Sage Policy Group, Inc.

Strategies to Efficiently Address Housing Affordability in Columbia, MD

Submitted by:
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Submitted to:
The Howard Hughes Corporation

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Executive Summary

- Recent Housing Affordability Proposals Jeopardize the Viability of Downtown Columbia's Redevelopment

The General Plan for the redevelopment of Downtown Columbia had been negotiated over the course of many years. Among other things, the redevelopment calls for the construction of 5,500 residential units. To date a small fraction of these units has been built, but there are already calls to renegotiate and reformulate the plan.

Specifically, the Columbia Downtown Housing Corporation (CDHC) is recommending revisions to the Downtown Columbia Plan. The standing Plan and approved Code provisions embody a flexible Housing Trust Fund payment structure to render below market rate housing more available in Downtown Columbia by making awards from the Fund for various purposes. As set forth in Title 28, these purposes include:

(i) Acquiring, building, rehabilitating, or preserving affordable housing units;
(ii) Contributing to the payment of predevelopment or operating expenses of affordable housing units;
(iii) Acquiring, building, rehabilitating, or preserving special needs housing;
(iv) Providing rental assistance, eviction prevention, and foreclosure assistance; and,
(v) Making loans that enable the purchase of a primary residence.[1]

Rather than focus on the achievement of multiple goals, the CDHC has instead proposed a Moderate Income Housing Unit (MIHU) requirement of 15 percent on all units to be developed going forward. This means the requirement would be imposed on approximately 4,700 units (15% of which translates into slightly more than 700 affordable units). The policy objective appears to have narrowed to the achievement of objective (i) listed above.

This study does not question whether or not affordability is a challenge in and around Downtown Columbia. It is. Rather, this study attempts to provide insight to policymakers and other stakeholders regarding how affordability can be addressed in the most efficient and effective manner. To help stakeholders understand the consequences of decisions to be made and votes to be taken, the Sage Policy Group, Inc. (Sage) study team conducted both macro-level and micro-level analyses.

Our macroeconomic analysis indicates that the net present value of the cost to Downtown Columbia's redevelopers of Housing Trust Fund (HTF) payments to be made (status quo; Scenario 1) is approximately $25.4 million. The cost of compliance with proposed affordable housing mandates (Scenario 2) is calculated as $94.2 million based on foregone revenue. In other words, the

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[1] County Council of Howard County, Maryland. Bill No. 24-2012. Section 28.116. Available at apps.howardcountymd.gov/olis/GetFile.aspx?id=266.

Our public policy-based concern is two-fold. First, the delayed development will also delay associated tax base formation. Second, stalling downtown residential development will also diminish prospects for commercial development, which depends on the achievement of a mixed-use, urban live-work-play environment.

Exhibit E2. Pro-forma Analysis Assumptions

Base Property Assumptions					
Parking Ratio (Per Unit)	1.65				
Parking Type	High Rise: Below Grade Podium: Above Grade				
Number of Units	Total	Market	40% AMI	60% AMI	80% AMI
Market Development/No MIHUs	300	300	-	-	-
MIHU Requirement	300	255	15 (5%)	15 (5%)	15 (5%)
Rent Assumptions (1)					
		Market	40% AMI	60% AMI	80% AMI
High-Rise		$2,800	$831	$1,322	$1,812
Podium		$2,500			

Exhibit E3. High-Rise Apartment Development Pro-forma

Building Type: High-Rise			No MIHU Requirement	MIHU Requirement
Stabilized Operating Pro Forma				
Gross Income			$10,080,000	$9,281,640
Vacancy Loss	5.50%		-554,400	-510,490
Effective Rental Income			$9,525,600	$8,771,150
Other Income			$377,398	$377,398
Collection Loss	0.50%		-49,515	-45,743
Effective Gross Income			$9,853,483	$9,102,805
Operating Expenses	MIHU: 10% Premium		-2,953,779	-3,249,157
Real Estate Taxes	1.382%	@7% Cap	-1,130,184	-957,713
Capital Reserves	$150		-45,000	-45,000
Net Operating Income			$5,724,520	$4,850,935
Debt Service			-4,321,114	-4,299,190
Cash Flow After Debt Service			$1,403,406	$551,745
Stabilized Return on Investment			**4.6%**	**3.9%**
Cash-on-Cash Return			**3.2%**	**1.5%**
Total Development Cost per Unit			$411,535	$409,447

Exhibit E4. Podium Apartment Development Pro-Forma

Building Type: Podium			No MIHU Requirement	MIHU Requirement
Stabilized Operating Pro Forma				
Gross Income			$9,000,000	$8,363,640
Vacancy Loss	5.50%		-495,000	-460,000
Effective Rental Income			$8,505,000	$7,903,640
Other Income			$351,185	$351,185
Collection Loss	0.50%		-44,281	-41,274
Effective Gross Income			$8,811,904	$8,213,551
Operating Expenses	MIHU: 10% Premium		-2,638,673	-2,902,540
Real Estate Taxes	1.382%	@7% Cap	-1,010,405	-868,245
Capital Reserves	$150		-45,000	-45,000
Net Operating Income			$5,117,826	$4,397,766
Debt Service			-2,924,717	-2,903,018
Cash Flow After Debt Service			$2,193,109	$1,494,748
Stabilized Return on Investment			**6.1%**	**5.3%**
Cash-on-Cash Return			**8.7%**	**6.0%**
Total Development Cost per Unit			$278,545	$276,478

A. Introduction

In keeping with the original vision of Jim Rouse to create a socially responsible community for people of all backgrounds and stages of life, the original and standing Plan for the redevelopment of Downtown Columbia embodies a Housing Trust Fund payment structure. The Fund has been designed to render below market rate housing more available in Downtown Columbia by making awards from the Fund for various purposes. As set forth in Title 28, these purposes include:

(i) Acquiring, building, rehabilitating, or preserving affordable housing units;
(ii) Contributing to the payment of predevelopment or operating expenses of affordable housing units;
(iii) Acquiring, building, rehabilitating, or preserving special needs housing;
(iv) Providing rental assistance, eviction prevention, and foreclosure assistance; and,
(v) Making loans that enable the purchase of a primary residence.[2]

While it may be a bit too early to determine whether this affordable housing payment structure will prove adequate and though the redevelopment of Downtown Columbia is in its infancy, changes to the original Plan are already being proposed. Specifically, the Columbia Downtown Housing Corporation (CDHC) has proposed a Moderate Income Housing Unit (MIHU) requirement of 15 percent on all units to be developed going forward. This means the requirement would be imposed on approximately 4,700 total units (15% of which translates into slightly more than 700 affordable units). This newly fashioned requirement would replace the Housing Trust Fund payment schedule.

This study does not question whether or not affordability is a challenge in and around downtown Columbia. It is. Rather, this study attempts to provide insight to policymakers and other stakeholders regarding how affordability can be addressed in the most efficient and effective manner.

Plans for Downtown Columbia are ambitious. The costs of construction will be high. A newly introduced MIHU requirement threatens to stall the development of Downtown Columbia, which would have negative consequences for merchants, Howard County tax collections, and local contractors, all without generating a significant number of new affordable units. It is conceivable that the MIHU requirement would result in deflecting investment capital to other markets, preventing not only the development of affordable units, but market rate units and commercial development that depends on a vibrant and expanding residential component.

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[2] County Council of Howard County, Maryland. Bill No. 24-2012. Section 28.116. Available at apps.howardcountymd.gov/olis/GetFile.aspx?id=266.

Zoning District.[9] At the time of the amendment's publication, GGP and its affiliates owned and controlled about 240 acres, more than 60 percent of total Downtown Columbia land. The remaining land was split among third parties, including 54 acres of open space at Symphony Woods and the Lakefront properties owned by the Columbia Association.[10] The 2010 Plan contemplates the construction of 5,500 residential units. It also outlined Downtown Community Enhancements, Programs, and Public Amenities (CEPPAs) through which each of the recommended developments would be carried out. The CEPPAs supply 27-step guidance for implementing various components of the development plans encapsulated by the 2010 Amendment, ranging from environmental assessments, feasibility studies, transportation, and housing. GGP and other property owners were held responsible for undertaking the CEPPAs "in a prescribed timetable and sequence."[11]

The housing components of the CEPPA guidelines (CEPPAs #10, 11, 26, 27) provided specific approaches targeted toward satisfying the needs for affordable housing in the downtown area, starting with GGP's creation of the Downtown Columbia Community Housing Foundation (DCCHF), a fund to facilitate the accomplishment of the task. Note that to arrive at this solution required years of study and negotiation. The fund is partially supported by fees imposed on incoming residential developers. Each developer is required to provide a one-time, per unit payment to the DCCHF upon the issuance of any building permit for a building containing dwelling units under the following schedule.[12]

1. \$2,000/unit for each unit up to and including the 1,500th unit
2. \$7,000/unit between the 1,501st unit up to and including the 3,500th unit
3. \$9,000/unit between the 3,501st unit up to and including the 5,500th unit

GGP was also to contribute \$1.5 million upon issuance of the first residential building permit downtown, plus an additional \$1.5 million upon issuance of a building permit for the 400th new residential unit in Downtown Columbia.[13] In 2010, Howard Hughes succeeded GGP as master developer of Downtown Columbia.[14] In 2013, the Howard Hughes Corporation contributed \$2.3 million to the Housing Trust Fund (HTF) in conjunction with the issuance of permits for the Metropolitan, the first new downtown housing to be developed in more than a decade.

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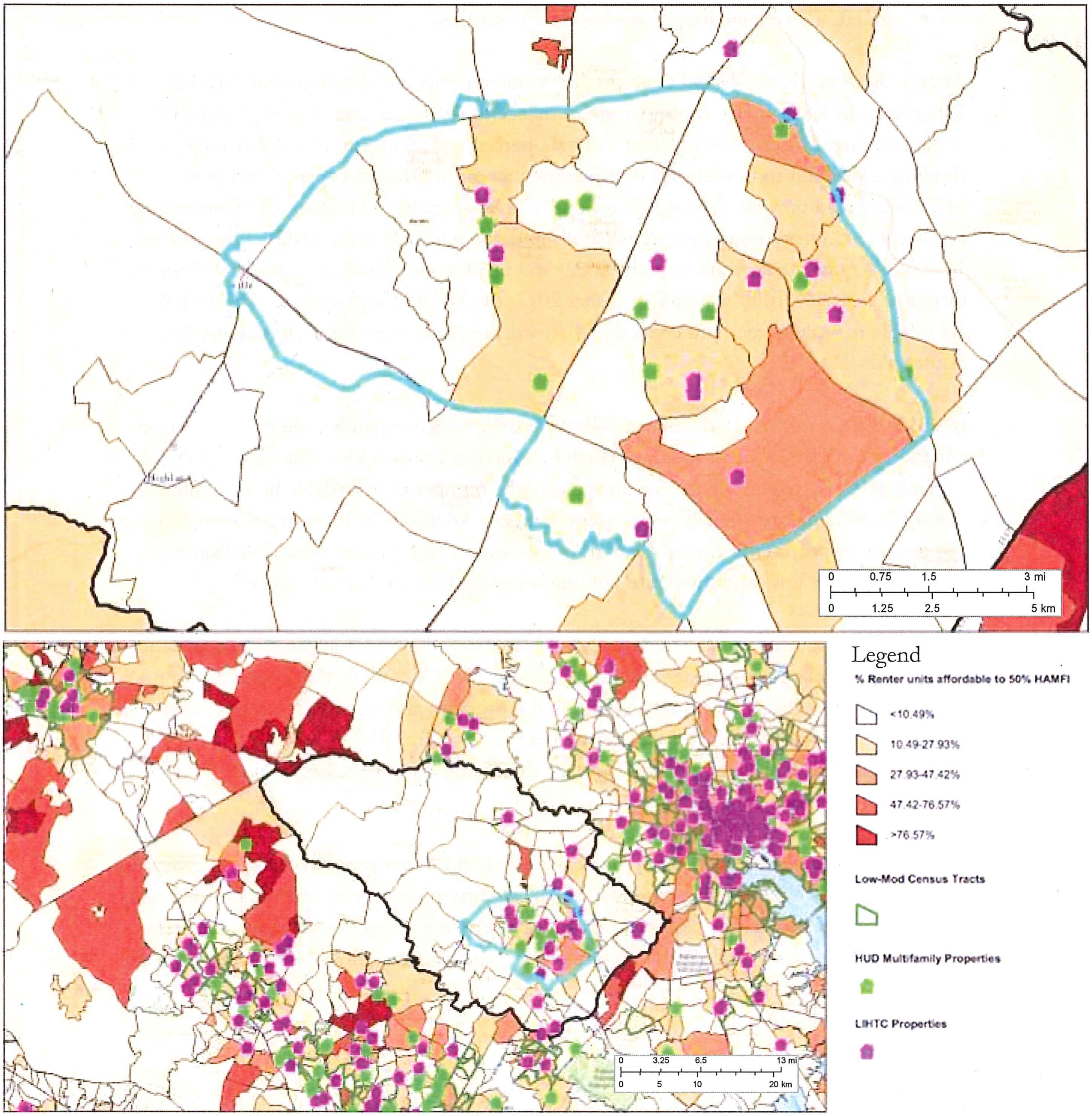
9 Howard County Department of Planning and Zoning. (April 3rd, 2014). Technical Staff Report. *General Plan Amendment (GPA 2014-1) to revise certain provisions in the Downtown Columbia Plan that relate to: housing and the development of moderate income housing units; certain developer contributions; the nature and timing of certain actions related to Merriweather Post Pavillion.* (p. 2, prgh. 1-4)
10 Howard County Department of Planning. (2010). *Downtown Columbia Plan: A General Plan Amendment,* op. cit., p. 79 & 93.
11 Howard County. (2010). *Downtown Columbia: A General Plan Amendment,* op.cit., p. 2.
12 "Each payment will be contingent upon the expiration of all applicable appeal periods associated with each building permit without an appeal being filed, or if an appeal is filed upon the issuance of a final decision of the courts upholding the issuance of the permit" Howard County. (2010). *Downtown Columbia: A General Plan Amendment,* op.cit.
13 Howard County. (2010). *Downtown Columbia: A General Plan Amendment,* op. cit., page 18; also in Howard County Code Title 28.115(c) as proposed in Bill 24-2012.
14 Howard Hughes. (n.d.) *Columbia, Md.* Retrieved from http://www.howardhughes.com/properties/master-planned-communities/maryland.html. (paragraph 2).

Exhibit 1. Households by Income Level, 2013

	Columbia, Maryland		Howard County, Maryland	
	Estimate	Percent	Estimate	Percent
Total households	39,823	39,823	108,188	108,188
Household Income (In 2013 inflation-adjusted dollars)				
Less than $10,000	1,041	2.6%	2,115	2.0%
$10,000 to $14,999	820	2.1%	1,647	1.5%
$15,000 to $24,999	1,498	3.8%	3,883	3.6%
$25,000 to $34,999	2,061	5.2%	4,999	4.6%
$35,000 to $49,999	2,972	7.5%	6,645	6.1%
$50,000 to $74,999	6,260	15.7%	16,344	15.1%
$75,000 to $99,999	5,070	12.7%	13,375	12.4%
$100,000 to $149,999	9,105	22.9%	24,672	22.8%
$150,000 to $199,999	5,388	13.5%	15,134	14.0%
$200,000 or more	5,608	14.1%	19,374	17.9%
Median household income (dollars)	$100,902	-	$109,476	-
Mean household income (dollars)	$121,379	-	$131,886	-

Source: U.S. Census Bureau, American Community Survey 2013 1-Year Estimates.

Exhibit 4. Rental Housing Affordability in Columbia and Howard County, Maryland —Columbia outlined in blue in upper portion of exhibit



Source: U.S. Department of Housing and Urban Development (HUD), eGIS: CPD Maps. http://egis.hud.gov/cpdmaps/#.

number of units to eligible, low-income purchasers who have a certain annual household income; or (c) paying a fee-in-lieu for each MIHU required, under certain circumstances.[21]

The fee-in-lieu provision under MIHUs applies in the following zoning districts: RC, RR, R-ED, R-20, R-12, and R-SC. Developers of age-restricted, planned senior communities, single family attached dwellings in R-H-ED, and mixed-use developments in MXD are also eligible for the fee-in-lieu option. Legislation requires that the fee-in-lieu for each project to be paid before the first use and occupancy permit is issued.[22]

Maximum rents for rental MIHU units are based on an affordability formula established by the MIHU Law. Rents for these units are established twice a year per MIHU regulations. A utility allowance is subtracted from the MIHU maximum allowable rents so that units will continue to be affordable after tenants pay their own utility bills. [23, 24]

According to section 13.403(b) of the Howard County code, maximum rental rates for MIHUs are defined as "30% of the monthly income of a household whose annual income does not exceed 60% of the median income."[25] These rates are determined by the Department of Housing and Community Development and are established by bedroom count. The following exhibit summarizes the MIHU rental rate schedules for various unit sizes effective January 1st, 2015 to June 30th, 2015.[26] The calculation is based on the County median household income of $109,476 for a family of four,[27] the estimate published by the U.S. Census Bureau's 2013 American Community Survey.

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[21] Ibid. *Moderate Income Housing Unit Program Annual Report 2013.* p.7.
[22] Howard County Housing. *MIHU Report January 2015.* Retrieved from http://www.howardcountymd.gov/housingpublications.htm.
[23] *Moderate Income Housing Unit Program Annual Report 2013*, op. cit., p. 6.
[24] "The maximum rental rates shall include an allowance for utilities paid by the tenant. The allowance shall be calculated by the department based upon the average utility costs prevailing for similar sized units in Howard County. If required by the lease, all utility costs, including those in excess of the allowance, shall be paid by the tenant." (Source: Howard County Housing and Community Development. (2015). *Moderate Income Housing Unit (MIHU) Program: Price & rent summary, January 1 through June 30, 2015).*
[25] See Howard County code, Title 13 Subtitle 4 Section 13.403(B)(2). Available from http://www.howardcounty md.gov/uploadedFiles/Home/Department_Content/Housing/SUBTITLE_4%20_MIHU%20Regulations.pdf.
[26] Howard County Housing and Community Development. (2015). *Moderate Income Housing Unit (MIHU) Program: Price & rent summary, January 1 through June 30, 2015.* Retrieved from http://www.howardcountymd.gov /uploadedFiles/Home/Department_Content/Housing/Jan%202015%20Price%20schedule(2).pdf. (p. 10 of 13).
[27] Census Bureau. 2013 American community Survey, *1-year Estimates: Income in the past 12 months* (Table S1901).

Exhibit 7. Existing and Planned Howard County Moderate Income Housing Units Rental Communities, Rental Activity as of December 2014

Development	*Location*	*Status*	*Total Units*	*On-site MIHU Requirement*	*Pending*	*Rented*	*Market Rent***	*MIHU Rent**	*Difference*
Aladdin South	Jessup	C	39	39	0	39	N/A	N/A	N/A
Alta at Regency Crest	Ellicott City	C	150	15	0	15	$2,160	$1,268	$892
Annapolis Junction Town (2)	Annapolis Junct	PC	416	32	32	0	N/A	N/A	N/A
Ashbury Courts	Laurel	C	156	24	3	21	$1,590	$1,249	$341
Belmont Station	Elkridge	C	208	32	0	32	$1,670	$1,289	$381
Burgess Mill Station	Ellicott City	C	198	20	0	20	N/A	N/A	N/A
Deep Falls	Elkridge	PC	60	60	60	0	N/A	N/A	N/A
Ellicott Gardens	Ellicott City	C	106	103	0	103	N/A	N/A	N/A
Howard Square (3)	Elkridge	PC	654	69	69	0	N/A	N/A	N/A
Miller's Grant	Ellicott City	PC	286	29	29	0	N/A	N/A	N/A
Mission Place	Jessup	C	366	61	0	61	$1,710	$1,249	$461
Monarch Mills	*Columbia*	*C*	*269*	*27*	*0*	*27*	N/A	N/A	N/A
Oakland Place	*Columbia*	*C*	*16*	*2*	*0*	*2*	*$2,000*	*$1,594*	*$406*
Orchard Meadows	Ellicott City	C	150	15	0	15	$1,535	$1,268	$267
Orchard Park	Ellicott City	PC	40	4	4	0	N/A	N/A	N/A
Penniman Park	Elkridge	C	186	19	0	19	$1,685	$1,268	$417
Parkview at Emerson	Laurel	C	80	80	0	80	N/A	N/A	N/A
Woodfield Oxford Square	Hanover	PC	248	38	38	0	N/A	N/A	N/A
Totals			3,628	669	235	434	N/A	N/A	N/A

Source: Howard County Department of Housing and Community Development, MIHU Report, January 2015.
*Updated January 2015. **For 2 bedroom unit–Revised July 2014.
Notes: 1. This list does not include Howard County Housing Commission Owned Rental Housing.
2. Total MIHU's required: 63. Alternative compliance method: 31 units off-site (according to the MIHU Program 2013 Annual Report).
3. Total MIHU's required: 150. Alternative compliance method: 81 units off-site (according to the MIHU Program 2013 Annual Report).

Key	
PC	Pending Construction
UC	Under Construction
C	Constructed

Exhibit 8. FY 2015 Spending Reduction Plan, Howard County Government

	Approved Reduction	(Original Budget)	% of the original
Public Works	$2,353,783	($214,791,511)	-1.1%
Police	$1,955,373	($105,749,022)	-1.8%
Technology & Communication Svc.	$1,343,011	($27,048,063)	-5.0%
Recreation & Parks	$950,000	($44,761,791)	-2.1%
County Executive/Administration	$736,000	($99,675,307)	-0.7%
Transportation	$723,000	($15,962,444)	-4.5%
Library	$516,000	($18,841,541)	-2.7%
Citizen Svc.	$505,858	($17,596,890)	-2.9%
Housing	*$475,000*	*($9,688,206)*	*-4.9%*
Health	$450,194	($9,003,880)	-5.0%
Corrections	$373,964	($16,548,386)	-2.3%
Finance	$373,000	($12,952,762)	-2.9%
Planning & Zoning	$359,624	($19,073,148)	-1.9%
Community Svc. Partnerships	$353,251	($9,200,312)	-3.8%
Inspections, Licenses and Permits	$183,190	($7,145,704)	-2.6%
Social Services	$27,810	($920,608)	-3.0%
Sheriff	$20,023	($7,336,017)	-0.3%
State's Attorney	$9,000	(7659379)	-0.1%

Source: Howard County Budget Office.

In recognition of market realities, Montgomery County government directly invests significant resources to address affordability. According to its FY2015 budget, Montgomery County allocated more than $26.9 million for affordable housing programs, an increase of 10 percent over FY2014's level of dedicated funding. The County invested more than $320 million into affordable housing over the past eight years (since FY2008).[29]

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29 Montgomery County, Maryland Office of Management and Budget. https://reports.data.montgomerycountymd.gov/reports/BB_FY15_APPR/HCA.

C. The Challenge of Developer Financing

Real estate development is fundamentally shaped by the sources of capital available. For market-rate residential and commercial developments, both investors and developers share the same common goal: profit maximization.

Intuitively, market rate development enjoys more flexible financing than affordable housing deals. Market-rate developers can raise capital for the overall company or a portfolio of properties and then deploy it quickly. Investors are taking risk based on the overall financial health of the company or a pool of deals, rather than each individual deal. This gives investors and developers more flexibility to adapt to changing market demands and cost pressures.

By contrast, affordable housing developments are generally financed through a mix of public and private capital tied to the specific development or jurisdiction. Thus, the economies of scale in financing that exist in market-rate development contexts fail to materialize in affordable housing development settings. Financing is therefore often more complicated and expensive for each dollar of equity raised.[30]

The Low Income Housing Tax Credit program represents the primary source of equity for affordable multifamily developments, providing capital for more than 100,000 apartments each year and 2.4 million apartments since its creation in 1986.[31] The specific structure of an affordable housing development is often dictated by the specific funding sources that are used. Many of the characteristics of a typical investment either directly or indirectly lead to increased costs, including from the following sources:

- *Enhanced risk.* Since profit margins are lower for affordable deals, lenders and equity investors have an enhanced incentive to minimize the project's risk profile, which produces tighter underwriting standards. Risk aversion can also lead to a preference for a narrower range of development types, which can hinder mixed-use development. Conservative underwriting can also lead to higher upfront costs (often in the form of higher reserve levels) and limit a developer's ability to undertake innovative deals and development types that may prove to be less costly overall.
- *Enhanced capital reserve requirements.* According to a variety of sources, developers must set aside a portion of reserve funding, which are used to cover construction cost overruns, shortfalls in operations funding, and/or ongoing maintenance needs. Adequate reserves are necessary because affordable developments operate on thinner

[30] *Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals.* (January 2014). Enterprise Community Partners and the Urban Land Institute Terwilliger Center for Housing. p. 12.
[31] Ibid. *Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals.* (January 2014). p. 13.

Exhibit 10. Land Values at Regional Multifamily Developments

Apartment Development	Address	City	Year Built	Units	Property Land Area (Acres)	Value				Land Value	
						Assess-ment Date	Land	Improve-ments	Total	$/Unit	$/Acre
Residences at Arundel Preserves (1)	Milestone Parkway	Hanover	2011	242	9.52	1/1/14	$5,902,400	$49,639,900	$55,542,300	$24,390.1	$620,000.0
The Quarter (Jazz & Renaissance)	Dulaney Valley Road	Towson	2009	430	5.75	1/1/14	$18,782,600	$62,638,900	$81,421,500	$43,680.5	$3,266,539.1
Elms at Stony Run	Watts Road	Hanover	2008	280	7.95	1/1/14	$19,300,000	$69,829,000	$89,129,000	$68,928.6	$2,427,673.0
Arbors at Arundel Preserve	2111 Piney Branch Circle	Hanover	2007	496	13.26	1/1/14	$24,800,000	$64,047,400	$88,847,400	$50,000.0	$1,870,286.6
Gramercy at Town Center	10601 Gramercy	Columbia	1998	210	9.05	1/1/13	$5,000,100	$27,206,800	$32,206,900	$23,810.0	$552,497.2
Haven at Odenton Gateway	615 Carlton Otto Lane	Odenton	2012	252	10.03	1/1/14	$12,600,000	$41,667,300	$54,267,300	$50,000.0	$1,256,231.3
Alta at Regency Crest	3311 Oak West Drive	Ellicott City	2011	150	5.81	1/1/13	$993,700	$20,797,600	$21,791,300	$6,624.7	$171,032.7
Lodge at Seven Oaks	Bluewater Boulevard	Odenton	2007	396	19.86	1/1/14	$19,800,000	$44,396,500	$64,196,500	$50,000.0	$996,978.9
Arbors at Baltimore Crossroads (2)	11550 Crossroads Circle	Baltimore	2011	365	7.48	1/1/15	$1,496,000	$52,554,800	$54,050,800	$4,098.6	$200,000.0
Columbia Town Center Apartments (3)	10360 Swiftstream	Columbia	2001	531	11.76	1/1/13	$6,497,400	$66,946,600	$73,444,000	$12,236.2	$552,500.0
Enclave at Emerson (4)	8420 Upper Sky Way	Laurel	2011	164	8.24	1/1/14	$2,800,000	$23,725,100	$26,525,100	$17,073.2	$339,805.8
Stonehaven Apartments (5)	7030 Gentle Shade Court	Columbia	1999	200	9.58	1/1/14	$4,173,000	$30,860,900	$35,033,900	$20,865.0	$435,595.0
Concord Park (6)	Faraway Hills Drive	Laurel	2005	335	11.80	1/1/14	$16,750,000	$42,594,500	$59,344,500	$50,000.0	$1,419,491.5
Belmont Station (4)	6900 Tasker Falls	Elkridge	2008	208	10.02	1/1/15	$6,547,000	$34,634,000	$41,181,000	$31,476.0	$653,393.2

Source: SDAT; Valbridge Property Advisors, "Market Analysis Annapolis Junction Town Center" Prepared for Stifel Nicholaus & Company, Inc. and Howard County, MD.
1. Assessed value includes approximately $854,200 in assessed value associated with retail component, based on information provided by Maryland State Department of Assessments and Taxation reported by the Valbridge Market Analysis.

The following assumptions/definitions were used to drive this assessment of the cost to developers under both scenarios:

A. The study team assumed the remaining 4,683 residential units (excluding the 817 units already built or fully approved) are to be constructed over the next 20 years.
B. Based on the three-phased construction plan envisioned in the relevant General Plan, the first 380 units already built and 437 units currently pending are defined to represent Phase I. Units expected to be built over the next 12 years represent Phase II of construction, while those built during the ensuing 8-year period are defined as representing Phase III. This analysis assumes that the sixth year of development will be associated with the onset of high-rise construction.

The study team also used the following parameters to calculate the cost of the proposed housing affordability mandate on developers.

1) Rental rate inflation = 2.5 percent; this parameter is not arbitrary. According to the Bureau of Labor Statistics, the Consumer Price Index component for housing during the past 12-month period (through December 2014) increased by 2.5 percent.[35]
2) Discount rate = 6.5 percent; probably a lofty discount rate to use given the current level of interest rates, but this ends up rendering the assessment of cost more conservative than it otherwise would be;
3) Vacancy rate = 5.5 percent; this is also not arbitrary. According to Delta Associates, the Baltimore metro region's apartment vacancy rate between 2013 and 2014 ranged from 4.6 to 5.8 percent during what has been considered a strong apartment market;[36]
4) The average rental rate for market rate units is $2,500/unit in for the first five years of the project and $2,800/unit after the sixth year when development transitions to high-rise buildings.[37] The average rental rate for affordable units is $1,322/unit (Exhibit 11).
5) The fee-in-lieu specified under CEPPA 26 is inflated at 3 percent annually, which is the 3-year average inflation rate calculated based on the ENR Building Cost Index.[38] In accordance with the Housing Trust Fund payment structure, the total lump-sum payment for the 4,683 units is $43,120,994 after adjusting for the inflation. This lump-sum payment translates into $25,391,411 in present value discounted at 6.5 percent annually (see exhibit 12 below).

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[35] Bureau of Labor Statistics. *Consumer Price Index – December 2014* (News Release). Retrieved from http://www.bls.gov/news.release/pdf/cpi.pdf. (p. 20, 'Table 3: CPI for All Urban Consumers (CPI-U)")
[36] Transwestern Mid-Atlantic Multifamily Group. (2014). *Mid-Atlantic Apartment Outlook: A Market Report for Multifamily Investors & Executives* (Q4 2014). Retrieved from http://www.transwestern.net/Market-Research/ Documents/Mid-Atlantic%20-%20Mid-Atlantic%20Apartment%20Outlook%20-%20Q4%202014.pdf. (p. 6).
[37] "CDHC draft recommendations 2-4-15" CDHC board meeting 2/4/15, op. cit., p. 3.
[38] County Council of Howard County, Maryland. Bill No. 24-2012. Section 28.115. Available at apps.howardcountymd.gov/olis/GetFile.aspx?id=266.

- Micro-Level Analysis

As this portion of the analysis will show, costs associated with compliance with the newly proposed mandates will frustrate construction, resulting in slowed build-out or worse. Developers will forego revenues and experience higher development costs due to enhanced project complexity and risk. Correspondingly, they may not be able to attract the equity capital necessary to execute mid- to high-density residential development as envisioned in the Downtown Columbia Plan.

Below is a summary of the stabilized operating pro-forma for two types of apartment buildings: podium and high-rise. The cost of development, income, and associated project returns for each building type are compared for 1) a development under a market rate scenario, and 2) a development subject to proposed Downtown Columbia inclusionary housing requirements.

This micro-level analysis indicates that the proposed MIHU requirements have the capacity to push returns below those acceptable to most equity investors. There are a number of ways to measure rate of return on investment. One of the most important in the world of real estate transactions is cash-on-cash return.

Cash-on-cash return = annual dollar income/total dollar investment.

Investors are always eager for free cash flow. Not only does free cash flow translate into income, but it can also be easily reinvested in ongoing or new projects. To the extent that Downtown Columbia is associated with low cash-on-cash returns, investment capital will be deflected to other markets. There are many opportunities to deploy capital within the Baltimore-Washington area, such as in emerging rental markets like Rockville, Gaithersburg, Frederick, Towson, Owings Mills, Laurel, Odenton, Bowie, and White Marsh.

The study team has calculated cash-on-cash returns for both scenarios—the status quo and the newly proposed MIHU mandates. For high-rise multifamily development, the expected cash-on-cash return declines from 3.2 to 1.5 percent if the current payment-in-lieu structure is replaced by the proposed MIHU requirement. For podium units, the expected cash-on-cash return declines from 8.7 to 6.0 percent.

Similarly, the stabilized return on investment for high-rise apartment buildings declines from 4.6 percent to 3.9 percent. The corresponding figures for podium units are 6.1 percent to 5.3 percent. According to our research, given current conditions, many investors expect a stabilized return on investment closer to 6.25 percent.

Exhibit 16. Podium Apartment Development Pro-Forma

Building Type: Podium			No MIHU Requirement	MIHU Requirement
Stabilized Operating Pro Forma				
Gross Income			$9,000,000	$8,363,640
Vacancy Loss	5.50%		-495,000	-460,000
Effective Rental Income			$8,505,000	$7,903,640
Other Income			$351,185	$351,185
Collection Loss	0.50%		-44,281	-41,274
Effective Gross Income			$8,811,904	$8,213,551
Operating Expenses	MIHU: 10% Premium		-2,638,673	-2,902,540
Real Estate Taxes	1.382%	@7% Cap	-1,010,405	-868,245
Capital Reserves	$150		-45,000	-45,000
Net Operating Income			$5,117,826	$4,397,766
Debt Service			-2,924,717	-2,903,018
Cash Flow After Debt Service			$2,193,109	$1,494,748
Stabilized Return on Investment			**6.1%**	**5.3%**
Cash-on-Cash Return			**8.7%**	**6.0%**
Total Development Cost per Unit			$278,545	$276,478

Notes: 1a. High-rise market rental rates are assumed to be slightly higher and have accordingly been adjusted upward in the pro-forma analysis. 1b. Affordable unit rental rates for each AMI category are an average of the maximum gross rent for 1, 2, and 3-bedroom units for each AMI category as specified in *CDHC, CR-120 proposal (rev. 2/19/15)*. 1c. AMI rental rates reflect a utility allowance of $151 as specified in *CDHC, CR-120 Options for Discussion-Summary (rev. 2/4/15)*.

These limits are based on a percentage of area median income adjusted by unit size. Rents may not exceed local market limits. It is important to note that the LIHTC Program restricts only the portion of the rent paid by the tenant, not total rent.

Affordability Requirements. The LIHTC program requires a minimum affordability period of 30 years. Some states require a longer affordability period for all LIHTC properties, and other states may negotiate longer affordability periods on a property-specific basis. Tenant incomes are recertified annually to ensure their continued eligibility. The allocating agency is responsible for monitoring compliance with provisions during the affordability period and must report results of monitoring to the IRS.[40]

One of the most effective uses of LIHTCs is for the acquisition and rehabilitation of existing apartment properties. This includes both market rate housing and older affordable housing in need of renovation. Use of LIHTC equity to renovate or redevelop such properties can provide a large number of units offering long-term affordability while simultaneously improving neighborhoods and increasing community property values.

2. Redefine Downtown Columbia Geography as it Relates to Affordability

Exhibit 9 above presents details regarding transit routes operating in Howard County, including the substantial reach of Howard Transit and MTA buses. There are some stakeholders who insist on having affordable units immediately Downtown. The study team understands why this is deemed to be important.

The fact remains, however, that developing affordable units Downtown is very expensive due to associated land and construction costs (e.g., because of prospective high-rise construction with structured parking). To the extent that stakeholders want to maximize the number of affordable units in and around Columbia, it is more sensible to place units where land is less expensive and where lower construction costs can be realized in settings in which lower density development is appropriate (e.g., all wood frame construction coupled with surface parking).

This strategy should be viewed in conjunction with the possibility of amassing more affordable units using the LIHTC program. The opportunity cost of using available developable acreage in the core of Downtown Columbia is high. More affordable units could be developed through use of the Low Income Housing Tax Credits by identifying locations where less economic activity would be displaced or where attractive synergies could be produced, including near the hospital and/or college.

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[40] U.S. Department of Housing and Urban Development (HUD). *LIHTC Basics—Eligibility.* Retrieved from http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/training/web/lihtc/basics/eligibility.

This, in and of itself, however, would not render Downtown Columbia developers whole. Based on our analysis, for a high-rise multifamily building developer to be made whole in the context of proposed MIHU requirements, the parking ratio would have to be 0.327 per unit to generate the same stabilized return on investment. For a podium project, the ratio would need to be reduced to 0.127. Exhibit 17 provides relevant analytical detail. While reduced parking ratios are consistent with increased urbanization, reducing the ratio below 1 would likely render many apartment units unmarketable since most Baltimore-Washington corridor households will require dedicated space for at least one vehicle.

Exhibit 17. Inclusionary (MIHU) Apartment Development Returns under Different Parking Ratio Requirements

Assumptions					
Base Property Assumptions					
Parking Type	High Rise: Below Grade Podium: Above Grade				
Number of Units	Total	Market	40% AMI	60% AMI	80% AMI
	300	255	15 (5%)	15 (5%)	15 (5%)
Rent Assumptions (1)					
Average Rent/Unit		Market	40% AMI	60% AMI	80% AMI
High-Rise		$2,800	$831	$1,322	$1,812
Podium		$2,500			

Building Type			**High Rise**		**Podium**	
Parking Ratio (Per Unit)			**1.65**	**1.15**	**1.65**	**1.15**
Stabilized Operating Pro Forma						
Gross Income			$9,281,640	$9,281,640	$8,363,640	$8,363,640
Vacancy Loss	5.50%		-510,490	-510,490	-460,000	-460,000
Effective Rental Income			$8,771,150	$8,771,150	$7,903,640	$7,903,640
Other Income			$377,398	$377,398	$351,185	$351,185
Collection Loss	0.50%		-45,743	-45,743	-41,274	-41,274
Effective Gross Income			$9,102,805	$9,102,805	$8,213,551	$8,213,551
Operating Expenses	MIHU: 10% Premium		-3,249,157	-3,249,157	-2,902,540	-2,902,540
Real Estate Taxes	1.382%	@7% Cap	-957,713	-957,713	-868,245	-868,245
Capital Reserves	$150		-45,000	-45,000	-45,000	-45,000
Net Operating Income			$4,850,935	$4,850,935	$4,397,766	$4,397,766
Debt Service			-4,299,190	-4,084,583	-2,903,018	-2,785,188
Cash Flow After Debt Service			$551,745	$766,352	$1,494,748	$1,612,578
Stabilized Return on Investment			**3.9%**	**4.2%**	**5.3%**	**5.5%**
Cash-on-Cash Return			**1.5%**	**2.2%**	**6.0%**	**6.8%**
Total Development Cost per Unit			$409,447	$389,008	$276,478	$265,256

Notes: 1a. High-rise market rental rates are assumed to be a bit higher and have accordingly been adjusted upward in the pro-forma analysis. 1b. Affordable unit rental rates for each AMI category are an average of the maximum gross rent for 1, 2, and 3-bedroom units for each AMI category as specified in *CDHC, CR-120 proposal (rev. 2/19/15).* 1c. AMI rental rates reflect a utility allowance of $151 as specified in *CDHC, CR-120 Options for Discussion-Summary (rev. 2/4/15).*

Conclusion

Moderate Income Housing Unit (MIHU) requirements proposed by the Columbia Downtown Housing Corporation (CDHC) would significantly increase the cost of redeveloping Downtown Columbia relative to the current Housing Trust Fund fee structure. Our macro-analysis indicates that the cost of complying with the proposed MIHU requirements would effectively triple the developer's contribution toward affordable housing over the next twenty years. Our micro-level analysis indicates that compliance would likely bring investment returns to levels that would not support ongoing redevelopment in Downtown Columbia.

Frustrated development momentum would not only reduce tax base growth, but it would also reduce the level of resources that Howard County has available to support residents in need. Correspondingly, the study team has put forth five potential solutions that could help accelerate the formation of affordable housing in and around Columbia without jeopardizing the redevelopment. These are:

1. Promote the Creative Use of Low-Income Housing Tax Credits

The Low-Income Housing Tax Credits (LIHTC) Program supplies indirect federal subsidies used to finance the acquisition, rehabilitation, and development of affordable rental housing for low-income households. The LIHTC Program is used by many local housing and community development agencies to increase the supply of affordable housing in their communities.

2. Redefine Downtown Columbia Geography as It Relates to Affordability

To the extent that stakeholders want to maximize the number of affordable units in and around Columbia, it is sensible to place units where land is less expensive and where existing properties may be renovated or redeveloped to include affordable housing. This means that locations immediately outside Downtown Columbia should be considered. There are a number of interesting redevelopment opportunities in the area around downtown Columbia that could serve as key contributors to better address housing affordability.

3. Front-Load Housing Trust Fund Payments

As our macro-analysis indicates, the proposed MIHU requirement would cost developers more than three times as much as the standing payment-in-lieu structure in terms of foregone net income. There would be additional costs of development due to the expanded complexity of deals. One possibility is to alter the Housing Trust Fund payment formula to collect more money during the early stages of redevelopment without jeopardizing its pace and quality.

Appendix A. Pro-forma Analysis & Assumptions

Exhibit A1. Pro-forma Analysis Assumptions

Assumptions					
Base Property Assumptions					
# of Units	300				
Parking Type	High Rise: Below Grade Podium: Above Grade				
Parking Ratio (Per Unit)	1.65				
Number of Units	Total	Market	40% AMI	60% AMI	80% AMI
Market Development/No MIHUs	300	300	-	-	-
MIHU Requirement	300	255	15 (5%)	15 (5%)	15 (5%)

Exhibit A2. High-Rise Apartment Development Pro-forma

Building Type: High-Rise			No MIHU Requirement	MIHU Requirement
Assumptions				
Project Cost Assumptions				
Land (Per Unit) (1)			$53,501	$53,501
Vertical Construction + Sitework Cost (Per Unit)			$210,000	$210,000
Parking Cost (Per Space)—Below Grade Parking			$30,000	$30,000
Soft Costs (% of Hard Costs)			13.0%	13.0%
Operating Assumptions				
Average Market Rents (Unit) (2)			$2,800	$2,800
40% AMI (2)			$831	$831
60% AMI			$1,322	$1,322
80% AMI			$1,812	$1,812
Other Income (Per Unit)			$105	$105
Operating Expenses (Per Unit) (3)	MIHU: 10% Premium		$9,846	$10,831
Loan Assumptions				
Development Period (Months)			30	30
Average Loan Draw Balance (% of Max)			50.0%	50.0%
Development Budget				
Uses:				
Land			$16,050,343	$16,050,343
Hard Construction Costs			$77,850,000	$77,850,000
Soft Costs			$10,120,500	$10,120,500
Contingency (HC/SC)	(10.0%	/10%)	$8,797,050	$8,797,050
Development Fee	5.0%		$4,838,378	$4,838,378
Payment in Lieu	$2,000	/Unit	$600,000	$0
Interest Expense	4.0%		$4,345,918	$4,323,868
Financing Fees	1.0%		$858,215	$853,861
Total			$123,460,404	$122,834,000
Sources:				
Construction Loan	70%		$86,422,283	$85,983,799.77
Equity	30%		$37,038,121	$36,850,200
Total	100%		$123,460,404	$122,834,000
Permanent Loan Assumptions:				

Payment in Lieu	$2,000	/Unit	$600,000	$0
Interest Expense	4.0%		$2,111,319	$2,095,655
Financing Fees	1.0%		$580,877	$576,568
Total			$83,563,354	$82,943,380
Sources:				
Construction Loan	70%		$58,494,348	$58,060,366.33
Equity	30%		$25,069,006	$24,883,014
Total	100%		$83,563,354	$82,943,380
Permanent Loan Assumptions:				
Loan-to-Cost Ratio			70.0%	70.0%
Loan Amount			58,494,348	58,060,366
Interest Rate			5.0%	5.0%
Amortization Period			30	30
Stabilized Operating Pro Forma				
Gross Income			$9,000,000	$8,363,640
Vacancy Loss (4)	5.50%		-495,000	-460,000
Effective Rental Income			$8,505,000	$7,903,640
Other Income	See above		$351,185	$351,185
Collection Loss (5)	0.50%		-44,281	-41,274
Effective Gross Income			$8,811,904	$8,213,551
Operating Expenses	See above		-2,638,673	-2,902,540
Real Estate Taxes (6)	1.382%	@7% Cap	-1,010,405	-868,245
Capital Reserves	$150		-45,000	-45,000
Net Operating Income			**$5,117,826**	**$4,397,766**
Debt Service			-2,924,717	-2,903,018
Cash Flow After Debt Service			**$2,193,109**	**$1,494,748**
Stabilized Return on Investment			**6.1%**	**5.3%**
Cash-on-Cash Return			**8.7%**	**6.0%**
Total Development Cost per Unit			$278,545	$276,478

Notes:

1. Land costs sourced from representative development pro-forma supplied by developer.

2a. High-rise market rental rates are assumed to be a bit higher and have accordingly been adjusted upward in the pro-forma analysis.

2b. Affordable unit rental rates for each AMI category are an average of the maximum gross rent for 1, 2, and 3-bedroom units for each AMI category as specified in *CDHC, CR-120 proposal (rev. 2/19/15).*

2c. AMI rental rates reflect a utility allowance of $151 as specified in *CDHC, CR-120 Options for Discussion-Summary (rev. 2/4/15).*

3a. Operating expenses supplied by developer.

3b. Due to the operational complexity of mixing market rate and income-restricted units and the need to verify household income levels, operating costs are assumed to be slightly higher in a MIHU scenario.

4a. According to Delta Associates, the Baltimore metro region's apartment vacancy rate between 2013 and 2014 ranged from 4.6-5.8 percent during what has been considered a strong apartment market.

4b. Transwestern Mid-Atlantic Multifamily Group. (2014). *Mid-Atlantic Apartment Outlook: A Market Report for Multifamily Investors & Executives* (Q4 2014). p. 6.

5. According to the National Apartment Association, "2014 Survey of Operating Income & Expenses in Rental Apartment Communities" collection losses as a % of gross potential rent are 0.6% for garden style properties and 0.4% for mid/high-rise properties. This Pro-Forma uses an average across building types of 0.5%.

6a. Howard County real property tax rate of 1.382 per $100 of assessed property value (or 1.382%). This rate breaks down as follows (per $100 assessment): County Tax ($1.01), State Tax ($0.11), Fire Tax ($0.18), Ad Valorem ($0.08).

6b. Source: Howard County, Maryland. http://www.howardcountymd.gov/departments.aspx?ID=1465.

held constant over the years. Equation (2) also implies that the value for the x% is determined by other terms in the equation.

Introducing the total Housing Trust Fund payments over time ($\sum_1^{20} Deposit_t$) to the left-side of the equation (2):

$$\sum_1^{20} Deposit_t = (x\%) \sum_{t=1}^{20} Unit_t \times Rent_{mkt,t} - (x\%) \sum_{t=1}^{20} Unit_t \times Rent_{aff,t}$$

Solving for x%, the equation becomes:

$$x\% = \sum_1^{20} Deposit_t \Big/ \sum_{t=1}^{20} Unit_t \times Rent_{mkt,t} - \sum_{t=1}^{20} Unit_t \times Rent_{aff,t} \quad \cdots (3)$$

The equation (3) is the formula to identify the proportion of the affordable unit that equates the total Housing Trust Fund payments that the developer has to make over the years. Using the assumptions used in the Macro analysis section of the report, the components in equation (3) are determined. The exhibit below reflects the details.

Year	# of homes in operation	$\sum_1^{20} Deposit_t$ (in present value)	Average market rental rate (\$)/unit	$\sum_{t=1}^{20} Unit_t \times Rent_{mkt,t}$ (in present value)	Average affordable rental rate (\$) / unit	$\sum_{t=1}^{20} Unit_t \times Rent_{aff,t}$ (in present value)
1	324	$648,000	$2,500	$9,185,400	$1,322	$4,856,015
2	648	$626,470	$2,563	$17,680,817	$1,355	$9,347,259
3	972	$1,956,228	$2,627	$25,525,123	$1,389	$13,494,282
4	1296	$2,049,361	$2,692	$32,755,244	$1,423	$17,316,606
5	1620	$1,981,269	$2,760	$39,406,250	$1,459	$20,832,771
6	1944	$1,915,440	$3,168	$50,972,817	$1,495	$24,060,383
7	2268	$1,851,799	$3,247	$57,234,736	$1,533	$27,016,158
8	2591	$1,784,746	$3,328	$62,930,083	$1,571	$29,704,497
9	2914	$2,078,014	$3,412	$68,116,872	$1,610	$32,152,785
10	3237	$2,144,722	$3,497	$72,825,270	$1,651	$34,375,261
11	3560	$2,073,462	$3,584	$77,083,897	$1,692	$36,385,435
12	3883	$2,004,570	$3,674	$80,919,895	$1,734	$38,196,117
13	3983	$599,990	$3,766	$79,886,333	$1,777	$37,708,251
14	4083	$580,055	$3,860	$78,816,259	$1,822	$37,203,151
15	4183	$560,782	$3,956	$77,713,874	$1,867	$36,682,799
16	4283	$542,150	$4,055	$76,583,115	$1,914	$36,149,053
17	4383	$524,136	$4,157	$75,427,668	$1,962	$35,603,655
18	4483	$506,722	$4,261	$74,250,982	$2,011	$35,048,232
19	4583	$489,885	$4,367	$73,056,284	$2,061	$34,484,306
20	4683	$473,609	$4,476	$71,846,586	$2,113	$33,913,299
		$25,391,411		**$1,202,217,502**		**$574,530,314**

Plugging in the outcome of $\sum_1^{20} Deposit_t$, $\sum_{t=1}^{20} Unit_t \times Rent_{mkt,t}$, and $\sum_{t=1}^{20} Unit_t \times Rent_{aff,t}$ from the above Exhibit to equation (3), the solution for x% is **4.1%**.

$x\% = (\sum_1^{20} Deposit_t) \;/\; (\sum_{t=1}^{20} Unit_t \times Rent_{mkt,t} - \sum_{t=1}^{20} Unit_t \times Rent_{aff,t})$

= \$25,391,411/ (\$1,202,217,502 – \$574,530,314)

= \$25,391,411/ \$627,687,189

= <u>4.05%</u>