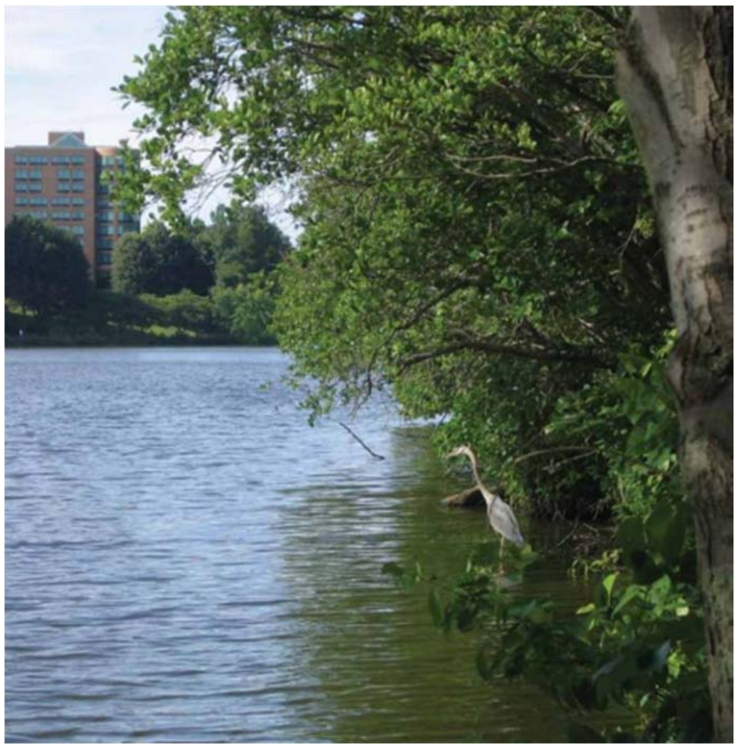
# Strategies to Efficiently Address Housing Affordability in Columbia, MD



Submitted by:
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Submitted to:
The Howard Hughes Corporation

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## Table of Contents



## List of Exhibits

**Strategies to Efficiently Address Housing Affordability in Columbia, MD**

## 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.

proposed mandate essentially more than triples the required contributions of developers. If one broadens the analysis to include property sales, the losses may be even greater since properties operating under MIHU requirements are likely to be worth less than unconstrained ones.

Even considering sales does not generate a complete picture of additional cost. Projects that include affordable units are inherently more complicated and therefore also tend to increase financing and other costs. The $94.2 million figure cited above and below only reflects foregone profit from diminished revenues, not the impact of additional development costs.

Exhibit E1. Details of the Revenue Analysis for Scenario 1 and Scenario 2

| | | | ***Scenario 1: Housing Trust Fund (HTF)*** | | | ***Scenario 2: Inclusionary mandate (MIHU)*** | | | |
|---|---|---|---|---|---|---|---|---|---|
| Yr | # of homes built, year | # of homes operated | Average market rent ($)/unit | **Revenue** | ***Revenue (In PV)*** | # of units @ Market & Affordable rates (in parenthesis) | Average affordable rent ($)/unit | **Revenue** | ***Revenue (In PV)*** |
| 1 | 324 | 324 | $2,500 | $9,185,400 | $9,185,400 | 275 (49) | $1,322 | $8,535,992 | $8,535,992 |
| 2 | 324 | 648 | $2,563 | $18,830,070 | $17,680,817 | 551 (97) | $1,355 | $17,498,784 | $16,430,783 |
| 3 | 324 | 972 | $2,627 | $28,951,233 | $25,525,123 | 826 (146) | $1,389 | $26,904,380 | $23,720,497 |
| 4 | 324 | 1296 | $2,692 | $39,566,685 | $32,755,244 | 1102 (194) | $1,423 | $36,769,320 | $30,439,448 |
| 5 | 324 | 1620 | $2,760 | $50,694,815 | $39,406,250 | 1377 (243) | $1,459 | $47,110,691 | $36,620,228 |
| 6 | 324 | 1944 | $3,168 | $69,837,177 | $50,972,817 | 1652 (292) | $1,495 | $64,306,322 | $46,935,952 |
| 7 | 324 | 2268 | $3,247 | $83,513,624 | $57,234,736 | 1928 (340) | $1,533 | $76,899,643 | $52,701,949 |
| 8 | 323 | 2591 | $3,328 | $97,792,502 | $62,930,083 | 2202 (389) | $1,571 | $90,047,685 | $57,946,245 |
| 9 | 323 | 2914 | $3,412 | $112,733,128 | $68,116,872 | 2477 (437) | $1,610 | $103,805,067 | $62,722,259 |
| 10 | 323 | 3237 | $3,497 | $128,359,665 | $72,825,270 | 2751 (486) | $1,651 | $118,194,038 | $67,057,769 |
| 11 | 323 | 3560 | $3,584 | $144,697,070 | $77,083,897 | 3026 (534) | $1,692 | $133,237,579 | $70,979,127 |
| 12 | 323 | 3883 | $3,674 | $161,771,121 | $80,919,895 | 3301 (582) | $1,734 | $148,959,426 | $74,511,328 |
| 13 | 100 | 3983 | $3,766 | $170,085,690 | $79,886,333 | 3386 (597) | $1,777 | $156,615,511 | $73,559,620 |
| 14 | 100 | 4083 | $3,860 | $178,714,881 | $78,816,259 | 3471 (612) | $1,822 | $164,561,301 | $72,574,292 |
| 15 | 100 | 4183 | $3,956 | $187,669,227 | $77,713,874 | 3556 (627) | $1,867 | $172,806,495 | $71,559,212 |
| 16 | 100 | 4283 | $4,055 | $196,959,594 | $76,583,115 | 3641 (642) | $1,914 | $181,361,098 | $70,518,005 |
| 17 | 100 | 4383 | $4,157 | $206,597,186 | $75,427,668 | 3726 (657) | $1,962 | $190,235,427 | $69,454,066 |
| 18 | 100 | 4483 | $4,261 | $216,593,558 | $74,250,982 | 3811 (672) | $2,011 | $199,440,122 | $68,370,570 |
| 19 | 100 | 4583 | $4,367 | $226,960,626 | $73,056,284 | 3896 (687) | $2,061 | $208,986,155 | $67,270,488 |
| 20 | 100 | 4683 | $4,476 | $237,710,675 | $71,846,586 | 3981 (702) | $2,113 | $218,884,839 | $66,156,593 |
| **Total Revenue:** | | | | **$2,567,223,927** | **$1,202,217,502** …(1) | | | **$2,365,159,874** | **$1,108,064,424** …(2) |
| **Total Additional Cost to Developers in Form of Foregone Revenue/Profit:** | | | | | | **(1)-(2)** | **$94,153,078 ($202,064,052 in nominal term)** | | |

Our micro-level analysis indicates that compliance would likely bring investment returns to levels that would not support ongoing redevelopment in Downtown Columbia. The study team took the analysis one step further by analyzing representative development pro-formas. Based on that analysis, we find that the return for investors in Downtown Columbia's redevelopment will be reduced enough to frustrate construction. Exhibit E2 provides baseline assumptions of the study team's pro-forma analysis. Exhibit E3 indicates that for high-rise multifamily development, the newly proposed requirements for affordable units would reduce cash-on-cash return from 3.2 percent to just 1.5 percent. Exhibit E4 indicates that for podium apartment units, the cash-on-cash return would decline from 8.7 percent 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.

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<br>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 |

- Possible Policy Solutions

The Sage study team puts forth five potential solutions that could accelerate the formation of affordable housing in and around Columbia without jeopardizing Downtown's 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.

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 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 addressing housing affordability.

3. Front-Load Housing Trust Fund Payments

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. This presumes that the projects will obtain financing in the first place in the presence of MIHU requirements. 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.

4. Reduce Required Parking Ratios for Inclusionary Developments

The required parking space per unit ratio is 1.65 for developments in Downtown Columbia. Developing parking can be particularly expensive—as much as $35,000 per space. Reducing the required parking ratio to 1.15 spaces per unit would significantly reduce the financial burden on the developer of including affordable housing in an apartment development, thereby making it more likely the development will proceed and affordable housing goals will be met.

5. Dramatically Alter Fee Structures and Development Requirements for Smaller Units

Policymakers may want to consider other mechanisms by which to reduce developer costs and increase incentives to supply affordable units. For instance, Howard County may need to consider altering fee structures. Today's requirements push developers toward larger, higher-rent units because fees are often on a per-unit rather than a per square foot or per bedroom basis.

## 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.

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

- Some Relevant History

When contemplating Columbia, Maryland, James W. Rouse envisioned "the most livable, the most beautiful and the most effective city in America."[3] Rouse, known for his unique and innovative urban concepts, designed a community that emphasized inter-connectivity among residents, employers, and essential services. The design encompasses nine self-contained villages allocated around a larger town center. Significant entertainment facilities and retail centers were pre-phased in the Town Center to spur growth in the new community.[4] Today, the community of Columbia is home to about 103,000 people.[5]

Columbia will celebrate its 50th anniversary in 2017. With the passage of time comes the need for change. Between 2005 and 2006, a series of focus groups and Charette sessions were conducted to help introduce modern development concepts to the community. In 2007, Howard County's Department of Planning and Zoning published detailed planning guidelines for the redevelopment of Downtown Columbia. General Growth Properties (GGP) became responsible for preparation of a "general plan amendment and zoning regulation amendment for submission to the County Council." GGP acquired the Rouse Company (owned by Columbia's original developer James Rouse) in 2004, becoming the majority landowner in Downtown Columbia.[6]

Despite expressions of concern regarding the availability of affordable housing during a period of intense community discussions,[7] the 2007 planning guidelines did not contain any extensive detail or recommendations regarding affordability. The guidelines did suggest, however, that the issue of housing choice could be addressed through the introduction of various structure types and styles of development, including mid-rise and high-rise apartments, condominiums, lofts, stacked townhomes, and live-work units.[8]

Stakeholders revisited the 2007 development plan in 2010. On February 1st, 2010, the County Council adopted CB58-2009, which led to the publication of the *Downtown Columbia Plan, General Plan Amendment* (2010 Plan), along with CB59-2009, a zoning regulation amendment to initiate a Downtown Columbia revitalization process in the New Town

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[3] Howard County Department of Planning. (2010). *Downtown Columbia Plan: A General Plan Amendment*. Retrieved from http://planhoward.org/downtown_columbia_plan.pdf. (See p. 4 paragraph 6).
[4] International Downtown Association. (2012). *The Evolution of Columbia, Maryland: A New Downtown for America's Best Known Master Planned Community*. Retrieved from https://www.ida-downtown.org/eweb/docs/2012%20 Awards/HowardSummary.pdf.
[5] Precisely 102, 907. U.S. Census Bureau, American Community Survey 2013 1-Year Estimates. Table DP05.
[6] Howard County Department of Planning. (2010). *Downtown Columbia Plan: A General Plan Amendment,* op. cit., p. 1 paragraph 4.
[7] *Downtown Columbia: A Community Vision*. (2007). Retrieved from http://www.howardcountymd.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6442474011&libID=6442474003. (See p. 2 paragraph 5).
[8] Ibid. *Downtown Columbia: A Community Vision*. (p. 20, paragraph 3)

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).

## B. The Challenge of Supplying Affordable Housing in the New Downtown Columbia

- Defining Affordability

"Affordable" housing has historically been considered housing that represents 30 percent or less of family income. According to Schwartz et al., "…this conventional rule of thumb evolved from the United States National Housing Act of 1937, which created the public housing program."[15] The law introduced the notion that 30 percent of household income can be devoted to housing costs before the household is characterized as being burdened. Income limits rather than maximum rents were established for public housing eligibility. A tenant's income could not exceed five to six times the rent.[16]

Public policymakers have striven to create more affordable units by requiring developers to construct them as part of their overall development. These policies are attractive from certain perspectives in that they place little burden on government and impose costs on builders and investors. However, these policies can generate unintended consequences by reducing the financial standing of a developer's investment and therefore making it less likely that the project will be financed.

Accordingly, the objective of the federally operated Low-Income Housing Tax Credit (LIHTC) program reflects public efforts to reduce the financial burden on developers of affordable homes. By granting developers of eligible low-income housing projects a tax credit for 10-years, the LIHTC is aimed at supplying incentives for private sector investors to provide start-up capital to affordable housing projects.[17]

Exhibits 1 and 2 provide statistical detail regarding Columbia and Howard County income levels and rents as a fraction of income, respectively. According to the Howard County Housing Commission, for Howard County rental households that earn less than $50,000 per annum, there is a shortage of approximately 5,600 affordable rental units. Exhibit 3 provides relevant detail regarding this estimate. The point is that affordable housing is an issue in Howard County. However, as with any issue, policymakers should seek to address it in a manner that minimizes total opportunity cost.

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[15] Schwartz, Mary & Ellen Wilson. (2008). *Who can afford to live in a home? a look at data from the 2006 American Community Survey 1–2*. Available at http://www.census.gov/housing/census/publications/who-can-afford.pdf.; also in Sarah Pickering. (2013-2014). Our house: Crowdfunding affordable homes with tax credit investment partnerships. *Review of Banking & Financial Law*, Vol.33. Retrieved from http://www.bu.edu/rbfl/files/2014/03 /RBFL-Vol-33.2_Pickering.pdf (p. 954).
[16] Ibid. Mary Schwartz & Ellen Wilson (2008). (p. 1 paragraph 3).
[17] Office of the Comptroller of the Currency. (March 2014). *Low-Income Housing Tax Credits: Affordable housing investment opportunities for banks.* (Community Developments Insights). Retrieved from http://www.occ.gov/topi cs/community-affairs/publications/insights/insights-low-income-housing-tax-credits.pdf. (p. 2 paragraph 2-3).

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 2. Rental Housing Costs as a Percentage of Household Income in the Past 12-Months

| | Columbia, Maryland | Howard County, Maryland |
|---|---|---|
| Total Rental Households | 13,531 | 29,311 |
| Rental households earning less than $20,000: | 1,830 | 3,127 |
| *Rental housing costs (% of income)* | | |
| Less than 20.0 percent | 0 | 46 |
| 20 to 29 percent | 56 | 56 |
| 30.0 percent or more | 1,774 | 3,025 |
| Rental households earning $20,000 to $34,999: | 1,528 | 3,834 |
| *Rental housing costs (% of income)* | | |
| Less than 20.0 percent | 0 | 0 |
| 20 to 29 percent | 46 | 117 |
| 30.0 percent or more | 1,482 | 3,717 |
| Rental households earning $35,000 to $49,999: | 1,677 | 2,751 |
| *Rental housing costs (% of income)* | | |
| Less than 20.0 percent | 95 | 176 |
| 20 to 29 percent | 94 | 191 |
| 30.0 percent or more | 1,488 | 2,384 |
| Rental households earning $50,000 to $74,999: | 2,563 | 6,711 |
| *Rental housing costs (% of income)* | | |
| Less than 20.0 percent | 0 | 197 |
| 20 to 29 percent | 1,572 | 3,138 |
| 30.0 percent or more | 991 | 3,376 |
| Rental households earning $75,000 or more: | 5,398 | 11,313 |
| *Rental housing costs (% of income)* | | |
| Less than 20.0 percent | 3,687 | 7,106 |
| 20 to 29 percent | 1,373 | 3,218 |
| 30.0 percent or more | 338 | 989 |
| Zero or negative income | 53 | 219 |
| No cash rent | 482 | 1,356 |

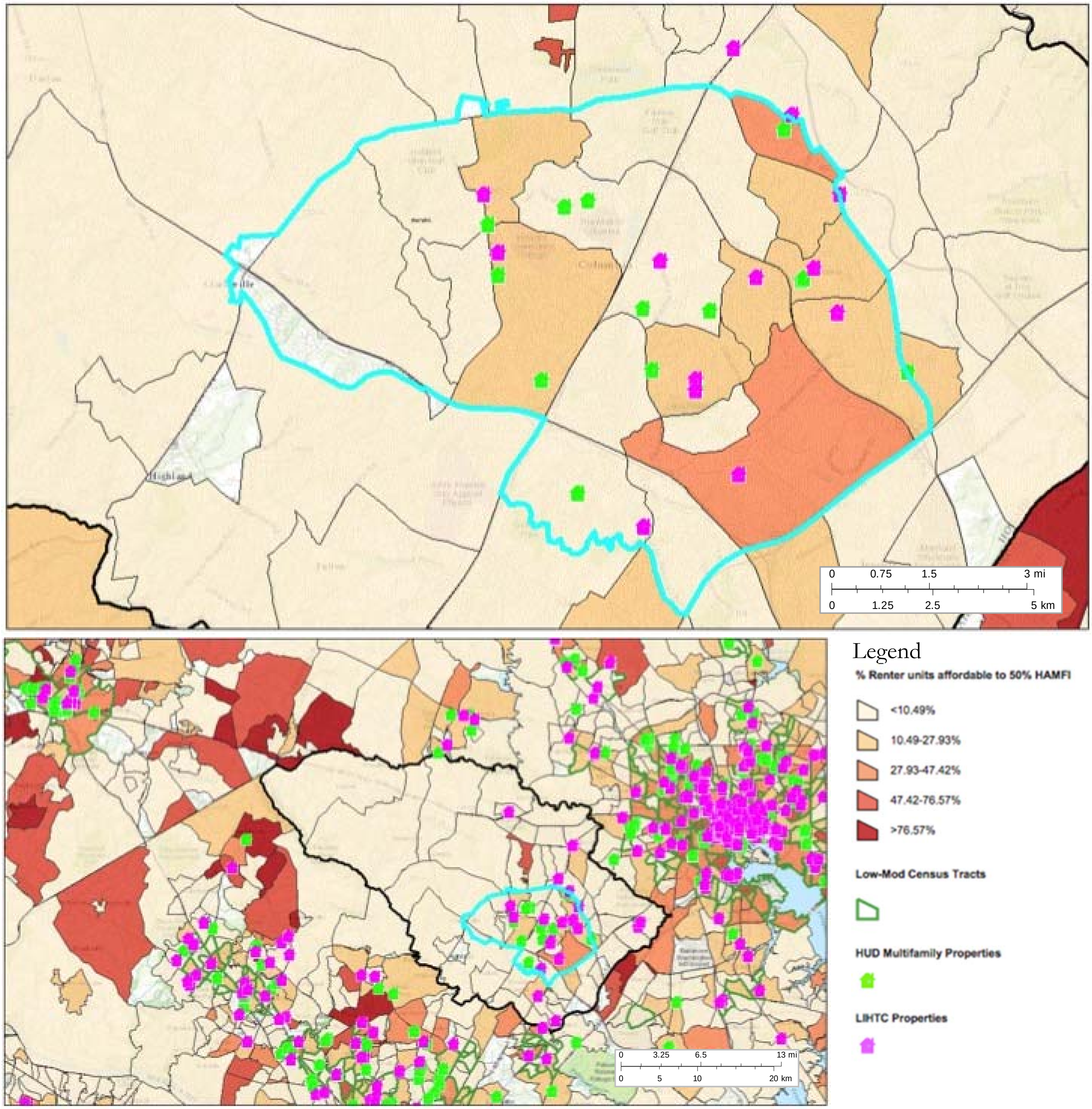
Source: U.S. Census Bureau, American Community Survey 2013 1-Year Estimates: Table B25106.

Exhibit 3. Howard County Housing Commission, Estimate of Need for Affordable Housing in Howard County, January 2014

| | |
|---|---|
| Renter Households Making ≤ $50,000: | 9,300* |
| Rental Units associated with what are Deemed to be Affordable Rents: | 3,624 |
| Affordable Units Needed: | 5,676 |

Source: Overview of Current HCH Programs, January 2014 *33% of all renter households.

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/#.

Affordable Housing Policy in Howard County

- MIHU Percentage Requirements and Fee-in-Lieu

*MIHU Overview. (From Howard County)*: The Moderate Income Housing Unit (MIHU) Program is an inclusionary zoning program that requires developers of new housing in certain zoning districts to sell or rent a certain percentage (generally 10 to 15 percent) of the dwelling units built to households of moderate income at affordable prices and rents. MIHUs are sold or rented through the County's Department of Housing and Community Development according to procedures and standards set forth in the MIHU Law (Section 13.400 et seq. of the Howard County Code) and regulations established under it. Since its inception in 1996[18] and through December 2013, the MIHU Program has awarded 106 affordable for-sale homes and created 434 affordable rental units for moderate-income households.[19]

In 2013, the County enacted Council Bills 34 and 35, which expanded the program to new zones and broadened the program to reach low-income households. The new legislation expanded MIHU requirements to help increase the number of affordable housing units in zoning districts that previously had no requirement. Additionally, it created potential fee-in-lieu income opportunities for the Department to use to create more affordable housing opportunities for low- and moderate-income households living in the County.[20]

*MIHU Alternative Compliance*: The Howard County Code allows for alternative compliance in Section 13.402(e) and (f) and Sections 13.402A and 13.402C. While the County Code generally requires that MIHU units remain in the program and on-site, developers may request alternative compliance on a case-by-case basis when MIHUs may not be economically feasible. The Housing and Community Development Board must review requests for alternative compliance.

If MIHU requirements are not met, the developer/builder may pursue one or a combination of three methods of alternative compliance: (a) substituting moderate income housing units by purchasing, rehabilitating, and offering for sale certain existing housing units located throughout the County under certain conditions; (b) substituting units by offering a certain

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[18] "The MIHU Law was first enacted in 1996. The law initially applied only in mixed use zones, but was later expanded to other zones and further revised in 2001, 2004, 2006, 2007, 2011 and 2013." Source: Howard County Housing. *Moderate Income Housing Unit Program Annual Report 2013*. Retrieved from http://www.howard countymd.gov/housingpublications.htm.

[19] Howard County Housing. *Moderate Income Housing Unit Program Annual Report 2013*. Retrieved from http://www.howardcountymd.gov/housingpublications.htm.

[20] Ibid. *Moderate Income Housing Unit Program Annual Report 2013*. p.7.

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).

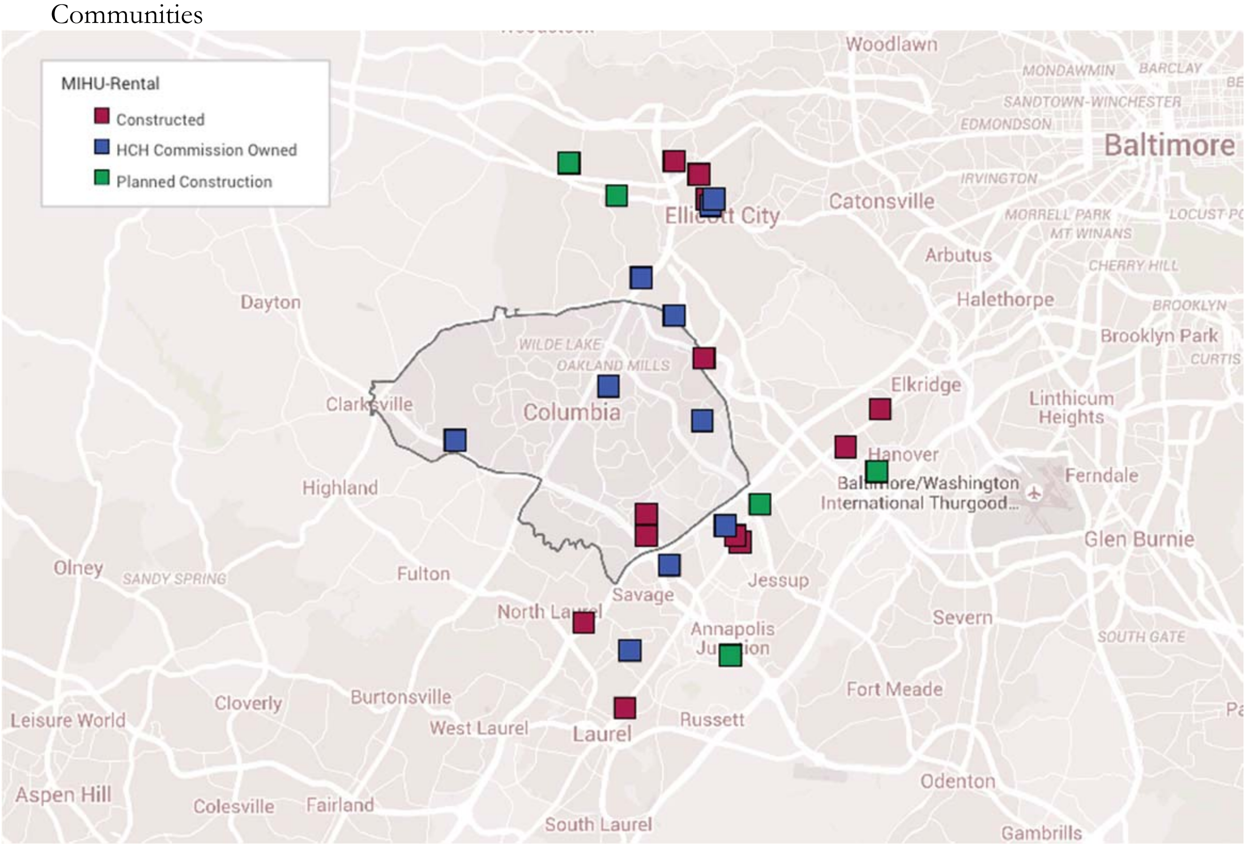
Exhibit 5. Maximum Rent Determined under MIHU Program, January 1, 2015–June 30, 2015

| Unit Size | Occupancy Base, in person(s)(a) | Adjustment Percentage(b) …(1) | Adjusted Median Income ($109,476×(1)) | 60% of Adj. Income …(2) | Annual Rent (=30% of (2)) | Maximum Monthly Rent(c) |
|---|---|---|---|---|---|---|
| *Studio* | 1.0 | 60% | $65,686 | $39,411 | $11,823 | **$985** |
| *One Bedroom* | 1.5 | 75% | $82,107 | $49,264 | $14,779 | **$1,232** |
| *Two Bedroom* | 3.0 | 90% | $98,528 | $59,117 | $17,735 | **$1,478** |
| *Three Bedroom* | 4.5 | 104% | $113,855 | $68,313 | $20,494 | **$1,708** |
| *Four Bedroom* | 6.0 | 116% | $126,992 | $76,195 | $22,859 | **$1,905** |
| Howard County median income: $109,476 | | | | | | |

Source: Howard County Department of Housing and Community Development; U.S. Census Bureau, American Community Survey, 1-year Estimate.

Exhibits 6 and 7 provide some sense of the geography and magnitude of the MIHU provision. Note in Exhibit 7 the gap between market rent and MIHU rent is often in the range of $400/month per unit. As this discussion will indicate, that gap is much larger for the product to be developed downtown, which means that the loss in developer/owner revenues is much larger per unit.

Exhibit 6. Existing and Planned Howard County Moderate Income Housing Units Rental Communities




Source: Google Maps. Notes: 1. Location of Aladdin South is an approximation. 2. Planned Deep Falls rental community not shown on map (plan is currently on hold).

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 |

- Why Downtown Columbia Is Different

Some may question why Downtown Columbia should be allowed to comply with County housing affordability requirements through an alternative mechanism (Housing Trust Fund payments) rather than by fulfilling the 15-percent affordable unit requirement. The explanations are relatively straightforward, though that does not mean they are accepted by all.

First, Downtown Columbia represents an untested market. The scale proposed for Downtown Columbia is unprecedented, and thus there is a significant amount of uncertainty regarding how much additional cost developers are willing and able to bear.

Second, as discussed briefly above, market apartment rents will be higher than has ever been considered in any other part of Howard County. This is due to a combination of higher land and construction costs (e.g., because of structured parking, higher densities, and ultimately high-rise construction). Given Downtown Columbia's stated goal of 5,500 residential units, the transition to high-rise construction must take place relatively soon.

This means that a given Downtown Columbia developer's opportunity cost is much higher on a per affordable housing unit basis (more costs needed to be recovered per unit on average, hence the higher average rents). Importantly, affordability is based on income thresholds whereas market rent is determined by the location of the unit, construction costs, land costs, and assorted amenities. Consequently, imposing MIHU requirements in the context of expensive construction generates particularly large losses in rental income. This also means that investors can anticipate significantly diminished returns on equity, which jeopardizes funding and forward development momentum. It is for this reason that Columbia should be viewed as being at least somewhat distinct.

Theoretically, it is conceivable that Howard County could step in financially to help bridge the development cost/affordability divide. However, given Howard County's current fiscal situation as reflected in Exhibit 8 below, it is clear the County today lacks the resources necessary to materially alter the mathematics of housing affordability in and around Downtown Columbia either by subsidizing development or supporting households directly. The County's FY2015 Spending Reduction Plan calls for total spending reductions exceeding $11.7 million, including significant reductions in spending on technology, transportation, health, and housing.[28]

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[28] Howard County Budget Office. (n.d.) *FY 2015 Spending Reduction Plan.* Retrieved from http://www.co.ho.md.us/workarea//downloadasset.aspx?id=6442478181.

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]

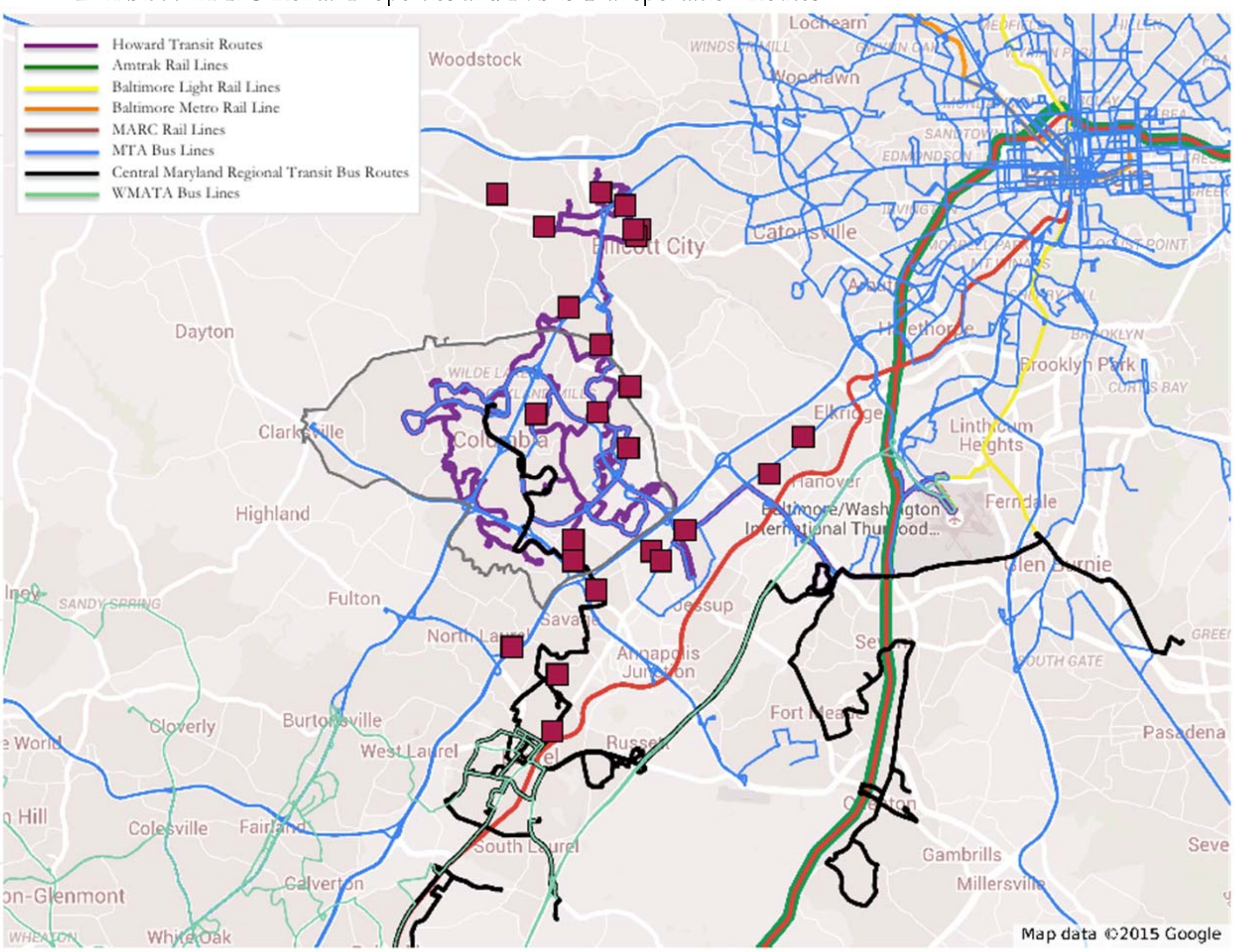
[29] Montgomery County, Maryland Office of Management and Budget. https://reports.data.montgomerycountymd.gov/reports/BB_FY15_APPR/HCA.

- The Geography of Affordable Housing

There are many reasons to support the production of affordable housing. The availability of affordable housing increases spending power in other categories, such as nutrition, utilities, education, childcare, and health care. To the extent that this housing is located proximate to employment centers, it also may contribute to improved employment prospects.

The definition of "proximate", however, varies in available academic literature. What is likely more important is access to these employment centers. The following exhibit relates the location of MIHU rental properties to public transportation routes. Although many of the MIHU units are not in Columbia or Ellicott City, the units frequently enjoy access to these and other employment markets.

Exhibit 9. MIHU Rental Properties and Public Transportation Routes




Source: Google Maps; Howard County Data Download and Viewer https://data.howardcountymd.gov/; MD iMAP http://data.imap.maryland.gov/.

## 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.

margins, limiting the cash flow available to deal with problems as they arise. By design, the housing credit does not provide enough capital to finance the entire development and developers must seek other sources of financing.

- *Increased complexity and longer timelines.* More complex deals require lengthier periods to assemble, which increases both soft costs and land holding costs. Financing and project details may need to be reworked as time goes by as a result of changing circumstances. Interest rates for various sources of financing may change as can the price at which investors purchase housing credits.
- *Project phasing.* Developers may be required to split larger developments into phases as a consequence of limited funding and the requirements of multiple financing sources. Numerous costs are associated with project phasing, including soft costs that are incurred for each phase, such as developer, application, design, engineering, legal, and professional fees. In addition, the more extensive timeline increases land-holding costs when phased land acquisition is not feasible.[32]

- Land Costs

As the exhibit below indicates, land costs can vary tremendously by community. In the sample of developed multifamily communities reflected below, the value of land per acre varies by more than an order of magnitude between the most expensive and least expensive land.

This represents an important aspect of the public policy considerations at hand. All things being equal, supplying affordable units is most efficient where land costs are low. The other principal to consider is one of opportunity cost. Situating affordable units in a community is most efficient when it displaces the least amount of other potential beneficial uses. It is important to note in this context that many separate beneficial uses are planned for the redevelopment of Downtown Columbia.

[32] Ibid. *Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals.* (January 2014). p. 14-15.

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.

## D. What Would Be the Cost of Proposed Affordable Housing Mandates to Downtown Columbia's Developers?

- Macro-Level Analysis

Using known parameters and a handful of basic assumptions detailed below, the Sage study team calculated the cost of proposed affordable housing mandates that would supplant the existing Housing Trust Fund payment structure in Downtown Columbia. The two scenarios are specified below:

Scenario 1: *Existing Housing Trust Fund (HTF) payment structure*

In accordance with the current structure as agreed upon in the 2010 General Plan, the developer is required to pay $2,000/unit for the first 1,500 units, $7,000/unit for the next 2,000 units, and $9,000/unit for the remaining 2,000 units. As specified in CEPPA 26, the rates are inflated annually based on the Engineering News Record (ENR) Building Cost Index.[33] To date 817 units have already been built or are planned for immediate construction.

Scenario 2: *Newly proposed inclusionary housing (MIHU) mandate*

Under this scenario, 15 percent of to-be-developed rental units must be affordable in accordance with the following parameters: 5% at 40 percent of the County Area Median Income (AMI), 5% at 60 percent of AMI, and 5% at 80 percent of AMI. Based on the most recent revision to the CDHC proposal, the corresponding rental rates are equal to $982 (40% of AMI), $1,473 (60% of AMI), and $1,963 (80% of AMI), averaged among one-, two-, and three-bedroom units. Excluding the utility allowance of $151[34], these rates translate into $831(40% of AMI), $1,322 (60% of AMI), and $1,812 (80% of AMI).

Exhibit 11. Affordable Unit Rates Proposed by the CDHC, as of February 19th

| | 1 bedroom | 2 bedrooms | 3 bedrooms | **Average of all unit sizes** | **Less utility allowance ($151)** |
|---|---|---|---|---|---|
| 40% of AMI | $821 | $985 | $1,139 | ***$982*** | **$831** |
| 60% of AMI | $1,232 | $1,478 | $1,708 | ***$1,473*** | **$1,322** |
| 80% of AMI | $1,642 | $1,971 | $2,277 | ***$1,963*** | **$1,812** |
| | | | | ***Average of 40%, 60%, & 80% of AMI*** | ***$1,322**** |

Source: CDHC, CR-120 proposal, as revised on February 19th. NOTE: *Since the proposed requirement stipulates equal proportions for these units, the average rate among the three can be used in the analysis without producing any error.

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[33] County Council of Howard County, Maryland. Bill No. 24-2012. Section 28.115. Available at apps.howardcountymd.gov/olis/GetFile.aspx?id=266.

[34] See "CDHC draft recommendations 2-4-15" (pdf file), handout from CDHC board meeting 2/4/15.

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.

Exhibit 12. Estimated HTF Costs for To-be-built Multifamily Units in Downtown Columbia

| Year | # of units built | HTF payment that year | (In PV) | Year | # of units built | HTF payment that year | (In PV) |
|---|---|---|---|---|---|---|---|
| 1 | 324 | $648,000 | $648,000 | 11 | 323 | $3,892,174 | $2,073,462 |
| 2 | 324 | $667,190 | $626,470 | 12 | 323 | $4,007,440 | $2,004,570 |
| 3 | 324 | $2,218,803 | $1,956,228 | 13 | 100 | $1,277,436 | $599,990 |
| 4 | 324 | $2,475,524 | $2,049,361 | 14 | 100 | $1,315,267 | $580,055 |
| 5 | 324 | $2,548,836 | $1,981,269 | 15 | 100 | $1,354,218 | $560,782 |
| 6 | 324 | $2,624,319 | $1,915,440 | 16 | 100 | $1,394,323 | $542,150 |
| 7 | 324 | $2,702,038 | $1,851,799 | 17 | 100 | $1,435,615 | $524,136 |
| 8 | 323 | $2,773,471 | $1,784,746 | 18 | 100 | $1,478,131 | $506,722 |
| 9 | 323 | $3,439,105 | $2,078,014 | 19 | 100 | $1,521,905 | $489,885 |
| 10 | 323 | $3,780,224 | $2,144,722 | 20 | 100 | $1,566,976 | $473,609 |
| | | | **TOTAL:** | | **4683** | **$43,120,994** | **$25,391,411** |

*Analytical Findings*

The net present value of the cost to Downtown Columbia's redevelopers of Housing Trust Fund (HTF) payment to be made (Scenario 1) is approximately $25.4 million. The cost of compliance with proposed affordable housing mandates (Scenario 2) is calculated as $94.2 million. In other words, the proposed mandate essentially more than triples the required contributions of developers. These analytical findings are neatly summarized in Exhibit 13.

Exhibit 13. Details of the Revenue Analysis for Scenario 1 and Scenario 2

| | | | ***Scenario 1: Housing Trust Fund (HTF)*** | | | ***Scenario 2: Inclusionary mandate (MIHU)*** | | | |
|---|---|---|---|---|---|---|---|---|---|
| Yr | # of homes built, year | # of homes operated | Average market rent ($)/unit | **Revenue** | ***Revenue (In PV)*** | # of units @ Market & Affordable rates (in parenthesis) | Average affordable rent ($)/unit | **Revenue** | ***Revenue (In PV)*** |
| 1 | 324 | 324 | $2,500 | $9,185,400 | $9,185,400 | 275 (49) | $1,322 | $8,535,992 | $8,535,992 |
| 2 | 324 | 648 | $2,563 | $18,830,070 | $17,680,817 | 551 (97) | $1,355 | $17,498,784 | $16,430,783 |
| 3 | 324 | 972 | $2,627 | $28,951,233 | $25,525,123 | 826 (146) | $1,389 | $26,904,380 | $23,720,497 |
| 4 | 324 | 1296 | $2,692 | $39,566,685 | $32,755,244 | 1102 (194) | $1,423 | $36,769,320 | $30,439,448 |
| 5 | 324 | 1620 | $2,760 | $50,694,815 | $39,406,250 | 1377 (243) | $1,459 | $47,110,691 | $36,620,228 |
| 6 | 324 | 1944 | $3,168 | $69,837,177 | $50,972,817 | 1652 (292) | $1,495 | $64,306,322 | $46,935,952 |
| 7 | 324 | 2268 | $3,247 | $83,513,624 | $57,234,736 | 1928 (340) | $1,533 | $76,899,643 | $52,701,949 |
| 8 | 323 | 2591 | $3,328 | $97,792,502 | $62,930,083 | 2202 (389) | $1,571 | $90,047,685 | $57,946,245 |
| 9 | 323 | 2914 | $3,412 | $112,733,128 | $68,116,872 | 2477 (437) | $1,610 | $103,805,067 | $62,722,259 |
| 10 | 323 | 3237 | $3,497 | $128,359,665 | $72,825,270 | 2751 (486) | $1,651 | $118,194,038 | $67,057,769 |
| 11 | 323 | 3560 | $3,584 | $144,697,070 | $77,083,897 | 3026 (534) | $1,692 | $133,237,579 | $70,979,127 |
| 12 | 323 | 3883 | $3,674 | $161,771,121 | $80,919,895 | 3301 (582) | $1,734 | $148,959,426 | $74,511,328 |
| 13 | 100 | 3983 | $3,766 | $170,085,690 | $79,886,333 | 3386 (597) | $1,777 | $156,615,511 | $73,559,620 |
| 14 | 100 | 4083 | $3,860 | $178,714,881 | $78,816,259 | 3471 (612) | $1,822 | $164,561,301 | $72,574,292 |
| 15 | 100 | 4183 | $3,956 | $187,669,227 | $77,713,874 | 3556 (627) | $1,867 | $172,806,495 | $71,559,212 |
| 16 | 100 | 4283 | $4,055 | $196,959,594 | $76,583,115 | 3641 (642) | $1,914 | $181,361,098 | $70,518,005 |
| 17 | 100 | 4383 | $4,157 | $206,597,186 | $75,427,668 | 3726 (657) | $1,962 | $190,235,427 | $69,454,066 |
| 18 | 100 | 4483 | $4,261 | $216,593,558 | $74,250,982 | 3811 (672) | $2,011 | $199,440,122 | $68,370,570 |
| 19 | 100 | 4583 | $4,367 | $226,960,626 | $73,056,284 | 3896 (687) | $2,061 | $208,986,155 | $67,270,488 |
| 20 | 100 | 4683 | $4,476 | $237,710,675 | $71,846,586 | 3981 (702) | $2,113 | $218,884,839 | $66,156,593 |
| **Total Revenue:** | | | | **$2,567,223,927** | **$1,202,217,502** …(1) | | | **$2,365,159,874** | **$1,108,064,424** …(2) |
| **Total Additional Cost to Developers in Form of Foregone Revenue/Profit:** | | | | | | **(1)-(2)** | **$94,153,078 ($202,064,052 in nominal term)** | | |

- 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 14 provides a summary of analytical assumptions while Exhibits 15 and 16 provide summaries of analytical findings for high-rise and podium apartment developments, respectively. The complete pro-forma analysis and assumptions, which are voluminous, are presented in Appendix A.

Exhibit 14. Pro-forma Analysis Assumptions

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

Exhibit 15. 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 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)*.

## E. Possible Policy Solutions

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

The Low-Income Housing Tax Credit (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 may seem complicated, but many local housing and community development agencies are effectively using these tax credits to increase the supply of affordable housing in their communities.[39] There is significant competition among affordable housing developers to secure these tax credit allocations, particularly for the so-called 9 percent credits. Proposed projects must include or incorporate many features viewed as desirable by the relevant state housing authority in order to score competitively within the state's rating system.

*LIHTC Eligibility*. To be eligible for consideration under the LIHTC Program, a proposed project must:

- Be a residential rental property;
- Commit to one of two possible low-income occupancy threshold requirements;
- Restrict rents, including utility charges, in low-income units; and,
- Operate under the rent and income restrictions for 30 years or longer, pursuant to written agreements with the agency issuing the tax credits.

*Occupancy Threshold Requirements*. Projects eligible for housing tax credits must meet low-income occupancy threshold requirements. Project owners may elect one of the following two thresholds:

- *20-50 Rule*: At least 20 percent of the units must be rent restricted and occupied by households with incomes at or below 50 percent of the HUD-determined area median income (adjusted for household size).

- *40-60 Rule*: At least 40 percent of the units must be rent restricted and occupied by households with incomes at or below 60 percent of the HUD-determined area median income (adjusted for household size).

Due to the financial and operational complexity of mixing market rate and income-restricted units, most projects across the country that utilize LIHTC financing are 100% affordable projects.

*Rent Limits*. Program administrators establish rent for each unit such that tenant monthly housing costs (including a utility allowance) do not exceed applicable LIHTC rent limits.

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

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.

Along these lines, policymakers and other stakeholders may want to consider the potential acquisition and rehabilitation or development of low-income housing stock already in existence. Redevelopment could increase density. Low interest home improvement loans could also expand and improve obsolete or aging single family homes in Wilde Lake, Harper's Choice, Oakland Mills, or other areas proximate to Downtown Columbia. This approach is consistent with County policymaking. The rehabilitation and preservation of existing affordable housing is one of the uses specifically authorized by Howard County Title 28.

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 Housing Trust Fund payment structure in terms of foregone net income. There would be additional costs of development due to the expanded complexity of deals, and equity capital may not be available to finance any new residential construction under the MIHU proposal. Accordingly, one possibility would be to alter the Housing Trust Fund payment formula so that more money was collected during the early stages of the redevelopment of Downtown Columbia. This would expand the Housing Trust Fund more rapidly, and may create enough resources to begin supplying affordable units in larger numbers sooner rather than later.

Naturally, such an arrangement would have to be negotiated between Howard County and the project's master developer. However, there may be some room for compromise here.

4. Reduce Required Parking Ratios for Inclusionary Developments

Presently the required parking space per unit ratio is 1.65 for developments in Downtown Columbia.[41] Developing parking can be particularly expensive—on the order of $35,000 per space for below grade parking according to a representative pro-forma analysis made available to the Sage study team. Reducing the required parking ratio to 1.15 spaces per unit would significantly reduce the financial burden on the developer of including affordable housing in an apartment development, thereby making it more likely that development will proceed and that affordable housing goals will be met. Such a reduced parking ratio would be consistent with the more urban vision for the future of Downtown Columbia, which is more walkable and less auto dependent.

[41] Howard Hughes Corporation.

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<br>Podium: Above Grade | | | | |
| Number of Units | Total | Market | 40% AMI | 60% AMI | 80% AMI |
| | 300 | 255 | 15<br>(5%) | 15<br>(5%) | 15<br>(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)*.

5. Dramatically Alter Fee Structures and Development Requirements for Smaller Units

Policymakers may want to consider other mechanisms by which to reduce developer cost and increase incentives to supply affordable units. For instance, Howard County may need to consider altering fee structures.

Today's requirements push developers toward larger, higher-rent units because fees are often on a per-unit rather than a per square foot, per bedroom, or floor area ratio basis. As an example, under current rules defining the redevelopment of Downtown Columbia, a 350 square foot micro unit would require the payment of the same $2,000/unit affordable housing fee, provide 1.65 parking spaces per unit, and count as one unit against the 5,500 unit cap. This is precisely the same as a 3,000 square foot, four-bedroom condominium. This creates a significant disincentive to supply smaller, more affordable units.

Our survey of Columbia also indicates that there are a number of sites that could support additional affordable units if development requirements are altered. Among these are the future fire station site, the future library site, and the prospective redevelopment of Toby's Columbia site.

## 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.

4. Reduce Required Parking Ratios for Inclusionary Developments

The required parking space per unit ratio is 1.65 for developments in Downtown Columbia. Developing parking can be particularly expensive—as much as $35,000 per space. Reducing the required parking ratio to 1.15 spaces per unit would significantly reduce the financial burden on the developer of including affordable housing in an apartment development, thereby making it more likely that development will proceed and that affordable housing goals will be met.

5. Dramatically Alter Fee Structures and Development Requirements for Smaller Units

Policymakers may want to consider other mechanisms by which to reduce developer cost and increase incentives to supply affordable units. For instance, Howard County may need to consider altering fee structures. Today's requirements push developers toward larger, higher-rent units because fees are often on a per-unit rather than on per square foot, per bedroom, or floor area ratio bases.

## 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<br>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<br>(5%) | 15<br>(5%) | 15<br>(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: | | | | |

| | | | | |
|---|---|---|---|---|
| Loan-to-Cost Ratio | | | 70.0% | 70.0% |
| Loan Amount | | | 86,422,283 | 85,983,800 |
| Interest Rate | | | 5.0% | 5.0% |
| Amortization Period | | | 30 | 30 |
| **Stabilized Operating Pro Forma** | | | | |
| Gross Income | | | $10,080,000 | $9,281,640 |
| Vacancy Loss (4) | 5.50% | | -554,400 | -510,490 |
| Effective Rental Income | | | $9,525,600 | $8,771,150 |
| Other Income | See above | | $377,398 | $377,398 |
| Collection Loss (5) | 0.50% | | -49,515 | -45,743 |
| Effective Gross Income | | | $9,853,483 | $9,102,805 |
| Operating Expenses | See above | | -2,953,779 | -3,249,157 |
| Real Estate Taxes (6) | 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** | | | **3.8%** | **1.5%** |
| Total Development Cost per Unit | | | $411,535 | $409,447 |

Exhibit A3. Podium Apartment Development Pro-forma

| **Building Type: Podium** | | | **No MIHU Requirement** | **MIHU Requirement** |
|---|---|---|---|---|
| **Assumptions** | | | | |
| Project Cost Assumptions | | | | |
| Land (Per Unit) (1) | | | $53,501 | $53,501 |
| Vertical Construction + Sitework Cost (Per Unit) | | | $131,890 | $131,890 |
| Parking Cost (Per Space)—Above Grade Parking | | | $16,073 | $16,073 |
| Soft Costs (% of Hard Costs) | | | 17.0% | 17.0% |
| Operating Assumptions | | | | |
| Average Market Rents (Unit) (2) | | | $2,500 | $2,500 |
| 40% AMI (2) | | | $831 | $831 |
| 60% AMI | | | $1,322 | $1,322 |
| 80% AMI | | | $1,812 | $1,812 |
| Other Income (Per Unit) | | | $98 | $98 |
| Operating Expenses (Per Unit) (3) | MIHU: 10% Premium | | $8,796 | $9,675 |
| Loan Assumptions | | | | |
| Development Period (Months) | | | 24 | 24 |
| Average Loan Draw Balance (% of Max) | | | 45.0% | 45.0% |
| **Development Budget** | | | | |
| Uses: | | | | |
| Land | | | $16,050,343 | $16,050,343 |
| Hard Construction Costs | | | $47,523,45 | $47,523,45 |
| Soft Costs | | | $8,078,987 | $8,078,987 |
| Contingency (HC/SC) | (10.0% | /10%) | $5,560,244 | $5,560,244 |
| Development Fee | 5.0% | | $3,058,134 | $3,058,134 |

| | | | | |
|---|---|---|---|---|
| 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.

## Appendix B. Derivation & Analysis of Alternative Inclusionary Housing Goal

The two-scenario analysis presented in this report had shown that the developers have to forego part of the revenue if the inclusionary policy were to be pursued, which results in having to operate a portion of the units at lower (affordable) prices. Naturally, the question becomes what would be the fair share of the cost for the developer should the proposed inclusionary housing policy be pursued. In other words, under the proposed MIHU mandate, what is the reasonable percentage goal for affordable units that equal the lump-sum HTF that the developer had already agreed to pay during the construction phrase?

The percentage in question can be derived by equating the cost to the developer (i.e. foregone revenue) and the total amount of HTF deposits made over the years. A simple algebraic analysis finds that just about 4.1 percent[42] of all residential units have to be the affordable units in order for the developer's foregone revenue to equate the cost associated with the lump-sum HTF payment made over time under the current structure.

*Derivation*

The foregone revenue, that is, the cost to the developer for a specific year, can be mathematically defined as:

$$Cost = Unit \times Rent_{mkt} - \left[x\% \times Unit \times Rent_{mkt} + (1 - x\%) \times Unit \times Rent_{aff}\right] \quad \ldots (1)$$

Where *Unit* refers to the number of units in operation that year, $Rent_{mkt}$ refers to the annual revenue derived from the rental units operated at market rate, $Rent_{aff}$ refers to the annual revenue from the affordable units, and x% refers to the proportion of residential units operated at an affordable rate.

The equation (1) can be transformed to reflect the developer's cost over several years—in this case, the period of 20 years during which the construction of residential units transpire. The aggregated cost over the years is mathematically expressed as:

$$\begin{aligned} Aggregated\ Cost &= \sum_{t=1}^{20} Unit_t \times Rent_{mkt,t} - \sum_{t=1}^{20}\left[x\% \times Unit_t \times Rent_{aff,t} + (1 - x\%) \times Unit_t \times Rent_{mkt,t}\right] \\ &= (x\%)\sum_{t=1}^{20} Unit_t \times Rent_{mkt,t} - (x\%)\sum_{t=1}^{20} Unit_t \times Rent_{aff,t} \end{aligned} \quad \ldots (2)$$

$\sum_{t=1}^{20}$ indicates the summation of annual revenue over the period of 20 years, and *t* refers to the value of each variable (*Unit*, $Rent_{mkt}$ & $Rent_{aff}$) in $t^{th}$ year. It must be noted that "x%" is

[42] The calculation reflects the net present value (NPV).

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**%.

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

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

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

= 4.05%