White Oak Science Gateway Master Plan Staff Draft

AFFORDABLE HOUSING ANALYSIS

March 8, 2013

Executive Summary

The Draft White Oak Science Gateway (WOSG) Master Plan encourages development of higher density, multifamily housing. Nine garden-style apartment complexes may be identified as appropriate for higher density redevelopment.

Increasing density poses a risk that redevelopment will result in rent increases that will eliminate market affordable housing options. Redevelopment or renovation is expected to increase rents, but redevelopment would also result in new MPDUs and, in the CR Zone, additional public benefits.

The purpose of this analysis is to assess whether, and how much, redevelopment of the nine existing apartment complexes to higher densities could impact the number of available affordable rental units in the WOSG Master Plan.

Table 1: Summary of Analysis

	Today (Existing)	Future Scenarios		
		R-10 Zone	CR Zone, Low Density	CR Zone, Max Density
Total Units	**2,709**	**6,125**	**4,901**	**7,351**
Subsidized Units	120	0	0	0
MPDUs	0	681	545	817
Market Affordable to Low-to Moderate-Income HHs (up to 65% AMI)	2,086	358	286	429
Market Affordable to Middle Income/Workforce Households (65% - 100% AMI)	503	5,086	4,070	6,105

Three density scenarios were tested: (1) rezoning the properties from the existing R-20 Zone to the R-10 Zone, (2) rezoning from the existing R-20 to the Commercial Residential (CR) Zone with a lower residential density of 1.0 Floor Area Ratio (FAR)), and (3) rezoning from the existing R-20 to the CR Zone with the maximum residential density of 1.5 FAR.

For each scenario, it was assumed that development would include multi-story rental housing to an established maximum density.[1]

The following are the major findings of the study:

- Redevelopment of the nine complexes to full recommended densities of the R-10 Zone would replace the existing 2,709 units with a total of 6,125 units. Redevelopment to the full recommended residential densities of the CR Zone would replace existing units with 7,351 units. Redevelopment to a lower density CR Zone would replace existing units with 4,901 units.
- Based on the current market potential, rents for redeveloped units are assumed to increase by 15 percent on average from the current range of $815 to $1,925 to a range of $1,100 to $2,010.[2]
- Redevelopment of parcels from the existing R-20 to an R-10 Zone would result in the net loss of 1,728 existing units affordable to low- to moderate-income households (earning

[1] A developer may choose to build at a lower density or build a different type of housing than modeled in this analysis (i.e. townhomes).

[2] The estimated rent increase is based on current market potential and assumes redevelopment today. Without a defined timeframe, rents for future development cannot be predicted.

up to 65% of the Area Median Income) but will create 4,583 units affordable to middle-income households (earning between 65% and 100% AMI) and will create up to 681 Moderately Priced Dwelling Units (MPDUs) affordable to the same income segment for a period of 99 years. [3]

- Redevelopment of parcels from the existing R-20 to a CR Zone with a residential density of 1.0 FAR would result in the net loss of 1,800 existing units affordable to low- to moderate-income households (earning up to 65% of the Area Median Income) but will create 3,567 units affordable to middle-income households (earning between 65% and 100% AMI) and create up to 545 Moderately Priced Dwelling Units (MPDUs) affordable to the same income segment for a period of 99 years. [4]
- Redevelopment of parcels from the existing R-20 to a CR Zone with a residential density of 1.5 FAR would result in the net loss of 1,657 existing units affordable to low- to moderate-income households (earning up to 65% of the Area Median Income) but will create 5,602 units affordable to middle-income households (earning between 65% and 100% AMI) and create up to 817 Moderately Priced Dwelling Units (MPDUs) affordable to the same income segment for a period of 99 years. [5]
- Redevelopment in all three scenarios will result in the loss of 120 units with existing unit-based subsidies and 271 units with tenant-based subsidies unless the owners of future redevelopment decide to participate in the same housing subsidy programs.[6]

Introduction

The Planning Department developed an approach to estimate the number of market affordable and rent-restricted housing units in the WOSG Master Plan using the following steps:

1. ***Define Affordable:*** Determine the maximum rent that low-to-moderate income and middle income households can afford.
2. ***Existing Market Affordable Units:*** Produce an estimate of the number of existing market units that are renting at or below the maximum affordable rents determined in step one.
3. ***Existing Rent-Restricted Affordable Units:*** Determine the total number of rent-restricted affordable housing units through a review of existing housing subsidy programs.

[3] Any development of more than 20 units is required to include a minimum of 12.5 percent MPDUs. The number of MPDUs could be higher with incentive densities through additional MPDUs (up to 15 percent) pursuant to the CR Zone's public benefit provisions.

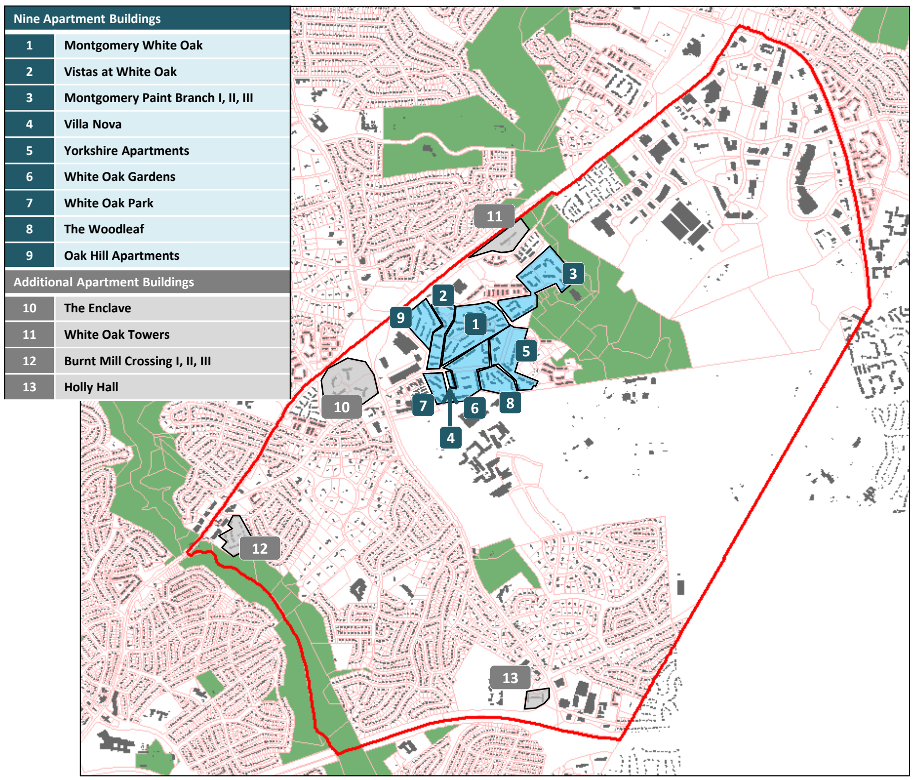
[4] Future developer may opt to build 15 percent of the units as MPDUs with a density incentive, which would increase the total number of units.

[5] Any development of more than 20 units is required to include a minimum of 12.5 percent MPDUs. The number of MPDUs could be higher with incentive densities through additional MPDUs (up to 15 percent) pursuant to the CR Zone's public benefit provisions.

[6] The tenant-based subsidies overlap with the market affordable units.

The following sections of this report outline the methodologies used to estimate both market-affordable and rent-restricted affordable housing. The final component of this analysis explores the two future redevelopment scenarios, the number of MPDUs that each would produce, and how an increase in rents could affect existing market affordable housing.

Figure 1: Map of Multi-Family Rental Apartment Buildings in White Oak Science Gateway Master Plan Area



Background

The nine identified apartment complexes occupy 125 acres and include: Montgomery White Oak, Vistas at White Oak, Montgomery Paint Branch Apartments, Villa Nova, White Oak Park, Oak Hill Apartments, White Oak Gardens, the Woodleaf, and Yorkshire Apartments.

The nine complexes currently have 2,709 units in primarily garden-style apartment buildings and one mid-rise building (Montgomery White Oak). The apartment complexes are contiguous; clustered between Colesville Road (Route 29) and New Hampshire Avenue and adjacent to the White Oak Shopping Center and the U.S. Food and Drug Administration office complex.

Of the 2,709 units, 1,739 are in the Montgomery White Oak, Vistas at White Oak, Montgomery Paint Branch, Villa Nova and the Yorkshire and are marketed together as the White Oak Communities. Rents for market-rate units start at $861 for an

Table 2: Nine WOSG Apartment Buildings

Apartment Building	# of Units	Percent Vacant (2011)	Percent Turnover (2011)	Starting One-Bedroom Rent	Utilities Included in Rent	Year Built
Montgomery White Oak	592	1%	25%	$1,125	All	1967-1970
Vistas at White Oak	272	3%	22%	$1,149	Water	1981
Montgomery Paint Branch	529	5%	26%	$1,132	All	1984-1986
Villa Nova	22	0%	64%	$974	Water	1967
Yorkshire Apartments	324	2%	32%	$1,220	None	1991
White Oak Gardens	351	3%	24%	$1,095	All	1965
White Oak Park	111	4%	5%	$990	None	1965
The Woodleaf	228	3%	40%	$1,085	None	1985
Oak Hill Apartments	280	2%	31%	$1,090	All	1965
Total	**2,709**	**3%**	**27%**			

efficiency, $974 for a one-bedroom, $1,285 for a two-bedroom, and $1,730 for a three-bedroom. One hundred twenty of the 1,739 units are rent-restricted, which are offered to low-income residents and rented below market rate (not included in above prices).

The units in garden-style apartment buildings are generally larger than high-rise and mid-rise buildings. Seventy percent of the units in the five buildings marketed as the White Oak Communities have two-bedrooms or more. One bedroom units in the Yorkshire and Montgomery Paint Branch are large with square footage from 850 to 1,000 and many include a den.

Vacancy rates in 2011 were low at an average of three percent for the five buildings in the White Oak Communities. Turnover in 2011 was 28 percent of all units, which is six percent lower than the County average.

White Oak Garden (351 units), Oak Hill Apartments (280 units), the Woodleaf (228 units), and White Oak Park (111 units) are three large garden-style complexes similar in character to the above-described buildings.

White Oak Park commands the lowest rents of the four complexes with efficiencies starting at $780, one-bedrooms at $990, and two-bedrooms at $1,215. The turnover was five percent in 2011, significantly lower than all other WOSG apartment buildings.

The Woodleaf had the highest turnover of the four complexes at 40 percent of its units in 2011. Rents for the Woodleaf, White Oak Gardens, and Oak Hill Apartments are similar starting at $1,090 for a one-bedroom, $1,400 for a two-bedroom, and $1,750 for a three-bedroom. Average vacancy rate was three percent in 2011.

Housing affordability can be defined in many ways. For the purposes of this analysis, affordable housing is divided into three groups:

Market affordable to low-to moderate-income Households: **Rents are not subsidized, but are affordable to households earning up to 65percent of the region's AMI. The rents are determined by the market and may be affordable because of lower market demand for these units, which can be affected by the quality or location of the units.**

Market affordable to workforce households: **Rents are not subsidized, but are affordable to households earning 65 percent to 100 percent of the region's AMI. The rents are determined by the market and the units are available to a household at any income-level.**

Rent-restricted affordable to low-to moderate-income Households: **Rents are subsidized because the apartment building participates in a federal or local affordable housing program such as Low Income Housing Tax Credits, Project Based Section 8, Opportunity Housing, or the Housing Initiatives Fund. Rents for these units remain affordable to low and very low-income households.**

There are three remaining multi-family rental apartment buildings in the WOSG Master Plan Area with 1,669 units that are not recommended for re-zoning. This includes two high-rise complexes - the Enclave and White Oak Towers and the Burnt Mill Crossings.

The Enclave consists of three 18-story high-rise buildings and is the largest of the 15 WOSG apartment complexes with 1,119 rental units. Efficiency units start at $943, one-bedrooms at $1,234, two-bedrooms at $1,503 and three-bedrooms at $1,762 for new tenants. Vacancies are highest in the Enclave at 10 percent. The building is positioned as a luxury gated community with amenities that include tennis courts, pool, 24 hour concierge service, playground, sundeck, and private shuttle service to the Silver Spring Metro Station.

White Oak Towers is a 22-story high-rise with 414 units. Unlike many high-rise buildings in the County, over half of White Oak Towers units have two bedrooms. Rents are competitive with the Enclave with efficiencies starting at $1,034, one-bedrooms at $1,128, two-bedrooms at $1,388, three-bedrooms at $1,758, and four-bedrooms at $1,925. Vacancies are low at 5% and turnover is 36%. The community has a number of amenities including a shuttle to public transit, fitness center, basketball court, playground, and ground floor retail.

Burnt Mill Crossings is a 136 unit income-restricted property that includes 120 garden-style two- and three-bedroom units and 16 three-bedroom townhomes. Holly Hall is a 96 unit income-restricted retirement community.

The WOSG also includes 157 single-family home rentals, 125 condo rentals, and 6 accessory apartments, which are not included in this analysis due to limited available market data for these individual rental units and difference in character.

Definition of Affordable

For the purposes of this study, low-to moderate-income households are defined as those earning up to 65 percent of the region's AMI ($70,000 for a family of four). By this definition, about 60 percent of the WOSG renter households are low-to moderate-income households.[7]

Typically, workforce households are defined as households earning up to 120 percent of the region's AMI. To capture the lower range of the typical workforce households, this study defined workforce households as those earning between 65 percent and 100 percent of the region's AMI ($70,000 to $107,500 for a family of four).

Table 3: Area Median Income by Household Size

Household Size	65% of AMI	100% of AMI
1	$49,000	$75,500
2	$56,000	$86,000
3	$63,000	$97,000
4	$70,000	$107,500
5	$75,500	$116,000

[7] U.S. Census American Community Survey, 2006-2010, Tenure by Housing Costs as Percentage of Household Income

Table 4: Maximum Affordable Rents

	Low- to Moderate-Income *Up to 65% AMI*		Middle Income/Workforce Households *65% to 100% AMI*	
	Utilities Not Included in Rent	Utilities Included in Rent	Utilities Not Included in Rent	Utilities Included in Rent
Efficiency	< $1,021	< $1,225	< $1,571	< $1,885
1-bedroom	< $1,123	< $1,348	< $1,728	< $2,073
2-bedroom	< $1,342	< $1,610	< $2,064	< $2,477
3-bedroom	< $1,464	< $1,756	< $2,252	< $2,702

Using this definition, about 30 percent of renter households in the WOSG Master Plan Area are considered workforce households.[8]

A commonly used indicator of affordability is that a household should not spend more than 30 percent of their household income on housing costs, which include rent and utilities. In WOSG, 57 percent of all renter households are spending more than 30 percent of their annual household income on housing costs (includes housing and utilities).[9]

For this analysis, market affordable rents are determined by taking 30 percent of the household income and adjusting by household size.[10] Maximum affordable rents are consistent with the 2012 Montgomery County Rent and Income Limits set by the U.S. Department of Housing and Urban Development to determine eligibility for housing subsidy programs.

Using this methodology, the maximum affordable rents for a low-to moderate-income Household (adjusted for household size) for buildings that do not include utilities are as follows:

- **Efficiency: $1,021**
- **1-bedroom: $1,123**
- **2-bedroom: $1,342**
- **3-bedroom: $1,464**

Similarly, the maximum affordable rents for middle income households (adjusted for household size) for buildings that do not include utilities are as follows:

- **Efficiency unit is $1,571**
- **1-bedroom: $1,728**
- **2-bedroom: $2,064**
- **3-bedroom: $2,252**

Existing Market Affordable Units

The nine properties in the WOSG Master Plan that were analyzed for redevelopment have 2,709 rental units. Of the 2,709 units, 2,086 units or 77 percent are estimated to be market affordable to low-to moderate-income households and 503 are market affordable

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[8] Montgomery County Planning Estimate of U.S. Census, 2010 Decennial Census. Includes all rental units – condos, single family homes, and multi-family.

[9] U.S. Census American Community Survey, 2006-2010, Tenure by Housing Costs as Percentage of Household Income.

[10] This methodology is consistent with the County's methodology to determine eligibility for an MPDU unit. To be eligible for an MPDU, a household must earn at or below 65 percent of the Washington D.C. Metro Area Median Income (adjusted by household size). Rent for an MPDU unit is determined by taking 25 percent of the household's monthly income.

to workforce households (earning between 65 percent and 100 percent of AMI).[11]

The three additional rental apartment buildings in WOSG that are not identified for redevelopment (the Enclave, White Oak Towers, Burnt Mill Crossing), have 1,669 rental units. Of the 1,669 units, 489 are market affordable to low- to moderate-income households and 1,076 are market affordable to workforce households.

Table 5: Market Affordable Units by Bedroom Type in the Nine Apartment Buildings

Units Affordable to Low-to-Moderate Income Households (earning up to 65%)

	Affordable Monthly Rent (Utilities Included)	Total Units	Estimated # of At-Market Affordable Units	% of Total Units
Efficiency	< $1,225	3	3	100%
1-bedroom	< $1,348	880	754	86%
2-bedroom	< $1,610	1,638	1,274	78%
3-bedroom	< $1,756	188	55	29%
4-bedroom	< $1,833	0	0	0%
Total		**2,709**	**2,086**	**77%**

Units Affordable to Middle Income Households (earning between 65% and 100% AMI)

	Affordable Monthly Rent (Utilities Included)	Total Units	Estimated # of At-Market Affordable Units	% of Total Units
Efficiency	< $1,885	3	0	0%
1-bedroom	< $2,073	880	98	11%
2-bedroom	< $2,477	1,638	277	17%
3-bedroom	< $2,702	188	128	68%
4-bedroom	< $2,819	0	0	0%
Total		**2,709**	**503**	**19%**

The Montgomery County Department of Housing and Community Development (DHCA) Rental Facilities Survey provides the lowest and highest rents, vacancies, and turnover for the apartment buildings in the WOSG Master Plan Area. Using this data, staff estimated the approximate number of units that fall at or below the maximum affordable rent for low-to moderate-income households and workforce households by unit size. For more details on the methodology, see Reference Note 1.

The market affordable rents for individual units may be impacted by the number of years a tenant resides in the property because rents are typically lower for renewal tenants than for new tenants.

It is also important to reiterate that rents for all market affordable units are dictated by market dynamics and can change at any time.

Existing Rent-Restricted Affordable Units

Rent-restricted units refer to units with housing subsidies. For the purposes of this analysis, we will discuss two categories of rent-restricted affordable units – subsidies that are attached to the tenant ("tenant-based subsidies") and subsidies that are attached to the unit ("unit-based subsidies"). Tenant-based subsidies are not included in the total number of rent-restricted affordable units because they overlap with market affordable units.

The nine buildings have 120 rent-restricted units with unit-based subsidies in the nine apartment buildings. Unit-based subsidies are provided through programs such as Low Income Housing Tax Credits (LIHTC), Project-based Section 8, or through a Housing Opportunities Commission Contract. By participating in these

[11] All rents in the Master Plan Area are affordable to workforce households, but the above numbers reflect the balance of units that are not affordable to low-to-moderate income households or that do not have rent-restrictions.

funding programs, subsidized units are only available to qualifying low or very low income households.

MPDUs are also considered a unit-based subsidy because the units are only available to tenants earning up to 65 percent of the Area Median Income. The WOSG does not have any MPDUs because its large apartment buildings were built before the MPDU requirements were applied to rental properties.

Tenant-based subsidies used in the nine buildings are the Housing Choice Vouchers (HCV) and the Shelter Plus Care Program and include 183 units. As long as the landlord participates in the program, households with a tenant-based subsidy can reside in any unit. The subsidy is provided as a rent certificate to the landlord to make up the difference between what the tenant can afford and the market-rate rent. Since tenants choose the unit, there can be overlap between the 120 unit-based subsidies and the 183 units with tenant-based subsidies.

Redevelopment Scenarios

Staff tested three future density scenarios for affordability on the site of the nine properties based on usage of the R-10 and CR Zone. It is assumed that new development will be multi-family construction and that the mix of unit types (efficiency, one-, two-, or three-bedroom) will match recent development in Wheaton.[12]

MPDU Requirements

The MPDU program requires that any new development in the County with 20 or more units provide 12.5% of the units at prices affordable to households earning up to 65% AMI. Additional density is allowed to a project for providing 15% of the units as MPDUs.

Households apply directly to the apartment building management for MPDU apartments. Units are typically offered by lottery but preference is made for families that live and work in the County. Eligibility for an MPDU is determined based on the following criteria:

- Minimum annual household income is $30,000
- Maximum annual household income:

Household Size	Maximum Income--Garden Apartments
1	$49,000
2	$56,000
3	$63,000
4	$70,000
5	$75,500

The household must:

- have at least as many people in the household as the number of bedrooms in the apartment
- must demonstrate good credit rating that is acceptable to the apartment management; and
- be able to afford the monthly rent payments for the MPDU unit.

[12] The analysis assumes that 4% of units will be efficiencies, 65% will have one-bedroom, 30% will have two-bedrooms, and 1% will have three-bedrooms. This is consistent with the recently developed Metropointe in Wheaton. A developer may propose to build townhomes or another type of structure, which is not modeled in this analysis.

In the first scenario, the existing 2,709 units in the R-20 Zone would redevelop to a maximum of 6,125 units in an R-10 Zone. The R-10 Zone is a high-density multi-family zone that would yield units per acre densities similar to the Enclave and White Oak Towers, which are zoned R-H.

For the second scenario, the existing 2,709 units would be replaced with 4,901 units in the CR Zone. In this scenario, the residential density for the CR Zone would be 1.0 FAR.[13]

The third scenario is the highest density scenario. The existing 2,709 units would be replaced with 7,351 units in the CR Zone. This scenario assumes a residential density of 1.5 FAR.

In the CR Zone, a developer can select a number of optional public benefits (i.e. additional MPDUs, public open space, public art) offered in exchange for additional density. This analysis does not model the public benefits, but a developer may choose to build more than 12.5% of the units as MPDUs for additional density.

Rent Assumptions

Based on existing market conditions, redevelopment of the nine apartment complexes will result in higher rents. The nine apartment complexes currently have older finishes and few amenities, which contribute to lower rents.

It is impossible to accurately predict achievable rents for the nine redeveloped properties because the completion date and future market dynamics are unknown. However, an analysis of existing rental properties in Montgomery County indicates that if the redevelopment occurred today, the rents would be affordable to households earning the median income ($107,500 for a 4-person household).

Table 6: Estimated Rents for Redevelopment Scenarios

	Average WOSG Garden Apartment Rents (2011)	Estimated Rents of Future WOSG Redevelopment
Efficiency	$780 - $780	$1,100 - $1,190
1 Bedroom	$990 - $1,190	$1,260 - $1,430
2 Bedroom	$1,215 - $1,490	$1,490 - $1,620
3 Bedroom	$1,750 - $1,795	$1,790 - $2,010

Note: Rent is based on unit size, which is expected to be slightly smaller in higher density development.

It is assumed that new development in WOSG would have lower rents than recent development in Wheaton, the location of the closest comparable new development in the County. Pricing for market-rate units in the Archstone at Wheaton and the Encore at Wheaton Station is mostly affordable to middle-income households but not affordable to low-to moderate-income households.

Compared to existing garden-style apartments in WOSG, new development in Wheaton is highly amenitized, has smaller unit square footage, and the unit mix includes more efficiency and one-bedroom units. See Table 6 for the rent estimates used for the post-redevelopment analysis.

Conclusion

Because rents are expected to increase with redevelopment, WOSG will experience a loss of units affordable to low- to moderate-income households in all three scenarios.

[13] The C would be set as

It is important to note that if the property owners do not choose to redevelop, the properties in White Oak will eventually reach a point where renovation is necessary. An extensive renovation will increase rents over time and would also result in the loss of market affordable housing.

New development in all three scenarios would create guaranteed housing affordable to low-to moderate-income households through the MPDU program. A minimum of 12.5% of the new units in the redeveloped properties are required to participate in the MPDU program, making them affordable to households earning 65 percent of the Washington D.C. median income. A developer can choose to designate up to 15 percent of the units as MPDUs for a density bonus. The MPDU restriction remains tied to the unit for a period of 99 years for the rental units.

The WOSG Master Plan Area has 1,669 additional rental units in the Enclave, White Oak Towers, and Burnt Mill Crossings that have not requested a change in zoning. Of the 1,669 units, 104 are income-restricted through housing subsidy programs, 489 are market affordable to low- to moderate-income households and 1,076 are affordable to middle-income households.

Affordability in Scenario 1: R-10 Zone

If the nine properties were redeveloped to the R-10 Zone, they could yield a maximum of approximately 6,125 residential units. Of the 6,125 units, a minimum of 681 units are required to be MPDUs and will be restricted to households earning up to 65 percent of the area median income.

The rent increase associated with redeveloping 6,125 units will eliminate an estimated total of 1,728 units affordable to low-to moderate-income households, 120 units with unit-based subsidies, and 271 units with tenant-based subsidies.[14] The increase in density will produce an additional 4,584 units affordable to middle income households.

Affordability in Scenario 2: CR Zone with Residential Density of 1.0 FAR

If the nine properties were redeveloped under the CR Zone using a residential density of 1.0 FAR, they would yield 4,901 residential units.[15] Of the 4,901 units, a minimum of 545 units are required to be MPDUs and will be restricted to households earning up to 65 percent of the area median income.

In this scenario, the redevelopment will eliminate 1,800 units affordable to low-to moderate-income households, 120 units with unit-based subsidies, and 271 units with tenant-based subsidies.[16] However, it will add 3,567 units affordable to middle-income households.

Affordability in Scenario 3: CR Zone with Residential Density of 1.5 FAR

[14] The 271 tenant-based subsidies are not mutually exclusive since tenants with the subsidy can reside in a market affordable unit or a unit with a unit-based subsidy.

[15] In the CR Zone, a developer will be allowed to increase density based on provision of public benefits via the CR point system. The density requirement does not reflect any density increases of this kind.

If the nine properties were redeveloped under the CR Zone using a density of 1.5 residential units per acre, they would yield 7,251 residential units.[17] Of the 7,351 units, a minimum of 817 units are required to be MPDUs and will be restricted to households earning up to 65 percent of the area median income.

In this scenario, the redevelopment will eliminate 1,657 units affordable to low-to moderate-income households, 120 units with unit-based subsidies, and 271 units with tenant-based subsidies.[18] However, it will add 5,602 units affordable to middle-income households.

Table 7: Summary of Findings

	Dwelling Units per Acre	Total Units	Subsidized Units	MPDUs	Market Affordable	
					Low-to Moderate-Income HHs (up to 65% AMI)	Middle Income/Workforce Households (65% - 100% AMI)
Today (Existing)	**21.7**	**2,709**	120	0	2,086	503
Future - R-10 Zone	**49.0**	**6,125**	0	681	358	5,086
Future - CR Zone with R 1.0	**39.2**	**4,901**	0	545	286	4,070
Future - CR Zone with R 1.5	**58.8**	**7,351**	0	817	429	6,105

[17] The 271 tenant-based subsidies are not mutually exclusive since tenants with the subsidy can reside in a market affordable unit or a unit with a unit-based subsidy.

APPENDIX

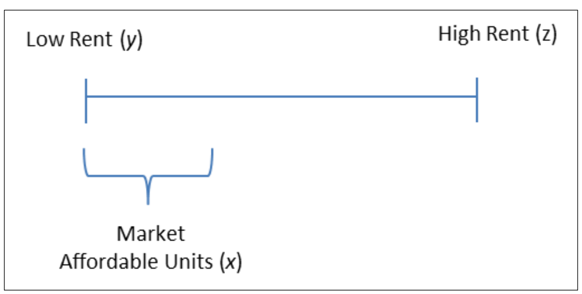
Appendix 1: Reference Note on Estimating Market Affordable Units

The units with rents at or below the maximum amount affordable to low- to moderate-income, or workforce households without any subsidy are considered market affordable.

For example, the DHCA Rental Facilities Survey provides rents, turnover rate, vacancies, and other market data by unit type (efficiency, 1, 2, or 3 bedrooms). The data shows a range of rents for each unit type. For example, there are 105 one-bedroom units in Glenmont Forest Apartments rented to existing tenants (renewals) from $1,113 to $1,255. But since we don't have an exact number of units in this group of 105 units renting at or below the maximum affordable rent for a one-bedroom unit of $1,123, we had to develop a methodology to calculate that number.

In some cases, the maximum affordable rent is above the rent range, which means all units fall below and are considered market affordable. In other cases (see Figure 3), the maximum affordable rent falls within the high and low rent range.

Figure 4: Illustration of Estimation Technique



To explain the estimation technique, the following equation is used:

$$n = \frac{x - y}{z - y} \times N$$

Where "*N*" represent the number of units by type, "*y*" represent the low rent for the unit type, "*z*" the high rent for the unit type and "*x*" represent the maximum affordable rent for the unit type.

When applicable, this equation is used to estimate the number of units that fall under the maximum affordable rent.

To go back to the example in Glenmont Forest Apartments, the maximum affordable rent of $1,123 falls between $1,113 and $1,255. Applying the equation above, we find the estimate of existing tenants that are renting below $1,123.

$$8 = \frac{\$1{,}123 - \$1{,}113}{\$1{,}255 - \$1{,}113} \times 105$$

The result is that 8 of the 105 units are estimated to be rented under $1,123. The same formula is repeated for turnover tenants, which have a different rent range.

Appendix 2: Summary of Existing Apartment Buildings in the WOSG Master Plan Area

MONTGOMERY WHITE OAK (GARDEN)

GARDEN			Annual		Vacant		New Tenants		Existing Tenants	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	164	33%	39	24%	1	1%	$1,125 -	$1,275	$1,049 -	$1,275
2 Bedrooms	290	58%	75	26%	3	1%	$1,395 -	$1,425	$1,320 -	$1,453
3 Bedrooms	42	8%	8	19%	0	0%	$1,850 -	$1,925	$1,790 -	$1,885
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**496**	**100%**	**122**	**25%**	**4**	**1%**				

Includes Utilites: ALL

MONTGOMERY WHITE OAK (MIDRISE)

MIDRISE			Annual		Vacant		New Tenants		Existing Tenants	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	40	42%	13	33%	0	0%	$1,125 -	$1,200	$1,049 -	$1,200
2 Bedrooms	56	58%	14	25%	1	2%	$1,425 -	$1,525	$1,329 -	$1,470
3 Bedrooms	0	0%	0	N/A	0	N/A				
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**96**	**100%**	**27**	**28%**	**1**	**1%**				

Includes Utilites: ALL

VISTAS AT WHITE OAK

GARDEN			Annual		Vacant		New Tenants		Existing Tenants	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	74	27%	14	19%	1	1%	$1,142 -	$1,242	$1,142 -	$1,242
2 Bedrooms	198	73%	47	24%	6	3%	$1,347 -	$1,480	$1,347 -	$1,480
3 Bedrooms	0	0%	0	N/A	0	N/A				
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**272**	**100%**	**61**	**22%**	**7**	**3%**				

MONTGOMERY PAINT BRANCH I, II, III

GARDEN			*Annual*		*Vacant*		**New Tenants**		**Existing Tenants**	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	151	27%	44	19%	9	6%	$1,132	$1,242	$1,132	$1,242
2 Bedrooms	307	73%	74	24%	11	4%	$1,337	$1,480	$1,337	$1,480
3 Bedrooms	71	0%	19	27%	5	7%	$1,730	$1,740	$1,730	$1,740
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**272**	**100%**	**61**	**22%**	**7**	3%				

Includes Utilites: WATER

VILLA NOVA

GARDEN			*Annual*		*Vacant*		**New Tenants**		**Existing Tenants**	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	2	9%	2	100%	0	0%	$861	$861	$815	$861
1 Bedroom	20	91%	12	60%	0	0%	$974	$1,020	$900	$1,144
2 Bedrooms	0	0%	0	N/A	0	N/A				
3 Bedrooms	0	0%	0	N/A	0	N/A				
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**22**	**100%**	**14**	**64%**	**0**	**0%**				

Includes Utilites: WATER

YORKSHIRE APARTMENTS

GARDEN			*Annual*		*Vacant*		**New Tenants**		**Existing Tenants**	
	Units	***% Total***	***Turnover***	***% Turnover***	***Units***	***% Vacant***	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	77	24%	35	45%	1	1%	$1,220	$1,380	$1,244	$1,397
2 Bedrooms	238	73%	65	27%	7	3%	$1,285	$1,790	$1,295	$1,632
3 Bedrooms	9	3%	4	44%	0	0%	$1,795	$1,880	$1,811	$1,897
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**324**	**100%**	**104**	**32%**	**8**	**2%**				

Includes Utilites: NONE

WHITE OAK GARDENS

GARDEN			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	108	31%	32	30%	1	1%	$1,095 -	$1,115	$906 -	$1,115
2 Bedrooms	207	59%	43	21%	9	4%	$1,395 -	$1,415	$1,039 -	$1,415
3 Bedrooms	36	10%	10	28%	1	3%	$1,795 -	$1,795	$892 -	$1,795
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**351**	**100%**	**85**	**24%**	**11**	**3%**				

Includes Utilites: ALL

WHITE OAK PARK

GARDEN			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	1	1%	1	100%	0	0%	$780 -	$780	$811 -	$811
1 Bedroom	32	29%	4	13%	0	0%	$990 -	$1,170	$1,030 -	$1,102
2 Bedrooms	78	70%	1	1%	4	5%	$1,215 -	$1,145	$1,275 -	$1,545
3 Bedrooms	0	0%	0	N/A	0	N/A				
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**111**	**100%**	**6**	**5%**	**4**	**4%**				

Includes Utilites: NONE

WOODLEAF APARTMENTS

GARDEN			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	120	53%	48	40%	3	3%	$1,085 -	$1,145	$1,019 -	$1,254
2 Bedrooms	108	47%	43	40%	4	4%	$1,395 -	$1,490	$1,241 -	$1,445
3 Bedrooms	0	0%	0	N/A	0	N/A				
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**228**	**100%**	**91**	**40%**	**7**	**3%**				

Includes Utilites: NONE

OAK HILL APARTMENTS

GARDEN

			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	0	0%	0	N/A	0	N/A				
1 Bedroom	94	34%	41	44%	2	2%	$1,090 -	$1,190	$966 -	$1,140
2 Bedrooms	156	56%	37	24%	2	1%	$1,400 -	$1,450	$1,215 -	$1,375
3 Bedrooms	30	11%	8	27%	1	3%	$1,750 -	$1,750	$1,430 -	$1,699
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**280**	**100%**	**86**	**31%**	**5**	**2%**				

Includes Utilites: ALL

WHITE OAK TOWERS

HIGHRISE

			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	22	5%	10	45%	2	9%	$1,034 -	$1,112	$1,064 -	$1,128
1 Bedroom	131	32%	51	39%	0	0%	$1,128 -	$1,325	$1,148 -	$1,320
2 Bedrooms	215	52%	76	35%	4	2%	$1,338 -	$1,717	$1,346 -	$1,848
3 Bedrooms	39	9%	11	28%	2	5%	$1,758 -	$1,927	$1,726 -	$1,896
4 Bedrooms	7	2%	2	29%	0	0%	$1,925 -	$2,325	$1,927 -	$2,292
Total	**414**	**100%**	**150**	**36%**	**8**	**2%**				

Includes Utilites: ELECTRICITY GAS

THE ENCLAVE

HIGHRISE

			Annual		Vacant		New Tenants		Existing Tenants	
	Units	*% Total*	*Turnover*	*% Turnover*	*Units*	*% Vacant*	*Low Rent*	*High Rent*	*Low Rent*	*High Rent*
Efficiency	213	19%	51	24%	13	6%	$943 -	$1,164	$940 -	$1,140
1 Bedroom	285	25%	67	24%	31	11%	$1,234 -	$1,525	$1,234 -	$1,525
2 Bedrooms	391	35%	84	21%	49	13%	$1,503 -	$1,782	$1,503 -	$1,782
3 Bedrooms	230	21%	33	14%	21	9%	$1,762 -	$2,107	$1,710 -	$1,955
4 Bedrooms	0	0%	0	N/A	0	N/A				
Total	**1,119**	**100%**	**235**	**21%**	**114**	**10%**				

Includes Utilites: NONE

Source: Montgomery County Department of Housing & Community Affairs, 2011