CITY OF CAMBRIDGE
Community Development Department

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To: Yi-An Huang, City Manager

From: Iram Farooq, Assistant City Manager for Community Development

Date: March 21, 2024

Re: Response to POR 2024 #25 regarding the data analysis included in the Economic Feasibility Analysis provided to EOHLC as part of Cambridge's MBTA Communities final compliance submission.

As requested by the City Council, attached is the final Economic Feasibility Analysis provided for Cambridge's MBTA Communities compliance submission. It includes a narrative report and tables with assumptions and modeling data in the format requested by the Executive Office of Housing and Livable Communities (EOHLC). This analysis was conducted by Karl Seidman, the Community Development Department's real estate development economics consultant.

The report reviews Cambridge's housing stock and current levels of affordability, highlighting the importance of the inclusionary housing program to provide affordable housing opportunities for Cambridge residents.

The feasibility analysis concludes that as-of-right inclusionary condominium projects generally meet assumed financial return requirements in current market conditions. Regarding rental housing, the report concludes: "While multifamily rental projects do not meet assumed financial return requirements with Cambridge's inclusionary zoning requirements, this result reflects the current challenging financial market conditions rather than the City's inclusionary zoning requirements." The report shows that inclusionary rental housing projects would be more feasible under market conditions with somewhat lower interest rates and capital returns. It also shows that today's uniquely high interest rates and investment returns make it difficult to finance multifamily rental housing regardless of whether or not inclusionary housing is required.

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I. Overview of Cambridge Housing Stock

Cambridge, Massachusetts boasts a diverse housing stock, with a total of 56,934 units housing 118,489 residents, according to the latest data from the American Community Survey (ACS).[1] This housing stock is divided between rental and ownership units, with approximately 66% of occupied units being rental housing.[2] The city's housing landscape is marked by significant rent and sales price variations, influenced by neighborhood, development type, and building age.

In the past five years, 3,099 units of multifamily rental housing have been developed, or 5.4% of the total stock.[3] While this is a significant amount of units, the growing Cambridge population and construction cost means there is still immense pressure on the existing housing, and many families are rent-burdened or struggle to find housing within their income range.

II. Rental Housing Market

The landscape of Cambridge's 33,751 occupied rental housing units is dynamic and multifaceted.[4] Most of the new units being built in Cambridge are rentals, with 3,099 units of new multifamily housing since 2018.[5] Despite the increase in units, Cambridge has a relatively low 4.4% vacancy rate across rentals,

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[1] U.S. Census Bureau. 2022: ACS 1-Year Estimates Data Profiles, Selected Housing Characteristics

[2] Ibid.

[3] CoStar Multifamily Housing Profile, City of Cambridge, 20 September 2023

[4] U.S. Census Bureau. 2022: ACS 1-Year Estimates Data Profiles, Selected Housing Characteristics

[5] CoStar Multifamily Housing Profile, City of Cambridge, 20 September 2023

indicating high demand compared to available inventory.[6] Understanding the factors influencing the current market rents is critical for comprehending residents' affordability challenges and the impact of inclusionary zoning policy. This section delves into the variations in rents across neighborhoods, development types, and building ages.

<u>Current Market Rents</u>

Citywide, the median rent for all housing types and unit sizes is $3,223 per month, with 2-bedroom (2BR) units commanding a median market rent of $3,719 per month.[7] However, it is crucial to note that within ½ mile from an MBTA station (Study Area), market rents significantly exceed these citywide medians. In this district, the median market rent for all housing types is $3,750 per month, while 2BR units command a median of $4,646 per month.[8] **Figure 1** shows a breakdown of median rent by unit size.

Figure 1 – Cambridge Market Median Asking Rent by Unit Size (July 2023)

Unit Size	Cambridge	Study Area[9]
Studio	$2,565	$2,659
1 Bedroom	$2,929	$3,497
2 Bedroom	$3,719	$4,646
3 Bedroom	$4,653	$5,871

Source: Costar

<u>Variation in Rents</u>

Rents vary significantly across neighborhoods, development types, and building ages. For instance, Apartments in North Cambridge command the highest median rents ($3,975 for a 2BR) compared to other neighborhoods, and Strawberry Hill commands the lowest median rent ($3,050 for a 2BR). See **Figure 2** for a complete breakdown of median asking rent by neighborhood.

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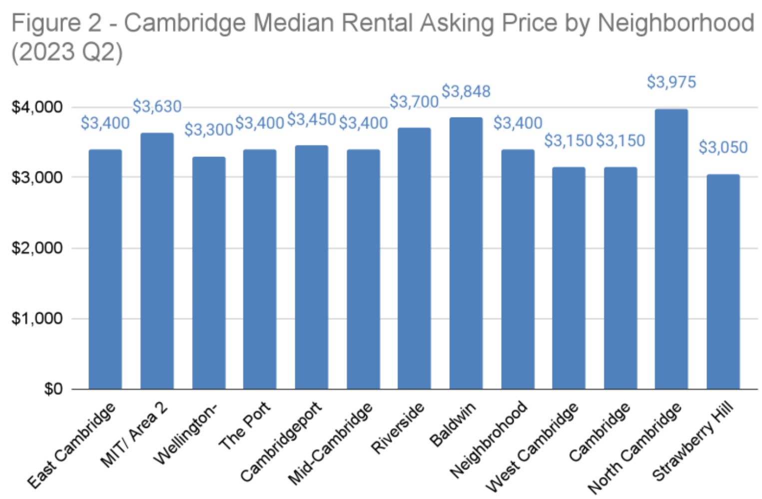
[6] U.S. Census Bureau. 2022: ACS 1-Year Estimates Data Profiles, Selected Housing Characteristics

[7] Ibid.

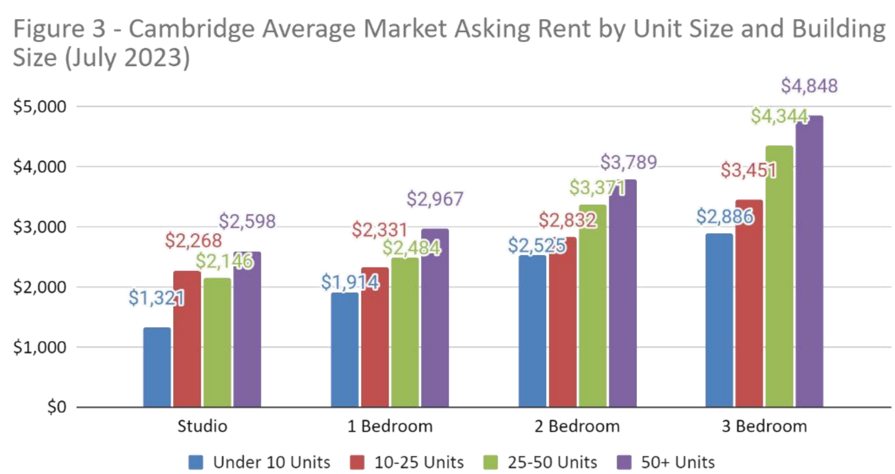
[8] CoStar Multifamily Housing Profile, Cambridge Inclusionary Housing Zoning Overlay Area, 26 July 2023

[9] The Study Area is defined using a .5-mile buffer around all MBTA Stations



Source: Rental Listing Cost and Affordability Monitor - Metropolitan Area Planning Council

Additionally, larger buildings command higher rents. The current median market rent for a 2BR in a 50+ unit building is $3,789, while a 2BR unit in a building with less than ten units is $2,525. This may reflect fewer amenities and older finishes in smaller buildings, because larger buildings are more likely to be newly built. **Figure 3** shows the median market rent breakdown by unit size and building size.

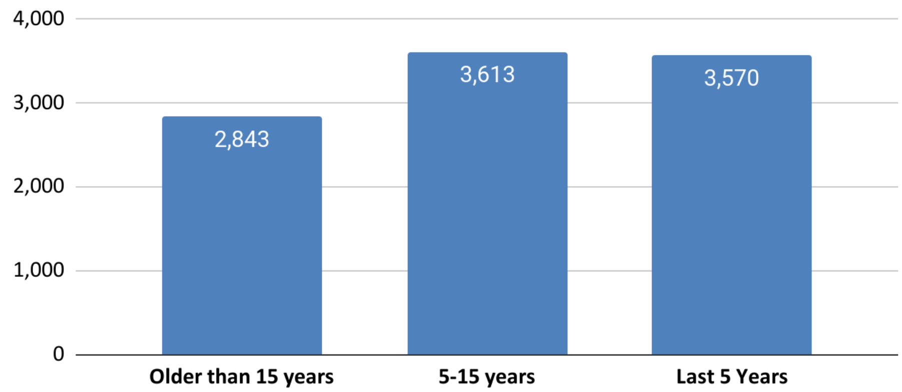


Source: Costar

Note: Average market asking rent represents the dollar amount the lessor is advertising units for. Effective rent may differ.

Finally, new constructions tend to have higher rent than older buildings (built pre-2008). Figure 4 shows a breakdown of rents per unit by year built.

Figure 4 - Cambridge Median Market Rent per Unit by Year Built (July 2023)



Source: Costar

Recent Trends in Rents

Rents in Cambridge across all unit types have generally increased for the past decade, with a slight slowdown during the COVID-19 pandemic.[10] Data from the Metropolitan Area Planning Council (MAPC) and Costar indicate an average annual increase of roughly 2.9% in Cambridge median rent between 2013 and 2023. Post-pandemic, from 2021 to the present, there has been an upward trend in rents, with a 9% annual increase in median rent.[11] Cambridge is seeing a particularly high rent increase in Cambridge Highlands (50% increase 2021 Q2 - 2023 Q2), near Fresh Pond and Alewife Station, where many new units have been built in the past decade.[12]

Affordability of Units

The area median income (AMI) for Cambridge residents is $104,500 for one-person households, $119,400 for two-person households, and $134,400 for three-person households. Just under half (49%) of 2BR units meet the affordability criteria (of rent no greater than 30% of income) for two-person households at the median income level, reflecting a moderate supply of affordable units at this income level.[13] However, a household with income at 80% of the AMI aspiring to secure a 2BR unit faces a narrow range of choices, with only 9.2% of units meeting this affordability criterion.[14] Finally, only 1% of 2BR units meet the affordability criteria for households at 50% of the Area Median Income (AMI), underscoring the pressing need for expanded housing supply targeted to very-low to low-income families.[15]

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[10] According to Costar data, the City's median rent dropped 12% in 2020, followed by an 18% increase in 2021.

[11] CoStar Multifamily Housing Profile, City of Cambridge, 20 September 2023

[12] Rental Listing Cost and Affordability Monitor, Cambridge, MA - Metropolitan Area Planning Council

[13] Ibid.

[14] Ibid.

[15] Ibid.

Rent-Burdened Households
According to ACS data, 50.5% of households in Cambridge paid more than 30% of their income towards rent in 2022. This substantial proportion of rent-burdened households emphasizes the acute need to address housing affordability challenges in the city.[16]

In conclusion, this analysis of the rental housing market in Cambridge reaffirms the importance of addressing housing affordability and the need for strong inclusionary zoning requirements as part of the City's comprehensive, affordable housing strategy.

III. Condo Housing Market

The condominium housing market is a key part of the city's housing supply. With 14,790 condominium units existing as of June 30, 2022, they help provide diverse housing options for residents.[17] Most of these condo units were constructed before 2015, with an additional 217 units added in the past five years, representing a 1.5% increase in the condominium stock. This section delves into the intricacies of this market, starting with an exploration of current sales prices.[18]

Current Median Sales Prices
From January 2021 through May 2023, 1,214 condo units across Cambridge were sold. The median sales price for all condominiums sold in Cambridge during this period was $870,000.[19] The median sales price for 2BR condos slightly exceeded the citywide median at $875,000.[20] **Figure 5** provides a breakdown of median sale price by unit size and sales year, underscoring that 1-bedroom units command a significant premium in the market.

Figure 5 – Cambridge Condo Median Sale Price by Unit Size and Sale Year, January 2021 to May 2023

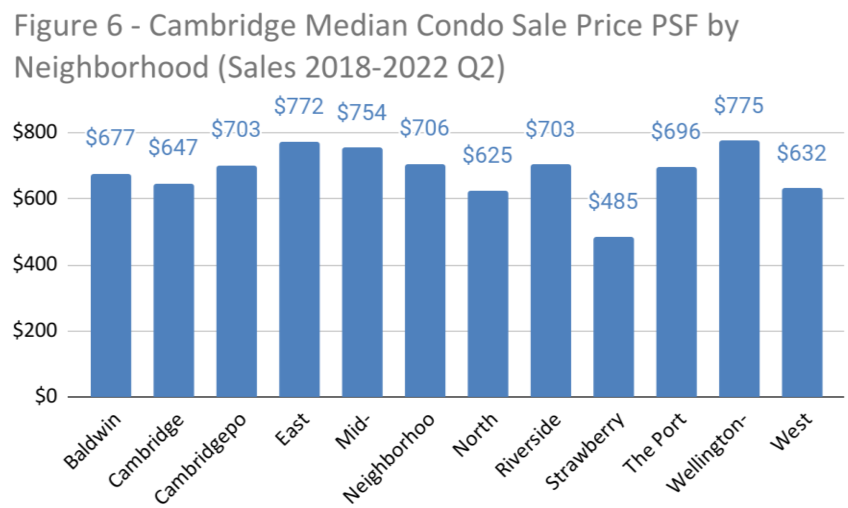
	1-Bedroom		2-Bedroom		3-Bedroom	
Sale Year	Number of Sales	Median Sales Price	Number of Sales	Median Sales Price	Number of Sales	Median Sales Price
2023	61	$1,150,000	31	$875,000	31	$880,000
2022	263	$1,150,000	146	$825,000	93	$810,000
2021	153	$975,000	91	$799,000	66	$800,000

Source: Cambridge Assessor's Office Condo Sales Data, January 2021-May 2023

[16] https://data.census.gov/table?g=160XX00US2511000&tid=ACSDP1Y2022.DP04
[17] Cambridge Property Database FY2016-FY2023, Condominium Data Report FY2016
[18] Cambridge Property Database FY2016-FY2023
[19] Cambridge Assessor's Office Condo Sales Data, 2021-2023
[20] Ibid.

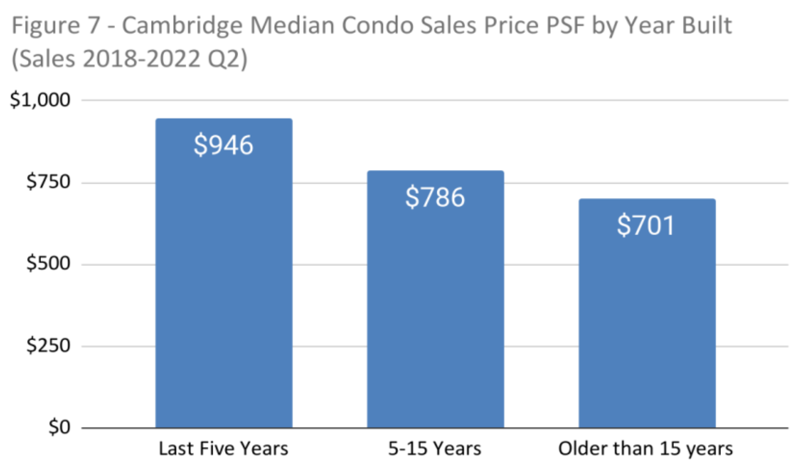
Variations in Sales Prices

Condo sales prices vary by neighborhood, with specific areas experiencing higher demand and, thus, higher prices. Wellington-Harrington has seen the highest median sales prices PSF ($775) between 2018-2022. Like the rent rates, Strawberry Hill has the lowest median sales price PSF ($485) over that same period.[21] See Figure 6 for a complete breakdown of median sales price PSF by neighborhood.[22]



Source: Cambridge Assessor's Office Condo Sales Data, 2018-2022

As with the rental market, newly built condo units sell at significantly higher prices than older units due to a higher level of amenities. The median sales price for units built in the last five years was $946 PSF, while units older than 15 years have sold for $701 PSF.[23] **Figure 7** provides a breakdown of median sales price PSF by year built.



Source: Cambridge Assessor's Office Condo Sales Data, 2022

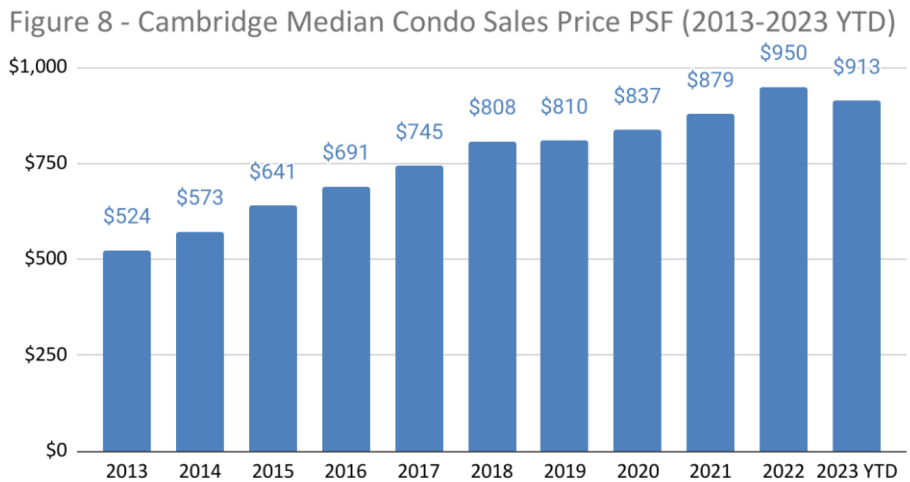
[21] Cambridge Assessor's Office Condo Sales Data, 2018-2022

[22] Note: MIT/Area 2 is excluded due to missing data

[23] Cambridge Assessor's Office Condo Sales Data, 2023

Recent Trends in Sales Prices

In the wake of the pandemic, a significant transformation has occurred in the Cambridge condominium market. From 2021 to the present, median condo prices have experienced a notable average annual increase of 5.8%.[24] This recent growth rate follows a period of significant price growth from 2013 to 2018 and fairly stable prices from 2018 to 2020. Condo sales prices picked up again in 2020 before cooling off considerably in the first half of 2023. **Figure 8** highlights the median condominium prices PSF from 2013 to 2023.



Source: Cambridge Assessor's Office Condo Sales Data, 2013-2023

Affordability of Units

Unsurprisingly, the increasing sale price of condominiums comes with decreased affordability for many Cambridge residents. The income level needed to buy a median 2BR condo in Cambridge with a 3% down payment through an FHA loan is $279,000, which is equivalent to 208% of AMI for a 3-person household or 187% of AMI for a 4-person household. Households that pay a 20% down payment must make at least $225,000 to afford a median 2BR condo, which is 167% of AMI for a 3-person household or 151% of AMI for a 4-person household. These numbers indicate that only a small portion of the current Cambridge population can purchase condos anywhere in the City, requiring other households to seek rental housing or look outside Cambridge for ownership opportunities.

In conclusion, a multifaceted approach is essential in ensuring that Cambridge's condo market continues to thrive while creating units that are affordable to a diverse range of households. Even with varying down payment scenarios, the income thresholds required to access a median-price condo in Cambridge underscore the pressing need to address homeownership affordability, in part through the City's inclusionary zoning policy.

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[24] Cambridge Assessor's Office Condo Sales Data, 2021-2023

IV. Overview of Cambridge Inclusionary Zoning Policy

Cambridge's Inclusionary Housing Program was first established in 1998 through adoption of the Inclusionary Zoning Ordinance. In April 2017, the ordinance was amended to establish the current inclusionary zoning policy. These amendments were informed by an economic feasibility analysis, completed in 2016, which found that requiring 20% affordable units was financially viable under multiple development prototypes for household income levels consistent with Cambridge' policy[25]. The key requirements under this policy include[26]:

- the policy applies to developments with 10 or more housing units or at least 10,000 square feet of residential gross floor area;
- these developments must dedicate 20% of their net residential floor area to low- and moderate-income tenants or moderate- and middle- income homebuyers (Affordable Dwelling Units);
- developments are encouraged to provide 3-BR units as part of the 20% inclusionary housing. Three-bedroom units are required for developments with over 30,000 SF, which must create one 3BR unit for every 6,000 of required Affordable Dwelling Unit floor area. The ratio of affordable 3BR units must be equal to or greater than the ratio of 3 BR units in the non-affordable units;
- developers receive an as-of-right density bonus of up to 30% in total additional gross floor area and dwelling units in exchange for providing inclusionary housing units;
- household income levels for eligible tenants in affordable rental units are between 50% and 80% of Area Median Income (AMI); and
- household income levels for eligible homeowners in affordable ownership units cannot exceed 100% of AMI.

New multifamily housing development has occurred after adoption of the 20% inclusionary requirement. Three multifamily projects (two rental and one condominium) with 837 new housing units, of which 157 are affordable inclusionary units, have been permitted and built under the 2017 amended inclusionary zoning policy. Since its inception in 1998, Cambridge's Inclusionary Zoning Program has generated over 1,100 units of affordable rental and ownership housing, either completed or currently under construction in new developments the city[27].

V. Economic Feasibility Analysis Results

Five development scenarios were used for the economic feasibility analysis. These scenarios, presented in **Figure 9,** reflect the diversity of development sizes and types (rental or condominium) that have been recently built in the city and that are allowable by right under Cambridge zoning. The small and medium size projects include a 30% density bonus, as permitted under the Inclusionary Zoning Ordinance. No bonus was applied to the large rental project, as the bonus would bring the project above the 50,000 SF threshold that requires a special permit, which no longer makes it an as-right project.

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[25] David Paul Rosen & Associates, Cambridge Inclusionary Housing Analysis, Final Report, March 27, 2016
[26] Cambridge Zoning Ordinance, Article 11.203
[27] https://www.cambridgema.gov/CDD/housing/inclusionaryhousing

Figure 9. Development Scenarios Used for Economic Feasibility Analysis

Project Type and Size				All Units				Affordable Units			
Project Type	No of Units	Gross Floor Area (GFA)	Dwelling unit Floor Area (DUFA)	Studio- No. of Units	1 BR - No. of Units	2 BR - No. of Units	3 BR- No. of Units	Studio- No. of Units	1 BR - No. of Units	2 BR - No. of Units	3 BR- No. of Units
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2
Medium Project Condo	42	43,550	34,840	3	16	16	7	0	3	3	2
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1

Source: Karl F. Seidman Consulting Services and Karp Strategies

For rental projects, two financial return standards were used:

1. return on cost – the ratio of annual project net cash flow before debt service to total development costs with a threshold of 7% under current market and interest rate conditions. This financial return measure is commonly used by developers and is especially applicable to developers holding their property long-term.
2. internal rate of return – the discount rate at which the developer's cash outflows to develop the project equal the net cash proceeds received from the project 's rental income and sale of the property. The IRR analysis assumes developers sell the property at the end of the third year after the development commences, once it is occupied with stabilized income. This return measure is most appropriate for developers that build projects with the expectation to sell the stabilized property to long-term investors.

For ownership projects, only the IRR measure was used since the developer's cash flow is from the sale of units to home -buyers after project completion and there is no on-going annual cash flow stream to compare to project development costs or developer equity.

Assumptions used in the financial analysis of the five scenarios are detailed in the accompanying Assumptions Checklist. A spreadsheet with the financial analysis for all five scenarios is also provided.

Figure 10. Estimated Financial Returns for Development Scenarios

Scenario	Gross Floor Area (SF)	Number of Units	Return on Cost	IRR
Small Rental	13,000	15	5.72%	9.42%
Medium Rental	43,550	42	5.84%	11.60%
Large Rental	50,000	49	5.56%	6.55%
Small Condo	13,000	15	NA	26.24%
Medium Condo	43,550	42	NA	28.44%
Threshold Rate			7.00%	19.00%

Source: Karl F. Seidman Consulting Services and Karp Strategies

Figure 10 presents the estimated financial return results for the five scenarios. The results show that the projected IRR returns for the small and medium condo projects exceed the 19% threshold by a healthy margin of 7.24 percentage points and 9.44 percentage points, respectively. These condo projects are financially feasible with Cambridge's inclusionary zoning requirements under current market and financial conditions.

Estimated returns for all three rental scenarios are below projected return thresholds, for both return measures. The estimated return on cost ranges from 5.56% to 5.84%, compared to the 7% threshold rate. Estimated IRRs are well below the 19% return threshold, with the margins ranging from 7.4 percentage points for the medium project to almost 12 percentage points for the large rental project.

The rapid rise in interest rates generated by Federal Reserve policy and uncertainly about future construction costs have increased the cost of capital for developers, which impacts developer's return thresholds. Consequently, the financial returns under current economic conditions may not represent long-term financial viability under a more stabilized market with lower interest-rates, more predictable inflation rates and reduced return requirements. In other words, the above financial feasibility results may reflect current development and financial market conditions and not be the result of Cambridge's inclusionary zoning requirements. To assess whether the economic feasibility results are driven by market conditions rather than Cambridge's inclusionary zoning policy, financial analysis for several alternative situations was conducted to be better understand the extent to which Cambridge's inclusionary zoning policy is the source of financial feasibility results for rental projects, or whether the results reflect particular assumptions in the model or current financial market conditions. These alternatives include:

1. a 10% increase in assumed rents to represent the potential (and possibly developer expectations) that rents will increase at about current levels during the project permitting and construction period;
2. a reduction in debt interest rates from 8.25% to 5.5% and cap rates from 5% to 4.5%, reflecting pre-pandemic levels, and corresponding reductions in return on cost and IRR thresholds to 6% and 16%, respectively; and
3. rental projects with all market rate units without any affordable units and no density bonus.

A 10% rent increase has a large impact on financial returns, making projects viable under the IRR threshold by raising the IRR above the 19% threshold for the small and medium projects and to just below 19% for the large rental project (see **Figure 11**). It also raises the return on cost by .70 basis points[28]—much closer to the 7% threshold but still below the level desired by developers planning to hold their property long-term.

[28] A basis point is 1/100th of a percentage point.

Figure 11. Rental Project Financial Returns with 10% Rent Increase

Scenario	Gross Floor Area (SF)	Number of Units	Return on Cost	IRR
Small Rental	13,000	15	6.43%	22.81%
Medium Rental	43,500	42	6.54%	24.86%
Large Rental	50,000	49	6.22%	18.76%
Threshold Rate			7.00%	19.00%

Source: Karl F. Seidman Consulting Services and Karp Strategies

In a lower interest rate and investment return environment, all three rental projects exceed a 16% IRR requirement and would be feasible for developers expecting to sell a completed and stabilized project to investors (see Figure 12). All three projects are within 45 basis points of a lower 6% return on cost standard, with the small and medium rental projects just below the threshold at 5.72% and 5.84%, respectively. These returns are close enough for some developers to proceed with a project, especially in the strong Cambridge market, in which low vacancy rates and increases in market rents over time are likely.

Figure 12. Financial Analysis Results with Lower Interest Rates and Return Thresholds

Scenario	Gross Floor Area (SF)	Number of Units	Return on Cost	IRR
Small Rental	13,000	11	5.72%	25.65%
Medium Rental	43,500	32	5.84%	28.95%
Large Rental	50,000	49	5.56%	17.09%
Small Condo	13,000	15	NA	28.03%
Medium Condo	43,550	42	NA	30.87%
Threshold Rate			6.00%	16.00%

Source: Karl F. Seidman Consulting Services and Karp Strategies

Figure 13 shows results for rental scenarios with 100% market-rate units. Since these scenarios do not include the density bonus provided for under inclusionary zoning, the GFA and number of units for the small and medium projects are lower than in the prior scenarios. These scenarios are feasible based on the IRR criteria, but fall below the 7% return on cost threshold by 56 to 75 basis points. This result indicates that the current cost and financial market environment, rather than the city’s inclusionary zoning policy, is making rental housing development in Cambridge challenging and infeasible under a 7% return on cost threshold.

Figure 13. Estimated Financial Returns with All Market Rate Units

Scenario	Gross Floor Area (SF)	Number of Units	Return on Cost	IRR
Small Rental	10,000	11	6.25%	19.23%
Medium Rental	33,500	32	6.44%	22.97%
Large Rental	50,000	49	6.40%	22.20%
Threshold Rate			7.00%	19.00%

Source: Karl F. Seidman Consulting Services and Karp Strategies

VI. Conclusions

Under current real estate and financial market conditions, multi-family condominium projects reflective of as-right zoning and site conditions exceed typical developer IRR thresholds and are financially feasible under Cambridge's inclusionary zoning policy. While multifamily rental projects do not meet assumed financial return requirements with Cambridge's inclusionary zoning requirements, this result reflects the current challenging financial market conditions rather than the City's inclusionary zoning requirements. The recent completion of several projects with the current inclusionary zoning requirements supports this conclusion along with financial analysis showing that under improved financial market conditions and modest increases in expected rents, many multi-family rental projects are financially feasible with Cambridge's inclusionary zoning requirements.

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Economic Feasibility Analysis - Assumption Checklist

The data and assumptions requested in this EFA form will allow DHCD to evaluate the potential impacts of any Inclusionary Zoning requirements in excess of what is allowed by the MBTA Communities Act. Please complete this form with all available information and provide source references for each data point as they relate to your MBTA 3A Compliant District(s).

Revenue Sources	**Input**	**Source**	**Notes/Comments**
Rents by Bed Count (per SQFT)			
Studio/Efficiency	$ 5.50	Co-star, MLS, developer interviews	Reflects averages; new large project are higher
One Bedroom	$ 5.00	Co-star, MLS, developer interviews	Reflects averages; new large project are higher
Two Bedroom	$ 4.35	Co-star, MLS, developer interviews	Reflects averages; new large project are higher
Three Bedroom	$ 4.45	Co-star, MLS, developer interviews	Reflects averages; new large project are higher
Sale Value (per SQFT)	$ 960.00	Assessor Records-2021-2023	Variation by unit size- 2BR ($900) 3BR ($1000)
Sale Value (per Unit)			
Other Income			
Parking Revenue (per month per space)	$ -		Assume no on site parking for projects
On-Site Laundry (per month)	$ -		Laundry in units for virtually all projects
Other (please list)	$ -		

Construction Costs	**Input**	**Source**	**Notes/Comments**
Land Acquisition (per unit)	$ 87,000.00		Based on 3 projects
Land Acquisition (per SQFT)			
Land Development Costs (per unit)	$ -	Included in hard costs	Based on construction cost figures from developers
Soft Costs (percentage of hard costs)	20%	Developer interviews	
Hard Costs (per SQFT)			
Residential	$ 350.00	Developer & Contractor interviews, BI	Podium + stick built for most projects; $25 higher for condos reflecting higher quality finishes
Commercial Stick Built			
Commercial Podium			
Commercial Steel			
Parking Assumptions	$ -		
Parking Ratio	0.00		
Parking Cost by Type			
Surface (per space)			Not applicable
Structured (per space)			Not applicable
Underground (per space)			Not applicable

Operations & Expenses	**Input**	**Source**	**Notes/Comments**
Vacancy (percentage)	5%	Developer interviews	
Collection Loss (percentage)	0%	Included in vacancy	
Operating Expense (% of EGI)			
Operating Expenses (per unit)	$ 10,000.00		
Cost of Sale (percentage)	5%		Brokerage fees for condos

Financial	**Input**	**Source**	**Notes/Comments**
Lending Rate (Percentage)	8.25%	Developer interviews	
Lending Term (Years)	25 years	Developer interviews	Amortization period
Debt Equity Ratio	1.85		(70/30 ratio); lower for rental projects per 1.25 debt service coverage ratio
Cap Rate	5%	Costar, developer interviews	
Return Expectations			
Internal Rate of Return (IRR)	19%	Developer interviews	
Return on Cost (ROC)	7%	Developer interviews	
Cash on Cash (CoC)			Not applicable

Project	No of Units	GFA	Dwelling unit Floor Area (DUFA)	All Units: Studio- No. of Units	All Units: 1 BR -No. of Units	All Units: 2 BR -No. of Units	All Units: 3 BR-No. of Units	Inclusionary Units: Studio- No. of Units	Inclusionary Units: 1 BR -No. of Units	Inclusionary Units: 2 BR -No. of Units	Inclusionary Units: 3 BR-No. of Units	Required Inclusionary SF	Required 3BR
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	1
Medium Project Condo	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	1
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1	8000	1

Project	Studio SF/unit	1 BR SF/unit	2 BR SF/unit	3 BR SF/unit
Small & medium projects	500	700	900	1100
Large Project	500	700	900	1100

Rental Income for Inclusionary Zoning (IZ) Units

	Factor/ Parameter	SF/Units	Household Size/Unit	AMI	Income @ .65 AMI	30% of Income/25% for studios	Less Annual Utility Allowance*	Net Annual Rent/Unit	Total Annual Rent/Unit Type
Building Gross Floor Area (GFA)	10,000								
Dwelling Unit Floor Area (DUFA)	7900								
Required IZ DUFA @ .20	1580								
Required 3 BR Units	0								
Number of 3 BR Units	0	1100	4	$149,300	$97,045	$29,113.50	-3336	$25,778	$0
Number of 2 BR Units	1	900	3	$134,400	$87,360	$26,208.00	-2388	$23,820	$23,820
Number of 1 BR Units	1	700	2	$119,400	$77,610	$23,283.00	-1716	$21,567	$21,567
Number of Studio Units	1	500	1	$104,500	$67,925	$16,981.25	-1236	$15,745	$15,745
Total Affordable Units	**3**	2100							
Total Gross Rent Inclusionary Zoning Units									**$61,132**
Percent affordable DUFA	20.39%								

Rental Income for Market Rate Units

Market Rate Units- DUFA	Number of Units	SF Per Unit		Total Unit SF	Rent/SF		Annual Rent/Unit Type
3 BR SF	0	1100		0	$4.45		$0
2 BR SF	3	900		2700	$4.35		$140,940
1 BR SF	5	700		3500	$5.00		$210,000
Studio SF	4	500		2000	$5.50		$132,000
Total Market Rate Units	**12**			**8200**			
Total Gross Rent Marlet Rate Units							**$482,940**

Annual Cash Flow Statement

Total Gross Rental Income	**$544,072**	
Parking Revenue	$0	
On-site Laundry Revenue	$0	
Other Revenue	$0	
Total Gross Annual Revenue	**$544,072**	
Less Vacancy and Collection Loss	-$27,204	
Less Operating Expenses	-$150,000	
Net Cash Flow Before Debt	**$366,869**	
Cash Flow for Debt Service @ 1.25	$293,495	
Annual Debt Service	-$293,493	
Net Cash Flow After Debt Service	$73,376	
Debt Principal	**($3,102,024)**	round to 3,102,000

Development Costs and Sources of Funds

Gross Building Floor Area		13,000		
Construction Type	Podium & Stick built			
Use of Funds	Cost/GFA SF		Cost/Unit	Amount
Land acquisition -based on 11 units before density bonus			87000	$957,000
Land development				$0
Building construction/hard costs		$350		$4,550,000
Parking construction Costs		$0		$0
Soft Costs		20%		$910,000
Total Development Cost				$6,417,000
Sources of Funds	Percent			Amount
Developer/Investor Equity		51.7%		$3,315,000
Debt		48.3%		$3,102,000
Total Sources of Funds				$6,417,000
Debt Amortization Period				300
Debt Interest Rate				8.25%
Annual Debt Service				($293,493)

Financial Returns

Return on Cost Percentage*	5.72%

*Net cash flow before debt/total development cost

IRR Analysis with Building Sale in Year 3

Assumes constant rent and costs

	Year 0	Year 1	Year 2	Year 3
Equity investment	-$1,105,000	-$1,105,000	-$1,105,000	
Net Cash Flow Before Debt Service				$366,869
Sale in Year 3-stablized net income				$7,337,373
Less sales cost (5%)				-$366,869
Less debt payoff - principal + 1 years interest				-$3,357,915
Net Sales proceeds				$3,612,589
Net Cash Flow	-$1,105,000	-$1,105,000	-$1,105,000	$3,979,458
Cap rate	5.00%			
IRR	9.42%			

Assumptions

Project	No of Units	GFA	Dwelling unit Floor Area (DUFA)	All Units: Studio- No. of Units	All Units: 1 BR -No. of Units	All Units: 2 BR -No. of Units	All Units: 3 BR-No. of Units	Inclusionary Units: Studio- No. of Units	Inclusionary Units: 1 BR -No. of Units	Inclusionary Units: 2 BR -No. of Units	Inclusionary Units: 3 BR-No. of Units	Required Inclusionary SF	Required 3BR
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	0
Medium Project Condo	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	0
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1	8000	1

Project	Studio SF/unit	1 BR SF/unit	2 BR SF/unit	3 BR SF/unit
Small & medium projects	500	700	900	1100
Large Project	500	700	900	1100

Sales Revenue for Inclusionary Zoning (IZ) Condominiums

Total GFA 13,000

Affordable IZ Units	Factor/ Parameter	SF/Units	Household Size/Unit	AMI	Income @ .90 AMI	30% of Income/2 5% for studios	Tax AV Fixed	Tax Rate	Tax Cost	PMI (% of mortgage)	Condo Fee (per SF)	Total Deductions from Income	Income for Mortgage	Mortgage Amount	Sales Price (Mortgage/ .95)	Total sales Revenue
										0	$0.15			7.25%		
Dwelling Unit Floor Areas (DUFA) @ .80																
Affordable DUFA	2100															
Number of 3 BR Units	0	1100	4	$149,300	$134,370	$40,311	$192,000	0.592%	$1,136.64	0	$ 1,980.00	$3,116.64	$37,194.36	($454,359.10)	$478,273	$0
Number of 2 BR Units	1	900	3	$134,400	$120,960	$36,288	$176,000	0.592%	$1,041.92	0	$ 1,620.00	$2,661.92	$33,626.08	($410,769.68)	$432,389	$432,389
Number of 1 BR Units	1	700	2	$119,400	$107,460	$32,238	$161,000	0.592%	$953.12	0	$ 1,260.00	$2,213.12	$30,024.88	($366,778.12)	$386,082	$386,082
Number of Studio Units	1	500	1	$104,500	$94,050	$23,513	$145,000	0.592%	$858.40	0	$ 900.00	$1,758.40	$21,754.10	($265,743.87)	$279,730	$279,730
Total Affordable Units	**3**	**2100**														
Average Unit Size																
Total Gross Sales Revenue, IZ Units]																**$1,098,202**
Percent affordable DUFA	20.39%															

Sales Revenue for Market Rate Condos

Market Rate Units	Percent of DUFA	Total DUFA	SF Per Unit	Number of Units	Total SF	Sales Price/SF	Total Sales Revenue	Gross Sales Revenue
3 BR SF			1100	0	0	$1,000	$0	$0
2 BR SF			900	3	2700	$900	$2,430,000	$2,430,000
1 BR SF			700	5	3500	$960	$3,360,000	$3,360,000
Studio SF			500	4	2000	$960	$1,920,000	$1,920,000
Total Market Rate Units				**12**	**8200**			
Total Gross Sales Revenue, Market Rate Units								**$7,710,000**

Development Revenue

Gross sales, IZ Units	$1,098,202
Gross sales, market units	$7,710,000
Total Gross Sales revenue	**$8,808,202**
Less Sales Cost (5% of market gross sales)	-$440,410
Total Net Sales revenue	**$8,367,792**
Construction loan principal repayment	-$4,764,900
Construction loan interest during sales period	-$289,298
Net Sales Proceeds	**$3,313,594**

Development Costs and Sources of Funds

Gross Building Floor Area	13,000		
Construction Type			
Use of Funds	Cost/GFA SF	Cost/Unit	Amount
Land acquisition -based on 11 units before density bonus		87000	$957,000
Land development, included in construction costs			
Building construction/hard costs	$375		$4,875,000
Parking construction c]costs	$0		$0
Soft costs	20%		$975,000
Total Development cost			$6,807,000
Sources of Funds	Percent		Amount
Developer/Investor Equity	30%		$2,042,100
Construction Debt	70%		$4,764,900
Total Sources of Funds			$6,807,000
Debt Interest Rate	8.5%		
Construction loan period	2		

Condo sales period	1

Financial Returns

Return on Cost Percentage	NA

IRR Analysis with Condo Unit Sales in Year 3

	Year 0	Year 1	Year 2	Year 3
Equity investment (1/3 each year)	-$680,700	-$680,700	-$680,700	$0
Net sales proceeds	$0	$0	$0	$3,313,594
Net Annual Cash Flow	-$680,700	-$680,700	-$680,700	$3,313,594
IRR	26.24%			

Project	No of Units	GFA	Dwelling unit Floor Area (DUFA)	All Units: Studio- No. of Units	All Units: 1 BR -No. of Units	All Units: 2 BR -No. of Units	All Units: 3 BR-No. of Units	Inclusionary Units: Studio- No. of Units	Inclusionary Units: 1 BR - No. of Units	Inclusionary Units: 2 BR - No. of Units	Inclusionary Units: 3 BR-No. of Units	Required Inclusionary SF	Required 3BR
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	1
Medium Project Condo	32	33,500	26,800	2	11	14	5	0	3	3	2	5360	1
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1	8000	1

Project	Studio SF/unit	1 BR SF/unit	2 BR SF/unit	3 BR SF/unit
Small & medium projects	500	700	900	1100
Large Project	500	700	900	1100

Rental Income for Inclusionary Zoning (IZ) Units

	Factor/ Parameter	SF/Units	Household Size/Unit	AMI	Income @ .65 AMI	30% of Income/25 % for studios	Less Annual Utility Allowance*	Net Annual Rent/Unit	Total Annual Rent/Unit Type
Building Gross Floor Area (GFA)	43,550								
Dwelling Unit Floor Area (DUFA)	34,840								
Required IZ DUFA @ .20	6968								
Required 3 BR Units	0								
Number of 3 BR Units	2	1100	4	$149,300	$97,045	$29,114	-3336	$25,778	$51,555
Number of 2 BR Units	3	900	3	$134,400	$87,360	$26,208	-2388	$23,820	$71,460
Number of 1 BR Units	3	700	2	$119,400	$77,610	$23,283	-1716	$21,567	$64,701
Number of Studio Units	0	0	1	$104,500	$67,925	$16,981	-1236	$15,745	$0
Total Inclusionary Zoning Units	**8**	**7000**							
Total Gross Rent Inclusionary Zoning Units									**$187,716**
Percent affordable DUFA	20.11%								

Rental Income for Market Rate Units

Market Rate Units	SF Per Unit	Number of Units	Total Unit SF	Rent/SF	Annual Rent/Unit Type
3 BR SF	1100	5	5500	$4.45	$293,700
2 BR SF	900	13	11700	$4.35	$610,740
1 BR SF	700	13	9100	$5.00	$546,000
Studio SF	500	3	1500	$5.50	$99,000
Total Market Rate Units		**34**	**27800**		
Total Gross Rent Market Rate Units					**$1,549,440**

Annual Cash Flow Statement

Total Gross Rental Income	$1,737,156	
Parking Revenue	$0	
On-site Laundry Revenue	$0	
Other Revenue	$0	
Total Gross Annual Revenue	**$1,737,156**	
Less Vacancy and Collection Loss	-$86,858	
Less Operating Expenses	-$420,000	
Net Cash Flow Before Debt	**$1,230,298**	
Cash Flow for Debt Service @ 1.25	$984,239	
Annual Debt Service	-$984,270	
Net Cash Flow After Debt Service	**$246,029**	
Debt Principal	($10,402,672)	round to 10,403,000

Development Costs and Sources of Funds

Gross Building Floor Area	43,550
Construction Type	Podium & Stick built

Use of Funds	Cost/GFA SF	Cost/Unit	Amount
Land acquisition - based on 32 units before density bonus		87000	$2,784,000
Land development costs , included in building construction			$0
Building construction/hard costs	350		$15,242,500
Parking construction costs	0		$0
Soft Costs	0.2		$3,048,500
Total Development Cost			$21,075,000

Sources of Funds	Percent	Amount
Developer/Investor Equity	50.64%	$10,672,000
Debt	49.36%	$10,403,000
Total Sources of Funds		$21,075,000
Debt Amortization Period		300
Debt Interest Rate		0.0825
Annual Debt Service		($984,270)

Financial Returns

Return on Cost Percentage*	5.84%

*Net cash flow before debt/total development cost

Project	No of Units	GFA	Dwelling unit Floor Area (DUFA)	All Units: Studio- No. of Units	All Units: 1 BR -No. of Units	All Units: 2 BR -No. of Units	All Units: 3 BR-No. of Units	Inclusionary Units: Studio- No. of Units	Inclusionary Units: 1 BR -No. of Units	Inclusionary Units: 2 BR -No. of Units	Inclusionary Units: 3 BR-No. of Units	Required Inclusionary SF	Required 3BR
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	0
Medium Project Condo	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	0
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1	8000	1

Project	Studio SF/unit	1 BR SF/unit	2 BR SF/unit	3 BR SF/unit
Small & medium projects	500	700	900	1100
Large Project	500	700	900	1100

Sales Income for Inclusionary Zoning (IZ) Condominiums

Total GFA 43,550

Affordable IZ Units	Factor/ Parameter	SF/Units	Household Size/Unit	AMI	Income @ .90 AMI	30% of Income/25% for studios	Tax AV Fixed	Tax Rate	Tax Cost	PMI (% of mortgage)	Monthly Condo Fee (per SF)	Total Deductions from Income	Income for Mortgage	Mortgage Rate/Amount	Sales Price (Mortgage/.95)	Total sales Revenue
Affordable Percentage /GFA										0	$0.15			7.25%		
Dwelling Unit Floor Areas (DUFA) @ .80																
Affordable DUFA	7000															
Number of 3 BR Units	2	1100	4	$149,300	$134,370	$40,311	$192,000	0.592%	$1,136.64	0	$ 1,980.00	$3,116.64	$37,194.36	($454,359.10)	$478,273	$956,545
Number of 2 BR Units	3	900	3	$134,400	$120,960	$36,288	$176,000	0.592%	$1,041.92	0	$ 1,620.00	$2,661.92	$33,626.08	($410,769.68)	$432,389	$1,297,167
Number of 1 BR Units	3	700	2	$119,400	$107,460	$32,238	$161,000	0.592%	$953.12	0	$ 1,260.00	$2,213.12	$30,024.88	($366,778.12)	$386,082	$1,158,247
Number of Studio Units	0	500	1	$104,500	$94,050	$23,513	$145,000	0.592%	$858.40	0	$ 900.00	$1,758.40	$21,754.10	($265,743.87)	$279,730	$0
Total Affordable Units	**8**	**7000**														
Average Unit Size																
Total Gross Sales Revenue, IZ Units																**$3,411,960**
Percent Inclusinary DUFA	20.11%															

Sales Revenue for Market Rate Condos

Market Rate Units	Percent of DUFA	Total DUFA	SF Per Unit		Number of Units	Total SF	Sales Price/SF	Total Sales Revenue	Gross Sales Revenue
3 BR SF			1100		5	5500	$1,000	$5,500,000	$5,500,000
2 BR SF			900		13	11700	$900	$10,530,000	$10,530,000
1 BR SF			700		13	9100	$960	$8,736,000	$8,736,000
Studio SF			500		3	1500	$960	$1,440,000	$1,440,000
Total Market Rate Units					**34**	**27800**			
Total Gross Sales Revenue, Market Rate Units									**$26,206,000**

Development Revenue

Gross sales, IZ Units	$3,411,960
Gross sales, market units	$26,206,000
Total Gross Sales revenue	**$29,617,960**
Less Sales Cost (5% of market gross sales)	-$1,310,300
Total Net Sales revenue	**$28,307,660**
Construction loan principal repayment	-$15,667,050
Construction loan interest during sales period	-$1,331,699
Net Sales Proceeds	$11,308,910

Development Costs and Sources of Funds

Gross Building Floor Area			
Construction Type			
Use of Funds	Cost/GFA SF	Cost/Unit	Amount
Land acquisition - based on 32 units before density bonus		87000	$2,784,000
Land development, included in construction costs			
Building construction/hard costs	$375		$16,331,250
Parking construction costs	$0		$0
Soft costs	20%		$3,266,250
Total Development cost			$22,381,500
Sources of Funds	Percent		Amount
Developer/Investor Equity	30%		$6,714,450
Construction Debt	70%		$15,667,050

Total Sources of Funds		$22,381,500
Debt Interest Rate	8.5%	
Construction loan period	2	
Condo sales period	1	

Financial Returns

Return on Cost Percentage	NA

IRR Analysis with Condo Unit Sales in Year 3

	Year 0	Year 1	Year 2	Year 3
Equity investment (1/3 each year)	-$2,238,150	-$2,238,150	-$2,238,150	$0
Net sales proceeds	$0	$0	$0	$11,308,910
Net Annual Cash Flow	-$2,238,150	-$2,238,150	-$2,238,150	$11,308,910
IRR	28.44%			

Project	No of Units	GFA	Dwelling unit Floor Area (DUFA)	All Units: Studio- No. of Units	All Units: 1 BR -No. of Units	All Units: 2 BR -No. of Units	All Units: 3 BR-No. of Units	Inclusionary Units: Studio- No. of Units	Inclusionary Units: 1 BR -No. of Units	Inclusionary Units: 2 BR -No. of Units	Inclusionary Units: 3 BR-No. of Units	Inclusionary Units: Required Inclusionary SF	Inclusionary Units: Required 3BR
Small Project -Rental	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Small Project -Condo	15	13,000	10,400	5	6	4	0	1	1	1	0	2080	0
Medium Project-Rental	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	1
Medium Project Condo	42	43,550	34,840	3	16	16	7	0	3	3	2	6968	1
Large Project -Rental	49	50,000	40,000	5	17	21	6	1	4	4	1	8000	1

Project	Studio SF/unit	1 BR SF/unit	2 BR SF/unit	3 BR SF/unit
Small & medium projects	500	700	900	1100
Large Project	500	700	900	1100

Rental Income for Inclusionary Zoning (IZ) Units

	Factor/ Parameter	SF/Units	Household Size/Unit	AMI	Income @ .65 AMI	30% of Income/25% for studios	Less Annual Utility Allowance*	Net Annual Rent/Unit	Total Annual Rent/Unit Type
Building Gross Floor Area (GFA)	50000								
Dwelling Unit Floor Area (DUFA)	39900								
Required IZ DUFA @ .20	7980								
Required 3 BR Units	1								
Number of 3 BR Units	1	1100	4	$149,300	$97,045	$29,114	-3336	$25,778	$25,778
Number of 2 BR Units	4	900	3	$134,400	$87,360	$26,208	-2388	$23,820	$95,280
Number of 1 BR Units	4	700	2	$119,400	$77,610	$23,283	-1716	$21,567	$86,268
Number of Studio Units	1	500	1	$104,500	$67,925	$16,981	-1236	$15,745	$15,745
Total Gross Rent Inclusionary Zoning Units	10	8000							$223,071

Rental Income for Market Rate Units

Market Units	SF Per Unit	Units	Total Unit SF	Rent/SF	Rent/Unit
3 BR SF	1100	5	5500	$4.45	$293,700
2 BR SF	900	17	15300	$4.35	$798,660
1 BR SF	700	13	9100	$5.00	$546,000
Studio SF	500	4	2000	$5.50	$132,000
Total Market Rate Units		**39**	**31900**		
Total Gross Rent Market Rate Units					**$1,770,360**

Annual Cash Flow Statements

Total Gross Rental Income	$1,993,431
Parking Revenue	$0
On-site Laundry Revenue	$0
Other Revenue	$0
Total Gross Annual Revenue	$1,993,431
Less Vacancy and Collection Loss	-$99,672
Less Operating Expenses	-$490,000
Net Cash Flow Before Debt	$1,403,759
Cash Flow for Debt Service @ 1.25	$1,123,007
Annual Debt Service	-$1,123,008
Net Cash Flow After Debt Service	$280,751
Debt Principal	$11,869,365

Development Costs and Sources of Funds

Gross Building Floor Area	50,000		
Construction Type	Podium & Stick built		
Use of Funds	Cost/GFA SF	Cost/Unit	Amount
Land acquisition		87000	$4,263,000
Land development costs , included in building construction			$0
Building construction/hard costs	350		$17,500,000
Parking construction costs	0		$0
Soft Costs	0.2		$3,500,000
Total Development Cost			$25,263,000
Sources of Funds	Percent		Amount
Developer/Investor Equity	53.02%		$13,393,635
Debt	46.98%		$11,869,365
Total Sources of Funds			$25,263,000
Debt Amortization Period			300
Debt Interest Rate			0.0825
Annual Debt Service			($1,123,008)

Financial Returns

Return on Cost Percentage*	5.56%

*Net cash flow before debt/total development cost

IRR Analysis with Building Sale in Year 3

	Year 0	Year 1	Year 2	Year 3
Equity investment	-$4,464,545	-$4,464,545	-$4,464,545	
Net Cash Flow Before Debt Service				$1,403,759
Sale in Year 3-stablized net income				$28,075,184
Less sales cost (5%)				-$1,403,759
Less debt payoff - principal + 1 years interest				-$12,848,588
Net Sales proceeds				$13,822,837
Net Cash Flow	-$4,464,545	-$4,464,545	-$4,464,545	$15,226,597
Cap rate	5.00%			
IRR	6.55%			