



2017/2018 Regional Travel Survey In-Depth Analysis

School Trips: Share of Total Trips, Trip Times

In the Fall of 2019, TPB staff began releasing the preliminary results of the Regional Travel Survey. The RTS is a once-a-decade household travel survey which collected detailed information about households and their daily travel obtained from a travel diary. TPB staff asked regional stakeholders to offer questions that the RTS might help inform. The piece is part of a series of responses to thought-provoking questions offered by our stakeholders.

QUESTIONS

- What share of drop off/pick up trips in the TPB Planning Region are school and day care trips?
- What share of school trips are performed by university students in the TPB Planning Region?
- What share of drop off/pick up trips in the TPB Planning Region are performed in the following time periods?
 - 6 am to 9 am (AM peak)
 - 9 am to 3 pm (midday)
 - 3 pm to 7 pm (PM peak)
 - All other times
- What is the share of school trips out of total trips for the region, subregional area, and county-level jurisdiction?

INTRODUCTION

The 2017/2018 Regional Travel Survey (RTS) data can reveal insights about various kinds of trips taken in the Washington metropolitan region. A notable share of trips in the region are school and day care trips, in addition to drop off and pick up trips to and from schools. School trips include trips to K-12 schools and universities taken by the child alone or accompanied by an adult. This question takes a deeper dive into school trips in the region and how drop off/pick up trips vary based on time of day (i.e., peak and off-peak periods). The primary source of data is from the one-day travel diary that was completed by all household members who participated in the survey.

APPROACH

We examined several dimensions of travel pertaining to school trips in the TPB Planning Region, including the share of drop off/pick up trips in the region that are school/day care trips and the share of school trips performed by university students. We also conducted a temporal analysis of drop off/pick up trips based on the AM peak, midday, PM peak, and all other times. Finally, the share of school trips out of total trips for the region, subregional area, and county-level jurisdictions were tabulated.

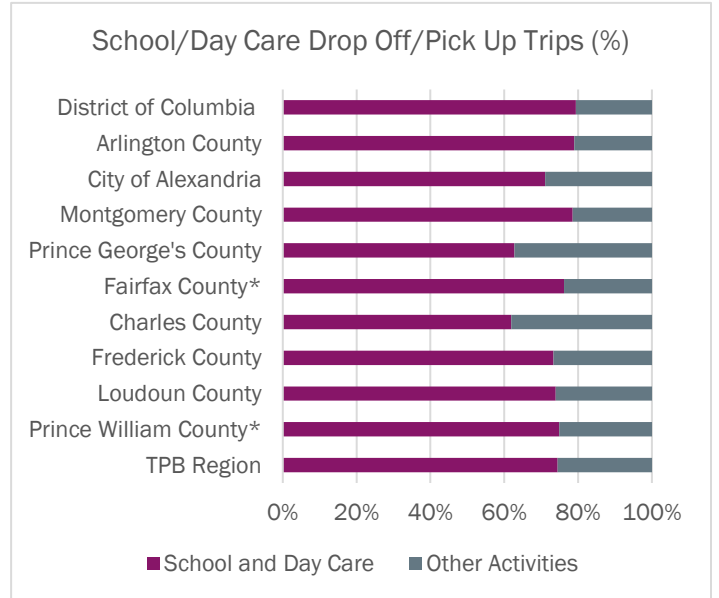
Detailed breakdowns of each part of these questions are shown in the tables and charts below, with key takeaways for each. Highlighting is used in certain tables for emphasis. In advance of preparing these responses, the tabulations were reviewed for accuracy and robustness. To create these tables for the TPB Planning Region, the survey results were expanded using weights that considered the probability of selection of individual households as well as adjustments for household size, workplace location, and Metrorail ridership.

ANALYSIS AND KEY FINDINGS

A. School and Day Care Drop Off/Pick Up Trips

Jurisdiction	Drop off/Pick Up Trips (%)	
	School and Day Care	Other Activities
District of Columbia	79.4	20.6
Arlington County	79.0	21.0
City of Alexandria	71.1	28.9
Montgomery County	78.5	21.5
Prince George's County	62.8	37.2
Fairfax County*	76.2	23.8
Charles County	61.9	38.1
Frederick County	73.3	26.7
Loudoun County	73.9	26.1
Prince William County*	74.9	25.1
TPB Region	74.5	25.5

*Fairfax County includes the independent cities of Fairfax and Falls Church. Prince William County includes the independent cities of Manassas and Manassas Park.



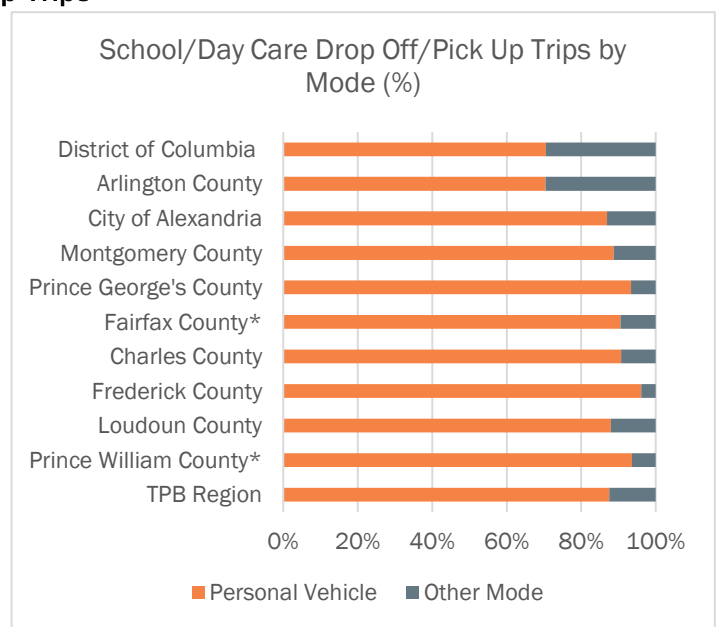
Key Findings for school and day care drop off/pick up trips:

- About three-quarters of drop off/pick up trips are school and day care trips in the region
- Highest share of school/day care drop off/pick up trips in DC, Arlington County, and Montgomery County; lower share of school/day care drop off/pick up trips in Prince George's County and Charles County

B. Mode of School/Day Care Drop Off/Pick Up Trips

Jurisdiction	Drop Off /Pick Up Trips (%)	
	Personal Vehicle	Other Mode
District of Columbia	70.5	29.5
Arlington County	70.4	29.6
City of Alexandria	86.9	13.1
Montgomery County	88.7	11.3
Prince George's County	93.4	6.6
Fairfax County*	90.5	9.5
Charles County	90.7	9.3
Frederick County	96.1	3.9
Loudoun County	88.0	12.0
Prince William County*	93.6	6.4
TPB Region	87.5	12.5

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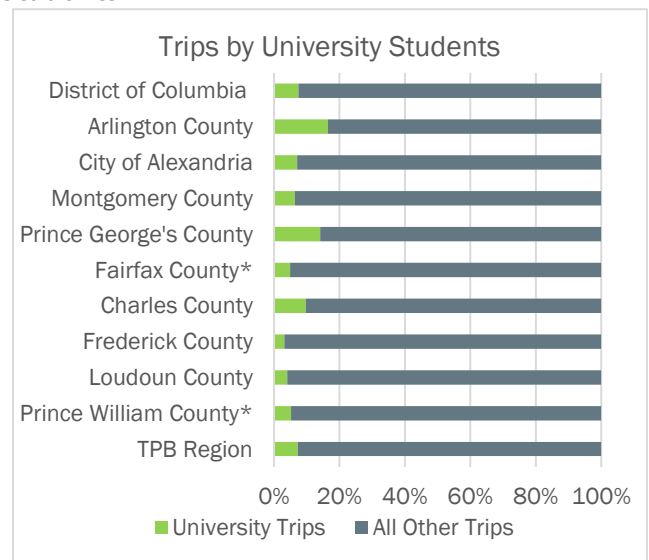
Key Findings for Mode of School/Day Care Drop Off/Pick Up Trips:

- Most school/day care drop off/pick up trips were performed using personal vehicles in the region
- Lowest share of school/day care drop off/pick up trips in a personal vehicle in DC and Arlington County. Other modes included rail and bus transit, walk, bicycle, and taxi/ridehail.
- In the suburbs, the lowest share of school/day care drop off/pick up trips in a personal vehicle in Montgomery County and Loudoun County

C. Share of School Trips Performed by University Students

Home Jurisdiction	University Student Trips (%)	
	University Trips	All Other Trips
District of Columbia	7.5	92.5
Arlington County	16.5	83.5
City of Alexandria	7.1	92.9
Montgomery County	6.4	93.6
Prince George's County	14.1	85.9
Fairfax County*	4.9	95.1
Charles County	9.7	90.3
Frederick County	3.2	96.8
Loudoun County	4.0	96.0
Prince William County*	5.2	94.8
TPB Region	7.3	92.7

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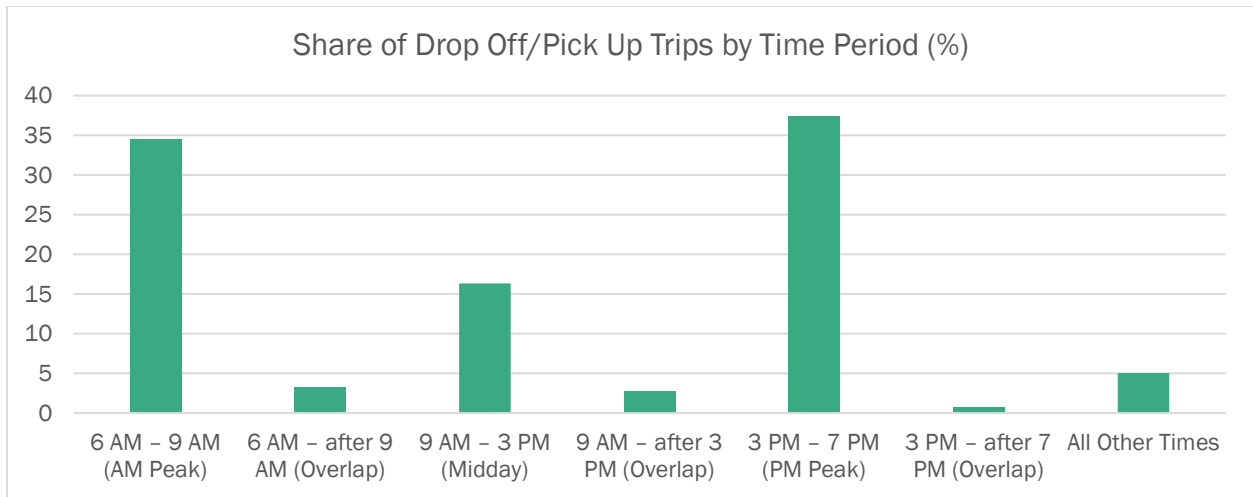


Key Findings for Share of School Trips Performed by University Students:

- Highest share of school trips taken by university students in Arlington County and Prince George's County

D. Share of Drop Off/Pick Up Trips by Time Period

Trip Start and End Times	Drop Off/Pick Up Trips (%)
6 AM – 9 AM (AM Peak)	34.5
6 AM – after 9 AM (Overlap)	3.2
9 AM – 3 PM (Midday)	16.3
9 AM – after 3 PM (Overlap)	2.8
3 PM – 7 PM (PM Peak)	37.4
3 PM – after 7 PM (Overlap)	0.7
All Other Times	5.0



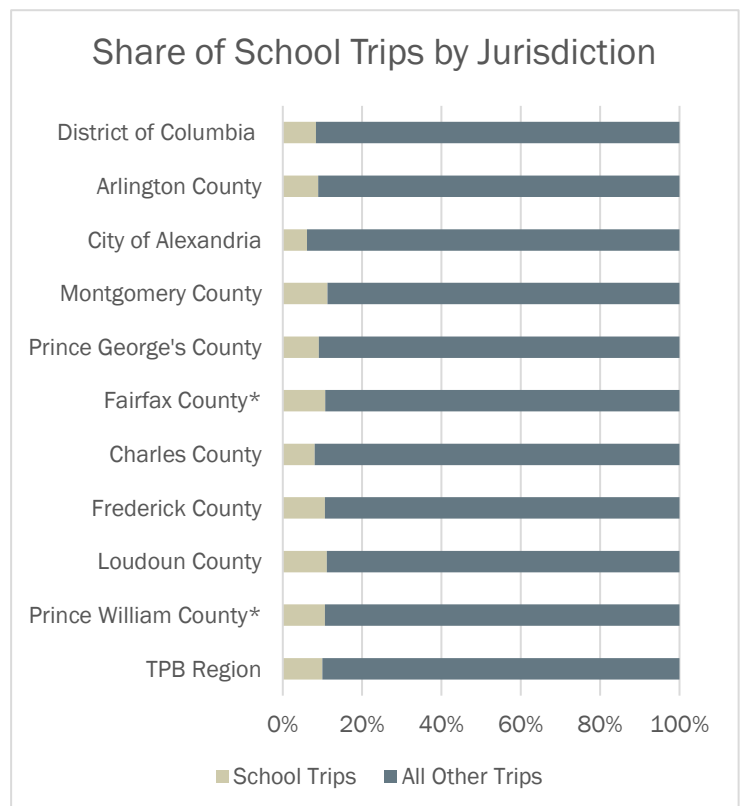
Key Findings for Share of Drop Off/Pick Up Trips by Time Period:

- Highest share of drop off/pick up trips during PM peak, followed by AM peak

E. Share of School Trips out of Total Trips for the Region, Subregional Area, and County-Level Jurisdiction:

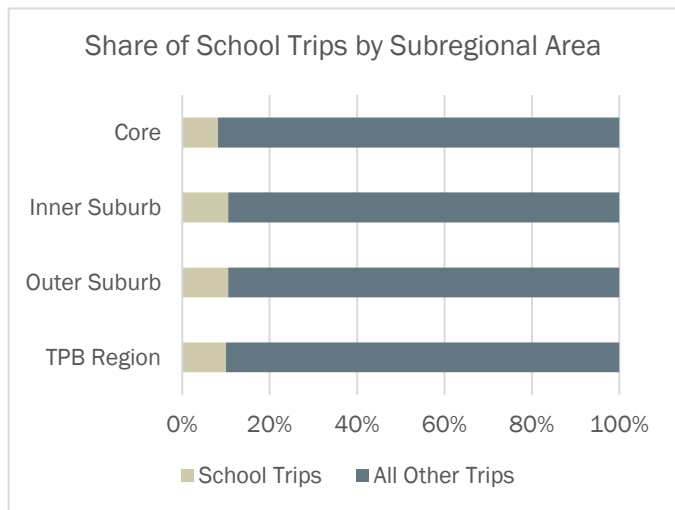
Jurisdiction	All Trips (%)	
	School Trips	All Other Trips
District of Columbia	8.4	91.6
Arlington County	8.9	91.1
City of Alexandria	6.1	93.9
Montgomery County	11.3	88.7
Prince George's County	9.1	90.9
Fairfax County*	10.7	89.3
Charles County	8.0	92.0
Frederick County	10.6	89.4
Loudoun County	11.1	88.9
Prince William County*	10.6	89.4
TPB Region	10.0	90.0

*Fairfax County includes the independent cities of Fairfax and Falls Church. Prince William County includes the independent cities of Manassas and Manassas Park.



Subregional Area	School Trips	All Other Trips
Core	8.2	91.8
Inner Suburb	10.5	89.5
Outer Suburb	10.5	89.5
TPB Region	10.0	90.0

*Core jurisdictions include the District of Columbia, Arlington County, and the City of Alexandria. Inner Suburb jurisdictions include Montgomery County, Prince George’s County, and Fairfax County (including City of Fairfax and City of Falls Church. Outer Suburb jurisdictions include Charles County, Frederick County, Loudoun County, and Prince William County (including City of Manassas and City of Manassas Park).



Key Findings for Share of School Trips out of Total Trips for the Region, Subregional Area, and County-Level Jurisdiction:

Region

- For the region, one in ten trips are school trips

County-Level Jurisdiction

- Lowest share of school trips in the City of Alexandria
- Highest share of school trips in Montgomery County

Subregional Area

- Lower share of school trips in the regional core compared with the inner and outer suburbs

SUMMARY OF FINDINGS

The RTS data show that school trips and drop off and pick up trips to and from schools vary across the region.

- For school and day care drop off/pick up trips, there was a lower share of school/day care drop off/pick up trips in Prince George’s County and Charles County.
- For the travel mode of school/day care drop off and pick up trips, the lowest share of trips in a personal vehicle was in DC and Arlington County. This suggests the greater availability of non-auto modes in addition to more walking and biking to and from school.
- The highest share of school trips taken by university students is in Arlington County and Prince George’s County, where many universities are located.
- The largest share of drop off/pick up trips is during the PM peak period, followed by the AM peak.
- Ten percent of trips in the region are school trips, with the lowest share of school trips in the City of Alexandria and the highest share of school trips in Montgomery County.