



APPENDIX: C

Student Travel Tally

Introduction

In late 2019, the Planning Department and Montgomery County Public Schools (MCPS) collaborated to survey MCPS students about how they arrive and depart from school each day. School-aged children are a leading indicator for walking. Those areas where students are walking to school in great numbers are likely areas where there is a lot of walking taking place. This survey was the first time this information had been collected at a countywide level.

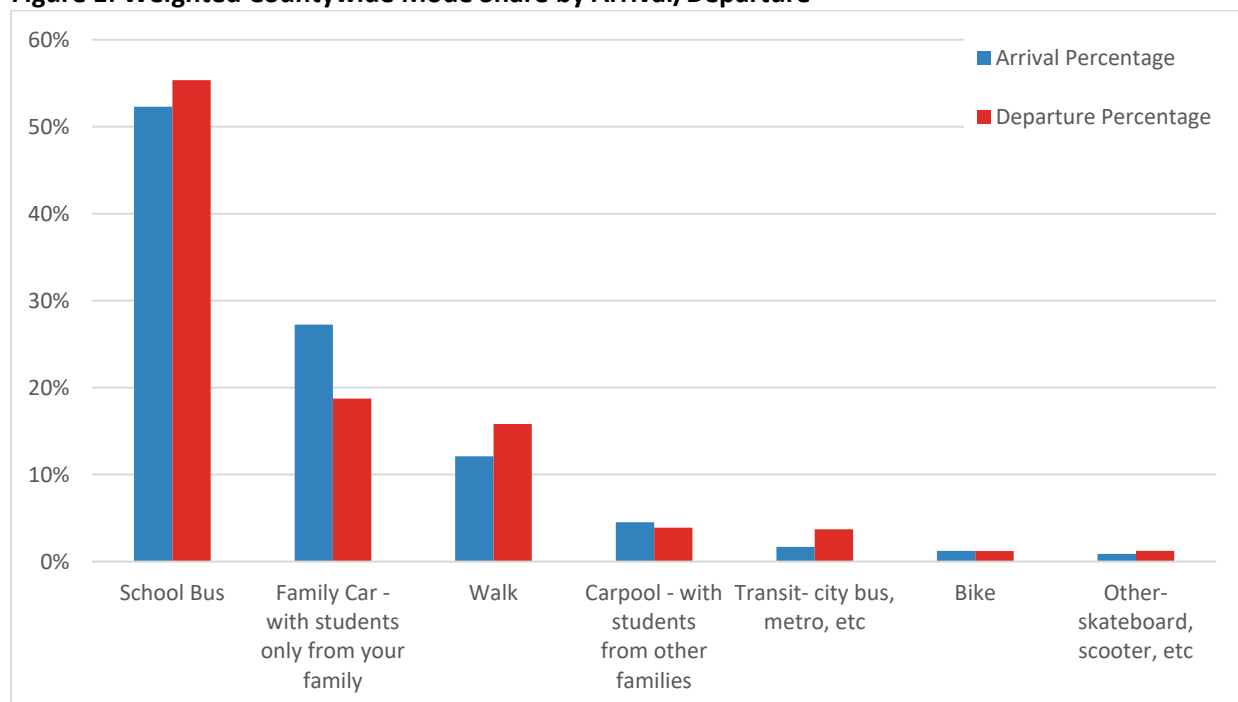
Survey Findings

The majority of students arrive and depart by school bus in Montgomery County (Figure 1). Over 50 percent of students take the bus to school, while more than 55 percent take the bus home from school. Students driving or getting driven to school by family members is the second-most common travel mode, followed by walking.

Student travel mode changes from arrival to departure. Fewer students leave school in a car than arrive in one. This makes sense as many students are dropped off to start the school day by parents or other family members, and school dismissal times are generally not convenient for those same people to leave work to pick up. As a result, at the end of the day, more students take the school bus, walk, take public transit, or leave school by other means. Nearly as many students take public transit at dismissal time as get into a car with non-family members.

At the countywide level, 12 percent of students walk to school and nearly 16 percent walk from school. Students taking public transportation are also pedestrians at the beginning and end of their trips. Adding those students to the mix, there is a 14 percent pedestrian mode share to school and 20 percent pedestrian mode share from school.

Figure 1: Weighted Countywide Mode Share by Arrival/Departure

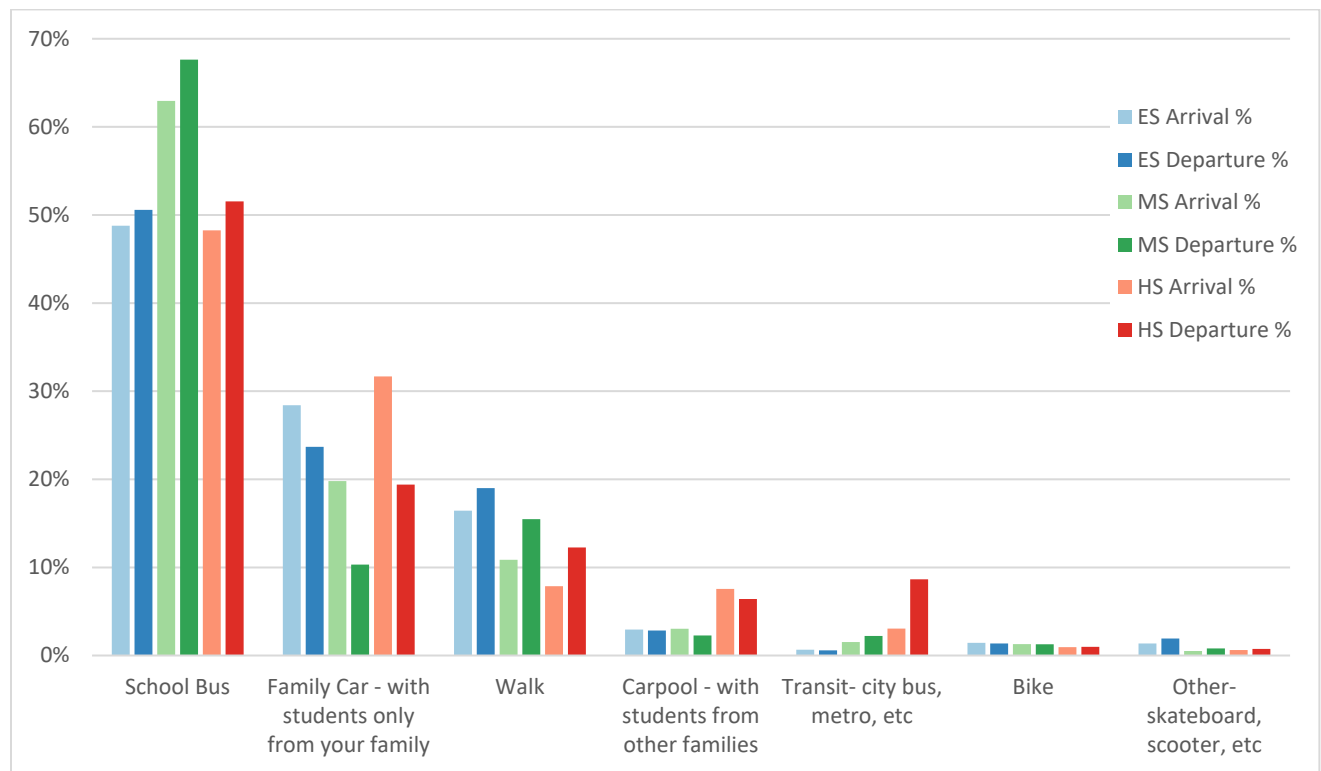


Breaking out the countywide data by elementary, middle, and high schools in Figure 2 illustrate several emerging trends. First, school buses are most heavily utilized by middle school students. This may be because many students live too far away or have to cross too many unsafe roads to walk to school, cannot yet drive themselves and do not have siblings or friends who can drive them to school. With middle schools generally further from home, parents may also be less willing or able to drive students to school or pick them up at the end of the school day.

Second, walk mode share decreases from elementary school to middle school to high school. This is likely a function of two related issues: as students transition to higher schools, they tend to live further away, and in walking further, students would have to cross roads that MCPS has determined are hazardous. School bus service is provided for the affected students, increasing school bus mode share, and decreasing walk mode share.

Third, driving to school is more common for high school students. Both driving with family members and carpooling with non-family members are generally more common in high school than in middle or elementary school. In high school, students may still be picked up and dropped off by parents or other family members, but as they earn driver’s licenses, students can also drive themselves, family members, and friends to and from school.

Figure 2: Arrival/Departure Mode Share by School Type

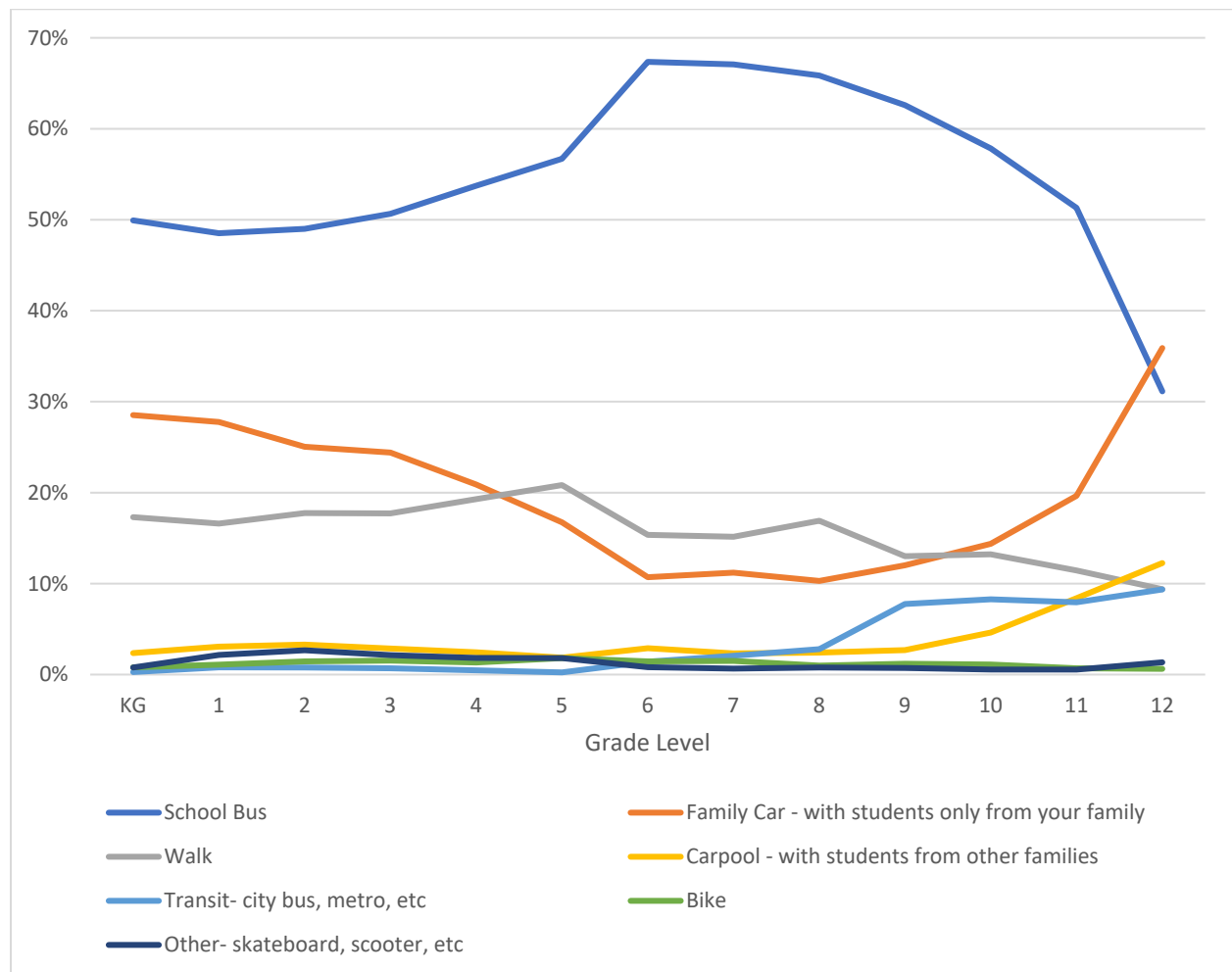


Fourth, public-transit use is also significantly higher for high school students. Three percent of high school students arrive at school by public transit, but nearly nine percent depart school by this mode – more than the percentage who drive home with friends and other non-family members. At Northwood High School, John F. Kennedy High School, and Wheaton High School, the percentage of students

departing by transit is 24 percent, 20 percent, and 20 percent respectively. Bethesda-Chevy Chase High School is not far behind at 15 percent.

The graph below (Figure 3) breaks out mode choice by grade and largely reinforces the dynamics observed at the school level, though there are a few unique findings. School bus ridership increases through elementary school with a concurrent downturn in family car usage. This may be attributable to parents becoming more comfortable allowing children to take the school bus as they age. One can also see the sharp upward inflection of family car usage and carpooling from 10th to 12th grade as students begin driving.

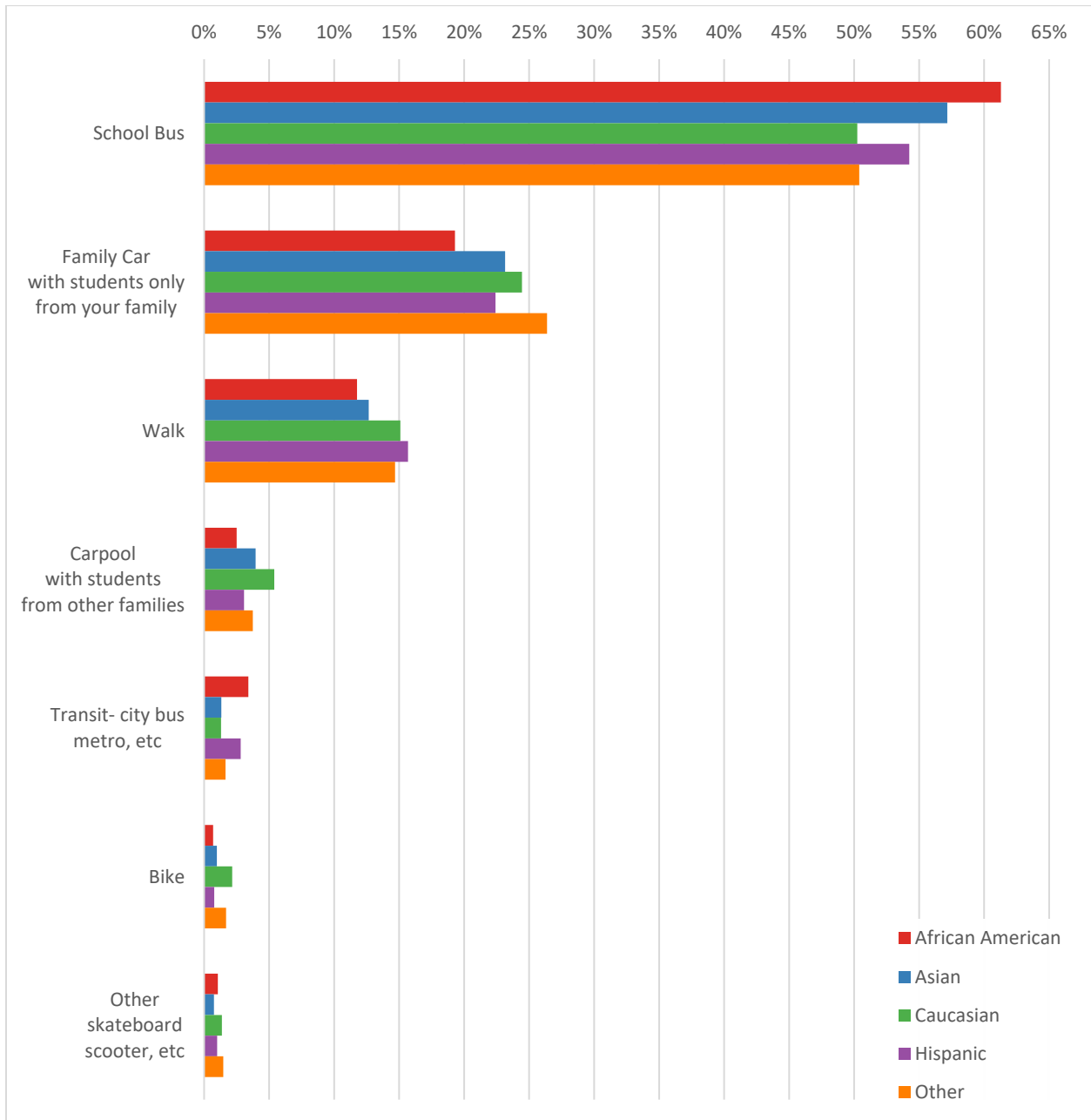
Figure 3: Departure Mode Share by Grade



Looking at student travel patterns through the lens of race and ethnicity (Figure 4) found that African American students were more likely to arrive and depart by school bus and less likely to arrive or depart by family car. Caucasian students were more likely to be driven to and from school than students from other backgrounds. Hispanic students were the most likely to walk, followed by Caucasian students, then Asian students, then African American students. African American and Hispanic students were

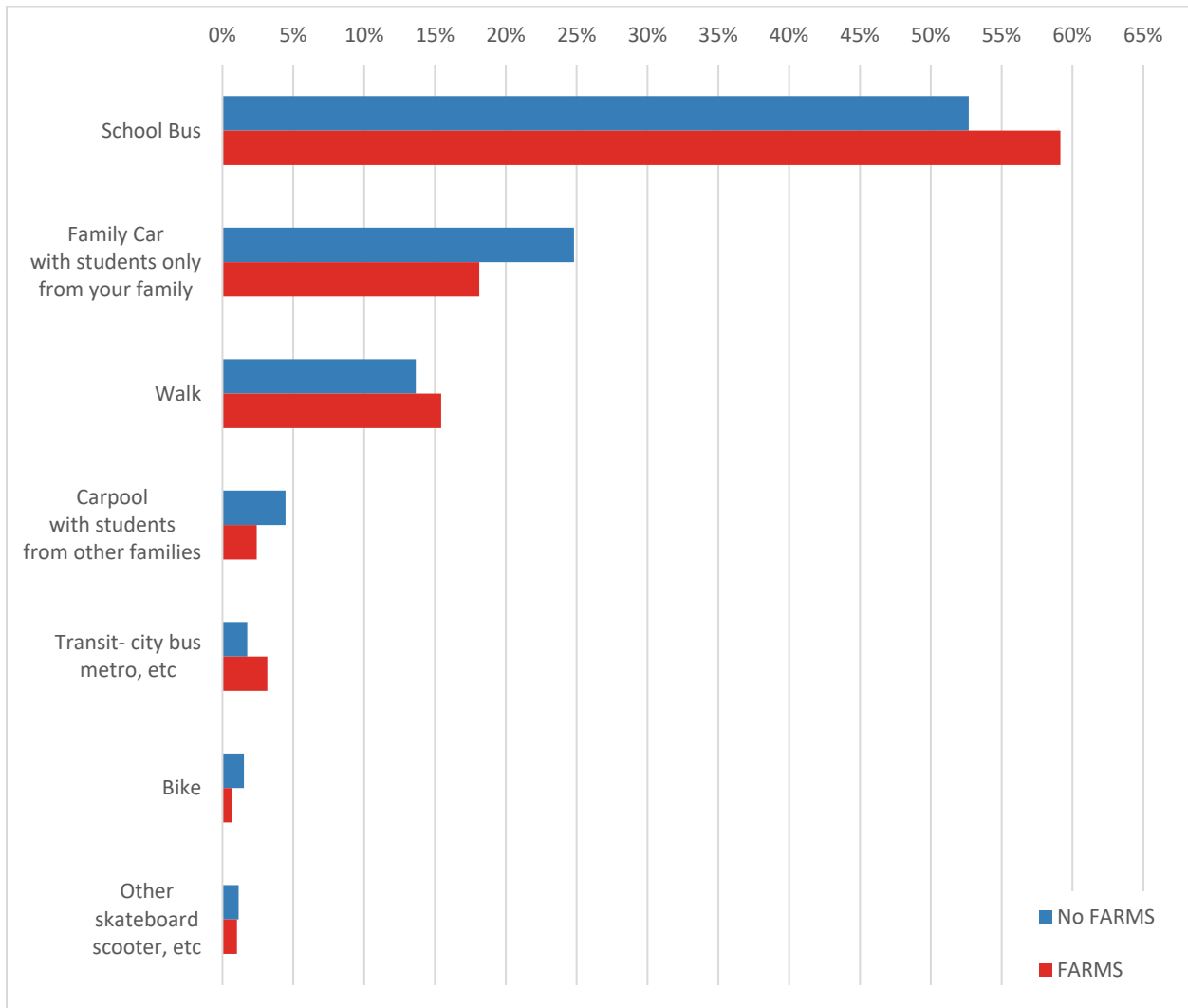
significantly more likely to take public transit to or from school than other groups. Caucasian students are more likely to bike to/from school than other groups.

Figure 4: Average Mode Share by Race/Ethnicity



In addition to race and ethnicity, breaking the data by Free- and Reduced-price Meals System (FARMS) participation provides insight into the relationship between socioeconomic status and mode share (Figure 5). Students eligible for FARMS are less likely to use a car to get to/from school and are also less likely to bike. They are more likely to take a school bus, public transit, or walk.

Figure 5: Average Mode Share by FARMS Status

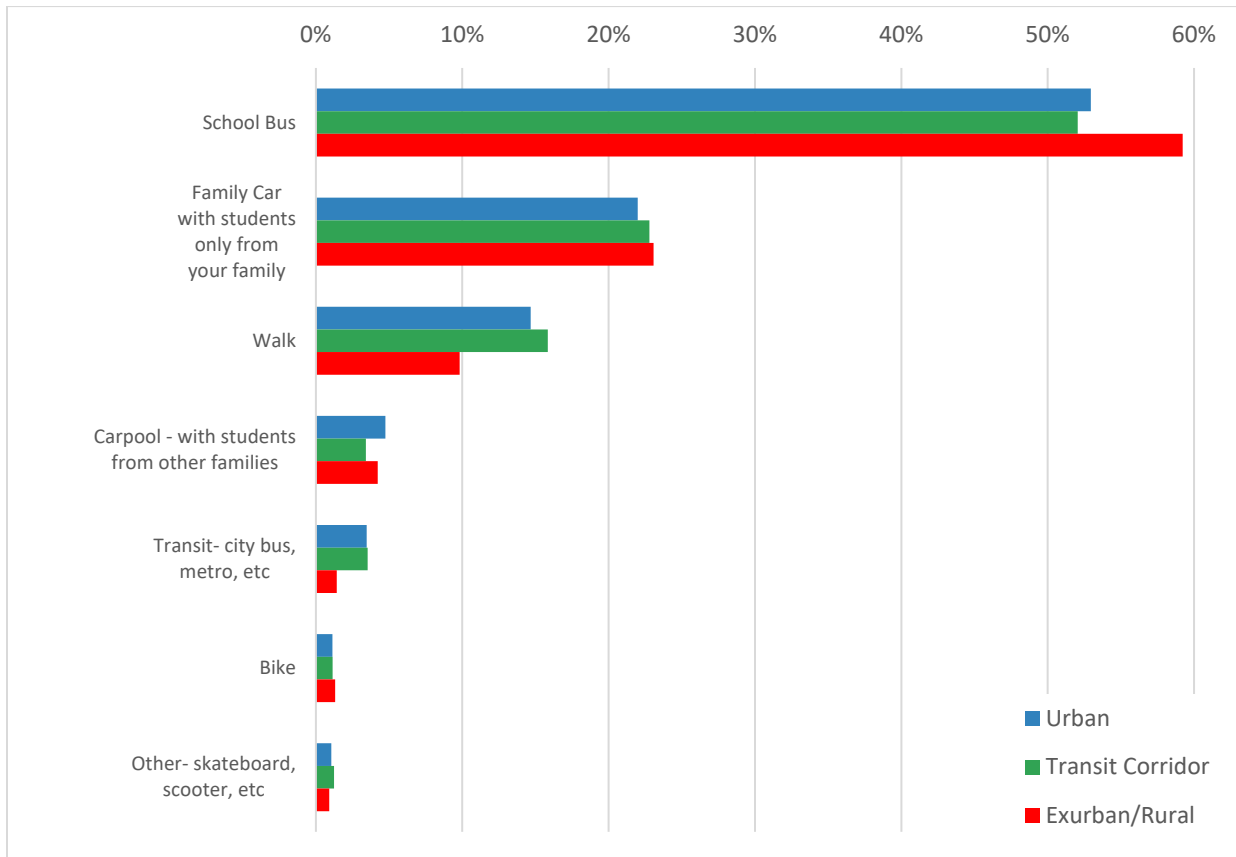


Grouping schools based on whether they are located in urban (downtowns and town centers), transit corridors (within a half mile of higher-frequency public transit) and rural/exurban (the remainder of the county) areas of the county and then reviewing student travel tally findings through that lens provides perspective about the relationship between urban form and mode share (Figure 6)¹. Students attending schools located in urban areas and along transit corridors walk and take public transit at higher rates than students attending rural/exurban schools. Students at schools in rural/exurban areas are more

¹ In October and November 2020, the Planning Department conducted a countywide survey of pedestrian activity and perception. Postcards with unique survey credentials were sent to 60,000 randomly selected households across the county. The results were provided at the countywide level, but also at smaller geographies. These geographies were urban (downtowns and town centers), transit corridors (within a half mile of higher-frequency public transit) and rural/exurban (the remainder of the county). A map of these geographies is provided in the Existing Conditions Report. Because the cities of Rockville and Gaithersburg do their own planning, the Countywide Pedestrian Survey did not include residents from these communities.

likely to take the school bus than students attending schools in other geographies. Student car usage is generally similar across all geographies.

Figure 6: Weighted Average Mode Share by Pedestrian Plan Survey Area



Methodology

To conduct the survey, MCPS adapted the student travel tally form created by the National Center for Safe Routes to School² to be completed by students as part of the login prompt on school computers. The survey asks students what travel mode they used to arrive at school and which mode they would use to depart school. Pictures of each travel mode were included to be more accessible to younger students.

The survey collected responses from November 1, 2019 until December 13, 2019. All told, 73,602 students participated from a broad cross-section of schools. Response rates at more than half of surveyed schools exceeded 50 percent, while response rates were below 20 percent at nearly 28 percent of schools. Response rates for each school can be found in the Supporting Tables section below. Efforts were underway in early 2020 to resurvey those schools with low response rates, but the COVID-19 pandemic and the start of virtual schooling rendered those efforts moot. Survey participation was not required and responses, especially at schools with low response rates, may not be representative of

² <http://saferoutesdata.org/>

the school. Additionally, there does not appear to be a pattern or rationale for why the participation rates at some schools were significantly lower than others.

The survey should be administered biannually to track changes in how students are arriving to and departing from school. Appropriate adjustments should be made to the survey to increase response rates at schools with lower response rates today.

Data Weighting and Interpolation

To control for some of the variance between schools and within schools, each grade-level response was factored up to its appropriate proportion of school-wide enrollment. For example, two ninth graders at Albert Einstein High School reported that they biked to school. Since the response rate for the ninth grade was 50 percent, it was assumed that overall, four ninth graders bike to Albert Einstein. The formula for bike responses is below with a specific Albert Einstein High example for ninth-grade biking.

$$Bike_{weighted} = \frac{School\ Grade\ Enrollment}{School\ Grade\ Survey\ Responses} \times Bike_{responses}$$
$$\sim 4 = \frac{557}{278} \times 2$$

In this way, survey responses are scaled up to better represent the grade within the school and, by extension, the school within the county.

If a grade at a school had zero responses or had a response rate below five percent, staff interpolated survey results for that grade from adjacent grades. For instance, if the second grade at a particular school had zero results, for each mode, the sum of the mode-specific responses for the adjacent grades (first and third) were added and that number was divided by the sum of the total responses for the adjacent grades and then multiplied that figure by the missing grade's enrollment. The formula for biking is below:

$$Bike_{weightedInterpolated} = \frac{\sum Adjacent\ Bike}{\sum Adjacent\ Total\ Responses} \times School\ Grade\ Enrollment$$

If two consecutive grades within a school had zero responses or had a response rate below five percent, that school was removed from the weighted countywide analyses and those grades were removed from the weighted grade-level analyses.

Additional weighting on the basis of race and ethnicity and the Free- and Reduced-price Meals System (FARMS) status was not conducted as the required grade information was not available.

Limitations

While the student survey was very successful as an initial effort, the data and associated findings have limitations. Though 70,000 students participated, MCPS enrollment in 2020 was 160,564 in fall 2020 when the survey was completed, so response rates overall were around 43 percent. Additionally, missing responses were not necessarily random. Some schools, like Montgomery Blair High School, did not have any responses, while others had response rates near 100 percent. These discrepancies could skew findings, making them less representative of the student population.

Takeaways / Next Steps

The student survey analysis identified several key takeaways:

- **Walking is the third-most popular student travel mode.** Behind the school bus and family car, 12 percent of students walk to school and 16 percent walk home from school.
- **Walking is most common at the elementary schools.** Walk-mode share from school is 19 percent for elementary school students, 15 percent for middle school students, and 12 percent for high school students. There may be several reasons for this, but the increasing distance between home and school is likely a key factor.
- **Hispanic students are the most likely to walk to/from school.** Additionally, Hispanic and African American students are significantly more likely to take public transit (which involves a significant walking component) to/from school than students from other backgrounds.
- **FARMS students are more likely to walk to/from school.** These students are also less likely than non-FARMS students to be driven to/from school, and more likely to take the school bus.
- **Walking is less prevalent in the exurban/rural parts of the county.** Given the distances necessary to travel and the streets along which students would have to walk, it makes sense that schools in rural areas only have about a 10 percent walk-mode share, while transit-corridor schools and urban areas have 16 and 15 percent rates, respectively.

The Pedestrian Master Plan will build on these findings to create pedestrian-mode share goals for different types of MCPS schools and develop recommendations to increase pedestrian-mode share to achieve them. Different types of schools may benefit from different approaches to encourage more walking. Comparing the mode share data from this survey to other data being collected like the Pedestrian Level of Comfort may point to situations where improving the comfort of sidewalks and street crossings is most important. For other schools, a very comfortable pedestrian environment but low walk-mode share may lead to recommendations for robust Safe Routes to School programming and other related activities.

Supporting Tables

Figure 7: Elementary School Student Survey Results

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Arcola Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Ashburton Elementary	11.3%	12.0%	63.8%	65.4%	22.4%	19.0%	1.5%	2.2%	0.2%	0.1%	0.1%	0.0%	0.7%	1.2%	71.9%
Bannockburn Elementary	15.4%	16.4%	63.6%	59.6%	17.6%	20.1%	0.0%	0.2%	2.9%	2.3%	0.0%	0.0%	0.5%	1.3%	78.3%
Bayard Rustin Elementary	9.7%	11.9%	52.3%	46.5%	29.7%	30.2%	4.3%	6.7%	1.0%	0.8%	0.7%	0.5%	2.3%	3.4%	42.3%
Beall Elementary	24.5%	25.0%	37.9%	37.1%	32.8%	31.7%	1.4%	1.5%	2.1%	1.8%	0.3%	0.3%	1.0%	2.6%	75.5%
Bel Pre Elementary	0.8%	0.7%	73.6%	79.4%	21.9%	16.1%	2.1%	2.8%	0.5%	0.0%	0.7%	0.5%	0.3%	0.5%	81.1%
Bells Mill Elementary	13.2%	17.1%	37.2%	40.7%	40.1%	31.6%	2.2%	2.7%	4.8%	4.4%	0.7%	0.5%	1.8%	3.0%	89.2%
Belmont Elementary	8.3%	11.7%	51.9%	49.8%	27.7%	26.5%	2.2%	1.9%	7.6%	7.0%	0.0%	0.0%	2.2%	3.1%	92.8%
Bethesda Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Beverly Farms Elementary	15.1%	20.4%	39.2%	42.3%	39.8%	31.5%	5.1%	2.3%	0.0%	0.4%	0.0%	1.1%	0.8%	2.1%	45.8%
Bradley Hills Elementary	17.1%	22.3%	42.4%	40.0%	30.0%	27.3%	1.9%	0.6%	5.2%	4.5%	1.3%	0.3%	2.1%	5.0%	58.3%
Brooke Grove Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Brookhaven Elementary	14.0%	17.9%	49.0%	49.7%	34.1%	28.1%	2.1%	1.3%	0.4%	1.4%	0.0%	0.4%	0.4%	1.2%	66.7%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Brown Station Elementary	31.8%	37.9%	17.3%	19.0%	42.3%	34.0%	3.5%	5.6%	3.6%	0.6%	0.8%	1.4%	0.6%	1.6%	38.4%
Burning Tree Elementary	14.8%	15.0%	52.4%	58.0%	29.5%	23.9%	0.0%	0.6%	1.6%	0.3%	0.6%	1.0%	1.0%	1.3%	55.7%
Burnt Mills Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Burtonsville Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Candlewood Elementary	5.0%	6.6%	66.8%	66.3%	23.1%	23.4%	1.7%	0.6%	1.3%	0.7%	0.3%	0.4%	1.7%	2.1%	82.2%
Cannon Road Elementary	11.5%	11.1%	49.1%	51.3%	34.8%	33.4%	1.2%	1.8%	1.2%	0.0%	1.3%	0.0%	0.9%	2.5%	48.4%
Captain James E. Daly Elementary	23.2%	28.2%	27.8%	35.0%	41.1%	29.2%	3.8%	2.7%	0.7%	1.2%	0.7%	0.6%	2.7%	3.1%	85.3%
Carderock Springs Elementary	2.6%	4.6%	61.8%	71.4%	26.2%	18.4%	4.4%	2.0%	3.2%	2.6%	0.0%	1.0%	1.7%	0.0%	39.3%
Cashell Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Cedar Grove Elementary	1.3%	1.0%	81.4%	82.2%	16.0%	14.1%	0.3%	1.1%	0.0%	0.3%	0.0%	0.0%	1.0%	1.3%	74.6%
Chevy Chase Elementary	22.4%	21.9%	50.4%	51.7%	12.6%	12.4%	3.6%	3.6%	4.8%	4.5%	0.0%	0.0%	6.3%	5.9%	95.3%
Clarksburg Elementary	3.7%	3.5%	77.3%	79.3%	15.4%	14.3%	1.3%	1.3%	0.4%	0.2%	0.5%	0.2%	1.4%	1.3%	89.9%
Clearspring Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Clopper Mill Elementary	32.9%	35.7%	27.8%	30.5%	31.0%	28.0%	5.1%	4.0%	1.4%	1.2%	1.5%	0.3%	0.2%	0.2%	57.1%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Fields Road Elementary	25.8%	27.2%	46.4%	46.4%	23.2%	21.0%	1.6%	1.5%	0.7%	0.7%	1.0%	0.5%	1.2%	2.8%	70.1%
Flora M. Singer Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Flower Hill Elementary	23.1%	28.4%	38.1%	37.0%	33.7%	28.9%	2.4%	1.6%	1.5%	1.8%	0.3%	0.5%	1.0%	1.8%	91.4%
Flower Valley Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Forest Knolls Elementary	14.2%	17.1%	46.3%	45.4%	35.6%	31.6%	1.5%	2.8%	0.6%	1.3%	0.7%	0.4%	1.2%	1.4%	79.9%
Fox Chapel Elementary	24.3%	26.8%	47.4%	56.1%	25.4%	14.0%	2.4%	1.7%	0.2%	0.8%	0.2%	0.4%	0.0%	0.2%	87.2%
Gaithersburg Elementary	45.5%	48.4%	22.6%	23.0%	23.2%	19.5%	7.4%	7.3%	0.5%	0.2%	0.1%	0.5%	0.6%	1.0%	61.5%
Galway Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Garrett Park Elementary	15.7%	16.8%	50.8%	51.6%	24.8%	22.4%	2.7%	2.6%	2.6%	1.5%	0.4%	0.5%	3.0%	4.6%	82.1%
Georgian Forest Elementary	2.9%	2.6%	76.2%	80.9%	18.7%	13.7%	0.4%	0.7%	0.4%	0.6%	0.9%	0.5%	0.4%	1.0%	58.7%
Germantown Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Glen Haven Elementary	39.2%	49.8%	1.8%	2.0%	48.6%	38.9%	6.4%	3.7%	1.4%	2.3%	1.6%	2.1%	1.1%	1.2%	86.1%
Glenallan Elementary	22.7%	29.1%	36.1%	36.2%	36.0%	31.1%	2.8%	1.8%	1.9%	0.0%	0.0%	0.5%	0.6%	1.3%	32.4%
Goshen Elementary	1.5%	2.0%	66.1%	66.5%	26.6%	24.3%	1.3%	4.1%	0.9%	0.0%	0.8%	0.0%	2.8%	3.1%	38.2%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Lake Seneca Elementary	26.7%	30.4%	31.3%	33.1%	30.2%	26.6%	4.8%	4.5%	2.6%	1.4%	0.3%	1.0%	4.0%	3.0%	81.1%
Lakewood Elementary	6.0%	9.1%	59.6%	62.6%	29.2%	24.2%	3.1%	1.9%	1.0%	1.0%	0.0%	0.3%	1.1%	0.8%	57.4%
Laytonsville Elementary	1.9%	1.6%	69.7%	74.3%	23.1%	19.9%	2.2%	1.6%	1.2%	0.8%	0.9%	0.9%	1.0%	1.0%	77.3%
Little Bennett Elementary	22.2%	22.5%	40.6%	42.3%	31.1%	26.5%	3.6%	4.7%	0.7%	1.2%	0.8%	0.5%	1.0%	2.3%	71.9%
Lois P. Rockwell Elementary	6.4%	7.6%	58.1%	65.8%	33.2%	25.6%	1.2%	0.0%	0.3%	0.5%	0.4%	0.0%	0.4%	0.5%	73.1%
Lucy V. Barnsley Elementary	12.9%	12.9%	49.2%	54.2%	35.0%	29.5%	1.7%	1.9%	0.8%	0.9%	0.3%	0.2%	0.2%	0.4%	93.5%
Luxmanor Elementary	0.0%	0.4%	79.1%	82.0%	17.2%	13.9%	0.8%	1.1%	1.3%	1.3%	1.3%	1.3%	0.4%	0.0%	31.6%
Maryvale Elementary	0.6%	1.4%	78.8%	77.1%	15.7%	14.3%	1.7%	2.6%	1.2%	0.2%	0.0%	0.8%	2.1%	3.6%	64.7%
Meadow Hall Elementary	33.1%	38.1%	25.0%	25.6%	35.5%	28.4%	3.7%	3.2%	0.8%	0.5%	0.5%	0.5%	1.5%	3.9%	71.5%
Mill Creek Towne Elementary	5.6%	4.8%	56.6%	60.7%	31.2%	28.2%	3.8%	3.7%	0.3%	1.1%	0.0%	0.0%	2.6%	1.5%	75.6%
Monocacy Elementary	0.0%	0.0%	80.7%	87.7%	14.4%	9.4%	2.8%	2.9%	0.7%	0.0%	0.7%	0.0%	0.7%	0.0%	92.1%
Montgomery Knolls Elementary	7.4%	8.1%	66.0%	69.9%	23.1%	18.2%	1.5%	0.9%	1.0%	1.0%	0.3%	0.6%	0.7%	1.3%	86.8%
New Hampshire Estates Elementary	37.9%	42.9%	41.8%	39.9%	13.4%	11.3%	3.4%	1.5%	1.1%	1.9%	0.5%	1.1%	1.8%	1.4%	60.1%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
North Chevy Chase Elementary	18.2%	17.8%	63.2%	66.1%	13.3%	10.9%	0.5%	0.5%	3.1%	2.3%	0.0%	0.0%	1.6%	2.5%	88.4%
Oak View Elementary	17.7%	16.9%	60.0%	66.4%	17.1%	11.1%	1.7%	2.5%	1.1%	0.9%	1.5%	0.6%	0.9%	1.4%	81.3%
Oakland Terrace Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Olney Elementary	9.9%	17.7%	63.8%	68.3%	23.2%	10.3%	1.1%	1.3%	0.6%	1.7%	0.9%	0.0%	0.6%	0.7%	55.9%
Pine Crest Elementary	17.5%	17.2%	56.6%	55.2%	20.5%	20.7%	4.1%	5.7%	0.7%	0.7%	0.6%	0.3%	0.0%	0.3%	62.2%
Piney Branch Elementary	35.7%	37.4%	34.7%	32.4%	19.2%	20.1%	3.3%	0.5%	5.5%	5.1%	0.0%	0.8%	1.6%	3.6%	40.3%
Poolesville Elementary	13.1%	14.4%	44.2%	48.7%	33.8%	27.1%	3.3%	4.3%	1.3%	2.1%	1.0%	0.0%	3.5%	3.3%	44.5%
Potomac Elementary	0.0%	0.0%	83.8%	85.3%	13.3%	11.2%	1.7%	1.1%	0.0%	0.7%	1.2%	1.0%	0.0%	0.8%	83.8%
Rachel Carson Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Ritchie Park Elementary	7.3%	9.4%	55.4%	56.4%	31.5%	29.7%	0.9%	1.2%	2.5%	1.9%	0.6%	0.0%	1.8%	1.5%	89.3%
Rock Creek Forest Elementary	15.3%	19.0%	50.9%	54.2%	30.5%	22.3%	0.4%	0.6%	0.5%	1.1%	0.3%	0.2%	2.1%	2.5%	71.3%
Rock Creek Valley Elementary	16.0%	27.1%	42.2%	44.4%	37.3%	23.5%	1.6%	2.8%	0.9%	1.3%	0.3%	0.0%	1.7%	0.9%	37.1%
Rock View Elementary	14.8%	16.6%	44.2%	43.9%	34.3%	32.3%	3.7%	3.1%	1.4%	1.7%	0.9%	0.5%	0.6%	1.8%	91.5%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Rolling Terrace Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Ronald McNair Elementary	22.0%	27.5%	27.9%	28.8%	38.5%	33.6%	5.0%	2.0%	3.5%	2.8%	0.3%	0.9%	2.8%	4.4%	56.0%
Roscoe R. Nix Elementary	3.6%	5.4%	67.2%	71.7%	25.6%	19.3%	1.8%	2.1%	1.4%	1.4%	0.3%	0.0%	0.0%	0.0%	49.2%
Rosemary Hills Elementary	19.3%	19.6%	55.6%	53.7%	20.9%	21.8%	2.3%	1.0%	0.5%	0.3%	0.5%	1.1%	0.7%	2.6%	79.4%
Rosemont Elementary	2.5%	3.1%	68.6%	70.3%	24.8%	21.4%	1.9%	2.1%	0.6%	0.8%	0.8%	1.0%	0.8%	1.4%	88.7%
S. Christa McAuliffe Elementary	21.4%	23.3%	48.3%	51.4%	22.5%	17.4%	3.8%	3.4%	0.8%	1.3%	1.0%	1.3%	2.1%	1.9%	88.4%
Sargent Shriver Elementary	22.8%	25.4%	39.7%	41.1%	29.4%	24.6%	4.5%	4.8%	0.7%	1.0%	1.3%	1.4%	1.7%	1.7%	88.7%
Sequoyah Elementary	0.9%	1.8%	79.0%	80.5%	18.4%	15.0%	0.3%	0.6%	0.6%	1.2%	0.6%	0.0%	0.3%	0.9%	89.1%
Seven Locks Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Sherwood Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Sligo Creek Elementary	20.7%	21.3%	33.7%	36.0%	39.9%	36.9%	1.9%	2.1%	2.7%	2.3%	0.4%	0.6%	0.7%	0.8%	68.2%
Snowden Farm Elementary	48.6%	48.6%	10.9%	18.1%	25.5%	19.4%	12.5%	11.2%	0.7%	1.6%	0.2%	0.2%	1.7%	0.8%	55.1%
Somerset Elementary	28.0%	28.4%	48.5%	40.9%	15.4%	19.7%	1.2%	1.4%	4.4%	4.9%	0.0%	0.4%	2.5%	4.3%	84.3%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
South Lake Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Spark M. Matsunaga Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Stedwick Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Stone Mill Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Stonegate Elementary	8.9%	11.1%	50.7%	50.3%	33.9%	30.2%	4.6%	3.9%	0.9%	0.8%	0.8%	0.5%	0.2%	3.3%	69.9%
Strathmore Elementary	2.7%	4.3%	72.7%	78.0%	19.3%	11.2%	2.2%	2.7%	0.9%	0.9%	1.7%	1.5%	0.5%	1.4%	82.0%
Strawberry Knoll Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Summit Hall Elementary	25.5%	29.0%	41.3%	43.0%	25.0%	20.9%	4.7%	3.5%	1.4%	1.4%	1.4%	1.2%	0.9%	1.1%	85.3%
Takoma Park Elementary	27.4%	29.6%	45.4%	42.3%	22.3%	24.6%	2.1%	1.0%	0.8%	0.6%	1.0%	0.4%	1.0%	1.5%	78.9%
Thurgood Marshall Elementary	8.1%	10.5%	59.7%	64.0%	29.8%	21.4%	0.6%	1.8%	0.6%	0.8%	0.2%	0.6%	1.0%	0.8%	90.5%
Travilah Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Twinbrook Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Viers Mill Elementary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Washington Grove Elementary	4.9%	4.2%	78.2%	78.9%	14.8%	14.2%	0.6%	1.7%	0.8%	0.6%	0.0%	0.0%	0.7%	0.4%	50.8%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Forest Oak Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Francis Scott Key Middle	3.2%	7.0%	81.1%	83.9%	13.4%	6.9%	0.6%	0.6%	0.0%	0.0%	1.3%	0.9%	0.3%	0.7%	62.9%
Gaithersburg Middle	26.5%	33.9%	47.2%	47.1%	20.8%	13.4%	2.6%	1.8%	0.3%	0.6%	2.0%	1.8%	0.6%	1.3%	70.2%
Hallie Wells Middle	31.6%	42.9%	21.7%	24.8%	29.2%	15.5%	10.2%	9.9%	4.5%	4.6%	0.8%	0.3%	2.0%	2.0%	90.4%
Herbert Hoover Middle	10.5%	18.6%	55.9%	63.7%	28.8%	13.0%	3.4%	3.0%	0.9%	0.9%	0.2%	0.2%	0.4%	0.6%	81.9%
John Poole Middle	4.7%	7.0%	63.0%	75.4%	24.4%	11.5%	3.1%	1.7%	3.1%	3.1%	0.0%	0.0%	1.7%	1.4%	91.8%
John T. Baker Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Julius West Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Kingsview Middle	16.8%	26.2%	42.8%	47.5%	33.6%	16.3%	4.2%	3.7%	1.8%	1.6%	0.9%	4.2%	0.0%	0.4%	82.2%
Lakelands Park Middle	17.3%	25.8%	54.2%	57.7%	21.9%	10.4%	3.1%	1.6%	2.6%	2.7%	0.3%	0.9%	0.6%	0.9%	79.4%
Montgomery Village Middle	28.8%	45.7%	25.7%	26.0%	34.9%	19.4%	5.5%	2.4%	1.4%	1.4%	2.8%	4.6%	0.9%	0.6%	72.8%
Neelsville Middle	0.0%	0.0%	83.0%	89.9%	12.1%	6.3%	0.9%	0.0%	0.0%	0.0%	4.0%	2.8%	0.0%	1.0%	15.0%
Newport Mill Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
North Bethesda Middle	12.3%	15.2%	67.6%	71.3%	14.8%	7.9%	1.3%	0.4%	3.4%	3.1%	0.2%	1.5%	0.5%	0.6%	87.8%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Parkland Middle	4.2%	5.7%	58.5%	62.9%	27.0%	18.7%	8.4%	8.7%	0.3%	0.2%	1.3%	3.1%	0.4%	0.7%	92.4%
Redland Middle	1.4%	1.7%	89.1%	93.0%	8.6%	4.6%	0.2%	0.0%	0.2%	0.2%	0.4%	0.0%	0.2%	0.6%	78.0%
Ridgeview Middle	7.4%	10.9%	75.8%	76.9%	13.8%	8.0%	1.1%	1.4%	0.3%	0.5%	1.4%	1.9%	0.3%	0.4%	73.2%
Robert Frost Middle	7.1%	11.3%	66.8%	76.4%	20.3%	7.1%	2.0%	1.0%	3.1%	3.1%	0.3%	0.9%	0.3%	0.1%	68.4%
Roberto W. Clemente Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Rocky Hill Middle	4.8%	5.9%	80.1%	86.6%	13.8%	6.0%	0.7%	0.8%	0.1%	0.1%	0.1%	0.3%	0.4%	0.3%	84.6%
Rosa Parks Middle	7.2%	13.6%	65.4%	68.9%	19.9%	9.3%	5.5%	5.0%	1.7%	2.3%	0.3%	0.1%	0.0%	0.7%	87.1%
Shady Grove Middle	6.7%	9.1%	76.8%	79.7%	14.4%	9.6%	0.6%	0.4%	0.2%	0.2%	1.0%	1.0%	0.2%	0.0%	85.6%
Silver Creek Middle	6.0%	6.6%	83.1%	87.2%	9.0%	3.3%	0.3%	0.4%	1.5%	1.7%	0.1%	0.7%	0.0%	0.1%	83.3%
Silver Spring International Middle	16.1%	19.2%	53.9%	59.1%	19.4%	10.4%	2.0%	0.8%	3.0%	3.1%	4.7%	6.5%	0.8%	0.9%	70.6%
Sligo Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Takoma Park Middle	29.1%	36.0%	40.6%	45.5%	17.1%	7.5%	5.5%	0.4%	1.5%	1.5%	3.5%	5.2%	2.6%	4.0%	40.2%
Thomas W. Pyle Middle	11.6%	14.9%	70.5%	75.1%	13.4%	5.4%	1.3%	1.1%	2.8%	2.8%	0.1%	0.4%	0.1%	0.1%	33.6%
Tilden Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Westland Middle	13.9%	18.0%	71.1%	72.4%	11.4%	5.3%	0.6%	0.5%	1.5%	1.3%	0.5%	0.9%	0.9%	1.5%	74.1%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
White Oak Middle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
William H. Farquhar Middle	0.5%	0.9%	76.0%	86.6%	19.8%	11.5%	3.1%	0.5%	0.3%	0.2%	0.2%	0.4%	0.0%	0.0%	83.0%

Figure 9: High School Student Survey Results

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
Albert Einstein High	12.0%	19.0%	44.1%	45.6%	32.4%	19.9%	7.1%	4.0%	0.2%	0.2%	3.7%	10.6%	0.5%	0.6%	54.7%
Bethesda-Chevy Chase High	17.7%	23.8%	42.4%	40.6%	20.8%	9.2%	10.3%	6.2%	4.6%	4.6%	3.8%	15.1%	0.4%	0.6%	40.4%
Clarksburg High	5.9%	10.7%	53.1%	60.1%	31.5%	17.9%	6.7%	6.5%	0.2%	0.3%	1.7%	3.5%	1.0%	1.0%	59.1%
Col. Zadok Magruder High	1.4%	1.8%	67.4%	75.4%	23.5%	14.9%	6.0%	5.4%	0.2%	0.3%	1.0%	1.4%	0.5%	0.7%	58.0%
Damascus High	6.8%	8.8%	46.7%	51.7%	37.0%	28.3%	7.8%	8.6%	0.0%	0.1%	0.6%	1.2%	1.1%	1.2%	76.9%
Gaithersburg High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
James Hubert Blake High	0.8%	1.8%	69.4%	73.0%	26.5%	20.2%	2.9%	3.0%	0.0%	0.0%	0.2%	1.8%	0.2%	0.2%	31.8%

School	Walk to School	Walk from School	School Bus to School	School Bus from School	Family Car to School	Family Car from School	Carpool to School	Carpool from School	Bike to School	Bike from School	Public Transit to School	Public Transit from School	Other to School	Other from School	Response Rate
John F. Kennedy High	9.2%	11.5%	54.1%	51.4%	26.9%	15.0%	1.6%	1.6%	0.1%	0.1%	7.8%	20.0%	0.3%	0.5%	60.0%
Montgomery Blair High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Northwest High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Northwood High	11.5%	16.9%	43.4%	41.0%	29.6%	14.9%	3.2%	2.4%	0.7%	0.7%	11.2%	23.6%	0.4%	0.5%	52.4%
Paint Branch High	2.7%	5.0%	61.9%	67.8%	27.6%	18.3%	3.2%	2.6%	0.1%	0.1%	3.7%	4.7%	0.9%	1.5%	49.3%
Poolesville High	7.6%	13.2%	55.5%	56.5%	30.8%	21.3%	4.3%	5.9%	1.2%	1.2%	0.3%	1.3%	0.3%	0.5%	50.8%
Quince Orchard High	8.0%	15.9%	33.0%	35.2%	38.8%	23.8%	15.6%	14.0%	1.4%	1.0%	2.4%	9.1%	0.8%	1.0%	43.5%
Richard Montgomery High	10.9%	15.7%	43.3%	48.5%	34.6%	19.3%	6.4%	4.3%	1.5%	1.4%	3.1%	10.2%	0.3%	0.7%	54.5%
Rockville High	12.7%	17.4%	39.4%	39.4%	33.7%	23.8%	9.3%	10.6%	0.5%	0.5%	3.5%	7.2%	0.7%	1.1%	30.9%
Seneca Valley High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Less than 15%
Sherwood High	2.5%	3.5%	49.1%	56.8%	36.2%	27.0%	9.9%	9.7%	0.2%	0.3%	0.9%	1.8%	1.1%	0.9%	76.1%
Springbrook High	3.1%	5.6%	60.2%	65.3%	29.3%	19.4%	3.5%	2.3%	0.5%	0.5%	3.0%	6.3%	0.3%	0.5%	31.3%
Thomas S. Wootton High	7.0%	12.0%	41.8%	48.2%	36.2%	24.7%	12.9%	9.9%	1.4%	2.1%	0.1%	3.1%	0.5%	0.1%	29.7%
Walt Whitman High	8.9%	16.0%	34.7%	41.8%	35.5%	19.7%	17.1%	14.9%	2.3%	2.3%	1.1%	4.6%	0.4%	0.6%	77.8%

