

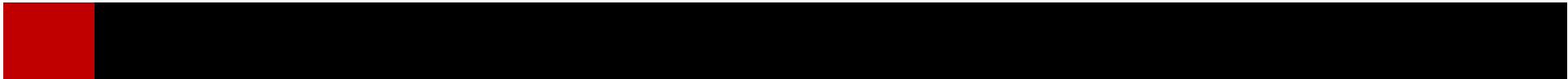


Arlington Public Schools
Thomas Jefferson Site Evaluation
Preliminary Findings

Thomas Jefferson Working Group Meeting #2
October 1, 2014



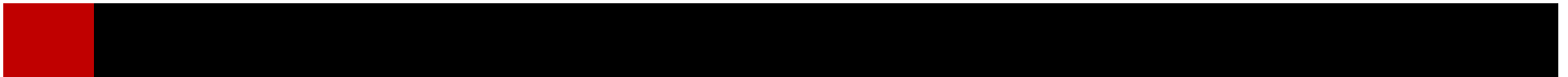
INTRODUCTION



Work Completed



- Observations and mode counts during arrival & dismissal on a typical day
- Intersection counts (cars, trucks, pedestrians, bicyclists)
- Daily roadway counts (car volume, speed and class)
- Parking counts
- Crash data
- Infrastructure assessment
- Intersection operational analysis
- Parent, student, staff surveys
- Special event observations



Work In Process



- Inclement weather day observations
- Community center user survey
- Data on use of theatre, cooking kitchen, community center, fields and courts
- Case studies of similar sites
- Analysis of existing transit service
- Infrastructure recommendations
- Assess impacts of new school and middle school expansion on transportation network
- Coordinate with design team on site layout
- Parking supply considerations
- SRTS Team

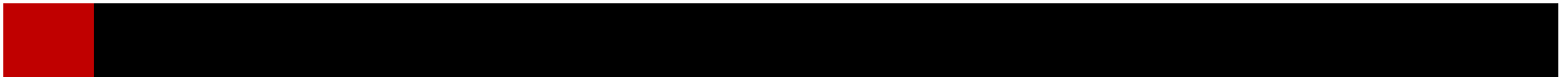
Key questions for our analysis



How does the transportation system currently operate on and surrounding the TJ campus?

What is the Transportation Demand Management (TDM) potential for the TJ campus?

How might the transportation system operate if a new elementary school is built?

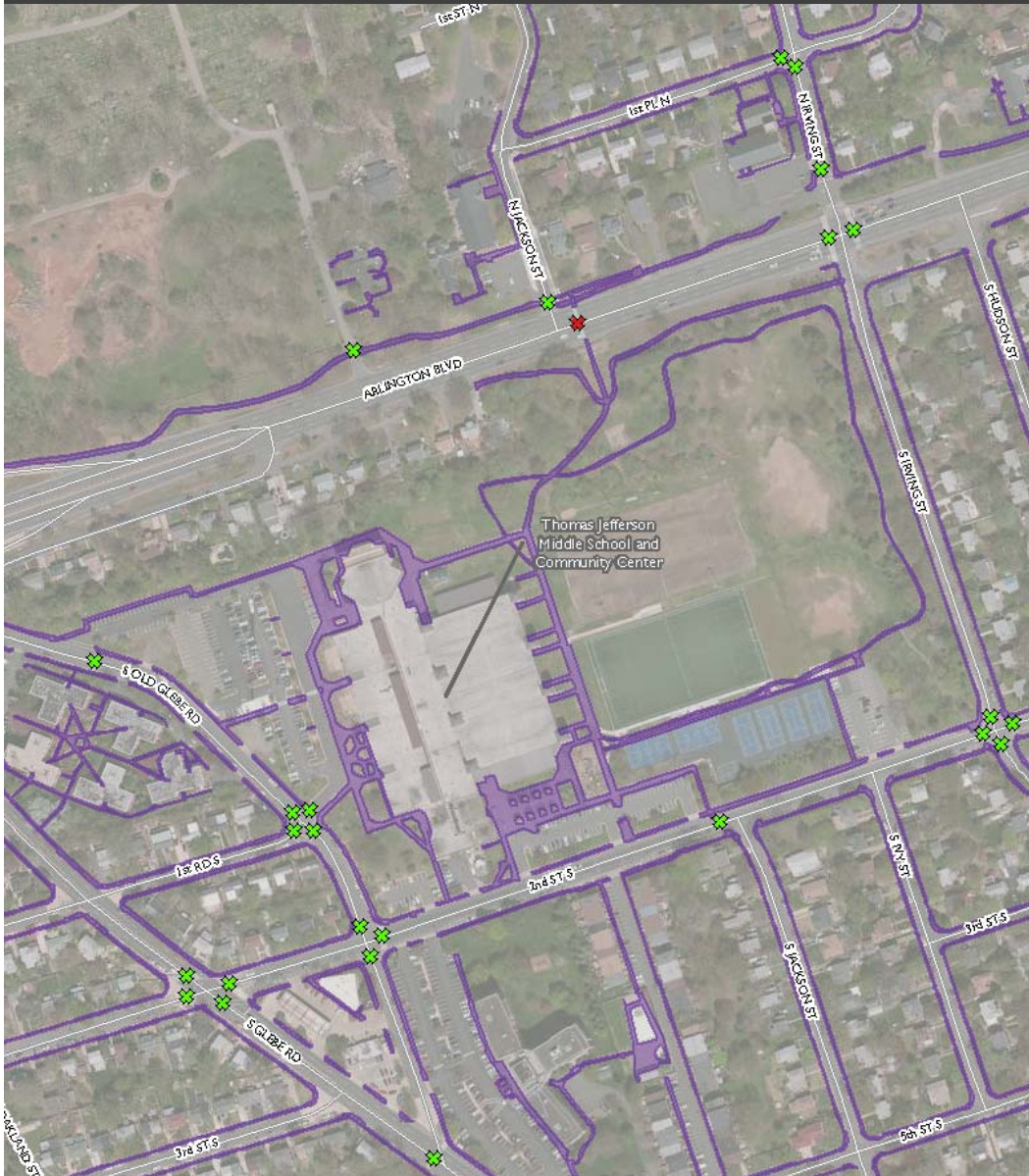




HOW DOES THE TRANSPORTATION SYSTEM CURRENTLY OPERATE ON THE TJ CAMPUS?


Transportation System Infrastructure


Pedestrian Infrastructure



Pedestrian Facilities

 Marked Crossing

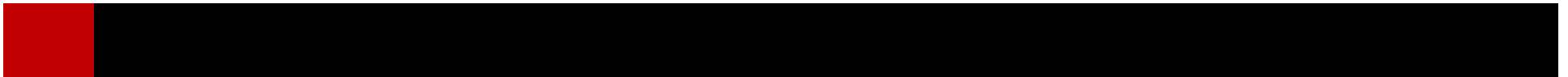
 Pedestrian Bridge

 Sidewalks

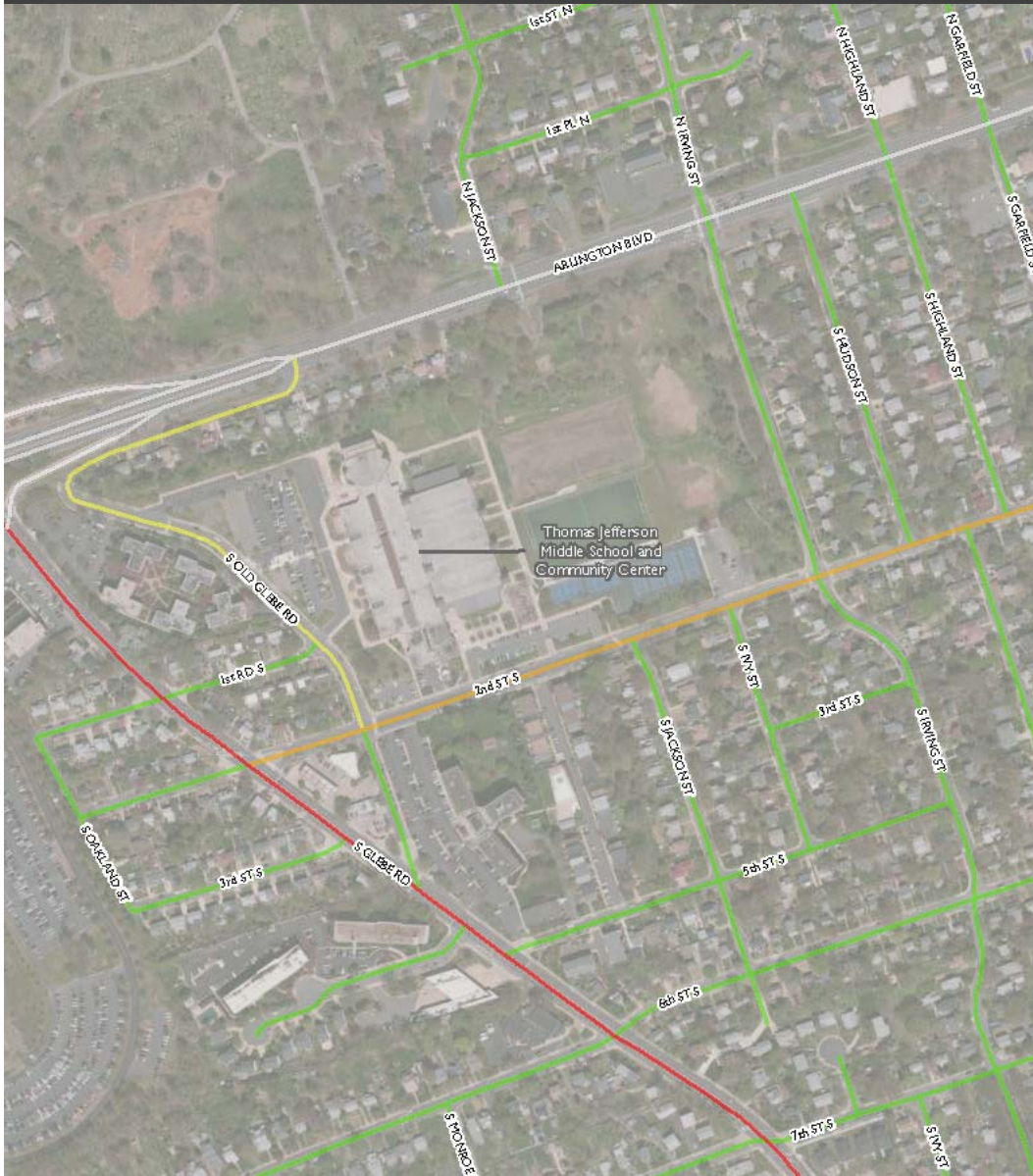
Transit Infrastructure—Bus Schedules






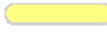
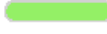

Route	Art 41	4A	10B	23A/23B/23T
Stops on roads...	S. Glebe Road	Arlington Blvd	S. Glebe Road and 2 nd Street	S. Glebe Road
Hours, Monday to Friday	5:30 a.m. to 12:55 a.m.	5:30 a.m. to 12:50 a.m.	5:35 a.m. to 1:40 a.m.	5:30 a.m. to 1:20 a.m.
Headways between 7 a.m. and 5 p.m.	15 to 20 minutes	5 to 40 minutes combined	30 minutes	10 to 30 minutes combined



Motor Vehicle Infrastructure—Roads



Streets by Class

-  Controlled Access Highway
-  Principal Arterial
-  Minor Arterial
-  Neighborhood Principal
-  Neighborhood Minor
-  Private/Non-County



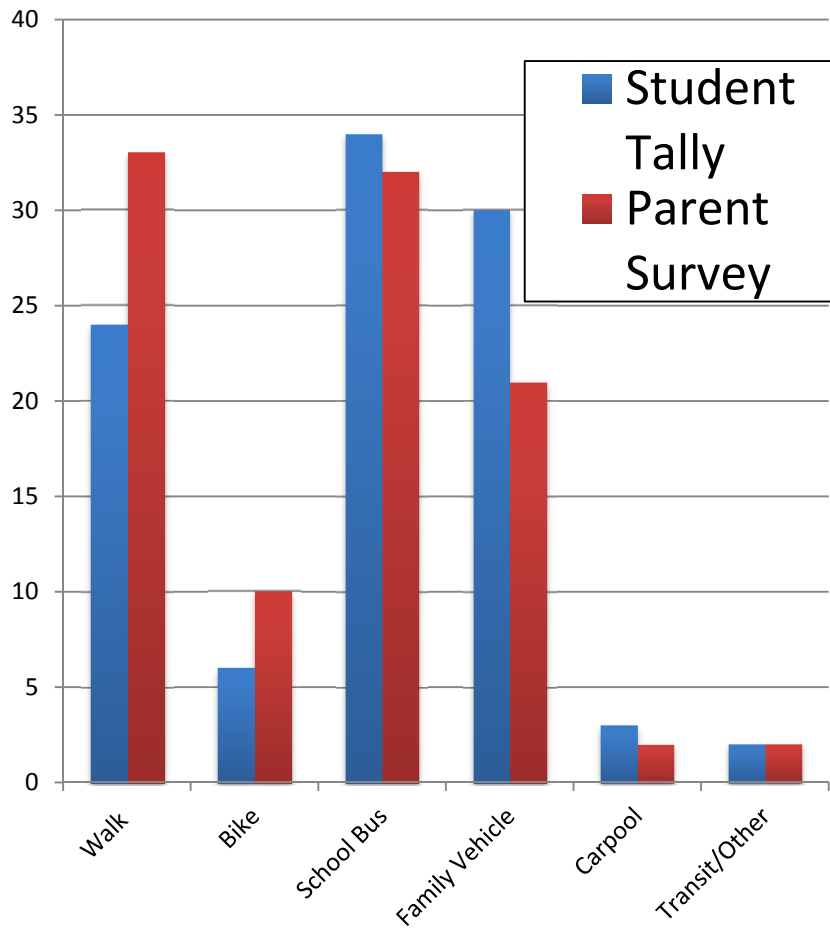
HOW DOES THE TRANSPORTATION SYSTEM CURRENTLY OPERATE ON THE TJ CAMPUS?

Transportation System Use

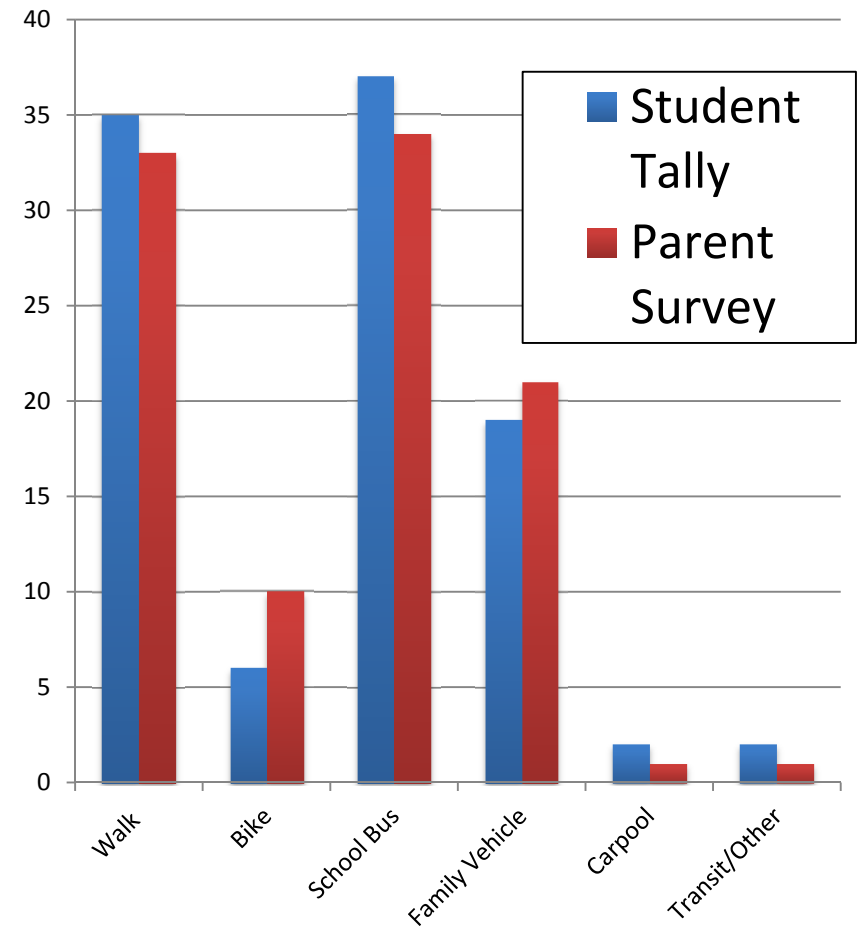
School Travel Modes - Students



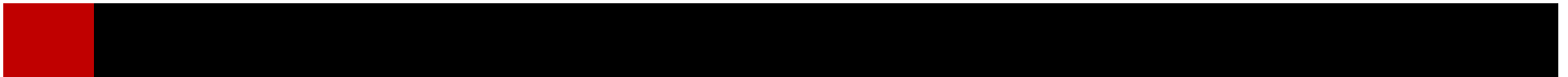
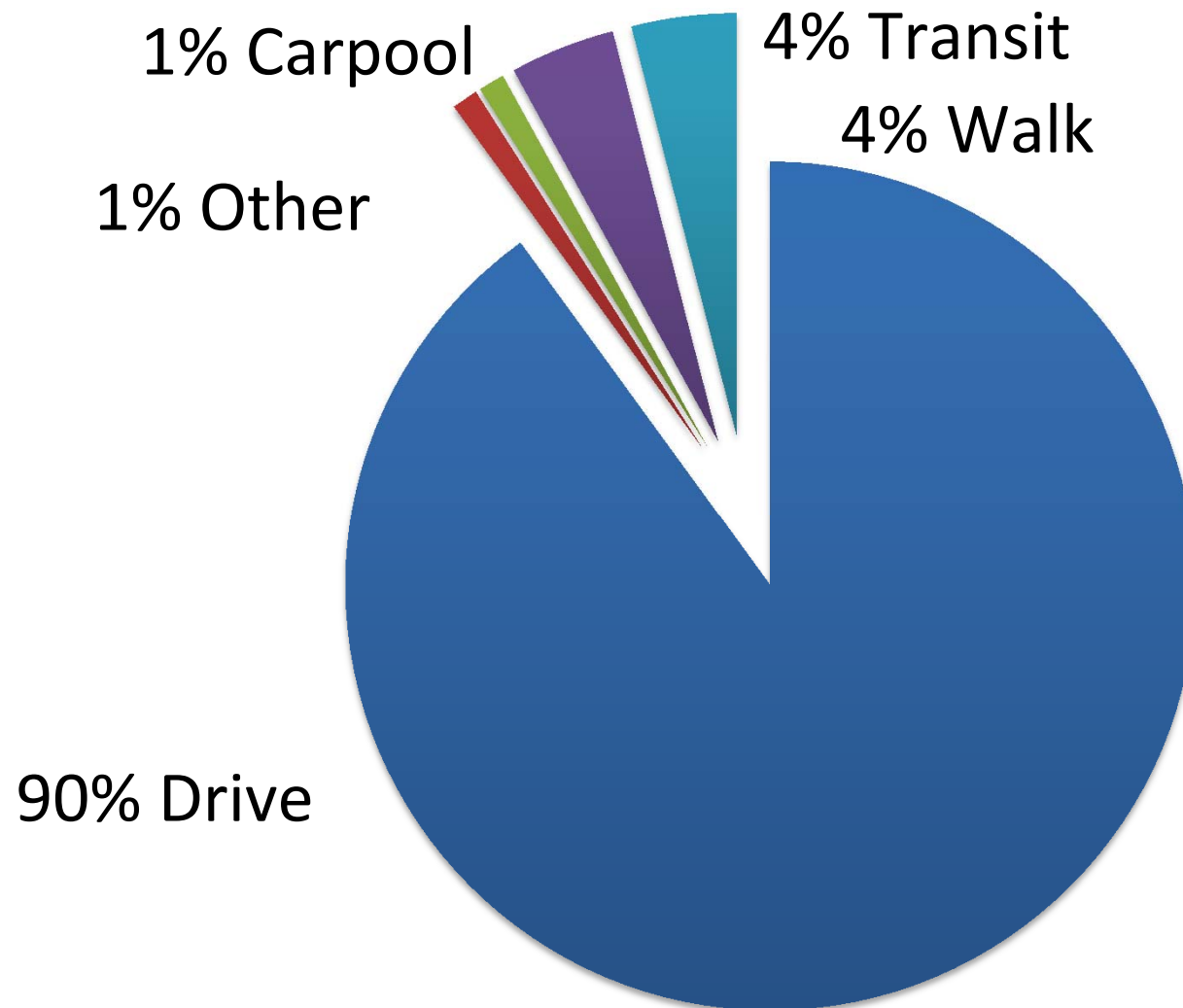
To School



From School



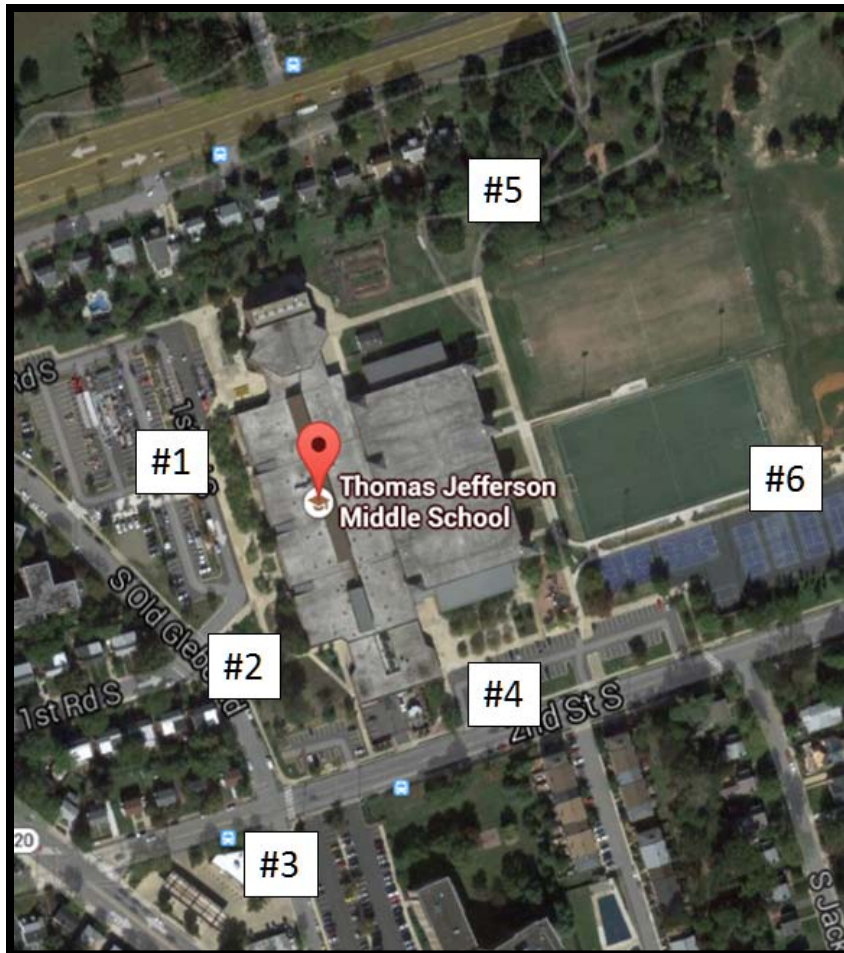
School Travel Modes - Staff



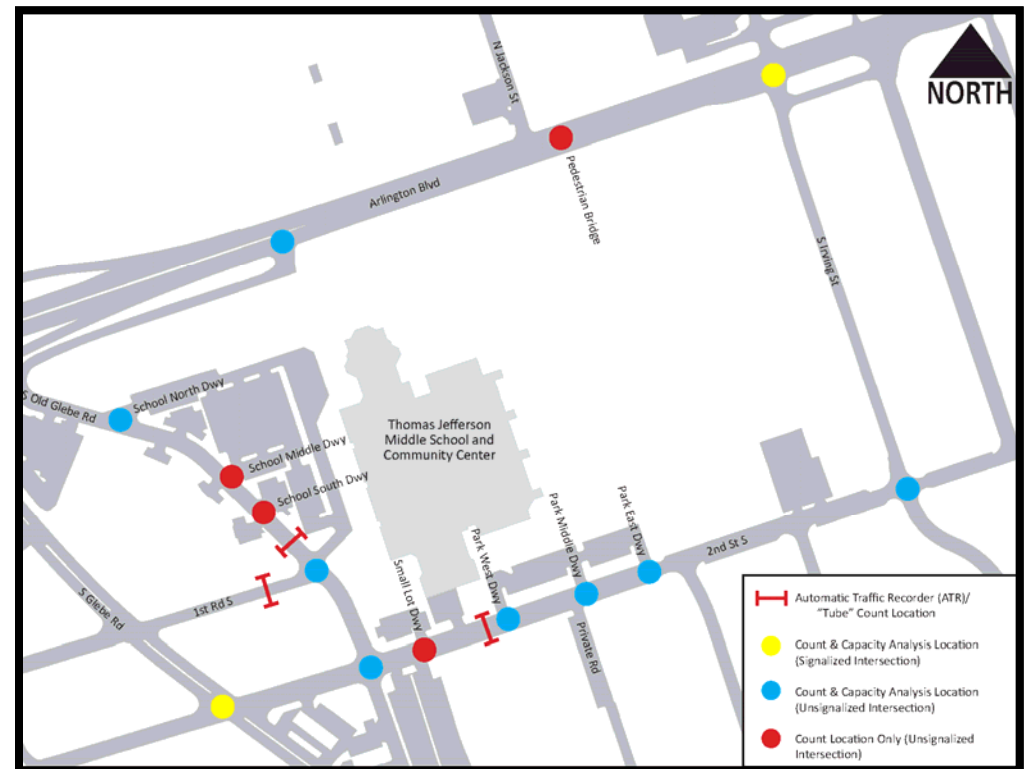
Observations and Counts during Arrival and Dismissal



Observation & Mode Count Locations

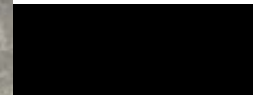


Traffic Count Locations



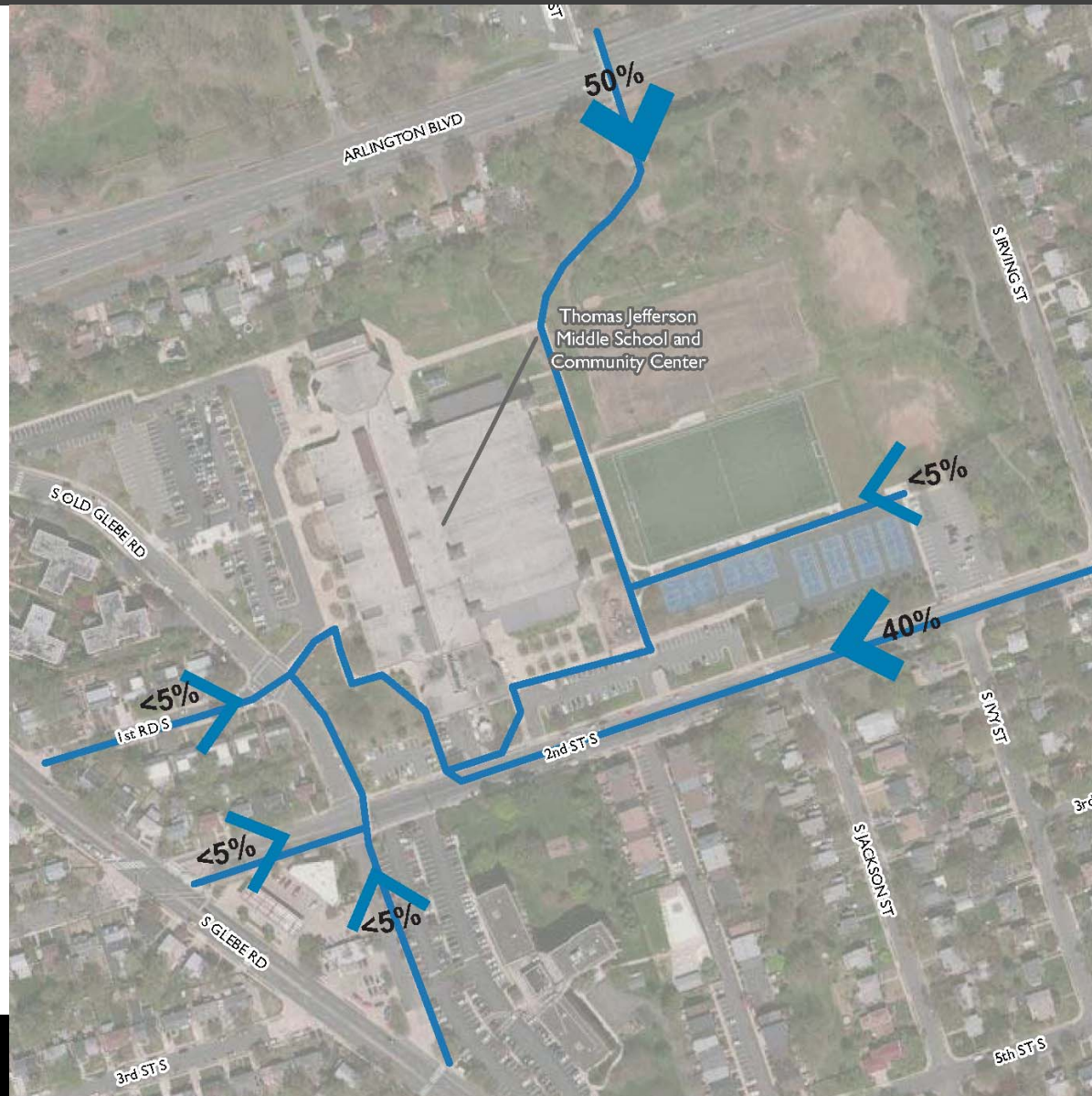
Arrival Circulation & Counts

Walkers



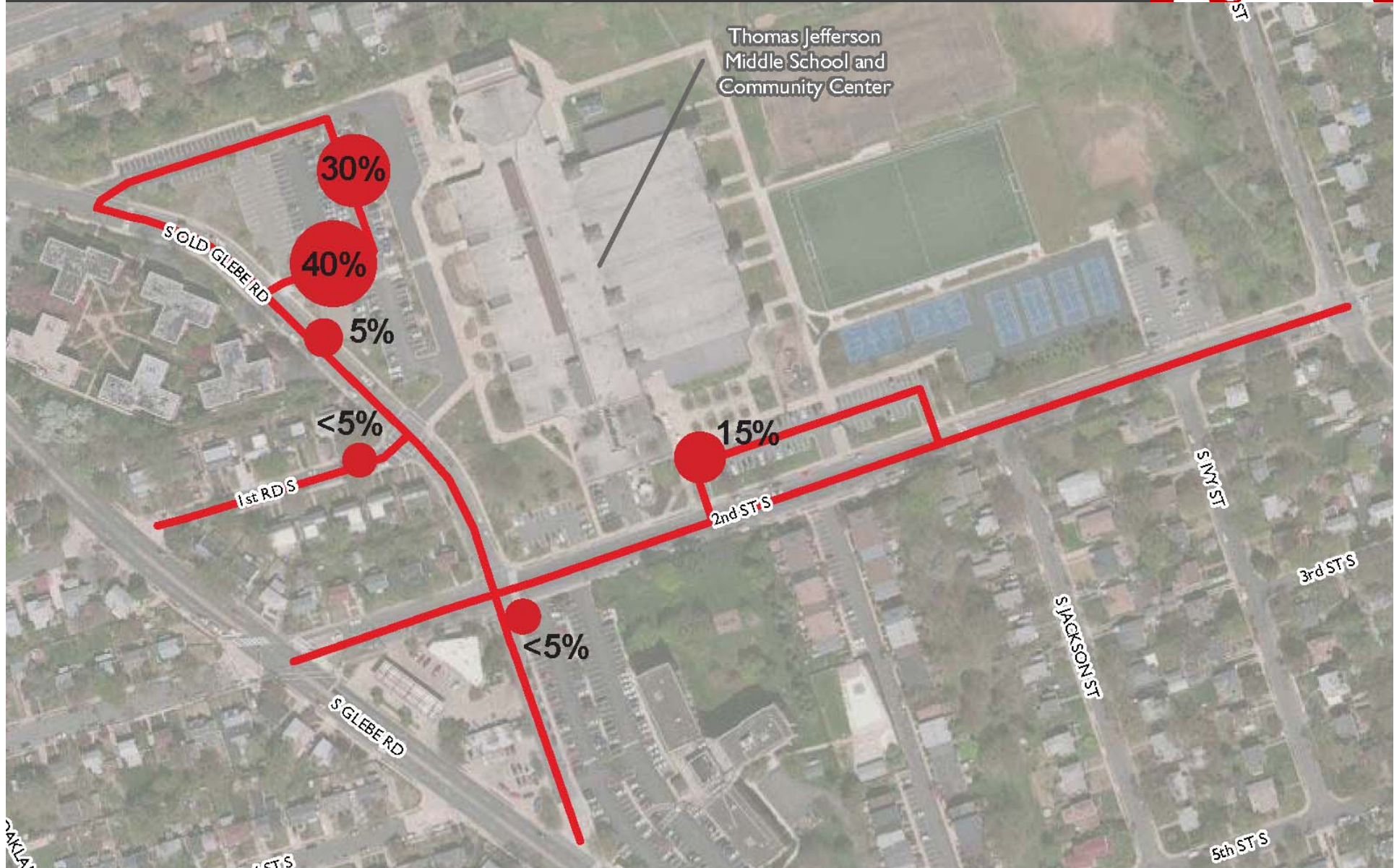
Arrival Circulation & Counts

Bicyclists



Arrival Circulation & Counts

Student Drop-Offs



Dismissal Circulation & Counts Student Drop-Offs



Bus Circulation



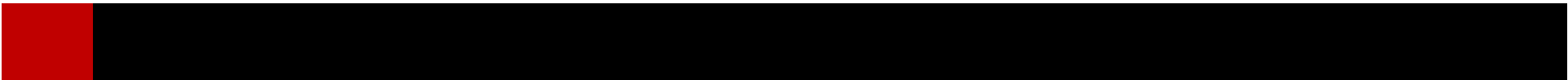
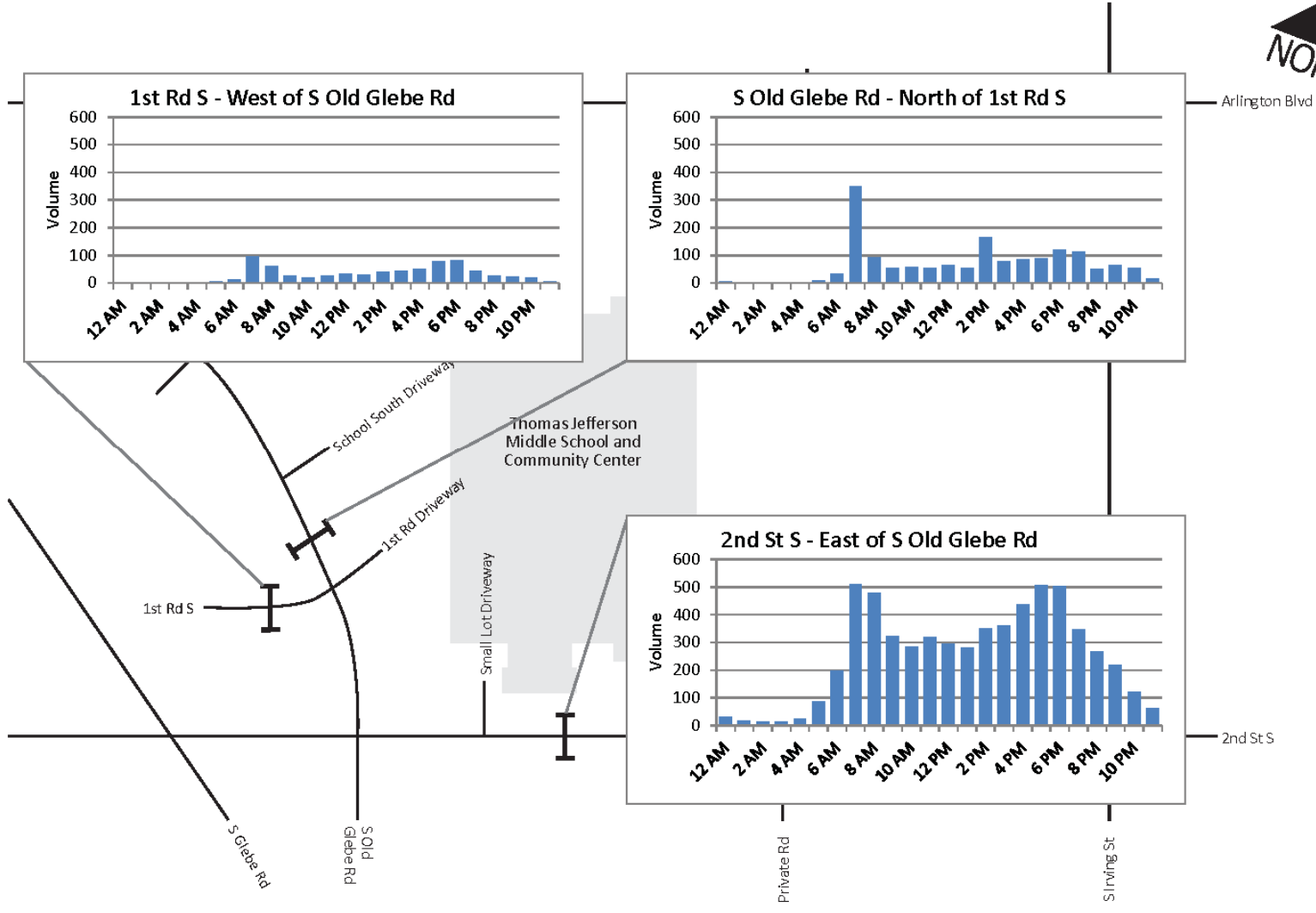
Other TJ Campus Destinations



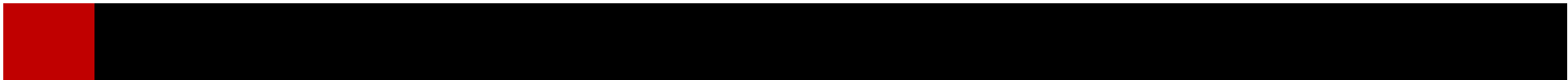
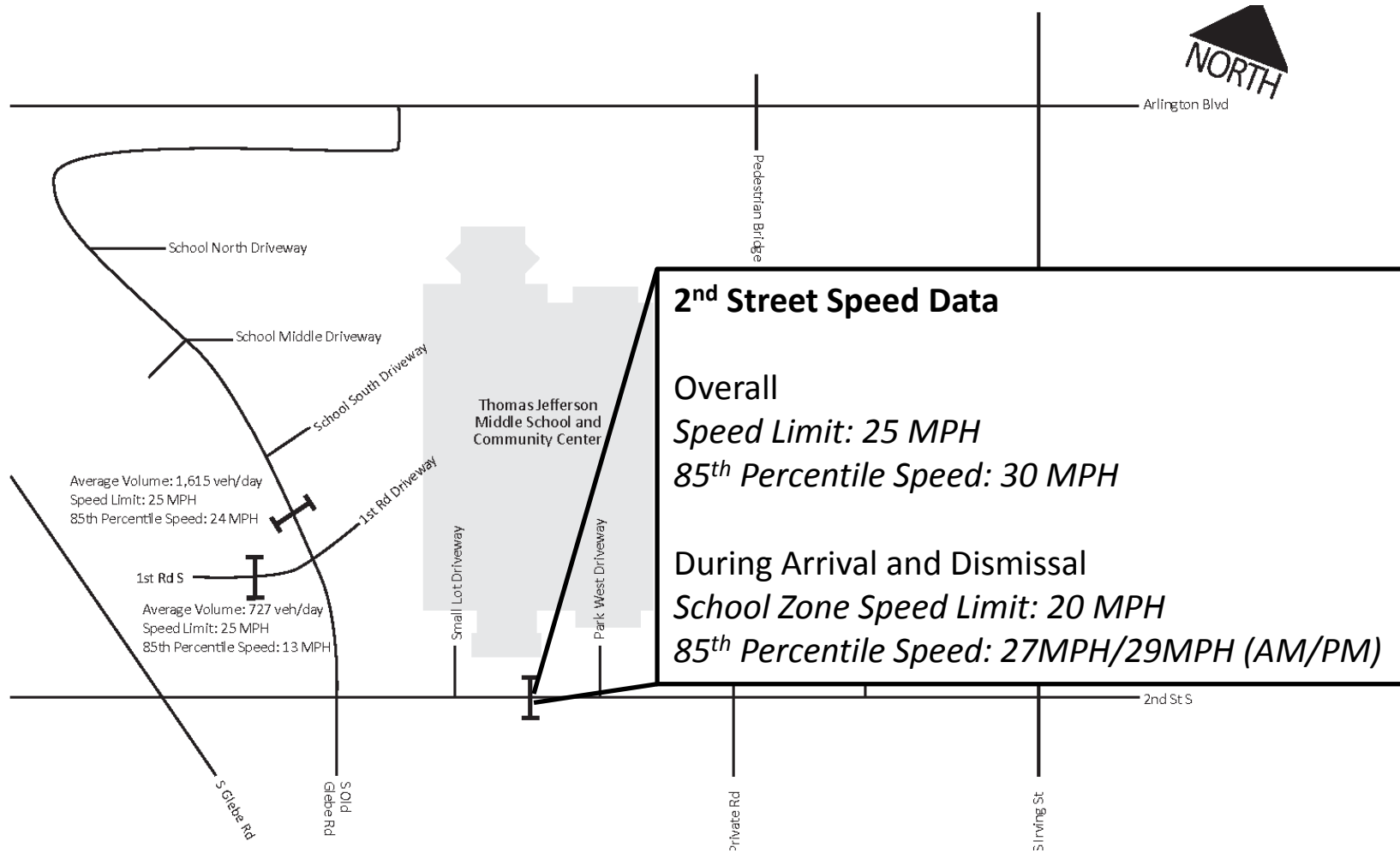
- Community center user survey (mode of travel, parking location)
- Data on use of theatre, cooking kitchen, community center, fields and courts



Daily Traffic Counts & Speed Information



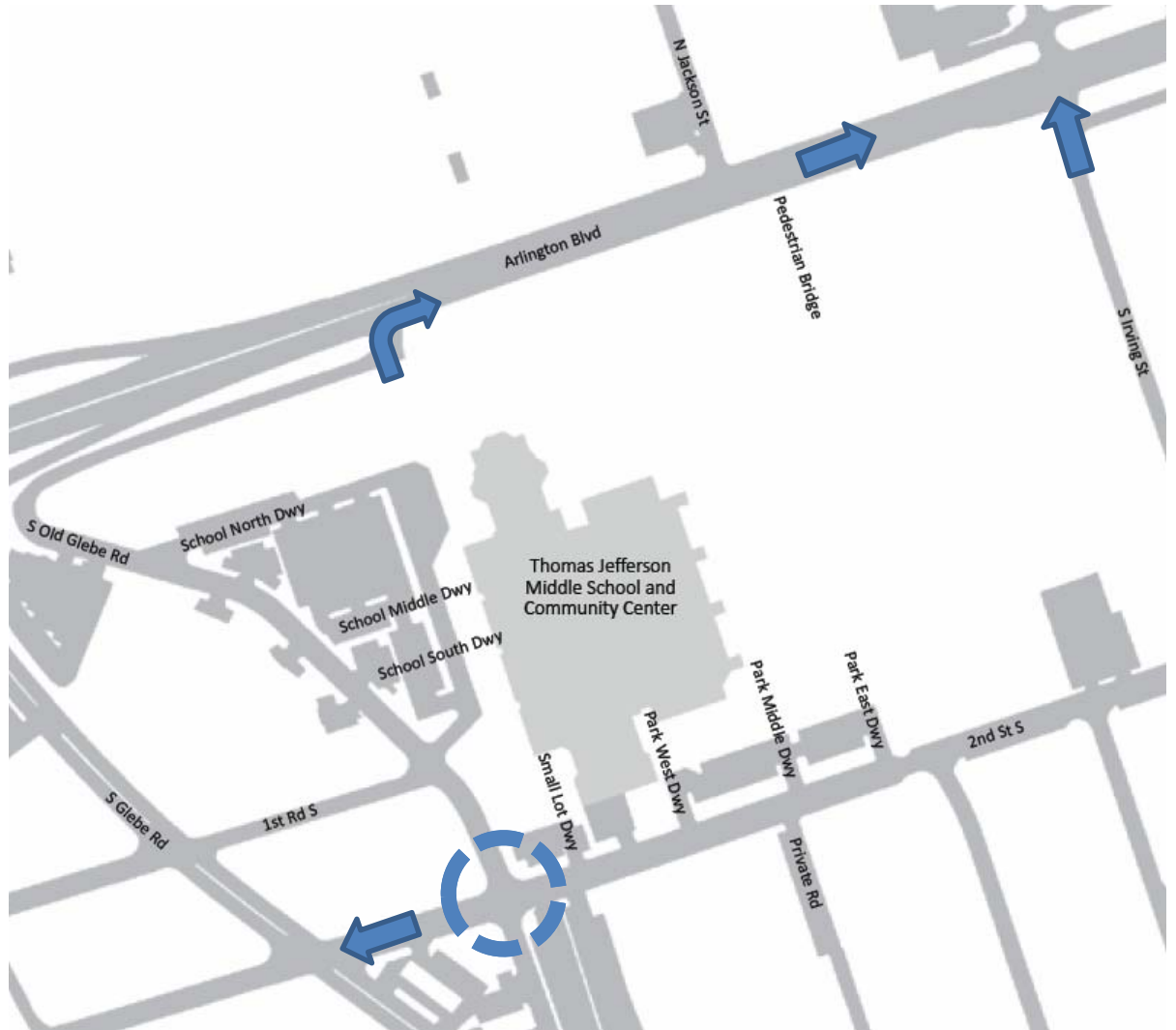
Daily Traffic Counts & Speed Information



Existing Intersection Operations



- During arrival, motorists may experience increased delay:
 - Turning right onto Arlington Blvd from S. Old Glebe Road
 - Crossing Arlington Blvd on Irving Street
 - Traveling east on Arlington Blvd
 - Traveling west on 2nd Street towards Glebe
 - Intersection of 2nd Street & Old Glebe Road
- During dismissal, the study intersections operate better due to less commuter traffic and fewer trips associated with the school



Parking Number of Spaces



- 370 spaces on TJ campus, including 11 ADA spaces
- Over 1,000 spaces on streets surrounding TJ campus



Parking Occupancy during back to school night



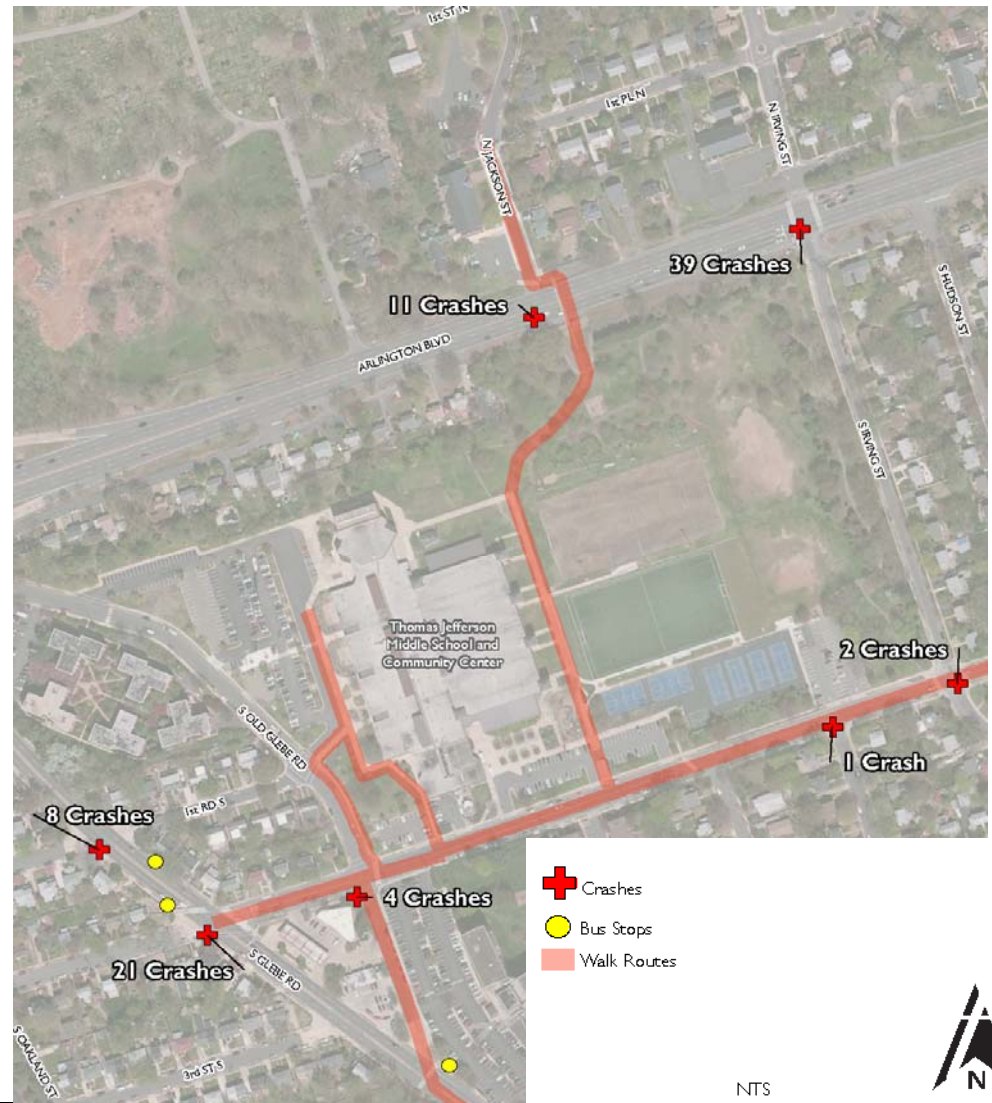
- On-site over 100% occupied
- On-street approx. 50% occupied (concentrated near school)



Crash Data Summary

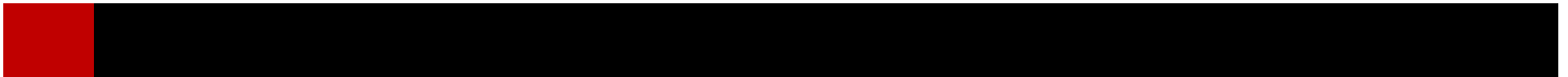


- Three years of crash data
- Crash data doesn't capture near misses or close calls
- Arlington Blvd and Glebe Road - most crashes typical of high-volume roads
- Seven crashes involved pedestrians
- Two crashes involved bicycles





**WHAT IS THE TDM POTENTIAL
FOR THE SITE?**





Advantages

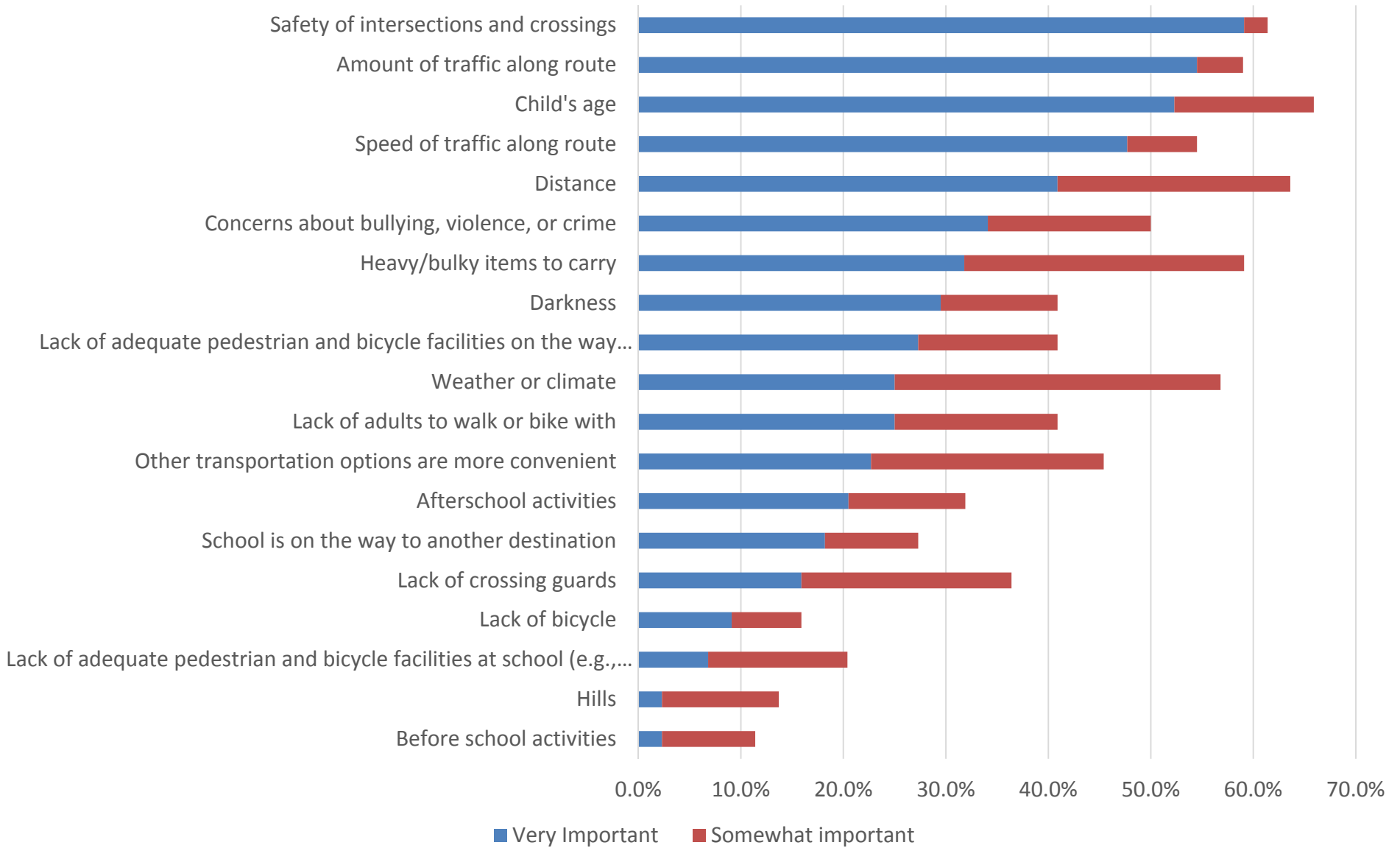
- Joint use potential
- Existing multimodal infrastructure

Disadvantages

- Existing barriers to non-Single Occupancy Vehicle travel



Factors in Decision Not to Walk or Bike—Parent Survey

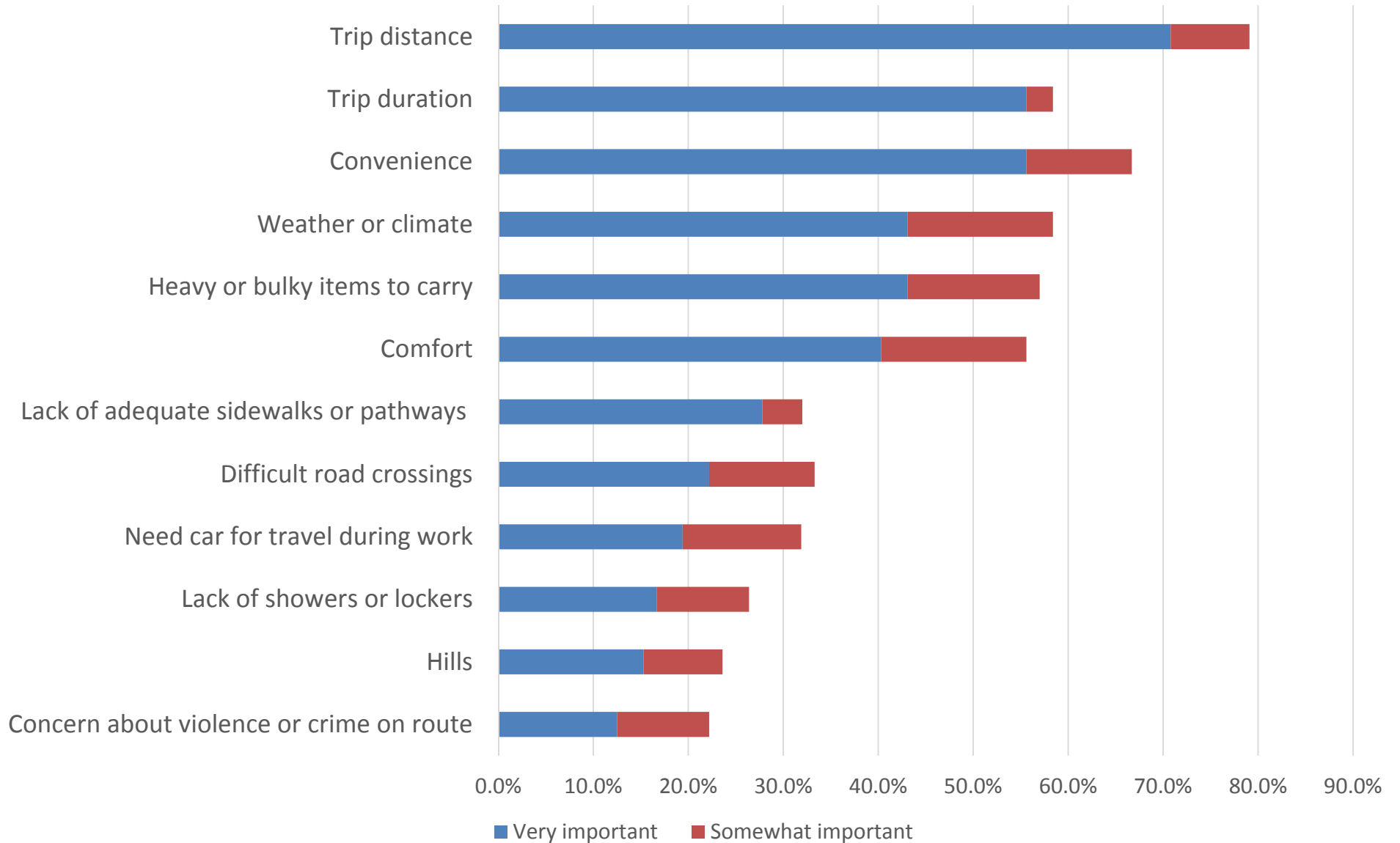


Walking and Biking Barriers— Comments from Parents about Specific Locations

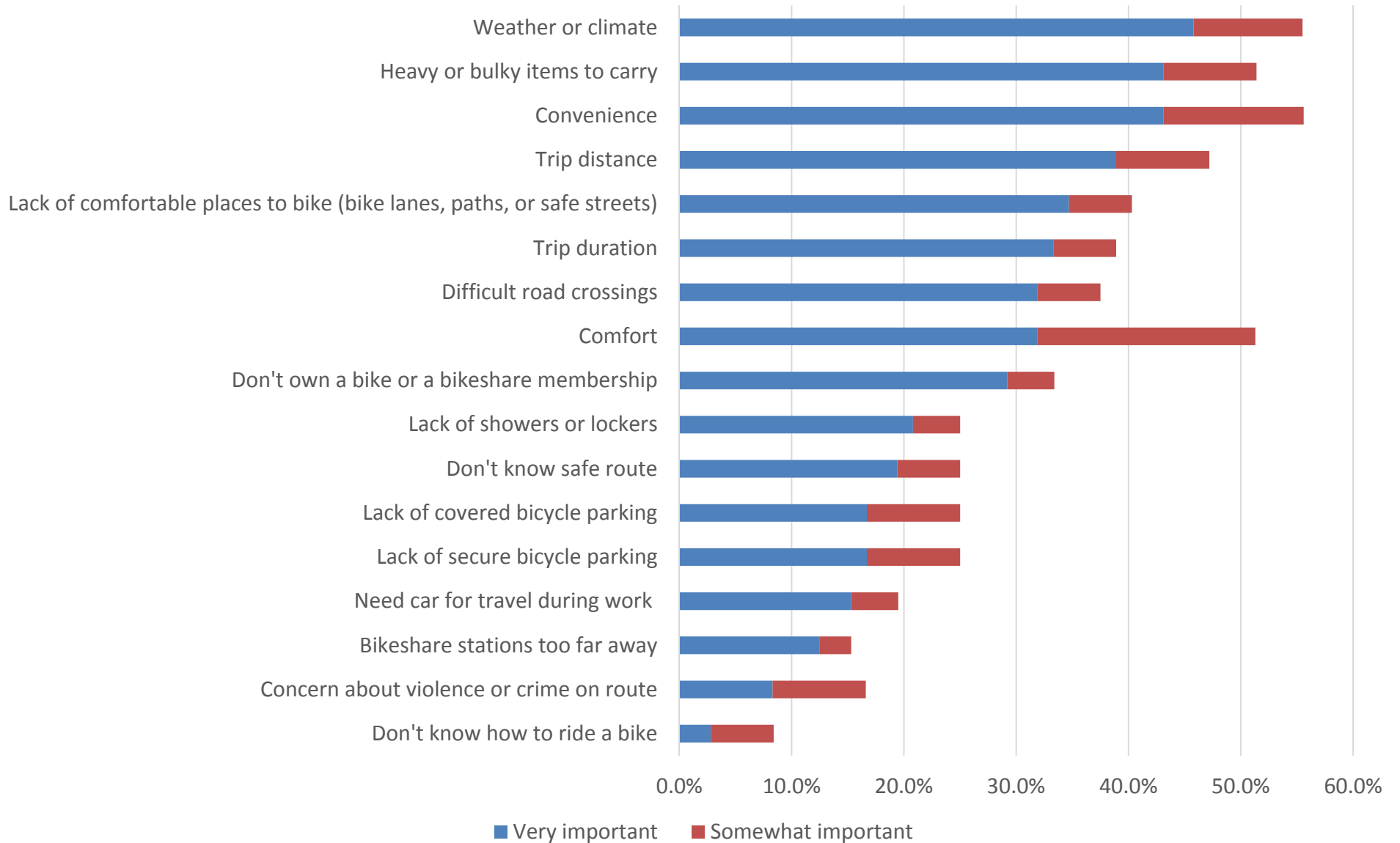


- Route 50 (“bike path...has no guardrail between it and Route 50”)
- Intersection of Columbia Pike and Glebe Road (“a great concern that my child has to cross Col Pike & Glebe Road” “no crossing guards at these intersections”)
- George Mason Drive (“difficult to cross even for adults”)
- Jackson St (“winding hill with cars parked on both sides”)

Factors in Decision Not to Walk—Staff Survey



Factors in Decision Not to Bike—Staff Survey



2nd Street and Old Glebe



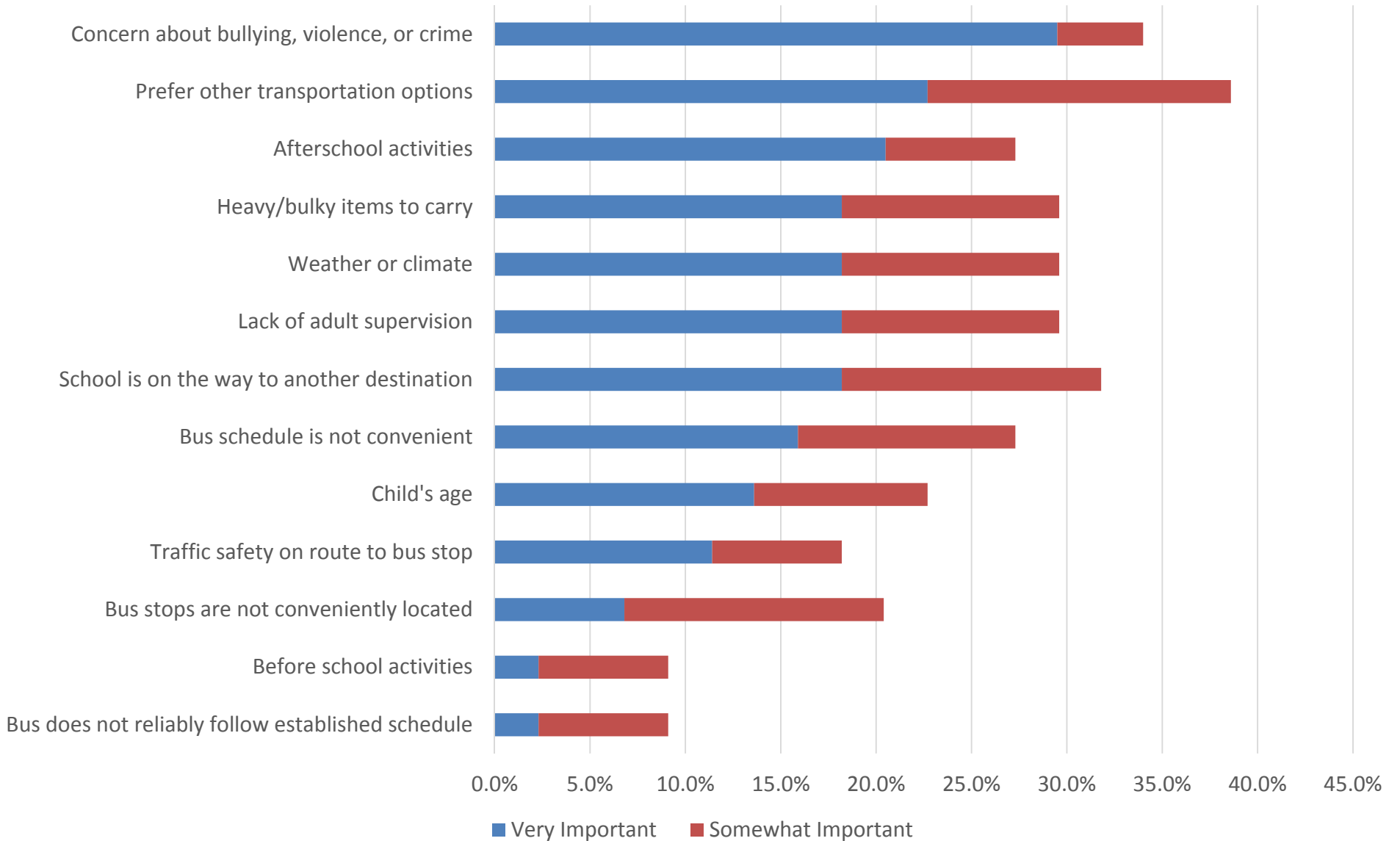
2nd Street and Glebe



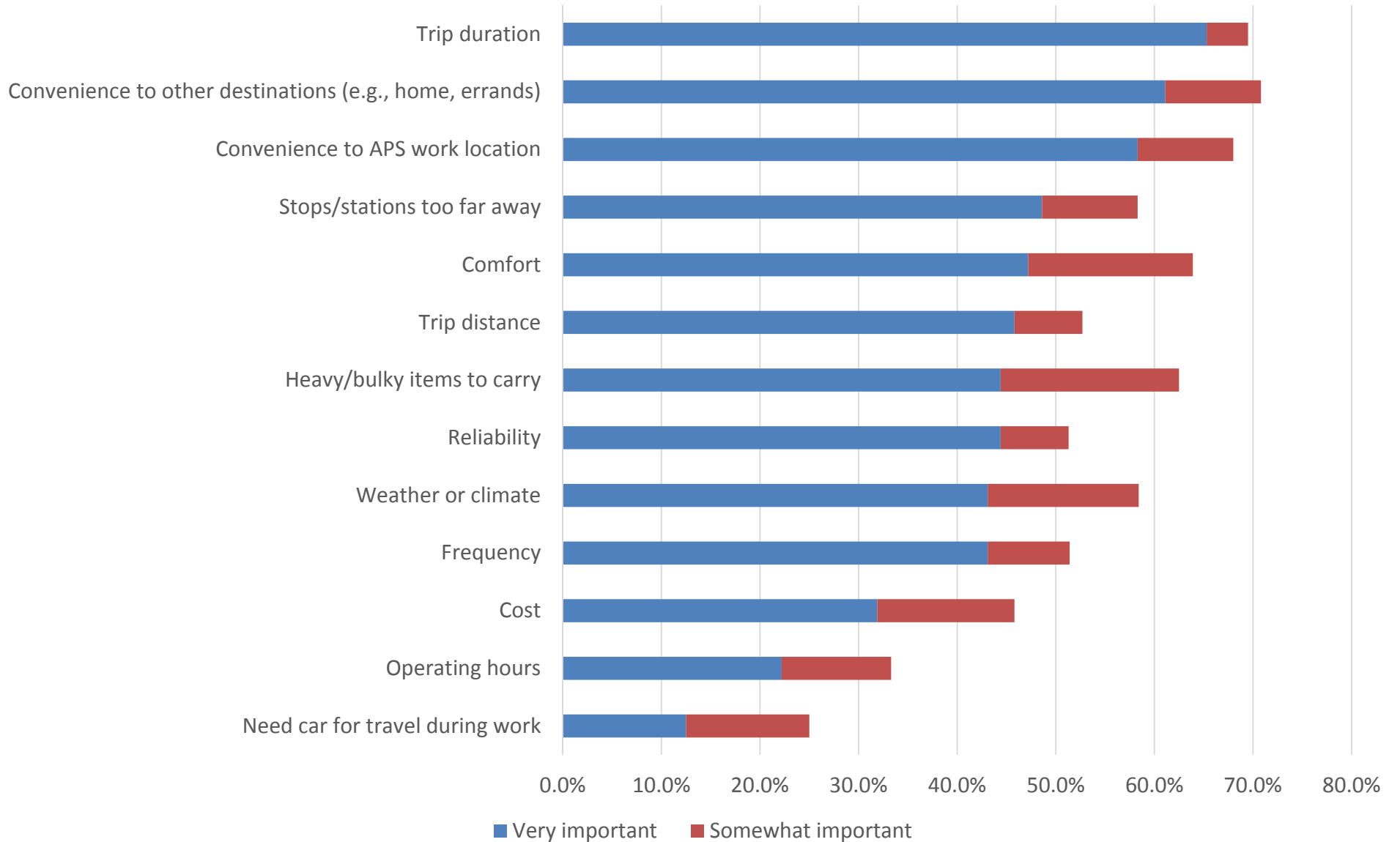
Old Glebe and Glebe



Factors in Decision Not to Ride School Bus—Parent Survey



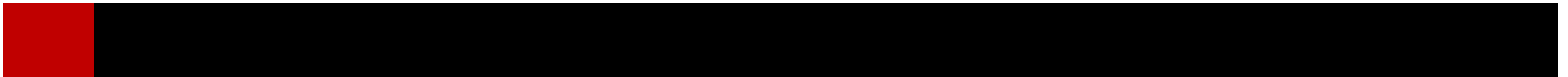
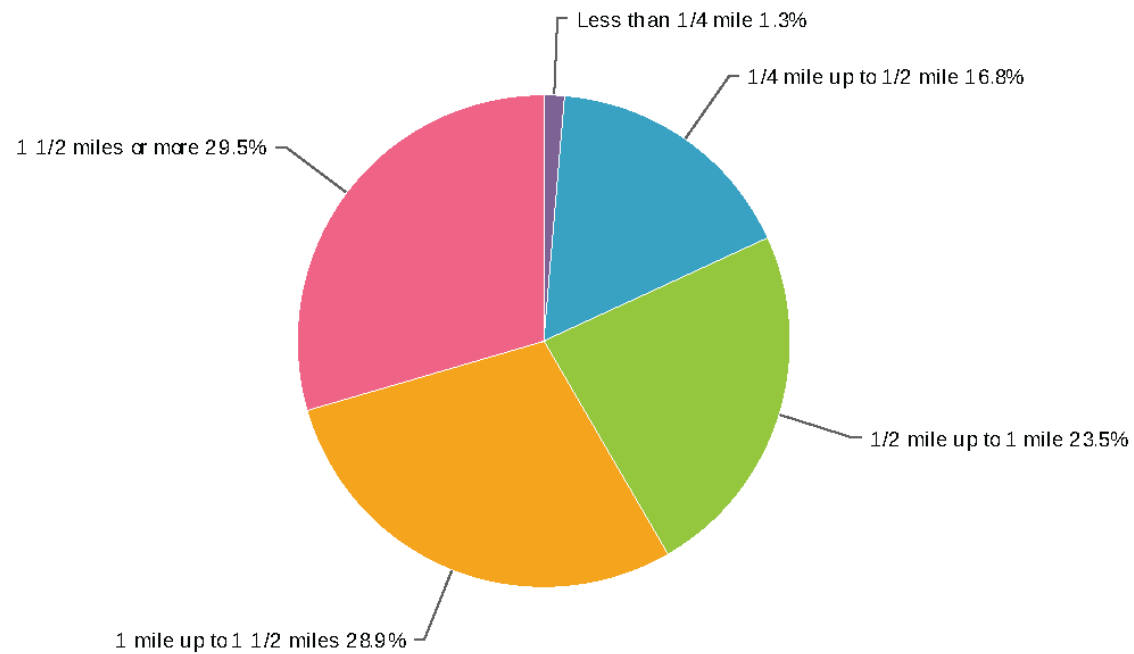
Factors in Decision Not to Use Public Transit—Staff Survey



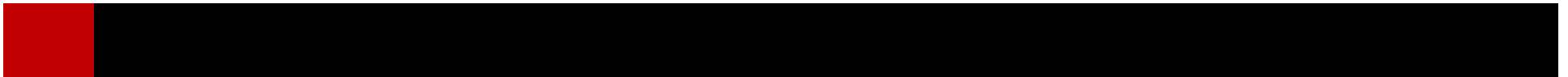
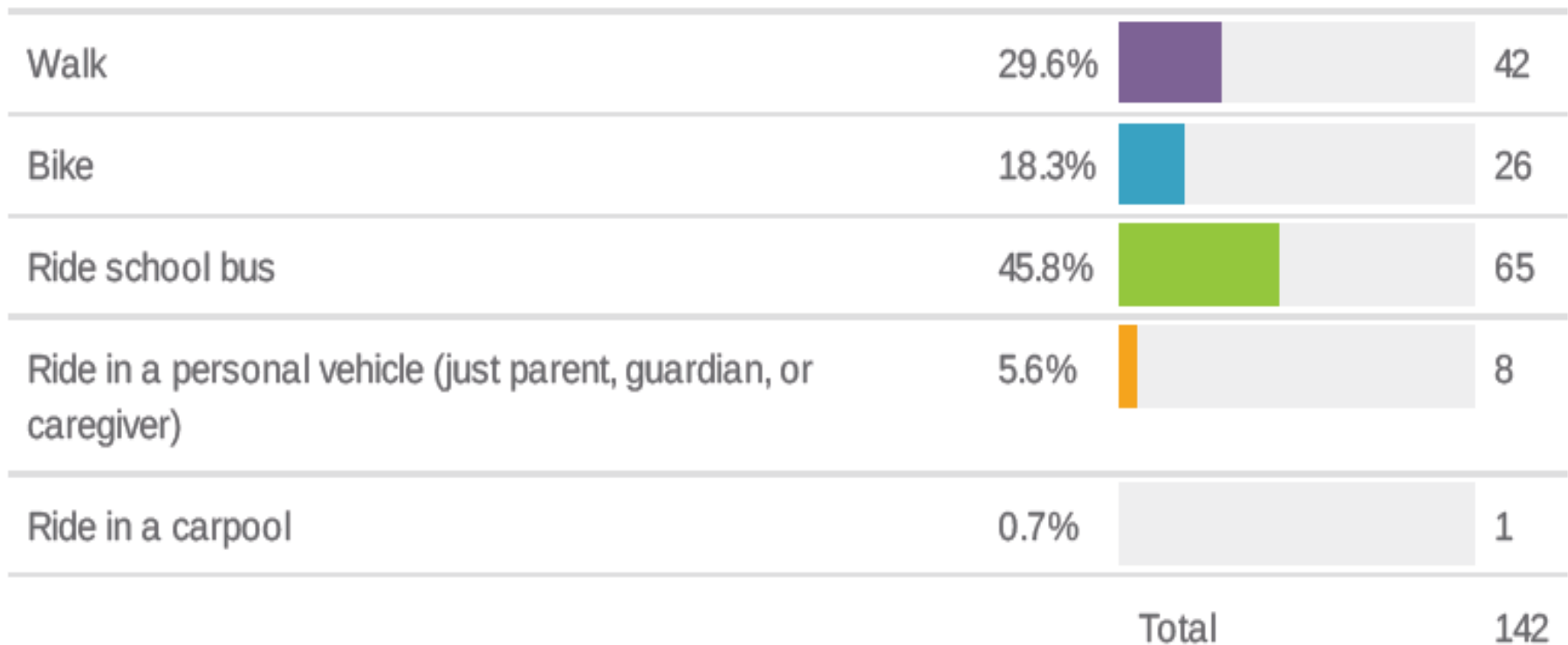
Distance to School—Parent Survey



11. Approximately, how far is your child's trip TO school?

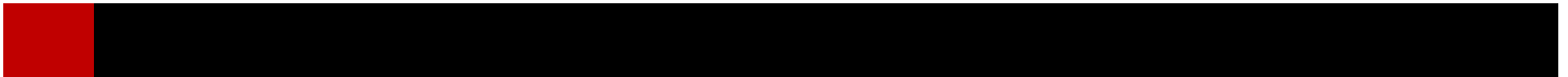


Ideal Mode—Parent Survey





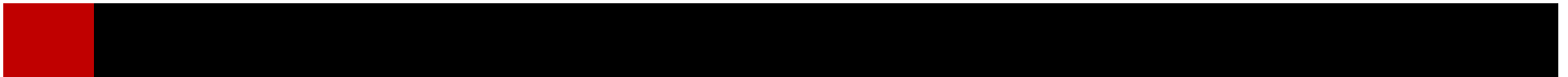
**HOW MIGHT THE TRANSPORTATION
SYSTEM OPERATE IF A NEW
ELEMENTARY SCHOOL IS BUILT?**



Considerations for Elementary School on Thomas Jefferson Site



- Distribution of uses over time
 - bell times
- Choice versus neighborhood school
- Spatial relationship of uses on the site relative to transportation facilities (e.g. vehicle and bike parking, pedestrian pathways, transit stops)
 - school location
 - combined bus and/or pick-up/drop-off areas
 - parking needs
- Minimize conflicts between users (i.e. separate modes)



Average Mode Splits Neighborhood versus Choice School



	Walk	Bike	School Bus	Personal Vehicle	Carpool	Transit	Other
Choice School	5%	1%	66%	27%	1%	0%	0%
Neighborhood School	22%	1%	47%	29%	1%	0%	0%

Next steps/Work In Process



- Increment weather day observations
- Community center user survey
- Data on use of theatre, cooking kitchen, community center, fields and courts
- Case studies of similar sites
- Analysis of existing transit service
- Infrastructure recommendations
- Assess impacts of new school and middle school expansion on transportation network
- Coordinate with design team on site layout
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