

Economic Feasibility Analysis

COMPLIANCE UNDER M.G.L. CHAPTER 40A, SECTION 3A
“MULTI-FAMILY ZONING REQUIREMENT FOR MBTA
COMMUNITIES”

PREPARED FOR:
CITY OF WORCESTER

PREPARED BY:
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COMMISSION

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Executive Summary

Under the new requirements codified as Section 3A of M.G.L. Chapter 40A, the city of Worcester was designated as one of 177 “MBTA communities”. MBTA communities must have at least one zoning district of reasonable size in which multi-family housing is permitted as of right and meets other criteria set forth in the statute, including:

- Minimum gross density of 15 units per acre
- Located not more than 0.5 miles from a commuter rail station, subway station, ferry terminal or bus station, if applicable
- No age restrictions and suitable for families with children

A set of guidelines was issued by the Executive Office of Housing and Livable Communities (EOHLC) to determine if an MBTA community is in compliance with Section 3A. According to the *Compliance Guidelines for Multi-Family Zoning Districts Under Section 3A of the Zoning Act*, Section 3A does not include any express requirement or authorization for an MBTA community to require affordable units in a multi-family housing project that is allowed as of right. While inclusionary zoning requirements support the production of affordable housing, these policies can make it economically infeasible to construct new multi-family housing. Therefore, MBTA communities with inclusionary zoning that requires more than 10% of units in a project and/or requires affordability at less than 80% of the Area Median Income (AMI) are required to complete an economic feasibility analysis. This analysis must demonstrate that a reasonable variety of multi-family housing types can be feasibly developed at the proposed affordability levels, taking into account the densities allowed as of right in the district, the dimensional requirements applicable within the district, and the minimum number of parking spaces required.

This Economic Feasibility Analysis (EFA) was commissioned by the City of Worcester to better understand the economic implications associated with its inclusionary zoning requirements in multi-family residential projects, as may be planned for development in the district in accordance with Section 3A of the Zoning Act.

This EFA has been conducted in accordance with the *Instructions for Economic Feasibility Analysis* as set forth by the EOHLC and prepared by the Central Massachusetts Regional Planning Commission (CMRPC), the regional planning agency for the city of Worcester, utilizing District Local Technical Assistance (DLTA) funding.

The methodology employed includes seventeen development scenarios using a series of pro forma models that serve as tools in understanding patterns of feasibility and how the inclusionary zoning requirement can impact the financial performance of potential projects. The pro forma inputs and resulting outputs utilize the best available data and information from a variety of sources, most notably interviews with local developers and recent project applications. The results indicate that while a myriad of factors will influence a development’s financial success, there are a variety of project scenarios in which the mandatory inclusion of affordable units, or a 3% construction cost payment in lieu thereof, does not ultimately prevent economic feasibility.

Inclusionary Zoning Ordinance

The City of Worcester’s Inclusionary Zoning (IZ) ordinance was ordained by the City Council on May 9, 2023. Incorporating feedback from a series of public hearings and guidance from community leaders, developers, attorneys, IZ experts, and other municipalities with IZ policies, the new ordinance is a combination of mandatory measures and incentives that intend to promote the production of much-needed affordable housing units in the city.

The demand for a policy that advances affordable housing production has resulted from an increasingly competitive housing market in the city and region. Worcester has experienced a resurgence in the past decade, attracting new investment and development in a previously underserved market. Additionally, the city has outpaced its projected population growth in the past decade. However, renewed interest in the city has impacted housing availability and affordability, both for renters and homeowners. An increase in cost-burdened households in Worcester¹, resulting from rising housing costs and stagnant income growth, indicates a strong demand for additional income-restricted housing.

The IZ ordinance applies to any development that results in the production of twelve (12) or more net new dwelling units. Applicable housing developments must provide no less than 15% of the dwelling units as affordable to households earning a maximum of 80% of the Worcester, MA HUD Metro FMR Area Median Income (AMI); or not less than 10% of the dwelling units as affordable to households earning a maximum of 60% of the Worcester, MA HUD Metro FMR AMI. Affordable units must be deed-restricted as affordable for at least 30 years and be comparable in size and quality to the market-rate units.

Alternatively, developers have the option of “payment-in-lieu” in which they can opt to pay a fee to the city’s affordable housing trust fund, rather than constructing the required affordable housing units. The payment must equal 3% of the total construction value of all building permits for the development. This option will provide a revenue stream for Worcester’s newly established affordable housing trust fund, supporting other affordable housing developments and fair housing initiatives.

A series of incentives are included in the IZ ordinance to alleviate the added costs involved with IZ requirements, encourage developers to provide on-site affordable units at lower AMI limits, provide greater flexibility and encourage developers to continue to invest in Worcester. These incentives include a density bonus and dimensional relief, reductions for minimum parking requirements, and special permits for further modifying minimum parking requirements, as well as parking and loading dimensional and landscaping requirements. The density bonuses are applied to all developments that include the net production of 12 new dwelling units with at least 5% of the units for the project with income restrictions at the 60% AMI limit while still meeting the baseline affordability requirements.

¹ “Static Income, Rising Costs: Renting in the Heart of the Commonwealth”. Report 22-09. Worcester Regional Research Bureau. December 2022.

Methodology

This Economic Feasibility Analysis utilizes an Excel-based development proforma sourced with local data in order to assess how the City's inclusionary zoning ordinance impacts the financial feasibility of future development projects. This model is designed to compare construction and operational costs against anticipated operational revenues to determine if projects of various sizes and variables will meet or exceed local return on investment expectations. Ultimately, the model is testing if, and to what degree, the compliance with inclusionary zoning may negatively impact the viability of a market-rate development project, potentially to the point where the project becomes financially infeasible.

There are three principal components that constitute the model: development costs (soft costs, hard costs, and land costs), operational revenues (rental rates, sale prices, parking revenue), and operational costs and expenses (financing costs, marketing, management, repairs, property taxes). Each of these components is based on a series of market and financial inputs from local real-estate developers, recent project applications, and other reliable sources.

This analysis relies on interviews with real estate professionals active in Worcester and familiar with local development conditions, along with information from the database MLS Property Information Network. A full list of assumptions can be found on page 9. The proforma inputs, variables, and subsequent outputs have been developed using the best available data and reliable information.

The model focuses on Internal Rate of Return (IRR) calculations to determine financial feasibility, which is a standard approach to estimating the profitability of potential real-estate investments. The analysis also considers other metrics of financial sensitivity to be used in conjunction with IRR, including Cash on Cash return and Return on Cash. As developers attempt to attract sources of capital in projects, they seek to maximize the revenue potential. In general, a higher IRR percent is favorable as it reduces risk exposure and increases the likelihood of securing the necessary capital to carry out the project. Specifically, this analysis focuses on the change in IRR as affordable units are added to a project in comparison to baseline scenarios of 100% market-rate projects.

While this Excel-based pro-forma model is a useful tool to understand the impacts of inclusionary zoning, it is not intended to be the only measurement of a development's projected profitability.

Market Analysis

Overview

There are numerous trends influencing the housing market in Worcester. Notably, the rising cost of housing in the Boston metropolitan area resulting in a westward search for more affordable opportunities has placed pressure on Worcester's market. Worcester's population increased by 14% between 2010 and 2020, adding over 25,000 new residents to the city and solidifying itself as the second largest city in New England. Availability of housing, particularly deed-restricted affordable units, has not kept pace with the growing population. Of Worcester's 84,071 year-round housing units, 10,205 units (12.14%) are included on the Subsidized Housing Inventory (SHI). Since 2010, 614 new subsidized housing units have been created in the city. Over 1,200 new residential units, including single-family and multi-family developments, plus nearly 300 residential units resulting from conversions of existing buildings from non-residential uses to residential uses have been permitted in the city of Worcester since 2022². The City is taking great strides to close the housing gap with residential units for all income tiers.

Growing momentum in Worcester has attracted public and private investment, particularly in the city's urban core. After decades of modest economic growth and housing development, Worcester is experiencing a resurgence fueled by projects such as Union Station, Gateway Park, CitySquare, the Reactory Biomanufacturing Park, Polar Park, numerous residential developments, and strategic public investments.

This section provides a summary of recent housing market trends in Worcester. The data analyzed here is sourced from rental listings and sales of condominiums and multi-family buildings between February 2023 and August 2023, collected from the MLS Property Information Network. It should be noted that data from MLS only represents a sample of property listings, as other platforms such as Yardi, RentCafé, and Craigslist are widely used by landlords and property management companies as well.

Rental Market

The following data on rental units listed in Worcester captures a 6-month period between February 2023 and August 2023. The number of 2-bedroom residential rental units listed during this period was 147 rental units. The median rent for 2-bedroom market-rate apartments was \$1,800 per month. The median living area square footage was 1,000 sq. ft.

² 2023 Housing Unit Review Survey, UMass Donahue Institute

Figure 1: 2-Bedroom Residential Rental Units: Listings
February 2023 - August 2023



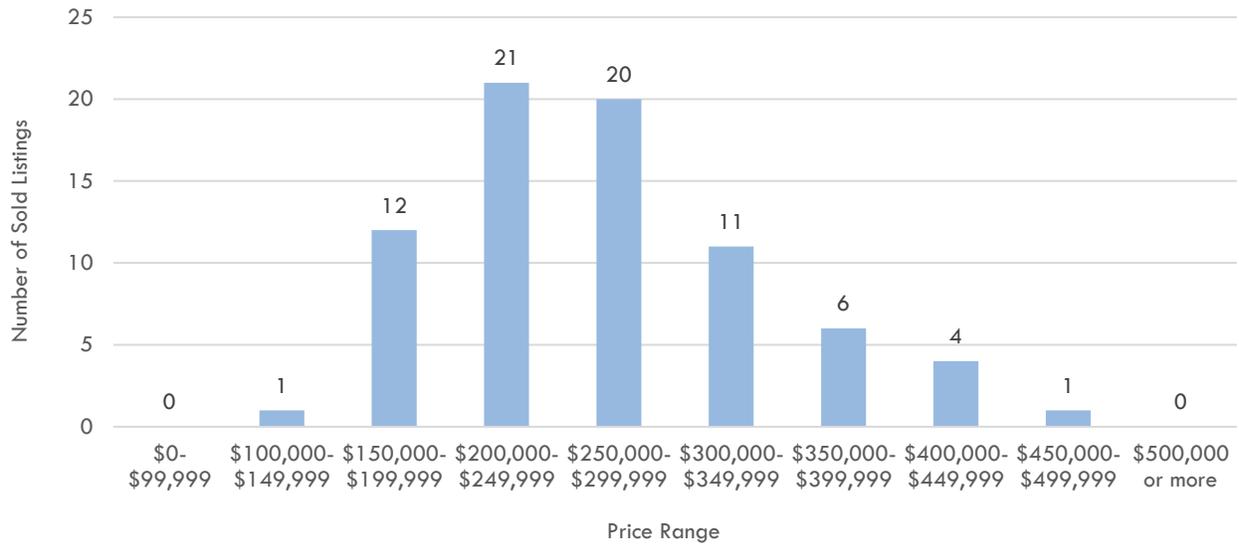
While this sample of listings shows a demand for 2-bedroom apartments generally in the \$1,500 - \$2,250 range, these listings include units in the city’s housing stock that are older, in need of upgrades, or lack modern apartment amenities. In order to align this analysis with prospective future development in the study area, the focus is on recent multi-family developments in new and renovated buildings in Worcester, which have substantially higher rents than what is generally available across city as a whole. The following table shows a range of rents for currently available units in recently constructed multi-family buildings.

Number of Bedrooms	Monthly Rent Range
Studio	\$1,875 - \$2,565
1-Bedroom	\$2,045 - \$3,250
2-Bedroom	\$2,556 - \$4,175
3-Bedroom	\$3,550 - \$3,960

Condominium Market

The following data on condominiums listed and sold in Worcester captures a 6-month period between February 2023 and August 2023. The number of 2-bedroom condominium listings that were sold totaled 76 condominiums. The median sales price for 2-bedroom market-rate condominiums was \$254,000, while the median listing price was \$249,950. The median sales price per square foot was \$246/sq. ft. The median living area square footage was 1,025 sq. ft. The average monthly condominium fees for these units were \$366. The average annual tax bill for these units was \$2,726.

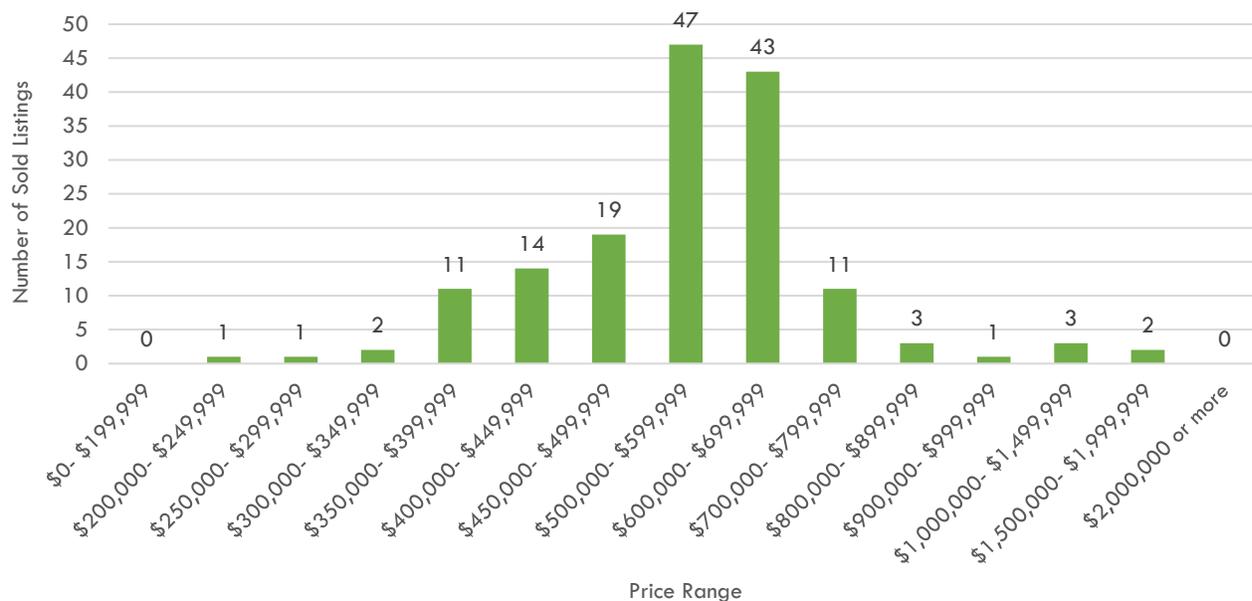
Figure 2: 2-Bedroom Condominiums: Sold Listings
February 2023 - August 2023



Multi-Family Building Market

The following data on multi-family buildings listed and sold in Worcester captures a 6-month period between February 2023 and August 2023. The number of multi-family building listings that were sold totaled 36 buildings. The median sales price for multi-family buildings was \$597,500, while the median listing price was \$594,950. The median sales price per square foot was \$175/sq. ft. The median living area square footage was 3,779.5 sq. ft.

Figure 3: Multi-Family Buildings: Sold Listings
February 2023 - August 2023



Affordability

Renter-households constitute about 58% of all housing units in Worcester, according to the 2022 American Community Survey 5-Year Estimates. Data from the past decade shows that Worcester renters are increasingly cost-burdened (spending more than 30% of income on housing costs), which can be attributed to rising costs of living paired with minimal income growth³. Affordability continues to be a primary concern for renters, as well as homeowners, in the heart of the Commonwealth.

Occupants of rental units would need an annual household income of \$79,000 in order to afford a median-priced 2-bedroom rental unit in Worcester as of 2023. This calculation considers (1) that the occupants pay no more than 30% of their monthly income on housing and (2) the median rent of a 2-bedroom market-rate apartment is \$1,800 per month⁴, and (3) the household is factoring in \$175 per month for utilities.

Owners of condominiums have additional housing costs to budget for, such as condominium association fees, residential property taxes, and home insurance. Condominium association fees of 2-bedroom units sold between February 2023 and August 2023 range from \$150 to \$741 per month, with the average fees equaling \$366 per month. Residential taxes for 2-bedroom condominium units sold between February 2023 and August 2023 range from \$1,367 to \$5,454 annually, with the average annual tax bill equaling \$2,726 for these condominium units.

³ *Static Income, Rising Costs: Renting in the Heart of the Commonwealth*. Report 22-09. Worcester Regional Research Bureau. December 2022.

⁴ MLS Property Information Network, 2023

The city of Worcester falls within the Worcester, MA HUD Metro FMR Area. The following table shows the maximum allowable rents for affordable housing units for the Worcester, MA FMR Area based on 30% of the monthly maximum gross income according to U.S. Department of Housing and Urban Development (HUD) Area Median Income as of 2024.

2024 Maximum Allowable Rents for Affordable Housing Units based on 30% of Monthly Maximum Gross Income Worcester, MA HUD Metro FMR Area		
	60% AMI	80% AMI
Studio	\$1,350	\$1,713
1 Bedroom	\$1,544	\$1,956
2 Bedrooms	\$1,737	\$2,201
3 Bedrooms	\$1,931	\$2,445
4 Bedrooms	\$2,085	\$2,641

The inclusionary zoning ordinance states that “The maximum rent for an affordable housing unit shall not exceed thirty percent (30%) of the gross income for the household based on the qualifying Area Median Income restriction, including the utility allowance published annually by HUD. The maximum rent shall **also** not exceed the FMR published annually by HUD.” The following table shows the Fair Market Rents for all bedroom sizes as of 2024 according to HUD.

2024 Fair Market Rents Worcester, MA HUD Metro FMR Area	
	Fair Market Rent
Studio	\$1,282
1 Bedroom	\$1,292
2 Bedrooms	\$1,661
3 Bedrooms	\$2,008
4 Bedrooms	\$2,212

For condominiums, or other owned units in multi-family buildings, the maximum sale price utilizes a more complex formula.⁵ Maximum sale prices are determined by creating a marketing window so that buyers within a range of incomes may afford to qualify for a mortgage for an affordable unit despite possible interest rate fluctuations. The affordable sale price is determined based on low- and moderate-income households spending no more than 30% of their income on housing costs. The initial maximum sale prices for an affordable homeownership unit should be set for households whose income is between 70% and 80% of the Area Median Income, based on certain assumptions about the size of the family most likely to occupy the unit.

Based on research of recent sales of Worcester’s condominiums and discussions with developers of affordable ownership units, the sale price of affordable units in the pro forma has been set at \$187,000 for a 1-bedroom unit, \$215,000 for a 2-bedroom unit, and \$230,000 for a 3-bedroom unit.

⁵ Chapter 40B Sale Prices and Rents: <https://www.mass.gov/info-details/chapter-40b-sale-prices-and-rents>

EFA Assumptions Checklist

Revenue Sources	Input	Source
Rents by Bed Count (per SQFT)		Local Developers; MLS; Zillow listings
Studio/Efficiency	\$4.00	
One Bedroom	\$3.59	
Two Bedroom	\$3.10	
Three Bedroom	\$2.92	
Sale Value (per SQFT)	6.50%	
Other Income		
Parking Revenue (per month per space)	\$75	
On-Site Laundry (per month)	N/A	
Other (please list)	N/A	
Construction Costs	Input	Source
Land Acquisition/Development (per unit)	\$20,000	Local Developers; Recent Project Applications
Soft Costs (percentage of hard costs)	20.0%	
Hard Costs (per SQFT)		
Residential	\$240.00	
Commercial Stick Built	\$285.00	
Commercial Podium	\$320.00	
Commercial Steel	\$350.00	
Parking Assumptions		
Parking Ratio	0.0	City of Worcester
Parking Cost by Type		Local Developers
Surface (per space)	\$8,500	
Structured (per space)	\$30,000	
Underground (per space)	\$65,000	
Operations & Expenses	Input	Source
Vacancy (percentage)	4.0%	Local Developers; City of Worcester
Collection Loss (percentage)	1.0%	
Operating Expense (% of EGI)	27.0%	
Financial	Input	Source
Lending Rate (Percentage)	6.25%	Local Developers; Recent Project Applications
Lending Term (Years)	30	
Debt Equity Ratio	70%	
Cap Rate	6.50%	
Return Expectations		
Internal Rate of Return (IRR)	15.00%	
Return on Cost (ROC)	6.50%	
Cash on Cash (CoC)	5.50%	

Scenario Analysis

Scenarios Under Evaluation

In order to test the model and the development assumptions, a total of 17 development scenarios have been conducted. The scenarios were selected by the City to understand the impact of inclusionary zoning changes on typical projects of various sizes recently developed or proposed in the city. A summary of the development scenarios is presented in the following table.

Scenario	Unit Type	Total Number of Units	AMI %	Inclusionary %
1	Rental	12	80%	15%
2	Rental	12	60%	10%
3	Rental	12	N/A	Payment in Lieu
4	Rental	25	80%	15%
5	Rental	25	60%	10%
6	Rental	25	N/A	Payment in Lieu
7	Rental	50	80%	15%
8	Rental	50	60%	10%
9	Rental	50	N/A	Payment in Lieu
10	Rental	100	80%	15%
11	Rental	100	60%	10%
12	Rental	100	N/A	Payment in Lieu
13	Rental	200	80%	15%
14	Rental	200	60%	10%
15	Rental	200	N/A	Payment in Lieu
16	Ownership	20	80%	15%
17	Ownership	20	N/A	Payment in Lieu

The model uses three different metrics to measure anticipated financial outcomes: Internal Rate of Return (IRR), Cash on Cash (COC), and Return on Cost (ROC). As shown in the EFA Assumptions Checklist, the return expectation for IRR is 15.0%, COC is 5.5%, and ROC is 6.5%. The following table displays the return measures for the 17 project scenarios outlined in the previous table using the three metrics that test the sensitivity of project feasibility, designating which scenarios would be below market expectations with the inclusion of affordable units.

Scenario	IRR	COC	ROC
1	15.0%	6.2%	7.0%
2	15.0%	6.2%	7.0%
3	16.8%	7.9%	7.4%
4	15.1%	6.3%	7.1%
5	15.6%	6.7%	7.2%
6	16.8%	7.9%	7.4%
7	7.4%*	0.8%*	5.4%*
8	8.2%*	1.3%*	5.6%*
9	9.3%*	2.1%*	5.7%
10	7.5%*	0.8%*	5.4%*
11	8.2%*	1.3%*	5.6%*
12	9.3%*	2.1%*	5.7%*
13	7.5%*	0.8%*	5.4%*
14	8.2%*	1.3%*	5.6%*
15	9.3%*	2.1%*	5.7%*
16	>-100%*	-50%*	-15%*
17	>-100%*	-42.2%*	-12.7%*

*Below market expectation

It is important to note that the minimum IRR threshold varies based on the risk appetite of lenders and equity investors and the risk profile of a development project. Acknowledging that projects of different scales financed with different sources may have different IRR targets, the following table demonstrates the relative impact of Worcester’s inclusionary zoning policy on an example project’s return profile. This table provides a sense of the negative change to IRR that a project would need to absorb with the mandatory inclusion of affordable units or payment in lieu of units.

Internal Rate of Return (IRR) Scenario Comparison				
	No affordability (baseline)	Includes 15% units at 80% AMI	Includes 10% units at 60% AMI	Includes 3% Payment in Lieu
12 rental units	17.1%	15.0% (-2.1%)	15.0% (-2.1%)	16.8% (-0.3%)
25 rental units	17.1%	15.1% (-2.0%)	15.6% (-1.5%)	16.8% (-0.3%)
50 rental units	9.6%	7.4% (-2.2%)	8.2% (-1.4%)	9.3% (-0.3%)
100 rental units	9.6%	7.5% (-2.1%)	8.2% (-1.4%)	9.3% (-0.3%)
200 rental units	9.6%	7.5% (-2.1%)	8.2% (-1.4%)	9.3% (-0.3%)
20 ownership units	>-100%	>-100%	N/A	>-100%

Percentages in **bold** indicate a given scenario’s change from the baseline sensitivity measurements

12-Unit Rental Development, 15% of Units at 80% AMI

See Table 1 on page 22.

This development scenario is comprised of 12 rental apartments, ten of which are leased at the market rate and two of which are leased at the affordable rate for households earning 80% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 7,800 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$3,048,000.

The financial analysis performed for this scenario generated a 15.0% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 12-unit rental projects under the City’s Inclusionary Zoning ordinance.

12-Unit Rental Development, 10% of Units at 60% AMI

See Table 2 on page 23.

This development scenario is comprised of 12 rental apartments, ten of which are leased at the market rate and two of which are leased at the affordable rate for households earning 60% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 7,800 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$3,048,000.

The financial analysis performed for this scenario generated a 15.0% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 12-unit rental projects under the City’s Inclusionary Zoning ordinance.

12-Unit Rental Development, Payment in Lieu of Units

See Table 3 on page 24.

This development scenario is comprised of 12 rental apartments, all of which are leased at the market rate. The model uses an average square footage of 650 square feet per unit, with a net square footage of 7,800 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$3,125,400, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$77,400, which the developer would be required to pay to the City’s Affordable Housing Trust Fund.

By adding \$77,400 to the total development costs, the financial analysis performed for this scenario would generate a 16.8% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 12-unit rental projects under the City’s Inclusionary Zoning ordinance.

25-Unit Rental Development, 15% of Units at 80% AMI

See Table 4 on page 25.

This development scenario is comprised of 25 rental apartments, 21 of which are leased at the market rate and four of which are leased at the affordable rate for households earning 80% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 16,250 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$6,350,000.

The financial analysis performed for this scenario generated a 15.1% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 25-unit rental projects under the City's Inclusionary Zoning ordinance.

25-Unit Rental Development, 10% of Units at 60% AMI

See Table 5 on page 26.

This development scenario is comprised of 25 rental apartments, 22 of which are leased at the market rate and three of which are leased at the affordable rate for households earning 60% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 16,250 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$6,350,000.

The financial analysis performed for this scenario generated a 15.6% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 25-unit rental projects under the City's Inclusionary Zoning ordinance.

25-Unit Rental Development, Payment in Lieu of Units

See Table 6 on page 27.

This development scenario is comprised of 25 rental apartments, all of which are leased at the market rate. The model uses an average square footage of 650 square feet per unit, with a net square footage of 16,250 square feet. This scenario assumes residential construction with hard costs of \$240 per square foot. Total development costs are calculated to be \$6,511,250, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$161,250, which the developer would be required to pay to the City's Affordable Housing Trust Fund.

By adding \$161,250 to the total development costs, the financial analysis performed for this scenario would generate a 16.8% internal rate of return, which is considered a sufficient return for project viability, demonstrating economic feasibility for the development of 25-unit rental projects under the City's Inclusionary Zoning ordinance.

50-Unit Rental Development, 15% of Units at 80% AMI

See Table 7 on page 28.

This development scenario is comprised of 50 rental apartments, 42 of which are leased at the market rate and eight of which are leased at the affordable rate for households earning 80% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 32,500 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$16,600,000.

The financial analysis performed for this scenario generated a 7.4% internal rate of return, which is not considered a sufficient return for project viability. The notable increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 50-unit rental projects may be economically infeasible.

50-Unit Rental Development, 10% of Units at 60% AMI

See Table 8 on page 29.

This development scenario is comprised of 50 rental apartments, 45 of which are leased at the market rate and eight of which are leased at the affordable rate for households earning 60% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 32,500 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$16,600,000.

The financial analysis performed for this scenario generated an 8.2% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 50-unit rental projects may be economically infeasible.

50-Unit Rental Development, Payment in Lieu of Units

See Table 9 on page 30.

This development scenario is comprised of 50 rental apartments, all of which are leased at the market rate. The model uses an average square footage of 650 square feet per unit, with a net square footage of 32,500 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$17,020,000, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$420,000, which the developer would be required to pay to the City's Affordable Housing Trust Fund.

By adding \$420,000 to the total development costs, the financial analysis performed for this scenario would generate a 9.3% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 50-unit rental projects may be economically infeasible.

100-Unit Rental Development, 15% of Units at 80% AMI

See Table 10 on page 31.

This development scenario is comprised of 100 rental apartments, 85 of which are leased at the market rate and 15 of which are leased at the affordable rate for households earning 80% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 65,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$33,200,000.

The financial analysis performed for this scenario generated a 7.5% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 100-unit rental projects may be economically infeasible.

100-Unit Rental Development, 10% of Units at 60% AMI

See Table 11 on page 32.

This development scenario is comprised of 100 rental apartments, 90 of which are leased at the market rate and ten of which are leased at the affordable rate for households earning 60% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 65,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$33,200,000.

The financial analysis performed for this scenario generated an 8.2% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 100-unit rental projects may be economically infeasible.

100-Unit Rental Development, Payment in Lieu of Units

See Table 12 on page 33.

This development scenario is comprised of 100 rental apartments, all of which are leased at the market rate. The model uses an average square footage of 650 square feet per unit, with a net square footage of 65,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$34,040,000, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$840,000, which the developer would be required to pay to the City’s Affordable Housing Trust Fund.

By adding \$840,000 to the total development costs, the financial analysis performed for this scenario would generate a 9.3% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 100-unit rental projects may be economically infeasible.

200-Unit Rental Development, 15% of Units at 80% AMI

See Table 13 on page 34.

This development scenario is comprised of 200 rental apartments, 170 of which are leased at the market rate and 30 of which are leased at the affordable rate for households earning 80% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 130,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$66,400,000.

The financial analysis performed for this scenario generated a 7.5% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 200-unit rental projects may be economically infeasible.

200-Unit Rental Development, 10% of Units at 60% AMI

See Table 14 on page 35.

This development scenario is comprised of 200 rental apartments, 180 of which are leased at the market rate and 20 of which are leased at the affordable rate for households earning 60% of the AMI. The model uses an average square footage of 650 square feet per unit, with a net square footage of 130,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$66,400,000.

The financial analysis performed for this scenario generated an 8.2% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 200-unit rental projects may be economically infeasible.

200-Unit Rental Development, Payment in Lieu of Units

See Table 15 on page 36.

This development scenario is comprised of 200 rental apartments, all of which are leased at the market rate. The model uses an average square footage of 650 square feet per unit, with a net square footage of 130,000 square feet. This scenario assumes commercial podium construction with hard costs of \$320 per square foot. Total development costs are calculated to be \$68,080,000, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$1,680,000, which the developer would be required to pay to the City's Affordable Housing Trust Fund.

By adding \$1,680,000 to the total development costs, the financial analysis performed for this scenario would generate a 9.3% internal rate of return, which is not considered a sufficient return for project viability. The increase in costs per square foot for commercial podium construction has a significant impact on project feasibility. Even without inclusion of affordable units, a project of this scale shows an IRR of only 9.6%. Without adequate subsidies to offset the costs of construction, or changes to the macroeconomic conditions, the development of 200-unit rental projects may be economically infeasible.

20-Unit Ownership Development, 15% of Units at 80% AMI

See Table 16 on page 37.

This development scenario is comprised of 20 ownership units (condominiums), three of which are affordable to households earning 80% of the AMI. This model differs from the previous leasing model which uses a separate timeframe for recapturing the initial investment.

The model uses an average square footage of 650 square feet per unit, with a net square footage of 13,000 square feet. This scenario assumes residential construction in its hard costs at rate of \$240 per square foot. Land costs are estimated at \$400,000. Soft costs are estimated at \$780,000. Total development costs are calculated to be \$5,080,000.

The financial analysis performed for this scenario generated an IRR of over -100%, which indicates is not a desirable investment for developers. Without adequate subsidies to offset the costs of construction, the development of condominium projects, even those with 100% market-rate units, prove highly challenging for developers to make feasible. Adding an inclusionary unit requirement makes this development type even less likely to be created in Worcester. However, there are funding

opportunities and incentives such as Low Income Housing Tax Credits and Worcester's Affordable Housing Trust Fund that are available to developers interested in pursuing these types of projects.

20-Unit Ownership Development, Payment in Lieu of Units

See Table 17 on page 37.

This development scenario is comprised of 20 ownership units (condominiums), all of which are sold at the market rate. This model differs from the previous leasing model which uses a separate timeframe for recapturing the initial investment.

The model uses an average square footage of 650 square feet per unit, with a net square footage of 13,000 square feet. This scenario assumes residential construction in its hard costs at rate of \$240 per square foot. Land costs are estimated at \$400,000. Soft costs are estimated at \$780,000. Total development costs are calculated to be \$5,209,000, including the payment in lieu. A calculation of 3% of the total development costs (excluding soft costs) equals \$129,000, which the developer would be required to pay to the City's Affordable Housing Trust Fund.

Even without the inclusion of three affordable units or payment in lieu totaling \$129,000, the financial analysis performed for this project scenario generated an IRR of over -100%, which indicates is not a desirable investment for developers. Without adequate subsidies to offset the costs of construction, the development of condominium projects, even those with 100% market-rate units, prove highly challenging for developers to make feasible. Adding an inclusionary unit requirement makes this development type even less likely to be created in Worcester. However, there are funding opportunities and incentives such as Low Income Housing Tax Credits and Worcester's Affordable Housing Trust Fund that are available to developers interested in pursuing these types of projects.

Summary Findings

The results of this economic feasibility analysis are based upon a model informed by assumptions. While precise results cannot be guaranteed, the model utilizes local data and market information to forecast the financial return to a developer with Worcester's existing inclusionary zoning ordinance in place. Based on the analysis, the following conclusions have been made.

While not all scenarios selected for this EFA provided results that would meet the economic thresholds necessary for implementation, the 12-unit and 25-unit development scenarios generated sufficient returns for project viability. These results validate that multi-family development under zoning that adheres to the requirements of Chapter 40A Section 3A is not inhibited by the inclusion of affordable units or payment in lieu required under Worcester's Inclusionary Zoning ordinance.

Residential development is highly influenced by macroeconomic conditions including interest rates on construction loans, material costs, labor costs, delays due to global supply shortages and high demand, and other building factors which are out of the control of local municipalities but considerably impact feasibility. A surge in interest rates over the past two years has increased development costs and enhanced the challenge of attracting investors who are hesitant to risk financing housing developments that may result in lower profit margins. The economic thresholds necessary to attract debt and equity investors are now, due to weak market conditions, much more difficult to meet without support from tax relief or other mechanisms to offset the cost of construction – a circumstance not unique to Worcester.

The financial performance of real estate projects across the region has been and will continue to be strained given the significant increase in interest rates. Therefore, based on prevailing interest rates and other unfavorable and uncertain market conditions that are inhibiting investment opportunities, many real estate professionals in Worcester and across the region are pausing temporarily, adjusting, or cancelling development projects. Macroeconomic conditions that affect development costs are sufficient in multiple development scenarios to render projects infeasible regardless of the impacts of inclusionary zoning. The results also indicated that project size and rental vs. ownership scenarios are more prominent factors in relation to inclusionary zoning feasibility. Hence, the current inclusionary zoning ordinance is not the deciding factor influencing project feasibility in this market.

The availability of subsidies or relief for developers can be instrumental in supporting residential development and offsetting higher costs. Opportunities such as tax relief, capital subsidies, density bonuses, dimensional relief, decreased parking ratios, expedited permitting, reductions of land costs, brownfield site remediation incentives, and more can increase flexibility for developers and enhance feasibility. These subsidies and incentives may help facilitate housing production for households at all price points in Worcester, particularly under challenging market conditions and the city has a demonstrated track record of partnering with public and private developers, large and small, to support projects of all sizes in coming to fruition.

Table 1
Cash Flow Pro-Forma
12 Rental Units – 15% Affordable at 80% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$310,732	\$320,054	\$329,656	\$339,545	\$349,732	\$360,224	\$371,030	\$382,161	\$393,626	\$405,435	\$417,598
Vacancy		(\$12,429)	(\$12,802)	(\$13,186)	(\$13,582)	(\$13,989)	(\$14,409)	(\$14,841)	(\$15,286)	(\$15,745)	(\$16,217)	(\$16,704)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$298,303	\$307,252	\$316,469	\$325,964	\$335,742	\$345,815	\$356,189	\$366,875	\$377,881	\$389,218	\$400,894
Operating Expenses		(\$83,898)	(\$86,415)	(\$89,007)	(\$91,677)	(\$94,428)	(\$97,260)	(\$100,178)	(\$103,184)	(\$106,279)	(\$109,467)	(\$112,751)
Net Operating Income		\$214,405	\$220,837	\$227,462	\$234,286	\$241,315	\$248,554	\$256,011	\$263,691	\$271,602	\$279,750	\$288,143
Debt Service		(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	
Operating Free Cash Flow		\$56,762	\$63,194	\$69,819	\$76,643	\$83,672	\$90,911	\$98,368	\$106,048	\$113,959	\$122,107	\$288,143
Sale Cash Flow											\$4,432,963	
Debt Payoff											(\$1,797,296)	
Total Cash Flow	(\$914,400)	\$56,762	\$63,194	\$69,819	\$76,643	\$83,672	\$90,911	\$98,368	\$106,048	\$113,959	\$2,757,774	

Table 2
Cash Flow Pro-Forma
12 Rental Units – 10% Affordable at 60% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$310,732	\$320,054	\$329,656	\$339,545	\$349,732	\$360,224	\$371,030	\$382,161	\$393,626	\$405,435	\$417,598
Vacancy		(\$12,429)	(\$12,802)	(\$13,186)	(\$13,582)	(\$13,989)	(\$14,409)	(\$14,841)	(\$15,286)	(\$15,745)	(\$16,217)	(\$16,704)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$298,303	\$307,252	\$316,469	\$325,964	\$335,742	\$345,815	\$356,189	\$366,875	\$377,881	\$389,218	\$400,894
Operating Expenses		(\$83,898)	(\$86,415)	(\$89,007)	(\$91,677)	(\$94,428)	(\$97,260)	(\$100,178)	(\$103,184)	(\$106,279)	(\$109,467)	(\$112,751)
Net Operating Income		\$214,405	\$220,837	\$227,462	\$234,286	\$241,315	\$248,554	\$256,011	\$263,691	\$271,602	\$279,750	\$288,143
Debt Service		(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	
Operating Free Cash Flow		\$56,762	\$63,194	\$69,819	\$76,643	\$83,672	\$90,911	\$98,368	\$106,048	\$113,959	\$122,107	\$288,143
Sale Cash Flow											\$4,432,963	
Debt Payoff											(\$1,797,296)	
Total Cash Flow	(\$914,400)	\$56,762	\$63,194	\$69,819	\$76,643	\$83,672	\$90,911	\$98,368	\$106,048	\$113,959	\$2,757,774	

Table 3
Cash Flow Pro-Forma
12 Rental Units – Payment in Lieu

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$335,669	\$345,739	\$356,111	\$366,795	\$377,798	\$389,132	\$400,806	\$412,830	\$425,215	\$437,972	\$451,111
Vacancy		(\$13,427)	(\$13,830)	(\$14,244)	(\$14,672)	(\$15,112)	(\$15,565)	(\$16,032)	(\$16,513)	(\$17,009)	(\$17,519)	(\$18,044)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$322,242	\$331,909	\$341,867	\$352,123	\$362,686	\$373,567	\$384,774	\$396,317	\$408,207	\$420,453	\$433,067
Operating Expenses		(\$90,631)	(\$93,350)	(\$96,150)	(\$99,035)	(\$102,006)	(\$105,066)	(\$108,218)	(\$111,464)	(\$114,808)	(\$118,252)	(\$121,800)
Net Operating Income		\$231,612	\$238,560	\$245,717	\$253,088	\$260,681	\$268,501	\$276,556	\$284,853	\$293,399	\$302,201	\$311,267
Debt Service		(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	(\$157,643)	
Operating Free Cash Flow		\$73,968	\$80,917	\$88,073	\$95,445	\$103,038	\$110,858	\$118,913	\$127,210	\$135,755	\$144,557	\$311,267
Sale Cash Flow											\$4,788,717	
Debt Payoff											(\$1,797,296)	
Total Cash Flow	(\$937,620)	\$73,968	\$80,917	\$88,073	\$95,445	\$103,038	\$110,858	\$118,913	\$127,210	\$135,755	\$3,135,978	

Table 4
Cash Flow Pro-Forma
25 Rental Units – 15% Affordable at 80% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$649,437	\$668,920	\$688,987	\$709,657	\$730,947	\$752,875	\$775,461	\$798,725	\$822,687	\$847,368	\$872,789
Vacancy		(\$25,977)	(\$26,757)	(\$27,559)	(\$28,386)	(\$29,238)	(\$30,115)	(\$31,018)	(\$31,949)	(\$32,907)	(\$33,895)	(\$34,912)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$623,459	\$642,163	\$661,428	\$681,271	\$701,709	\$722,760	\$744,443	\$766,776	\$789,779	\$813,473	\$837,877
Operating Expenses		(\$175,348)	(\$180,608)	(\$186,027)	(\$191,607)	(\$197,356)	(\$203,276)	(\$209,375)	(\$215,656)	(\$222,125)	(\$228,789)	(\$235,653)
Net Operating Income		\$448,111	\$461,555	\$475,401	\$489,663	\$504,353	\$519,484	\$535,068	\$551,120	\$567,654	\$584,684	\$602,224
Debt Service		(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	
Operating Free Cash Flow		\$119,688	\$133,131	\$146,978	\$161,240	\$175,930	\$191,060	\$206,645	\$222,697	\$239,230	\$256,260	\$602,224
Sale Cash Flow											\$9,264,987	
Debt Payoff											(\$3,744,366)	
Total Cash Flow	(\$1,905,000)	\$119,688	\$133,131	\$146,978	\$161,240	\$175,930	\$191,060	\$206,645	\$222,697	\$239,230	\$5,776,880	

Table 5
Cash Flow Pro-Forma
25 Rental Units – 10% Affordable at 60% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$661,905	\$681,762	\$702,215	\$723,282	\$744,980	\$767,329	\$790,349	\$814,060	\$838,482	\$863,636	\$889,545
Vacancy		(\$26,476)	(\$27,270)	(\$28,089)	(\$28,931)	(\$29,799)	(\$30,693)	(\$31,614)	(\$32,562)	(\$33,539)	(\$34,545)	(\$35,582)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$635,429	\$654,492	\$674,127	\$694,350	\$715,181	\$736,636	\$758,735	\$781,497	\$804,942	\$829,091	\$853,963
Operating Expenses		(\$178,714)	(\$184,076)	(\$189,598)	(\$195,286)	(\$201,145)	(\$207,179)	(\$213,394)	(\$219,796)	(\$226,390)	(\$233,182)	(\$240,177)
Net Operating Income		\$456,715	\$470,416	\$484,528	\$499,064	\$514,036	\$529,457	\$545,341	\$561,701	\$578,552	\$595,909	\$613,786
Debt Service		(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	
Operating Free Cash Flow		\$128,291	\$141,992	\$156,105	\$170,641	\$185,613	\$201,034	\$216,917	\$233,278	\$250,129	\$267,485	\$613,786
Sale Cash Flow											\$9,442,863	
Debt Payoff											(\$3,744,366)	
Total Cash Flow	(\$1,905,000)	\$128,291	\$141,992	\$156,105	\$170,641	\$185,613	\$201,034	\$216,917	\$233,278	\$250,129	\$5,965,982	

Table 6
Cash Flow Pro-Forma
25 Rental Units – Payment in Lieu

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$699,310	\$720,290	\$741,898	\$764,155	\$787,080	\$810,692	\$835,013	\$860,064	\$885,865	\$912,441	\$939,815
Vacancy		(\$27,972)	(\$28,812)	(\$29,676)	(\$30,566)	(\$31,483)	(\$32,428)	(\$33,401)	(\$34,403)	(\$35,435)	(\$36,498)	(\$37,593)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$671,338	\$691,478	\$712,222	\$733,589	\$755,597	\$778,265	\$801,613	\$825,661	\$850,431	\$875,944	\$902,222
Operating Expenses		(\$188,814)	(\$194,478)	(\$200,313)	(\$206,322)	(\$212,512)	(\$218,887)	(\$225,454)	(\$232,217)	(\$239,184)	(\$246,359)	(\$253,750)
Net Operating Income		\$482,524	\$497,000	\$511,910	\$527,267	\$543,085	\$559,378	\$576,159	\$593,444	\$611,247	\$629,585	\$648,472
Debt Service		(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	(\$328,424)	
Operating Free Cash Flow		\$154,101	\$168,576	\$183,486	\$198,844	\$214,662	\$230,954	\$247,736	\$265,020	\$282,824	\$301,161	\$648,472
Sale Cash Flow											\$9,976,494	
Debt Payoff											(\$3,744,366)	
Total Cash Flow	(\$1,953,375)	\$154,101	\$168,576	\$183,486	\$198,844	\$214,662	\$230,954	\$247,736	\$265,020	\$282,824	\$6,533,288	

Table 7
Cash Flow Pro-Forma
50 Rental Units – 15% Affordable at 80% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$1,298,873	\$1,337,840	\$1,377,975	\$1,419,314	\$1,461,893	\$1,505,750	\$1,550,923	\$1,597,450	\$1,645,374	\$1,694,735	\$1,745,577
Vacancy		(\$51,955)	(\$53,514)	(\$55,119)	(\$56,773)	(\$58,476)	(\$60,230)	(\$62,037)	(\$63,898)	(\$65,815)	(\$67,789)	(\$69,823)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$1,246,918	\$1,284,326	\$1,322,856	\$1,362,541	\$1,403,418	\$1,445,520	\$1,488,886	\$1,533,552	\$1,579,559	\$1,626,946	\$1,675,754
Operating Expenses		(\$350,696)	(\$361,217)	(\$372,053)	(\$383,215)	(\$394,711)	(\$406,553)	(\$418,749)	(\$431,312)	(\$444,251)	(\$457,578)	(\$471,306)
Net Operating Income		\$896,223	\$923,109	\$950,803	\$979,327	\$1,008,706	\$1,038,968	\$1,070,137	\$1,102,241	\$1,135,308	\$1,169,367	\$1,204,448
Debt Service		(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	
Operating Free Cash Flow		\$37,667	\$64,553	\$92,247	\$120,771	\$150,150	\$180,412	\$211,581	\$243,685	\$276,752	\$310,811	\$1,204,448
Sale Cash Flow											\$18,529,973	
Debt Payoff											(\$9,788,422.24)	
Total Cash Flow	(\$4,980,000)	\$37,667	\$64,553	\$92,247	\$120,771	\$150,150	\$180,412	\$211,581	\$243,685	\$276,752	\$9,052,362	

**Table 8
Cash Flow Pro-Forma
50 Rental Units – 10% Affordable at 60% AMI**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$1,336,279	\$1,376,367	\$1,417,658	\$1,460,188	\$1,503,993	\$1,549,113	\$1,595,587	\$1,643,454	\$1,692,758	\$1,743,541	\$1,795,847
Vacancy		(\$53,451)	(\$55,055)	(\$56,706)	(\$58,408)	(\$60,160)	(\$61,965)	(\$63,823)	(\$65,738)	(\$67,710)	(\$69,742)	(\$71,834)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$1,282,827	\$1,321,312	\$1,360,952	\$1,401,780	\$1,443,834	\$1,487,149	\$1,531,763	\$1,577,716	\$1,625,047	\$1,673,799	\$1,724,013
Operating Expenses		(\$360,795)	(\$371,619)	(\$382,768)	(\$394,251)	(\$406,078)	(\$418,261)	(\$430,808)	(\$443,733)	(\$457,045)	(\$470,756)	(\$484,879)
Net Operating Income		\$922,032	\$949,693	\$978,184	\$1,007,530	\$1,037,755	\$1,068,888	\$1,100,955	\$1,133,983	\$1,168,003	\$1,203,043	\$1,239,134
Debt Service		(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	
Operating Free Cash Flow		\$63,476	\$91,137	\$119,628	\$148,973	\$179,199	\$210,332	\$242,399	\$275,427	\$309,447	\$344,487	\$1,239,134
Sale Cash Flow											\$19,063,604	
Debt Payoff											(\$9,788,422.24)	
Total Cash Flow	(\$4,980,000)	\$63,476	\$91,137	\$119,628	\$148,973	\$179,199	\$210,332	\$242,399	\$275,427	\$309,447	\$9,619,668	

**Table 9
Cash Flow Pro-Forma
50 Rental Units – Payment in Lieu**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$1,398,621	\$1,440,579	\$1,483,797	\$1,528,311	\$1,574,160	\$1,621,385	\$1,670,026	\$1,720,127	\$1,771,731	\$1,824,883	\$1,879,629
Vacancy		(\$55,945)	(\$57,623)	(\$59,352)	(\$61,132)	(\$62,966)	(\$64,855)	(\$66,801)	(\$68,805)	(\$70,869)	(\$72,995)	(\$75,185)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$1,342,676	\$1,382,956	\$1,424,445	\$1,467,178	\$1,511,194	\$1,556,529	\$1,603,225	\$1,651,322	\$1,700,862	\$1,751,887	\$1,804,444
Operating Expenses		(\$377,628)	(\$388,956)	(\$400,625)	(\$412,644)	(\$425,023)	(\$437,774)	(\$450,907)	(\$464,434)	(\$478,367)	(\$492,718)	(\$507,500)
Net Operating Income		\$965,048	\$994,000	\$1,023,820	\$1,054,534	\$1,086,170	\$1,118,755	\$1,152,318	\$1,186,888	\$1,222,494	\$1,259,169	\$1,296,944
Debt Service		(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	(\$858,556)	
Operating Free Cash Flow		\$106,492	\$135,444	\$165,264	\$195,978	\$227,614	\$260,199	\$293,762	\$328,332	\$363,938	\$400,613	\$1,296,944
Sale Cash Flow											\$19,952,987	
Debt Payoff											(\$9,788,422)	
Total Cash Flow	(\$5,106,000)	\$106,492	\$135,444	\$165,264	\$195,978	\$227,614	\$260,199	\$293,762	\$328,332	\$363,938	\$10,565,178	

Table 10
Cash Flow Pro-Forma
100 Rental Units – 15% Affordable at 80% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$2,610,215	\$2,688,522	\$2,769,177	\$2,852,253	\$2,937,820	\$3,025,955	\$3,116,733	\$3,210,235	\$3,306,542	\$3,405,739	\$3,507,911
Vacancy		(\$104,409)	(\$107,541)	(\$110,767)	(\$114,090)	(\$117,513)	(\$121,038)	(\$124,669)	(\$128,409)	(\$132,262)	(\$136,230)	(\$140,316)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$2,505,807	\$2,580,981	\$2,658,410	\$2,738,162	\$2,820,307	\$2,904,917	\$2,992,064	\$3,081,826	\$3,174,281	\$3,269,509	\$3,367,594
Operating Expenses		(\$704,758)	(\$725,901)	(\$747,678)	(\$770,108)	(\$793,211)	(\$817,008)	(\$841,518)	(\$866,764)	(\$892,766)	(\$919,549)	(\$947,136)
Net Operating Income		\$1,801,048	\$1,855,080	\$1,910,732	\$1,968,054	\$2,027,096	\$2,087,909	\$2,150,546	\$2,215,062	\$2,281,514	\$2,349,960	\$2,420,459
Debt Service		(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	
Operating Free Cash Flow		\$83,936	\$137,968	\$193,620	\$250,942	\$309,984	\$370,797	\$433,434	\$497,950	\$564,402	\$632,848	\$2,420,459
Sale Cash Flow											\$37,237,824	
Debt Payoff											(\$19,576,844)	
Total Cash Flow	(\$9,960,000)	\$83,936	\$137,968	\$193,620	\$250,942	\$309,984	\$370,797	\$433,434	\$497,950	\$564,402	\$18,293,827	

Table 11
Cash Flow Pro-Forma
100 Rental Units – 10% Affordable at 60% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$2,672,557	\$2,752,734	\$2,835,316	\$2,920,375	\$3,007,987	\$3,098,226	\$3,191,173	\$3,286,908	\$3,385,516	\$3,487,081	\$3,591,693
Vacancy		(\$106,902)	(\$110,109)	(\$113,413)	(\$116,815)	(\$120,319)	(\$123,929)	(\$127,647)	(\$131,476)	(\$135,421)	(\$139,483)	(\$143,668)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$2,565,655	\$2,642,625	\$2,721,903	\$2,803,560	\$2,887,667	\$2,974,297	\$3,063,526	\$3,155,432	\$3,250,095	\$3,347,598	\$3,448,026
Operating Expenses		(\$721,590)	(\$743,238)	(\$765,535)	(\$788,501)	(\$812,156)	(\$836,521)	(\$861,617)	(\$887,465)	(\$914,089)	(\$941,512)	(\$969,757)
Net Operating Income		\$1,844,064	\$1,899,386	\$1,956,368	\$2,015,059	\$2,075,511	\$2,137,776	\$2,201,909	\$2,267,967	\$2,336,006	\$2,406,086	\$2,478,268
Debt Service		(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	
Operating Free Cash Flow		\$126,952	\$182,274	\$239,256	\$297,947	\$358,399	\$420,664	\$484,797	\$550,855	\$618,894	\$688,974	\$2,478,268
Sale Cash Flow											\$38,127,207	
Debt Payoff											(\$19,576,844)	
Total Cash Flow	(\$9,960,000)	\$126,952	\$182,274	\$239,256	\$297,947	\$358,399	\$420,664	\$484,797	\$550,855	\$618,894	\$19,239,337	

Table 12
Cash Flow Pro-Forma
100 Rental Units – Payment in Lieu

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$2,797,241	\$2,881,159	\$2,967,593	\$3,056,621	\$3,148,320	\$3,242,769	\$3,340,052	\$3,440,254	\$3,543,462	\$3,649,766	\$3,759,259
Vacancy		(\$111,890)	(\$115,246)	(\$118,704)	(\$122,265)	(\$125,933)	(\$129,711)	(\$133,602)	(\$137,610)	(\$141,738)	(\$145,991)	(\$150,370)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$2,685,352	\$2,765,912	\$2,848,890	\$2,934,356	\$3,022,387	\$3,113,059	\$3,206,450	\$3,302,644	\$3,401,723	\$3,503,775	\$3,608,888
Operating Expenses		(\$755,255)	(\$777,913)	(\$801,250)	(\$825,288)	(\$850,046)	(\$875,548)	(\$901,814)	(\$928,869)	(\$956,735)	(\$985,437)	(\$1,015,000)
Net Operating Income		\$1,930,097	\$1,987,999	\$2,047,639	\$2,109,069	\$2,172,341	\$2,237,511	\$2,304,636	\$2,373,775	\$2,444,989	\$2,518,338	\$2,593,888
Debt Service		(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	(\$1,717,112)	
Operating Free Cash Flow		\$212,984	\$270,887	\$330,527	\$391,956	\$455,229	\$520,399	\$587,524	\$656,663	\$727,876	\$801,226	\$2,593,888
Sale Cash Flow											\$39,905,975	
Debt Payoff											(\$19,576,844)	
Total Cash Flow	(\$10,212,000)	\$212,984	\$270,887	\$330,527	\$391,956	\$455,229	\$520,399	\$587,524	\$656,663	\$727,876	\$21,130,357	

Table 13
Cash Flow Pro-Forma
200 Rental Units – 15% Affordable at 80% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$5,220,430	\$5,377,043	\$5,538,355	\$5,704,505	\$5,875,640	\$6,051,910	\$6,233,467	\$6,420,471	\$6,613,085	\$6,811,478	\$7,015,822
Vacancy		(\$208,817)	(\$215,082)	(\$221,534)	(\$228,180)	(\$235,026)	(\$242,076)	(\$249,339)	(\$256,819)	(\$264,523)	(\$272,459)	(\$280,633)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$5,011,613	\$5,161,962	\$5,316,820	\$5,476,325	\$5,640,615	\$5,809,833	\$5,984,128	\$6,163,652	\$6,348,562	\$6,539,018	\$6,735,189
Operating Expenses		(\$1,409,516)	(\$1,451,802)	(\$1,495,356)	(\$1,540,216)	(\$1,586,423)	(\$1,634,016)	(\$1,683,036)	(\$1,733,527)	(\$1,785,533)	(\$1,839,099)	(\$1,894,272)
Net Operating Income		\$3,602,097	\$3,710,160	\$3,821,465	\$3,936,109	\$4,054,192	\$4,175,818	\$4,301,092	\$4,430,125	\$4,563,029	\$4,699,919	\$4,840,917
Debt Service		(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	
Operating Free Cash Flow		\$167,873	\$275,936	\$387,240	\$501,884	\$619,968	\$741,593	\$866,868	\$995,901	\$1,128,804	\$1,265,695	\$4,840,917
Sale Cash Flow											\$74,475,647	
Debt Payoff											(\$39,153,689)	
Total Cash Flow	(\$19,920,000)	\$167,873	\$275,936	\$387,240	\$501,884	\$619,968	\$741,593	\$866,868	\$995,901	\$1,128,804	\$36,587,654	

Table 14
Cash Flow Pro-Forma
200 Rental Units – 10% Affordable at 60% AMI

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$5,345,114	\$5,505,468	\$5,670,632	\$5,840,751	\$6,015,973	\$6,196,453	\$6,382,346	\$6,573,817	\$6,771,031	\$6,974,162	\$7,183,387
Vacancy		(\$213,805)	(\$220,219)	(\$226,825)	(\$233,630)	(\$240,639)	(\$247,858)	(\$255,294)	(\$262,953)	(\$270,841)	(\$278,966)	(\$287,335)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$5,131,310	\$5,285,249	\$5,443,807	\$5,607,121	\$5,775,335	\$5,948,595	\$6,127,052	\$6,310,864	\$6,500,190	\$6,695,196	\$6,896,051
Operating Expenses		(\$1,443,181)	(\$1,486,476)	(\$1,531,071)	(\$1,577,003)	(\$1,624,313)	(\$1,673,042)	(\$1,723,233)	(\$1,774,930)	(\$1,828,178)	(\$1,883,024)	(\$1,939,514)
Net Operating Income		\$3,688,129	\$3,798,773	\$3,912,736	\$4,030,118	\$4,151,022	\$4,275,552	\$4,403,819	\$4,535,933	\$4,672,011	\$4,812,172	\$4,956,537
Debt Service		(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	
Operating Free Cash Flow		\$253,905	\$364,549	\$478,512	\$595,894	\$716,797	\$841,328	\$969,595	\$1,101,709	\$1,237,787	\$1,377,948	\$4,956,537
Sale Cash Flow											\$76,254,415	
Debt Payoff											(\$39,153,689)	
Total Cash Flow	(\$19,920,000)	\$253,905	\$364,549	\$478,512	\$595,894	\$716,797	\$841,328	\$969,595	\$1,101,709	\$1,237,787	\$38,478,673	

Table 15
Cash Flow Pro-Forma
200 Rental Units – Payment in Lieu

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Gross Potential Rent		\$5,594,483	\$5,762,317	\$5,935,187	\$6,113,242	\$6,296,640	\$6,485,539	\$6,680,105	\$6,880,508	\$7,086,923	\$7,299,531	\$7,518,517
Vacancy		(\$223,779)	(\$230,493)	(\$237,407)	(\$244,530)	(\$251,866)	(\$259,422)	(\$267,204)	(\$275,220)	(\$283,477)	(\$291,981)	(\$300,741)
Other Income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Effective Gross Income		\$5,370,703	\$5,531,825	\$5,697,779	\$5,868,713	\$6,044,774	\$6,226,117	\$6,412,901	\$6,605,288	\$6,803,446	\$7,007,550	\$7,217,776
Operating Expenses		(\$1,510,510)	(\$1,555,826)	(\$1,602,500)	(\$1,650,575)	(\$1,700,093)	(\$1,751,095)	(\$1,803,628)	(\$1,857,737)	(\$1,913,469)	(\$1,970,873)	(\$2,030,000)
Net Operating Income		\$3,860,193	\$3,975,999	\$4,095,279	\$4,218,137	\$4,344,681	\$4,475,022	\$4,609,272	\$4,747,551	\$4,889,977	\$5,036,676	\$5,187,777
Debt Service		(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	(\$3,434,224)	
Operating Free Cash Flow		\$425,969	\$541,775	\$661,055	\$783,913	\$910,457	\$1,040,798	\$1,175,048	\$1,313,326	\$1,455,753	\$1,602,452	\$5,187,777
Sale Cash Flow											\$79,811,950	
Debt Payoff											(\$39,153,689)	
Total Cash Flow	(\$20,424,000)	\$425,969	\$541,775	\$661,055	\$783,913	\$910,457	\$1,040,798	\$1,175,048	\$1,313,326	\$1,455,753	\$42,260,713	

Table 16		
Cash Flow Pro-Forma		
20 Ownership Units – 15% Affordable at 80% AMI		
	Year 0	Year 1
Sale Proceeds		\$4,428,500
Commissions (2.5%)		(\$110,713)
Net Revenue		\$4,317,788
Total Development Costs		(\$5,080,000)
Profit / (Loss)		(\$762,213)
Sale Cash Flow		(\$762,213)
Total Cash Flow	(\$1,524,000)	(\$762,213)

Table 17		
Cash Flow Pro-Forma		
20 Ownership Units – Payment in Lieu		
	Year 0	Year 1
Sale Proceeds		\$4,550,000
Commissions (2.5%)		(\$113,750)
Net Revenue		\$4,436,250
Total Development Costs		(\$5,209,000)
Profit / (Loss)		(\$772,750)
Sale Cash Flow		(\$772,750)
Total Cash Flow	(\$1,562,700)	(\$772,750)

ARTICLE VII – INCLUSIONARY ZONING

Section 1 – Purpose

The purpose of this Article is to advance the public good through the production of affordable housing units for rent or sale; to maintain an economically integrated community through the geographic distribution of affordable housing opportunities; and to help prevent displacement of low- to moderate-income residents.

Section 2 – Application

This Article shall apply to any development, whether new construction, conversion, adaptive reuse or expansion of an existing structure, involving the net production of twelve (12) or more dwelling units or to any division of land for development of twelve (12) or more dwelling units. Developers proposing a project that is subject to the provisions of this Article shall complete an Inclusionary Zoning Determination, on a form approved by the city of Worcester’s Housing Development Division and shall submit said form as part of a Definitive Site Plan, Special Permit or building permit application. Said Inclusionary Zoning Determination Form shall include an Affirmative Marketing Plan that complies with federal and state fair housing laws.

Notwithstanding any provisions of this Article to the contrary, this Article shall not apply to any project for which one or more applications has been filed for a preliminary or definitive site plan review; special permit; variance; or other similar building or land-use related approvals, as of the date of adoption of this Article, and said application is approved within six (6) months of the filing date. Furthermore, the provisions of this Article shall not apply to any project for which a building permit application has been submitted, as of the date of adoption of this Article, and said building permit has been issued within six (6) months of the filing date.

Section 3 – Definitions

- A. AFFORDABLE HOUSING RESTRICTION** - a deed restriction, contract, mortgage agreement, or other legal instrument, acceptable in form and substance to the city solicitor that effectively restricts occupancy of an affordable housing unit to a qualified purchaser or qualified renter that provides for administration, monitoring and enforcement of the restriction during the term of affordability, and conforms to the requirements of chapter 184, sections 26 or sections 31-32 of the General Laws.
- B. AFFORDABLE HOUSING TRUST FUND** – a fund account established by the City of Worcester and stewarded by the Affordable Housing Trust Fund Board of Trustees.
- C. AFFORDABLE HOUSING TRUST FUND BOARD OF TRUSTEES** – the executive board established pursuant to Article 3, section 18 of the Revised Ordinances of 2015, Organization of City Agencies, under the authority of chapter 44, section 55 of the General Laws.

D. AFFORDABLE HOUSING UNIT – a dwelling unit that is affordable to and occupied by a low- or moderate-income household and meets the requirements for inclusion in the Subsidized Housing Inventory (SHI) of the Massachusetts Department of Housing and Community Development (DHCD).

E. AREA MEDIAN INCOME (AMI) - the median household income for the metropolitan area that includes the City of Worcester, as defined in the annual schedule of low- and moderate-income limits published by the U.S. Department of Housing and Urban Development (HUD), adjusted for household size.

F. FAIR MARKET RENTS - Fair Market Rents (FMRs) are estimates of rent plus the cost of utilities, except telephone. FMRs are housing market-wide estimates of rents that provide opportunities to rent standard quality housing throughout the geographic area in which rental housing units are in competition. The level at which FMRs are set is expressed as a percentile point within the rent distribution of standard quality rental housing units in the FMR area. HUD publishes FMRs annually.

G. LOW- OR MODERATE-INCOME HOUSEHOLD –a household with annual earnings no greater than the eighty percent (80%) percent income limit of the Worcester, MA HUD Metro FMR Area Median Family Income, as determined by HUD in its most recent Income Limits Summary.

H. MARKET-RATE HOUSING UNIT – a dwelling unit that is free from any income-based restrictions for the occupant.

Section 4 – Affordable Housing Requirements

A. Level of Affordability

Housing developments subject to this Article shall provide not less than fifteen percent (15%) of the dwelling units as affordable to households with annual earnings no greater than the eighty percent (80%) income limit of the Worcester, MA HUD Metro FMR Area Median Family Income, as determined by HUD in its most recent Income Limits Summary; or not less than ten percent (10%) of the dwelling units as affordable to households with annual earnings no greater than the sixty percent (60%) income limit of the Worcester, MA HUD Metro FMR Area Median Family Income, as determined by HUD in its most recent Income Limits Summary; or a proportional combination thereof. Any calculation of required affordable housing units that results in the fractional equivalent of one-half or above shall be increased to the next highest whole number.

B. Maximum Rent and Sale Price

- i. The maximum rent for an affordable housing unit shall not exceed thirty percent (30%) of the gross income for the household based on the qualifying Area Median Income restriction, including the utility allowance published annually by HUD. The maximum rent shall also not exceed the FMR published annually by HUD.

- ii. Affordable housing units for sale must have a sale price that will not exceed the amount that an income-eligible household can obtain financing for through prevailing conventional or affordable mortgage products available to the general public. The sale price shall also not exceed the median sales price for the property type at the time of sale published by the Massachusetts Multiple Listing Service for the city of Worcester.

C. Preservation of Affordability

An affordable housing restriction granted to the City of Worcester on the required number of dwelling units that shall run with the land and be in force for a term of not less than thirty (30) years shall be recorded at the Worcester District Registry of Deeds.

D. Comparability

- i. Affordable units shall be indistinguishable from market-rate units in building materials, finishes, appliances, and overall construction quality.
- ii. The mix of bedroom sizes for the affordable units shall be comparable to the overall mix in the development.
- iii. The dwelling square footage for affordable units shall be comparable to the square footage of market-rate units.
- iv. Any required accessible or adaptable units in the project shall have a mix of affordable and market-rate units equal to the proportion of affordable and market-rate units for the overall project.
- v. The affordable units shall not be grouped together, but distributed throughout the development.
- vi. Occupants of affordable units shall have equal access as occupants of market-rate units to any of the building's common areas and amenities.

E. Affirmative Marketing

Affordable housing units shall be made available for rent or sale to eligible low- or moderate-income households under an affirmative marketing plan that complies with federal and state fair housing laws. No building permit shall be issued without an approved affirmative marketing plan.

F. Segmentation and Phasing

A development project may not be segmented to avoid the provisions of this Article, nor may a developer divide or subdivide property or establish surrogate or subsidiary business entities to avoid the provisions of this Article. If the project is phased, the affordable housing units shall not be delayed to the last phase.

Section 5 – Payment in Lieu

In lieu of constructing the required affordable housing units, an applicant may elect to make a payment equal to three percent (3%) of the total construction value of all building permits for the development, including trade permits. Applicants electing this option shall submit a detailed construction cost budget as part of the Inclusionary Zoning Determination mentioned above in Section 2 of this Article. Payments pursuant to this Article shall be made, in full prior to the issuance of a certificate of occupancy, to the City's Affordable Housing Trust Fund.

Section 6 – Incentives

A. To encourage housing production that meets the intent and spirit of this Article, the following incentives may be available to developments that include at least five percent (5%) of the units for the overall project with income restrictions at the sixty percent (60%) AMI limit (“Eligible Developments”):

- i. Density Bonus and Dimensional Relief – Eligible Developments are entitled to an increase in the maximum number of units permitted in the zoning district of an additional percentage equal to the percentage of affordable units plus five percent (5%) up to a maximum twenty-five percent (25%) density bonus. In RG-5 zones, the maximum density bonus shall be limited to fifteen percent (15%) to prevent overcrowding. Said increase in units shall not require additional lot area, frontage, or parking, or increase floor-area-ratios as part of this entitlement.
- ii. Off-Street Parking and Loading –
 - a. Eligible Developments are entitled to a twenty-five percent (25%) reduction from the minimum parking requirements of this Ordinance provided that the applicant submits a Transportation Management Program (TMP) to the Planning Board and the TMP is maintained in accordance with any conditions imposed by the Planning Board, as a requirement of any Definitive Site Plan Approval. Where Definitive Site Plan Approval is not required, the TMP shall be submitted to the Department of Inspectional Services concurrent with any application for a building permit.
 - b. The Planning Board may grant a special permit to modify the loading requirements; parking dimensional, landscaping, and layout requirements, including the number of required parking spaces, where it is demonstrated that with such modification there will be adequate space for off-street parking and/or loading to provide for the needs of the subject building or use. In the event a special permit application requests a reduction of the number of required parking spaces, the requirements described above in subsection (a) related to a TMP shall apply.
 - c. Where parking is reduced through a special permit under the provisions of this Article, the total reduction in parking, after applying the entitlements of this Article, shall not exceed fifty percent (50%) and may not be combined with reductions permitted in Article IV, Section 7, A. 2.