MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item No.
Date: 04/24/2014

Aspen Hill Minor Master Plan Amendment: Briefing

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

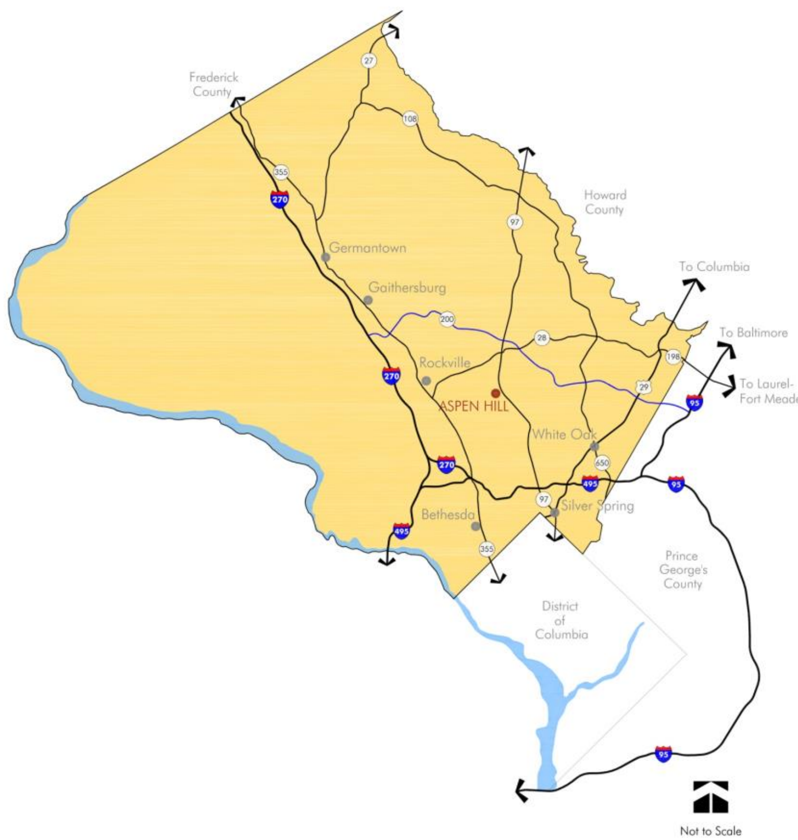
Glenn Kreger, Chief, Area 2 Division, Glenn.Kreger@montgomeryplanning.org, 301.495.4653

Completed: 4/17/2014

Description

Aspen Hill Minor Master Plan Amendment Briefing: Update on the planning and outreach process.

Staff Recommendation: Discussion



Summary

Staff will provide a briefing and status report on the Aspen Hill Minor Master Plan Amendment. This briefing will highlight the planning challenges, market analysis, and outreach strategy. In addition to this briefing, staff will outline preliminary planning and design recommendations.

PROJECT AUTHORIZATION

In April 2013, the Montgomery County Council approved the incorporation of three Minor Master Plan Amendments into the County's planning work program: the Bethesda Purple Line Station; Sandy Spring Rural Village; and Aspen Hill. The County Council programmed the Aspen Hill Minor Master Plan Amendment to begin in January 2014. On January 23, 2014, Staff presented, and the Planning Board approved, the project Scope of Work which included a project description, outreach plan, and project timeline.

MINOR AMENDMENT PURPOSE

The Aspen Hill Minor Master Plan Amendment process 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*. (Figure 1) Of the 14 total acres included in the Minor Master Plan Amendment, the former Vitro/BAE office building and associated parking encompass approximately 10 acres.

Through the Minor Amendment process, Staff will evaluate additional redevelopment and zoning opportunities 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 office building at 4115 Aspen Hill Road had been a long standing employment center 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 addition to the vacant property, the Subject area faces challenges to transportation capacity; efficient vehicular, pedestrian, and bicycle circulation; and pedestrian safety.

Figure 1: Minor Amendment Area

ASPEN HILL MINOR MASTER PLAN AMENDMENT

Proposal

The minor amendment process provides an opportunity to reassess the Subject area and analyze alternative redevelopment and zoning opportunities. The review considers existing development potential and reevaluates the area's potential within the context of a changing office market in the County as a whole, the intent and rationale of the 1994 *Aspen Hill Master Plan*, and any impacts to the surrounding land uses and transportation network.

Planning Challenges

The 1994 *Aspen Hill Master Plan* recommended that the site of the currently vacant and former Vitro/BAE office building "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. For the majority of the properties on the southwest side of the Aspen Hill Road and Connecticut Avenue intersection, 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)

The Aspen Hill Minor Master Plan Amendment will address the following challenges:

- Limited redevelopment potential of the majority of the Subject area under the current zoning
- A vacant and outdated large office building that was constructed for one specific user
- Low-density residential uses adjacent to higher intensity office and commercial land uses
- Transportation capacity on Aspen Hill Road and Connecticut Avenue
- Pedestrian safety in an area that has been identified as a "high incidence area for pedestrian related collisions" by Montgomery County[1]
- Limited sidewalks, bicycle infrastructure, and streetscape

Planning Opportunities

The Minor Amendment area is located within one of the Aspen Hill Master Plan boundary's most popular shopping areas. The Minor Master Plan Amendment will address specific land use, design alternatives, and zoning opportunities with the purpose of creating a framework for the future redevelopment of the Subject area that is compatible with well-established existing uses, yet flexible enough to respond to future changes in the market and the area's development pattern. Staff has evaluated market trends, surrounding land uses, transportation

---

[1] Vanasse Hangen Brustlin, Inc. (2011). Prepared for Department of Transportation Montgomery County, Maryland in partnership with the Maryland State Highway Administration. *Connecticut Avenue (MD 185) Pedestrian Road Safety Audit*. Retrieved from https://montgomerycountymd.gov/DOT-PedSafety/Resources/Files/PRSA_Reports/Connecticut_PRSA_draft_08-08-12_PUBLIC.pdf

capacity, pedestrian safety, circulation, and design guidance in the 1994 Plan. A draft development concept was presented to the community at the public meeting on April 1 to initiate practical discussion about the future form of the Subject area. (Attachment A)

MARKET ANALYSIS

Research and Special Projects Staff conducted an office, retail, and townhouse residential market analysis to determine: 1) trends in the County's office market; 2) whether the market within the designated trade area could support additional retail; and 3) whether townhouse development was feasible in the minor amendment area. The market analysis indicates that the demand for office space is declining regionally and the way in which offices are used and developed has changed; there is significant retail potential within the trade area; and the market demand for townhouses is uncertain. (Attachment B)

PRELIMINARY RECOMMENDATIONS

Staff is currently evaluating different zoning alternatives, design guidelines, and infrastructure improvements for the Subject area that include:

- Rezoning the Subject area 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 guidelines that address future form and function of the Subject area.
- Fine-tuning proposed zoning map conversions for properties in the Subject area to ensure consistency with the Minor Amendment.
- 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 Subject area.

OUTREACH

Over the last six months, Staff has been reaching out to residents, business owners, civic associations and other community groups to engage a diverse cross-section of stakeholders in the planning process. Staff has provided information to individuals and groups, and requested feedback through the following formats:

- an open house was held to kick off the Plan (December 3, 2013)
- one-on-one stakeholder meetings (January 2014-present)
- second community meeting (April 1, 2014)
- mailings, email blasts, and webpage updates (December-present)

Results from each outreach effort are helpful and important to Staff as we begin to develop the Plan's preliminary recommendations. Staff's outreach efforts will continue until Plan approval.

SCHEDULE

The following is a tentative schedule for upcoming activities:

Planning Board Briefing	April 24, 2014
Third and Final Community Meeting	May 13, 2014
Staff Draft Presented to the Planning Board	June 2014
Planning Board Public Hearing	July 2014
Planning Board Work Sessions	July and September 2014
Transmit to County Executive and County Council	November 2014

SUMMARY

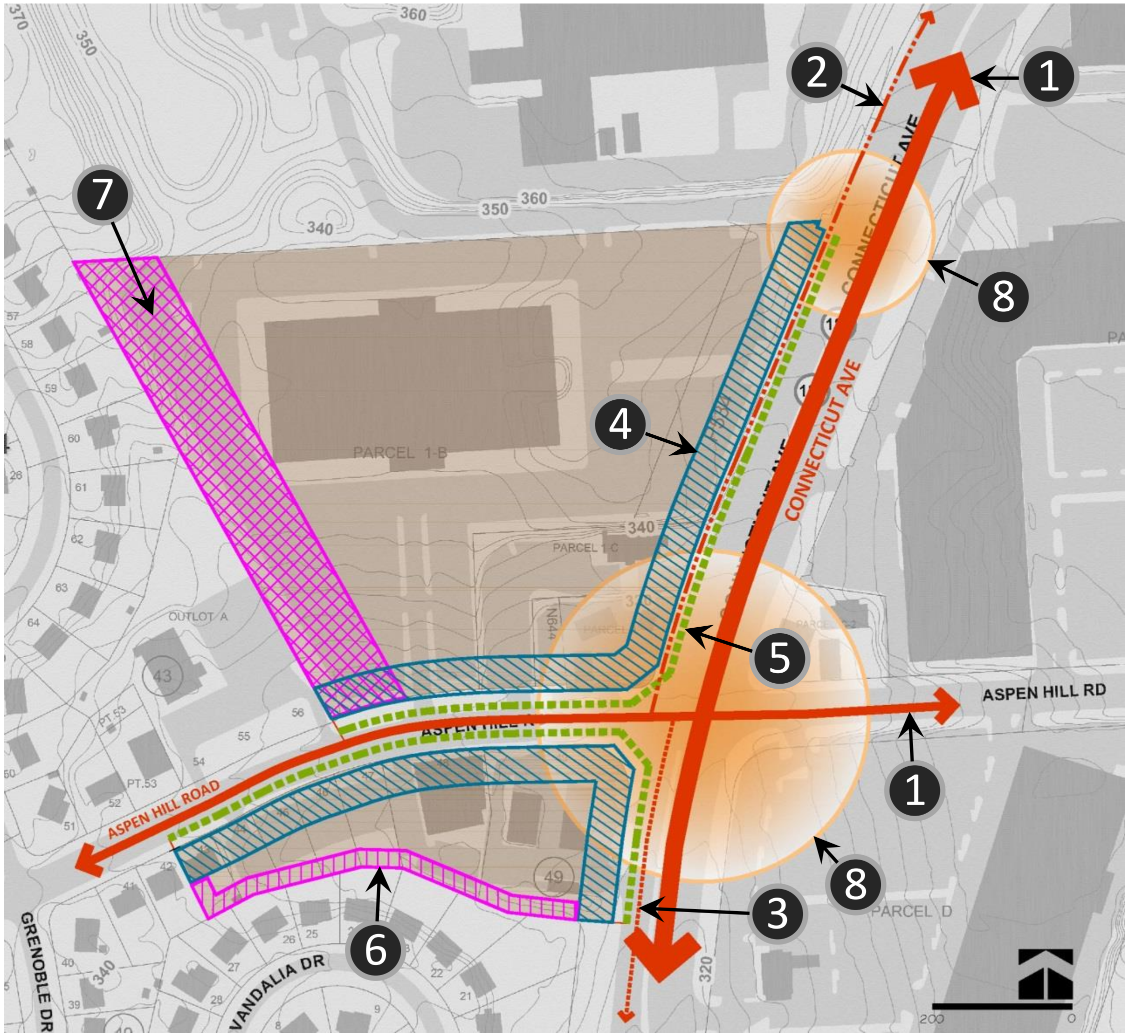
Following this April briefing and status report, Staff will present draft recommendations to the community on May 13, 2014. Staff will fine-tune recommendations based on community meeting feedback and prepare the Staff Draft for the Planning Board's review in June. The Draft will focus on establishing a zoning program that allows for a mix of uses; improved vehicular, pedestrian, and bicycle connections; and an improved streetscape.

ATTACHMENTS

A. Draft Development Concept
B. Market Analysis
C. Timeline

ATTACHMENT A

Development Concept



Legend

1. Existing Road
2. Shared Use Path
3. Bike Lane
4. Build-to-area
5. Streetscape
6. Transition Area
7. No-Build Area
8. Enhanced Intersection

ATTACHMENT B

ASPEN HILL MINOR MASTER PLAN OFFICE MARKET STUDY

Prepared by the

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 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

The analysis begins by examining key trends shaping office demand, and then the existing supply and demand of the office market in the region. The analysis gauges Aspen Hill's ability to attract office users given shifting tenant location and building design preferences, and competing options in the other areas. Site-specific challenges to reusing, retrofitting or replacing office space in the Minor Master Plan Amendment (MMPA) area also are discussed. The analysis seeks to determine the economic feasibility of large scale office use in Aspen Hill.

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.

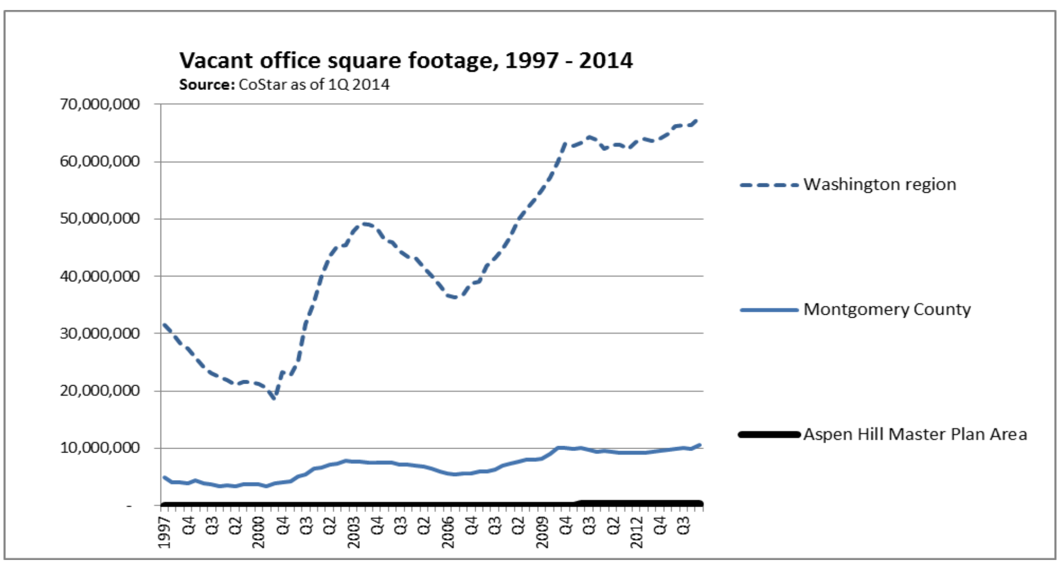
Changing tenant preferences for office locations and building characteristics also are fundamentally reshaping the office market. Companies want to collocate with clients and suppliers, reinforcing the pull of existing business clusters. Tenants also increasingly favor more attractively-designed, greener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

Figure 1



Even so, such 'normal' market ups and downs do not fully explain the office glut. As shown in the Figure 2 below, 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. Furthermore, 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 vacancy rate for Montgomery County's office market stands at 13.7%, and is representative of the continued weakness in the regional office market as compared to the past.

Figure 2

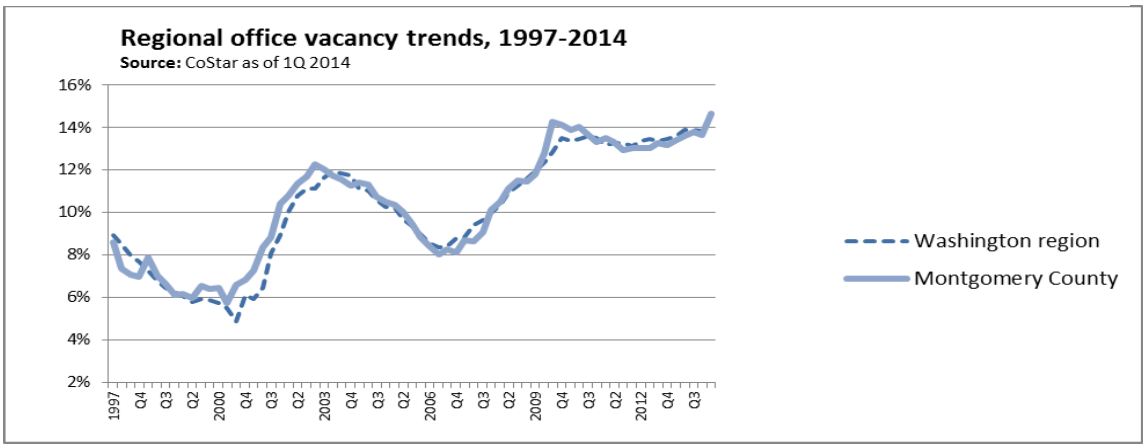
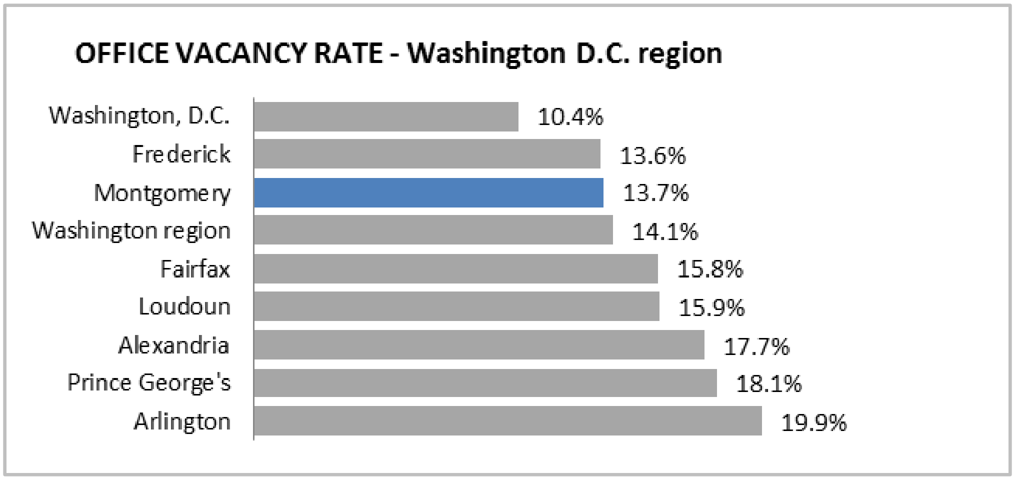


Figure 3



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).

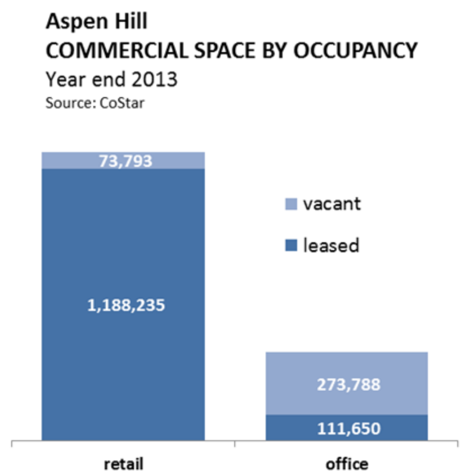
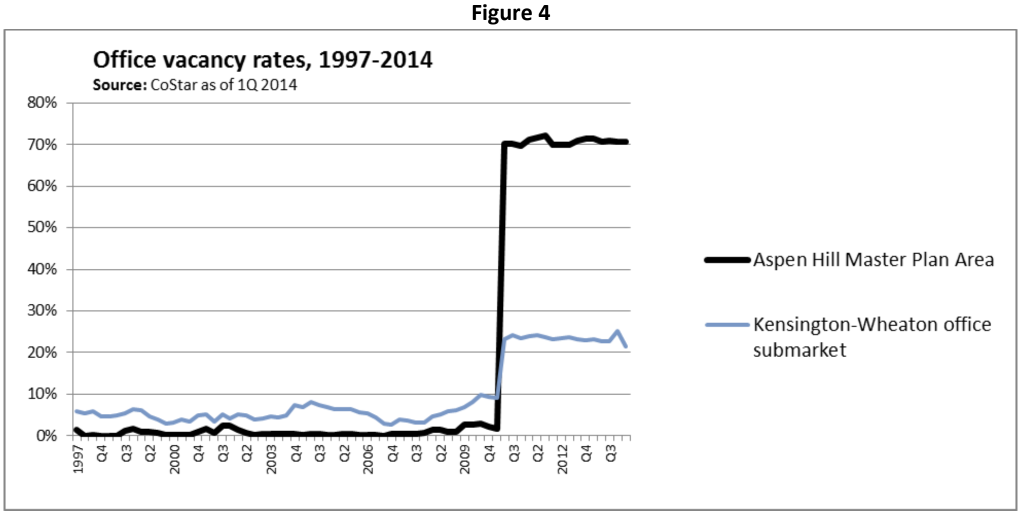


Figure 4



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.

Aspen Hill Minor Master Plan Retail Feasibility Study

Prepared by the

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[1].

[1] 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.

ASPEN HILL RETAIL SPACE

Year end 2013

Source: CoStar

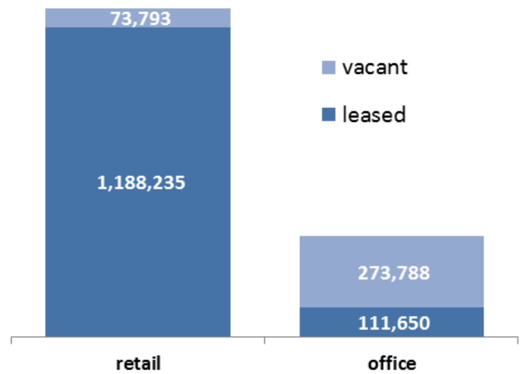
Retail Inventory	Aspen Hill	Montgomery County
Buildings	52	2,255
Existing SF	1,262,028	39,652,767
Under Construction SF	-	370,468
Retail Leasing	**Aspen Hill**	**Montgomery County**
NNN Rent Per SF	$26.51	$25.09
Vacant SF	73,793	1,720,544
Vacancy Rate	5.8%	4.3%

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

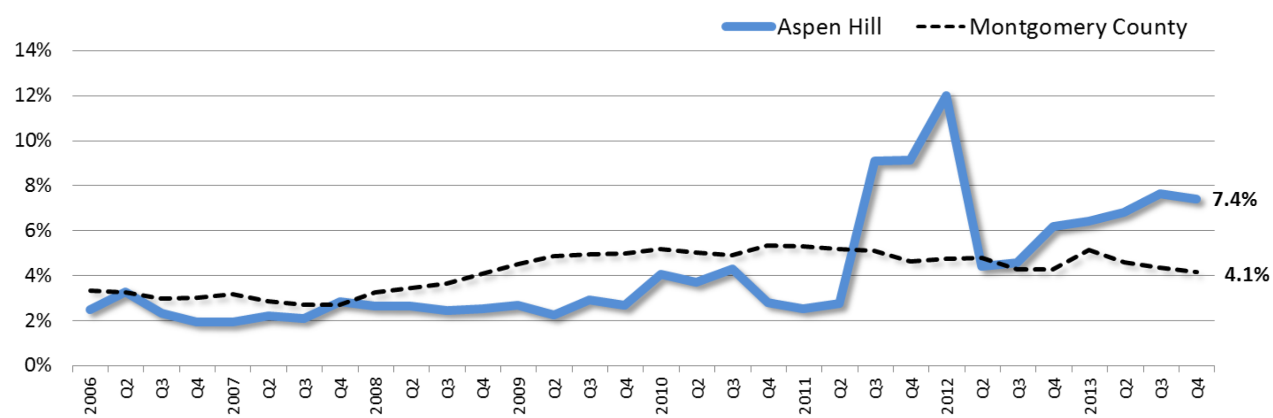
* Former 25,000 sf Giant Food store closed in 2011; anchor space has not been relet.

Retail market activity

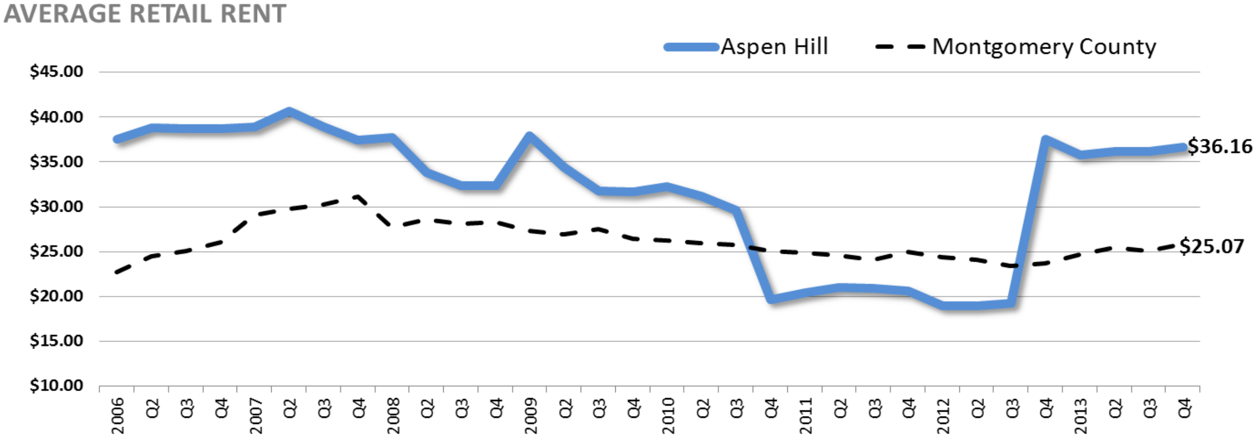
Retail space in the Aspen Hill market is generally stable. No new retail space has come on line in the past decade. With a fixed inventory and steady demand, retail occupancy rates and average asking rents in the area have been relatively high, compared to the County as a whole. In a small market such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

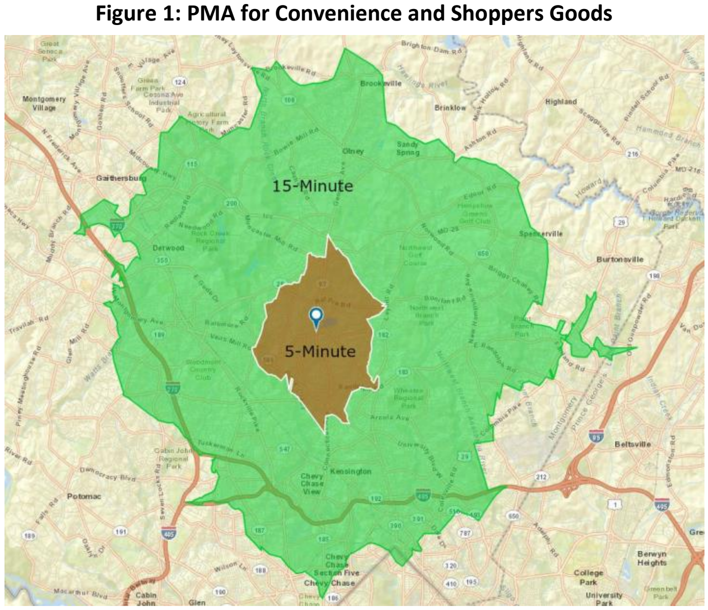
The retail market analysis focuses on two Primary Trade Areas (PMAs)

1. 5-Minute Driveshed from the Aspen Hill Vitro Site
2. 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 the PMAs is presented below in Figure 1.

Figure 1: PMA for Convenience and Shoppers Goods



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[2] 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			

[2] 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.

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:

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.[3]

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.

[3] 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.

ASPEN HILL MINOR MASTER PLAN
RESIDENTIAL FEASIBILITY STUDY

Prepared by the

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

Figure 1: Aspen Hill Minor Master Plan 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.

SECTION 2: ECONOMIC AND MARKET OVERVIEW

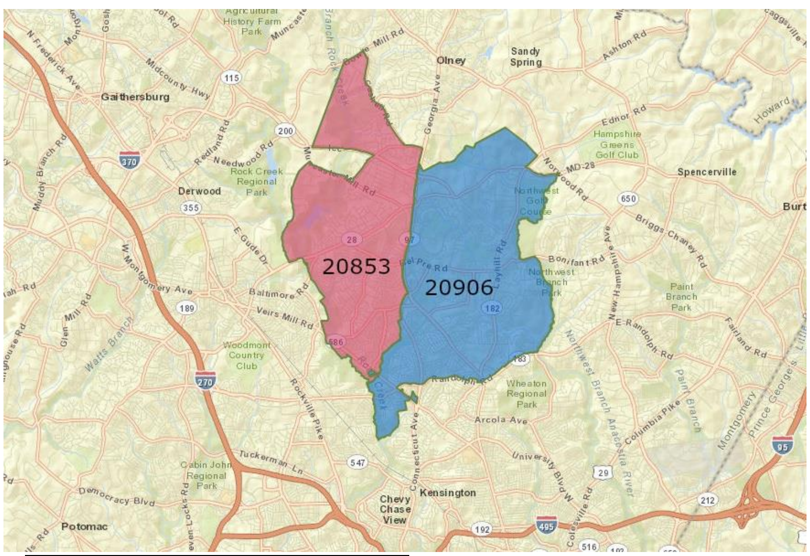
A residential market analysis typically addresses the appropriate scale and type of residential development for a site. However, this study just looks at the feasibility of townhouse development. This is because townhouses were determined to be the most compatible, given surrounding land uses and because 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.

Figure 2: Trade Area (Zip Codes)



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

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

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.

Populations/Households

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		

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.

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.

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													

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 3: Household Age and Income Profile															
Zip Code 20853								Zip Code 20906							
2013 Households by Income and Age of Householder								2013 Households by Income and Age of Householder							
	<25	25-34	35-44	45-54	55-64	65-74	75+		<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															

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.

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

---

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

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.

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.				

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).

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			

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 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.

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

[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.

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 children[4]
- 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.

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

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

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

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

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.

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]

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	

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 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.

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

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**

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).

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,

---

[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.
[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.

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.

ATTACHMENT C

Aspen Hill Minor Master Plan Amendment Work Program