

EDUCATION CENTER REUSE

David M. Brown Planetarium
Arlington Public Schools
1426 North Quincy Street

ARLINGTON PUBLIC SCHOOLS

1426 N QUINCY ST

BLPC / PFRC JOINT MEETING

BUILDING LEVEL PLANNING COMMITTEE
PUBLIC FACILITIES REVIEW COMMITTEE

OCTOBER 30, 2018

- 1) Welcome
- 2) Committee Roles of PFRC / BLPC
- 3) Project Parameters
- 4) Revised Meeting Schedule
- 5) Arlington County Civic Design Principles
- 6) Architecture Existing Conditions
- 7) Transportation Existing Conditions
- 8) Committee Comment
- 9) Public Comment
- 10) Next Steps

A photograph of a woman with long blonde hair, wearing a white lace top and a lanyard, smiling warmly at a young child with curly hair. They are seated at a table with a TruMoo chocolate yogurt container, a can of 100% Orange Juice, and other items. The background shows other people at tables, suggesting a social gathering or meeting. The entire image is overlaid with a semi-transparent orange filter.

1 Welcome



2 Committee Roles of BLPC/PFRC

Building Level Planning Committee (BLPC)

1. Based on Policy Implementation Procedure F-5.7 PIP-2
2. School Board approved BLPC Charge found at: <https://www.apsva.us/wp-content/uploads/2018/09/C-4-Education-Center-BLPC-Charge-083018-SB-approved.pdf>
3. Primary role is to serve as the principal communication liaison with community stakeholders
4. Solicit comments from constituency groups and share with the BLPC for consideration
5. Assist APS Staff during schematic design phase by reviewing:
 - a. Site amenities
 - b. Adjacencies between interior spaces and site amenities
 - c. Community use of the building and site
 - d. Impact of project on surrounding community

Public Facilities Review Committee - PFRC

1. PFRC Charge (June 18, 2014) found at: https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/5/2014/06/PFRC_Charge_June2014.pdf
2. Mission: to ensure that the highest quality of land use planning, design, transportation planning, and other important community aspects are incorporated into civic projects as assigned to the Committee by the Arlington County Board.
3. Key responsibilities:
 - a. Provide a forum for advisory commission and committee input
 - b. Ensure highest quality of land use planning and design
 - c. Promote compliance with County Comprehensive Plan and other County planning policies
 - d. Provide means for broad-based public participation
 - e. Provide advice to County Board and County Manager



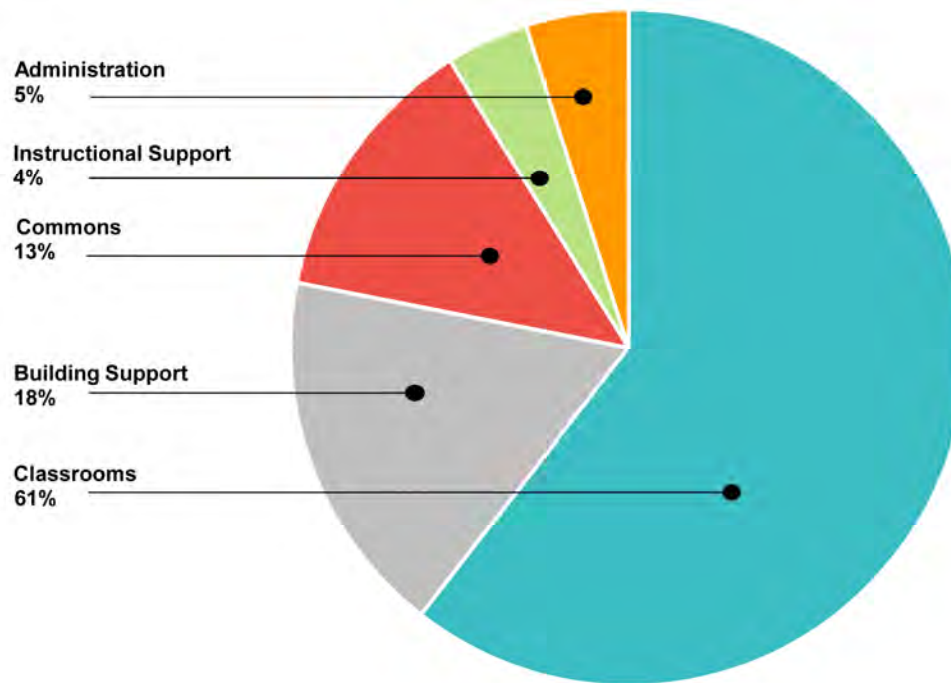
3 Project Parameters

Project Parameters

- Project included in the FY2019-28 Capital Improvement Plan (CIP)
- Renovate the Education Center to both increase the capacity of Washington-Lee initially, and later to adapt to possible future instructional and grade level changes
- Support APS Strategic Plan Goals, specifically for Healthy, Safe, and Supported Students
- Address capacity by providing 500-600 high school seats
- Open by start of school 2021
- Spend a maximum project cost of \$37 million, using every effort to spend less

Education Specification + Space Program

Education Specification + Space Program by APS Staff

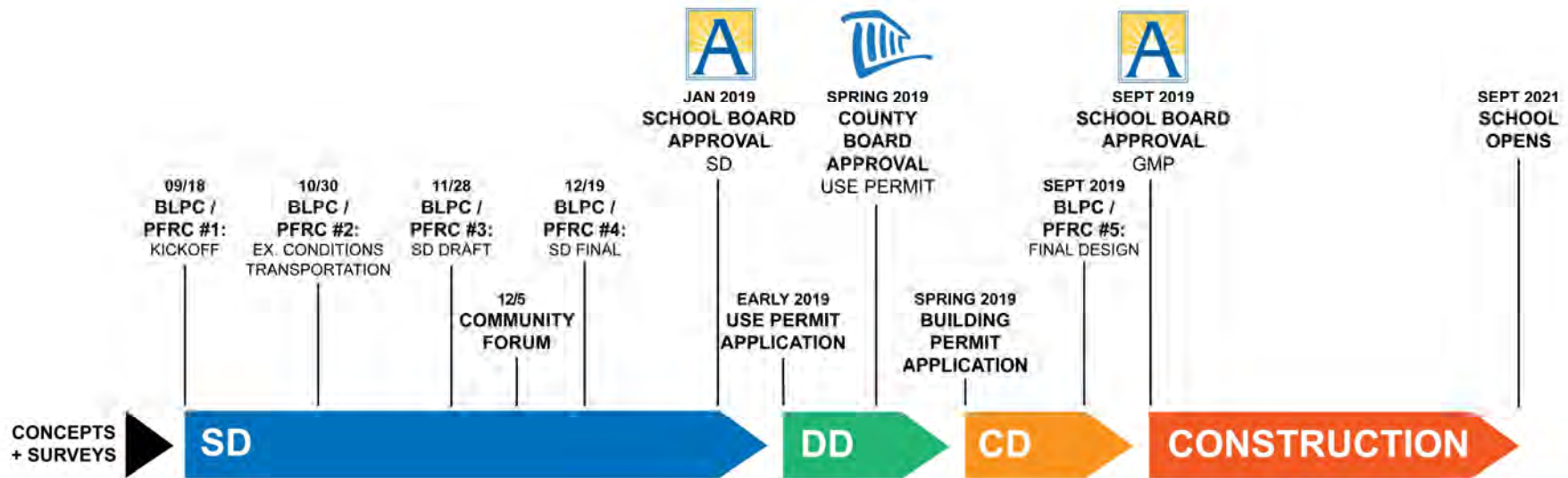




4 Revised Meeting Schedule

Project Timeline

Revised meeting dates



REVISED MEETING SCHEDULE

A group of people in a meeting, overlaid with an orange grid pattern. The image shows several individuals engaged in conversation, with one person in the foreground gesturing with their hand. The overall tone is professional and collaborative.

5 Arlington County Civic Design

Public Facilities Review Committee: Principles of Civic Design

- Intended to inform the design of civic facilities
- Ensure facilities meet community goals and are attractive, durable, & functional
- Supplement existing County planning documents & policies
- Each project reviewed individually- certain principles may be stressed over others

Civic Values

- Context
- Bold Architecture
- Sustainable Design
- Universal Design
- Adaptive Reuse
- Open Space
- Mixed Use

Siting & Orientation

- Building Entrances
- Emphasize Pedestrians, Bicycles, Mass Transit
- Circulation
- Outdoor Spaces

Building Form

- Massing
- Scale
- Hierarchy

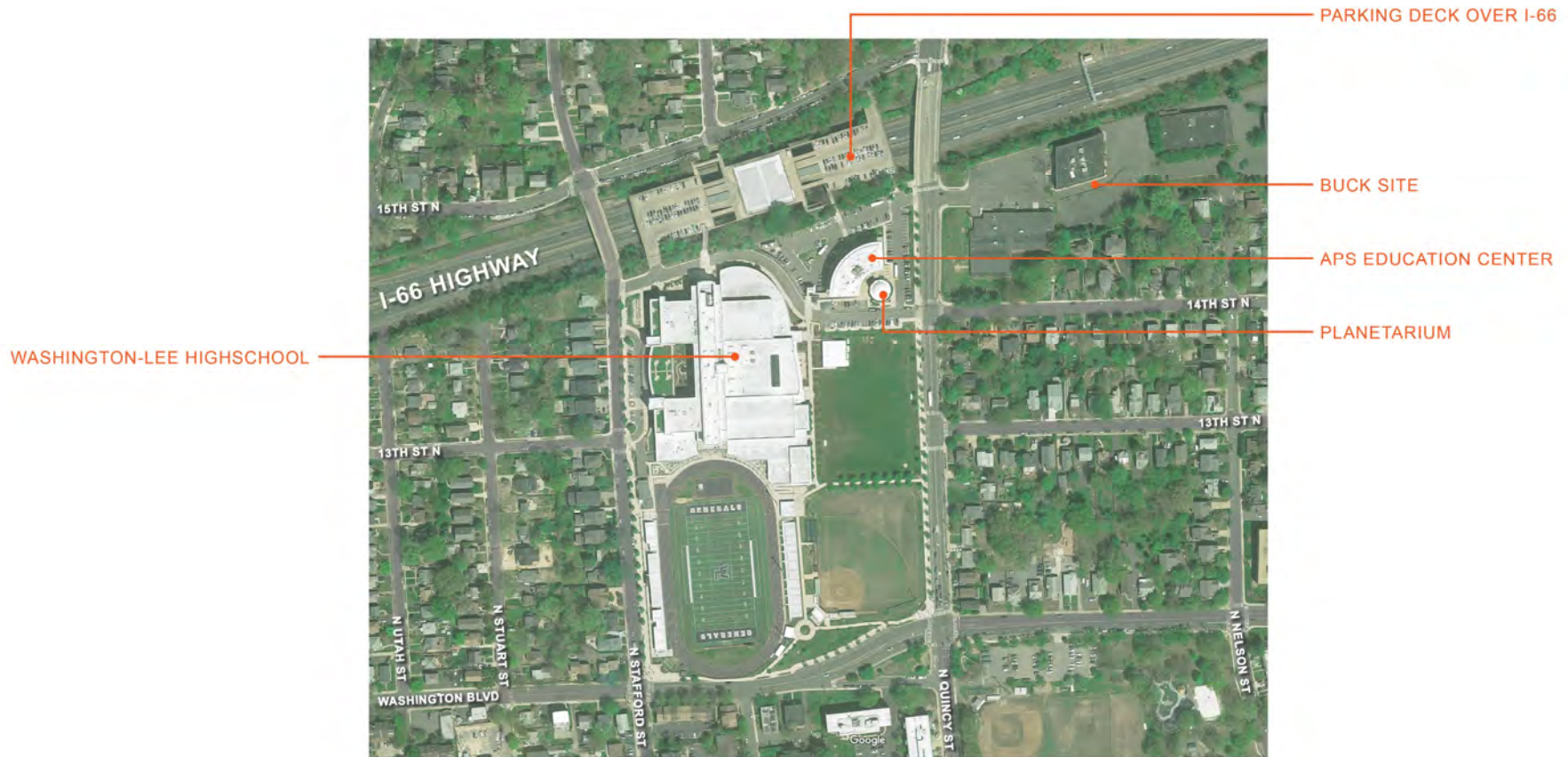
Building Details & Materials

- Pedestrian Scale
- Public art & Architecture
- Durable Materials
- Consistency
- Sense of Place



6 Architecture Existing Conditions

Washington-Lee Campus



Architectural Image



ARCHITECTURE EXISTING CONDITIONS

Architectural Image



ARCHITECTURE EXISTING CONDITIONS

Technology History

Cost of steel frame lowered

by designing 11 repetitive wedge-shaped sections

Architects: Ward and Schmidt, Cleveland, Ohio. Consulting engineers: Barber & Hoffman, Cleveland. General contractor: Hill and Kimmel, Inc., Silver Spring, MD. Steel fabricator: Arlington Iron Works, Arlington, VA.



The steel frame, fabricated from Bethlehem A36 structural steel, is made up of 11 wedge-shaped sections, which allowed for repetition—and cost-saving—in fabrication.



Attachment 13

New headquarters building reflects Arlington County's pride in its educational system

The bond issue that authorized the Arlington County (Va.) Education Center called for a building that would "reflect the importance" of the 26,000-student school system. Steel helped the architects achieve a striking building, at a cost below the budget figure.

The basic shape of the Center is an arc. A circular, domed planetarium was used as a radius point, and grid lines extend from that point to form 11 equal wedge-shaped sections in the main building. Here is where steel came into its own. Because of the repetition of the wedge shapes, structural steel could be fabricated using the same shapes repetitiously, at a significant saving in cost. To form the curves of the building, the steel frame was cut and fit from short straight sections. Bethlehem A-36 structural steel was used, and all connections were bolted.

The building takes advantage of a naturally sloping site, allowing for five stories at the outward curve of the arc, four on the inner face. The lowest level contains the school system's data processing center, the ground floor has the rooms most often visited by the public, and the upper three floors house staff offices.

Steel is versatile, adaptable, economical. It can lighten a structure, give it shape, shorten construction time, provide more usable floor space. Want to discuss your next building? The Sales Engineer at the nearest Bethlehem office is available to you at any time.




The Arlington County Education Center has 58,000 sq ft of floor space including the Planetarium building. The Center was built at a cost well below the budgeted figure.



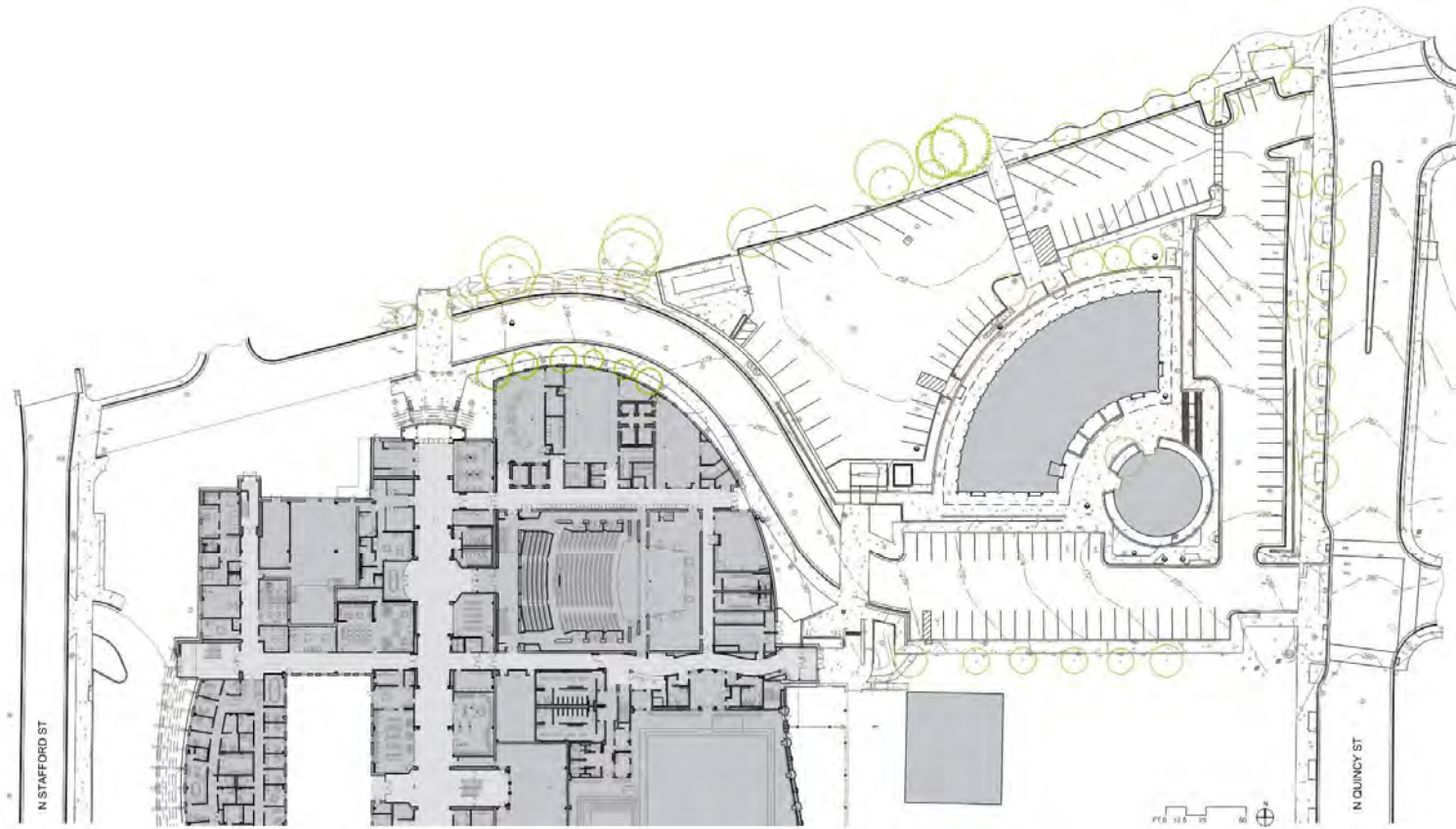
Solar Environment

Spring/Autumn Equinox



ARCHITECTURE EXISTING CONDITIONS

Site Ground Plane



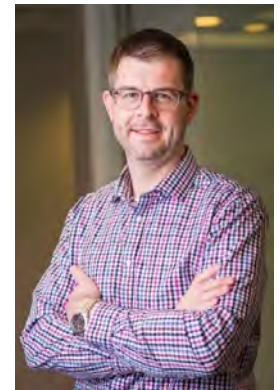
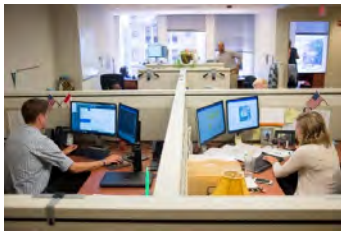
ARCHITECTURE EXISTING CONDITIONS



7 Transportation Existing Conditions

Gorove/Slade Associates

- Local transportation engineering and planning firm, headquartered in Washington DC
- Significant experience working in Arlington County
- Significant experience working in education (Pre-K to large Universities)



Dan VanPelt, P.E., PTOE
Principal and Vice President

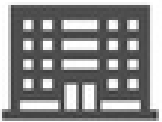


Rob Schiesel, P.E.
Director of Planning

TRANSPORTATION

Context – What are the project’s significant transportation aspects?

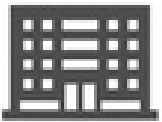
53,150 SF
Office space



A school with up
to 600 students

Context – What are the project’s significant transportation aspects?

53,150 SF
Office space

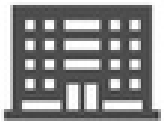


A school with up
to 600 students

Traffic?

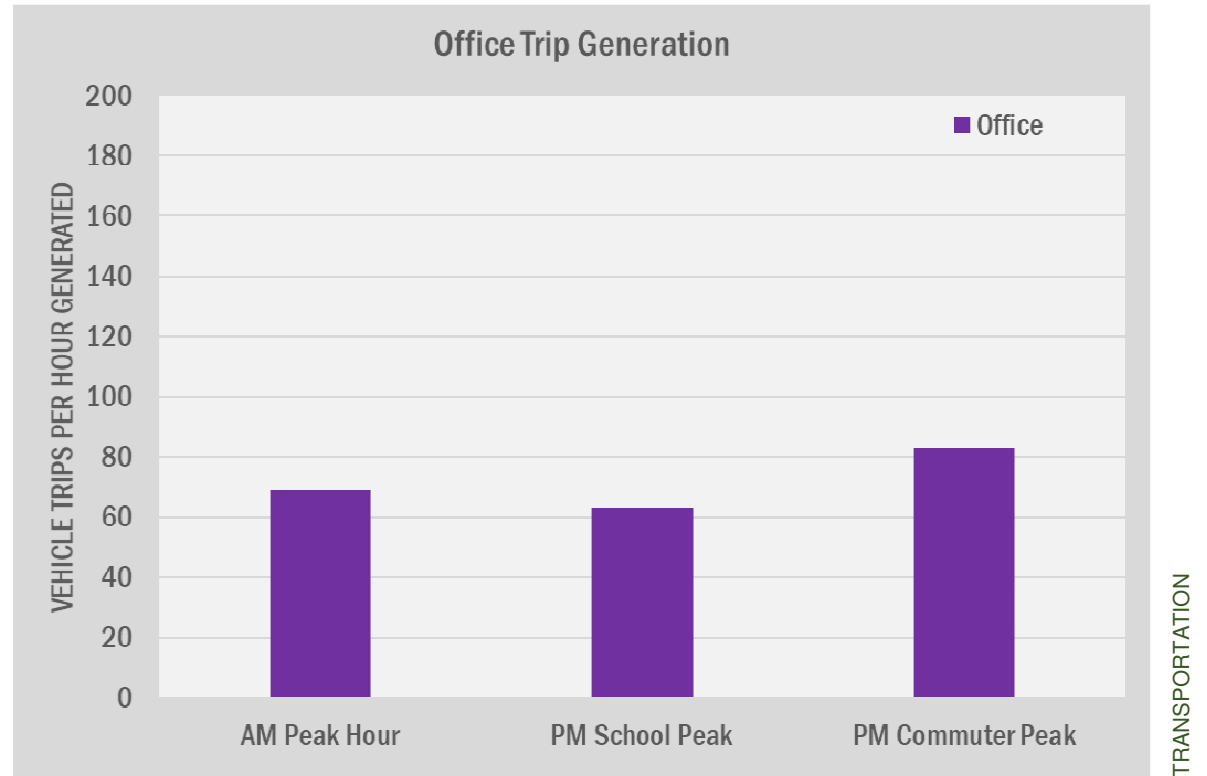
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53,150 SF
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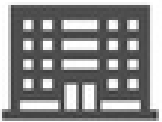
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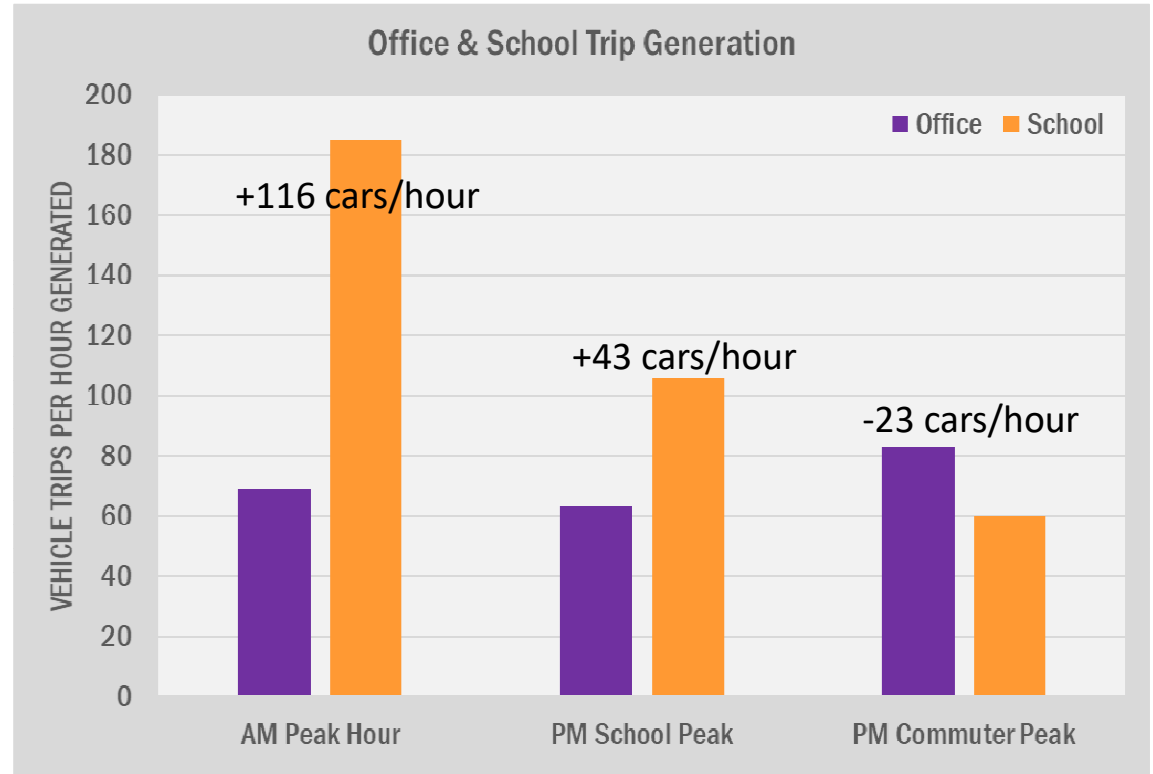
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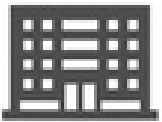
Traffic?

Probably not,
but maybe in AM



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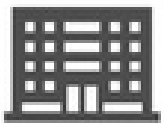
Parking?



TRANSPORTATION

Context – What are the project’s significant transportation aspects?

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Office space



A school with up
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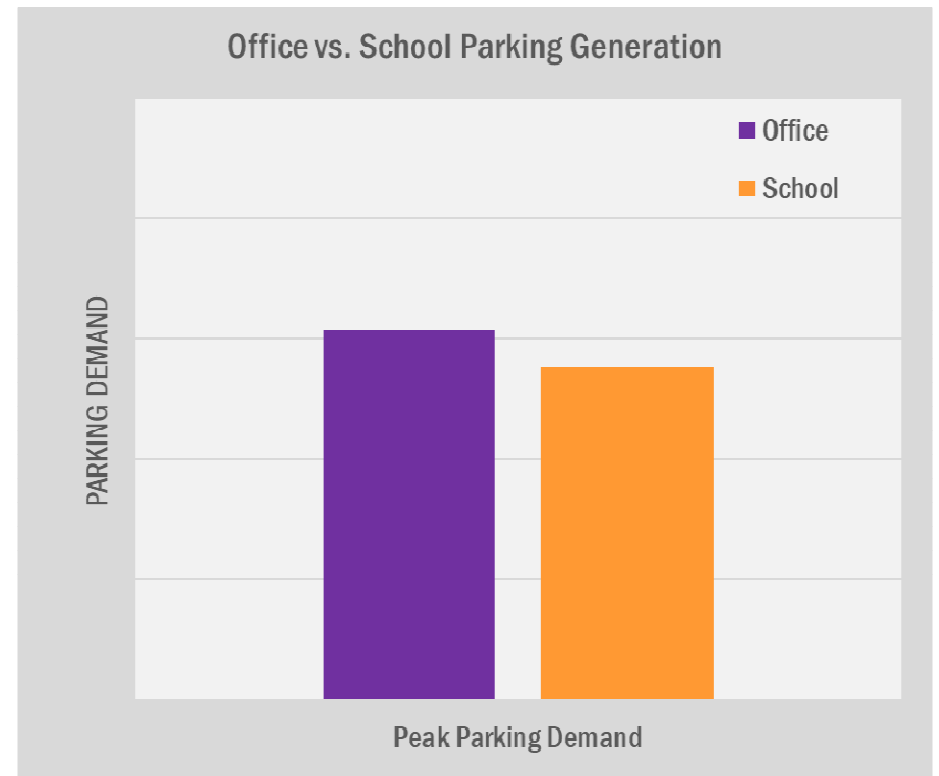
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Probably not,
but maybe in AM

Parking?

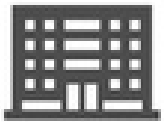
Should be about
the same

(based on industry standards)



Context – What are the project’s significant transportation aspects?

53,150 SF
Office space



A school with up
to 600 students

Traffic?

Probably not,
but maybe in AM

Parking?

Should be about
the same

Arrival/Dismissal?

Yes, schools have
many more drop-
offs/pick-ups and
buses than office
buildings



TRANSPORTATION

Quick Summary - What we've found so far

Traffic?

- Commuter traffic going by site creates some capacity issues
- Mainly for side street traffic entering N Quincy St

Parking?

- Parking garages reaches 90% capacity between bell times
- Unrestricted parking reaches 90% capacity between bell times
- Should be enough unused parking to meet demand

Arrival/Dismissal?

- Arrivals and dismissals are 20 to 25 minutes of 'controlled chaos', but seem to work
- May not be room for more buses to unload in the morning, already not enough room for buses to load in afternoon

Next Questions:

- How to use available transportation resources?
- What potential traffic changes are needed at school driveways?
- Are there any school policies or procedures that should change?
- What's the best way to accommodate more buses if they are needed?

W-L Arrival

Bus Drop-off

All accommodated on
Generals Way, but queues
extended to 15th Street

Student Drop-off

Long queues on main loop,
lead to drop-offs outside of
loop

Pedestrians

Crowds of pedestrians
along 13th Street – meter
traffic crossing 13th Street.
Clustered arrivals from the
south due to traffic signals



TRANSPORTATION



TRANSPORTATION

W-L Dismissal

N Stafford Closure

No traffic crossing 13th St N

Student Pick-up

Long queues during pick-up, many cars parked on street in various places. Difficult to arrive from North due to closure.

Bus Pick-up

Takes place on Generals Way and N Stafford Street

Pedestrians

Large dispersal makes all movement difficult for 5-10 minutes



TRANSPORTATION



TRANSPORTATION

Arrival: Around 25 minutes from start to finish



7:50 – quiet



8:05 – a bit chaotic



8:17 – serene



TRANSPORTATION

Dismissal: Around 20 minutes from start to finish



2:55 – quiet



3:02 – a bit chaotic



3:12 – serene



Parking

Parking Inventory

- On-site
- Parking garage
- On-street

Occupancy Counts

- September 20, 2018
- Every 30 minutes
- 6 AM to 10 PM

975 spaces in study area



TRANSPORTATION

On-Site Lots

Surface Lots

Ed Center lot

-Used to hold 128 cars

Pool/Visitor lot

-36 total spaces (2 HC)

-All 2-hour parking

Front Door lot

-14 total spaces(2 HC)



TRANSPORTATION

Parking Garage

Level A – 72 spaces

W-L Student Parking
7:30 AM to 3:00 PM M-F

Level B – 76 spaces

School Staff Parking

Level D – 74 spaces

APS Center Staff

Level E – 76 spaces

Public use

Level F – 80 spaces

APS Center Staff

Total: 378 spaces



W-L Student & Staff Parking

Level A – Signed for W-L Student Parking

Student sticker required, Seniors only
\$50 fee per sticker per year
Parents & students required to sign form with rules

Level B – Signed for School Staff Parking

Used by W-L Staff. Sticker required.

Level D – Signed for APS Center Staff

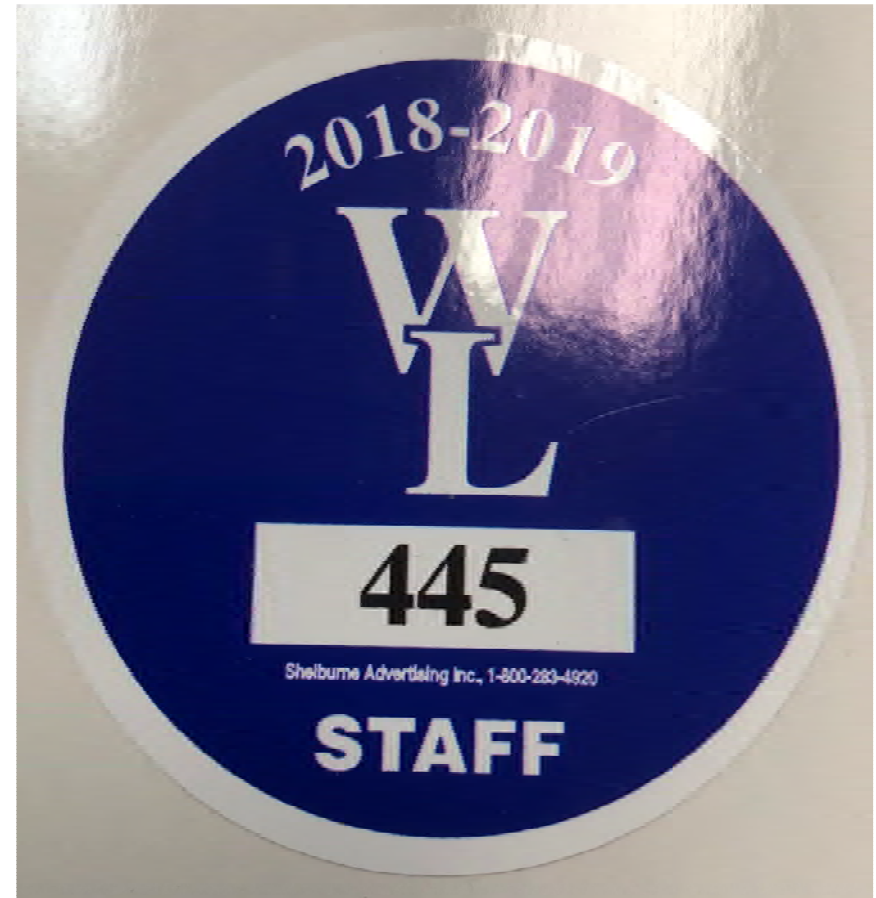
Used by W-L Staff. Sticker required.

Level E – Signed for Public use

No fee.

Level F – Signed for APS Center Staff

Used by W-L Staff. Sticker required.



TRANSPORTATION

On-Street Parking

Residential Permit

248 spaces 

Time Restricted (includes meters)

70 spaces 

Unrestricted

101 spaces 

No Parking

Public use 

Total: 419 Spaces



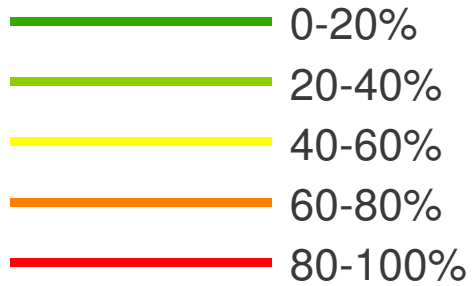
TRANSPORTATION

6:00 AM

30.3% occupied

Most demand in residential streets and near pool

Percent Occupied



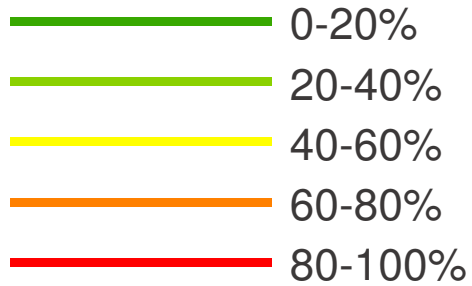
TRANSPORTATION

7:00 AM

32.3% occupied

Slightly less demand on residential streets and near pool. First parkers arrived in garage.

Percent Occupied



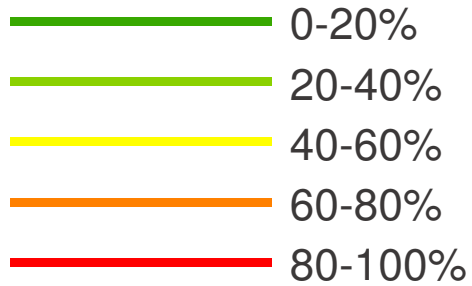
TRANSPORTATION

8:00 AM

62.1% occupied

Garage gets full fast in the morning. Significant parking in unrestricted spaces north of I-66.

Percent Occupied



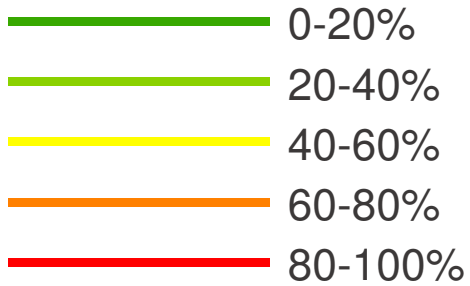
TRANSPORTATION

10:30 AM

63.5% occupied

Similar to 8 AM. Unrestricted street parking even harder to find now.

Percent Occupied



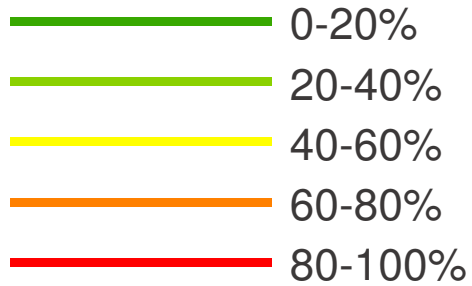
TRANSPORTATION

2:30 PM

61.4% occupied

Closest measurement to dismissal. Similar to 10:30 AM.

Percent Occupied



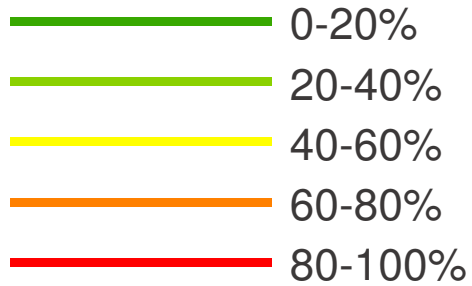
TRANSPORTATION

4:30 PM

36.5% occupied

Garage and unrestricted parking empties – indicating HS use and not general commuting use. Pool lot fills up also after school.

Percent Occupied



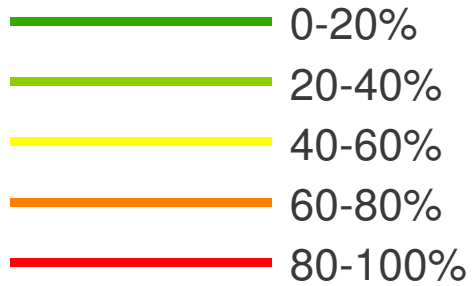
TRANSPORTATION

7:30 PM

48.1% occupied

Residential streets get more occupied as commuters get home. School visitor lots and some garage levels get full.

Percent Occupied



TRANSPORTATION

On-Street Parking

Residential Permit

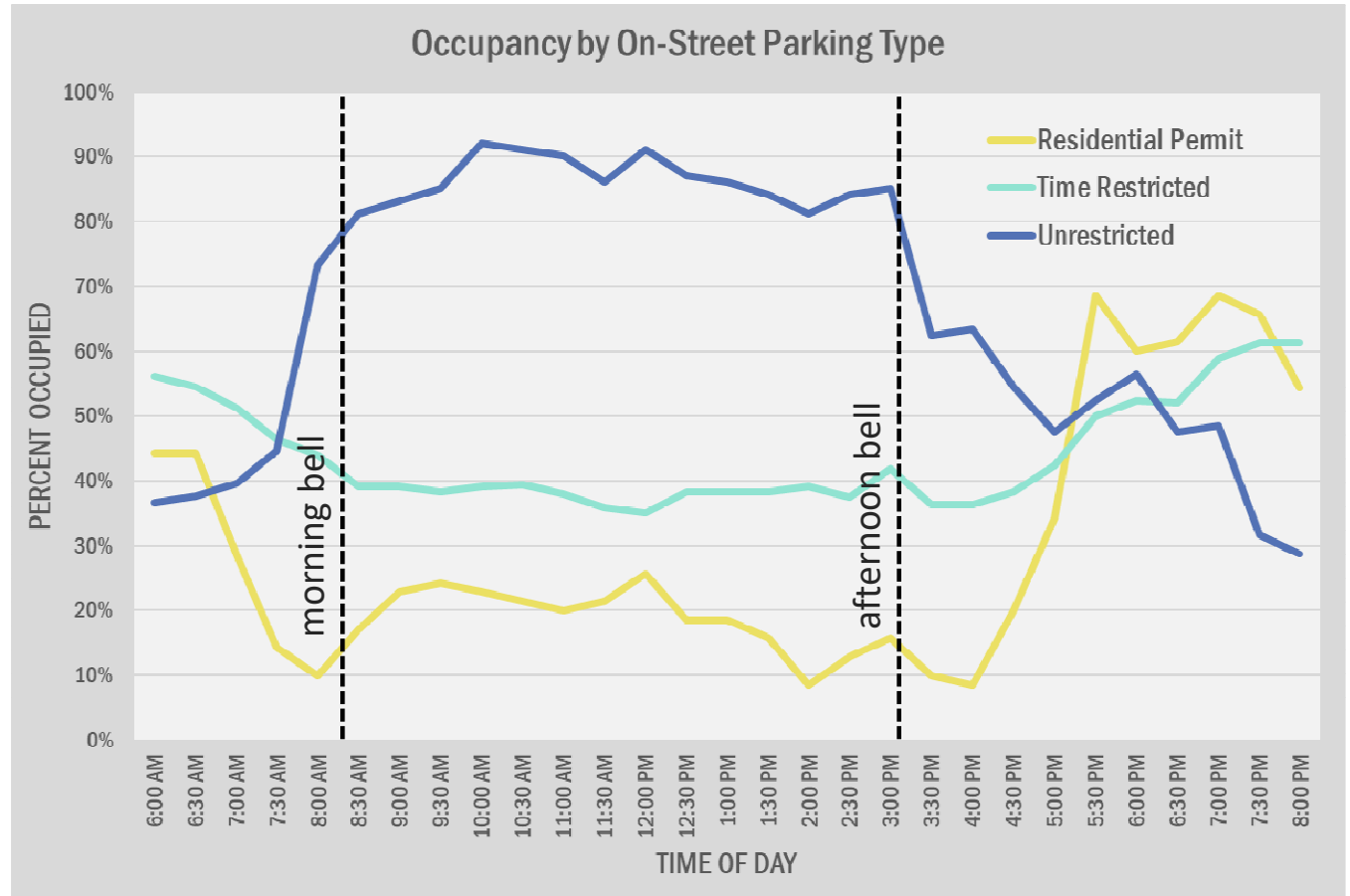
Highest at morning and evening. Never dips below 35% during the day.

Time Restricted

Very available when restrictions are in place.

Unrestricted

In high demand between morning and afternoon bell times.



TRANSPORTATION

Garage/Surface

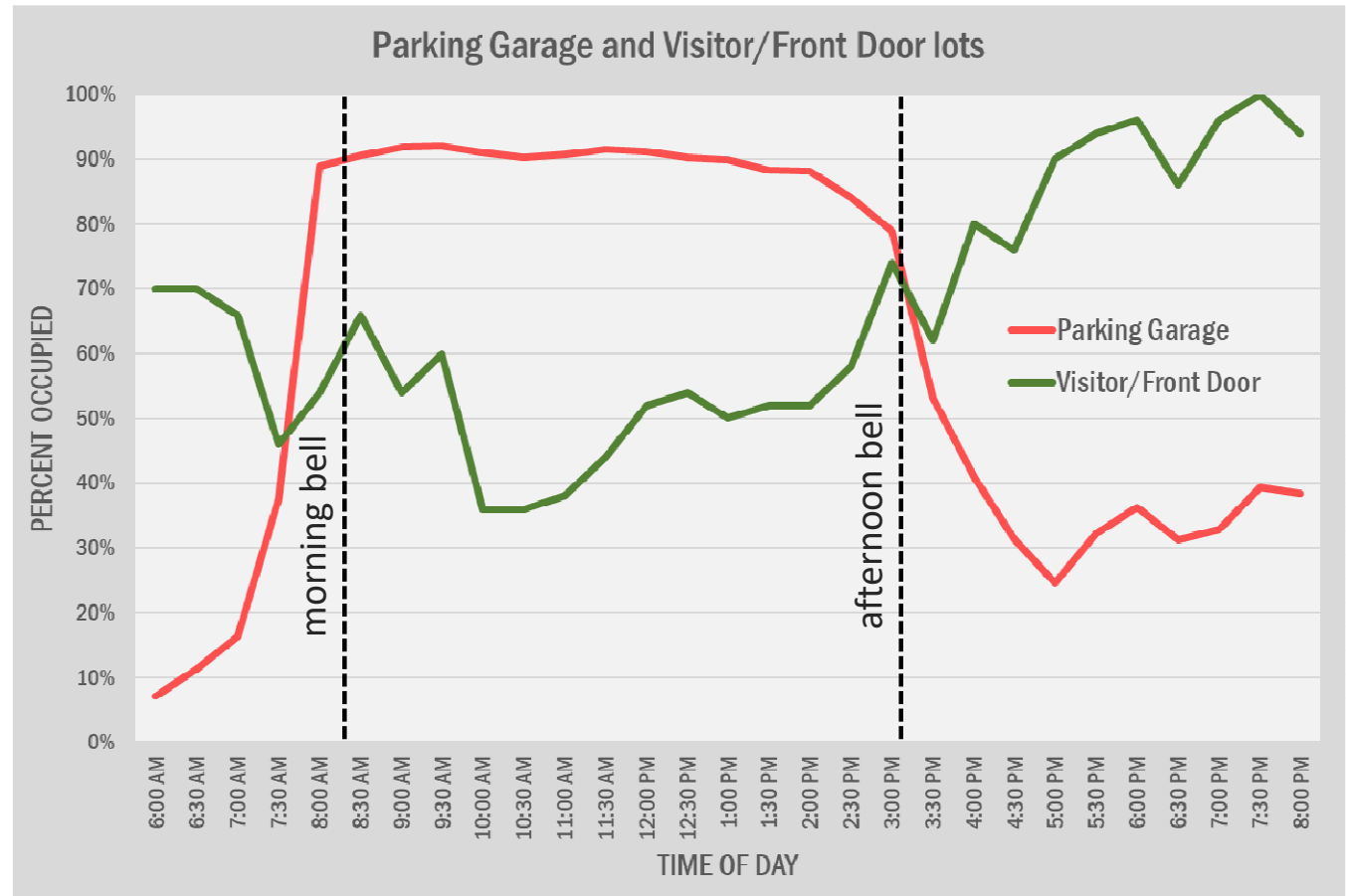
Parking Garage

In high demand between morning and afternoon bell times.

Other Parking

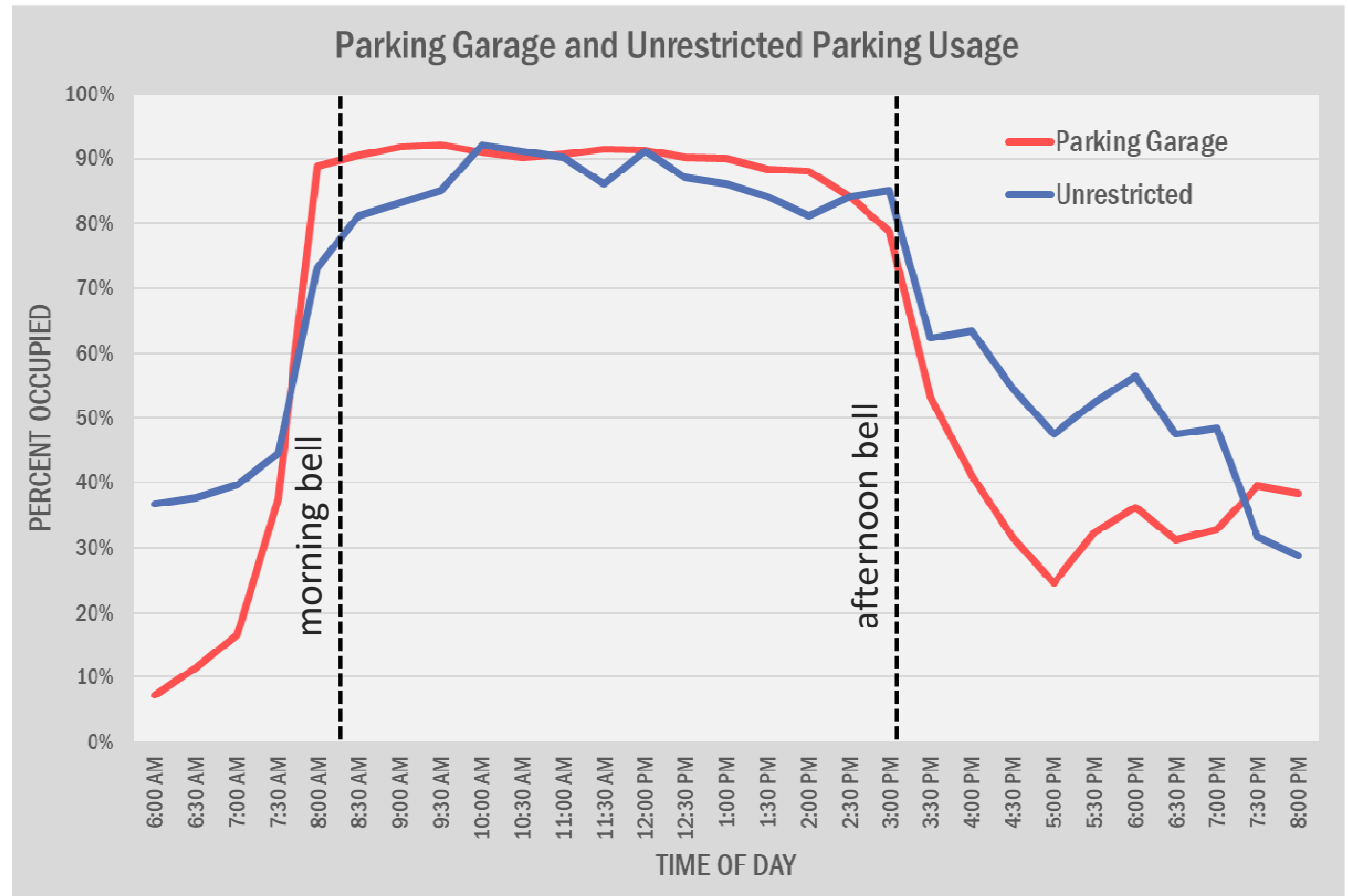
(not for regular school staff/student use)

Seems to follow pool schedule/demand. Gets full in evenings.



Hmmm....

Very similar profiles for parking garage and the unrestricted on-street parking

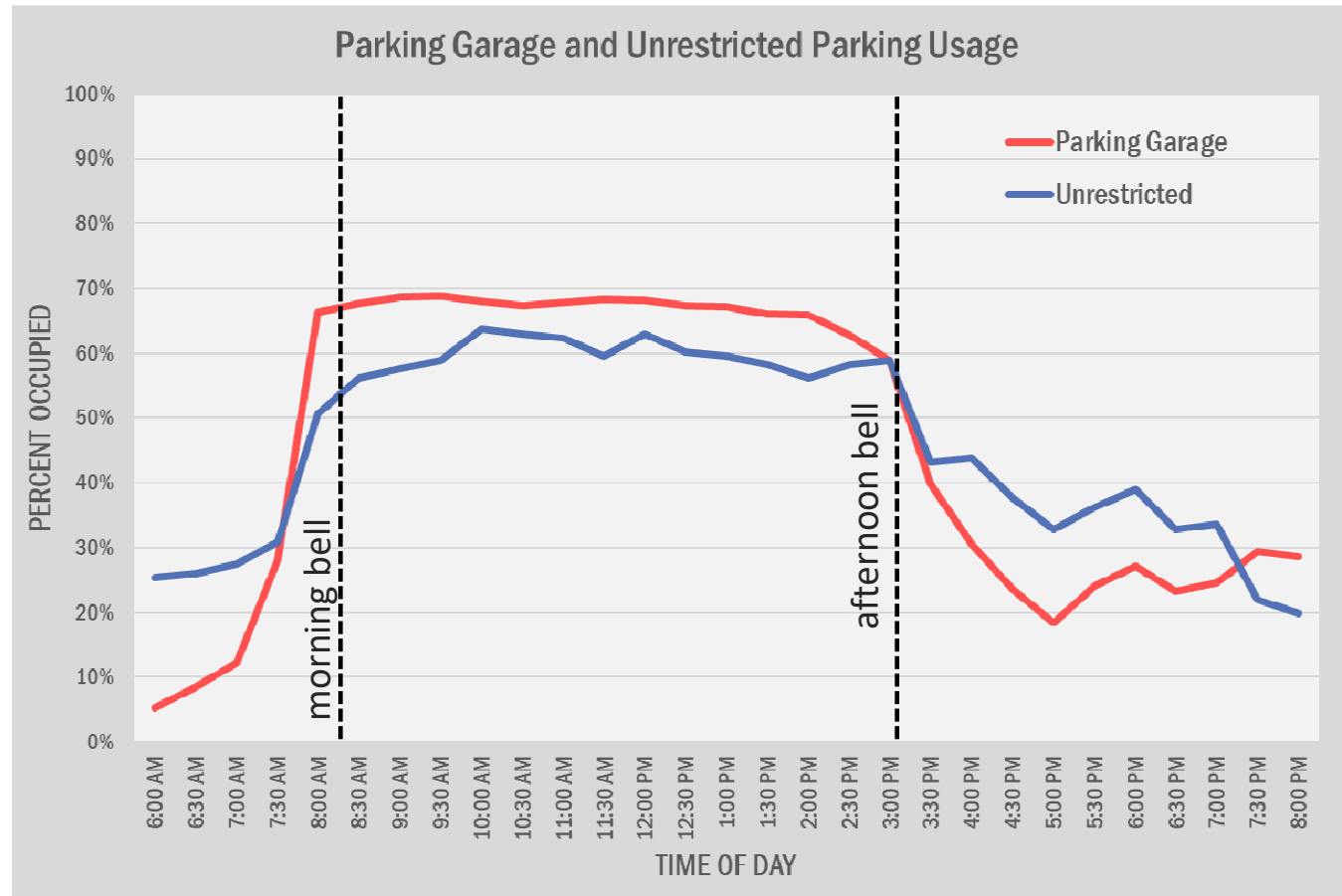


TRANSPORTATION

What if...

...we added the Ed Center lot supply to the parking garage, and the empty time restricted on-street parking on N Quincy St to the unrestricted supply?

Peak parking would be less than 70%, meaning that if managed correctly there should be enough room to accommodate additional parking demand



Summary

Concerns

- Queuing during arrival and dismissal
- Lack of space to accommodate more buses at existing locations
- Parking occupancy at 90% in parking garage and unrestricted parking between bell times
- Commuter traffic impacting side street traffic, including site driveways

Opportunities

- Existing Ed Center lot and surrounding space
- Lots of unused transportation resources during the school day
- Existing APS demand management program



Transportation Next Steps

Our to-do list:

- Use traffic model to look at what happens if we add more traffic demand
- Explore ways to use parking locations with low demand during the school day more efficiently
- Review policies changes to influence W-L student travel behavior
- Investigate changes/additions to pick-up/drop-off areas
- Test ideas and develop solutions

Next presentation:

- Discuss potential solutions and results of testing
- Present preliminary recommendations for arrival/dismissal, parking, and traffic operations



TRANSPORTATION



8 Committee Comments

A photograph of two children sitting at a table with laptops in a classroom. The child on the left is a girl with glasses, smiling slightly. The child on the right is a boy looking down at his laptop. A chalkboard with the words "Parents Advice" is visible in the background. The entire image has a blue tint.

9 Public Comments

10 Next Steps + Adjourn

David M. Brown Planetarium
1426 North Quincy Street

Adjourn

1. As a reminder the APS Project Manager is:
Steve Stricker
(703) 228-7749
steven.stricker@apsva.us
2. Public meeting dates and past presentations are posted on the APS project website:
<https://www.apsva.us/education-center-reuse/>
3. To provide feedback and/or comments to APS use: engage@apsva.us

Transportation Back Up Slides



STUDIOTWENTYSEVENARCHITECTURE

Existing Traffic Concerns

AM Commuter Peak

Traffic model results show side street traffic trying to enter N Quincy St, and long wait for turning left onto Washington Boulevard from Quincy and Stafford



TRANSPORTATION

Existing Traffic Concerns

AM Commuter Peak

Traffic model results show side street traffic getting delayed trying to enter N Quincy St, and long waits to turning left onto Washington Boulevard from Quincy and Stafford

PM Commuter Peak

Traffic model results show side street traffic getting delayed trying to enter N Quincy St



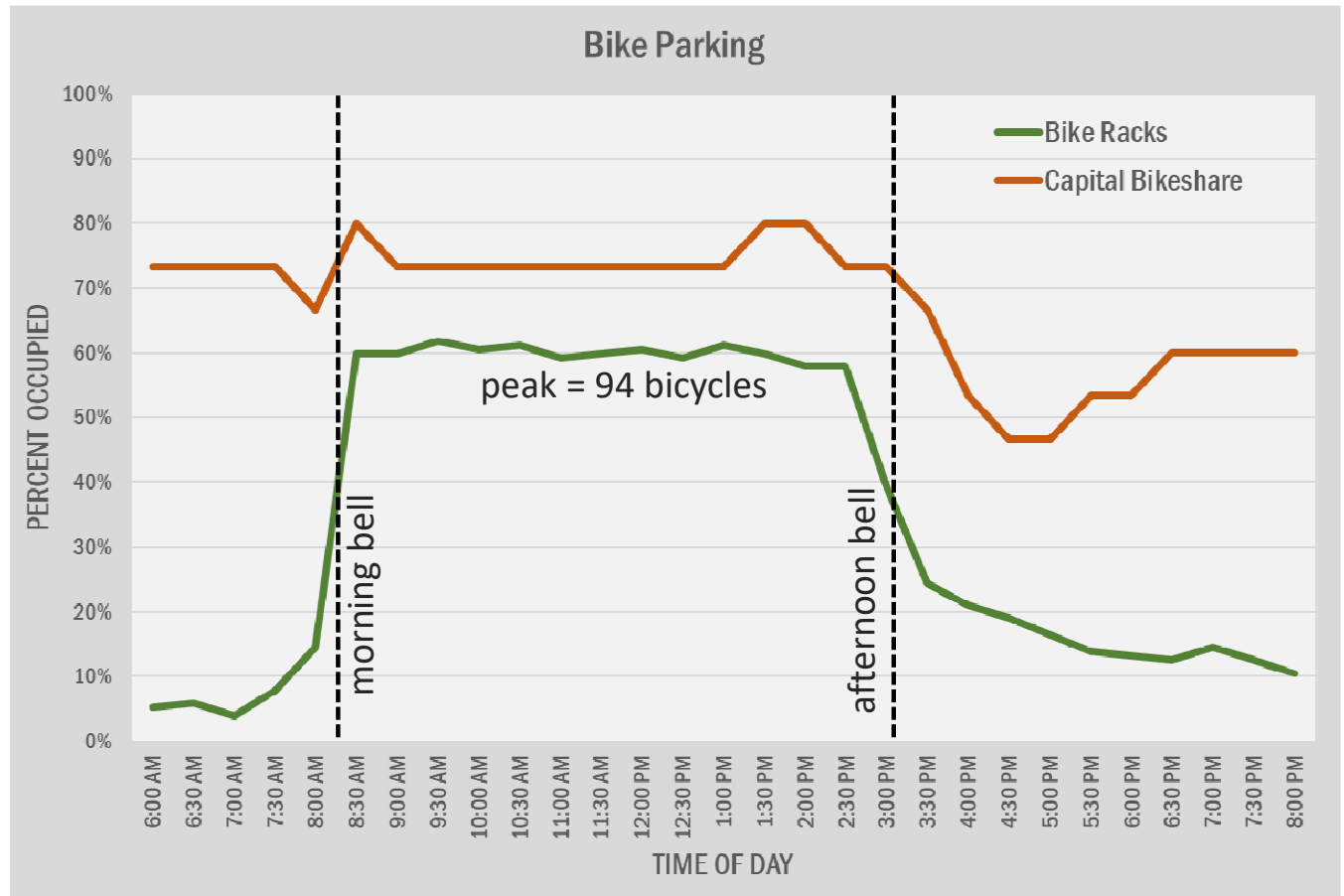
TRANSPORTATION

Bike Parking

76 racks in two locations
(152 bicycles)



15 dock Capital Bikeshare station



TRANSPORTATION

Parking by Level

Level A

Student Parking

Level B

Used by W-L Staff

Level D

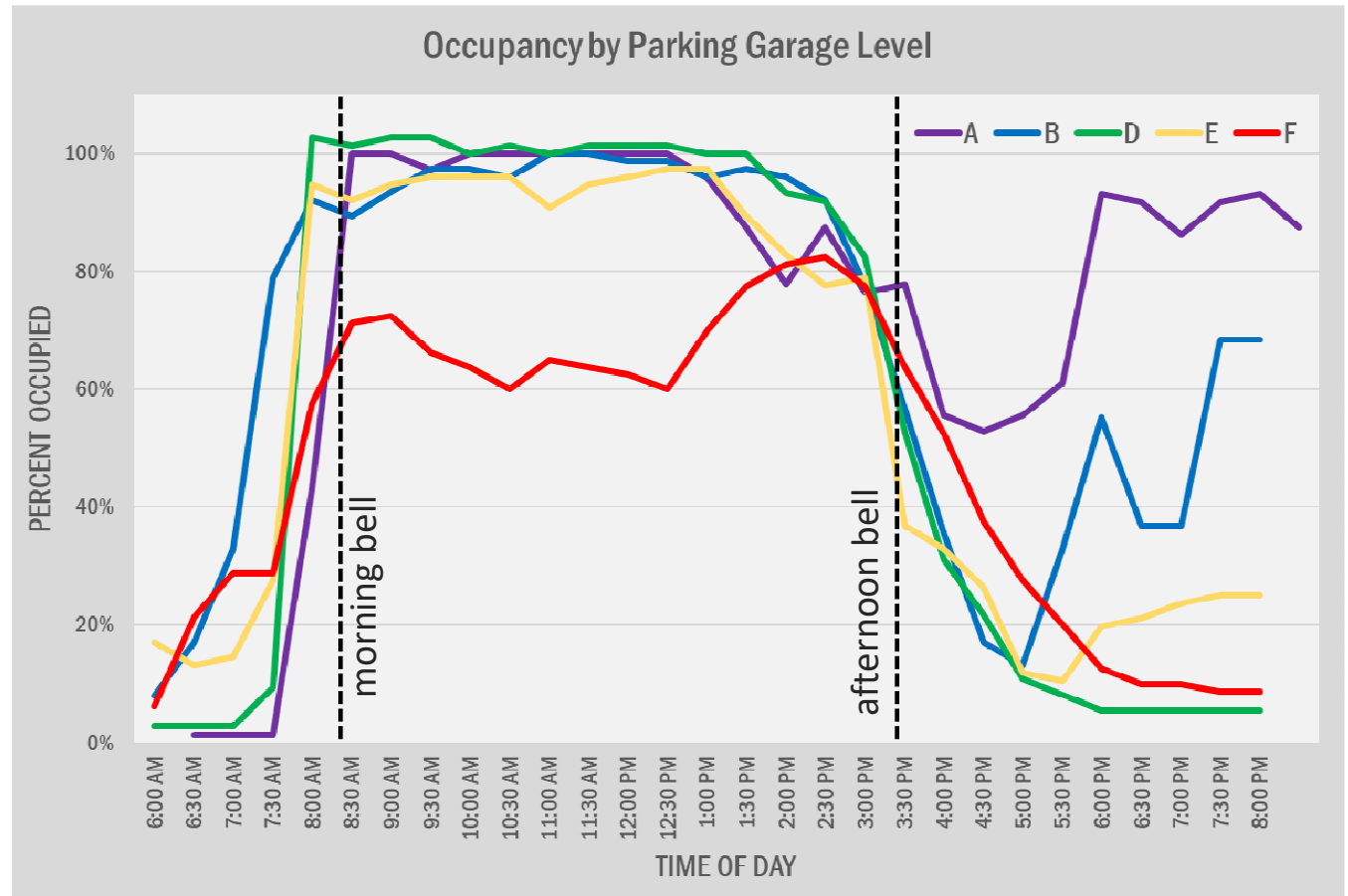
Used by W-L Staff

Level E

No fee

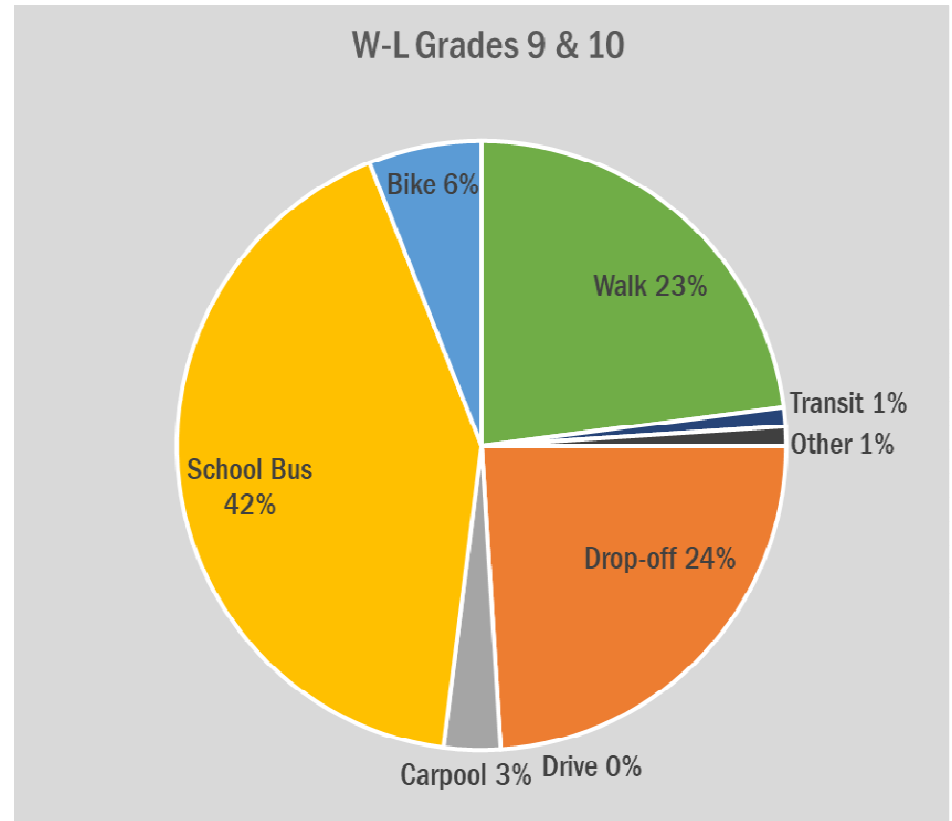
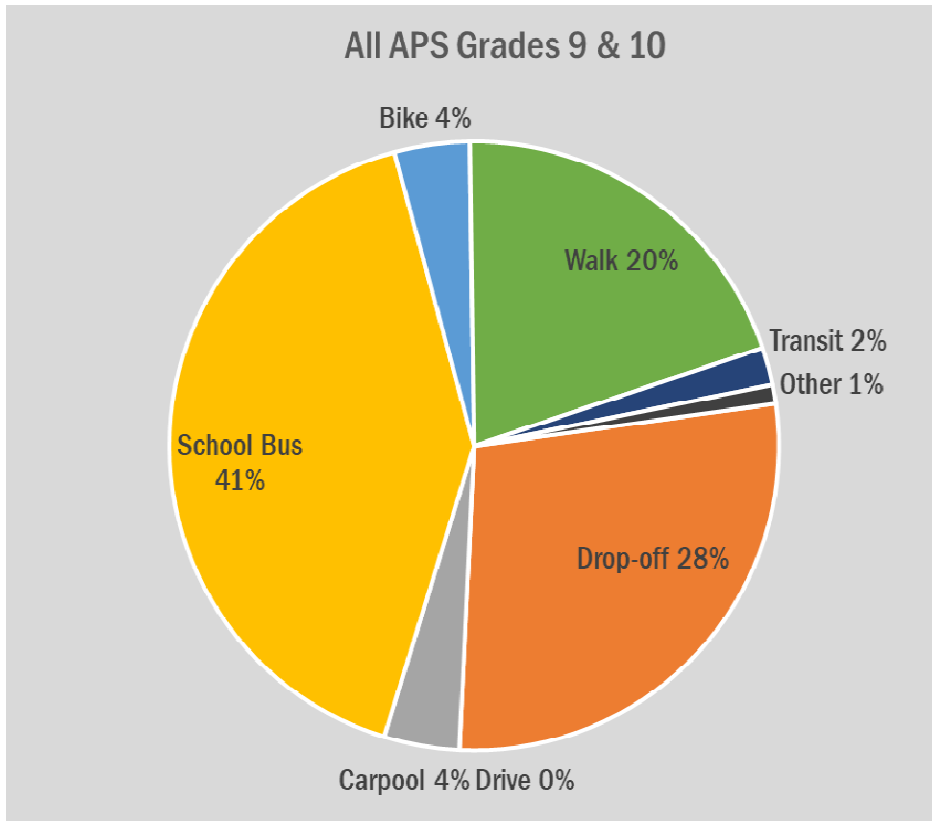
Level F

Used by W-L Staff



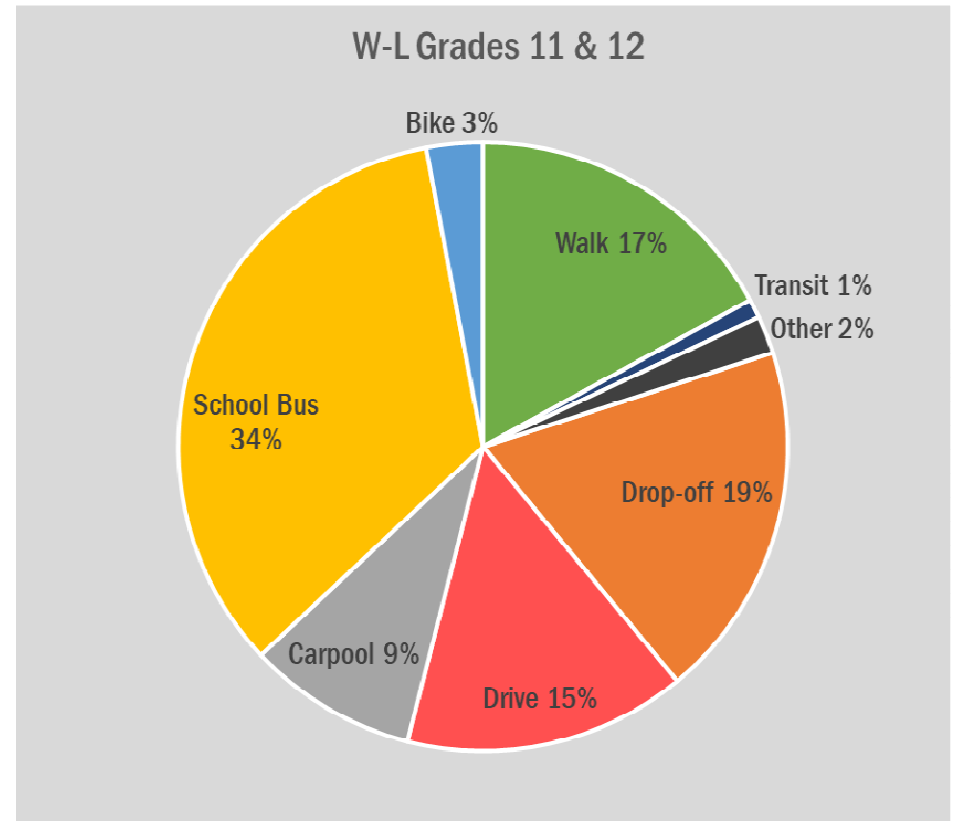
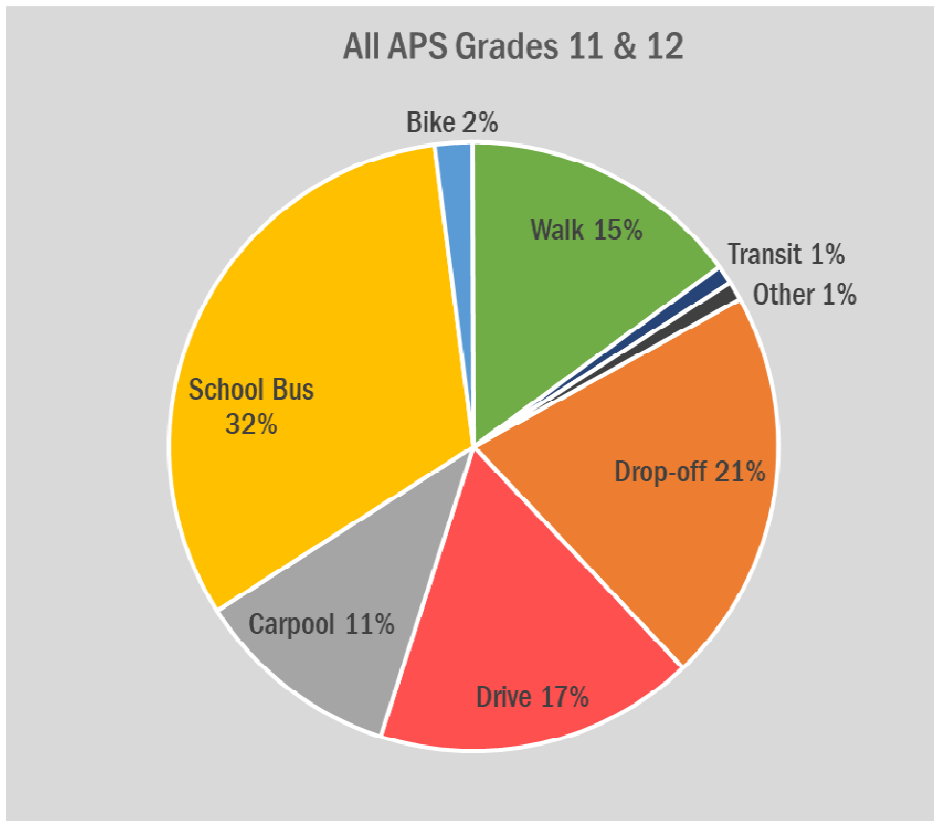
TRANSPORTATION

Mode Split – Grades 9 & 10



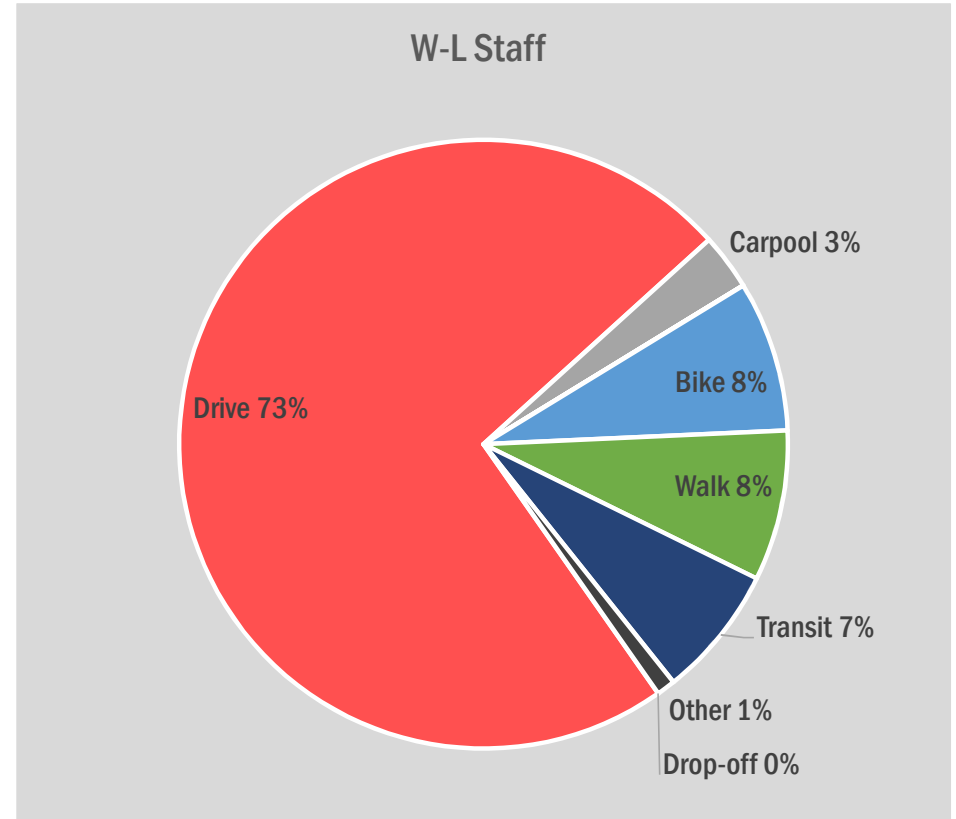
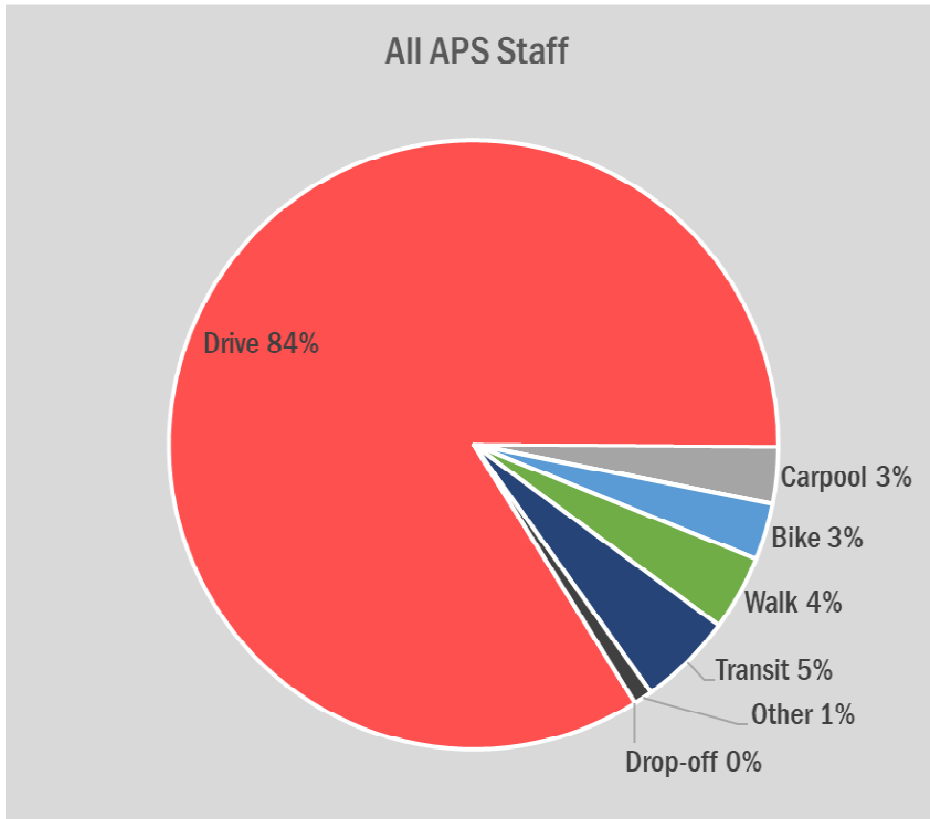
TRANSPORTATION

Mode Split – Grades 11 & 12



TRANSPORTATION

Mode Split – Staff



TRANSPORTATION