STRATFORD MIDDLE SCHOOL
RENOVATION AND ADDITION
ARLINGTON PUBLIC SCHOOLS

BLPC #7
JUNE 29, 2015
SCHEDULE & RECENT MEETINGS
<table>
<thead>
<tr>
<th>Meeting Title</th>
<th>Date</th>
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<tbody>
<tr>
<td>Introductions and Discussion</td>
<td>April 8, 2015</td>
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<tr>
<td>Visioning and Site Planning</td>
<td>April 20, 2015</td>
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<tr>
<td>Site Planning and Massing</td>
<td>May 4, 2015</td>
</tr>
<tr>
<td>Learning Environments</td>
<td>May 18, 2015</td>
</tr>
<tr>
<td>Preliminary Concepts</td>
<td>June 1, 2015</td>
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<tr>
<td>Concept Development and Value Analysis</td>
<td>June 15, 2015</td>
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<tr>
<td>Preferred Concept and Conclusions</td>
<td>June 29, 2015</td>
</tr>
<tr>
<td>Review of School Board Presentation</td>
<td>August 2015, TBD</td>
</tr>
</tbody>
</table>
• Site access solution needs to include a connection to Old Dominion (straw poll)
• Option A3 (addition on lower lot) removed from consideration
• Option G (wide loop providing in/out from Old Dominion) removed from consideration
• Plan for entire site (APS + DPR) and consider Phase 2
• Provide a traffic signal at Old Dominion
• Consider remote drop-off locations
• Consider historic views and perspective but should not impede good school design
• Survey results (12 responses) indicated preferences for site options A/A1, and building options A/A1 and C
OPTION C2 - “TERRACE”

VACATION LANE TO OLD DOMINION WITH LEVEL 1 PLAZA

- Connection from Vacation Lane to Old Dominion
- Can enter/exit from Old Dominion
- Existing bus loop widened for more capacity
- Entry/Drop-off Plaza at Level 1
- No change to park or west parking
- Field shifts east
- 145 parking spaces
OPTION C2 - "TERRACE"

LEVEL 1 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

 Existing Circulation
 Existing Program
 Proposed Circulation
 Proposed Program

Existing Circulation
Existing Program
Proposed Circulation
Proposed Program

Soccer and Ultimate Frisbee Field
Entry Plaza
Media Center

Arlington Public Schools
Stratford Middle School - 7
OPTION C2 - “TERRACE”

MASSING

Phase 2 addition

Phase 1 addition
OPTION C2 - “TERRACE”

MASSING - Contextual Response

- Projecting main drop-off entrance; vocabulary of the historic main entrance
- Courtyard enhances the existing symmetry
- Low massing preserves view of existing gym and classroom facades
- Field is shifted but the size is maintained
- Field is shifted but the size is maintained
- Courtyard enhances the existing symmetry
- Low massing preserves view of existing gym and classroom facades
OPTION C2 - “TERRACE”

MASSING - Program & Circulation

- Occupiable Green Roof
- New Drop-off & Field Entrance
- New Parent Drop-off Plaza
- New Auxiliary Gym & Lockers
- New ADA Elevator Connecting All Floors
- Stratford Program Converted to Media Center Adjacent to Courtyard
- Classrooms & Electives

Arlington Public Schools
Stratford Middle School - 10
OPTION C2 - “TERRACE”
PERSPECTIVE
PRECEDEENTS

Perkins + Will - Springdale Park Elementary
OPTION C3 - “LINK”
VACATION LANE TO OLD DOMINION WITH SIGNAL

- Expanded bus drop-off at existing location
- New parent drive from Vacation Lane to Old Dominion
- Entry Plaza/drop-off at west end of addition
- Signal at Old Dominion allows right and left exits
- No change to park or west parking
- Field shifts south
- 155 parking spaces
OPTION C3 - “LINK”

LEVEL 1 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

Soccer and Ultimate Frisbee Field

Auxiliary Gym

Lockers
OPTION C3 - “LINK”

MASSING

Phase 2 addition

Phase 1 addition
OPTION C3 - “LINK”

MASSING - Contextual Response

- Atrium provides the opportunity to preserve and protect the historic south facade.
- Maintain vocabulary of historic facade.
- Trees preserved.
- Follow the historic precedent of massing that directly reflects the use of the interior spaces.
- Symmetrical and vertical elements respond to the historic facade beyond.
- New Addition will maintain the historic relationship of the classroom core to the field.
- Atrium reduces the amount of building envelope, improving energy performance.
- Projecting form at new entrance; vocabulary of the historic main entrance.
- Atrium reduces the amount of building envelope, improving energy performance.
- Trees preserved.
- Follow the historic precedent of massing that directly reflects the use of the interior spaces.
- Symmetrical and vertical elements respond to the historic facade beyond.
- New Addition will maintain the historic relationship of the classroom core to the field.
- Atrium provides the opportunity to preserve and protect the historic south facade.
- Maintain vocabulary of historic facade.
OPTION C3 - “LINK”

MASSING - Program & Circulation

- Enclosed Atrium
- Improved Building Circulation
- Stratford Program Converted Auxiliary Gym & Lockers
- Renovated Media Center
- Classrooms & Electives
- New ADA Elevator Connecting All Floors
- New Parent Drop-off Plaza
- Arlington Public Schools
- Stratford Middle School
OPTION C3 - “LINK”

PERSPECTIVE
PRECEDE NTS

R enzo Piano - Harvard Art Museum
PRESERVATION OPPORTUNITIES

RESTORE BURKETT’S ORIGINAL DESIGN INTENT
OPTION G2 - “HILL”

IN / OUT FROM OLD DOMINION W/ STRUCTURED PARKING

- Expanded bus drop-off at existing location
- New parent loop off of Old Dominion
- Signal at Old Dominion allows right and left exits
- 1 level structured parking under drop-off loop
- No change to Stratford field
- 135 parking spaces
OPTION G2 - “HILL”

LEVEL 2 PLAN

LEGEND
- Existing Circulation
- Existing Program
- Proposed Circulation
- Proposed Program

Garage below at Level 1

New Entry

Media Center below

Soccer and Ultimate Frisbee Field +280’
OPTION G2 - “HILL”

MASSING

Phase 2 addition
Phase 1 addition
OPTION G2 - “HILL”

MASSING - Contextual Response

- Enhance visual & physical connection to the field
- Symmetrical approach to media center and central stair tower
- Landscape approach preserves open space
- Skylight with view to tower from media center
- Low massing preserves view of existing building
OPTION G2 - “HILL”

MASSING - Program & Circulation

- New Parent Drop-off Plaza
- Stratford Program Converted Auxiliary Gym & Lockers
- Circulation Concentrated on the West
- Classrooms & Electives
- New ADA Elevator Connecting All Floors
- New Media Center
OPTION G2 - “HILL”

PERSPECTIVE
OLD DOMINION PERSPECTIVE
OLD DOMINION PERSPECTIVE
MASSING OPTIONS

Existing

C2 - Terrace

C3 - Link

G2 - Hill
• Vacation lane widened as much as possible
• Parking garage under field: 135 spaces
• Can work with several schemes
• Field either left at existing elevation, or raised 5’.
• Existing bus loop for pedestrians and bikes only
### Site Criteria
- Limit disturbance to existing DPR property
- Preserve and enhance existing field uses and site amenities on APS property
- Minimize environmental impacts: stormwater, non-permeable surfaces, RPA boundary
- Provided flexibility for phase 2
- Balance site and building costs ($ only includes road and concept regrading)

### Building Criteria
- Provide an addition that enhances the arrival and internal circulation network
- Respect and compliment existing historic character
- Maximize building construction efficiency
- Provide optimal daylighting and learning environments

### Option Comparison Matrix

<table>
<thead>
<tr>
<th>KEY:</th>
<th>Satisfies criteria and already optimized</th>
<th>Could satisfy criteria with changes</th>
<th>Does not satisfy criteria and satisfying criteria would be challenging</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Satisfies criteria but not yet optimized</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>A</th>
<th>A1</th>
<th>A2</th>
<th>C2 Terrace</th>
<th>C3 Link</th>
<th>G2 Hill</th>
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<tr>
<td>Limit disturbance to existing DPR property</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Preserve and enhance existing field uses and site amenities on APS property</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Minimize environmental impacts: stormwater, non-permeable surfaces, RPA boundary</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Provided flexibility for phase 2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Balance site and building costs ($ only includes road and concept regrading)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Provide an addition that enhances the arrival and internal circulation network</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Respect and compliment existing historic character</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maximize building construction efficiency</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Provide optimal daylighting and learning environments</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
OPTION A

ENHANCED VACATION LANE

- All drop-off and pick-up from Vacation Lane
- Parent drop-off at north entrance
- New bus drop-off with stacking and queuing
- No change to park or west parking
- Maximum field area
- 140 parking spaces
**OPTION A1**

**ENHANCED VACATION LANE**

- All drop-off and pick-up from Vacation Lane
- Expanded bus drop-off at existing location
- New parent drop-off loop on Vacation Lane
- No change to park or west parking
- Maximum field area
- 155 parking spaces
OPTION A/A1
PRELIMINARY MASSING
OPTION A2

ENHANCED VACATION LANE ACCESS - DRIVE SOUTH OF FIELD

- All drop-off and pick-up from Vacation Lane
- Existing bus loop widened for more capacity
- Parent drop-off south of field
- Parking on parent drive
- No change to Park or west parking
- Maximum field area
- 148 parking spaces
OPTION A2
PRELIMINARY MASSING
APS Stratford Project
Transportation Analysis Overview

Stratford BLPC #7
June 29, 2015
Outline

• Recent and Upcoming Project Activities
• BLPC 6 Follow-Ups
• Evaluation of New Old Dominion Driveway Access Options
• Future Parking Estimates
Recent & Upcoming Project Activities

• June 24—Meeting with County to discuss Five Points
• June 25—Meeting with County to discuss Old Dominion access
BLPC 6 Follow Ups
Where will sidewalks require private land? What is the process for coordinating potential new/widened sidewalks with residents?

What precedents are there for parking restrictions near schools? What notifications/approvals/coordination with residents is needed before parking restrictions can be implemented?

Develop hypothetical boundary scenarios, so traffic analysis can show real direction of travel.

Adjust drive rates for bus-eligible and "walkers", rather than using a blended average across all schools.

Study satellite drop off locations, esp. on Military and Lorcom.
Where will sidewalks require private land?
  - Field study necessary to verify.

What is the process for coordinating potential new/widened sidewalks with residents?
  - Sidewalks on neighborhood streets generally installed within County right-of-way and not on private property.
  - If there is a need for an easement, County Real Estate Bureau works directly with homeowners to obtain one.
  - Sidewalks can be funded through the Neighborhood Conservation CPHD program or through Capital projects through the Department of Transportation (DES).
• What precedents are there for parking restrictions near schools?
  – Pick-up/drop-off related parking restrictions have been implemented adjacent to school property at several APS schools.
  – Can be marked No Parking or No Stopping/Standing.

• What notifications/approvals/coordination with residents is needed before parking restrictions can be implemented?
  – Potential parking restrictions reviewed as part of use permit process.
• Develop hypothetical boundary scenarios, so traffic analysis can show real direction of travel.
  – Would require redoing traffic analysis for all remaining options and is unlikely to yield significant new insights.
List of BLPC 6 Follow-Ups—Drive Rates by Bus Eligibility

• Adjust drive rates for bus-eligible and "walkers", rather than using a blended average across all schools.
  – Would require redoing traffic analysis for all remaining options and is unlikely to yield significant new insights.
## Neighborhood MS Drive Rate by Bus Eligibility

<table>
<thead>
<tr>
<th>School</th>
<th>%Bus Eligible APS&lt;sup&gt;1&lt;/sup&gt;</th>
<th>%Bus Eligible Parent Survey&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Bus Eligible AM Drive Rate&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Not Bus Eligible AM Drive Rate&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Combined Drive Rate&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunston</td>
<td>77%</td>
<td>73.8%</td>
<td>16.9%</td>
<td>22.1%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Jefferson</td>
<td>52%</td>
<td>41.6%</td>
<td>24.2%</td>
<td>21.3%</td>
<td>22.5%</td>
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<tr>
<td>Kenmore</td>
<td>43%</td>
<td>61.5%</td>
<td>23.6%</td>
<td>35.7%</td>
<td>28.1%</td>
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<tr>
<td>Swanson</td>
<td>41%</td>
<td>43.6%</td>
<td>23.3%</td>
<td>34.3%</td>
<td>29.5%</td>
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<tr>
<td>Williamsburg</td>
<td>62%</td>
<td>64.0%</td>
<td>21.1%</td>
<td>56.0%</td>
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<td><strong>AVERAGE</strong></td>
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<td><strong>26.4%</strong></td>
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<td><strong>RANGE</strong></td>
<td>41% – 77%</td>
<td>41.6% - 73.8%</td>
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<sup>1</sup> Based on data provided by APS in 2013.

<sup>2</sup> Based on 2013 APS GO! Parent Survey
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1 Based on data provided by APS in 2013.
2 Based on 2013 APS GO! Parent Survey

- Range of drive rates for bus-eligible students is relatively small.
- Range of drive rates for non-bus eligible students is larger, and Williamsburg the highest by a significant margin.
List of BLPC 6 Follow-Ups—Remote Drop-off

- Study satellite drop off locations, esp. on Military and Lorcom.
  - Detail regarding satellite drop-off locations on following slides.
Recommended Remote Drop-off Locations—Lorcom

- Drop-off capacity west side: 5 cars
- Drop-off capacity east side: 4 cars
- Drop-off on west side of Lorcom must be supported by improved crossing at Vacation/Lorcom

Restricted parking during arrival
Recommended Remote Drop-off Locations—Military

- Drop-off capacity west side: 5 cars
- Drop-off capacity east side: 5 cars
- Drop-off on east side of Military must be supported by improved crossing at Vacation/Military

Restricted parking during arrival
Evaluation of Old Dominion Access Options
Notes:
- Inbound right- and left- turns from Vacation Lane
- Inbound right-turns from OD
- Outbound right- and left-turns at full signal on OD
- No queuing issues
Notes:

- Inbound right- and left- turns from Vacation Lane
- Inbound right-turns from OD
- Outbound right- and left-turns at full signal on OD
- No queuing issues
Notes:

- Inbound right- and left-turns from Vacation Lane
- Inbound right-turns from OD
- Outbound right- and left-turns at full signal on OD
- Outbound right- and left-turns at Vacation Lane
- Signal queue is the same as C2, but signal timing reduces delay to OD
NEW OPTION C2 – Alternative Traffic Configuration

Notes:
- Inbound right- and left-turns from Vacation Lane
- Inbound right-turns from OD
- Outbound right- and left-turns at full signal on OD
- Outbound right- and left-turns at Vacation Lane
- Signal queue is the same as C2, but signal timing reduces delay to OD
Notes:

- Hybrid of C and C2
- Therefore, NOT evaluated for intersection operations
- Inbound right- and left-turns from Vacation Lane
- Outbound right- and left-turns at full signal on OD
- Signal Queue backs into drop-off queue
NEW OPTION C₃

Notes:
- Hybrid of C and C₂
- Therefore, NOT evaluated for intersection operations
- Inbound right- and left- turns from Vacation Lane
- Outbound right- and left-turns at full signal on OD
- Signal Queue backs into drop-off queue
NEW OPTION G2

Notes:
- Inbound right- and left-turns at full signal on OD
- Outbound right- and left-turns at full signal on OD
- Signal Queue backs into drop-off queue
Notes:

- Inbound right- and left-turns at full signal on OD
- Outbound right- and left-turns at full signal on OD
- Signal Queue backs into drop-off queue
## Summary of Recommendations for Traffic Operations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>A</th>
<th>C</th>
<th>C2</th>
<th>C2 alt</th>
<th>G2</th>
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<tbody>
<tr>
<td>Signal at Lorcom &amp; Vacation</td>
<td>✓</td>
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<tr>
<td></td>
<td>✓</td>
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<tr>
<td>(1,300 Seat Scenario Only)</td>
<td>✓</td>
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<tr>
<td>HAWK Beacon at Old Dominion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Signal at Old Dominion &amp; New Driveway</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<td>Right Turn Lane on OD at New Driveway</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Left Turn Lane on OD at New Driveway</td>
<td>N/A</td>
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<td>✓</td>
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<td>Two Northbound Thru Lanes at Lorcom &amp; OD</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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Intersection Operations – Options Summary

All figures represent year 2021.
Intersection Operations – Options Summary

Average Delay per Vehicle

All figures represent year 2021.
# Intersection Operations – Options Summary

## Average Delay per Vehicle in seconds

<table>
<thead>
<tr>
<th>Ex</th>
<th>A</th>
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<tbody>
<tr>
<td>C2</td>
<td>C2alt</td>
<td>G2</td>
</tr>
</tbody>
</table>

All figures represent year 2021.
*Analysis at Five Points is not reliable due to high volumes relative to capacity. Thus, the delay figures are intended to illustrate increase from existing rather than actual delay experienced at the intersection.

All figures represent year 2021.
## Evaluation of Stratford Site Access Options

<table>
<thead>
<tr>
<th>Criterion</th>
<th>A</th>
<th>A1</th>
<th>C2</th>
<th>C2 Alt</th>
<th>C3</th>
<th>G2</th>
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<tbody>
<tr>
<td>1. Minimizes adding traffic to intersections that are currently challenging (specifically Five Points and Lorcom/Old Dominion)</td>
<td></td>
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<td>2. Minimizes impacts to local streets (specifically 23rd and Vacation)</td>
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<tr>
<td>3. Doesn’t limit movements as doing so may contribute to congestion (number of arrows)</td>
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<td>4. Separates modes</td>
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<tr>
<td>5. Provides adequate queuing and turning space for buses</td>
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<tr>
<td>6. Provides adequate queuing space for parent drop-off</td>
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<td>7. Provides comfortable pedestrian and bicycle access</td>
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<td>8. Accommodates staff, visitor and park/rec parking</td>
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</table>
Future Parking Estimates
## Estimated Future Parking Needs—Zoning-Based Scenario

<table>
<thead>
<tr>
<th></th>
<th>1,000 Seats</th>
<th>1,300 Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees(^1)</td>
<td>134</td>
<td>174</td>
</tr>
<tr>
<td>Visitors(^1)</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>Park Users(^2)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Parking Spaces Needed On-Site(^3)</strong></td>
<td><strong>169</strong></td>
<td><strong>217</strong></td>
</tr>
</tbody>
</table>

\(^1\)Calculated from Arlington County Zoning Ordinance.
\(^2\)Based on PFRC principles and preliminary indications from DPR regarding needed spaces.
\(^3\)There are currently **153** off-street parking spaces on the combined APS/DPR property.
Based on projected employees and average staff drive rate of 92% for APS neighborhood middle schools, including both driving alone and carpooling, from 2013 Staff Survey.

Based on maximum number of visitors recorded at Swanson Middle School at any hour during the APS Neighborhood Middle School Visitor Survey.

Based on PFRC principles and preliminary indications from DPR regarding needed spaces.

There are currently 153 off-street parking spaces on the combined APS/DPR property.

### Estimated Future Parking Needs—Existing Travel Mode Scenario

<table>
<thead>
<tr>
<th></th>
<th>1,000 Seats</th>
<th>1,300 Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees(^1)</td>
<td>141</td>
<td>184</td>
</tr>
<tr>
<td>Visitors(^2)</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Park Users(^3)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Parking Spaces Needed On-Site(^4)</strong></td>
<td><strong>165</strong></td>
<td><strong>212</strong></td>
</tr>
</tbody>
</table>

\(^1\) Based on projected employees and average staff drive rate of 92% for APS neighborhood middle schools, including both driving alone and carpooling, from 2013 Staff Survey.

\(^2\) Based on maximum number of visitors recorded at Swanson Middle School at any hour during the APS Neighborhood Middle School Visitor Survey.

\(^3\) Based on PFRC principles and preliminary indications from DPR regarding needed spaces.

\(^4\) There are currently 153 off-street parking spaces on the combined APS/DPR property.
### Estimated Future Parking Needs—TDM Scenario (RECOMMENDED)

<table>
<thead>
<tr>
<th></th>
<th>1,000 Seats</th>
<th>1,300 Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees¹</td>
<td>134</td>
<td>174</td>
</tr>
<tr>
<td>Visitors²</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Park Users³</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Parking Spaces Needed</strong></td>
<td><strong>158</strong></td>
<td><strong>202</strong></td>
</tr>
<tr>
<td><strong>Total Parking Spaces Needed On-Site</strong>⁴</td>
<td><strong>144</strong></td>
<td><strong>188</strong></td>
</tr>
</tbody>
</table>

¹Based on an average staff drive rate of 87%, including both driving alone and carpooling.

²Based on maximum number of visitors recorded at Swanson Middle School at any hour during the APS Neighborhood Middle School Visitor Survey.

³Based on PFRC principles and preliminary indications from DPR regarding needed spaces.

⁴Assumes 14 parking spaces accommodated on-street on Vacation Lane and 23rd Street. There are currently **153** off-street parking spaces on the combined APS/DPR property.
Estimated Future Parking Needs—All Scenarios

<table>
<thead>
<tr>
<th></th>
<th>1,000 Seats</th>
<th>1,300 Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zoning-Based</td>
<td>Existing Travel</td>
</tr>
<tr>
<td></td>
<td>Scenario(^1)</td>
<td>Mode Scenario(^2)</td>
</tr>
<tr>
<td>Employees(^4)</td>
<td>134</td>
<td>141</td>
</tr>
<tr>
<td>Visitors(^5)</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>Park Users(^6)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total Parking Spaces</td>
<td>169</td>
<td>165</td>
</tr>
<tr>
<td>Needed On-Site</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) The Zoning Based Scenarios include parking requirements from the Arlington County Zoning Ordinance for employees and visitors.

\(^2\) The Existing Travel Mode Scenarios are based on an average staff drive rate of 92% for APS neighborhood middle schools, including both driving alone and carpooling, from the 2013 Staff Survey.

\(^3\) The TDM Scenarios are based on an average staff drive rate of 87%, including both driving alone and carpooling.

\(^4\) For the Existing Travel Mode and TDM scenarios, the Employees number is based on projected employees.

\(^5\) For the Existing Travel Mode and TDM scenarios, the Visitors number is based on the maximum number of visitors recorded at Swanson Middle School at any hour during the APS Neighborhood Visitor Survey.

\(^6\) The park user number is based on the PFRC principle that some parking spaces should be reserved for park users and a preliminary indication from DPR that 10 reserved spaces would likely be sufficient.

\(^7\) The TDM Scenarios assume that 14 of the needed parking spaces can be accommodated on-street on Vacation Lane and 23rd Street. There are currently 153 off-street parking spaces on the combined APS/DPR property.
Questions?