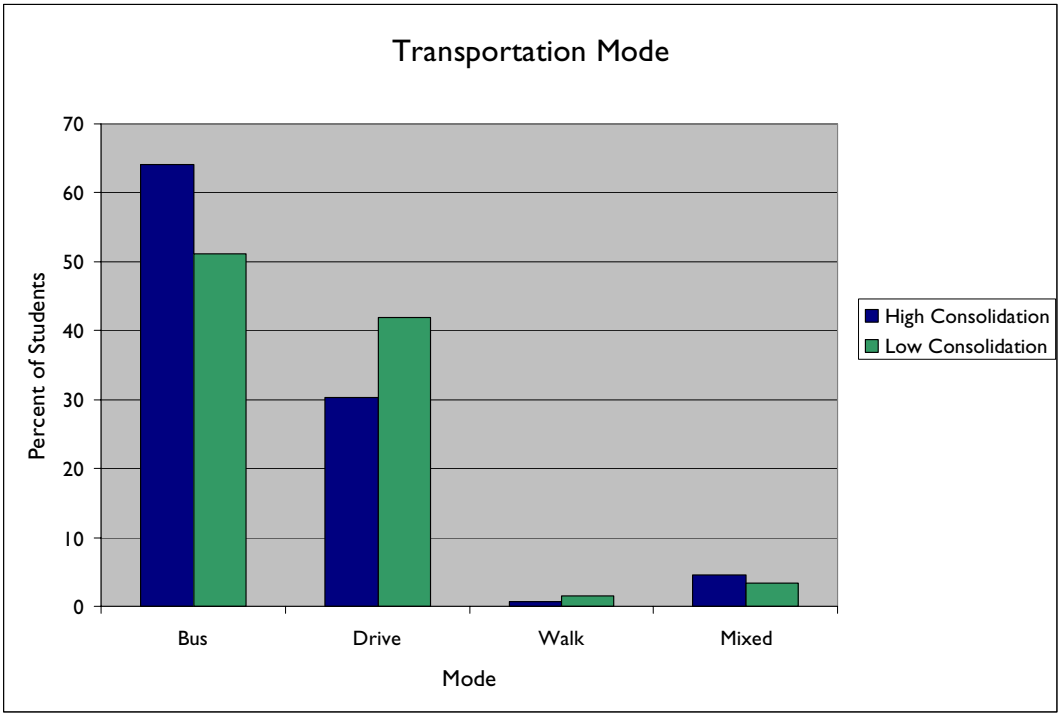
[3] See Appendix D for a discussion of potential limitations of this study.

1. *How* do students get to school?

* Overall, the majority of high school students (57%) depend on school bus transportation to get to school each morning.

* The percentage of students riding buses in High Consolidation districts (64.1%) is significantly higher than in Low Consolidation districts (51.3%). This means that the length of the bus ride impacts relatively more students in High Consolidation districts than in Low Consolidation districts.

Walking to school is rare in both situations. And it appears that bus riding displaces car riding in High Consolidation districts. One can speculate that perhaps parents do not want their students driving the distances it takes to get to school, especially in winter.



Transportation Mode

	Bus	Car	Walk	Mixed[4]	Total
High Consolidation	64.1%[1,3] N=1263	30.6%[1,4] N=602	0.61% N=12	4.7% N=92	N=1,969
Low Consolidation	51.3%[2,3] N=1,262	43.9%[2,4] N=1,080	1.5% N=38	3.3% N=82	N=2,462
Total	57.0% N=2,525	38.0% N=1,682	1.1% N=50	3.9% N=174	N=4,431

[1,2,3,4] Differences in all four comparisons are significant at p<.0001

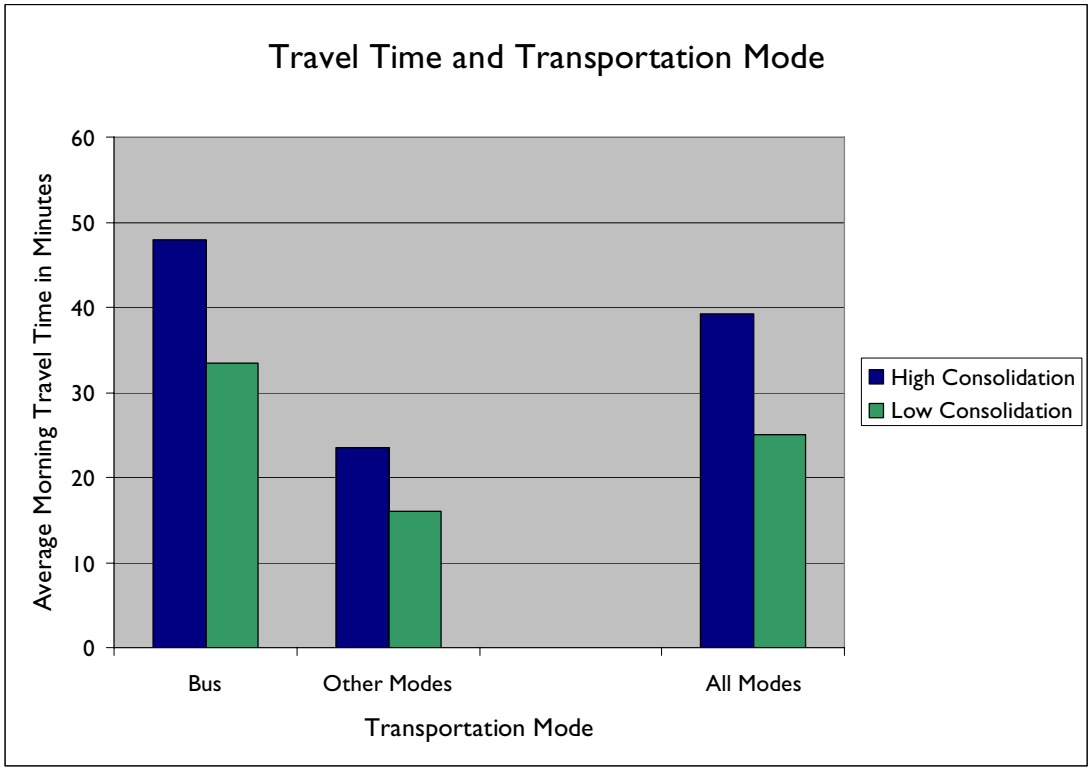
[4] Some students indicated two or more modes of transportation, which we designated as the "mixed" category.

2. How *long* does it take to get to school?[5]

* Overall, it takes an average of 31 minutes to travel to school each morning in these districts. The average travel time, however, is much higher for students who ride school buses. The commute to school is *over twice* as long for bus riders as compared to students who use other means of travel. This is true for students in both High Consolidation and Low Consolidation districts.

Proportionally many more students depend on buses to travel to school in High Consolidation districts, therefore, the impact of these very long bus rides touches many students in these places.

* The length of school bus travel is significantly higher in High Consolidation districts than in Low Consolidation districts. Students attending school in High Consolidation districts have rides averaging 48 minutes each way. This is over 43% longer than bus riders in Low Consolidation districts, where the average one-way travel time is 33.5 minutes.



[5] The survey asked about the length of time for both the morning and the afternoon commutes. Since we had a more complete dataset for the morning commute, we used this in our analyses.

Average Morning Travel Time[6]

	Bus	Other Modes *(Car, Walk, or Mixed Mode)*	Totals *(All Modes)*
High Consolidation	48.0[1,3] minutes N=1,263	23.5[1,4] N=706	39.2 N=1,969
Low Consolidation	33.5[2,3] N=1,262	16.0[2,4] N=1,200	24.9 N=2,462
Totals	40.7 N=2,525	18.7 N=1,906	31.3 N=4,431

[1,2,3,4]Differences in all four comparisons are significant at p<.0001.

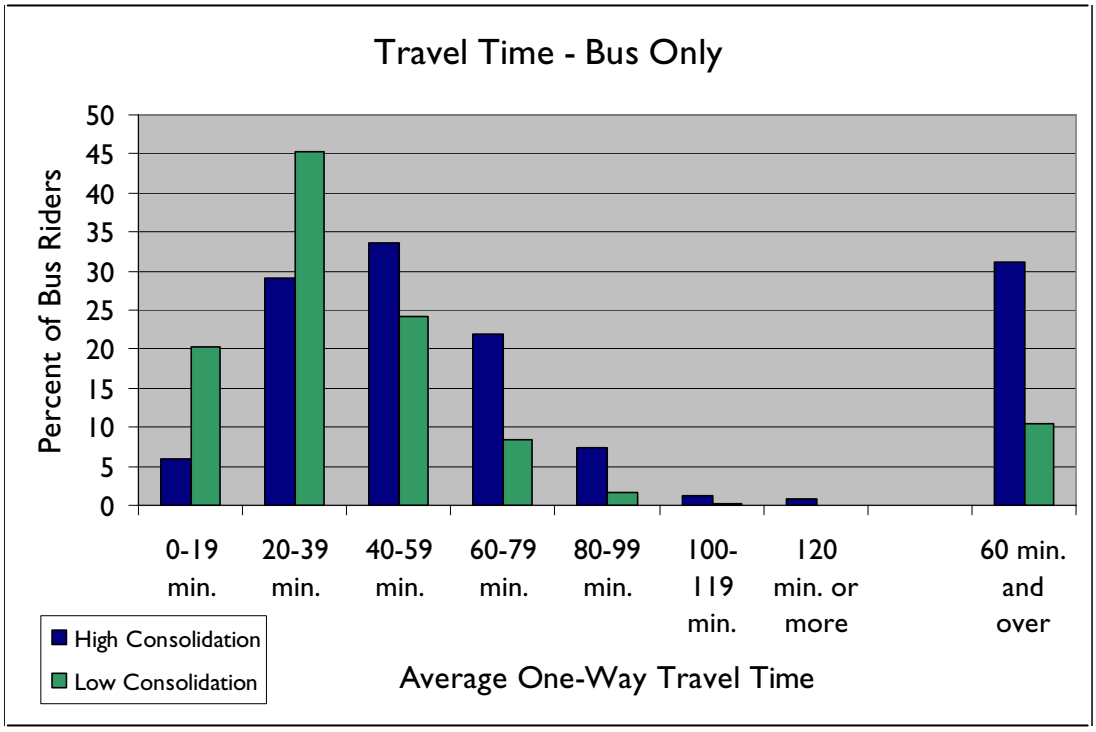
3. How many students travel over the recommended limit of one hour or more?

* In High Consolidation districts, 31.1% of bus riders travel an hour or more each way. In Low Consolidation districts, 10.5% travel that long. Thus, the incidence of bus overrides is three times higher in High Consolidation districts compared to Low Consolidation districts. Combined, over 20.8% of students who ride the school bus have bus rides 60 minutes or more.

* By comparison, in High Consolidation districts, among students who are not dependent on school bus transportation, only 4.8% travel 60 minutes or more. In Low Consolidation schools, only 1.9% of these students have very long commutes.

The two charts below show the distribution of the travel times for students. The first chart displays the travel times for students in these districts who ride the school bus. The second chart shows the same data for students who travel by other means besides the school bus (i.e., travel by car, walk, or use mixed modes).

[6] The 49 minutes referred to in the first paragraph of this report was derived from this chart. Students in High Consolidation districts who ride the bus have an average commute that is 24.5 minutes longer each way than students who use other modes of transportation.

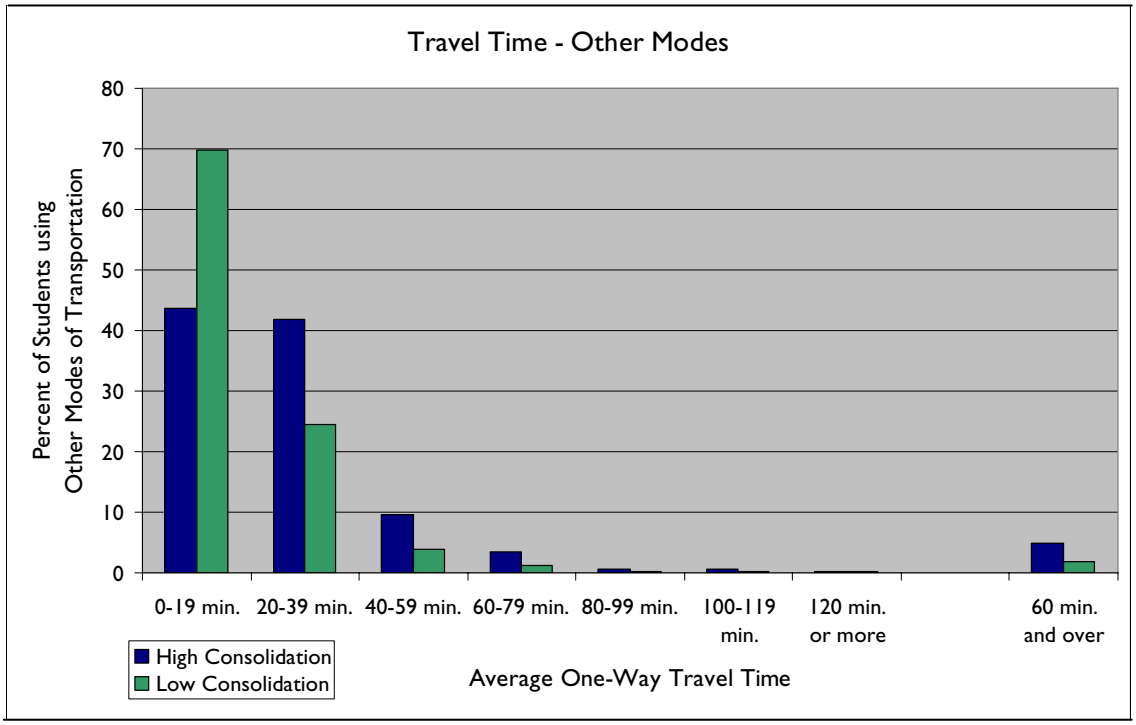


Note: The last column "60 min. and over" combines the data from the preceding four columns: 60-79 minutes, 80-99, 100-119, and 120 or more. This column represents the percentage of students who ride the school bus at or over the state recommended time limits.

Travel Time - Bus Rides Only

	0-19 minutes	20-39 minutes	40-59 minutes	60-79 minutes	80-99 minutes	100-119 minutes	120 or more	Total
High Consolidation	5.9% N=74	29.2% N=369	33.8% N=427	21.9% N=276	7.4% N=93	1.1% N=14	0.79% N=10	1,263
				60 Minutes and Over				
				31.1%[1] N=393				
Low Consolidation	20.3% N=256	45.2% N=570	24.1% N=304	8.4% N=106	1.7% N=22	0.32% N=4	0.0% N=0	1,262
				60 Minutes and Over				
				10.5. %[1] N=132				
Totals	13.1% N=330	37.2% N=939	29.0% N=731	15.1% N=382	4.6% N=115	0.71% N=18	0.40% N=10	2,525
				60 Minutes and Over				
				20.8% N=525				

[1]Difference significant at p<.0001



Note: The last column, 60 and Over, combines the data from the preceding four columns 60-79 minutes, 80-99, 100-119, and 120 or More. This column represents the percentage of students whose morning commute is at or over the state recommended time limits.

Travel Time for Morning Commute - Other Modes of Travel (Car, Walk, or Mixed)

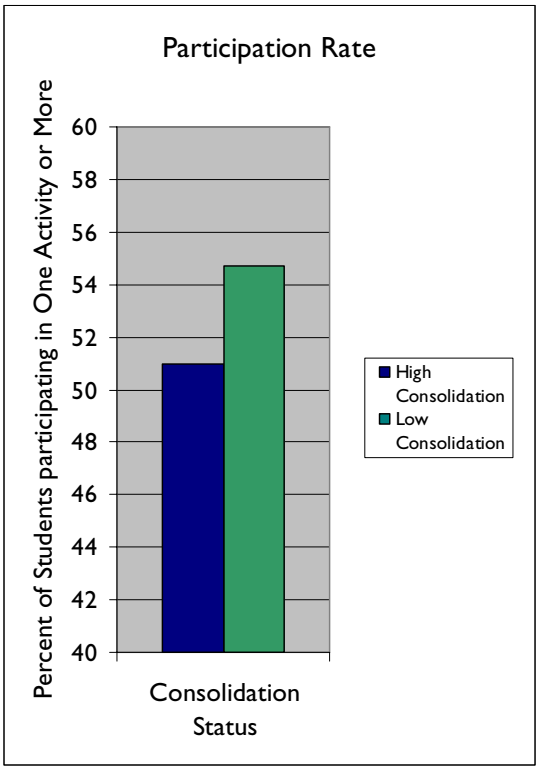
	0-19 minutes	20-39 minutes	40-59 minutes	60-79 minutes	80-99 minutes	100-119 minutes	120 or more	Total
High Consolidation	43.6% N=308	41.9% N=296	9.6% N=68	3.4% N=24	0.71% N=5	0.57% N=4	0.14% N=1	706
				60 Minutes and Over				
				4.8%[1] N=34				
Low Consolidation	69.8% N=838	24.4% N=293	3.8% N=46	1.25% N=15	0.25% N=3	0.25% N=3	0.17% N=2	1,200
				60 Minutes and Over				
				1.9%[1] N=23				
Totals	60.1% N=1,146	30.9% N=589	6.0% N=114	2.0% N=39	0.42% N=8	0.37% N=7	0.16% N=3	1,906
				60 Minutes and Over				
				3.0% N=57				

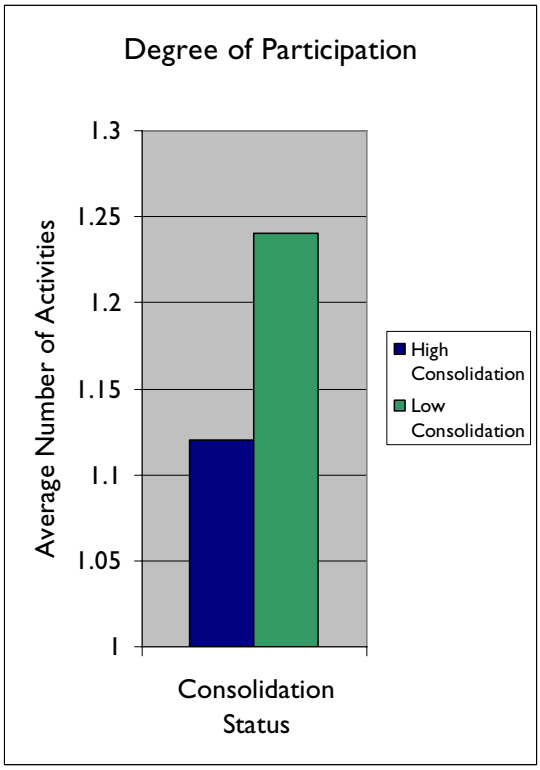
[1]Difference significant at p = .0012

4. What is the relationship between consolidation and participation in extra-curricular activities?

We examined this question by looking at participation in extra-curricular activities in two ways. First, we calculated the "participation rate," or the percentage of students who participate in at least one activity. Second, we analyzed the number of activities students participate in (or the "degree" of participation). This second method gives more in-depth information since it shows not only *if* a student participates, but also to *what extent* the student participates in extra-curricular activities.

* Significantly more students in Low Consolidation districts participate in extra-curricular activities, and those who participate are engaged in more activities compared to High Consolidation districts. That is, students in Low Consolidation districts have both a higher participation rate and a higher degree of participation as shown in the charts below.





Participation and Consolidation Status

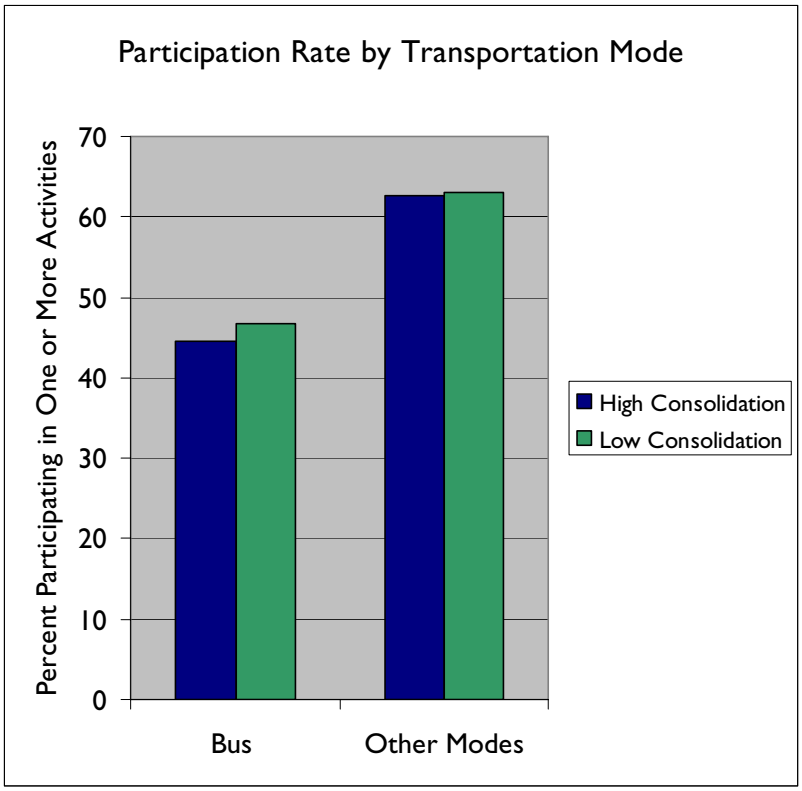
	Participation Rate *(Percent Participating in at least one extra-curricular activity)*	Degree of Participation *(Average Number of Extra-curricular Activities per pupil)*
High Consolidation	51.0%[1]	1.12[2]
Low Consolidation	54.7%[1]	1.24[2]
Totals	53.1	1.19

[1]Difference significant at p=.018
[2]Difference significant at p=.009

5. What is the relationship between mode of travel to school and participation in extra-curricular activities?

* *How* kids travel to school is highly associated with the number of extra-curricular activities they participate in.

Less than one half of the students who travel by bus, participate in *any* extra-curricular activity. Students who travel to school by car, in contrast, tend to have the highest participation rates. These differences in participation by transportation mode are seen in both High Consolidation districts and Low Consolidation districts.

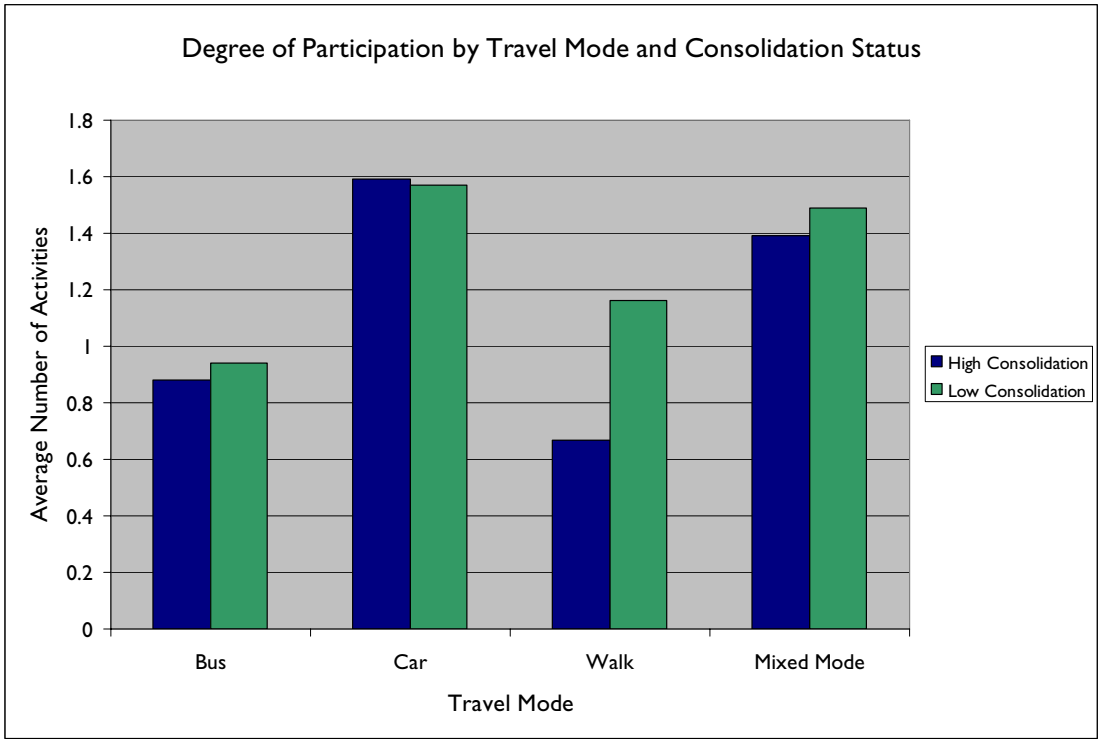


Participation Rate by Transportation Mode (Bus or Other Mode)

	Bus Riders	Other Modes of Transportation *(Car, Walk, or Mixed)*
High Consolidation	44.5%[1,3]	62.7%[1,4]
Low Consolidation	46.8%[2,3]	63.0%[2,4]
Totals	45.7%	62.8%

[1,2]Differences in these comparisons are significant at p<.0001
[3,4]Differences between High Consolidation and Low Consolidation within Bus Rider column and within the Other Modes column are not statistically significant.

The chart below shows the degree of participation in extra-curricular activities by consolidation status and transportation mode.



Degree of Participation by Travel Mode and Consolidation Status

	Bus	Car	Walk[7]	Mixed Modes
High Consolidation	.88[1,3] N=1263	1.59[1,4] N=602	.67[1,5] N=12	1.39[1,6] N=92
Low Consolidation	.94[2,3] N=1,262	1.57[2,4] N=1,080	1.16[2,5] N=38	1.49[2,6] N=82
Totals	.91 N=2,525	1.58 N=1,682	1.04 N=50	1.44 N=174

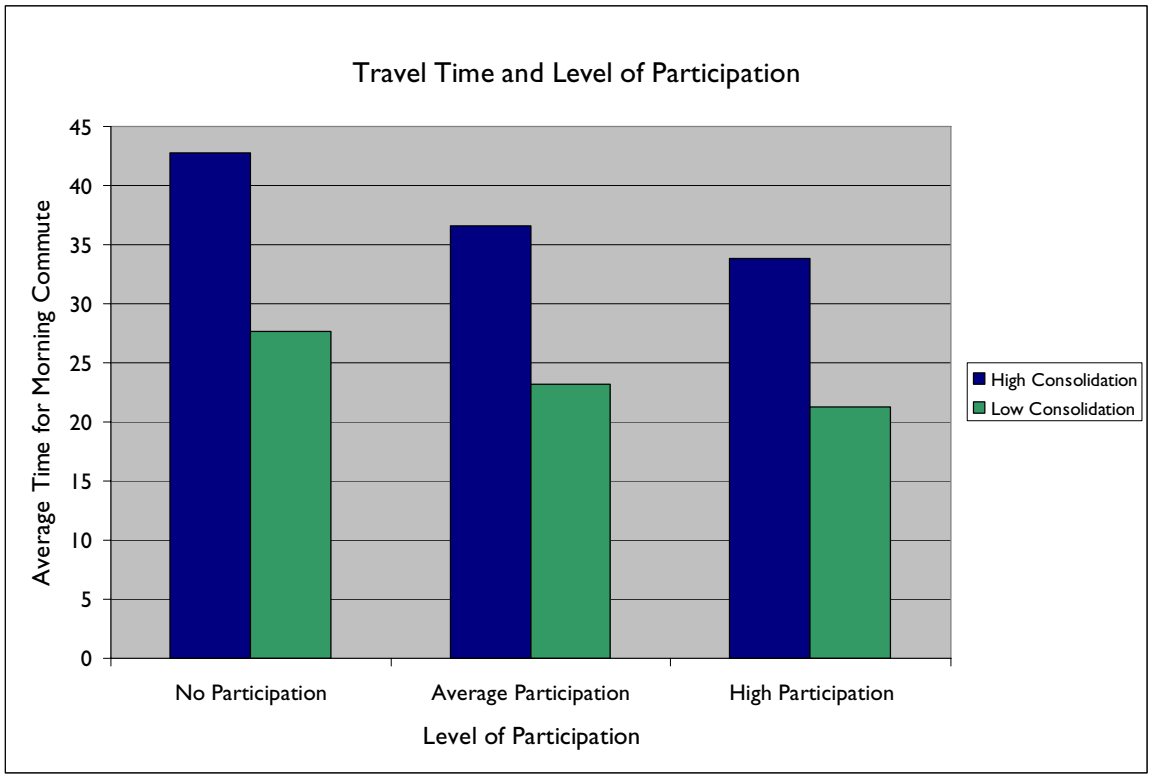
[1]Difference significant at p<.0001.
[2]Difference significant at p<.0001.
[3,4,5,6]Differences between High and Low Consolidation in all modes (bus, car or walk) are <u>not</u> statistically significant.

[7] The differences in the number of activities in the Walk category may appear significant, but the actual number of students in this category is very low and the difference is not statistically significant.

6. How is travel time related to participation in extra-curricular activities?

* Participation in extra-curricular activities is highly related to how long it takes to get to school. The longer the commute, the less the participation. This is true for both High Consolidation and Low Consolidation districts.

The average participation rate for the entire population in this study is 1.19 activities. Therefore, we defined an average participation rate as participating in one or two activities. Three or higher activities was defined as High Participation in the chart below.



Travel Time and Level of Participation

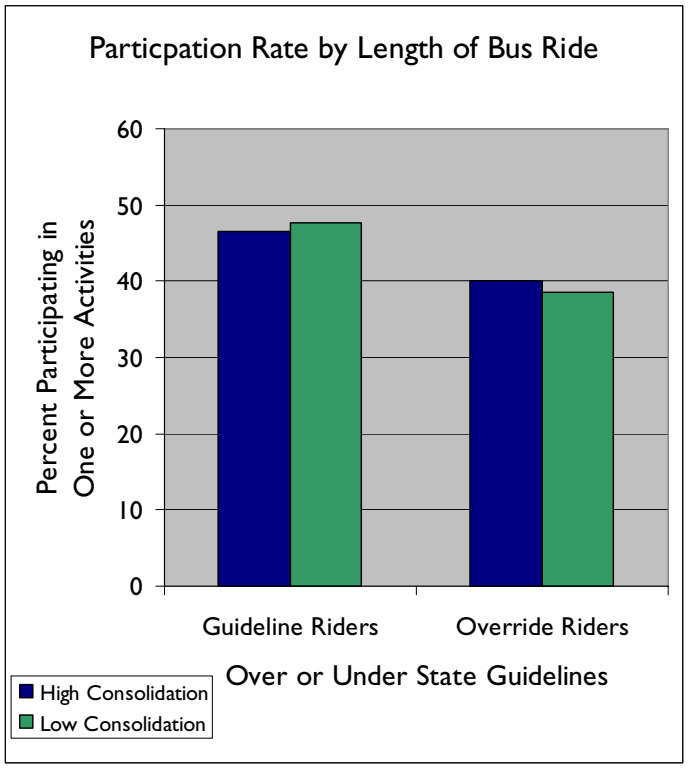
	No Participation *(Zero activities)*	Average Participation *(One or two activities)*	High Participation *(Three or more activities)*
High Consolidation	42.9 minutes[1,3] N=964	36.6 minutes[1,4] N=689	33.9 minutes[1,5] N=316
Low Consolidation	27.7 minutes[2,3] N=1,116	23.2 minutes[2,4] N=915	21.3 minutes[2,5] N=431
Totals	34.7	29.0	26.6

[1,2,3,4,5] Differences in all five comparisons are significant at p<.0001.

7. How do long bus rides affect participation in extra-curricular activities?

In this question, we were specifically interested in how bus rides over and under the state guidelines impact participation in extra-curricular activities. "Guideline" bus rides are defined as those under 60 minutes. Override bus rides are 60 minutes or more.

* In both High and Low Consolidation districts, students riding the bus over the recommended times, have significantly lower participation rates as compared to students with shorter bus rides.



Participation Rate by Bus Ride Length (Over or Under Guidelines)

	Guideline Bus Riders	Override Bus Riders
High Consolidation	46.6%[1,3] N=405 participate--out of 870 Guideline bus riders	40.0%[1,4] N=157 participate--out of 393 Override bus riders
Low Consolidation	47.7%[2,3] N=539 participate - out of 1130 Guideline bus riders	38.6%[2,4] N=51 participate - out of 132 Override bus riders[8]

[1]Difference significant at p<.0001
[2]Difference significant at p=.0015
[3,4]Differences between High and Low Consolidation within Guideline column and within the Override column are not statistically significant.

[8] Because of the relatively few numbers of Override students in the Low Consolidation group, these results must be considered with caution.

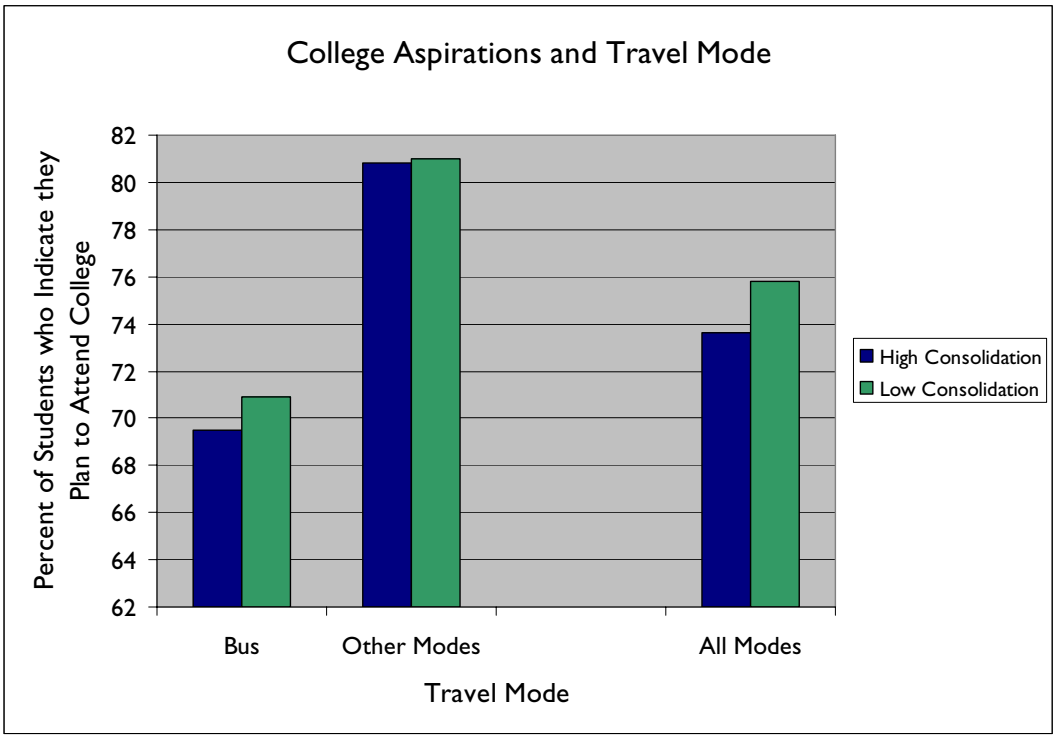
8. How is consolidation related to students' aspirations to attend college?

* Students who ride school buses have significantly lower aspirations about attending college, as compared to students who travel to school using other means. This occurs in both High and Low Consolidation districts.

* Students in Low Consolidation districts tend to have higher aspirations than those in High Consolidation districts, though the differences are not statistically significant.

* Among bus riders, students with rides under the state guidelines tend to have higher aspirations about college attendance, than those with bus rides over the state recommended time, though these differences are not statistically significant.

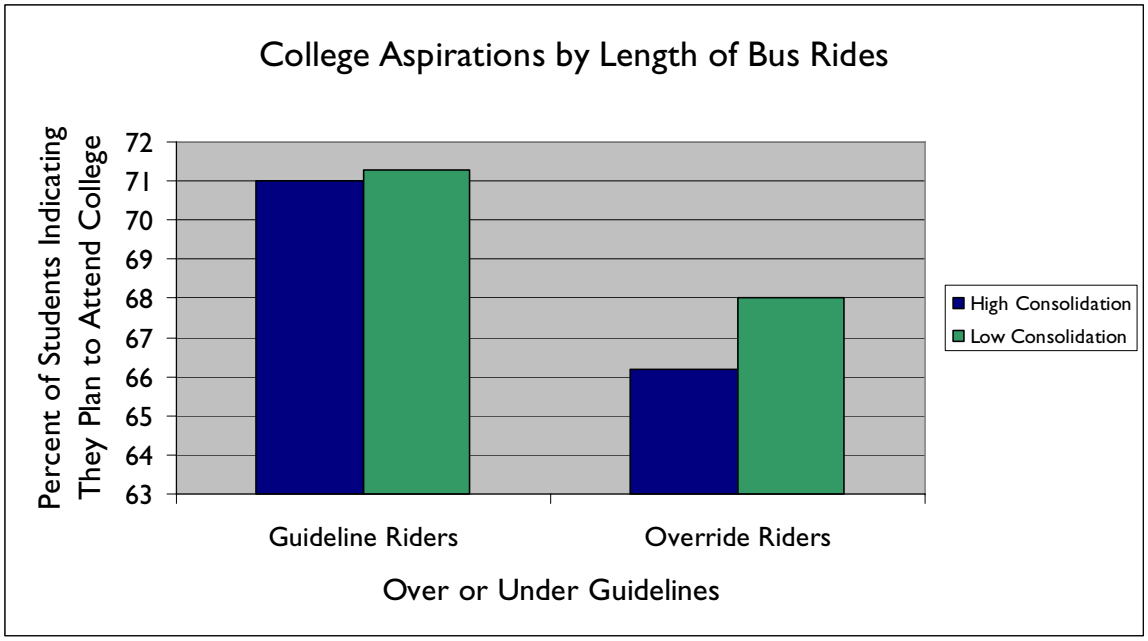
These findings emerge from the survey question that asked each student if they planned to go to college or not, or were uncertain. College aspiration was defined as the percent of students in each group who indicated that they planned to attend college.



College Aspirations by Travel Mode

	Bus	Other Modes	Totals
High Consolidation	69.5%[1,3] N=876	80.8%[1,4] N=703	73.6% N=1,963
Low Consolidation	70.9%[2,3] N=889	81.0%[2,4] N=1193	75.8% N=2446

[1]Difference significant at p<.0001
[2]Difference significant at p<.0001
[3,4]Differences between High and Low Consolidation within these columns are not statistically significant.



College Aspirations by Bus Ride Length (Over or Under Guidelines)

	Guideline Bus Riders	Override Bus Riders
High Consolidation	66.2%[1,3] N=260	71.0%[1,4] N=616
Low Consolidation	68.0%[2,3] N=131	71.3%[2,4] N=800

[1,2,3,4] Differences in these four comparisons are not statistically significant.

Conclusions

Our analysis of these surveys reveals a consistent and logical pattern: Consolidation in West Virginia has resulted in significantly longer commutes for many high school students. Not surprisingly, students who have these long commutes tend to participate in far fewer extra-curricular activities, if any, than students who live closer to school.

And in spite of West Virginia state guidelines that bus rides should NOT be longer than an hour each way at the high school level, almost one-third of students (31.1%) in consolidated districts who ride the bus, do so for an hour or more. Indeed, some students reported bus rides up to 2 ½ hours *each way*.

Long commutes are the reality for students who drive, as well as for those who take the school bus in consolidated districts. School bus ridership, however, is much higher in consolidated districts compared to non-consolidated districts, probably reflecting the fact that for many families, schools are located much further away from home and workplaces. Since the percentage of students depending on bus transportation is much higher in High Consolidation districts, any impact of bus rides affects proportionally more students.

Our results confirm the anecdotal stories heard around the state and indicate that very long bus rides restrict participation in extra-curricular activities. Research identifies participation in after-school activities as an important factor in helping students feel a sense of belonging and be connected to their schools. Long grueling commutes, however, make participation in after-school activities very difficult, or even impossible.

In addition, the strong relationship between participation level and mode of transportation is particularly troublesome. Students who participate in extra-curricular activities tend to travel by private car, not by bus. Driving is apparently one way to cope with the realities of long distances and still participate after school. This implies a potential equity issue: Is having access to a car a prerequisite to being actively engaged in after-school activities for students living far from school?

Our findings about college aspirations tend to bolster our equity concerns. We found that students who ride school buses, as compared to other means of transportation, have lower aspirations for attending college. Prior research has already established strong links between lower aspirations and poverty (Chenoweth & Galliher, 2004; Haas, 1992). Thus our results, combined with other research, suggest that lower-income students tend to be disproportionately dependent on bus transportation. (This makes sense—cars are expensive.) And we wonder whether the serious inconveniences and daily grind of very long bus rides serve to generate and/or reinforce pessimism about the possibility and desirability of further educational attainment.

Long distances to reach schools may present other problems as well. We suspect that parental involvement, for example, declines as the distance and time to school increases. We also wonder whether dropout rates tend to be higher when kids are forced to endure extremely long

commutes to school. These are topics that we did not investigate in this study, but that should be pursued.

One byproduct of consolidation is the creation of very long commutes for students which, in turn, construct huge obstacles to being actively engaged in after-school activities. The degree to which this disengagement generalizes to attitudes about schools and learning, we can only guess...but we believe it does to a significant extent. At the very least, consolidation has a number of outcomes, some of which are potentially harmful for students and should, therefore, be approached with great caution by policymakers.

Recommendations

Our recommendations are based on the conclusion that long bus rides have negative consequences for students as shown in this study and should be avoided whenever possible. We believe that state policies that promote very long commutes are unfair to students and unwise.

We recommend that:

1. West Virginia should pass legislation that limits the length of school bus rides and enforce this legislation.
2. The State should require districts to provide additional bus service to keep bus rides as short as possible. All additional costs for bus transportation should be assumed by the State.
3. The State should mandate that districts provide afternoon activities buses for all students, and that these buses take students within a reasonable walking distance of their homes.
4. The State should require districts to route buses in ways that shorten rides as the primary criteria (in contrast to minimizing costs).
5. The State should conduct or commission additional research studies that analyze travel time and its relation to a variety of indicators of student success and wellbeing, such as grade point averages, dropout rates, parental involvement and college attendance.

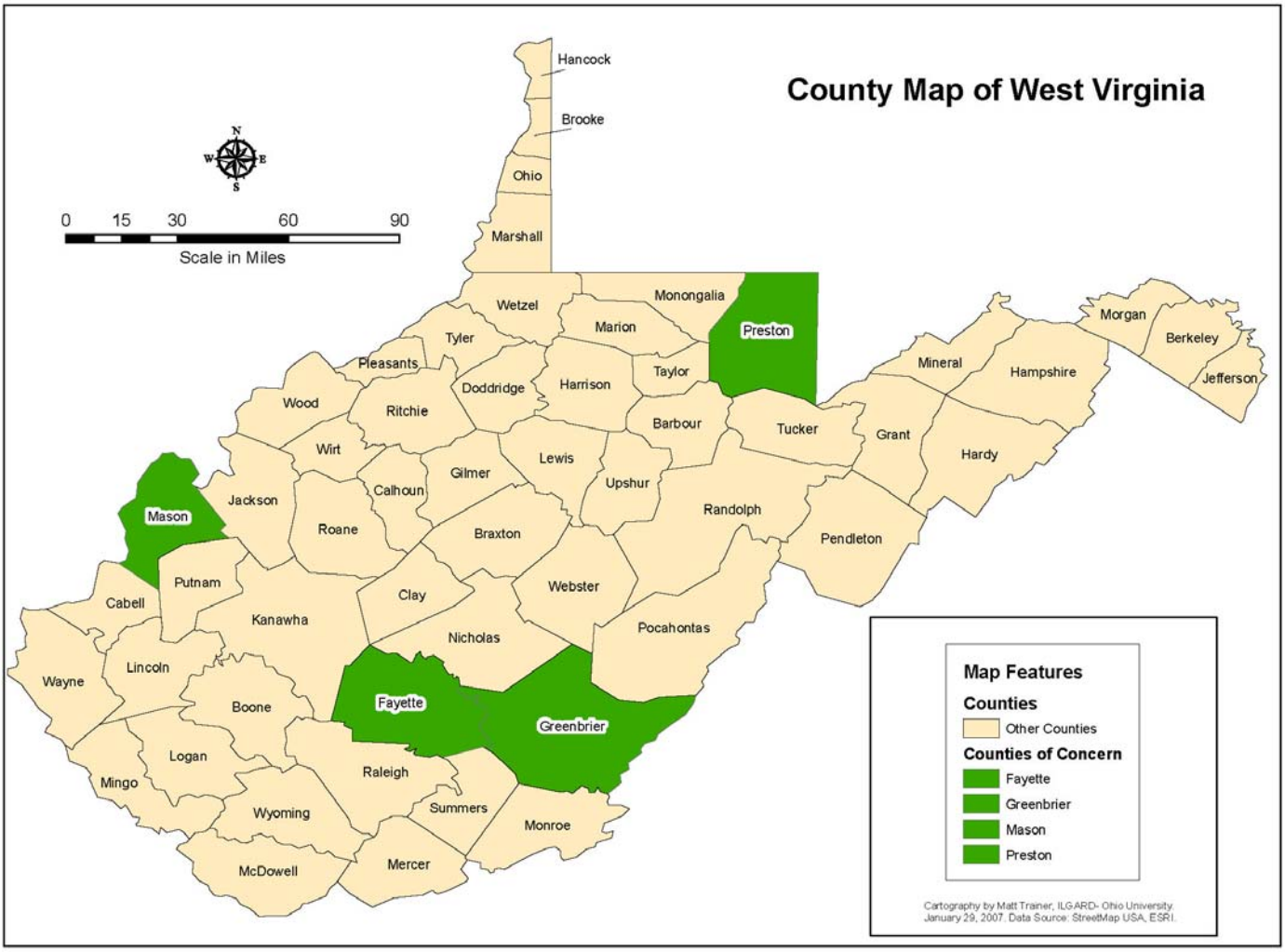
Appendix A – County Demographics

Demographics of the Four Sample Counties

County	Size in Square Miles	2004 Population	2002 per Capita Income	Population per Square Mile
Greenbrier	1021.26	34,886	$23,249	33.74
Preston	648.32	29,856	20,496	45.25
Fayette	663.93	47,049	20,218	71.66
Mason	431.85	25,941	19,814	60.11

Data from www.epodunk.com based on estimates from the U.S. Census, 2000.

Appendix B – County Map of West Virginia



Appendix C – Student Survey

1. What grade are you in? ___

2. What community do you live in? _____

3. How do you usually travel to school? [Check one]
   ___ Drive myself
   ___ Ride with someone else
   ___ Walk
   ___ Ride on the school bus

4. What time do you **leave your house** in the **morning** to go to school? _____

5. What time do you **arrive** at this high school in the **morning**? _____

(Answer the following 3 questions if you usually travel to school by school bus. If not, go to question 9.)

6. **If you travel by school bus**, what time does the bus **pick you up in the morning**? _____

7. What time does the bus **pick you up after school**? _____

8. What time do you **get off** the bus at your home in the **afternoon**? _____

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9. a. During the entire school year, how many school sponsored after-school activities do you participate in?

___None	___4
___1	___5
___2	___More than 5
___3	

b. Please list these activities:

_____	_____
_____	_____
_____	_____

10. Are you planning to go to college after high school?
___Yes
___No
___Uncertain

11. If you could change one thing about your high school experience, what would that be?

_____

_____

Thank you.
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Rural School and Community Trust

Appendix D – Study Limitations

Potential limitations of this study

Like any research project, this study has some potential limitations. First, we studied conditions in only four of 55 counties in West Virginia. We believe these four counties are representative of the state in general, though it is possible that they are outliers.

Second, it is reasonable to question the accuracy of student responses. However, we made every attempt to delete obviously invalid responses and the large number of responses tends to negate inaccuracies.

It is also logical to compare our results with data contained in the state transportation report. This comparison is given below.

County	State Data for 2005		Survey Data for 2006	
	Percent of bus riders exceeding recommended maximum time	*Number of high school bus riders over recommended time*	*Percent of bus riders exceeding recommended maximum time*	*Number of high school bus riders over recommended time*
Greenbrier	9.0%	71	13.5%	61
Preston	18.6%	296	29.0%	234
Fayette	2.3%	10	2.6%	20
Mason	11.1%	47	14.1%	67

At first glance, it appears that our survey may overestimate bus ride length when compared to state reported data. (Or, conversely, the state data may underestimate school bus lengths.) For example, our data indicate that 13.5% of high school students who ride the bus in Greenbrier County have rides of an hour or more. The state report indicates that only 9% of bus rides are over an hour.

However, there are two methodological differences that may account for these differences. First, the county averages contained in the state report include ALL students—elementary, middle and high school students. Our survey includes only high school students. This very significant difference would tend to lower the percent of lengthy bus rides in the state report and may account for the discrepancies noted above. That is, since most elementary and middle schools have not yet consolidated, they have relatively shorter bus rides. The percent reported by the state would include the numbers of all these students in the denominator and would make the percent OVER the recommended time look smaller on a county level.

Second, the latest state data is from school year 2005. Our survey was administered in 2006. There are slight differences between these years in number of students enrolled, number who use the school bus, etc. However, we do not believe these small differences fully explain the inconsistency between our findings and the state data.

One way or another, both state data and ours highlight the notable variance among different counties. Fayette County, a non-consolidated district, for example has relatively few students on buses for an hour or more. Preston County, a high-consolidated district, has many. Though the *average* commute time is "only" 28 minutes longer in consolidated districts, for a great many students the differences are far greater. And for those students the consequences of a long, sluggish daily trip to school are serious and detrimental.

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