MCPB
Item No.
Date: 07-10-14

Aspen Hill Minor Master Plan Amendment Staff Draft Presentation

Andrea Gilles, Senior Planner, Area 2 Division, Andrea.Gilles@montgomeryplanning.org, 301.495.4541

Nancy Sturgeon, Master Planner Supervisor, Master Plan Team, Area 2 Division, Nancy.Sturgeon@montgomeryplanning.org, 301.495.1308

Glenn Kreger, Chief, Area 2 Division, Glenn.Kreger@montgomeryplanning.org, 301.495.4653

Completed: 07-03-14

Staff Recommendation:

Approve the Staff Draft Aspen Hill Minor Master Plan Amendment as the Public Hearing Draft Aspen Hill Minor Master Plan Amendment, and set the public hearing date for September 11, 2014.

Summary

On July 10, 2014, the Planning staff will present the Staff Draft Minor Master Plan Amendment.

The proposed Staff Draft is a comprehensive minor amendment of the approved and adopted 1994 *Aspen Hill Master Plan*. The Planning Board approved the Scope of Work for the Aspen Hill Minor Master Plan Amendment on January 23, 2014. Between December 2013 and May 2014, Staff held three community meetings, and briefed the Planning Board on the project status, key issues, and preliminary recommendations on April 24 and June 5, 2014. The remaining milestones in the Aspen Hill Minor Master Plan Amendment process are as follows:

September 11, 2014:	Planning Board public hearing
September-October 2014:	Planning Board worksessions and approval of the Planning Board Draft Minor Amendment Plan
November 2014:	Planning Board transmits Planning Board Draft to the County Executive and the County Council
January 2015 (tentative)	County Council public hearing
February-March 2015:	Council worksessions and approval
April-May 2015:	Commission adoption, Sectional Map Amendment

Attachment

STAFF DRAFT

July 2014

Aspen Hill

Minor Master Plan Amendment

An Amendment to the Aspen Hill Master Plan,1994, as amended; being also an amendment to the General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties.

Montgomery County Planning Department
M-NCPPC
MontgomeryPlanning.org

ABSTRACT

An area master plan, after approval by the District Council and adoption by The Maryland-National Capital Park and Planning Commission, constitutes an amendment to *The General Plan (On Wedges and Corridors)* for Montgomery County. Each area master plan reflects a vision of future development that responds to the unique character of the local community within the context of a County-wide perspective. Area master plans are intended to convey land use policy for defined geographic areas and should be interpreted together with relevant County-wide functional master plans.

This Minor Master Plan Amendment contains text and supporting maps for a minor amendment to the 1994 *Aspen Hill Master Plan.* This Plan makes recommendations for land use, zoning, design, transportation, and environment. The minor amendment process provides an opportunity to reassess the Subject area and analyze alternative land use redevelopment, design, and zoning opportunities. The review considers existing development and reevaluates the area's potential within the context of a changing market in the region, the intent and rationale of the 1994 *Aspen Hill Master Plan*, community input, and impacts to the surrounding land uses and transportation network.

Master and sector plans convey land use policy for defined geographic areas and should be interpreted together with relevant County-wide functional plans and County laws and regulations. Plan recommendations provide comprehensive guidelines for the use of public and private land and should be referred to by public officials and private individuals when making land use decisions. Public and private land use decisions that promote plan goals are essential to fulfilling a plan's vision.

Master and sector plans look ahead 20 years from the date of adoption, although they are intended to be revised every 10 to 15 years. Moreover, circumstances when a plan is adopted will change and the specifics of a plan may become less relevant over time. Plans do not specify all development possibilities. Their sketches are for illustrative purposes only, intended to convey a sense of desirable future character rather than a recommendation for a particular design.

Master plans do not specify all development possibilities for a particular property or area. In order to understand the full range of development options, the reader should be aware of additional land uses and development potential available through permitted conditional uses; variances; transferrable development rights (TDRs); Moderately Priced Dwelling Units (MPDUs); rezoning by local map amendments; public projects and the mandatory referral process; and municipal annexations.

SOURCE OF COPIES

The Maryland-National Capital Park and Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910-3760
Online at: http://www.montgomeryplanning.org/community/aspenhill/

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

The Maryland-National Capital Park and Planning Commission is a bi-county agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties; the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1,001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two counties.

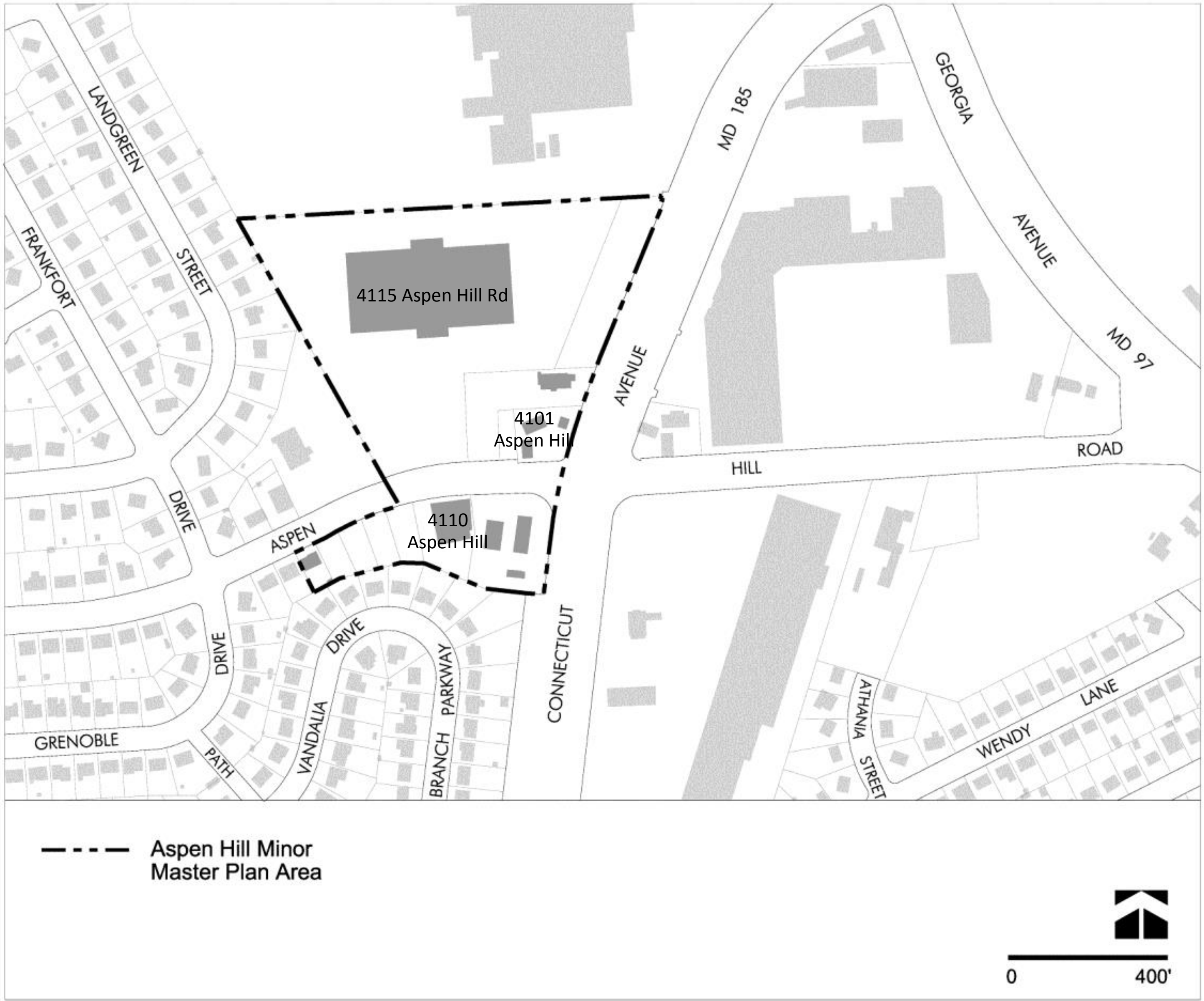
The Commission is charged with preparing, adopting, and amending or extending The *General Plan (On Wedges and Corridors)* for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties.

The Commission operates in each county through Planning Boards appointed by the county government. The Boards are responsible for all local plans, zoning amendments, subdivision regulations, and administration of parks.

CERTIFICATION OF APPROVAL AND ADOPTION

CONTENTS

Map 1: Minor Amendment Area



INTRODUCTION

Purpose

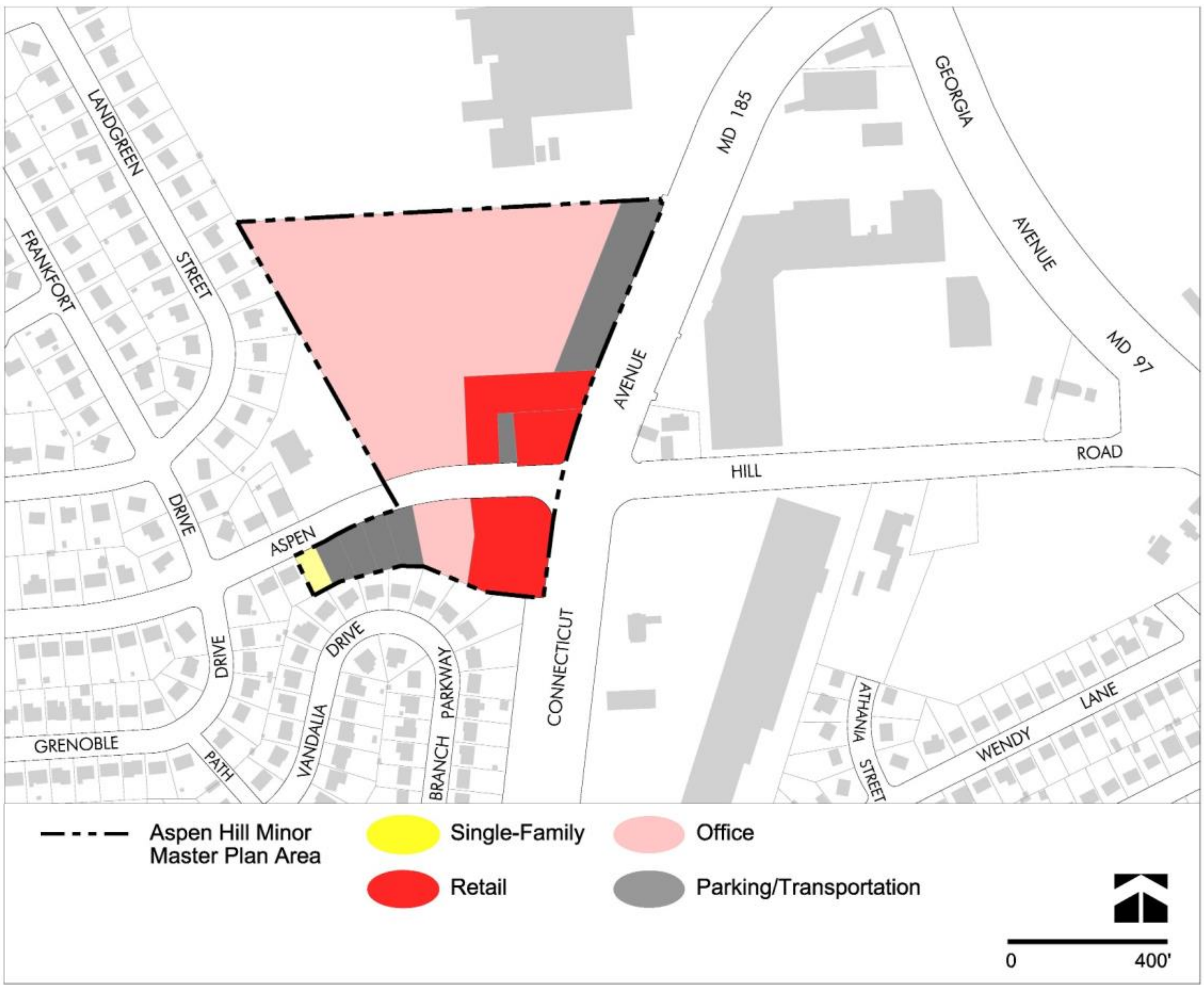
The Aspen Hill Minor Master Plan Amendment addresses approximately 14 acres of land located west of the intersection of Connecticut Avenue and Aspen Hill Road, the majority of which was recommended for office zoning in the 1994 *Aspen Hill Master Plan*. (Map 1) Of the 14 total acres included in the Minor Master Plan Amendment, the vacant office building (Vitro/BAE) at 4115 Aspen Hill Road and its associated parking, encompass approximately 10 acres.

As part of the Minor Amendment process, additional land uses, zoning, design, and redevelopment opportunities have been evaluated for the Subject area. The 1994 *Aspen Hill Master Plan* limits over half of the Minor Amendment area to office uses and associated parking. When the Master Plan was approved in 1994, the Vitro/BAE office building at 4115 Aspen Hill Road was still occupied by federal government contractors. The building had been constructed specifically for the Vitro Corporation, a defense contractor, in the 1960s and remained occupied until 2010 when BAE Systems relocated to Rockville, MD. Since 2010, the approximately 265,000 square foot office building and surrounding parking have remained vacant and underutilized. In addition to the empty and deteriorating office property, the Minor Amendment area faces challenges to vehicular congestion at surrounding intersections; efficient vehicular, pedestrian, and bicycle circulation; and pedestrian safety.

Vision

The Aspen Hill Minor Master Plan Amendment area is adjacent to greater Aspen Hill's largest suburban shopping areas, with access via two major highways (MD 185 and MD 97), and a potential future Bus Rapid Transit (BRT) station and line along Georgia Avenue. Although mature, the commercial area remains under-developed, but with potential to yield a greater mix of uses over time, for the benefit of surrounding communities. As redevelopment occurs, the area will apply strong urban design principles, as well as sustainable and low impact development to improve neighborhood connectivity, create new community open space and, by promoting distinctive architecture, define a stronger local identity. Context sensitive transitions in the scale of new development will be provided to the adjacent single-family residential neighborhoods. Safe, attractive, and well-connected pedestrian and bicycle linkages to and between neighborhoods, services, and amenities will strengthen the walkability and desirability of the area.

Map 2: Existing Land Use



Outreach

Outreach efforts included a combination of community meetings, small group and individual meetings, and online and social media platforms to engage the public in the development of the Staff Draft recommendations. Planners met with individual property owners, business owners, and community residents throughout the process. Spanish translation services, both oral and written, were available if needed.

A project website (www.montgomeryplanning.org/community/aspenhill) was created with applicable meeting presentations and materials, and an opportunity to leave comments. The Planning Department's main webpage was used to announce community meetings and interested parties were notified via e-mail. The Plan was also covered by local newspapers, including an editorial in the Washington Post.

A project kick-off community meeting was held on December 3, 2013, at the Aspen Hill Community Library to introduce the project and timeline to the community. Aspen Hill area citizen and homeowner associations within two miles of the Minor Amendment site were contacted via email. Interested parties that had contacted the Planning Department about the Project in 2013 prior to its initiation were also notified and added to the e-mail distribution list.

Approximately 35 people attended the initial meeting. Two additional community meetings were held on April 1, 2014 and May 13, 2014 with approximately 50 and 70 participants respectively. Each of the community meetings was held at the Aspen Hill Public Library, less than a half mile to the west of the Minor Amendment area.

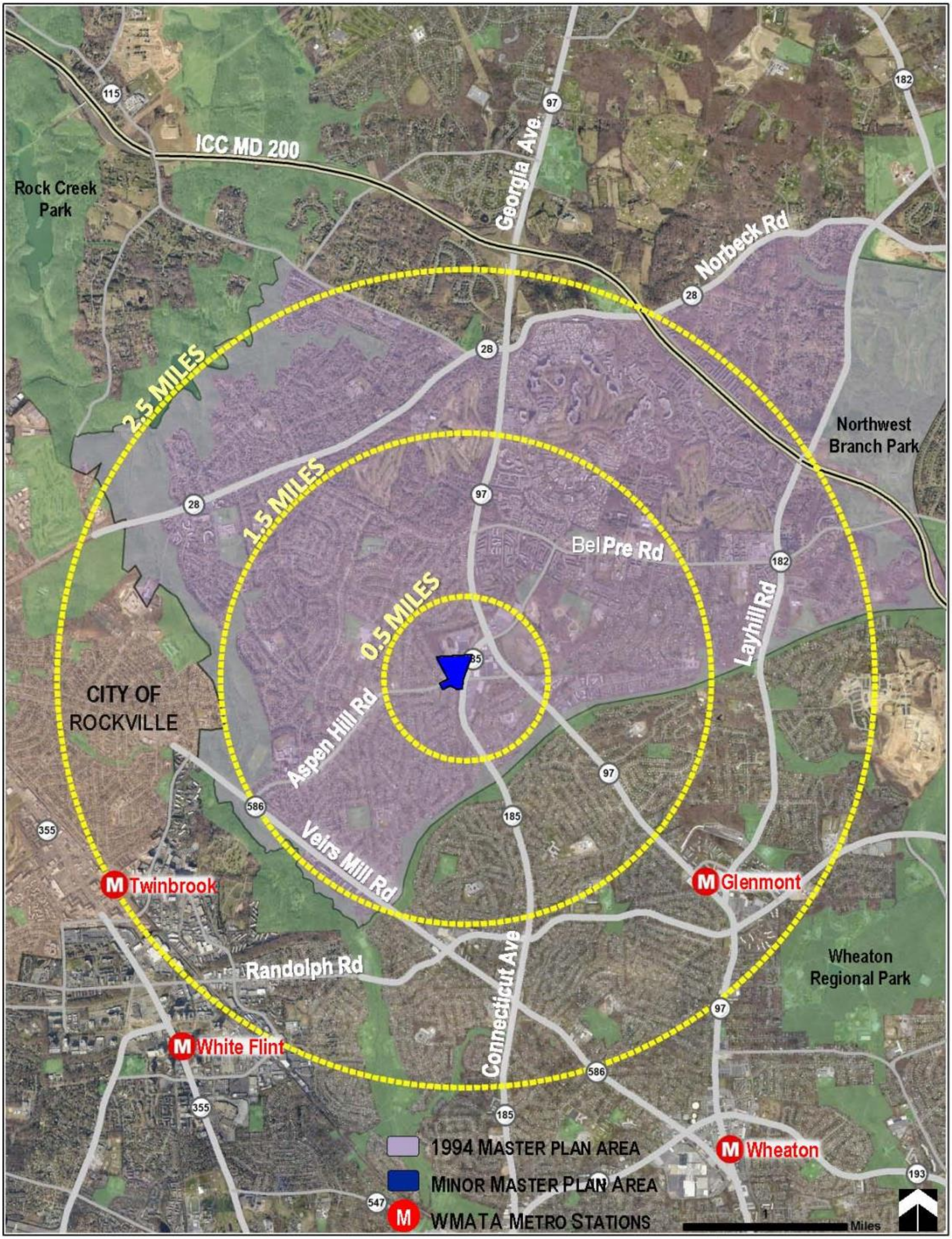
In addition to the community meetings, Staff attended the Aspen Hill Civic Association meeting on April 9, 2014 and the Aspen Hill Homeowners meeting on April 24, 2014 to respond to resident questions and concerns and to promote the final community meeting in May. Both meetings were held at the Aspen Hill Public Library.

A robust dialogue was had at each of the community meetings and included a wide range of input from different stakeholder groups, specifically:

- The vacant Vitro/BAE office building is a blight on the area and needs to be redeveloped;
- The land use and zoning should be changed to allow additional retail in the area;
- There is a need for more reasonably priced commercial goods and grocery in the area;
- The area is challenging for pedestrians;
- Traffic in the area, particularly along Aspen Hill Road, is already excessive and large-scale retail would only make it worse;
- This area should not be rezoned ahead of the large area, 1994 *Aspen Hill Master Plan* update;
- Instead of land use and zoning that allows large-scale commercial uses, could a smaller-scale commercial land use and zoning classification be considered for the amendment properties at the corners and north side of Aspen Hill Road?

Community meetings, Aspen Hill Public Library

Map 3: Vicinity Map



Planning Framework

The Minor Amendment area is located within the approximately 13.2-square mile 1994 *Aspen Hill Master Plan* boundary (Map 3, previous page), which is situated immediately to the east of the City of Rockville, to the north of the urbanized Wheaton-Glenmont communities, and to the south of Olney. Aspen Hill is considered a Suburban Community as defined by the 1993 *General Plan Refinement*. The 1994 *Aspen Hill Master Plan* recommended a change in land uses and zoning, accompanied by design guidelines for much of the Minor Amendment area, located to the west of the Aspen Hill Road and Connecticut Avenue intersection.

In 2008, the Planning Board approved a *Georgia Avenue Study/Urban Design Framework*, which was intended to inform future master plan work for communities along the Georgia Avenue Corridor, including Aspen Hill. This study envisioned an evolution of the commercial node in Aspen Hill from an auto-oriented group of strip shopping centers to a more walkable community with a grid system of streets, a mix of uses, and enhanced pedestrian amenities.

In November 2013, the County Council approved the *Countywide Transit Corridors Functional Master Plan*, which recommends additions to the County's transportation network. The Plan recommends additional transit facilities along 11 corridors, one of which is North Georgia Avenue, to facilitate Bus Rapid Transit (BRT) service that will move more people to and from jobs, homes, shopping, and entertainment areas in urbanizing parts of the County. The *Countywide Transit Corridors Functional Master Plan* proposes a future BRT station location at the MD 97 and MD 185 intersection, less than a half-mile from the Minor Amendment area.

In addition to this Amendment to the Master Plan, Montgomery County is concurrently in the final stages of completing an extensive process to update the County Zoning maps (zoning conversion) to reflect the Zoning Ordinance text rewrite that was adopted in March 2014. The new zoning classifications adopted by the rewrite, are scheduled for County Council approval in October 2014. As such, this Minor Amendment evaluates both the existing zoning to-date (July 2014) and the anticipated zoning conversion (October 2014). (see Map 7: Zoning Conversion)

Demographics

Research and Special Projects Staff established a baseline profile of the greater Aspen Hill Neighborhood to provide background and context for the Plan's recommendations. The 2007-2011 American Community Survey 5-year estimate from the United States Census Bureau was utilized for 13 census tracts that match most closely to the greater Aspen Hill boundary. (Map 4 below)

Map 4: Demographic Study Area - Greater Aspen Hill Neighborhood

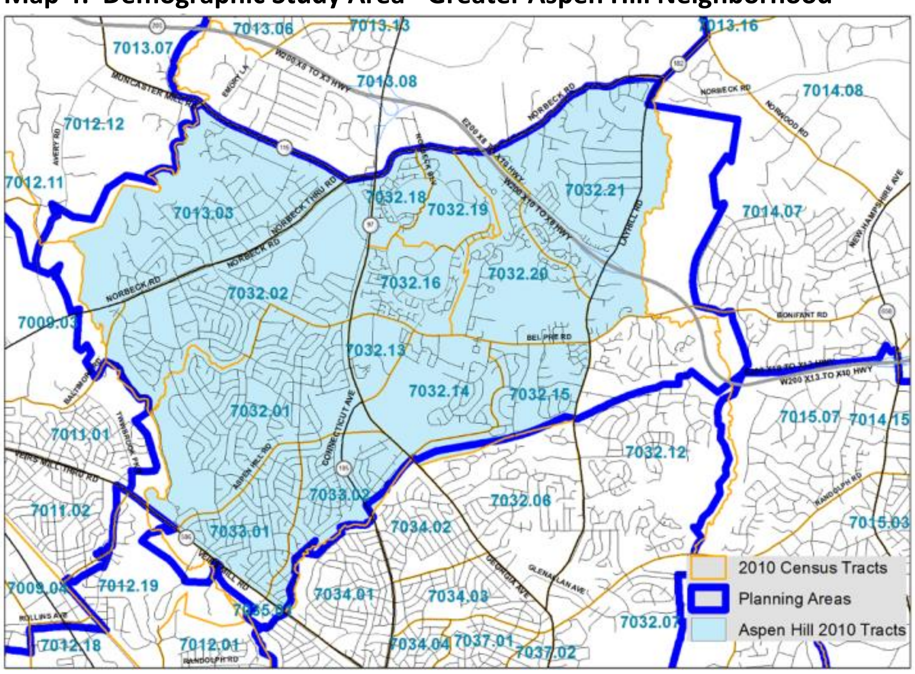


Table 1 below provides a summary of the neighborhood demographic profile as compared to Montgomery County. A full demographic profile for the greater Aspen Hill Neighborhood can be found in Appendix A.

The greater Aspen Hill Neighborhood has a total population of approximately 60,090 people. It is a diverse community with the Hispanic or Latino and Non-Hispanic Black populations higher than the Countywide average.

There is a significantly larger population of seniors age 65 and older in the greater Aspen Hill Neighborhood than the percentage Countywide. This can be attributed to the existence of the Leisure World age-restricted community as well as multiple senior and assisted living facilities within the area.

The greater Aspen Hill area has a lower Median Household Income than the County as a whole, and a much greater percentage of the population that works in the Service industry.

Table 1: Aspen Hill and Montgomery County Demographic Comparison Profile

Data Set	Greater Aspen Hill	Montgomery County
Total Population	60,090 (6.3 % of County)	959,738
65 years & older	22.0%	12.2%
Race and Hispanic Origin Combined*		
Not Hispanic	78.3%	83.5%
White	43.0%	50.0%
Black	22.8%	16.7%
Asian or Pacific Islander	9.9%	13.7%
Other race	2.6%	3.0%
Hispanic or Latino**	21.8%	16.5%
Occupation		
Management, business, science, arts	40.3%	55.9%
Service	23.8%	15.0%
Average Household Size	2.58	2.68
Tenure		
Owner-occupied	69.9%	68.8%
Renter-occupied	30.1%	31.2%
2011 Median Household Income	$70,072	$95,660

*Those of Hispanic origin may be of any race.
**Between 2000 & 2011 the Hispanic or Latino population in greater Aspen Hill grew from 14.1% to 21.8%; the fastest growing group with an increase of 63%.
Sources: 2000 U.S. Census, 2007-2011 American Community Survey 5-year estimate, U.S. Census Bureau; Research & Special Projects, Montgomery County Planning Department, M-NCPPC

Map 5: Minor Amendment Area and Surrounding Land Uses

The Aspen Hill Minor Master Plan Amendment area adjoins one of the greater Aspen Hill neighborhood's largest commercial areas, made up of three community shopping centers and two big-box retailers: Home Depot and Kmart. Immediately to the north of the Minor Amendment area is the Home Depot; to the east is Northgate Plaza which includes a Kohl's, Michaels, and Rite Aid; to the southeast is the Aspen Hill Shopping Center which includes a Giant Grocery, U.S. Post Office, and Panera Bread; and east of Georgia Avenue is a Kmart, the Gate of Heaven Cemetery, and the Aspen Manor Shopping Center. Single-family detached homes, interspersed with institutional uses, are predominant to the south and west.

Of the 14 total acres included in the Minor Amendment, the former Vitro/BAE vacant office building and associated parking encompass approximately 10 acres. A Dunkin Donuts is located adjacent to the former Vitro/BAE property to the south. Gas stations are situated on the northwest and southwest corners of the Connecticut Avenue and Aspen Hill Road intersection, and the Aspen View Center office building, its associated parking, and a residential detached home converted for an office use make up the remaining amendment properties on the south side of Aspen Hill Road.

ANALYSIS

The overall goal of the Plan is to facilitate the enhancement of Aspen Hill as a suburb where people can live, shop, work, and walk to community amenities. Different land use and zoning alternatives, design criteria, and infrastructure improvements were evaluated for the Minor Amendment area, including:

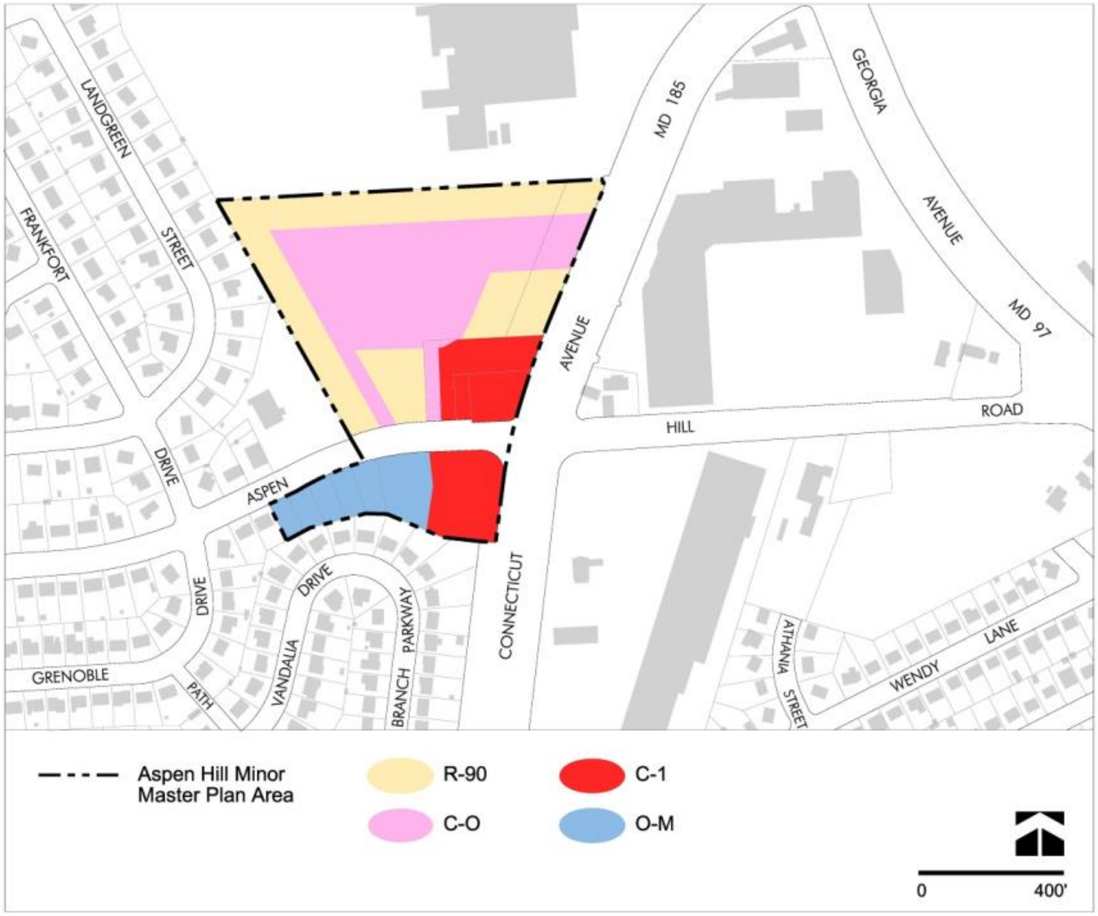
- Rezoning the Minor Amendment area to acknowledge the changed office market and to capture the area's retail market potential, while allowing for a mix of uses, compatible with surrounding land uses, to develop over time.
- Establishing design criteria that address future form and function of the Minor Amendment area.
- Fine-tuning proposed zoning map conversions for properties in the Subject area to ensure consistency with the Minor Amendment.
- Analyzing and addressing the impacts of added vehicular traffic on Aspen Hill Road and Connecticut Avenue.
- Addressing pedestrian safety; connectivity; and vehicular, pedestrian, and bicycle circulation within the Minor Amendment area.

When the *Aspen Hill Master Plan* was approved 20 years ago, Vitro Corporation occupied the office building at 4115 Aspen Hill Road and had been a long standing employer in the area. Over the past decade, both Vitro and BAE have vacated the site and the 265,000 square foot office building has remained vacant since 2010. In general, the large-scale, single-tenant office market has changed and declined throughout the region. The current trend in office uses is to move away from the suburban car-oriented sprawling campus of past decades and to cluster more compact offices around multiple-use, mass transit centered areas. Medical offices, such as the Aspen View Center located on a smaller footprint on the south side of Aspen Hill Road, may be the exception to this trend, as providers favor suburban locations that are convenient to their patients. The property owner's inability to attract an office tenant to reuse 4115 Aspen Hill Road after four years of marketing the building is indicative of the soft office market, generally, and the decreasing demand for large scale single tenant structures. The full market analysis completed by Research and Special Projects Staff is included in Appendix B.

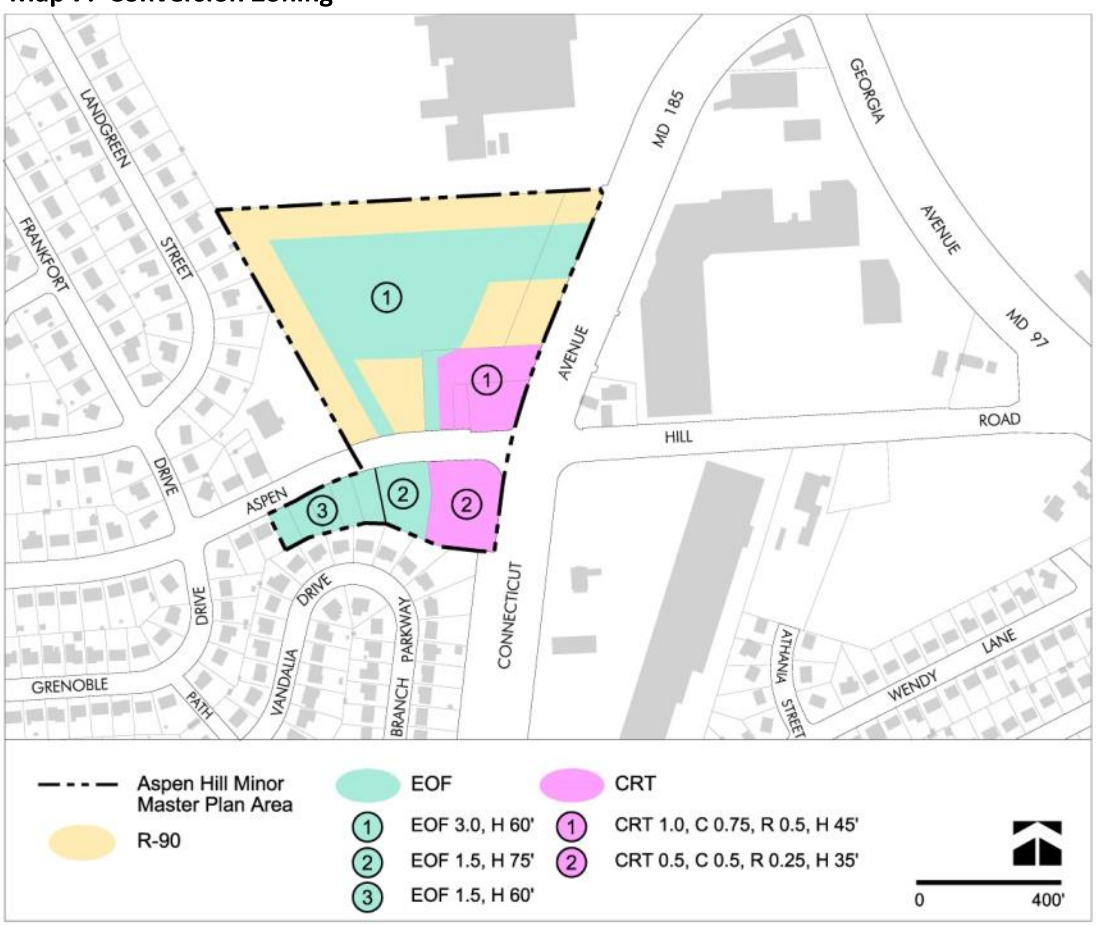
In light of the soft office market in the region, and the unlikely reuse of the obsolete office building at 4115 Aspen Hill Road, the market feasibility of additional land uses in the area, specifically retail and townhouse development, was evaluated. The strong commercial market base and land use pattern that currently surrounds the Minor Amendment area was an indication that additional retail may be supportable in the Minor Amendment area. In addition, a moderately dense residential land use would be an appropriate transition between the more dense commercial uses situated toward Connecticut Avenue and the single-family residential neighborhoods to the west. The *Retail and Residential Feasibility Studies* conducted by the Planning Department concluded that additional retail square footage could be supported in the trade area, whereas townhouses may be supported, but their feasibility is less certain at this time. (Appendix B)

Examples of townhouse and retail land uses

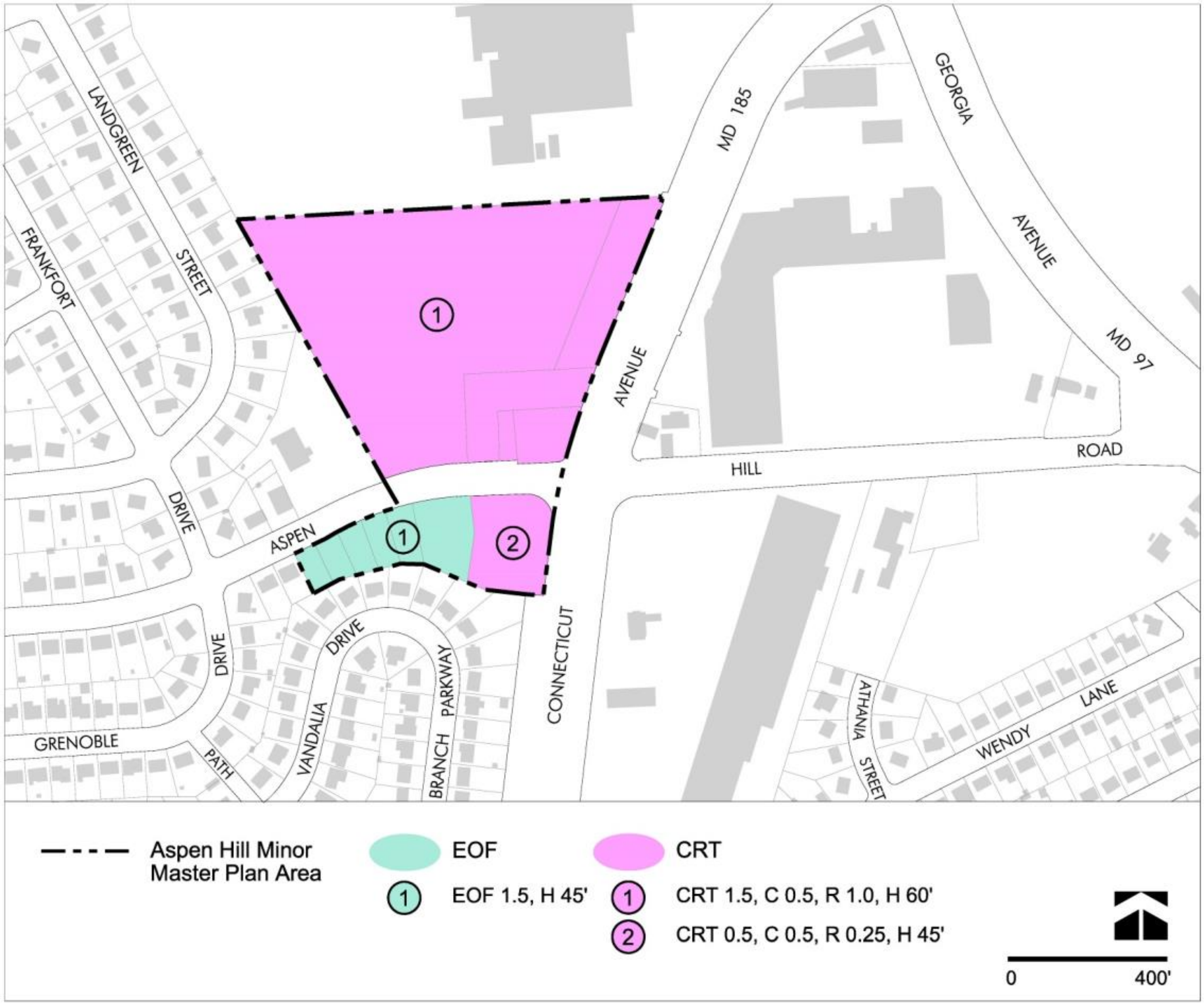
Map 6: Existing Zoning



Map 7: Conversion Zoning



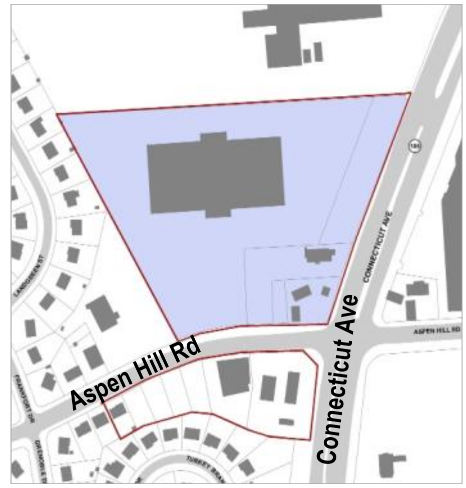
Map 8: Proposed Zoning

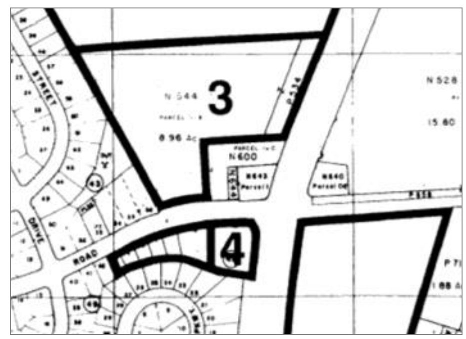


LAND USE AND ZONING RECOMMENDATIONS

Properties North of Aspen Hill Road

The approximately 11.5-acres situated to the north of Aspen Hill Road include the currently vacant Vitro/BAE office building, parking areas, a Dunkin Donuts, and a Shell gas station. The 1994 *Aspen Hill Master Plan* identified the majority of this area as *Significant Parcel #3* and stated that the site *should be maintained as an office employment center for the Aspen Hill community* (page 46). The Plan recommended a change in zoning from commercial (C-1 Convenience Commercial) to office (C-O Commercial, Office Building) to *preserve this site as an employment center and preserve job opportunities for residents to work near their home* (page 47). The R-90 (Residential, One-family) portions of the site which were used for parking, were reconfirmed. The Dunkin Donuts and Shell gas station properties were not included as part of *Significant Parcel #3* in the 1994 Plan. The properties are currently zoned C-1.





1994 Plan, Significant Parcels 3 & 4

The properties north of Aspen Hill Road may support mixed-use development as the market evolves in the future, particularly if the properties are assembled and redeveloped comprehensively. More intense redevelopment should be focused toward Connecticut Avenue. Redevelopment of the vacant, former Vitro/BAE office building, should have its primary access off of Connecticut Avenue and access to/from Aspen Hill Road should be limited to a right-in/right-out driveway to alleviate queuing pressures on Aspen Hill Road and intersection congestion during peak hours.

Projects adjacent to single-family residential neighborhoods should use compatible building mass, height and setback, and façade articulation to create a transition to those neighborhoods. The 1994 Plan recommends that *no structure for building or parking should be closer to the single-family houses than the existing structure* [at 4115 Aspen Hill Road]. (pg. 46) The existing structure sits approximately 96-feet from the west property line. In the event that this property is redeveloped, and the existing building demolished, the Plan recommends that any non-residential uses maintain a 100-foot no-build area along the western edge of the property adjacent to the single-family residential neighborhood. (see Figure 1, Design Guidelines)

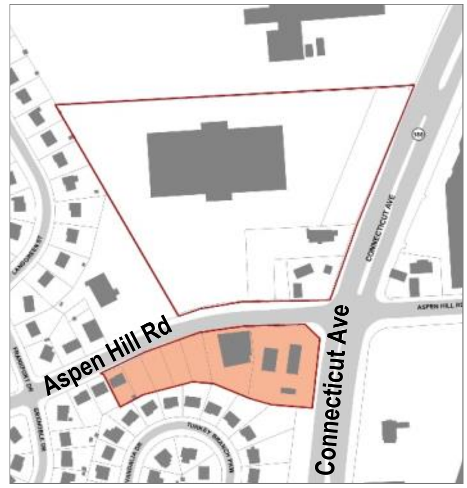
This Plan recognizes that there may be a phased redevelopment of the north side of Aspen Hill Road over a long period of time. It is likely that the former Vitro/BAE property will redevelop in the shorter term, followed by potential redevelopment of the remaining properties over time, as the market evolves to support a moderately dense mix of land uses. While this Plan recognizes the need to accommodate some near-term, single-use development, the overarching goal is to facilitate the opportunity for a comprehensive redevelopment of these sites over the long-term.

Recommendation

- Rezone the entire Minor Amendment area north of Aspen Hill Road from C-O; R-90; and C-1, to a Commercial Residential Town Zone (CRT-1.5, C-0.5, R-1.0, H-60).

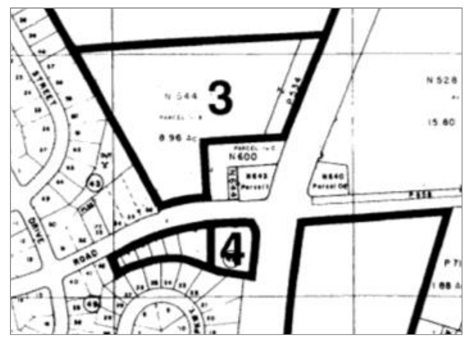
Properties South of Aspen Hill Road

This area is made up of approximately 2.4-acres of land. A gas station is situated on the southwest corner of the Connecticut Avenue and Aspen Hill Road intersection, and the Aspen View Center office building, its associated parking, and a residence that has been converted to an office use make up the remaining amendment properties on the south side of Aspen Hill Road.



The majority of the properties on the southwest side of Aspen Hill Road and Connecticut Avenue are identified as *Significant Parcel #4: Mobil Service Station and Aspen View Center Office Building* in the 1994 *Aspen Hill Master Plan*. The Plan recommended that *the entire service station site be zoned C-1 to better reflect the actual use of the site. The entire office building [Aspen View Center] site would be appropriate for O-M zoning with no expansion of the existing development*. (page 47)

Currently, there are no plans to redevelop the south side of Aspen Hill Road. Should redevelopment occur over the long-term, compatible building mass, height, and setback transitions should be made to the residential neighborhoods to the south and west. Any future development should be focused toward framing the Connecticut Avenue and Aspen Hill Road corner and along the Aspen Hill Road frontage. (see Figure 1, Design Guidelines)



1994 Plan, Significant Parcels 3 & 4

Recommendations

- Confirm the proposed zoning conversion to CRT-0.5, C-0.5, R-0.25, with an adjustment to maximum building height (H) from 35 feet to 45 feet, for the southwest corner of Aspen Hill Road and Connecticut Avenue.
- Confirm the proposed zoning conversion to EOF-1.5 (Employment Office) for the remaining properties south of Aspen Hill Road, with an adjustment to maximum building height from 60 and 75 feet to 45 feet.

DESIGN CRITERIA

The commercial center of Aspen Hill is a fragmented, suburban district where most of the land is dedicated to low intensity uses with vast amounts of surface parking. Although mature, the district remains under-developed, but with potential to yield a greater mix of uses over time, for the benefit of surrounding communities. As redevelopment occurs, the area presents a good opportunity for applying strong urban design principles and sustainable and low impact development to improve neighborhood connectivity, create new community open space and, by promoting distinctive architecture, define a stronger local identity. Connectivity is an important goal of this Plan. As feasible, there should be internal vehicular and pedestrian connections between properties that will encourage dispersal of movement throughout the Plan area.

The recommendations in this Amendment will create conditions that will allow for this type of connected, mixed-use development to occur, but achieving these goals will likely be incremental. Early development phases should set the stage to achieve longer-term goals.

As a minimum, redevelopment must do the following:

- Promote the creation of frontages along Connecticut Avenue. Locate buildings as close to Connecticut Avenue as possible. This will begin to establish a street wall along this major thoroughfare and give maximum visibility to new uses.
- Locate the front entrances and primary facades of new buildings on Connecticut Avenue or the shared entrance from Connecticut Avenue. Enhance the area's identity and character by providing architectural elements that articulate the façade and provide visual interest.
- Provide visual improvements that direct pedestrians to available transit options, and that clarify internal circulation patterns for vehicles, bicyclists, and pedestrians.
- All connections should have adequate amenities for pedestrians, including generous sidewalks, green planting strips between pedestrians and vehicular areas, and significant tree planting.
- Minimize the visibility of loading docks and locate them to have minimal impact on pedestrian activities. Loading docks and service areas must not front on Connecticut Avenue.
- Consolidate vehicular entrances at the major roads.
- Locate surface parking areas behind the front building line; include significant planting areas and highly visible landscaped pedestrian walks connecting uses with enhanced pedestrian areas along the public domain.

Shared use path, structures to road, façade articulation

Landscaped pedestrian paths between uses

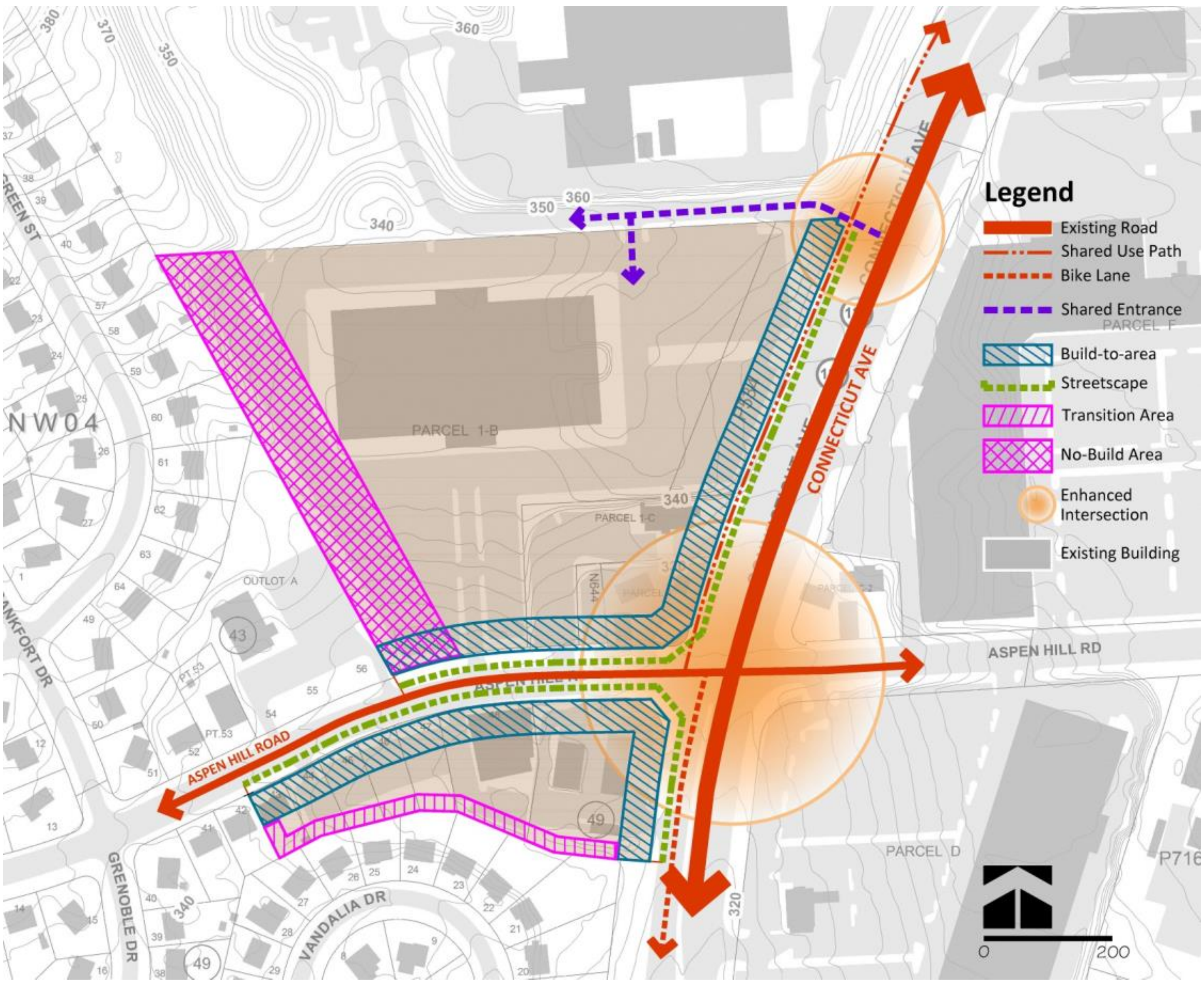
Redevelopment should foster the following, as the Plan area evolves over time:

- Promote compact, mixed-use development with high levels of internal connectivity.
- Concentrate high densities at locations where multimodal transportation choices are or might be available to reduce dependence on automobile use.
- Provide networks of internal streets that create blocks that are pedestrian-scaled and walkable. These streets should provide connections to surrounding communities.
- Create a development pattern with short blocks, and human-scaled buildings and streets, to create an inviting and safe public realm.
- Create a recognizable center for the community, with identifiable edges to reinforce the form and identity of the area.
- Provide places for community use where the public feels welcome and encouraged to congregate.

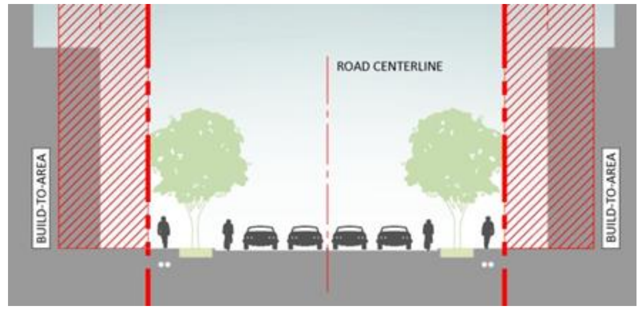
Design Guidelines

The guidelines focus on the elements of the redevelopment that will reshape the public domain. The following diagrams illustrate where and how each element could be considered.

Figure 1: Design Criteria



Elements



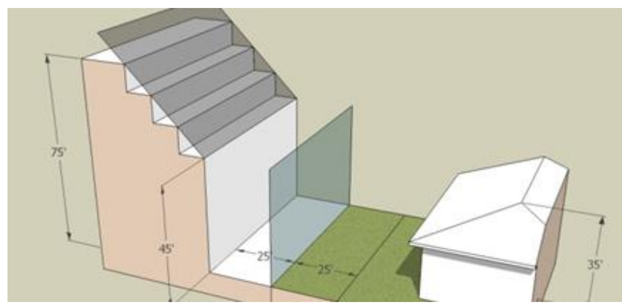
Build-to-areas

Build-to areas designate an area along the public right-of-way where the front building façade should be located, to define the public domain and introduce street activating uses in areas where promoting pedestrian activity is desirable. Build-to-areas allow for some flexibility in locating the street wall within pre-established distances away from the public right-of-way. The Zoning Ordinance establishes a maximum setback from the public right-of -way for a standard method project. Setbacks for optional method projects are determined during the regulatory review process, but locating building facades as close as possible to the right-of-way is strongly encouraged.

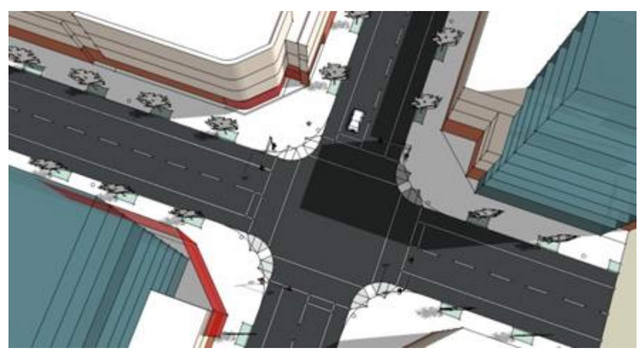

Streetscape improvements

Streetscape Improvements should include wide sidewalks, adequate illumination, landscaping, and street furnishings, to enhance and promote pedestrian activity, and must include implementing the Green Corridors Policy (1994 *Aspen Hill Master Plan*, pages 112-117). The green corridors concept designates major highways and through-residential streets that should be safe and attractive for pedestrians and bicyclists as well as vehicles, and preserves the character of those streets that already qualify as green corridors.

- Improve Connecticut Avenue and Aspen Hill Road with sidewalks where they are lacking, bikeways as recommended by the Plan, trees and planted areas along the curb, and median trees where possible.
- Sidewalks along Connecticut Avenue should include:
  – a 6-foot wide green strip along the curb, with trees centered on the strip;
  – a minimum 10-foot wide shared use path;
  – an 8- to 10-foot wide sidewalk.
- Increase vegetation along the corridor to improve visual and environmental quality and to buffer adjacent uses and pedestrians from the high speed and noise of vehicles. The amount of tree canopy through neighborhood roads designated as green corridors should be maintained or enhanced. To promote the creation of a continuous canopy, tree spacing should be ±35 feet on center.



Transitions


Enhanced intersections

Transitions between commercially zoned properties and immediately adjacent single-family neighborhoods are defined in the Zoning Ordinance. Compatibility requirements, including height compatibility, are described in section 4.1.8.B.

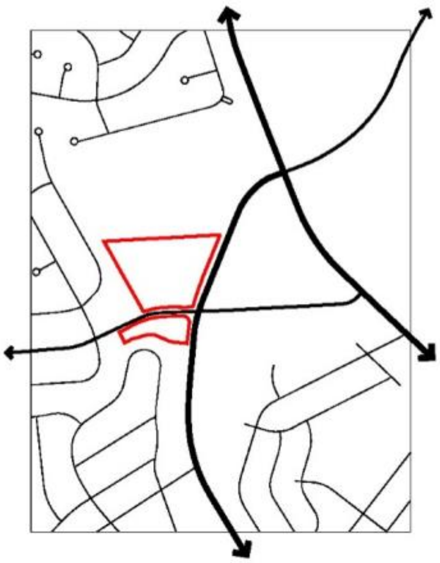
Enhanced intersections refer primarily to how buildings can shape and highlight street crossings linking significant areas, to improve visibility for motorists and safety for pedestrians, while enhancing local character. Enhanced intersections should include:

- Where feasible, create street defining buildings at all corners, with entrances and/or activating uses oriented toward or near the corner.
- Sidewalk streetscape elements (including trees) that clear the corner to improve visibility across the intersection for pedestrians, cyclists, and motorists.
- Building corner placement and articulation that allows adequate space for pedestrians to congregate safely, away from vehicular traffic.
- Consider speed-reducing measures at the road surface such as alternative materials at crosswalks. This would require Montgomery County Department of Transportation (MCDOT) approval and coordination.

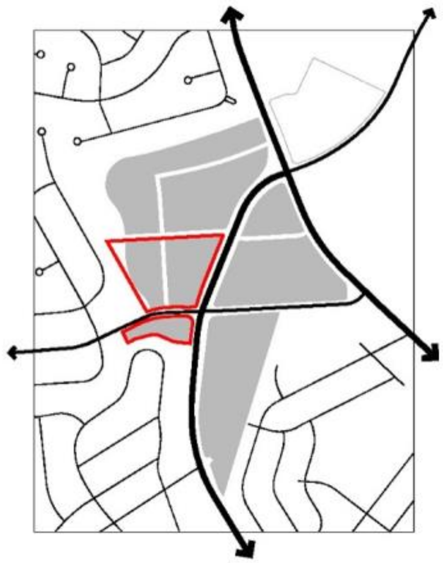
Looking Forward

The study area is part of a larger commercial cluster, which serves as a neighborhood center for the Aspen Hill area. The scope of this amendment was limited to a group of properties along the western edge of the cluster, so the combined potential of the larger Aspen Hill commercial area was not explored in full detail by this exercise. An update to the 1994 *Aspen Hill Master Plan* is programmed to begin in July 2015, and will address the larger commercial area. In addition to changing land use dynamics in the region, the approval of priority planning and design studies of the North Georgia Avenue Bus Rapid Transit line, with a proposed station at Georgia Avenue and Connecticut Avenue, (see Transportation Section) has the potential to catalyze more compact development in this area.

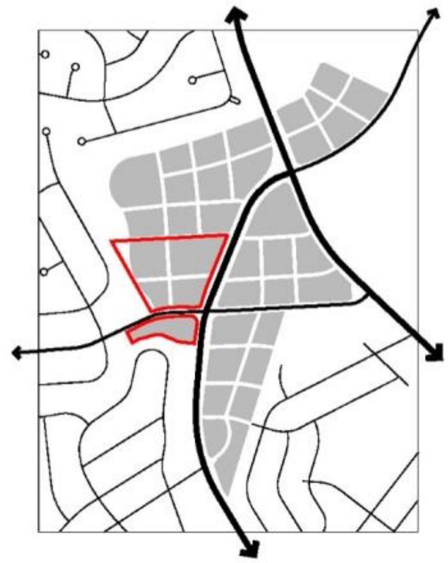
Future studies should include all the commercial properties in the area to assess their joint development potential, and to explore options for improved internal and external connectivity and for providing an interconnected network of spaces for public use. While the design criteria in the Minor Amendment includes considerations for possibly commercial-only development, the zoning recommendation for the current study area would also allow denser and more compact, mixed-use development. Property owners should consider all development scenarios while exploring redevelopment options.



Existing Grid



Future Study Area



Potential Mobility Network

Figure 2: Georgia Avenue Study/Urban Design Framework

Before

After

The 2008 Georgia Avenue Study / Urban Design Framework, prepared by the Planning Department and approved by the Planning Board, illustrated the potential future transition of the Minor Amendment and surrounding areas. The Study recommends that *a future amendment to the Aspen Hill Master Plan should explore the feasibility of creating a compact, mixed-use center on the existing commercially zoned areas at the intersection of Georgia and Connecticut Avenues to create a more walkable center with local retail, community facilities, and additional affordable housing*. (pages 30-31)

TRANSPORTATION

The Minor Master Plan Amendment area is located on the western side of Connecticut Avenue (MD 185) along both the northern and southern sides of Aspen Hill Road. The portion located north of Aspen Hill Road, mainly occupied by the former Vitro/BAE vacant office building, is accessed by one full-movement access driveway to Aspen Hill Road, which is presently chained closed, and an internal connection to the Home Depot secondary access driveway to Connecticut Avenue.

Connecticut Avenue (MD 185) is a six-lane major highway traversing in a northeast-southwest direction along the eastern frontage of the Minor Amendment area. Traffic signals exist at the nearby intersections with Aspen Hill Road and Georgia Avenue (MD 97). The Home Depot secondary access driveway (immediately north of the Vitro/BAE site) is currently undergoing a traffic signal warrant analysis as a condition of approval for the 30,000-square foot Home Depot expansion. This driveway is located approximately 750 feet north of Aspen Hill Road and approximately 850 feet south of the intersection with Georgia Avenue. The posted speed limit on Connecticut Avenue is 40 MPH. The 2013 annual average daily traffic (AADT) on Connecticut Avenue, as reported by the State Highway Administration (SHA), is approximately 36,300 vehicles per day. This represents a 3.6% decrease from 2011.

Georgia Avenue (MD 97) is a six-lane major highway traversing in a northwest-southeast direction approximately a quarter mile east of the properties subject to the Minor Amendment. Traffic signals are in place at the nearby intersections with Aspen Hill Road and Connecticut Avenue. The posted speed limit on Georgia Avenue is 45 MPH. The 2013 AADT on Georgia Avenue, as reported by SHA for the segment near Norbeck Road (MD 28), is approximately 42,200 vehicles per day. This represents a 0.6% decrease from 2011. Georgia Avenue is planned as a bus-rapid transit (BRT) corridor with a station to be located at the intersection with Connecticut Avenue. SHA, Maryland Transit Administration (MTA), and MCDOT is currently considering various design and operations alternatives for this BRT line.

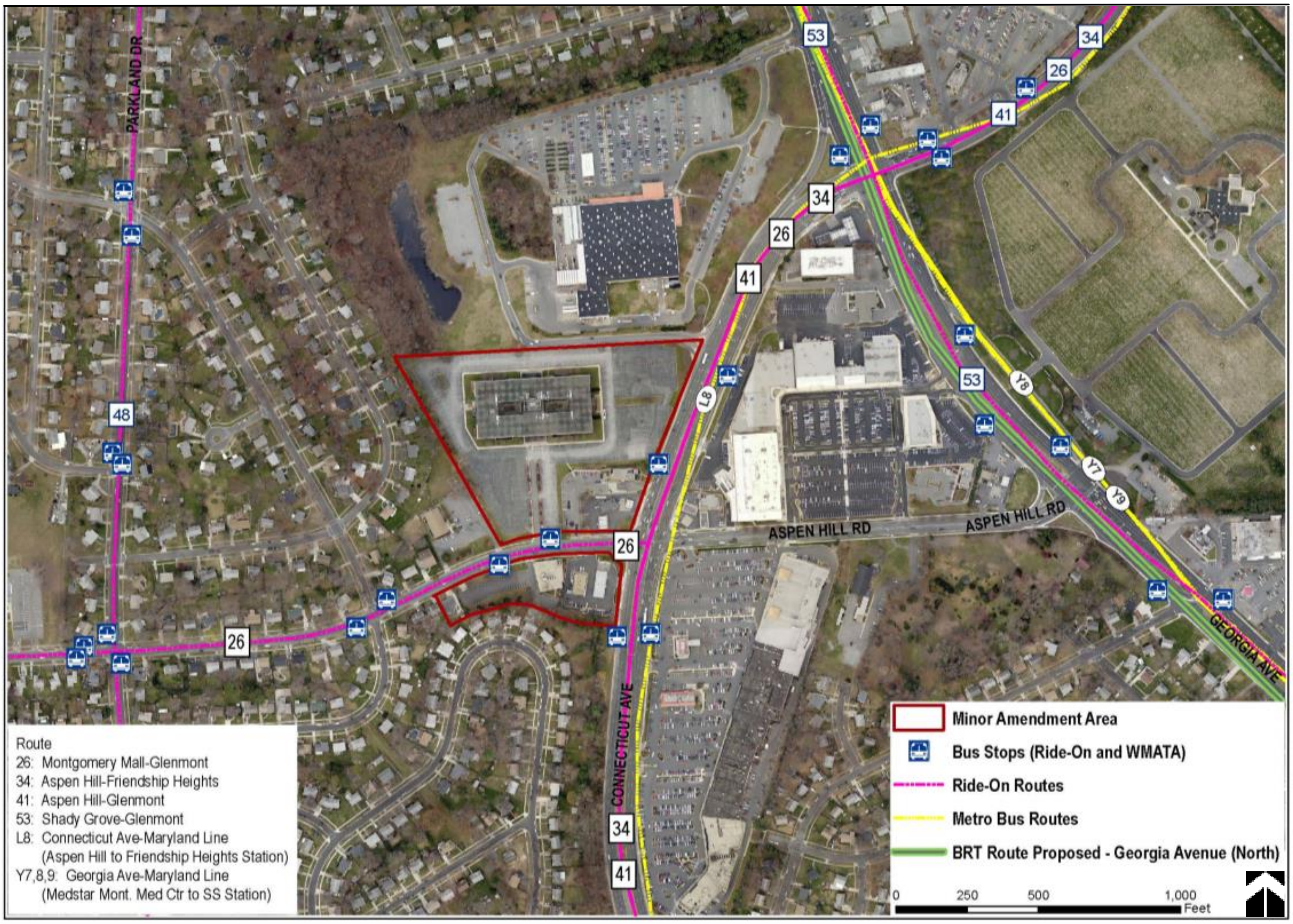
Aspen Hill Road is a two-lane arterial west of Connecticut Avenue and a four-lane arterial east of Connecticut Avenue. It traverses in an east-west direction between the northern and southern portions of the Minor Amendment area. Currently, the full-movement primary site access driveway to the Vitro/BAE site is located on Aspen Hill Road approximately 400 feet west of the intersection with Connecticut Avenue. Traffic signals are in place at the nearby intersections with Connecticut Avenue and Georgia Avenue. In 2008, a traffic calming project was undertaken by MCDOT to install neckdowns and on-street parking which effectively reduced the section of Aspen Hill Road west of Connecticut Avenue from four- to two-lanes. According to MCDOT, between 2008 and 2011, the traffic calming project resulted in a reduction of average vehicular speed from 35 MPH to 34 MPH and the number of collisions over a three-year period reduced from 13 to 4. The posted speed limit on Aspen Hill Road is 30 MPH. The 2013 AADT on Aspen Hill Road, along the site frontage, as reported by SHA, is approximately 17,400 vehicles per day. This represents an increase of 0.2% from 2012.

Existing Bus Service

The Minor Amendment area is served by a number of bus routes provided by the County's Ride On and the Washington Metropolitan Area Transit Authority's (WMATA) Metrobus services (see Map 10, following page). Along Connecticut Avenue there are a total of four bus routes, three of which are provided by Ride On (#26, #34, #41) and one route (#L8) by Metrobus. Route #26 also runs east-west along Aspen Hill Road. The bus stops along the segment of Georgia Avenue in the vicinity of the Minor Amendment area are served by a total of five bus routes, one Ride-on (#53) and four Metrobus (#Y5, #Y7, #Y8, #Y9). Depending on time of day, these buses typically run every 20-30 minutes.

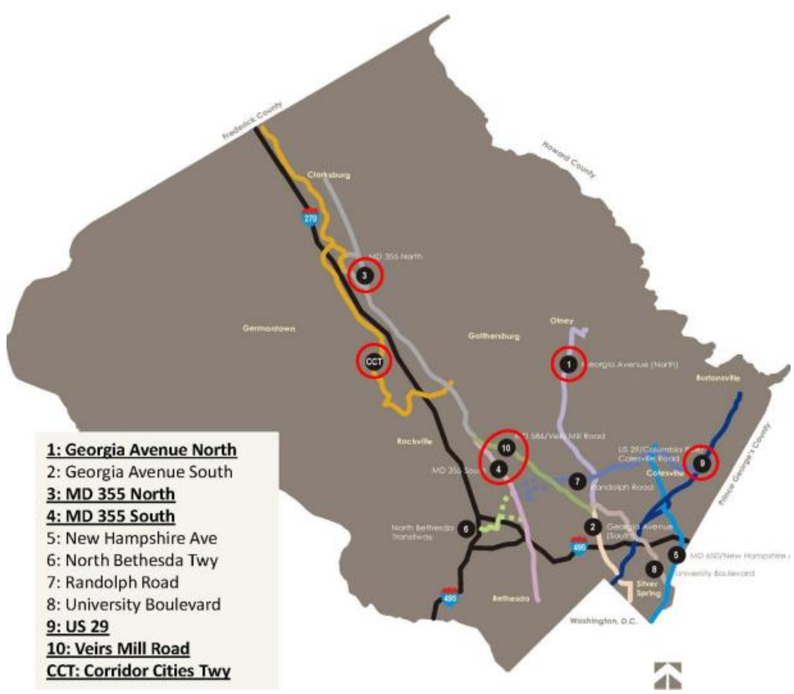
There are two bus stops on Connecticut Avenue, between Aspen Hill Road and the shared drive between the Vitro/BAE site and the Home Depot, for which the 2011 SHA *Pedestrian Road Safety Audit (PRSA)* identified relocation to be closer to the intersection with Aspen Hill Road. Based on data collected by MCDOT, Division of Transit Services, more than 300 transit riders are served daily at these two bus stops. Relocation of these bus stops would enhance safety for pedestrians seeking to cross Connecticut Avenue.

Map 9: Area Transit Services



Proposed Bus Rapid Transit on Georgia Avenue

In November 2013, the County Council approved the *Countywide Transit Corridors Functional Master Plan*. The plan recommends 11 Bus Rapid Transit (BRT) corridors throughout the County, including the segment of Georgia Avenue through the study area of this Minor Master Plan Amendment, to be developed in order to help ease congestion and improve travel times. According to the plans for this corridor (Corridor 1: Georgia Avenue North) a future BRT station is to be located at the intersection of Georgia Avenue and Connecticut Avenue. The MTA, SHA, and MCDOT are in the process of evaluating four different transit and BRT design options that include dedicated lanes for transit vehicles and operational upgrades for traffic signals to give priority to transit vehicles. There is currently no funding source identified for construction of this BRT line, however, the current planning phase is funded.



Countywide Recommended BRT Corridors

Traffic Analysis

Since the Vitro/BAE site has been proposed for redevelopment, an analysis was conducted for several possible development scenarios to measure the impacts of increased traffic at three major signalized intersections surrounding the site. Under the recommended CRT Zone or the EOF Zone that would result from remapping the existing Zone pursuant to the Zoning Rewrite project, the Vitro/BAE site could theoretically be redeveloped with a variety of uses including a theoretical maximum of 320,000 square feet of general office, 218,000 square feet of general retail, or 349 multi-family residential units. The following table shows a comparison of trips generated by each of these scenarios, as well as other scenarios such as re-using the existing office building (268,000 square feet) and a 120,000-square foot big box retail building which has been previously discussed by the property owner.

As shown in Table 2, an office development (either re-use of the existing building or maximizing the zoning potential on) would generate the most amount of traffic in the weekday morning peak hour, while a retail use would generate the most traffic during the weekday evening peak hour. Multi-family residential development would generate the least amount of traffic during both weekday morning and evening peak hours.

Table 2 – Comparison of Vehicle Trip Generation - Aspen Hill Minor Master Plan Amendment

Weekday Peak Hour	Office		Residential	Retail *	
	C-O Reuse Exist. Bldg. 268k SF	Max EOF Build-out 320k SF	Max CRT Multi-Fam. 349 Units	Max CRT Build-out 218k SF	Proposed Big Box 120k SF
AM	450	660	145	305	185
PM	405	590	165	1215	740

Notes: * Retail trips include a pass-by reduction rate of 35%, consistent with the ITE recommended methodology, to account for vehicles that are already on the roadway network in the vicinity of the site that choose to enter the proposed development and then exit the site continuing on their original journey.

The trips shown in Table 2 represent the 'worst-case' scenarios for the Vitro/BAE site. Due to various constraints of the site (i.e., setbacks, parking, slopes) it is unlikely that the maximum allowable square footages for any of the uses could be achieved. Since the property owner has publicly expressed an interest in potentially pursuing a big box retail development, a further detailed trip generation analysis for retail uses was conducted to determine the highest ('worst case') traffic generating methodology. Table 3 below shows a comparison of sources of similar retail-type trip generation data.

Table 3 – Comparison of Trip Generation Sources for Retail Uses

Source	Weekday Peak Hour	Max CRT Build-out 218k SF	Proposed Big Box 120k SF
LATR & TPAR * (General Retail)	AM	305	185
	PM	1215	740
ITE 9th Edition * (#813 Free-Standing Discount Superstore)	AM	260	145
	PM	615	340
Wal-Mart ** (average of 32 sites nationwide)	AM	235	130
	PM	735	405

Notes: *Trips shown for Local Area Transportation Review (LATR) & Transportation Policy Area Review (TPAR) Guidelines and Institute of Transportation Engineers (ITE) sources used a pass-by reduction rate of 35%, consistent with the ITE recommended methodology.
**A pass-by rate of 25% was used consistent with recommendations of the nationwide study.

As shown in Table 3, the highest trip generating rates for a retail use comes from the Planning Department's Local Area Transportation Review and Transportation Policy Area Review (LATR & TPAR) Guidelines. These rates were used in the following traffic analysis conducted by Staff to represent 'worst case' retail development scenarios.

The standard methodology in Montgomery County for determining intersection congestion is to calculate an intersection's critical lane volume (CLV). The CLV measures the traffic throughput of an intersection by determining the amount of conflicting traffic movements in the intersection. In the Aspen Hill Policy Area, the LATR & TPAR Guidelines state that intersections must operate at a CLV below 1475 in order for a proposed development to be approved without intersection improvements or other traffic mitigation. Table 4 shows a comparison of CLVs at nearby study intersections under the existing conditions, background (no build), and development (retail, residential, office) scenarios.

This traffic analysis assumed for all scenarios that the existing primary access driveway for the Vitro/BAE site to Aspen Hill Road would be converted to a right-in/right-out driveway and primary access would be shifted to the existing shared Home Depot driveway onto Connecticut Avenue.

Table 4 – Critical Lane Volume (CLV) Comparison - Aspen Hill Minor Master Plan Amendment

Intersection	Peak Hour	Existing Currently Vacant	No Build Remains Vacant	Office		Residential	Retail		
				C-O Reuse Exist. Bldg. 268k SF	Max EOF Build-out 320k SF	Max CRT Multi-Fam. 349 Units	Max CRT Build-out 218k SF	Proposed Big Box 120k SF	Max SF w/ Accept. CLVs 170k SF
Georgia Ave & Connecticut Ave	AM	980	985	1005	1010	1000	1010	1005	1010
	PM	1095	1100	1140	1155	1105	1205	1165	1185
Connecticut Ave & Aspen Hill Rd	AM	1300	1315	1430	1480	1340	1385	1355	1375
	PM	1120	1130	1245	1300	1175	1540	1380	1470
Georgia Ave & Aspen Hill Rd	AM	935	940	1025	1065	970	1010	980	1010
	PM	1125	1130	1245	1300	1160	1415	1305	1365

Notes: CLV standard is 1475 in the Aspen Hill Policy Area.

CLV analysis assumed right-in/out access to Aspen Hill Road and primary access driveway on Connecticut Avenue for all scenarios.

As shown in Table 4 above, except for the theoretical maximum build-out of retail and office uses, all intersections in all other scenarios would operate below the CLV threshold of 1475. In the cases of maximum general office and maximum general retail, the only intersection to exceed the 1475 threshold in either of the weekday peak hours is the Connecticut Avenue and Aspen Hill Road intersection. In the maximum office build-out scenario, this intersection would barely exceed the 1475 threshold with a CLV of 1480. In the maximum retail build-out scenario, this intersection would exceed the 1475 threshold with a CLV of 1540. As noted, the maximum square footages are unlikely to be achieved due to site constraints and the highest trip generation rates were used for the retail uses to present the most conservative ('worst case') analysis of traffic conditions.

An additional retail scenario was analyzed to determine the 1475 CLV 'tipping point' for retail development. The analysis shows that the site could develop with approximately 170,000 square feet of retail without the nearby intersections exceeding the 1475 CLV threshold during either of the AM or PM peak hours. This 170,000 square foot figure could be adjusted higher or lower based on changes to trip generation assumptions, distribution of site traffic, or location/design of access driveways.

Pedestrian Safety

Crash data from SHA for the intersection of Aspen Hill Road and Connecticut Avenue does not indicate any conclusive collision patterns. There were two reported collisions with pedestrians between 2005 and 2012. Collisions with pedestrians are typically only reported if they result in a serious injury or fatality.

In December 2011, SHA released the *Pedestrian Road Safety Audit (PRSA)* Review Report for the section of Connecticut Avenue in the vicinity of the properties subject to this Minor Amendment. The study made numerous recommendations to improve pedestrian safety. The highlights include:

- Reconstruct the Home Depot secondary access driveway to Connecticut Avenue to eliminate channelized islands.
- Consolidate driveways to businesses along Connecticut Avenue.
- Construct missing segments of sidewalks along Connecticut Avenue.
- Upgrade handicapped ramps to ADA standards along Connecticut Avenue.
- Improve pedestrian signage and crosswalks along Connecticut Avenue.
- Reduce corner turn radii at the intersection of Aspen Hill Road and Connecticut Avenue.
- Relocate bus stop on Connecticut Avenue closer to the intersection with Aspen Hill Road that is served by four bus routes.
- Install a concrete median barrier with pedestrian refuge along Connecticut Avenue.
- Significantly reduce the radius of the free right-turn ramp from Georgia Avenue to Connecticut Avenue.

Transportation Policy Area Review (TPAR)

Per the LATR & TPAR Guidelines, the Aspen Hill Policy Area is deemed to have both 'adequate' roadway and transit capacity. Therefore, developments in Aspen Hill are not subject to the additional impact tax for transportation improvements.

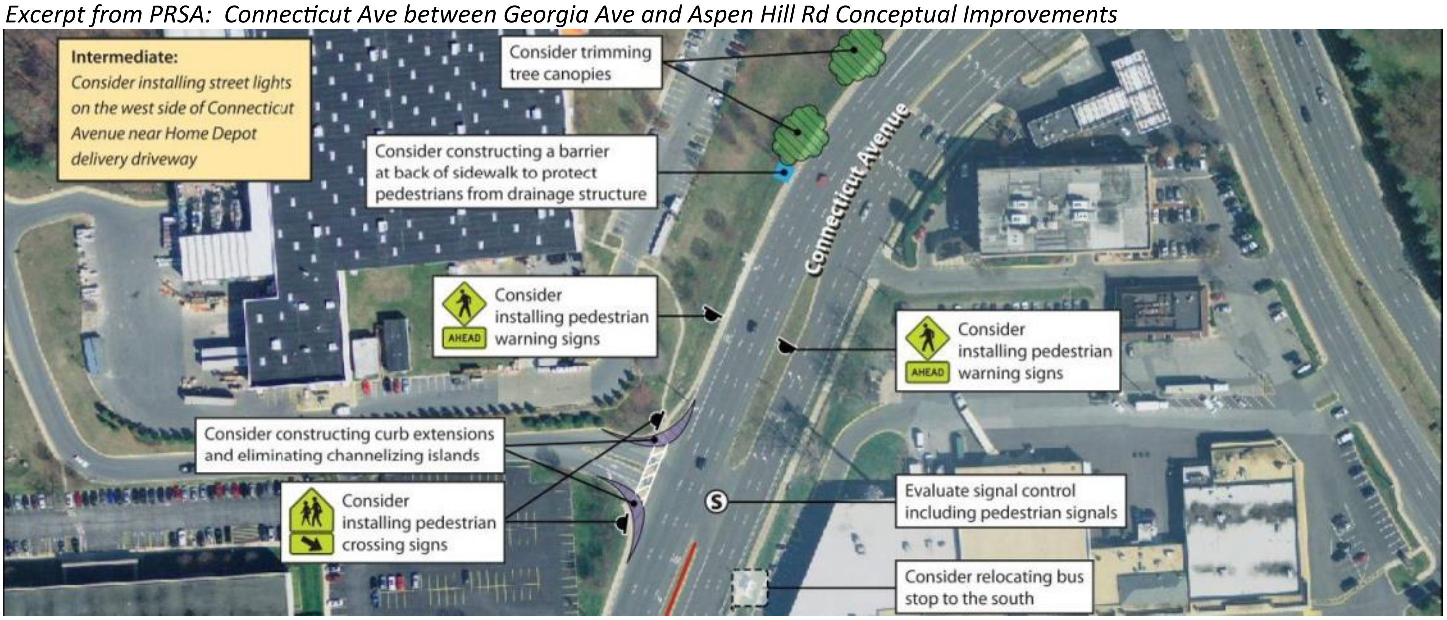
Transportation Recommendations

Based on the traffic analysis, site observations, community feedback, and studies conducted by other transportation agencies, this Plan recommends the following:

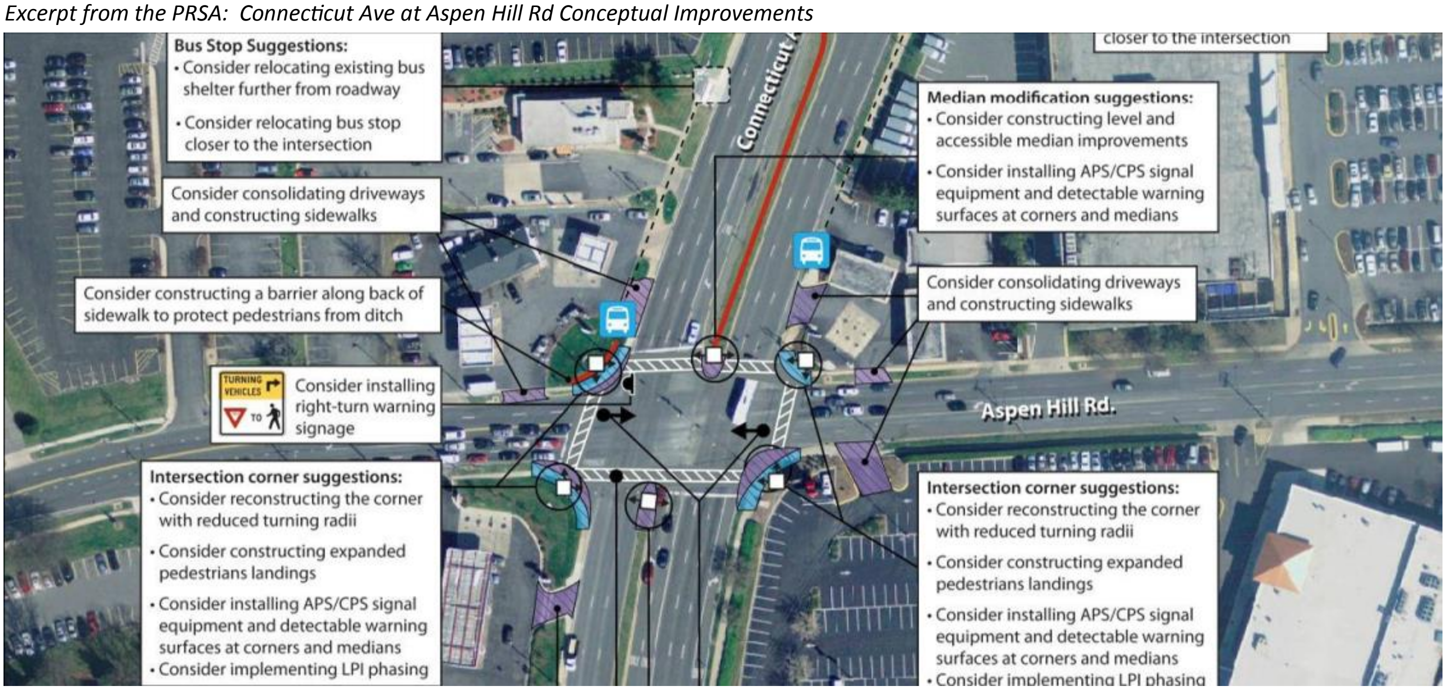
- Access to Aspen Hill Road from the Vitro/BAE site should be provided via a right-in/right-out driveway. This will prevent entering/exiting left-turning vehicles from worsening the existing back-ups on eastbound Aspen Hill Road from the nearby traffic signal at Connecticut Avenue. Additionally, on the northern side of Aspen Hill Road between the Vitro/BAE site driveway and Connecticut Avenue traffic signal there are already three other curb cuts (two for the Shell gas station, one for Dunkin Donuts) in the short span of approximately 400 feet. This driveway should serve as secondary access and be shifted as far west as possible at the time the property is redeveloped.
- Primary access to the Vitro/BAE site should be provided via the existing full-movement Home Depot access driveway to Connecticut Avenue. A traffic signal should be installed at this intersection to improve both traffic flow and pedestrian safety, subject to approval by SHA.
- The SHA recommendations for improved access management and improved pedestrian safety should be implemented along Connecticut Avenue in the vicinity of the Minor Amendment area and at the intersection with Aspen Hill Road.

- When/if the Vitro/BAE site and/or nearby properties are redeveloped (notably Dunkin Donuts and the Shell gas station) attention should be given to consolidating site driveways and creating interparcel access between properties. This will require future coordination between the developers, The Planning Department, and MCDOT.
- The existing transition from four-lanes to two-lanes heading westbound on Aspen Hill Road should be shifted as far west as feasibly possible to provide more merging room for westbound vehicles and more stacking space for eastbound vehicles queuing from the traffic signal at Connecticut Avenue.
- The southbound free-right ramp from Georgia Avenue to Connecticut Avenue should ultimately be removed. Instead, southbound right turns should come to the traffic signal with all other traffic. Removal of the free-right ramp will slow traffic traveling southbound on Connecticut Avenue by the Vitro/BAE site.
- The 2005 *Countywide Bikeways Functional Master Plan* recommends a shared use path along the western side of Connecticut Avenue (reference code SP-27) to connect to the regional network including the Matthew Henson Trail. This shared use path should be constructed commensurate with redevelopment of the Vitro/BAE site.

Excerpt from PRSA: Connecticut Ave between Georgia Ave and Aspen Hill Rd Conceptual Improvements



Excerpt from the PRSA: Connecticut Ave at Aspen Hill Rd Conceptual Improvements



Source: Pedestrian Road Safety Audit Review Report (PRSA), Connecticut Ave from Independence St to MD 97, MCDOT and SHA, Dec 2011

ENVIRONMENT

The 1994 *Aspen Hill Master Plan* area is located in the Turkey Branch subwatershed of the Rock Creek watershed. The area is highly urbanized and completely developed with auto-centric uses. Most of the development occurred at a time before stormwater management regulations were in place. There are almost no natural resources or environmental functions remaining and there are no sensitive areas to protect.

This Plan envisions more sustainable development within the footprint of the existing development. Incorporating new development into the existing developed area will reduce land consumption and vehicle miles travelled, improve our carbon footprint, and water and air quality. While the Amendment area is currently more than 90% impervious with very little stormwater management or tree canopy, redevelopment provides the opportunity to improve environmental conditions and create a greener community.

Recommendations focus on increasing the livability of the community while optimizing the land use within the existing development footprint. Implementation will occur through the redevelopment process.

Carbon Footprint Analysis

Montgomery County Bill number 32-07 establishes a goal to stop increasing greenhouse gas emissions by the year 2010, and to reduce emissions to 20 percent of 2005 levels by the year 2050. There are three main components to greenhouse gas emissions: embodied emissions, building energy emissions, and transportation emissions. Embodied emissions are emissions that are created through the extraction, processing, transportation, construction and disposal of building materials as well as emissions created through landscape disturbance (by both soil disturbance and changes in above ground biomass). Building energy emissions are created in the normal operation of a building including lighting, heating cooling and ventilation, operation of computers and appliances, etc. Transportation emissions are released by the operation of cars, trucks, buses, motorcycles, etc.

While it is not possible to quantify the carbon footprint of this Plan due to the small geographic area, it is possible to qualitatively analyze the impacts of the recommended land uses on the County's carbon footprint. The embodied emissions contribution to total greenhouse gas emissions will increase, due to the demolition of existing structures and construction of new structures. Newly developed buildings have decreased energy emissions due to substantial advances in energy efficiency. Total transportation emissions will increase because the majority of the current plan area is currently occupied by a vacant building. Mixed use development would typically have a lower carbon footprint than redevelopment under the current zoning due to the reduction of single-function automobile trips.

Recommendations

Increase tree canopy cover by:

- Using advanced planting techniques such as constructed soil and interconnected tree pits to increase the soil area for tree roots for new streets and sidewalks.
- Establishing a minimum of 30% tree canopy cover for new surface parking.

Minimize and mitigate for impervious surfaces by:

- Using Environmental Site Design to reduce runoff from all impervious surfaces, including roofs, terraces, and paving.
- Building new streets as "green streets" with urban stormwater management facilities in the right-of-way.

Reduce energy consumption by:

- Promoting non-auto transportation by providing for pedestrian linkages and incorporating transit stops within new development.
- Integrating geothermal systems to reduce energy consumption and allowing and encouraging wind energy conversion systems and large district energy systems.

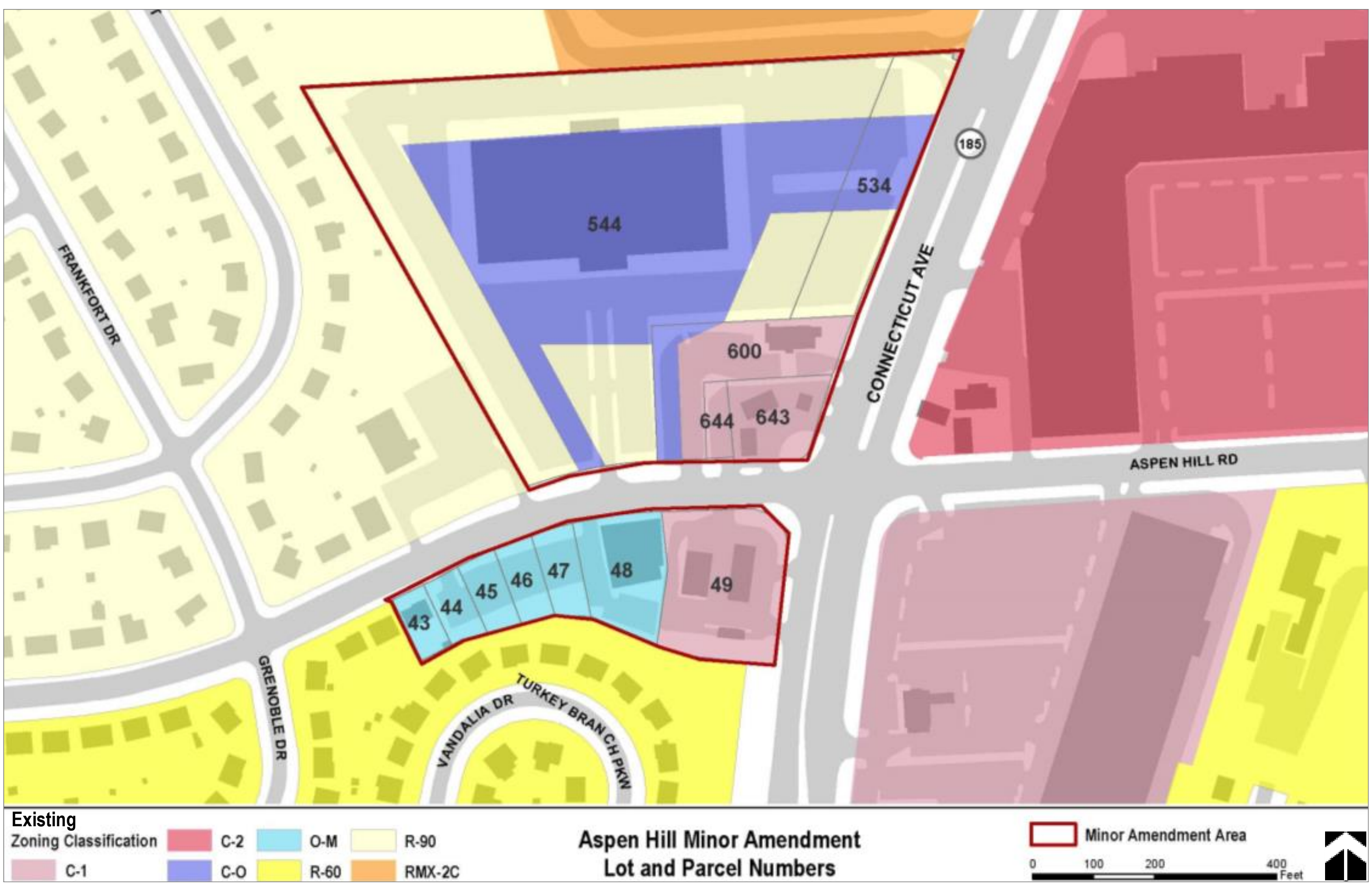
IMPLEMENTATION

This section outlines those steps necessary to implement the zoning recommendations of this Amendment. After the adoption of this Plan, the Zoning recommendations will be implemented through a Sectional Map Amendment.

Proposed Zoning

The following table summarizes the zones proposed in this Minor Amendment:

Property	Size (acres)	Existing Land Use	Existing Zone	Conversion Zone	Proposed Zone
Parcel 544	8.96	Office (vacant Vitro/BAE)	C-O; R-90	EOF-3.0 (H-60); R-90	CRT-1.5 (C-0.5 R-1.0 H-60)
Parcel 534	1.07	Parking	C-O; R-90	EOF-3.0 (H-60); R-90	CRT-1.5 (C-0.5 R-1.0 H-60)
Parcel 600	0.97	Retail (Dunkin Donuts)	C-1; C-0	CRT-1.0 (C-0.75 R-0.5 H-45); EOF-3.0 (H-60)	CRT-1.5 (C-0.5 R-1.0 H-60)
Parcel 644	0.12	Parking	C-1	CRT-1.0 (C-0.75 R-0.5 H-45)	CRT-1.5 (C-0.5 R-1.0 H-60)
Parcel 643	0.46	Retail (Shell Gas)	C-1	CRT-1.0 (C-0.75 R-0.5 H-45)	CRT-1.5 (C-0.5 R-1.0 H-60)
Lot 49	1.03	Retail (Sunoco Gas)	C-1	CRT-0.5 (C-0.5 R-0.25 H-35)	CRT-0.5 (C-0.5 R-0.25 H-45)
Lot 48	0.53	Office (Aspen View Center)	O-M	EOF-1.5 (H-75)	EOF-1.5 (H-45)
Lot 47	0.19	Parking	O-M	EOF-1.5 (H-60)	EOF-1.5 (H-45)
Lot 46	0.17	Parking	O-M	EOF-1.5 (H-60)	EOF-1.5 (H-45)
Lot 45	0.16	Parking	O-M	EOF-1.5 (H-60)	EOF-1.5 (H-45)
Lot 44	0.14	Parking	O-M	EOF-1.5 (H-60)	EOF-1.5 (H-45)
Lot 43	0.14	Residential Detached/Office	O-M	EOF-1.5 (H-60)	EOF-1.5 (H-45)



ELECTED AND APPOINTED OFFICIALS

County Council

Craig Rice, President
George Leventhal, Vice-President
Phil Andrews
Roger Berliner
Cherri Branson
Marc Elrich
Nancy Floreen
Nancy Navarro
Hans Riemer

County Executive

Isiah Leggett

The Maryland-National Capital Park and Planning Commission

Elizabeth M. Hewlett, Chair
Françoise M. Carrier, Vice Chair

Commissioners

Montgomery County Planning Board
Françoise M. Carrier, Chair
Marye Wells-Harley, Vice Chair
Casey Anderson
Norman Dreyfuss
Amy Presley

Prince George's County Planning Board
Elizabeth M. Hewlett, Chair
Dorothy F. Bailey, Vice Chair
Manuel R. Geraldo
John P. Shoaff
A. Shuanise Washington

THE PLAN PROCESS

A plan provides comprehensive recommendations for the use of publicly and privately owned land. Each plan reflects a vision of the future that responds to the unique character of the local community within the context of a countywide perspective.

Together with relevant policies, plans should be referred to by public officials and private individuals when making land use decisions.

The STAFF DRAFT PLAN is prepared by the Montgomery County Planning Department for presentation to the Montgomery County Planning Board. The Planning Board reviews the Staff Draft Plan, makes preliminary changes as appropriate, and approves the Plan for public hearing. After the Planning Board’s changes are made, the document becomes the Public Hearing Draft Plan.

The PUBLIC HEARING DRAFT PLAN is the formal proposal to amend an adopted master plan or sector plan. Its recommendations are not necessarily those of the Planning Board; it is prepared for the purpose of receiving public testimony. The Planning Board holds a public hearing and receives testimony, after which it holds public worksessions to review the testimony and revise the Public Hearing Draft Plan as appropriate. When the Planning Board’s changes are made, the document becomes the Planning Board Draft Plan.

The PLANNING BOARD DRAFT PLAN is the Board's recommended Plan and reflects their revisions to the Public Hearing Draft Plan. The Regional District Act requires the Planning Board to transmit a sector plan to the County Council with copies to the County Executive who must, within sixty days, prepare and transmit a fiscal impact analysis of the Planning Board Draft Plan to the County Council. The County Executive may also forward to the County Council other comments and recommendations.

After receiving the Executive's fiscal impact analysis and comments, the County Council holds a public hearing to receive public testimony. After the hearing record is closed, the relevant Council committee holds public worksessions to review the testimony and makes recommendations to the County Council. The Council holds its own worksessions, then adopts a resolution approving the Planning Board Draft Plan, as revised.

After Council approval the plan is forwarded to the Maryland-National Capital Park and Planning Commission for adoption. Once adopted by the Commission, the plan officially amends the master plans, functional plans, and sector plans cited in the Commission's adoption resolution.

ACKNOWLEDGEMENTS

Gwen Wright, Director
Rose Krasnow, Deputy Director

Project Team
Area 2 Division
Glenn Kreger, Chief
Nancy Sturgeon, Master Planner Supervisor
Andrea Gilles (Lead Planner)
Luis Estrada Cepero, Urban Design
Amy Lindsey, Environment
Ed Axler, Transportation
Aaron Zimmerman, Transportation

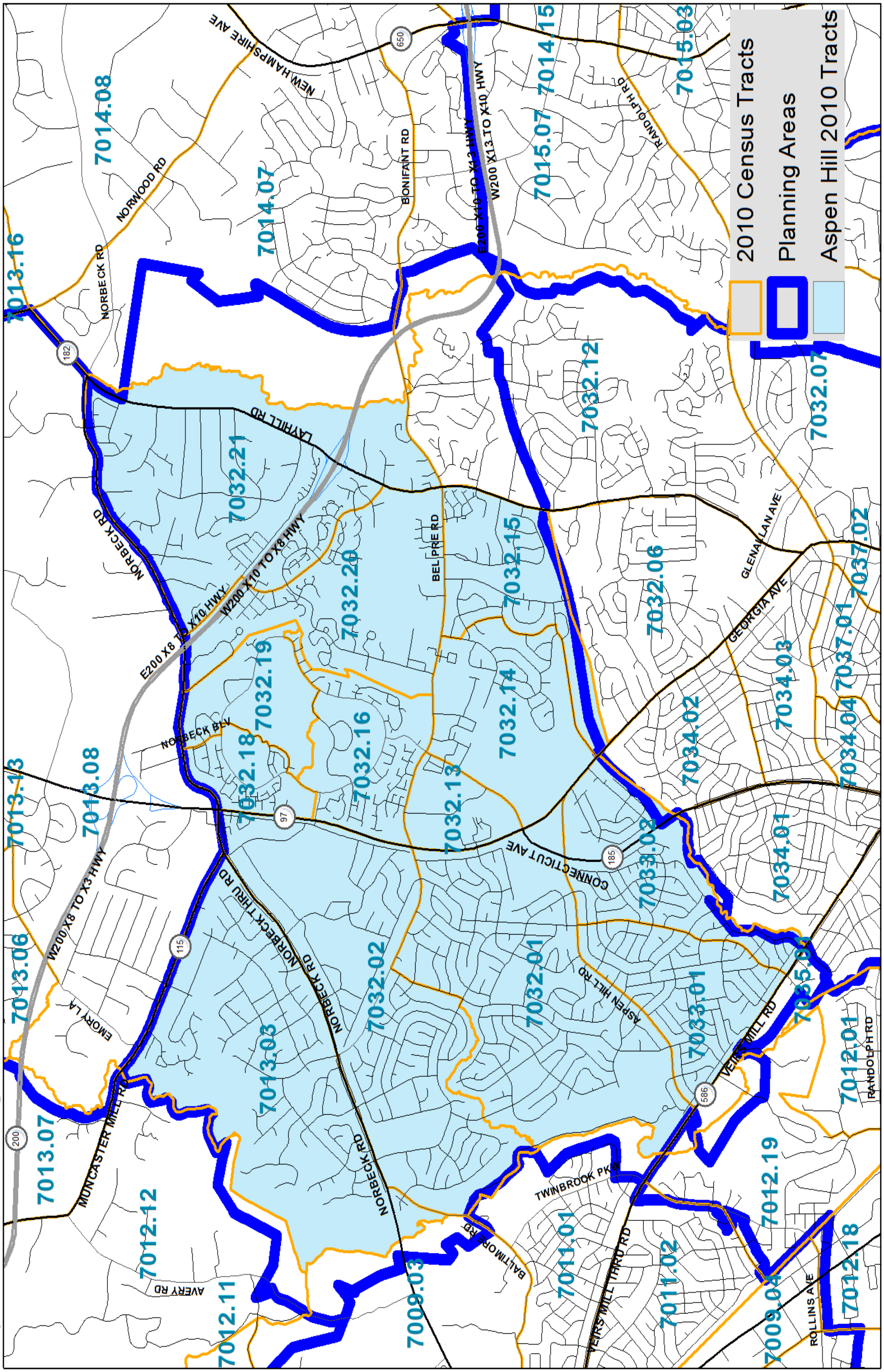
Research and Special Projects Division
Valdis Lazdins, Chief
Richard Liu
Lisa Tate
Pam Zorich

Park Planning, Department of Parks
Brooke Farquhar
Charles Kines

Management Services
Bridget Schwiesow, Communications Manager
Kevin Leonard

Montgomery County Planning Department
M-NCPPC
MontgomeryPlanning.org

Aspen Hill Planning Area: 2010 Tracts



Aspen Hill Study Area

Montgomery County, Maryland

	Aspen Hill Study Area [1] estimate	percent	Montgomery County estimate	percent
POPULATION				
Total population (% of County)	60,090	6.3	959,738	(X)
Age Distribution				
0-4 years	3,567	5.9	63,809	6.7
5-19 years	10,763	17.9	187,117	19.5
20-34 years	10,764	17.9	182,574	19.0
35-44 years	7,695	12.8	141,623	14.8
45-64 years	14,092	23.5	267,203	27.8
65-74 years	4,745	7.9	60,156	6.3
75 years and older	8,464	14.1	57,256	6.0
65 years and older	13,209	22.0	117,412	12.2
Race and Hispanic Origin Combined [2]				
Not Hispanic	47,021	78.3	800,924	83.5
White	25,847	43.0	480,156	50.0
Black	13,678	22.8	160,575	16.7
Asian or Pacific Islander	5,954	9.9	131,748	13.7
Other race	1,542	2.6	28,445	3.0
Hispanic or Latino [2]	13,069	21.8	158,814	16.5
Foreign-born	20,182	33.6	301,013	31.4
Language Spoken at Home				
Population 5 years and over	56,523		895,929	
Speak language other than English	23,153	41.0	341,757	38.1
Speak English less than "very well"	10,677	18.9	137,264	15.3
Educational Attainment				
Persons 25 years and older	42,604	100.0	655,343	100.0
Less than high school diploma	6,203	14.6	58,556	8.9
High school graduate	9,015	21.2	93,168	14.2
Some college or associate degree	9,759	22.9	131,297	20.0
Bachelor's degree	9,862	23.2	175,690	26.8
Graduate or professional degree	7,765	18.2	196,632	30.0
LABOR FORCE				
Civilian employed population 16 years and over	28,171	58.07	516,957	68.4
Females who are employed	13,686	51.4	251,473	63.0
Class of Worker				
Private wage and salary	20,657	73.3	368,949	71.4
Government	5,055	17.9	111,386	21.5
Self-employed in own not incorporated business	2,445	8.7	35,899	6.9
Occupation				
Management, business, science, and arts	11,362	40.3	288,840	55.9
Service	6,716	23.8	77,463	15.0
Sales and office	5,732	20.4	99,060	19.2
Natural resources, construction, and maintenance	2,601	9.2	31,114	6.0
Production, transportation, and material moving	1,760	6.3	20,480	4.0
Work Trip				
Drove	21,875	78.5	387,725	76.2
Alone	18,851	67.6	335,758	66.0
Carpool	3,024	10.9	51,967	10.2
Public transportation	4,616	16.6	77,077	15.2
Walked and other means	424	1.5	16,238	3.2
Worked at home	956	3.4	27,605	5.4
Mean travel time to work (minutes)	34.3	(X)	33.9	(X)
Work Location				
In County	17,329	62.2	301,771	59.3
Outside County, in Maryland	3,426	12.3	54,147	10.7
In another state	7,116	25.5	152,727	30.0
HOUSING				
Housing units (% of County)	24,785	6.6	374,145	(X)
Households (% of housing units)	23,052	93.0	355,434	95.0
Average Household Size	2.58	(X)	2.68	(X)

Aspen Hill Study Area

Montgomery County, Maryland

	Aspen Hill Study Area [1] estimate	Aspen Hill Study Area [1] percent	Montgomery County estimate	Montgomery County percent
Tenure				
Owner-occupied	16,109	69.9	244,497	68.8
Renter-occupied	6,943	30.1	110,937	31.2
Units in Structure				
1-unit, detached	9,743	39.3	182,351	48.7
1-unit, attached	3,866	15.6	68,139	18.2
2 to 4 units	486	2.0	6,596	1.8
5 to 9 units	1,752	7.1	19,105	5.1
10 to 19 units	3,927	15.8	36,503	9.8
20 or more units	5,011	20.2	60,997	16.3
Households by Type:				
Family households	15,023	65.2	242,848	68.3
Married-Couple	10,441	45.3	189,719	53.4
Single-Parent	2,336	10.1	27,474	7.7
Nonfamily households	8,029	34.8	112,586	31.7
Householder living alone	7,123	30.9	91,890	25.9
65 years and over	4,304	18.7	30,702	8.6
Residence 1 Year Ago				
Population 1 year and over	59,404	100.0	947,660	100.0
Same Home	52,829	88.9	816,248	86.1
Elsewhere in County	3,779	6.4	66,780	7.0
Elsewhere in Maryland	694	1.2	14,652	1.5
Different state	1,351	2.3	34,920	3.7
Abroad	751	1.3	15,060	1.6
Selected Monthly Owner Costs				
Housing units with a mortgage	10,495	100.0	195,241	100.0
Less than $700	201	1.9	1,710	0.9
$700 to $999	513	4.9	4,758	2.4
$1,000 to $1,499	1,457	13.9	19,124	9.8
$1,500 to $1,999	2,594	24.7	31,585	16.2
$2,000 or more	5,730	54.6	138,064	70.7
Median (dollars)		(X)	2,592	(X)
Gross Rent				
Occupied units paying rent	6,489	100.0	107,406	100.0
Less than $500	353	5.4	3,294	3.1
$500 to $749	469	7.2	3,434	3.2
$750 to $999	366	5.6	7,349	6.8
$1,000 to $1,499	2,619	40.4	40,925	38.1
$1,500 or more	2,592	39.9	50,993	47.5
Median (dollars)		(X)	1,473	(X)
Households Spending More Than 35% of Income on Housing Costs				
Homeowners with a mortgage	3,555	34.1	55,192	28.3
Renters	3,337	52.0	43,199	40.7
HOUSEHOLD INCOME				
2011 Household Income Distribution				
Under $15,000	1,679	7.3	18,538	5.2
$15,000 to $34,999	3,881	16.8	34,335	9.7
$35,000 to $49,999	2,731	11.9	32,032	9.0
$50,000 to $74,999	3,934	17.1	54,511	15.3
$75,000 to $99,999	3,090	13.4	45,306	12.8
$100,000 to 149,999	4,043	17.5	70,469	19.8
$150,000 to 199,999	2,031	8.8	42,181	11.9
$200,000+	1,663	7.2	58,062	16.3
2011 median household income (dollars)	70,072	(X)	95,660	(X)
People whose income is below the poverty level	5,261	8.85	59,793	6.3
65 years and over	662	5.1	6,996	6.2

[1] *Study area defined by 13 U.S. Census tracts: 13.03, 32.01, 32.02, 32.13-32.16, 32.18-32.21, 33.01 and 33.02.*

[2] *Those of Hispanic origin may be of any race.*

Source: 2007-2011 American Community Survey 5-year estimate, U.S. Census Bureau; Research & Special Projects, Montgomery County Planning Dept., M-NCPPC.

APPENDIX B - MARKET ANALYSIS

Aspen Hill Minor Master Plan Amendment

Market Studies

- Office Market Analysis
- Residential Feasibility Study
- Retail Feasibility Study

Prepared by the

Research & Special Projects Division
Montgomery County Planning Department

Valdis Lazdins, Chief, *Research & Special Projects Division*
Rick Liu, Economic & Development Specialist
Lisa Madigan Tate, Senior Economic Research Planner

April 15, 2014

Office Market Analysis

Office Market Analysis

RESEARCH & SPECIAL PROJECTS DIVISION
Montgomery County Planning Department
April 15, 2014

INTRODUCTION

This report assesses the general feasibility for future office uses within the proposed Aspen Hill Minor Master Plan Amendment (MMPA) area. It focuses on whether the market is likely to absorb existing vacant office space or support construction of a comparable amount of new office space in Aspen Hill as a whole and on the BAE/Vitro site in particular.

METHODOLOGY AND ASSUMPTIONS

This analysis begins by examining key trends shaping office demand in general, and quantifies existing levels of office supply and demand in the region. The analysis then assesses the economic feasibility of large scale office use in Aspen Hill. It gauges Aspen Hill's ability to attract office users relative to alternative locations given tenant preferences regarding transit accessibility, building design, and proximity to commercial centers. Site-specific challenges to reusing, retrofitting or replacing office space in the MMPA area also are discussed.

OFFICE MARKET OUTLOOK

National Office Market Assessment

Despite a brighter economic climate, office users nationwide are choosing to maintain smaller physical footprints. Government and private sector tenants alike are consolidating operations, lowering their square foot per employee ratios, taking on new space more slowly, and negotiating shorter term leases.

These trends are driven by more than a desire to reduce occupancy costs. Telecommuting, new technologies, and changing workplace designs (such as unassigned workspaces and smaller 'on-the-fly' meeting spaces) make it easier for employers use space more intensively, but also appeal to workers seeking more flexible, creative and collaborative work environments.

Changing tenant preferences for office locations and building characteristics also are fundamentally reshaping the office market. Companies want to collocate with clients and suppliers, reinforcing the pull of existing business clusters. Tenants also increasingly favor more attractively-designed, greener and transit-accessible office spaces.

Newer spaces in higher density, mixed use environments are best positioned to compete for these tenants. Older or obsolete properties, especially those located outside business clusters, are at a growing competitive disadvantage.

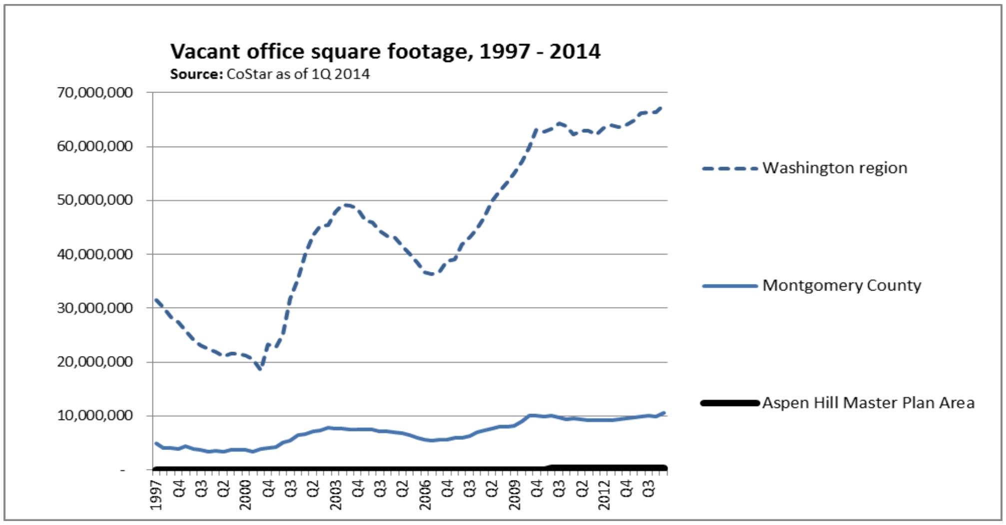
Medical offices may be an exception to the move to smaller, centralized and transit-centered offices. Demand for non-hospital health care space will be robust over the long term due to an increase in insured patients under the Affordable Care Act (ACA) and continued growth in the senior population. Medical providers increasingly favor suburban locations that are convenient and accessible to patients, fostering a boom in medical office construction--according to Colliers International, 25 percent of all office space under construction in the nation is medical office space.

This category of demand will not necessarily cure rising vacancy rates in existing suburban office buildings, as ACA compliance demands and cost containment are expected to spur consolidation in both the health care and insurance industries, potentially creating vacancies in medical and office buildings currently occupied by smaller providers. Medical offices have higher buildout costs and other increasingly specialized space requirements; newer and larger health care establishments typically prefer build-to-suit over existing office structures, and close proximity to retail centers.

Regional Office Market Assessment

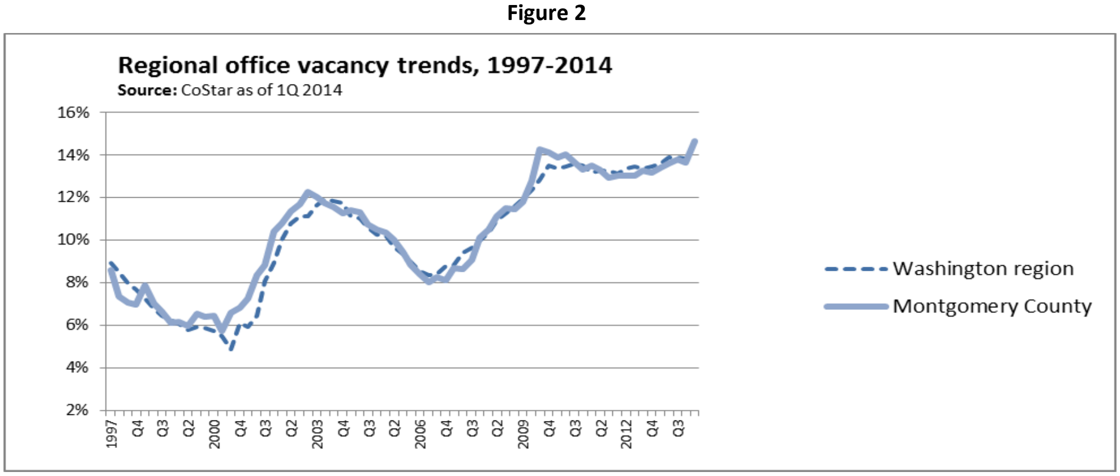
The vacant BAE/Vitro property represents a very minor part of the surplus of office space within Montgomery County and the Washington DC Metro region. Currently, there is roughly 10 million square feet of vacant office space in Montgomery County, and nearly 70 million square feet of vacant space in the Washington, D.C. metro region as a whole (Figure 1).

Figure 1



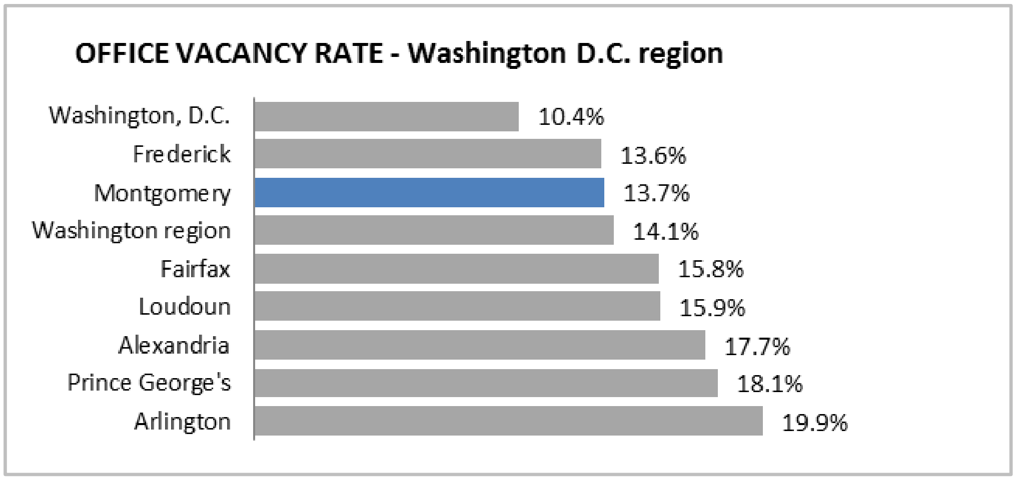
Part of this surplus can be attributed to the lingering impacts of an unusually long recession and federal budget cuts on hiring and leasing activity. Long development cycles and project costs make it difficult to quickly adjust the delivery of new space to market changes, adding to the oversupply. Even so, such 'normal' market ups and downs do not fully explain the office glut. As shown in Figure 2, there has been a persistent rise in office vacancy rates across multiple business cycles over the past two decades, an indication that there are broader trends contributing to the current oversupply of office space.

Figure 2



The Federal mandate for reducing office footprint is likely to only increase the vacancy rate: consolidation of federal space is expected to release 1 million square feet of space onto Montgomery County's office market alone. The current record-high 13.7 percent office vacancy rate for Montgomery is consistent with weakness in the office market region-wide (Figure 3).

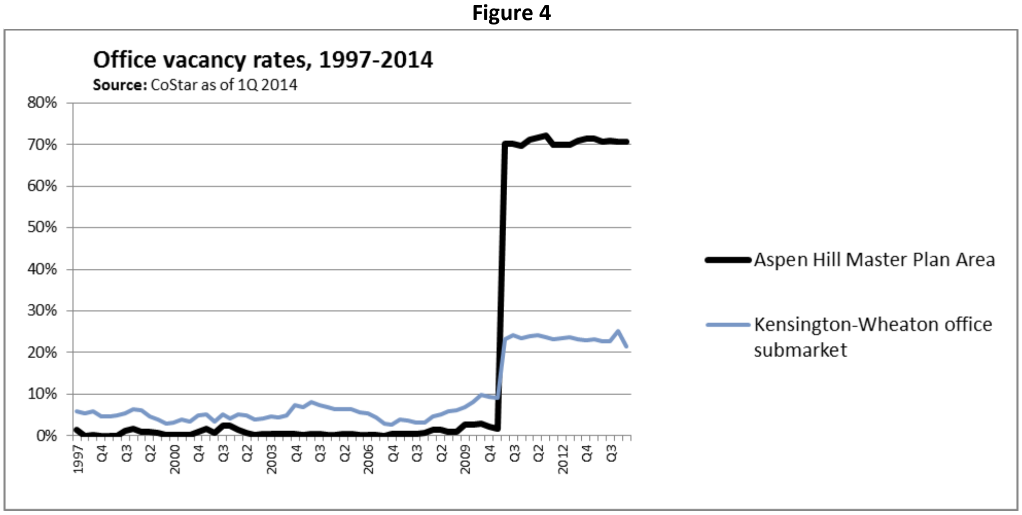
Figure 3



Aspen Hill Office Market Assessment

The 242,000 square foot office building currently on the Vitro site accounts for the vast majority of office inventory in Aspen Hill. Consequently, the loss of the building's sole tenant in 2010 and the owner's reported inability to release the space has had an outsized impact in Aspen Hill, where the vacancy rate has hovered at around 71 percent. The Vitro vacancy has pushed the vacancy rate in its wider Kensington-Wheaton office submarket to around 25 % (Figure 4).

Figure 4



IMPACT ON DEMAND FOR OFFICE SPACE IN ASPEN HILL

A long period of sustained economic growth and market adjustments may be needed to absorb the existing vacant office inventory in the regional economy, indicating that there will likely be fierce competition for office tenants for the foreseeable future. Changing office tenant location preferences also put suburban centers that lack Metro access or a strong non-retail commercial presence—such as Aspen Hill—at a significant competitive disadvantage.

It is important to note that the BAE/Vitro property, which accounts for most of Aspen Hill's office inventory, was custom-built for a large Federal defense contractor at a time when there was less risk associated with long-term leases. In the current market climate, it would be particularly difficult to attract a tenant large enough to absorb all 242,000 square feet of office space. Most tenants who do not want to collocate with other users are seeking smaller buildings that can be customized to their needs, as well as proximity to business partners as well as Metro.

The BAE/Vitro building's current interior layout (e.g., oddly placed stairwells and wall partitions) was designed for a unique user and would be obsolete and unappealing to contemporary tenants. Because the building was constructed with reinforced concrete, the cost of retrofitting these features to accommodate a new tenant would be unusually high.

Subdividing into a multi-tenant property would also be cost-prohibitive because it would require removing nearly all existing building components and essentially creating a new code-compliant building over the existing foundation. This option would be more expensive than fully demolishing and building new. Even then, it would be extremely challenging to find multiple tenants given the overall weakness in the current office market.

Based on these factors, it can be reasonably concluded that the market probably will not absorb the existing block of vacant office space or support the construction of a new or replacement office space in the MMPA area in the near future. Limited demand may exist for community-serving office uses, such as a medical or professional building.

Residential Feasibility Study

ASPEN HILL MINOR MASTER PLAN AMENDMENT

Residential Feasibility Study

RESEARCH & SPECIAL PROJECTS DIVISION
Montgomery County Planning Department
April 15, 2014

INTRODUCTION

This report was prepared in support of the Aspen Hill Minor Master Plan Amendment and it focuses on the former BAE/Vitro headquarters office site (see Figure 1). The report seeks to determine the economic feasibility of redeveloping it for residential uses, which would require a subsequent rezoning. The Research and Special Projects Division completed the following tasks for this effort:

- **Economic and Market Due Diligence Analysis**: Conducted economic, financial, and market analyses of the site's surrounding residential market and competitive areas to confirm variables and test a residential development program whose scale is generally in line with demand factors.
- **Financial Feasibility Analysis**: Analyzed the financial feasibility of a residential scenario based on development costs, revenue inputs, and development program variables based on the Economic and Market Due Diligence Analysis.

SECTION 1: SITE BOUNDARIES

While the Aspen Hill Minor Master Plan Amendment covers a larger area, the planning effort is focused primarily on the now vacant BAE/Vitro office site located at 4115 Aspen Hill Road in Aspen Hill, MD. The site is approximately 10 acres and is bounded by single family homes and a church to the west. A Home Depot and conservation area are located to the north, Connecticut Avenue to the east, and Aspen Hill Road to the south. A small site, zoned C-1, has been "carved out" from the property at the southeast corner and contains a gas station and Dunkin' Donuts.

The BAE/Vitro property is split zoned. A 4.9+ acre area containing the office building is zoned C-O. The remaining 5.1+ acres, primarily the parking areas, are zoned R-90 and an approved special exception allows the site to be used for parking (See Figure 1). The area zoned C-O would need to be rezoned to accommodate any residential uses.

The site sits at a relatively busy intersection, Aspen Hill Road and Connecticut Avenue. It is surrounded by large commercial stores, particularly to the east. Across Connecticut Avenue is Northgate Shopping Center and Aspen Hill Shopping Center, both large regional shopping centers. However, the planning area lacks certain amenities, such as proximity to Metro, ample and well-connected sidewalks, walkable shopping/restaurants, easy access to freeways and major employment centers, and a highly desirable school district.

Figure 5: Aspen Hill Minor Master Plan Boundaries

SECTION 2: ECONOMIC AND MARKET OVERVIEW

A residential market analysis typically addresses the appropriate scale and type of residential development for a site. However, this study just looks at the feasibility of townhouse development. This is because townhouses were determined to be the most compatible, given surrounding land uses and because they can serve as a transitional land use between the shopping centers to the east and single family homes to the west.

Section 2a: Demographic and Economic Assessment

The demographic and economic assessment looks at households, age, incomes, and Tapestry Segments®[1] in the two primary zip codes (20853, 20906) comprising Aspen Hill (the "Trade Area"). Zip codes were used to define the Trade Area for two reasons:

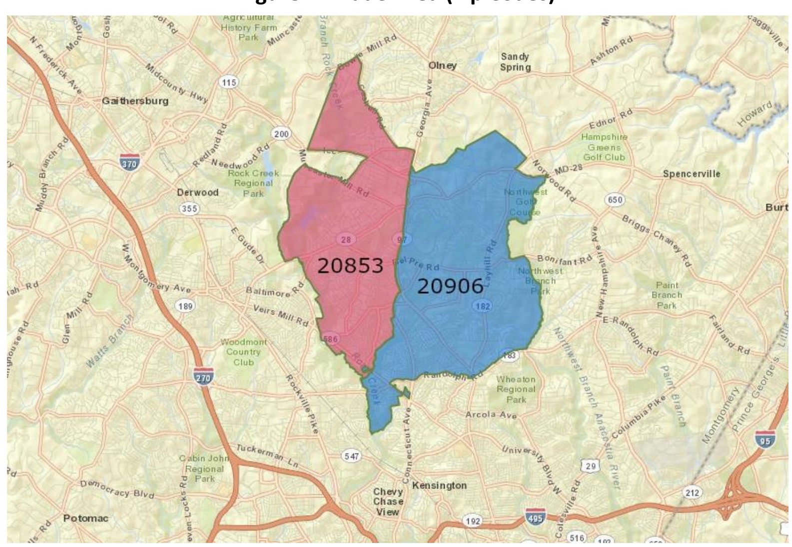
- Residential sales information is organized by zip code
- To highlight the difference in the composition and characteristics between the zip codes, which may lend support to different residential market opportunities.

While new development at the site may draw residents from Montgomery County and the Washington, D.C. metro area, the Trade Area is the best indicator of trends, characteristics, and consumer preferences that can be used to identify potential housing prices and the scale of development.

Trade Area

While land uses in both zip codes (see Figure 2) are primarily residential and retail, there are significant differences between the two. There is considerably less retail in 20853 than in 20906, which contains the majority of shopping centers in Aspen Hill. Additionally, residential in 20853 contains higher priced single family detached homes and fewer attached units or condominiums than 20906. The school districts in 20853 are also considered more desirable; contributing to the higher home prices. Lastly, Leisureworld, a large, age-restricted community, is in 20906, which adds a large senior population.

Figure 2: Trade Area (Zip Codes)



[1] Community Tapesttry Segments are an ESRI trademarked classification system based on labor force characteristics, median income, age, spending habits, etc. to categorize neighborhoods.

Populations/Households

In 2013 the population for zip code 20853 was 29,963 (9,782 households), while for 20906 it was 49,345 (16,351 households). Household growth from 2013 – 2018 is expected to increase annually in zip codes 20853 and 20906, about 0.9% and 1.2% respectively. This is commensurate with the growth rate during the same period for Montgomery County as a whole (1.1%). See Table 1.

Table 1: Population Growth in Trade Area

Zip Code 20853					Zip Code 20906				
Summary	2013	2018	Annual Growth 2013 - 2018	% Annual Growth (2013 - 2018)	Summary	2013	2018	Annual Growth 2013 - 2018	% Annual Growth (2013 - 2018)
Population	29,963	31,334	274	0.9%	Population	49,345	52,269	585	1.2%
Households	9,782	10,193	82	0.8%	Households	16,351	17,263	182	1.1%
Families	7,612	7,895	57	0.7%	Families	11,218	11,749	106	0.9%
Average Household Size	3.05	3.06			Average Household Size	2.99	3.00		
Source: ESRI Business Analyst Online									
Owner Occupied Housing Units	8,287	8,675	78	0.9%	Owner Occupied Housing Units	10,840	11,570	146	1.3%
Renter Occupied Housing Units	1,495	1,518	5	0.3%	Renter Occupied Housing Units	5,511	5,693	36	0.7%
Median Age	42.0	42.8			Median Age	36.1	37.1		

Household Age and Income Distribution

Age and income distribution were evaluated for the Trade Area, since different age groups generally prefer different types of residential units at differing prices. For example, the Leesborough townhome community, located one half mile north of the Wheaton Metro Station, offers townhomes to a primary market that includes singles, newlyweds, and one parent families. Since townhomes are usually two stories or higher, they are less appealing to seniors (65+) since they create mobility challenges.

In 2013 median ages for zip codes 20853 and 20906 were 42.0 and 36.1 respectively (see Table 2). Zip code 20906 had a slightly younger population, most likely because of more multifamily and less expensive residential units. However, the population in both zip codes was fairly well distributed. No age group represented more than 15% of the population, although the demographic composition can generally be characterized as families with children, as well as seniors. Families and seniors generally do not find townhomes a desirable housing choice. However, the groups that would – singles and newlyweds (25-34 years) – are projected to decrease over the next five years.

Table 2: Population Age Profile													
Zip Code 20853							Zip Code 20906						
	2013		2018		Pop Annual Growth 2013 - 2018			2013		2018		Pop Annual Growth 2013 - 2018	
Population by Age	Number	Percent	Number	Percent	Number	Percent	Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	1,676	5.6%	1,742	5.6%	13	0.79%	Age 0 - 4	3,735	7.6%	3,847	7.4%	22	0.60%
5 - 9	1,983	6.6%	2,054	6.6%	14	0.72%	Age 5 - 9	3,570	7.2%	3,795	7.3%	45	1.26%
10 - 14	2,067	6.9%	2,242	7.2%	35	1.69%	Age 10 - 14	3,136	6.4%	3,702	7.1%	113	3.61%
15 - 19	1,831	6.1%	1,877	6.0%	9	0.50%	Age 15 - 19	2,818	5.7%	3,019	5.8%	40	1.43%
20 - 24	1,548	5.2%	1,349	4.3%	-40	-2.57%	Age 20 - 24	3,043	6.2%	2,798	5.4%	-49	-1.61%
25 - 34	3,257	10.9%	3,199	10.2%	-12	-0.36%	Age 25 - 34	7,530	15.3%	7,244	13.9%	-57	-0.76%
35 - 44	3,827	12.8%	4,127	13.2%	60	1.57%	Age 35 - 44	7,410	15.0%	7,747	14.8%	67	0.91%
45 - 54	4,584	15.3%	4,402	14.0%	-36	-0.79%	Age 45 - 54	6,573	13.3%	6,854	13.1%	56	0.86%
55 - 64	4,157	13.9%	4,518	14.4%	72	1.74%	Age 55 - 64	5,712	11.6%	6,068	11.6%	71	1.25%
65 - 74	2,729	9.1%	3,257	10.4%	106	3.87%	Age 65 - 74	3,189	6.5%	4,178	8.0%	198	6.20%
75 - 84	1,720	5.7%	1,845	5.9%	25	1.45%	Age 75 - 84	1,760	3.6%	2,088	4.0%	66	3.73%
85+	584	1.9%	722	2.3%	28	4.73%	Age 85+	869	1.8%	929	1.8%	12	1.38%
Median Age	42.0		42.8				Median Age	36.1		37.1			
Source: ESRI Business Analyst Online													

As shown in Table 3, the median annual household income for this this age group (25-34 years) is $81,014 and $58,538 respectively for zip codes 20853 and 20906. It is also likely that many in this age group elect to live in Aspen Hill (characterized by lower residential densities, limited transit choice and a lack of mixed use development) preferring single family detached homes, or older and more affordable attached homes.

Table 3: Household Age and Income Profile															
Zip Code 20853								Zip Code 20906							
2013 Households by Income and Age of Householder	<25	25-34	35-44	45-54	55-64	65-74	75+	2013 Households by Income and Age of Householder	<25	25-34	35-44	45-54	55-64	65-74	75+
HH Income Base	69	762	1,599	2,240	2,175	1,493	1,444	HH Income Base	508	2,792	3,851	4,406	4,404	3,357	5,536
<$15,000	14	46	64	112	101	51	174	<$15,000	107	186	213	292	282	225	647
$15,000-$24,999	9	37	78	89	70	84	134	$15,000-$24,999	55	170	192	183	228	239	716
$25,000-$34,999	12	72	116	127	113	97	169	$25,000-$34,999	108	376	373	371	350	422	648
$35,000-$49,999	6	66	118	118	106	84	180	$35,000-$49,999	70	426	482	455	464	570	956
$50,000-$74,999	16	121	204	202	199	221	227	$50,000-$74,999	103	544	634	734	679	686	1,307
$75,000-$99,999	4	128	206	257	244	250	105	$75,000-$99,999	41	395	519	555	513	295	475
$100,000-$149,999	8	194	434	605	610	341	267	$100,000-$149,999	19	486	848	955	990	547	526
$150,000-$199,999	0	59	201	352	339	194	92	$150,000-$199,999	4	143	332	458	460	202	136
$200,000+	0	39	178	378	393	171	96	$200,000+	1	66	258	403	438	171	125
Median HH Income	$34,436	$81,014	$100,894	$112,519	$115,104	$94,844	$55,409	Median HH Income	$33,011	$58,538	$76,145	$81,188	$83,183	$55,968	$45,966
Average HH Income	$47,457	$94,366	$117,091	$135,728	$139,725	$117,238	$83,142	Average HH Income	$42,309	$75,089	$95,621	$104,071	$106,134	$80,496	$59,925
Source: ESRI Business Analyst Online															

Community Tapestry Segments

ESRI Business Analyst Online uses information such as labor force characteristics, median income, age, and spending habits to categorize demographic information according to a trademarked Community Tapestry classification system[2]. These tapestries provide insights into the housing and shopping preferences of Trade Area residents and can help inform the types of residential units that may be successful. The Community Tapestry Segments that characterize zip codes 20853 and 20906 include: Wealthy Seaboard Suburbs; The Elders, Connoisseurs; and Pleasant-Ville.

Table 4: Community Tapestry Segmentation					
Zip Code (20853)					
	Households		U.S. Households		
Tapestry Segment	Percent	Cumulative Percent	Percent	Cumulative Percent	Index
05. Wealthy Seaboard Suburbs	27.8%	27.8%	1.4%	1.4%	1,980
03. Connoisseurs	26.5%	54.3%	1.3%	2.7%	2,111
10. Pleasant-Ville	20.1%	74.4%	1.6%	4.3%	1,237
Zip Code (20906)					
43. The Elders	20.4%	20.4%	0.6%	0.6%	3,178
05. Wealthy Seaboard Suburbs	11.0%	31.4%	1.4%	2.0%	783
10. Pleasant-Ville	10.4%	41.8%	1.6%	3.6%	636
Source: ESRI Business Analyst Online					

- *Wealthy Seaboard Suburbs*, representing 27.8% of all households in zip codes 20853 and 11.0% in 20906 are generally described as older and more affluent. More than half work in professional or management positions and their median net worth is more than four times the U.S. median. Three fourths live in homes built before the 1970's and 89 percent of *Wealthy Seaboard Suburbs* households live in single family homes. Slow to change, they are the least likely to have moved in the last five years.

- *The Elders* represents 20.4% of all households in zip code 20906. Their median age is 73.2, and most are married with no children living at home, or single. Most are on a fixed income, receive Social Security benefits, and have a median household income of $42,293. They favor communities designed for senior living or with a large share of

[2] Community Tapestry segments descriptions provide national characteristics of the groups rather than Aspen Hill specific data.

seniors. Residential choice is mixed; half reside in single family homes, one-third in multiunit buildings, and 17 percent in mobile homes.

- *Connoisseurs*, representing 26.5% of the households in zip code 20853 are somewhat older; being closer to retirement than child-rearing age. Of these, 64% hold a bachelor or graduate degree and are in high paying management, professional, and sales jobs; although many are self-employed. Their median net worth is nearly 7 times the national average. The neighborhoods they live in are usually slow growing, established, and affluent. Most live in single family homes built before 1970.

- *Pleasant-Ville* represents 20.1% and 10.1% of the households in zip codes 20853 and 20906, respectively. They are characterized as middle-aged, married couples, and nearly 40 percent of the households have children. Labor force participation is above average and employed residents work in diverse industry sectors, similar to U.S. distributions. These households live in single family homes, with nearly half built between 1950 and 1970. They enjoy where they live; two-thirds have lived in the same house since 1995.

These Tapestry Segments typically have a preference for single family housing and are disinterested in moving, or downsizing or upsizing their homes. These preferences suggest weak market support within the Trade Area for townhouse development on the BAE/Vitro site. For a townhome development to move forward it would likely need to:

- Capture residents outside Aspen Hill.

- Be priced lower than comparable townhome developments (in areas with greater market support, such as Rockville or Wheaton).

- Be smaller scale so that inventory does not exceed market demand.

Section 2b: Housing Inventory Assessment

The housing market in the Trade Area was analyzed to identify the potential size and price ranges for new residential.There were considerably more sales (see Table 5) of attached units and condominiums/co-ops in zip code 20906 (534 units sold) than in 20853 (33 units sold). This is because single family detached homes are the dominant unit type in zip code 20853 and housing prices on average are lower in 20906 (-$69K difference for detached units, -106K difference for attached units). Most attached residential units are located in zip code 20906 and were built during the 1970s, or earlier, and are less expensive (see Table 5). The lower prices may be attributed to the age of homes, housing conditions, and being located in a less desirable school district.

The prices and sizes of residential units similar to the townhomes being analyzed for this planning effort were derived from discussions with sales associates and brokers, and online research of home listings for the Rockville and Wheaton markets (see Table 6 for residential market segments in the Trade Area and competing areas).

If developed for residential, townhome prices for the BAE/Vitro site would likely be higher than for similar units sold in the Trade Area during the past twelve months - partly because they would be newly constructed. However, prices would still be lower than comparable units in

Table 5: Residential Sales from Feb. 2013 - Feb. 2014

	Zip Code 20853		Zip Code 20906	
	Number	Price	Number	Price
Sold Dollar Volume		$ 126,679,677		$216,784,894
Avg. Sold Price		$ 417,274		$ 251,770
Median Sold Price		$ 358,288		$ 239,000
Units Sold	302		857	
Avg. Days on Market	49		46	
Detached Units Sold				
2 BDR	-	N/A	26	$ 180,774
3 BDR	60	$ 338,691	94	$ 315,737
4+ BDR	208	$ 469,920	203	$ 418,196
Overall	268	$ 440,541	323	$ 371,190
Attached Units Sold				
2 BDR	2	$ 349,200	4	$ 261,000
3 BDR	11	$ 391,294	75	$ 323,429
4+ BDR	-	N/A	14	$ 317,696
Overall	13	$ 289,784	93	$ 184,171
Condo/Co-Op	20	$ 160,225	441	$ 152,111

Source: RealEstate Business Intelligence, Inc.

Rockville and Wheaton. This is primarily because the Plan area lacks amenities normally expected by residents; in this case singles, newlyweds, and one parent households. Such amenities include a nearby Metro station, ample and well-connected sidewalks, walkable shopping/restaurants, good access to freeways and major employment centers, and desirable school districts.

Based on comparable sales information (see Table 6), past sales data, and the capitalized value of monthly payments affordable to the expected group of buyers[3], **an appropriate average unit size for a townhouse on the BAE/Vitro site should be around 1,800 square feet (SF), and the price per square foot (PSF) can be conservatively estimated to be between $208 - $226.** Average unit size is slightly lower than comparison neighborhoods, in order to mitigate costs in a weaker market. The PSF is approximately 10% lower than for Wheaton North, the most comparable neighborhood based on proximity. These estimates would generate a per unit price between $375,000 and $407,000, which would be affordable to expected buyers. In particular, this type of unit may appeal to a more budget conscious buyer looking for a more affordable townhouse style residence.

Table 6: Attached Housing Price Ranges

	Avg. Size (SF)	Avg. Price (Per SF)	Avg. Price
Rockville (west of I-270)	2,127	$332	$706,164
Wheaton (near Metro)	2,069	$213	$440,697
Wheaton North (closer to Aspen Hill)	1,831	$241	$441,271
Past Sales Data (in 20906)			$150,000 - $323,000
Townhome Affordability Factors *(Based on household incomes of 25-34 age group in Trade Area. See Table 3)*			$300,000 - $415,000
Source: Zillow, Allan and Rocks, Leesborough Townhomes			

[3] Assume 30% of annual income from 25-34 age group in zip codes 20853 and 20906. Capitalized value derived from amortized monthly payments using a 30-year, fixed rate mortgage at 5% interest.

Section 2c: Project Scale / Market Absorption

While this study helps gauge the potential to redevelop the BAE/Vitro site for residential and determine the number of units that could be supported by the market, it does so as an informed estimate. The estimate is based on observations of market demand and additional factors that may affect development scale. Should a residential option for the site proceed, these factors, including competition from similar townhome developments in the pipeline or under construction (limited in Aspen Hill) and financing that a developer can obtain based on credit or prevailing interest rates, may require further investigation.

The methodology to estimate the number of supportable residential units is based on the following:

- Demand for townhouses from three primary buyers:
- Singles
- Newlyweds
- One-parent families with children4
- Demand from nearby Rockville and Wheaton, which also have comparable townhouse developments and compete for similar buyers.
- Demand from people relocating within Montgomery County. About 20% of Montgomery County households will annually relocate based on a national home tenure of five years.
- Capture rates (how many new households and transfers a development can "capture" compared to projects elsewhere in the metro area). Capture rates are largely based on proximity of new housing to concentrations of households and competition from similar development.

[4] Singles, newlyweds, and one-parent families derived from data trends and ratios in 2010 U.S. Census

Annual household capture estimates for the BAE/Vitro site are presented in Table 7.

A key group of potential home buyers, new single and newlywed households are not expected to significantly grow over the next five years (see Table 2), affecting demand. In addition, competition from townhomes with better amenities in Rockville and Wheaton further helps limit development potential. Consequently, fewer than ten new households are expected to be captured annually. Therefore, demand would be primarily generated by in-County transfers and relocations. In total, approximately 50 residential units could annually be absorbed by BAE/Vitro site development.

Typically, a developer will plan to sell out a project within 1.5 years to avoid increased risk and carrying costs. A longer time frame may also make it less attractive for financing. Based on these assumptions a residential development program is estimated to be 70-80 market-rate units (50 x 1.5 = 75 unit average). An additional 9-10 Moderately Priced Dwelling Units (MPDU) will be added to the development program, **resulting in a total development program of 79-90 total units.**[5] The MPDU program stems from a regulatory policy that mandates affordable housing in conjunction with residential development.

Table 7: Annual Household Demand (On-Site)

	New Households (Aspen Hill, Rockville, Wheaton)	**Existing Household Relocations (Montgomery County)**	**TOTAL**
Singles	6	16	22
Newlyweds	1	5	6
One-Parent Households	2	20	22
Total	9	41	**50**

Source: U.S. Census, ESRI Business Solutions

[5] Per DHCA policy, MPDUs represent an additional 12.5% of total number of market rate units.

SECTION 3: FINANCIAL FEASIBILITY ANALYSIS

A financial feasibility analysis was conducted to determine the feasibility of a 70-80 unit residential development on the BAE/Vitro site. It also assumes a townhouse density of 12.5 dwelling units per acre (RT-12.5 Zone) Residential, townhouse (see Table 8 for requirements).[6]

The analysis evaluated revenues and costs for the current property owner (Lee Development Group) and a future residential developer. It assumed a conventional development process where the property owner would demolish the existing building, prepare the site for development (obtaining RT-12.5 zoning), and then sell it to a residential developer.[7] The developer would obtain all regulatory approvals, make all site improvements, and then construct townhomes.

Table 8: Zoning Designation Regulations (RT-12.5)	
Maximum DU per Acre	15.25
Maximum Height	35’
Setback	30 ft. (from front line)
Open Space	45% of tract
Parking	Off-street, 1.5 spaces per DU
Source: Montgomery County Planning Department	

Table 9 presents the assumed costs for the landowner, while Table 10 presents the assumed revenues and expenditures for the developer. All revenues and costs are approximate and should be considered order of magnitude estimates. For a property owner and developer to arrive at key decisions on whether to proceed they would have to prepare and assess more definitive studies and cost estimates.

Table 9: Landowner Costs for Site Preparation			
Site Preparation Costs			
Hazardous Materials removal, Demolition (along with hauling, disposal, and recycling credit)	$	2,029,888.90	*(Source: Lee Development Group + Independent Sources)*
Site Grading	$	300,000.00	*(Source: Homewyse.com + Independent Sources)*
Pavement Removal	$	300,000.00	*(Source: Independent Estimator)*
Rezoning Administrative Costs (Engineering, Legal, Entitlements, etc.)	$	1,100,000.00	*(Source: Lee Development Group)*
Total Landowner Costs for Site Preparation	**$**		**3,729,888.90**

[6] Since the development is expected to include moderately priced dwelling units (MPDU), zoning regulations are derived from zoning ordinance *59-C-1.74. Development including moderately priced dwelling units.*

[7] Since this assumes the opportunity cost of not preparing the site is $0, it is assumed that the Lee Development Group would cover all the costs of site preparation.

Section 3a: Landowner Costs

The cost to prepare the site for residential development is estimated to be approximately $3.5 - $4.0 million. This includes remediating hazardous materials (asbestos, lead based paint, etc.); building demolition, hauling, and disposing of or recycling debris; site clearing and pavement removal; and site grading (assuming an earthwork balance).[8]

The analysis further assumes the landowner would secure a rezoning and all entitlements, market the site, and sell it for the current assessed land value. It should be noted that the Vitro property owner has indicated they have no plans to sell the property in the foreseeable future.

[8] Assumes soil is not hauled into or from the site, which could increase costs considerably.

Table 10: Residential Developer Summary			
Development Revenue			
	Low Estimate	High Estimate	Source
Number of Units	70	80	
Average Price PSF	$208	$226	
Average Unit Size (2 Floor Townhouse)	1,800	1,800	
MPDU Number of Units	9	10	(DHCA)
MPDU Price Per Unit	$150,000	$180,000	(DHCA)
MPDU Unit Size (2 Floor Townhouse)	1,500	1,500	(DHCA)
Total Building Development (SF)	139,125	159,000	
Total Building Footprint (SF)	69,563	79,500	
Total Potential Revenue	**$27,520,500**	**$34,344,000**	
Expenditures			
Land Acquisition Cost	Low Estimate	High Estimate	Source
Assessed Value of Site	$10,098,800	$10,098,800	*(County GIS Department)*
Total Land Acquisition Cost	**$10,098,800**	**$10,098,800**	
Development Cost	Low Estimate	High Estimate	Source
Building Construction (@ $140 PSF)	$19,477,500	$22,260,000	*(RS Means)*
Repaving (70% of non-building footprint) *Includes surface parking at 1.5 per DU*	$714,279	$694,956	*(Independent Estimator at $25/SY)*
On-Site Open Space & Landscaping (30% of non-building footprint as concrete walkways, bermuda grass, garden landscaping)	$492,240	$478,924	*(Homewyse, MNCPPC DR Historic Information*
Utilities (Electric)	$80,000	$80,000	*(MNCPPC DR Historic Information)*
Utilities (Gas)	$120,000	$120,000	*(MNCPPC DR Historic Information)*
Utilities (Sanitary Sewer + Water)	$500,000	$500,000	*(MNCPPC DR Historic Information)*
Utilities (Stormwater)	$250,000	$250,000	*(MNCPPC DR Historic Information)*
Amenities and Off-Site Improvements	$300,000	$300,000	
Planning, Design, Approvals, Contingency, and Soft Costs (25% of Hard Costs)	$5,483,505	$6,170,970	
Marketing (6.0% of sales)	$1,651,230	$2,060,640	*(Urban Land Institute)*
Administration and contingency (6.0% of sales)	$1,651,230	$2,060,640	*(Urban Land Institute)*
Financing Cost (2% of Loan)	$816,376	$901,499	
Developer Hurdle Rate (i.e. Rate of Return) @ 20% of equity @ 75% Loan To Value ratio	$2,040,939	$2,253,747	
Total Development Cost	**$33,577,299**	**$38,131,375**	
	Low Estimate	High Estimate	
Total Project Cost (Land Acquisition + Development Cost)	**$43,676,099**	**$48,230,175**	
Funding Gap	**($16,155,599)**	**($13,886,175)**	

Section 3b: Developer Revenues and Costs

The following describes and considers both revenues (residential sales), and expenditures (land acquisition, building construction, site improvement, infrastructure, marketing, and financing costs) associated with the development of a townhouse project on the BAE/Vitro site.

Developer Revenues

The analysis assumes 79-90 townhome units[9], comprised of 70-80 market rate and 9-10 Moderately Priced Dwelling Units (MPDUs). Based on discussions with Montgomery County's Department of Housing and Community Affairs, the MPDUs are expected to sell from $150,000 - $180,000.[10] [11] The potential revenues under this program may be approximately **$27.5 - $34.3 million** (see Table 10).

Developer Expenditures

Expenditures are divided between land acquisition costs ($10.1 million), and development costs (see Table 10). In addition, a developer would anticipate financing the project for 75% of the total cost of development and acquisition, and require a 20% "cash-on-cash" return on the total project investment (i.e. 20% of developer equity, which is represented as 25% of the total cost of development and acquisition). **Total development costs are estimated to be $33 - $38 million, while total project cost (acquisition + development costs) is estimated to be $43 - $48 million. Such an imbalance would result in a project funding gap of approximately $14 - $16 million** (see Table 10).

[9] All units assume 2-story townhome with 2 baths, fireplace, upgraded kitchen, no basement, and no garage. Parking provided via surface parking at 1.5 spaces per DU.
[10] Approximate estimates from Lisa Schwartz, Senior Planning Specialist, DHCA.
[11] Due to MPDUs priced significantly below the market, 100% of the MPDUs are assumed to be absorbed independent of market forces.

SECTION 4: CONCLUSION

Given an estimated funding gap of $14-$16 million, the analyses would indicate that a townhome development on the BAE/Vitro site – in balance with market supply and demand factors – is not economically feasible without some type of subsidy. Based on the financial model and assumptions, a profitable and economically feasible project would require considerably more units; **approximately 270-300 units for revenues to exceed expenditures**.[12] This scale of development would not only exceed expected market demand, but it may also be difficult to meet the zoning standard that requires 40% of a site to remain as open space.

Although townhome demand in the Trade Area is limited, and prices are expected to be lower than comparable developments elsewhere in Montgomery County, opportunities to complement residential with other uses may provide enhanced value. More in-depth studies that consider a mix of residential, commercial/retail and other uses on the property may be warranted. However, all development scenarios should carefully consider factors such as compatibility with surrounding land uses, project phasing/staging that evolve with the market, and the interests and intentions of the property owner.

[12] This assumes keeping the price per unit constant, assumes a decrease in soft costs as a percentage of hard costs (currently 25%) due to economies of scale, and assumes additional costs for utility connections.

Retail Feasibility Study

Aspen Hill Minor Master Plan Amendment

Retail Feasibility Study

Research & Special Projects Division
Montgomery County Planning Department
April 15, 2014

Introduction

This report was prepared in support of the Aspen Hill Minor Master Plan Amendment and it assesses the market potential for retail uses within the Minor Amendment area. It is aimed at addressing two key concerns:

- Determining the amount of unmet retail demand within the Aspen Hill trade area, and consequently, the type of retail space that could be supported.
- The impact to existing retailers from new retail development on the Vitro site, which could potentially undermine existing businesses and create vacancies in nearby shopping centers.

Methodology and Assumptions

This analysis seeks to determine the economic feasibility for retail development in the Minor Amendment area by assessing the overall retail market in Aspen Hill. In order to quantify the amount of new retail space that could be supported, annual retail expenditures by residents (demand) were compared to estimated retail sales from businesses (supply). Those sales not captured represent the retail gap or “leakage”, which could be used to support additional retail development.

The analysis evaluated retail market potential among all retail categories and in accordance with surrounding land uses identified the potential type of retail and its format, which could be supported by the findings. The Minor Master Plan Application (MMPA) submitted by the Vitro property owner in 2012 that triggered this larger planning effort states that a prospective tenant is interested in building a 118,000 square foot (SF) big-box department store on the Vitro site; with a roughly equivalent mix between general merchandise and groceries. This report also evaluates the economic viability of this scenario.

EXISTING RETAIL ASSESSMENT

Retail inventory

Aspen Hill's existing commercial base overwhelmingly consists of big-box retail and shopping plazas. Roughly 1.26 million square feet of retail space is contained in 52 buildings within the Aspen Hill Master Plan Area. Of this amount, around 74,000 square feet (5.8 percent) was vacant as of the end of 2013. Most of the area's shopping centers were built before 1970. Occupancy rates are high, between 96 percent and 100 percent in most centers. The exception is Plaza del Mercado, which accounts for nearly half of Aspen Hill's vacant retail space[13].

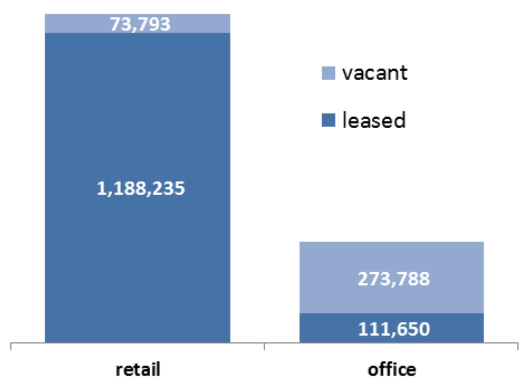
ASPEN HILL RETAIL SPACE

Year end 2013

Source: CoStar

Retail Inventory	Aspen Hill	Montgomery County
Buildings	52	2,255
Existing SF	1,262,028	39,652,767
Under Construction SF	-	370,468
Retail Leasing	**Aspen Hill**	**Montgomery County**
NNN Rent Per SF	$26.51	$25.09
Vacant SF	73,793	1,720,544
Vacancy Rate	5.8%	4.3%

Aspen Hill
COMMERCIAL SPACE BY OCCUPANCY
Year end 2013
Source: CoStar



Shopping Centers in Aspen Hill

Community and Neighborhood Centers located in the Aspen Hill Planning Area

SOURCE: CoStar; Montgomery County Planning Department

Center name	Center type	Year built	Retail GLA	Leased	Anchors	Anchor sf
Aspen Hill Shopping Center	Community Center	1962	170,499	98%	Giant Food	54,000
Northgate Plaza Shopping Center	Community Center	1960	158,410	98%	Kohl's	36,700
Plaza del Mercado*	Neighborhood Center	1969	104,232	64%	CVS	14,999
Rock Creek Village Center	Community Center	1968	103,075	100%	Safeway	48,262
Leisureworld Plaza	Neighborhood Center	1986	94,712	96%	Giant Food	55,425
Aspen Manor	Neighborhood Center	1971	76,467	100%	AutoZone	7,547
Aspen Manor Shopping Center	Neighborhood Center	1954	72,769	100%	Lotte Supermarket	24,692

* Former 25,000 sf Giant Food store closed in 2011; anchor space has not been relet.

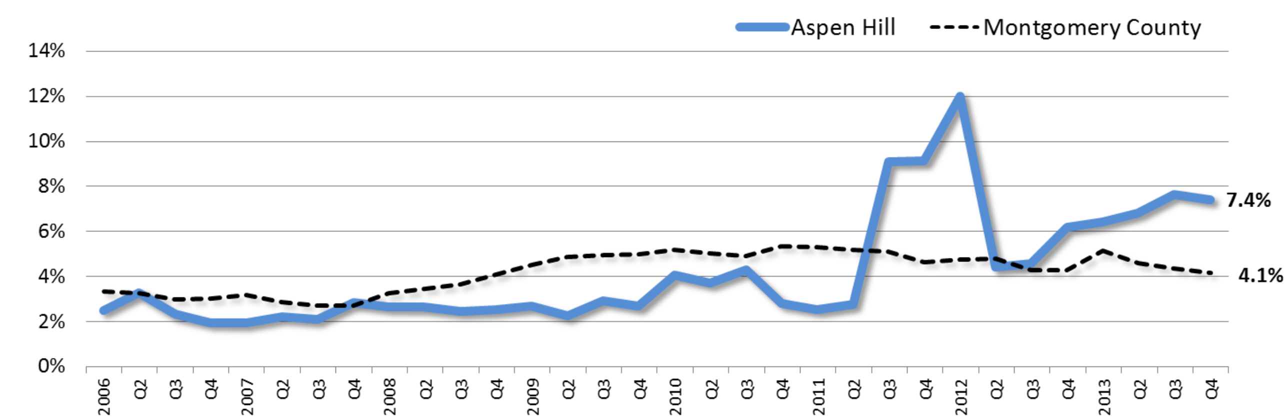
[13] NNN rent, or "Triple Net" rent, represents the rental rate where the tenant is responsible for all costs relating to the asset being leased, such as real estate taxes, net building insurance, and net common area maintenance.

Retail market activity

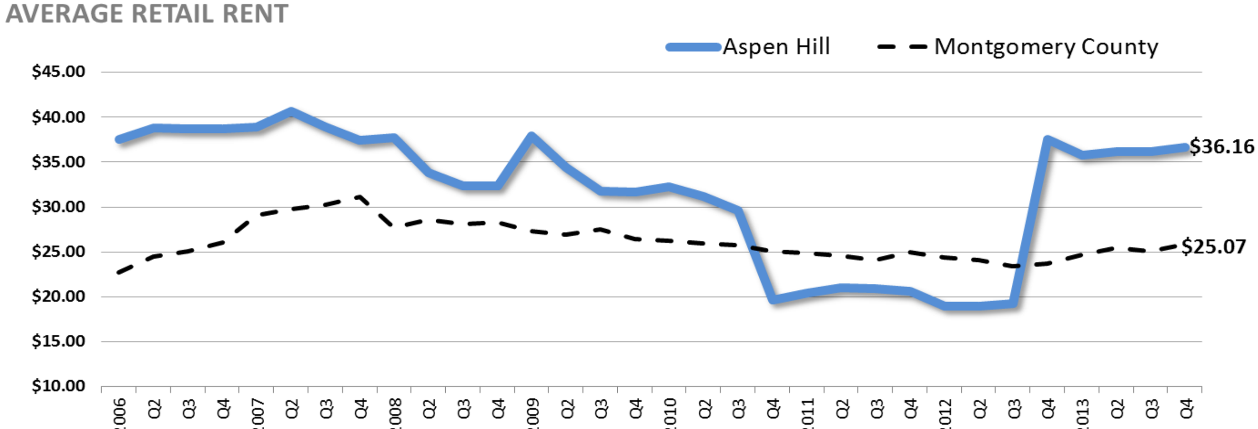
Retail space in the Aspen Hill market is generally stable. No new retail space has come on line in the past decade. With a fixed inventory and steady demand, retail occupancy rates and average asking rents in the area have been relatively high, compared to the County as a whole. In a small market such as Aspen Hill store closings or turnovers tend have a more visible impact.

Aspen Hill's overall retail vacancy rate spiked from 2.5 percent to 12.0 percent in 2011 following the closure of two area grocery stores. The vacancy rate fell to 4.4 percent in 2012 after Kohl's department store replaced the former SuperFresh grocery store in Northgate Plaza, but it has steadily ticked up since then. One factor is that Plaza del Mercado has not yet secured a new anchor tenant to replace the 25,000 square foot Giant Food grocery store that closed in 2011 when the company consolidated its Aspen Hill stores. Area vacancies reached 7.7 percent in 2013, potentially putting downward pressure on Aspen Hill rents.

RETAIL VACANCY RATE



AVERAGE RETAIL RENT



PRIMARY TRADE AREA ANALYSIS

Primary trade area definitions

The retail market analysis focuses on two Primary Trade Areas (PMAs)

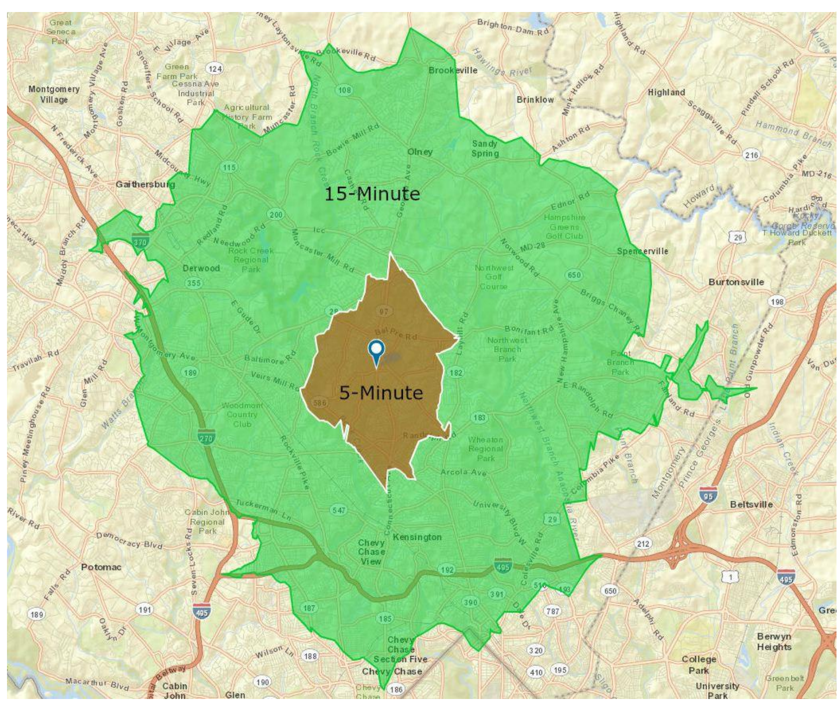
- 5-Minute Driveshed from the Aspen Hill Vitro Site
- 10-Minute Driveshed from the Aspen Hill Vitro Site

A Primary Trade Area is the geographic area from which most of a retail establishment's customers originate. However, trade areas can differ based on the type of products offered. For example, the trade area for a convenience good, such as milk, is typically smaller than that for a shoppers good, or "comparison" good, such as furniture or apparel. The distance a consumer will travel to buy a gallon of milk is significantly shorter than the travel distance tolerated to buy a new sofa.

Another factor affecting the trade areas for convenience and shoppers goods is comparison shopping. To purchase a gallon of milk, one does not need to compare brands or stores. To purchase furniture, consumers are willing to travel farther to compare various merchandise. Trade areas are also impacted by competitive retail destinations. A shopping district with little nearby competition will have a much larger trade area than one with significant regional competition.

Given the character of the Aspen Hill commercial environment, as well as its significant nearby competition, the PMA for this market study is defined as a 5-Minute Driveshed for Convenience Goods and a 15-Minute Driveshed for Shoppers Goods. While Shoppers Goods generally have a larger driveshed – for instance, big-box retail tends to have a 30 minute PMA driveshed according to the Urban Land Institute – a 15-Minute Driveshed was defined for this study given the considerable retail competition in the greater Washington D.C. metro area. A map of

Figure 6: PMA for Convenience and Shoppers Goods



the PMAs is presented in Figure 1.

Primary trade area demographics

The table below indicates that there are around 28,405 households and 81,945 residents within a 5-Minute Driveshed of the Vitro site. Within a 15-Minute Driveshed, there are nearly 174,000 households. The data also show that Aspen Hill's primary customer base has lower disposable incomes relative to potential customers in the wider trade area. This suggests that there could be relatively high demand for price-competitive retail in the area.

Table 1: Primary Trade Area Demographic Characteristics

	5 Minutes	15 Minutes
2013 Population	81,945	468,406
2013 Households by Disposable Income	28,405	173,749
<$15,000	2,390	9,017
$15,000 - $24,999	2,187	7,337
$25,000 - $34,999	3,077	10,969
$35,000 - $49,999	4,001	19,012
$50,000 - $74,999	5,274	26,835
$75,000 - $99,999	3,412	21,089
$100,000 - $149,999	4,956	35,630
$150,000 - $199,999	1,710	20,413
$200,000+	1,397	23,446
2013 Median Household Income	$59,673	$89,708
2013 Average Household Income	$81,501	$117,157
2013 Per Capita Income	$28,581	$43,701

Source: ESRI Business Analyst Online

RETAIL SUPPLY AND DEMAND ANALYSIS

Retail supply and demand by trade area

This analysis quantifies existing retail demand and supply in the PMA for Convenience Goods within the 5-Minute Driveshed and Shoppers Goods within the 15-Minute Driveshed. Both Convenience and Shoppers Goods are organized by the North American Industrial Classification System (NAICS) codes.

- The four principal retail categories under Convenience Goods are: 1.) Food and Beverage Stores, 2.) Health and Personal Care Stores, 3.) Miscellaneous Store Retailers, and 4.) Food Service and Drinking Places.

- The six principal retail categories under Shoppers Goods are: 1.) Furniture and Home Furnishings Stores, 2.) Electronics and Appliance Stores, 3.) Building Materials, Garden Equipment and Supply Stores, 4.) Clothing and Clothing Accessories Stores, 5.) Sporting Goods, Hobby, Book & Music Stores, and 6.) General Merchandise.

Consumer expenditures (retail potential) provide a measure of household demand for retail goods and services for different retail categories. Retail sales provide a measure of retail inventory and supply for the same categories. The retail gap – retail demand minus retail sales – represents available purchasing power, or retail opportunities.

If supply is greater than demand, the retail market is considered saturated and there is no surplus demand to support a new store. If estimated spending by area households (demand) exceeds sales by existing retailers (supply), the area is losing sales to outside retailers. A new store or an existing store that repositions itself in the market, could try to capture at least a percentage of those sales.

However, residents will frequently make retail purchases outside their trade area. Examples include purchases made near one's place of employment or while traveling, and business purchases (consumer expenditures above cover only expenditures for personal use). Therefore, market "capture rates" were derived for each retail category. Capture rates are a measure of the percentage of household expenditures "captured" from or made within a defined PMA. Sales not captured represent a retail gap or "leakage" - expenditures that take place outside of the retail trade area.

Capture rates can vary given certain factors. These include the nature of a retail establishment, the retail category, the age, quality and variety of merchandise, the customer base, a store's competitive position, and whether an establishment caters to local or regional consumers. As a rule, for retail categories where convenience and proximity are essential – such as grocery or convenience stores – there is a comparatively larger share of sales derived from PMA households (approximately 60-70%). Categories that draw people regionally – such as furniture and home furnishings stores – have a smaller share of sales derived from PMA households (with a high range of 30%-40%).

Table 2: 2013 Retail Supply and Demand

Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Existing Capture Rate from HH (assumed)	Retail Gap
Convenience Goods (5-Minute Driveshed)				
Food and Beverage Stores	$ 168,440,978	$ 88,184,242	75%	$ 60,192,552
Health and Personal Care Stores	$ 65,026,257	$ 153,136,318	70%	$ (61,677,043)
Miscellaneous Store Retailers	$ 25,196,427	$ 7,792,905	50%	$ 8,701,761
Food Services and Drinking Places	$ 95,029,156	$ 38,044,314	65%	$ 37,040,147
Shoppers Goods (15-Minute Driveshed)				
Furniture and Home Furnishings Stores	$ 158,883,485	$ 184,143,464	25%	$ (6,314,995)
Electronics and Appliance Stores	$ 195,981,703	$ 172,564,342	35%	$ 8,196,076
Building Materials, Garden Equipment and Supply Stores	$ 247,494,338	$ 89,552,975	40%	$ 63,176,545
Clothing and Clothing Accessories Stores	$ 467,254,342	$ 296,956,802	20%	$ 34,059,508
Sporting Goods, Hobby, Book & Music Stores	$ 187,997,998	$ 153,638,481	30%	$ 10,307,855
General Merchandise	$ 1,016,006,167	$ 218,539,329	40%	$ 318,986,735
Source: ESRI Business Analyst Online				

As shown in the Table 2 above, the retail gap is largest in Food and Beverage Stores (in the Convenience Goods category) at $60.1 million, and General Merchandise (in the Shoppers Goods category) at $319.0 million. Based on the large retail gaps in these two categories suggests that from a market perspective a new big-box retailer selling general merchandise and groceries (represented as Food and Beverage Stores) could be introduced to the Aspen Hill market. The relatively large retail gaps in Building Materials/Supply Stores, Clothing and Accessories Stores, and Food Services and Drinking Places offer potentially additional retail opportunities.

The current gaps for most retail categories would further indicate that retail development on the Vitro site is unlikely to adversely affect existing businesses in a significant way. Existing retailers can still tap the available purchasing power within the PMAs without strictly competing for existing household expenditures. Any new commercial development on the Vitro site should, however, be appropriately scaled so as not to create oversupply; especially in categories with a limited demand (small or negative retail gap).

Supportable retail space

Projections for supportable retail space in the respective PMAs (see Table 3) are provided for the existing retail environment, using the capture rates and retail gap for each category. Retail sales gaps for respective categories were divided by sales productivity factors for new development, based on sales per square foot[14] to arrive at supportable space estimates.

Table 3: Supportable Retail Space in PMA

Industry Group	Retail Gap	PSF Productivity Factors	Supportable SF in PMA
Convenience Goods (5-Minute Driveshed)			
Food and Beverage Stores	$ 60,192,552	$ 479	125,663
Health and Personal Care Stores	$ (61,677,043)	$ 231	(267,579)
Miscellaneous Store Retailers	$ 8,701,761	$ 339	25,669
Food Services and Drinking Places	$ 37,040,147	$ 470	78,809
Shoppers Goods (15-Minute Driveshed)			
Furniture and Home Furnishings Stores	$ (6,314,995)	$ 302	(20,911)
Electronics and Appliance Stores	$ 8,196,076	$ 412	19,893
Building Materials, Garden Equipment and Supply Stores	$ 63,176,545	$ 325	194,389
Clothing and Clothing Accessories Stores	$ 34,059,508	$ 345	98,676
Sporting Goods, Hobby, Book & Music Stores	$ 10,307,855	$ 311	33,144
General Merchandise	$ 318,986,735	$ 253	1,260,817
Source: ULI Dollars and Cents of Shopping Centers 2008: Regional Centers			

Estimates indicate that Aspen Hill would find its greatest support for retail space in the General Merchandise and Grocery category. Assuming new retail development is not large enough to cause a supply and demand imbalance, the Vitro site would likely be able to support a big-box store with an approximately 50/50 mix between General Merchandise and Groceries, consistent with the minor master plan application. A following calculation demonstrates that sufficient support likely exists for this store:

[14] Sales per square foot were obtained from the Urban Land Institute, *Dollars & Centers of Shopping Centers* 2008, using the sales PSF factors for regional shopping centers.

MMPA Application: 118,000 total SF x 50% = 59,000 SF each for General Merchandise and Groceries

- 59,000 SF Grocery Store = 47% of Food and Beverage Store potential (125,663 SF)
- 59,000 SF General Merchandise = 5% of General Merchandise potential (1,260,817 SF)

Estimates also indicate support, albeit more limited, for Clothing and Clothing Accessories retailers, Building Materials and Supply Stores, as well as Food Services and Drinking Places.[15]

Potential retail models for Aspen Hill

This analysis primarily focused on assessing the economic feasibility of retail uses on the Vitro site, rather than identifying particular store sizes, layouts, or tenants. However, the following retail formats could be appropriate, given surrounding land uses and market demand:

- **Big-Box Retail**: Big-box retail is a large format retail store ranging from 20,000 – 170,000 SF. The types and mix of goods sold widely varies by store (see Appendix A for big-box retail characteristics and trends). The area around the Vitro site already includes various big-box stores, such as Home Depot to the north and Kohl's across Connecticut Avenue. These stores are generally large, free-standing, rectangular, single story buildings that sit in the middle of a parking lot. Many of the retail categories with a potential for additional sales in the Aspen Hill PMA are commonly served by big-box retail, particularly General Merchandise, Food and Beverage Stores, and Building Materials and Supply Stores. Examples of a big-box store with a 50/50 mix between General Merchandise and Groceries include discount department stores such as a WalMart or Target Supercenter.

- **Shopping Plaza**: Shopping Plazas usually range from 5,000 SF to over 100,000 SF; with an open-air layout. Stores are arranged in a row, with a sidewalk in front and are generally developed as a unit. Shopping Plazas are generally anchored by a big-box retailer and/or a grocery store. The ancillary retail may vary widely, from dry cleaners and smaller restaurants (small shopping plazas) to electronic stores, bookstores, and home improvement stores (larger shopping plazas). The Vitro site could accommodate a larger shopping plaza; given market demand, with a discount department or grocery store as the anchor. Smaller, ancillary stores would complement the anchor store, tapping retail categories with available demand.

15 Supportable Retail Space in PMA estimates apply across the PMA but are not site-specific. Properly sizing site-specific development requires a case-by-case approach, since retail gravitation changes as newer, large-scale retail is introduced into a market

Impacts on Existing Retail

Commercial development of the Vitro site may affect existing businesses differently, depending on whether the merchandise sold is complementary or competitive with surrounding businesses.

Potential impact on complementary retail

New big-box stores or shopping plazas do not necessarily cause nearby stores to decline. For example, they may enhance the competitiveness of existing stores that sell similar or complementary products by increasing the overall number of customers drawn to the area. Assuming some sort of General Merchandise or Grocery use on the Vitro site, complementary uses in the vicinity may benefit:

- The Vitro site is next to an existing Home Depot, which commonly co-locates with large discount department stores such as Wal-Mart or Target.
- The Vitro site is across from the Northgate shopping center; anchored by Kohl's and Michael's. Neither store typically competes directly with a large discount department store.
- The potential mix of adjacent large format retailers near the BAE/Vitro site could result in the draw of a power center; with a comparable draw of additional customers that may enhance nearby existing stores.

Impact on directly competitive retail

The most important factor affecting the viability of existing businesses in Aspen Hill is their ability to attract the same level of consumer expenditures, in their respective trade areas, from potential customers. This is true whether the Vitro site is developed for retail uses, or not. Consequently, if demand for Groceries, General Merchandise, or other retail categories is sufficiently high, as shown by this study, the entrance of a major new competitor could have minimal adverse economic impacts on existing businesses in Aspen Hill. However, given the types of potential uses on the Vitro site the following should nevertheless be considered:

- Traditional supermarkets within a 5-minute drive time of the study area may be disadvantaged by the selection, price, and one-stop shopping advantages of a hybrid discount department store/grocery store. If such advantages are significant, enough to result in a store closing, the loss of a grocery store anchor could jeopardize the viability of an existing shopping center. This could in turn impact the viability of other stores, especially those in the center. However, a discount department store with a slightly scaled-down grocery component could reduce that potential.

- Nontraditional supermarkets provide convenience, they have a wider customer base, and they know the local market well; things that a large format retailer may lack. For example, Lotte offers a wide selection of international foods at very low prices; the store also has a different customer base and a wider trade area. Consequently, such a retailer is less likely to be affected by the arrival of a large grocery store.

- While a direct competitor in the discount department store category, the existing K-Mart is older, less visible from main streets, and does not sell groceries. Without improvements, K-Mart may experience increased competition and could potentially face significant economic pressures. If a vacancy results, it could be challenging to find a similar tenant.

APPENDIX A: BIG-BOX RETAIL: CHARACTERISTICS AND TRENDS

The term "big box" describes a wide range of large format retail stores that vary by size, the kinds of items they sell and their main customer base. Big box stores generally fall into four subcategories:

Category	Size Range (square feet)	Examples
Warehouse clubs	100,000 to 170,000	Costco, Sam's Club
Discount department store	80,000 to 130,000	Wal-Mart, Kmart, Target
Category killers	20,000 to 120,000	Staples, Home Depot
Outlet stores	20,000 to 80,000	Nordstrom Rack, Burlington Coat Factory

These categories are not necessarily fixed. Big box retailers are continually developing new store models and refining their product mix, target markets and location strategies to respond to changing market conditions and consumer preferences. The following is a brief literature review on characteristics and trends of big-box retail, as well as how big box retailers interact with other retailers.

Big box stores reflect a long term trend toward retail consolidation. Sears and Woolworths are early examples of large format stores and retail chains that gradually displaced many smaller, locally-based businesses. Large scale retailers do not necessarily operate large scale stores. Their key economic advantages as large enterprises—including price, selection, branding, and shared overhead—enable them to achieve comparable market coverage and profitability with smaller, multi-site store formats.

Discount department stores nearly always include food sales, from basic non-perishables to full service grocery stores. The proportion of store area dedicated to food sales has steadily increased since the 1980s, when the major U.S. discount department store chains (Wal-Mart, Kmart and Target) introduced "hypermarkets" combining department store and grocery store formats in one 150,000 square foot or larger superstore. Grocery items generate a higher average sales per square foot compared to general merchandise items ($479 versus $253), but due to low profit margins, groceries are not necessarily a highly lucrative product line. The impetus behind adding grocery sales is because they enable stores to compete on the basis of one-stop shopping convenience, not just price.

Big box stores commonly co-locate with other large retailers. Colocation can benefit a big box retailer by increasing the overall number of customers drawn to an area. Big boxes often are clustered with other large-format retailers in non-competing retail categories. One example is the 250,000 to 1,000,000 square foot "power center" featuring three or more big box retailers in freestanding or in-line configurations. For example, Wal-Mart stores tend to co-locate with large hardware and building supply stores, such as Lowe's or Home Depot; furniture stores also appear to benefit from proximity to a national discount retailer. If the consumer base is sufficiently large and differentiated, stores selling similar product lines, such as groceries, can coexist with large discount chains by targeting a different market segment. For example, an Aldi supermarket and a forthcoming Wegman's are adjacent to a Wal-Mart in Germantown, Maryland.

Big boxes also co-locate with smaller retailers by anchoring regional shopping malls or smaller scale community centers. Smaller retailers can survive by fulfilling a retail niche (e.g., offering specialty products, convenience, or a superior customer experience), or by locating in established small scale shopping districts or under-retailed areas. Small businesses that differentiate can survive or even thrive with an increase in traffic generated by a large retailer. Depending on the location, restaurants, specialty food markets and service-oriented retail, such as hair salons, generally are least at risk.

Big box retail formats are evolving. Due to their large footprint, most hypermarkets and power centers built to date are located in auto-oriented rural or suburban settings. Recent trends are forcing retailers and developers to come up with new formats and location strategies since rural and outer suburban markets are largely saturated. More significant is that population growth—and purchasing power—is migrating back to cities and older suburbs. To retain or expand market share, retailers need to follow.

Very large big box store formats do not readily adapt to denser urban environments. Higher land prices, more complex regulations, potential compatibility issues with existing uses, and political opposition make it more challenging to build. Consumer preferences also are more fragmented, making it more difficult to compete primarily on the basis of price and convenience. In large, diverse consumer markets already served by established retailers of all sizes and types, the potential for any new retailer to dominate the market is extremely limited. In such an environment, big box chain retailers can take advantage of localized gaps in retail coverage, but competition will limit their potential trade area and supportable square footage.