



## White Flint 2 Sector Plan Worksession No. 6: Transportation Analysis and Staging

---



Nkosi Yearwood, Senior Planner, Area 2 Division, [Nkosi.Yearwood@montgomeryplanning.org](mailto:Nkosi.Yearwood@montgomeryplanning.org), 301.495.1332



Eric Graye, Master Planner Supervisor, Functional Planning and Policy Division,  
[Eric.Graye@montgomeryplanning.org](mailto:Eric.Graye@montgomeryplanning.org), 301.495.4632



Nancy Sturgeon, Master Planner Supervisor, Master Plan Team, Area 2 Division,  
[Nancy.Sturgeon@montgomeryplanning.org](mailto:Nancy.Sturgeon@montgomeryplanning.org), 301.495.1308



Khalid Afzal, Acting Chief, Area 2 Division, [Khalid.Afzal@montgomeryplanning.org](mailto:Khalid.Afzal@montgomeryplanning.org), 301.495.4650

**Completed: 4/20/2017**

---

### Summary

Staff will present updated results of the transportation analysis performed in support of the White Flint 2 Sector Plan Public Hearing Draft Plan according to the procedures in the recently adopted 2016-2020 Subdivision Staging Policy (SSP) for Local Area Transportation Review (LATR). The analysis illustrates the transportation impacts of the level of development recommended in the Public Hearing Draft of the Plan on the proposed roadway network, and provides the foundation for the mobility recommendations in the Plan.

On January 26, 2017, staff presented the results of initial transportation analysis to the Planning Board based on the Critical Lane Volume (CLV) method and related CLV intersection congestion standards. The Staff has updated the transportation analysis using the Highway Capacity Manual (HCM) method, which measures intersection congestion standards based on average intersection delay.

Staff recommends that the staging plan in the Public Hearing Draft be modified by moving the shuttle/circulator from the second phase to the first phase to promote mobility options earlier in the Plan's implementation. Also, the recommended Non-Automotive Driver Mode Share (NADMS) is divided into categories for residents and employees. Key transportation recommendations and policies associated with the adjacent 2010 *White Flint Sector Plan* are also summarized in this report.

## **SCHEDULE**

The Planning Board held a public hearing on the Draft White Flint 2 Sector Plan on January 12, 2017. The public hearing record was open until the close of business on January 26, 2017. The Board has held five worksessions on the Public Hearing Draft of the White Flint 2 Sector Plan:

1. January 26: Focused on transportation analysis and staging recommendations in the Draft Plan.
2. February 9: Reviewed the Executive Boulevard District and associated economic feasibility analysis for some properties.
3. February 16: A joint meeting with the Rock Spring Master Plan on school issues within the Walter Johnson Cluster.
4. February 23: Reviewed the Rockville Pike-Montrose North District and revisited five properties in the Executive Boulevard District.
5. March 23: Reviewed financing alternatives for the Plan area.

The next worksession on May 4, 2017, will discuss urban design guidelines for the Plan area.

## **PURPOSE OF THIS WORKSESSION**

The purpose of this worksession is to: 1) provide the initial Highway Capacity Manual (HCM) analysis for the land use and zoning recommendations in the Public Hearing Draft Plan; 2) discuss the recommended MARC station with Maryland Transit Administration (MTA) representatives; 3) discuss pedestrian crossings of the CSX tracks; and 4) update the proposed staging plan. Background on the 2010 *White Flint Sector Plan* staging and transportation recommendations are also included in this review to provide context for the White Flint 2 Public Hearing Draft recommendations.

## **TRANSPORTATION REVIEW**

The initial transportation analysis for this Plan utilized the CLV method and the CLV intersection congestion standards established by the 2012-2016 Subdivision Staging Policy (SSP). The transportation analysis has been updated to reflect the use of the HCM method and the average intersection delay standards specified in the 2016-2020 SSP. Since then, the 2016-2020 Subdivision Staging Policy (SSP) established a new transportation system analysis and performance adequacy paradigm reflecting two key changes relative to the methods used previously:

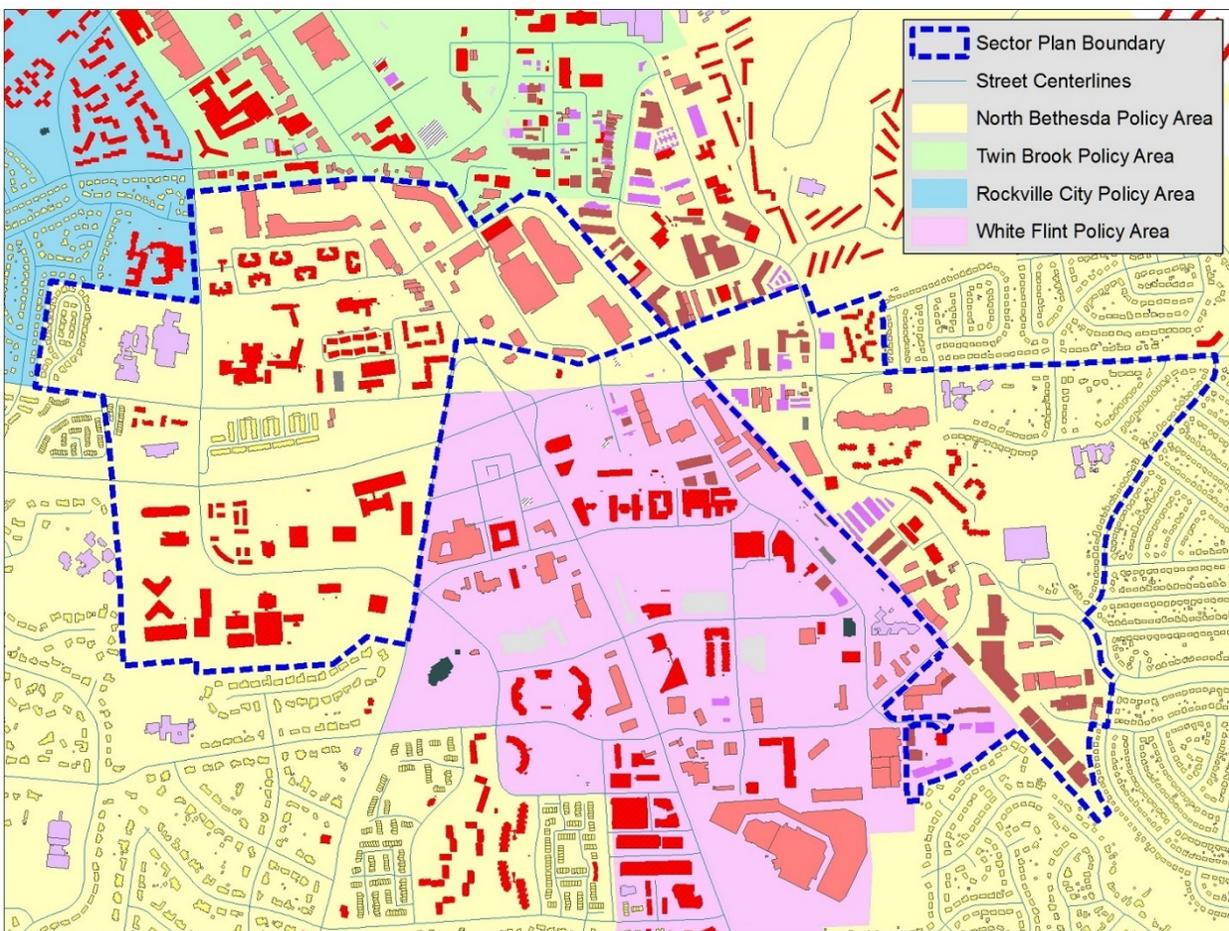
- The Critical Lane Volume (CLV) method was deemphasized in favor of the application of the delay-based Highway Capacity Method (HCM) to evaluate the performance of local intersections in most areas of the County, including the White Flint 2 Sector Plan area.
- Transportation Policy Area Review (TPAR) was eliminated as part of the regulatory process.

The transportation analysis performed in support of this sector plan focused on an evaluation of intersection system performance for the year 2040 master plan vision using the following tools:

- The Department’s regional travel demand model (referred to as Travel/4, a Montgomery County-focused adaptation of the Metropolitan Washington Council of Governments (MWCOG) regional travel demand modeling tool),
- National Cooperative Highway Research Program (NCHRP) 765 and 255 post-processing techniques, and
- Highway Capacity Manual (HCM) methodologies as generally used to implement the County’s Subdivision Staging Policy (SSP).

As depicted in the map below, most of the Plan area is located within the North Bethesda policy area and a smaller portion, Nicholson Court, is located within the White Flint Metro Station Policy Area (MSPA). The broader study area included a small portion of the Rockville City Policy Area and the Twinbrook MSPA, as well as a significant portion the White Flint MSPA located in the immediate vicinity of the Plan area.

### Relationship of Sector Plan Boundary to Policy Areas



The methodology used to evaluate transportation system network performance is established by the County’s SSP. Based on the recently adopted 2016-2020 SSP, the congestion standards for signalized intersections in these policy areas are the HCM delay-based congestion standards as described in the table below.

**2016-2020 Subdivision Staging Policy Intersection Congestion Standards**

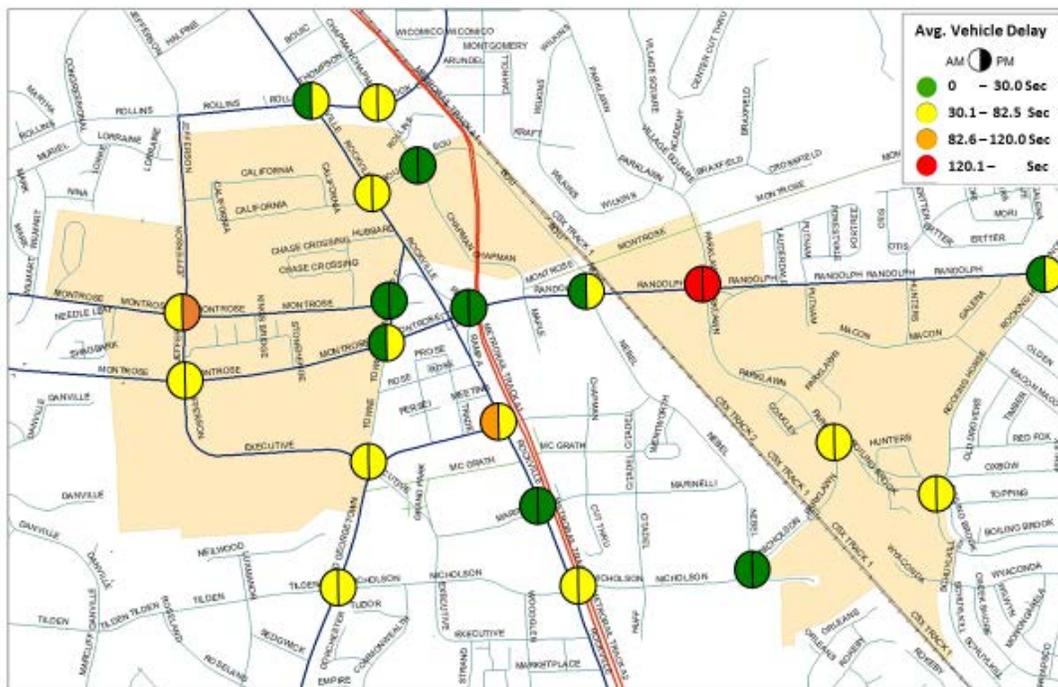
HCM Volume-to-Capacity Standard	Policy Area	HCM Average Vehicle Delay Equivalent (seconds/vehicle)
0.97	North Bethesda	71
1.13	White Flint	120
1.13	Twinbrook	120

The maps below depict intersection Level of Service (LOS) using color-coded dots to show levels of service (green—free flow, Red—failing) for major intersections based on the observed or forecasted average intersection delay as compared with the applicable policy area congestion standard during the AM (left half of the dot) and PM (right half of the dot) peak period. The results derived for three scenarios are provided below:

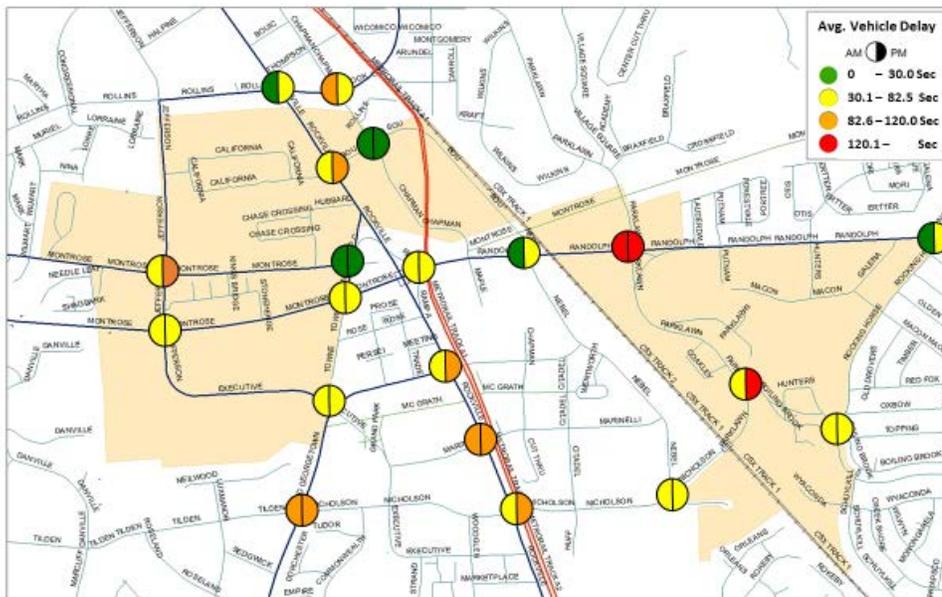
- **Scenario 1:** Year 2015, existing conditions based on the existing network and observed traffic counts.

WHITE FLINT **2** SECTOR PLAN

**2015 Existing Conditions Traffic**



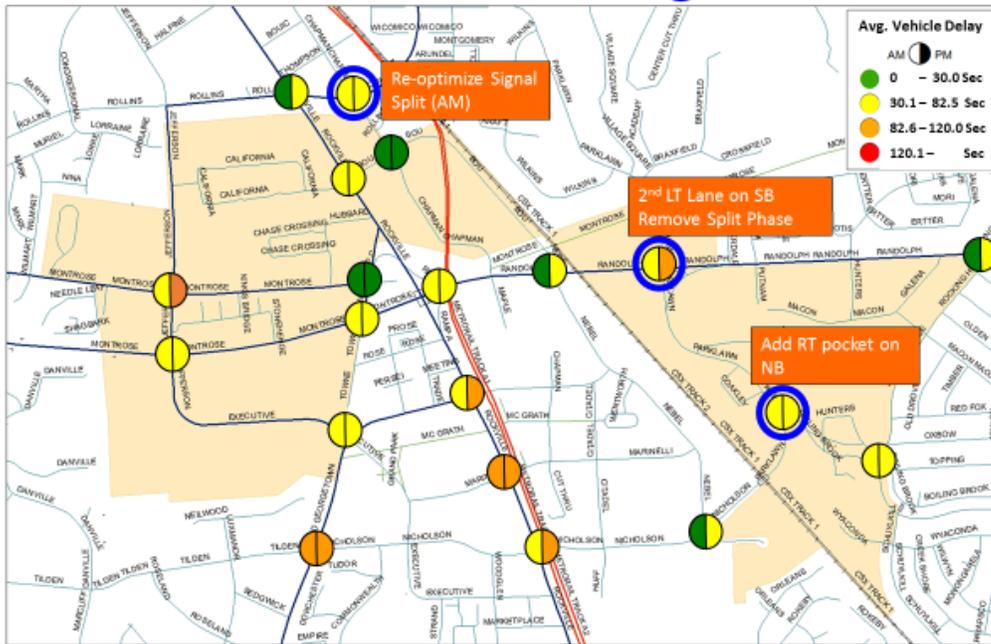
2040 Land Use-Alternative 3 (Pipeline)



- **Scenario 3:** Scenario 2 above with the application of the following mitigation strategies:

  - 50% Non-Auto Driver Mode Share (NADMS) goal for work trips in the White Flint Sector Plan area.
  - 42% NADMS goal for work trips in the White Flint 2 Sector Plan area.
  - The application of operational and/or physical geometric mitigation at selected intersection locations.

2040 Land Use-Alternative 3 with NADMS + Mitigation



The existing conditions depicted in Scenario 1 show acceptable congestion throughout the Study Area, except for the intersection at Randolph Road and Parklawn Drive, which shows failing conditions in both the AM and PM peak periods.

Relative to existing conditions, the year 2040 future conditions depicted in Scenario 2 exhibit increasing congestion along Rockville Pike (MD 355) and Old Georgetown Road (MD 187), particularly during the PM peak period.

In Scenario 3, operational and/or geometric mitigation strategies are applied at three intersection locations, which are projected to exceed the applicable policy area congestion threshold:

- Twinbrook Parkway at Chapman Avenue – Re-optimize split signal phase (AM peak).
- Randolph Road at Parklawn Drive – Add second left turn lane on SB Parklawn Drive and remove split signal phase.
- Parklawn Drive at Boiling Brook Parkway.

North Bethesda Transportation Policy Area Modification

The Public Hearing Draft Plan recommended creating a new Local Area Transportation Review Policy Area for the White Flint 2 Sector Plan area under the prior SSP. Given the new SSP, this recommendation is modified to adjust to the new standards and is focused on the areas that are north and west of the 2010 *White Flint Sector Plan*. Staff now recommends raising the intersection congestion standard in the western half of the White Flint 2 Sector Plan area from its current average intersection delay threshold of 71 seconds to 120 seconds, which is consistent

with White Flint Metro Station Policy Area. The rationale for this recommendation is in recognition of two key factors characterizing the western portion of the White Flint 2 Sector Plan area: (1) existing and planned development is generally similar in character to the White Flint Sector Plan Area; and (2) proximity to the White Flint and Twinbrook Metro Stations.

The area east of the CSX should remain at 71 seconds (the broader North Bethesda policy area congestion standard) because the Plan area east of the CSX tracks will have less new development than the area west of the tracks, and it is less accessible by Metro compared to the western half of the Plan area.

The implementation of this recommendation would require an amendment to the 2016-2020 SSP.

## **PUBLIC HEARING DRAFT PLAN STAGING RECOMMENDATIONS**

### Pre-Staging

The Public Hearing Draft Plan recommends several pre-staging actions, including a determination, and establishing if needed, within 12 months of the adoption of this Plan's Sectional Map Amendment (SMA) a financing mechanism to fund public infrastructure that will support the Plan's implementation. At the March 23 worksession, the Board recommended extending the existing White Flint Tax District, or creating a Local Area Transportation Improvement Program like the one created for the White Oak Policy Area to fund new infrastructure.

The Draft Plan recommends expansion or modification of the existing White Flint Staging Allocation Request (SAR) process to include the White Flint 2 Plan area. The SAR procedure would permit the same or similar allocation of development as in the 2010 *White Flint Sector Plan* area, where the allocation of new development occurs prior to building permit submission. This procedure would prevent large properties, such as Montrose Crossing and Willco, which are 31 acres and 21 acres, respectively, from "hoarding" new development capacity by getting approval for significant amounts of new development but not building it, and thereby preventing other property owners from developing within the recommended staging limits.

An additional Draft Plan pre-staging recommendation is the expansion of the White Flint Implementation Advisory Committee to include additional property owners and residents from the White Flint 2 Plan area. Currently, there are property owners and residential representatives on the advisory committee, who either own property or live within the White Flint 2 Plan area.

### Draft Staging Plan

The Draft Plan staging proposal combines required infrastructure for this Plan area with key staging triggers from the 2010 *White Flint Sector Plan*. The Draft Plan staging recommendations are divided into three phases with the level of residential and non-residential development and the related infrastructure triggers for each phase. The framework for the White Flint 2 Sector Plan staging is greatly influenced by the Plan area's adjacency to the 2010 *White Flint Sector Plan* area and its staging plan requirements as some of the properties in each Plan area will greatly benefit from infrastructure improvements in the other plan area.

New development can occur anywhere in the Plan area. Infrastructure requirements for each phase could be funded either through the County's Capital Improvements Program (CIP), the State's Consolidated Transportation Program (CTP), public-private partnership, or developers' contribution/construction. During each phase, the Planning Board may approve both residential and non-residential development until the limits of both are achieved.

Components of the Draft Plan staging recommendations are:

- Achievement of higher Non-Automotive Driver Mode Share (NADMS) goals for each phase.
- Funding of specific infrastructure, including the second entrance to the White Flint Metro Station.
- Completion of design and feasibility studies, including Rockville Pike BRT.
- Provision of new bikeways and streetscape improvements.
- Inclusion of public facilities, including schools.

First and second phases of the staging plan require the funding of new infrastructure, including bikeways, new street connections, and the completion of the Rockville Pike BRT study and the Western Workaround. More than 60 percent of the new residential and non-residential development is allocated in the first two phases; the remaining 40% is in the last phase. This approach is comparable to the 2010 *White Flint Sector Plan* staging plan. The Draft Plan staging plan is below:

Phase 1 Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	Phase 2 Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	Phase 3 Residential: 2,338 dwelling units Non-Residential: 1,189,857 square feet
Achieve 27% Non-Automotive Driver Mode Share (NADMS) for the Plan area.	Achieve 35% Non-Automotive Driver Mode Share (NADMS) for the Plan area.	Achieve 42% Non-Automotive Driver Mode Share (NADMS) for the Plan area.
Fund the Executive Boulevard and East Jefferson protected bikeway.	Fund a shuttle or circulator that serves the Plan area, adjacent to residential communities, and Metro station areas.	Fund and implement the Parklawn Drive Shared Use Path.
Fund and complete the design study for Rockville Pike Bus Rapid Transit (BRT) that will be coordinated with SHA, MCDOT, M-NCPPC and the City of Rockville.	Fund the acquisition or dedication of a new public park for the Plan area.	Montgomery County Public Schools (MCPS) must construct an elementary school for the Walter Johnson School Cluster or determine how elementary school needs will be addressed for the Cluster.
Complete the implementation of Western Workaround, including the realignment of Executive Boulevard, Towne Road and Old Georgetown Road (MD 187) for vehicular travel.	Construct streetscape improvements, sidewalk improvements, and bikeways for substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road and Nicholson Lane.	Construct a new MARC station, if MDOT determines that a MARC station will be located within the Plan area.
Fund the roadway realignment of Parklawn Drive and Randolph Road.	Fund the second entrance to the White Flint Metro Station.	
Montgomery County Public Schools (MCPS) must evaluate the need for a new elementary	Construct streetscape improvements, sidewalk improvements, and bikeways for	

<b>Phase 1</b> Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	<b>Phase 2</b> Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	<b>Phase 3</b> Residential: 2,338 dwelling units Non-Residential: 1,189,857 square feet
<p>school within the Walter Johnson cluster and determine how and when a new elementary school will be programmed.</p> <p>Maryland Department of Transportation (MDOT) must conduct a feasibility study for an infill MARC station along the Brunswick Line and determine if a MARC station should be located in the Plan area.</p> <p>The Planning Board must assess that the Sector Plan is achieving its goals and that all the infrastructure items for this Stage 1 are completed, prior to proceeding to Stage 2.</p>	<p>substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road and Nicholson Lane.</p> <p>The Planning Board must assess that the Sector Plan is achieving its goals and that all the infrastructure items for Stage 2 are completed, prior to proceeding to Stage 3.</p>	

### Revised Staging Plan

Based on the initial Planning Board worksession and public testimony, staff is recommending some modifications to the Plan’s staging as follows:

1. Shift the circulator/shuttle from the second phase to the first phase to promote increased mobility options within the Plan area and adjacent areas and help achieve the recommended NADMS goals.

Bethesda’s Circulator and Silver Spring’s Van Go are examples of existing dedicated circulators that serve both Central Business Districts. Recently, Montgomery County Department of Transportation (MCDOT) initiated a shuttle to Rock Spring from the Grosvenor-Strathmore Metro Station during morning and afternoon peak periods. The King Farm Shuttle, which connects the King Farm community in the City of Rockville to the Shady Grove Metro Station, is another dedicated local circulator.

2. Adjust the language associated with the NADMS goals.  
The initial analysis for the recommended NADMS goals was based on employees, since it follows the approved Subdivision Staging Policy (SSP) goals for North Bethesda, which is also employee-focused. The revised recommendation would include NADMS goals for both employees and residents, similar to the third phase of the 2010 *White Flint*

*Sector Plan.* The research to determine the starting point for residential NADMS is incomplete; a future worksession will present updated NADMS numbers.

3. Remove the phase two trigger for the streetscape and bikeway improvements within a quarter mile of the Metro Station since this trigger is more important to the 2010 *White Flint Sector Plan* area than the White Flint 2 Plan area.
4. Remove the trigger in Phase 2: “fund the acquisition or dedication of a new public park for the plan area.” The potential acquisition or dedication of a park on any of the major properties will be discussed and decided during the redevelopment process based on the specific recommendations for each property.

The updated staging plan is below with new language in bold:

Phase 1	Phase 2	Phase 3
Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	Residential: 2,338 dwelling units Non-Residential: 1,189,857 square feet
<p><b>During Phase 1, the Planning Board should assess whether the Plan area has achieved a NADMS goal of 27 percent for employees and X percent for residents.</b></p> <p>Fund the Executive Boulevard and East Jefferson protected bikeway.</p> <p><b>Fund a shuttle or circulator that serves the Plan area, adjacent to residential communities, and Metro station areas.</b></p> <p>Fund and complete the design study for Rockville Pike Bus Rapid Transit (BRT) that will be coordinated with SHA, MCDOT, M-NCPPC and the City of Rockville.</p> <p>Complete the implementation of Western Workaround, including the realignment of Executive Boulevard, Towne Road and Old Georgetown Road (MD 187) for vehicular travel.</p>	<p><b>During Phase 2, the Planning Board should assess whether the Plan area has achieved a NADMS goal of 35 percent for employees and X percent for residents.</b></p> <p>Fund the second entrance to the White Flint Metro Station.</p> <p>The Planning Board must assess that the Sector Plan is achieving its goals and that all the infrastructure items for Stage 2 are completed, prior to proceeding to Stage 3.</p>	<p><b>During Phase 3, the Planning Board should assess whether the Plan area has achieved a NADMS goal of 42 percent for employees and X percent for residents.</b></p> <p>Fund and implement the Parklawn Drive Shared Use Path.</p> <p>Montgomery County Public Schools (MCPS) must construct an elementary school for the Walter Johnson School Cluster or determine how elementary school needs will be addressed for the Cluster.</p> <p>Construct a new MARC station, if MDOT determines that a MARC station will be located within the Plan area.</p>

<b>Phase 1</b> Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	<b>Phase 2</b> Residential: 1,800 dwelling units Non-Residential: 900,000 square feet	<b>Phase 3</b> Residential: 2,338 dwelling units Non-Residential: 1,189,857 square feet
<p>Fund the roadway realignment of Parklawn Drive and Randolph Road.</p> <p>Montgomery County Public Schools (MCPS) must evaluate the need for a new elementary school within the Walter Johnson cluster and determine how and when a new elementary school will be programmed.</p> <p>Maryland Department of Transportation (MDOT) must conduct a feasibility study for an infill MARC station along the Brunswick Line and determine if a MARC station should be located in the Plan area.</p> <p>The Planning Board must assess that the Sector Plan is achieving its goals and that all the infrastructure items for Stage 1 are completed, prior to proceeding to Stage 2.</p>		

Based on the Board’s final land use and zoning recommendations, the recommended residential and non-residential development totals will be modified in the overall staging plan.

**BACKGROUND: 2010 WHITE FLINT SECTOR PLAN**

The Approved and Adopted 2010 *White Flint Sector Plan* creates the framework to transform strip commercial centers and an auto-oriented suburban development pattern in North Bethesda into an urban center that is supported by new public amenities, parks and open spaces, and a new street network. The Plan also proposes redesigning Rockville Pike (MD 355) as an urban boulevard with Bus Rapid Transit (BRT).

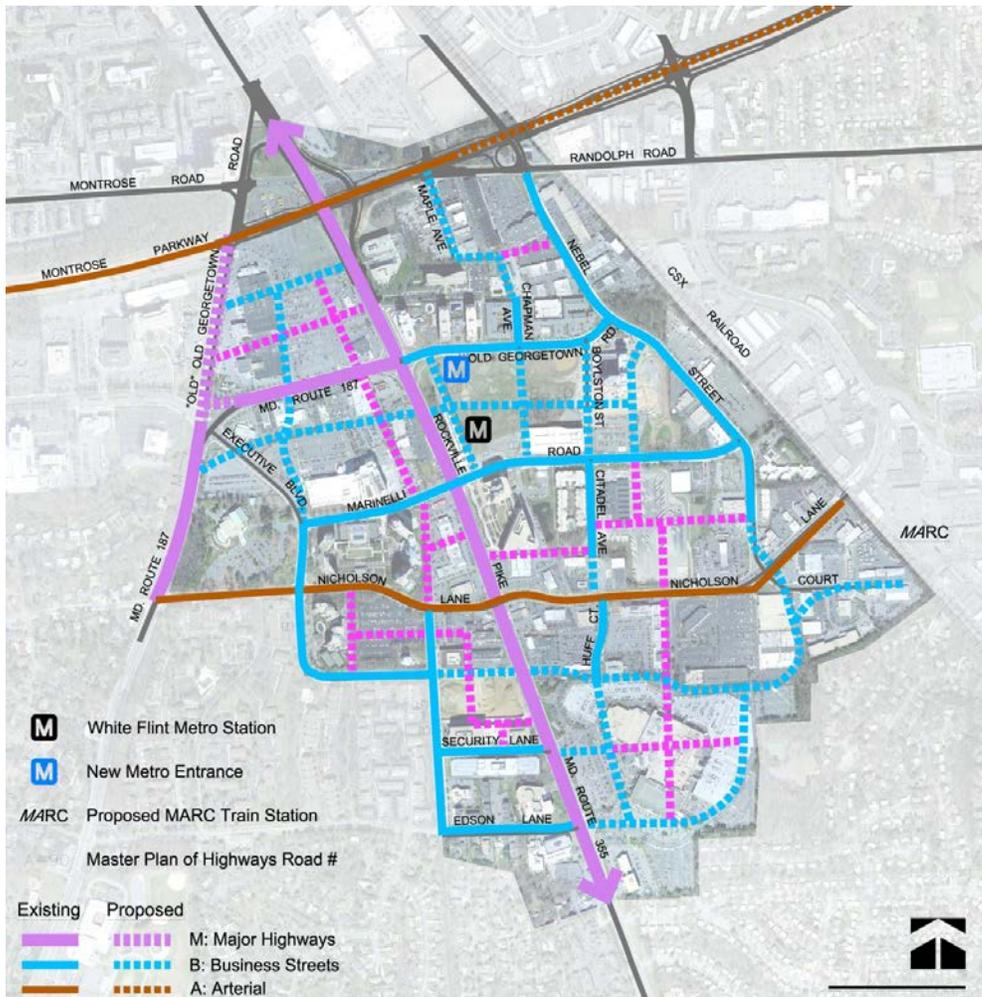
Staging

The 2010 Plan recommends 9,800 new residential dwelling units and 5.69 million square feet of new non-residential development. This amount of development is divided into three phases in the staging plan with each phase requiring a variety of transportation infrastructure projects that should be funded, contracted or built. Each phase requires the achievement of a specific Non-Automotive Driver Mode Share (NADMS) goal. The overall staging plan is illustrated below.

<b>Table 6 : Staging Plan</b>		
<b>Phase 1</b> 3,000 dwelling units 2 million square feet non-residential	<b>Phase 2</b> 3,000 dwelling units 2 million square feet non-residential	<b>Phase 3</b> 3,800 dwelling units 1.69 million square feet non-residential
<p>Contract for the construction of the realignment of Executive Boulevard and Old Georgetown Road.</p> <p>Contract for construction of Market Street (B-10) in the Conference Center block.</p> <p>Fund streetscape improvements, sidewalk improvements, and bikeways for substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road, and Nicholson Lane.</p> <p>Fund and complete the design study for Rockville Pike to be coordinated with SHA, MCDOT and M-NCPPC.</p> <p>Achieve 34 percent non-auto driver mode share for the Plan area.</p> <p>The Planning Board should assess whether the build out of the Sector Plan is achieving the Plan's housing goals.</p>	<p>Construct streetscape improvements, sidewalk improvements, and bikeways for substantially all of the street frontage within one-quarter mile of the Metro station: Old Georgetown Road, Marinelli Road, and Nicholson Lane.</p> <p>Complete realignment of Executive Boulevard and Old Georgetown Road.</p> <p>Construct the portion of Market Street as needed for road capacity.</p> <p>Fund the second entrance to the White Flint Metro Station.</p> <p>Explore the potential for expediting portions of Rockville Pike where sufficient right-of-way exists or has been dedicated. It should be constructed once the "work-around" roads are open to traffic.</p> <p>Increase non-auto driver mode to 42 percent.</p> <p>The Planning Board should assess whether the build out of the Sector Plan is achieving the Plan's housing goals.</p> <p>The Planning Board must develop a plan to determine how to bring the mode share to 51 percent NADMS for residents and 50 percent NADMS for employees during Phase 3.</p>	<p>Complete all streetscape improvements, sidewalks, and bikeways outside one-quarter mile from the Metro.</p> <p>Reconstruct any remaining portion of Rockville Pike not constructed during prior phases.</p> <p>Achieve the ultimate mode share goals of 51 percent NADMS for residents and 50 percent NADMS for employees.</p>

## Street Network

The 2010 *White Flint Sector Plan* recommends a new grid of streets, east and west of Rockville Pike (MD 355), that increases mobility options for pedestrians, bikes and vehicles. The recommended street network is illustrated below:



2010 White Flint Sector Plan Street Network

## White Flint Special Taxing District

The White Flint Special Taxing District is an *ad valorem* property tax that funds specific transportation infrastructure in the 2010 *White Flint Sector Plan* area. Established in 2011, the Special Taxing District (Bill No. 50-10) exempts new White Flint development from Local Area Transportation Review (LATR). In addition to the creation of the taxing district, the Council also approved the White Flint Sector Plan Implementation Strategy and Infrastructure Improvement List (Resolution No. 16-1570) that specifies the different transportation projects that will be funded.

## Roadways Implementation

The Western Workaround, which includes the extension and realignment of Executive Boulevard (future Grand Park), Main /Market Street, and Towne Road is currently under construction. The first phase of the Western Workaround should be implemented by 2020.

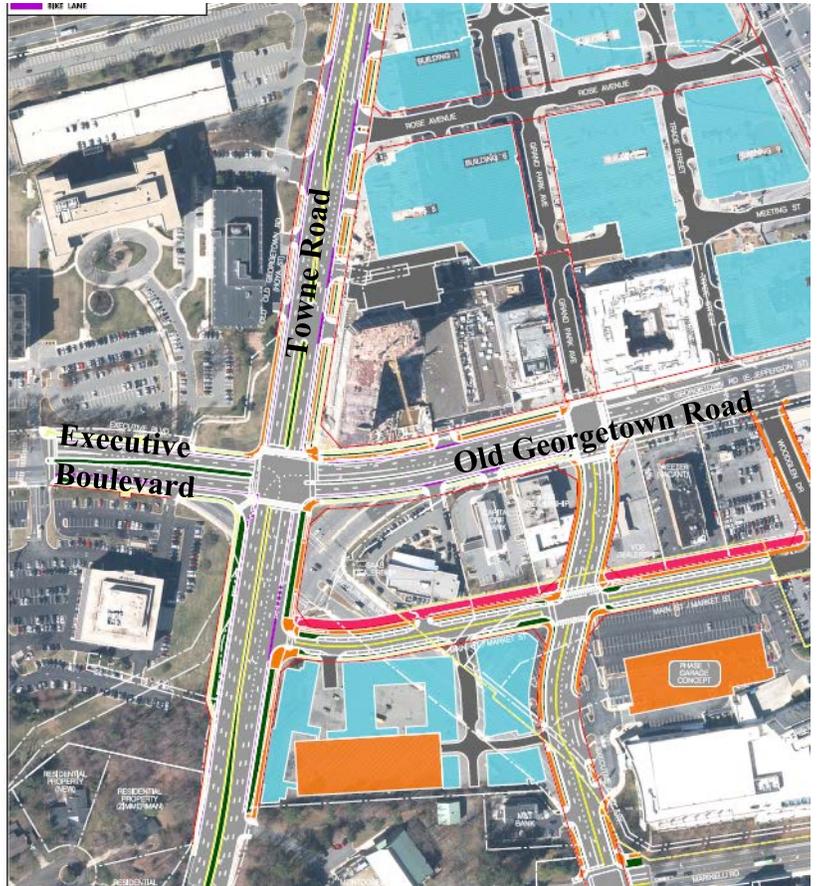
## Linkages to 2010 White Flint Staging Plan

The Draft White Flint 2 Sector Plan staging recommendations link important transportation infrastructure requirements from the 2010 *White Flint Sector Plan*, including the Western Workaround and the second White Flint Metro Station entrance, along with new transportation and public facilities for the White Flint 2 Plan area. This combination approach strives to achieve equity between property owners in both White Flint Plan areas.

### The Western Workaround

The Western Workaround, which is a phase one staging trigger in the 2010 *White Flint Sector Plan*, is located adjacent to the Executive Boulevard District. This transportation project is included in Draft Plan's staging recommendation because it will significantly enhance vehicular, bike and pedestrian connections to Executive Boulevard and other properties to the north. Towne Road, which is currently a cul-de-sac road, will open and connect to Old Georgetown Road and Executive Boulevard providing north and south bound travel on this roadway.

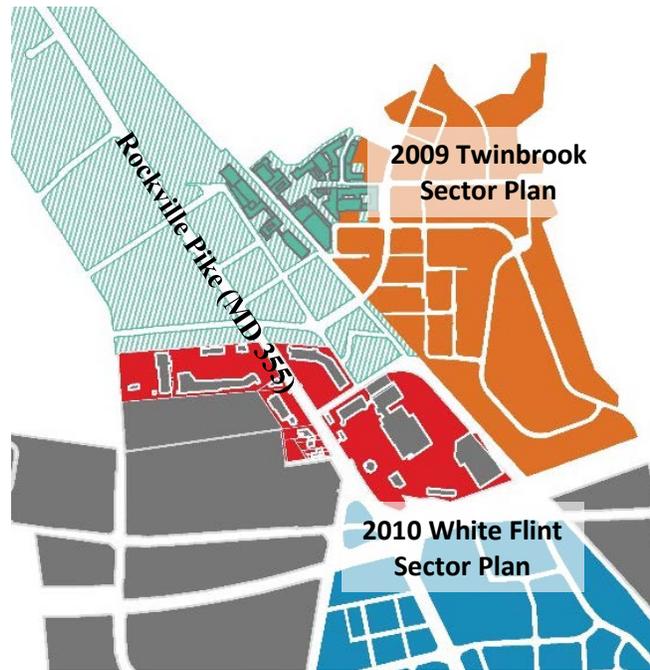
This project is in the CIP (White Flint West Workaround P501506) and the first phase is under construction.



Western Workaround

## Rockville Pike BRT

The Draft Plan recommendation will close a gap between the 2010 *White Flint Sector Plan* recommendation for an urban boulevard for Rockville Pike (MD 355) with Bus Rapid Transit (BRT) and the City of Rockville's *Rockville Pike Plan*. Maryland Department of Transportation (MDOT) and Montgomery County Department of Transportation (MCDOT) are currently conducting a Rockville Pike (MD 355) BRT study. Including this segment within the larger MD 355 BRT project will permit a comprehensive review of Rockville Pike with the City of Rockville's BRT proposal and the 2010 *White Flint Sector Plan* recommendation. MCDOT will present alternatives for the MD 355 Corridor later this year, followed by a preferred alternative.



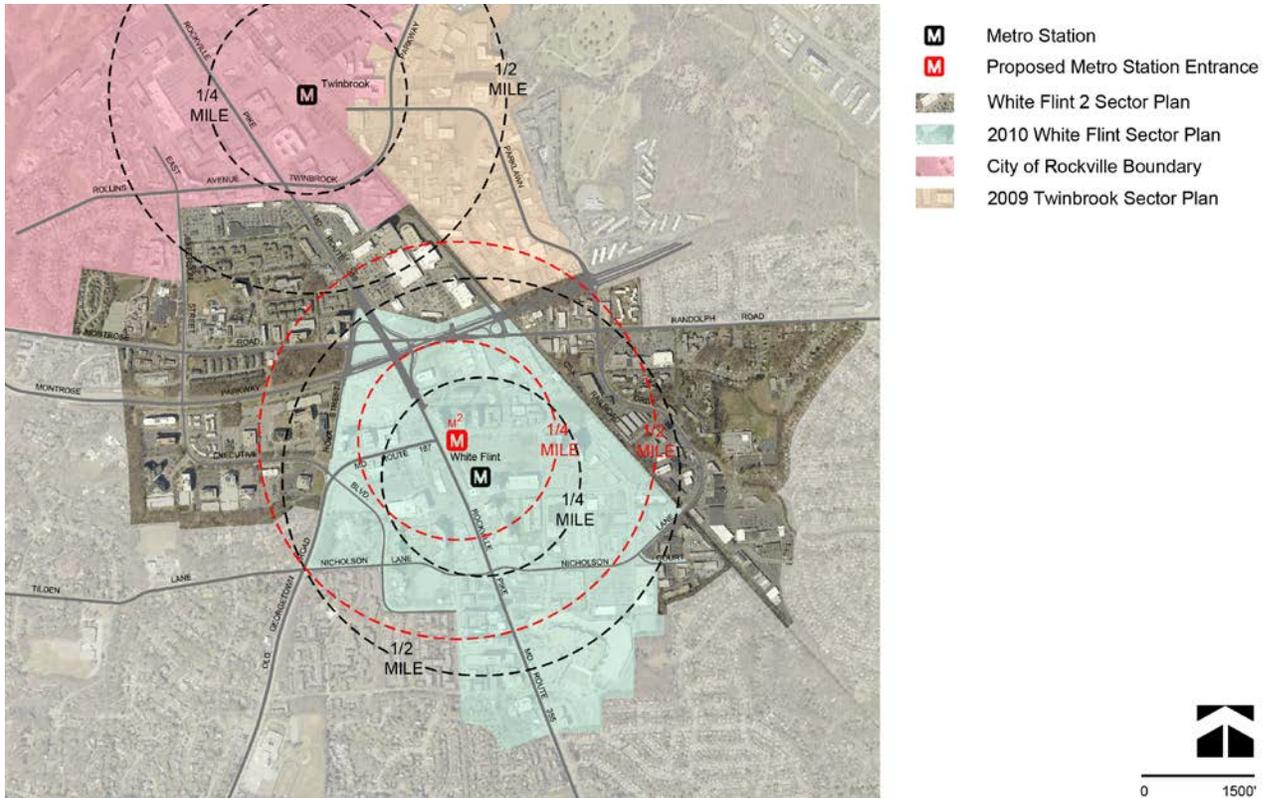
Rockville Pike (MD 355) Corridor

## The Second Metro Station Entrance

The 2010 *White Flint Sector Plan* recommends a new northern entrance to the White Flint Metro Station at the intersection of Rockville Pike (MD 355) and Old Georgetown Road. This new entrance will significantly enhance transit connections to the Executive Boulevard District and properties along Rockville Pike.

The Draft Plan recommends this infrastructure item in phase two, which is the same phase as the 2010 *White Flint Sector Plan*. The second Metro Station will not be funded by the White Flint Special Taxing District; therefore, it could be included as a potential financing proposal for the White Flint 2 Plan area. In 2010, the estimated cost for the new entrance ranged from \$13.5 to \$35 million.

As shown below, the pedestrian walkshed for a significant portion of the Plan area is enhanced with the new Metro station entrance.



Existing and proposed White Flint Metro Station proximity

### Non-Automotive Driver Mode Share

The overall Non-Automotive Driver Mode Share (NADMS) goal for the 1992 *North Bethesda/Garrett Park Master Plan* area is 39 percent for employees. In 2015, the estimated NADMS for the Master Plan area was 28 percent. The White Flint 2 Draft Plan recommends new NADMS goals in each phase to reduce reliance on single occupancy vehicles, which will be implemented by the North Bethesda Transportation Management District, created in 1995 and operated by the Transportation Action Partnership (TAP) as the North Bethesda Transportation Center (NBTC). The NBTC provides services to employers and employees in North Bethesda's commercial areas to promote employers' commuter benefits programs and to inform employees of alternative commuting options. At Preliminary Plan approval for all new development in the 2010 *White Flint Sector Plan* area, as well as other parts of North Bethesda, each development is required to enter into a Traffic Mitigation Agreement (TMAG) with the Planning Board and MCDOT. These agreements require the developer to implement a variety of measures to contribute towards achieving the recommended NADMS, such as real time signage for transit, such as Metrorail and buses; car sharing spaces; and bike share stations.

The 2010 *White Flint Sector Plan* staging plan requires the achievement of 34 percent NADMS in phase one; 42 percent in phase two; and 51 percent in phase three for residents and 50 percent for employees. Per the White Flint Sector Plan Implementation Guidelines, the “overall White Flint Sector Plan Area mode share (NADMS) is the weighted average of NADMS-R and NADMS-E” (p.11). The 2014 annual commuter survey of employees working in the White Flint Plan area indicated that the NADMS for the 3-hour peak period was 31.7 percent. The 2015 *Biennial Monitoring Report* indicated that the 2014 NADMS estimate for the 2010 *White Flint Sector Plan* area was approximately 30 percent for employees and approximately 50 percent for residents.

The Montgomery County Department of Transportation (MCDOT) has proposed several strategies to implement the ultimate 2010 *White Flint Sector Plan* NADMS goals. Via the CIP, White Flint Traffic Analysis No. 501202, has considered a variety of measures ranging from policy changes, such as parking policies; new transportation infrastructure including bikeshare stations and BRT; and service changes including increased bus service in North Bethesda, to achieve the ultimate NADMS goals of the 2010 *White Flint Sector Plan*.

In 2002, the Council approved Bill No. 32-02 that established new rules and procedures for all transportation management districts in the County, including requiring employers with 25 or more employees to submit a traffic mitigation plan to MCDOT. The mitigation plan should contribute towards the achievement of the North Bethesda Transportation Management NADMS goal. MCDOT has the discretion to require an owner of a residential building or complex with at least 100 dwelling units to also submit a traffic mitigation plan.

The White Flint 2 Draft Plan recommends using NADMS goals as a staging trigger: 27 percent NADMS in the first phase, followed by 35 percent and 42 percent for the second and third phases, respectively. The proposed NADMS goals promote transit use, contribute to reducing traffic congestion, and further the County’s Climate Protection Plan. In addition, NADMS goals are supported by the Subdivision Staging Policy (SSP) and complement the requirements of the adjacent White Flint Sector Plan area.

Initial public comments from the Friends of White Flint and the White Flint Partnership have suggested the same NADMS goals for both White Flint Plan areas. However, staff believes that achieving the same NADMS goals for both areas would be challenging because of different characteristics unique to each area. Unlike the 2010 *White Flint Sector Plan* area, most of which is within a ½ mile from the existing White Flint Metro Station and is not separated by the CSX rail line or Montrose Parkway, the White Flint 2 Plan area is split into two distinct areas and a good part of the plan area lies beyond the 1/2-mile radius of the Metro station. The eastern area is separated by the CSX rail line from the northern and western areas and has different character in terms of uses, density and scale. And while the 2010 *White Flint Sector Plan* will be a downtown area, the White Flint 2 Draft Plan recommendations will feature primarily infill development at key locations, and retain a significant amount of industrial properties on the east side of the CSX tracks. Given the lack of easy Metro access for properties on the east side of the Draft Plan area it is unrealistic to expect or require the White Flint 2 area to achieve the same NADMS as the 2010 *White Flint Sector Plan* area.

## Public Schools

The proposed staging plan recommends that Montgomery County Public Schools (MCPS) evaluate the need for a new elementary school in the Walter Johnson Cluster in phase one. The third phase requires that MCPS construct a new elementary school in the Walter Johnson Cluster or determine how elementary school needs would be met for the cluster. An elementary school is forecast to be the greatest need for public schools in the cluster. This staging recommendation can be implemented via the proposed monitoring report for the Plan area.

All school levels in the Walter Johnson Cluster have experienced significant enrollment growth and consequential space deficits primarily from existing residential development turnover, and some from new residential development. In 2015, MCPS launched a Walter Johnson Roundtable process, with a variety of stakeholders, to develop different approaches to meet the Cluster’s growth challenges. This process led to numerous approaches to address enrollment deficits, including the reopening of Woodward High School and opening a new elementary school.

MCPS’ Division of Long-range Planning has conducted long-range enrollment forecasts for the cluster, including the six-year forecast for elementary schools, as well as 10- and 15-year forecasts. A 30-year forecast was also conducted as part of the Roundtable process that indicated future enrollment deficits. The projected MCPS enrollment for the cluster is indicated below:

**Walter Johnson Cluster Elementary Schools Projected Enrollment, 2016–2046**

	Off. Enr.	Projected Enrollment*										
	2016	2017	2018	2019	2020	2021	2022					
	–	–	–	–	–	–	–	2026	2031	2036	2041	2046
	2017	2018	2019	2020	2021	2022	2023					**
<b>Total Walter Johnson Cluster Elementary Schools</b>												
Program Capacity	3812	3812	3812	4086	4402	4402	4402	4631	4631	4631	4631	4631
<b>Enrollment</b>	<b>4250</b>	<b>4345</b>	<b>4424</b>	<b>4471</b>	<b>4457</b>	<b>4573</b>	<b>4513</b>	<b>4800</b>	<b>4800</b>	<b>5100</b>	<b>5300</b>	<b>5500</b>
Space available	-438	-533	-612	-385	-55	-171	-111	-169	-169	-469	-669	-869

\*Projections from 2036 to 2046 assume complete build-out of Kensington and White Flint sector plans and proposed housing not associated with these sector plans. Market conditions and the pace of redevelopment of existing properties could change the number of units built and the timing of full build-out. Most master plans never reach full build-out.

\*\*The projection for 2046 is considered peak enrollment. The projection for 2046 does not include Rock Spring Master Plan and White Flint 2 Sector Plan, as housing unit counts are not finalized at this time. The longer the forecast period, the more error is possible. It is considered equally likely for enrollment to come in below the numbers as it is for enrollment to exceed them.

To justify a new MCPS elementary school, the total cluster space deficit should be between 450–500 seats. Based on the future housing development in the cluster, a new school will be needed in the long-term; therefore, the proposed staging plan recommendations will allow for the continued school enrollment to be monitored and assessed. The adjacent 2010 *White Flint Sector Plan* recommends a new elementary school at the White Flint Mall property, as the preferred

site, and the Lutrell property as the alternative. There is no school site recommendation in the 2009 *Twinbrook Sector Plan*.

The 2016-2020 Subdivision Staging Policy (SSP) emphasized the importance of the elementary school level analysis by introducing the seats deficit measure, 110 seats, along with the typical 120 percent utilization rate, as a measure of elementary school adequacy test. If projected enrollment in an elementary school service area exceeds 110 seats or 120 percent utilization rate, the area will be placed in moratorium.

Luxmanor Elementary School and Garrett Park Elementary School are the two elementary schools that primarily service the Draft Plan area, as well as the 2010 *White Flint Sector Plan* area, in this school Cluster. Based on the approved SSP, Garrett Park is projected to have a 117 percent utilization rate and a deficit of 128 seats by 2022, which is close to a moratorium for the service area. Luxmanor is projected to have adequate capacity by 2022.

### **MARC Station**

The 2010 *White Flint Sector Plan* and the 1992 *North Bethesda/Garrett Park Master Plan* recommended a MARC station each at the Nicholson Court and Montrose Crossing. The 2010 Sector Plan recommended the MARC station at Nicholson Court since the new station would complement the urban transformation in the Plan area, and Nicholson Court property owners supported the provision of land for the new station. However, the Council retained the industrial zone at Nicholson Court, until the White Flint 2 Plan could examine both sides of the CSX tracks.

At the March 9, 2017, worksession, the Board linked the provision of a MARC station with increased densities, up to 2.0 FAR via the Commercial Residential Town (CRT) Floating zone, for properties at Nicholson Court and Randolph Hills Shopping Center area, including the Pickford properties.

Maryland Transit Administration (MTA) *Growth and Investment Plan* (2013 to 2050) states that the Brunswick Line, which serves both Montgomery and Frederick counties, is anticipated to see some growth in the future. MTA's Plan recommends expanding an existing MARC station or adding a new station in Montgomery County by 2030. In 2008, MTA estimated the costs of a new White Flint MARC station at \$20 million, excluding property acquisition. MTA representatives have been invited to attend this worksession to discuss MARC near and long-term opportunities along the Brunswick Line.

### **Pedestrian-Bike CSX Crossing**

Public hearing testimony from residents and representatives from the Randolph Hills residential neighborhood have endorsed a pedestrian-bike crossing of the CSX tracks that would provide improved access to the White Flint Metro Station and new development along Rockville Pike. The community's preferred location for a pedestrian-bike crossing is north of Nicholson Lane since it is closer to the Metro Station and new development.

CSX has numerous rules and procedures regarding a pedestrian and bike crossing of any CSX right-of-way. Grade separated crossings are preferred in most cases, and crossings under existing railroad structures are discouraged and only permitted under special considerations (*CSX Public Projects Manual*, p. 24). Existing bike-pedestrian crossings of CSX tracks at Jessup Blair Park/Montgomery College in Takoma Park/Silver Spring, and the Rhode Island Avenue/Brentwood Metro Station in Washington, D.C. are representative of the type of pedestrian and bike crossings, which are permitted by CSX.

At the March 9 worksession, the Board recommended a pedestrian-bike bridge over the CSX tracks between the Randolph Hills Shopping Center and the Nicholson Court area. The Board recommended rezoning the adjacent properties at up to 1.5 FAR through a floating CRT zone with the idea that redevelopment of 1.5 FAR on these properties could either make financial contributions towards the bridge or build a bike-pedestrian bridge as a major public benefit under the Optional Method Public Benefits provision of the CRT zone. Based on the Board's direction, the Planning Board Draft of the Plan will be modified to reflect a pedestrian-bike crossing at Nicholson Court.