

City of Nashua

Inclusionary Zoning:

Financial Feasibility Analysis

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PREPARED FOR:

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EXECUTIVE SUMMARY

Scope of Work

The scope of this analysis is to determine the financial impact resulting from incorporating inclusionary zoning requirements into the City of Nashua's zoning ordinance. RKG Associates Inc. (RKG) constructed a financial feasibility model to test specific scenarios chosen by the City of Nashua and determined the relative impact in relation to developments constructed under the existing zoning requirements (by-right). The importance of this analysis cannot be understated, as setting the appropriate parameters for an ordinance is key to ensuring housing development accommodates various income levels across the city while minimizing impact on existing development activity.

Process

The process undertaken was collaborative and included engaging City staff, local and regional housing developers, local debt and equity investors, and other real estate professionals to understand the market dynamics and performance indicators unique to Nashua. RKG utilized information gained from market research and interviews to construct an adaptable financial model. The model enables the City to test prototypical developments to understand the financial implications of creating an inclusionary ordinance.

Summary Findings

The City of Nashua historically has found success in attracting traditional suburban development patterns. **Almost all the city's development over the past 20 years has been for single family detached housing. The city has experienced very little multifamily or non-residential development during this time frame, except for a few 100% income-controlled housing projects.** Recent efforts to jumpstart reinvestment and revitalization of Nashua's downtown by attracting higher income residents have been effective but rely upon the city leadership providing zoning relief and providing substantial financial inducements. Further, these projects have exclusively targeted the highest earners. As a result, new development has targeted lower income households and higher income households, leaving the 'middle incomes' without options in the city.

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This analysis focused on understanding how an inclusionary zoning policy that targeted that middle income cohort would impact the financial feasibility of new residential development. While the results of the analysis are based upon a financial model driven by assumptions, the model utilizes local-market relevant analysis to forecast the financial return to a developer and compares the change in financial return between current market conditions and the adoption of a model inclusionary zoning policy intended to create a true continuum of affordability in Nashua. The following section highlights the findings.

Current policies make an inclusionary zoning policy challenging. The most immediate challenge to implementing an inclusionary zoning policy is the City's current practices of maximizing density and/or providing financial incentives for pure market-rate projects. The impact of this practice has been two-fold. First, market return expectations (reported to be above 20% IRR) are substantially higher than other, similar-risk marketplaces in New England and throughout the United States. While RKG recognizes the delicate balance of desiring investment activity and the requirements of those willing to make that investment, these inflated return expectations will require even greater financial investments from the City to make an IZ policy work. Given the analysis indicated the average market value differential between a market-rate unit and a unit priced for a household earning 80% of AMI is over \$36,000, the cost to subsidize a larger multifamily development likely will exceed \$500,000. Second, this practice maximizes the physical capacity of these parcels (based on parking requirements, open space requirements, etc.). Allowing full development potential from the outset eliminates the use of bonus density.

Given the analysis indicated the average market value differential between a market-rate unit and a unit priced for a household earning 80% of AMI is over \$36,000.

Location impacts financial feasibility. **The financial modeling indicates that the need for podium parking (most prevalent in downtown Nashua) adds substantial cost to a development.** This additional cost impacts profitability, and thus indicates any inclusionary zoning policy (and potential subsequent bonus density policy) needs to consider location. From an execution perspective, requiring a lower percentage of units in areas that require structured parking and/or having higher bonus density ratios are recommended. In addition, location also affects revenue potential. RKG Associates research indicated that values/rents are highest in Downtown and in the Amherst/Exit 1 areas of the city. Over time, disparities between these two areas may develop as new investment/job creation occurs. To this point, any inclusionary zoning policy should reflect market differences and be reviewed regularly to ensure those policies do not become barriers to new investment.

Target income levels will heavily skew modeling results. For the purposes of this analysis, RKG Associates was tasked with modeling an inclusionary zoning policy that targeted the 80% of AMI income. The results detailed in this report reflect that assumption. Changing the target income threshold will affect the scale of impact. For example, targeting 50% of AMI will create greater negative financial impacts for a development. It also would require a much higher bonus density ratio due to larger loss of revenue between market rate and the income-controlled units. The City should thoroughly assess any potential policies through the financial model before establishing income thresholds, inclusionary requirements (% of units required), and bonus density ratios.

Creating a payment in lieu provides fair relief for 'partial' units. Some communities follow a 'round up' approach to inclusionary zoning policies. In these cases, the developer is required to deliver the next whole unit when the formula creates a fractional unit (i.e., deliver 6 units when the formula results in a 5.5 unit calculation). This approach creates greater negative financial impacts, particularly for smaller (less than 25 units) projects. The payment in lieu of fractional units provide relief to the

developer by only making them provide the market value equivalent to the policy formula while also creating a new revenue source for a housing trust. **Updating the market value differential formula on a regular basis (typically every 1-2 years) ensures fairness to both the developer and the city.**

A bonus density program could be effective, but only if maximum density is not by-right. As noted above, the City's current practice of allowing maximum densities for 100% market rate projects regardless of the zoning rules limits the potential for a bonus density program. **However, the financial analysis indicates that a bonus density program would be highly effective for Nashua (ranging from a 1:1 to 2.5:1 ratio for 80% of AMI income targets) at mitigating the financial impact of an inclusionary zoning program.**

INTRODUCTION

The City of Nashua has decided to investigate the feasibility of implementing an inclusionary zoning policy for new housing development. This effort was borne through the City's Housing Plan, which identified the potential to craft an inclusionary zoning ordinance which creates a public benefit from private development occurring in the city. The City of Nashua hired RKG to build a financial feasibility model to evaluate approaches toward incorporating inclusionary zoning.

RKG Associates is a multi-disciplinary real estate, planning, and economic development consulting firm with more than 35 years of experience advising public-sector and private-sector clients on real estate development and financial feasibility. The RKG analysis relied on conducting market research, interviewing stakeholders, and working with the City to test a series of development typologies to understand the financial sensitivity of introducing inclusionary zoning.

Inclusionary zoning is a way in which communities can generate affordable housing through traditional market developments. Inclusionary zoning policies are typically based on a specific percentage applied to new housing development. For example, if the inclusionary zoning percentage were set at 10%, on a new 200-unit development then 20 units would be required to be affordable. Additionally, affordable units can be required to be delivered at specific Area Median Income (AMI) thresholds such as 50% AMI and 80% AMI. Traditionally, local housing authorities are responsible for providing housing to households at 30% of AMI. Generally, for inclusionary zoning, having a lower AMI requirement results in a greater reduction in financial return to a developer because costs are harder to recoup due to lower revenue streams.

The following analysis details the approach RKG used to test potentially adopting an inclusionary zoning ordinance, results of the analysis, and recommendations to minimize financial impacts of such changes. The appendix section includes a glossary of terms used throughout this analysis.

MODEL

To perform the analysis, RKG Associates created a financial feasibility model based on traditional proforma analysis standards for real estate development. The model was created in Microsoft Excel to allow for the greatest functional flexibility and analysis transparency.

The RKG Associates model focuses on Internal Rate of Return (IRR) calculations to determine financial feasibility. This measure is a standard approach to understanding the potential performance of a real estate investment as it accounts for the construction, operation, and eventual sale of a real estate investment. Real estate development is a risk-based venture that requires an investor to guarantee a sum of money in exchange for the potential revenue and value created by that investment. Developers seek to reduce the risk of a project (i.e., development duration and cost overruns) while maximizing the revenue potential (i.e., rent payments and reversion for a rental project and sales pricing for an ownership project).

IRR calculations are presented as percentages. A higher percent indicates the property will provide a greater return for the investor. IRR is generally compared against an investor's desired return rate (or discount rate) to determine if an investment meets the perceived risk level. IRR calculations are much more detailed than overall return calculations, and account for inflation, projected income escalators and the reversion (or sale) of the property at the end of the study period (or hold period).

There is no universally accepted return rate to judge the return-risk of a real estate project. These market thresholds are established in each market based on several factors including current and projected demand, existing market supply, current and projected employment levels, and risk tolerances of local investors. For this project, Nashua area development industry minimum standards for a desired IRR were set at 20% for new construction ownership residential and 15% for new construction rental residential projects. It is important to note that these thresholds, while aggressive in most markets, are below the return expectations identified by local developers and investors for the Nashua market. That said, the feasibility analysis is intended to compare the impacts of differing scenarios (in this case, current market rate projects to similar projects subjected to an inclusionary zoning policy). Thus, it is important to set a consistent return expectation. RKG used 20% and 15%, respectively, because those are generally more industry standard returns, and should be a measure to determine whether a project receives public incentives.

Once the expected return thresholds were established, RKG Associates was able to assess how an inclusionary zoning policy would impact the return of the scenarios identified by the City (detailed in Table 1). For this project, RKG Associates used an inclusionary zoning policy threshold that required a minimum share of new housing units that are priced to be affordable for households earning at 80% of the regional Area Median Income (AMI). AMI affordability thresholds are detailed in Table 3 and 4. Further, the percentage of units to be income-controlled varied based on the size of the project. For this project, RKG modeled a 10% minimum requirement for projects sized at 25 units and under, 15% minimum requirement for projects sized 26 to 50 units, and a 20% minimum requirement for projects with 51 or more units.

Model Data Collection

Proforma development modeling, particularly IRR approach modeling, requires substantial market data to generate the model assumptions needed to calculate financial performance. There are three primary data categories needed to run a proforma model, [1] construction/development data, [2] revenue/expenditure data, and [3] finance/investment data.

- Construction and development data include the costs of land, the costs to develop the structures, and the basic assumptions of types of units, size of units, and unit amenities.
- Revenue and expenditure data includes prevailing rent rates (both market rate and income controlled), prevailing sales prices, and operation costs for rental housing. Operation cost data points include direct operations (i.e., maintenance, marketing) and indirect costs (i.e., real estate taxes).
- Financial and investment data include prevailing lending rates, debt/equity requirements, capitalization rates, and discount rates.

RKG used several tools to gather this information, with a preference to gather locally relevant information specific to the City of Nashua. In areas where local data was not available or not appropriate, RKG relied on regional data (i.e., Nashua Metro). The primary data collection method was capturing primary and secondary data about the Nashua housing market. RKG gathered current rent rates (per month) and sales prices (by unit type) for owner and renter housing within the city to determine potential revenues. RKG gathered sales data from the city to understand current pricing.

RKG also interviewed several for-profit and non-profit residential developers, and commercial lending bank professionals to garner greater understanding of the local marketplace. Finally, RKG used nationally recognized secondary data sources, such as Marshall & Swift Valuation Services, to verify data provided by the local real estate community. The results of this effort were used to create the baseline market assumptions for the financial feasibility model.

The following section provides details on the results of the data collection and provides the underlying performance metrics used to test the financial impacts of inclusionary zoning on specific development examples.

Components of the Model

As mentioned, the model functions on a traditional proforma analysis platform, measuring the potential revenue of a real estate investment and comparing it to the costs and expenditures to construct, operate, and sell the asset. The modeling efforts compared the financial performance of eight distinct residential development scenarios without inclusionary zoning against the financial performance of those same scenarios under inclusionary zoning. The eight development scenarios reflect various small, medium, and large-scale ownership and rental development projects that may occur within Nashua. The results were compared to understand the impact of inclusionary zoning on the financial feasibility of each scenario. Table 1 identifies each of the scenarios modeled.

Table 1. Modeled Scenarios			
Unit Size and Type	Suburban	Exit 1	Downtown
10-unit Single Family	X		
25-unit Multifamily (Stick/Podium)		X	X
50-unit Townhouse	X		
125-unit Multifamily (Stick/Podium)		X	X
200-unit Multifamily (Stick/Podium)		X	X
Source: City of Nashua and RKG Associates Inc., 2021			

The eight development scenarios include:

- 10-unit single family ownership development in the Suburban subarea
- 25-unit multifamily (stick construction) rental development in the Exit 1/Amherst Street Downtown subarea
- 25-unit multifamily (podium construction) rental development in the Downtown subarea
- 50-unit townhome ownership development in the Suburban subarea
- 125-unit multifamily (stick construction) rental development in the Exit 1/Amherst Street subarea
- 125-unit multifamily (stick construction) rental development in the Downtown subarea
- 200-unit multifamily (stick construction) rental development in the Exit 1/Amherst Street subarea
- 200-unit multifamily (podium construction) rental development in the Downtown subarea

The model has three primary components that drive the financial performance analysis: development assumptions, financial assumptions, and affordability assumptions. Each component influences the revenue and expenditure efficiencies of the development.

- *Development Assumptions* – The development assumptions focus on the ‘bricks and mortar’ facets of the proposed residential developments. Factors such as total unit count, unit breakout by bedroom count, average unit size by bedroom count, type of parking, and the cost of land to accommodate the development. These factors influence construction costs, potential operational revenues (for rental housing) and sale values (for ownership housing).
- *Financial Assumptions* – The financial assumptions include factors relating to debt and equity requirements, the cost of development financing (i.e., mortgage rates), inflation and appreciation rates (for operational costs and revenues), and project return expectations. The financial data directly affects the project’s financial performance by adjusting the timing and amount of capital outlays (both debt and equity).
- *Affordability Assumptions* – The affordability assumptions include the market performance data such as market rent rates, target income thresholds for the IZ units, assumptions about the size of the Inclusionary units, and the percent requirement of IZ units of the total development.

These assumptions further impact potential revenue levels as well as overall construction costs.

The following section details the individual assumptions used to run the model, and how those data points were collected. As mentioned, RKG collected primary and secondary data about residential development in Nashua. RKG also performed several interviews with local real estate professionals to verify those findings. That said, the model was constructed to enable the city to customize the proforma analysis through data overrides. This flexibility in modeling allowed RKG to perform sensitivity analyses on incorporating inclusionary zoning. This effort informed RKG's findings.

Income Tiers – To assess an inclusionary zoning policy, determinations regarding household income are required. Table 2 details the 2020 HUD Area Median Income by household size for the City of Nashua. Household income limits were used to calculate affordable rents in Nashua. Area median incomes in Nashua are high due to the inclusion of communities in Hillsborough County, which have significantly median higher incomes than the City of Nashua. The higher income limits affect affordability because the affordability thresholds are higher due to the higher incomes. For the modeling exercise, RKG used the 4-person household income as the default for conducting the analysis.

Income Level	Household Size					
	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person
30% of AMI	\$23,050	\$26,350	\$29,650	\$32,900	\$35,550	\$38,200
40% of AMI	\$30,720	\$35,080	\$39,480	\$43,840	\$47,360	\$50,880
50% of AMI	\$38,400	\$43,850	\$49,350	\$54,800	\$59,200	\$63,600
60% of AMI	\$46,080	\$52,620	\$59,220	\$65,760	\$71,040	\$76,320
65% of AMI	\$49,920	\$57,005	\$64,155	\$71,240	\$76,960	\$82,680
70% of AMI	\$53,760	\$61,390	\$69,090	\$76,720	\$82,880	\$89,040
80% of AMI	\$55,950	\$63,950	\$71,950	\$79,900	\$86,300	\$92,700
100% of AMI	\$76,800	\$87,700	\$98,700	\$109,600	\$118,400	\$127,200
110% of AMI	\$84,480	\$96,470	\$108,570	\$120,560	\$130,240	\$139,920
120% of AMI	\$92,160	\$105,240	\$118,440	\$131,520	\$142,080	\$152,640
140% of AMI	\$107,520	\$122,780	\$138,180	\$153,440	\$165,760	\$178,080

Source: HUD, RKG, 2021

Rent Thresholds – The model calculates potential gross income by applying the market rate threshold to market rate units, and a rent threshold equivalent to 30% of gross income (utilities included) for income-controlled units. The market rate rents were calculated through RKG research of current rent levels for new apartments built in the city over the last five years. The affordable rents were calculated based on the HUD AMI thresholds. Table 3 details the thresholds for each income level used in the financial model. What can be seen from the table is that the market rate rent falls between 80% and 100% of AMI, indicating that the market is building affordable units without an inclusionary zoning policy.

Table 3. Maximum Affordable Rents (Utilities Included)

Unit Type	40% AMI	50% AMI	60% AMI	65% AMI	70% AMI	80% AMI	100% AMI	110% AMI	120% AMI	140% AMI	Market Rate
Efficiency	\$711	\$889	\$1,067	\$1,156	\$1,245	\$1,422	\$1,778	\$1,956	\$2,134	\$2,489	\$1,779
1BR	\$829	\$1,036	\$1,243	\$1,347	\$1,450	\$1,658	\$2,072	\$2,279	\$2,486	\$2,901	\$1,860
2BR	\$998	\$1,248	\$1,498	\$1,622	\$1,747	\$1,997	\$2,496	\$2,746	\$2,995	\$3,494	\$2,316
3BR	\$1,154	\$1,443	\$1,732	\$1,876	\$2,020	\$2,309	\$2,886	\$3,175	\$3,463	\$4,040	\$2,688

Source: HUD, and RKG Associates Inc., 2021

Sales Price Thresholds –The sales price thresholds were established by using New Hampshire Workforce Housing 2020 Workforce Housing Purchase and Rent Limits to determine affordable sales prices. As seen in Table 4, home purchase income-controlled price thresholds are substantially lower than the market rate sales price levels identified by RKG. The market rate data was compiled by parsing the city’s property assessment and sales database over the last ten-years to determine average sales values.

Table 4. Maximum Affordable Rents (Utilities Included)

Unit Type	40% AMI	50% AMI	60% AMI	65% AMI	70% AMI	80% AMI	100% AMI	110% AMI	120% AMI	140% AMI	Market Rate
1BR	\$94,560	\$118,200	\$141,840	\$153,660	\$165,480	\$189,180	\$236,400	\$236,400	\$262,800	\$330,960	\$300,000
2BR	\$126,080	\$157,600	\$189,120	\$204,880	\$220,640	\$252,240	\$315,200	\$315,200	\$350,400	\$441,280	\$350,000
3BR	\$157,600	\$197,000	\$236,400	\$256,100	\$275,800	\$315,300	\$394,000	\$394,000	\$438,000	\$551,600	\$550,000

Source: HUD, and RKG Associates Inc., 2021

Inclusionary Thresholds – The model built by RKG allows the user to select three different AMI percentages to test the impact of inclusionary zoning. These percentages can be set for both rental and ownership projects, the tables below illustrate the default settings of the model. To measure the impact of inclusionary zoning, RKG scaled the inclusionary zoning percentage with the size of a development – the larger the project the higher the inclusionary percentage. For example, projects greater than 100 units would be required to have 20% of the units designated as affordable, which would be spread across three tiers of varying income limits. Additionally, the model allows the user to identify the AMI thresholds to apply the inclusionary units. For the purposes of this modeling exercise, RKG used 80% of AMI as the baseline for all tiers in the financial feasibility model. However, the model allows for the city to test any variation of income thresholds ranging from 50% AMI to 120% AMI.

Table 5. Modeled Inclusionary Zoning Percentages for Both Rental and Ownership Developments

Rental Units	Tier 1 50% - 120% AMI	Tier 2 50% - 120% AMI	Tier 3 50% - 120% AMI	Total
1-25 new units	5%	5%	0%	10%
26-50 new units	10%	5%	0%	15%
51+ new units	5%	10%	5%	20%

Source: City of Nashua and RKG Associates Inc., 2021

Development Revenues

RENTS

RKG collected rental rate data for relatively new luxury developments which included efficiency (studio), one-bedroom, two-bedroom, and three-bedroom apartments. The market rental rates were used as a baseline for the analysis and compared to information obtained from developers. Generally, new units rent for between \$2.24 and \$3.38 per square foot depending on the unit type. Within the model the rents can be modified by the user. For more information about rental rates, see Appendix 1.

SALES VALUES

The sales values of housing units were determined through a combination of market research and utilizing the City Assessor database to parse the most recent sales values by bedroom count. The results are used for the baseline assumption in the model. For more information about sales values, see Appendix 1.

OTHER INCOME

Income streams outside of traditional rent and sales value stem from parking revenues. For rental units, it was assumed in the model that parking revenues of \$75 per space were attainable. No parking revenues are included in ownership units because the parking space is inherently included in the price of the unit.

Development Costs

LAND COSTS

The amount of money a developer can pay for a piece of land is a critical component to the financial feasibility of a project. The higher the land value, the more a developer needs to offset their costs through things like higher density, lower parking rates, or increased sales prices and rents. The price of land is one of the key factors that can affect financial feasibility; and this is especially true for projects on the financial margin. From a cost perspective, the cheaper a developer can obtain the land, the greater the potential financial return. This is because in terms of development, construction and financing costs are relatively fixed. Whereas the price of land and its developable potential can significantly impact the viability of a project.

The price of land in Nashua has become high in recent years and fluctuates based on the underlying zoning and the total number of units which can be developed. An example being that a single-family home with a double lot can easily sell for \$400,000 as a tear-down project which is then replaced with two units each selling for \$500,000. This indicates that developable land is in scarcity in and around Nashua.

Developers typically calculate the residual value of the land to determine what they would be willing to pay for the land on a per unit basis. This calculation considers construction costs, financing expenditures, and expected returns. The general approach towards determining the land value is to calculate the income expectations for the developed land, subtract all expenses associated with this

development, and the remainder is the land residual. The decision to pursue the project depends on whether the developer can acquire the land at a favorable price.

Within the model RKG created a land value override where the model user can input their own land value assumption. This allows the user to test financial feasibility based on the different land costs, since they may vary significantly based on development size and underlying zoning.

CONSTRUCTION COSTS

To determine construction costs, RKG interviewed several developers and utilized the March 2021 Marshall & Swift Valuation Services booklet to build out customized per square foot construction costs for traditional townhouse, stick, and stick over podium construction. RKG assumed that new construction would have either “excellent” or “good” interior or exterior finishes. Construction costs are adjusted by using a local Nashua multiplier supplied by Marshall and Swift. The Marshall and Swift numbers are an industry standard based on market data. However, in conversation with local developers the price of materials and labor has been rising quickly since the start of the COVID-19 pandemic, and the Marshall and Swift data does not capture these pricing changes. RKG therefore factored into the Marshall and Swift construction cost number adjustments based on the price inflation identified by developers.

Within the model the appropriate construction cost is applied to the development based on its type and size. RKG quantified the costs for the three different construction styles, and these costs can be assigned to the typologies (Fee Simple, Multifamily Stick, and Multifamily Podium) the City of Nashua wants modeled. RKG assumed for this model that all projects would take one year to complete, and construction would begin in 2021. Appendix 1 has more detailed information about construction costs.

PARKING COSTS

Within the model two types of parking costs were included: surface and structured podium parking. The types of parking have dramatically different cost estimates. Surface parking is by far the cheapest option for parking. Typically, this type of parking is done on smaller projects which have sufficient land area to accommodate the parking requirements under zoning. Structured podium parking typically occurs in multifamily developments which are constrained for space.

The parking calculations are based on the number of parking spaces required by the city based on the total number of residential units and typology. The City of Nashua requires two parking spots for every single family or townhome and requires 1.5 spots per multifamily unit. Appendix 1 has more detailed information about parking costs.

Financing

Development financing is possibly the most important element of any real estate deal. The ability to secure long-term financing at an affordable rate allows a developer to complete their project. Different types of financing are available depending on the scale of the project. For very large projects, financing might be obtained from a national bank, institutional investors, or a debt fund. These types of entities invest capital in projects for investors, and typically provide favorable interest rates given the track records of large-scale developers.

Smaller scale developers utilize traditional bank financing as the main source of funding. Local banks typically act as partners with smaller scale developers and provide funding to projects which meet their lending standards and risk profiles. Lending at the small scale is very much relationship based.

Modeling the financing component of development requires assumptions to be made about the equity, loan terms, and interest rates. As part of the data collection process, RKG interviewed several local developers who provided reality-based data regarding project financing.

EQUITY

The equity investment on the part of the developer which is required to obtain financing is dependent on many factors, some of which include: financial wherewithal, experience, project type, etc. Lenders require developers to contribute funding towards the project. The percentage of equity required is a variable within the model that can have a significant impact on the overall financial return. Typically, if a developer can secure financing which requires a smaller percentage of equity contribution, then the overall project return will be greater because the initial out-of-pocket cost will be less. The benefit to the developer is that they minimize their risk when they do not have to contribute large amounts of equity. For the modeling exercise, the default equity requirement was set at 25% for both owner and rental developments, this value can be changed within the model by the user.

TERMS

The length of the loan is dependent on the type of project under construction. For for-sale units, the loan is repaid once the units have sold. In this case, the loan period might last for 1 or 2 years depending on the time it takes for a project to be constructed and the units sold. For rental projects, the loan term can be variable. Developers have different exit strategies depending on their investment philosophies; some developers will hold a project for 10 years and then sell it, while others just build and hold the property. For the analysis, the model was calibrated to assume as a default that the loan for a for-sale development would be two years, and that for rental properties the loan term would be 20 years.

INTEREST RATES

Financial institutions provide funding based on the viability and potential success of a project, and the interest rates charged are evaluated against the developers financial standing and ability to complete the project. A range of interest rates could be charged to a developer depending on their track record, development program, or equity contribution. The higher the interest rate, the greater the overall cost to the developer. Small fluctuations in interest rates can have large impacts on the project financial return because the cost of debt service can substantially increase, thus rendering a project infeasible. Some developers contribute greater amounts of out-of-pocket equity as a means of lowering the interest rate on the loan. The default model assumptions for interest rates were 5.5% for rental developments and 5.0% for ownership developments. The higher interest rate for rental developments was used because the loan term is longer than that of the ownership developments.

Density Bonus

Density bonus is a regulatory tool that provides a developer the right to build a greater number of units than the existing underlying zoning dictates in exchange for some public benefit (in this case,

the inclusion of income-controlled housing units). This incentive works well in cases where a community is focused on building lower cost housing without providing substantial cash incentives to developers. In other words, the density bonus provides a developer with an incentive to create units at deeper levels of affordability, in exchange for the ability to build more market rate units.

The key concept of the density bonus is to entice the developer to build affordable units at deeper levels of affordability, while at the same time offering an incentive for the developer to regain lost value from the creation of the affordable units by supplementing with market rate units. Within the model that RKG produced, it is possible to adjust the density bonus to test the implications on the financial feasibility of the project. Density bonus units tend to have greater importance on smaller projects which, from a financial perspective, may not be viable without the addition of market rate units above by-right thresholds.

For the purposes of this analysis, RKG tested how many bonus density units would be required to make the financial return of the proposed inclusionary policy equal to the by-right scenario for each tested development program.

Cash Payment/Payment in Lieu

As a method to capture the full value of affordable units that do not get built under the inclusionary ordinance, RKG created the financial feasibility model to include a cash payment amount for fractional units. The cash payment amount is applied to fractional units which result from applying the appropriate inclusionary percentage across Tier's One, Two, and Three. The modeled scenarios do not round any of the units, rather it prescribes each full unit be built, and any fractional piece be captured by a cash payment. This protects the developers from having to incur a cost greater than the policy requires, as having to build a full affordable unit for a fractional calculation (i.e., 0.5 units) will have a greater financial impact than a cash contribution equal to the fractional value of the net value difference between a market rate unit and an income-controlled unit.

Within the model there is an affordable unit and cash payment calculator which determines both the number of affordable units and potential payments in lieu based on the assumptions made in the model. The model also calculates the dollar value of the payment in lieu of an affordable unit using either: Total Residential Development Cost Limits (\$200,000); construction hard costs, or the value gap approach.

As part of the modeling process, three options were explored regarding the value of the cash payment amount for fractional units. The first option was a generic fee of \$200,000 per unit. The second option was to use the construction hard costs for developing the affordable unit. The construction hard costs can be defined as the cost of construction for the actual unit, which excludes the price of the land. Utilizing this cost method enables the city to match the cost of building the unit with payment amount requested.

The third approach towards determining the payment amount is to utilize the "value gap" approach. The value gap is the difference between the value of a market rate unit and that of an affordable unit. The value of a rental unit is determined by the net operating income and the capitalization rate; for an

ownership unit it is determined by the sales value of the unit. In the case of affordable units, the amount of rent or sale price is limited to the target income threshold of the inclusionary zoning policy. This results in lower revenue to a developer. This loss of revenue translates into a loss of value (hence, the value gap) and negatively impacts the overall financials of a developer because the cost of construction and land to build either an affordable or market rate unit are essentially the same. As part of the modeling process, an option was created to utilize the difference in value due to the loss of revenue in determining the fee amount to charge for fractional units.

Table 6 presents an example case of the calculation of the payment-in-lieu across the affordability tiers for a development that has 25 units, utilizing the value gap approach.

Table 6. Example Payment in-Lieu Calculation for 25 Unit Project Under Value Gap Approach			
	Tier 1	Tier 2	Tier 3
Inclusionary Percentage	5%	5%	0%
Calculated Units Based on IZ Percentage	1.25	1.25	0
Whole Units	1	1	0
Fractional Units	0.25	0.25	0
Cash Payment Amount on Fractional	\$9,109	\$9,109	\$0
Total Project Units	25		
Inclusionary Units	2		
Market Rate Units	23		
Cash Payment in Lieu	\$18,219		
Source: RKG Associates, Inc.			

From a financial standpoint, the calculated fee in-lieu payment is added to the initial cost of the development, which ultimately influences the overall financial return. Depending on the project size, a large fee in-lieu could have a detrimental impact. Typically, a small project tends to be more sensitive to greater upfront costs because small dollar amount changes can have an outsized impact as compared to larger projects.

SCENARIO ANALYSIS

Development Programs

To test the model and the underlying development assumptions, RKG ran eight development scenarios. Table 7 presents the model calibration for each of the eight scenarios. The scenarios were chosen by the city to understand the impact of the IZ changes on prototypical developments. One key difference in terms of development costs is that of parking; in multifamily scenarios podium level parking was assumed for developments located in the Downtown subarea.

Table 7. Modeled Scenarios

Scenario	Tenure	Unit Type	Location	Parking	Number of Units	AMI %	Inclusionary Percentage
1	Ownership	Single Family	Suburban	100% Surface	10	80%	10%
2a	Rental	Multifamily	Amherst/Exit 1	100% Surface	25	80%	10%
2b	Rental	Multifamily	Downtown	Podium	25	80%	10%
3	Ownership	Townhome	Suburban	100% Surface	50	80%	15%
4a	Rental	Multifamily	Amherst/Exit 1	100% Surface	125	80%	20%
4b	Rental	Multifamily	Downtown	Podium	125	80%	20%
5a	Rental	Multifamily	Amherst/Exit 1	100% Surface	200	80%	20%
5b	Rental	Multifamily	Downtown	Podium	200	80%	20%

Source: City of Nashua, and RKG Associates Inc.

Comparative Scenarios

The financial analysis conducted by RKG provides key insights regarding the relative impact on development finance resulting from the creation of an IZ ordinance. RKG modeled each of the eight scenarios by calibrating the model with market-tested assumptions. For each development program, RKG Associates analyzed four different scenarios. These scenarios include:

CURRENT MARKET/BASELINE SCENARIO

First scenario uses the current market conditions assumptions collected during the analysis to ensure the model is properly calibrated with accurate assumptions. The baseline scenario provides an assessment of how a project would perform (financially) based on market averages for acquisition, construction, operation, and reversion.

TARGET RETURN SCENARIO

The second scenario adjusts the land acquisition cost to have the proposed development program achieve the target IRR return levels (20% for ownership development and 15% for rental projects). Within real estate development, the only true cost/revenue variable is the cost of the land. Vertical construction costs, debt/equity requirements, and operational revenues are established by the market. For example, rents cannot be inflated for market rate units to offset the rent/price losses of income-controlled units. Thus, this scenario adjusts the land costs to reach the return threshold for the proposed development.

INCLUSIONARY POLICY SCENARIO

The third scenario measures the financial impact of the model inclusionary zoning policy (detailed earlier) on the target return scenario. This analysis was done to understand the fiscal impact of this proposed policy on a project that met the minimum return threshold. Instances where this scenario returned a lower IRR indicate the policy creates a financial disincentive, while instances where this scenario has a higher IRR than the target return scenario indicates the policy creates a positive financial impact.

INCLUSIONARY/BONUS DENSITY SCENARIO

The final scenario calculates how many additional market rate units (the bonus density) would be needed above the baseline unit count for the inclusionary zoning scenario to meet the minimum return threshold. In other words, RKG calculated how much bonus density would need to be granted for an

inclusionary zoning project to not adversely impact the return of the developer or the inherent value of the land. This effort was done to understand the feasibility of a non-financial incentive (additional units) could be applied to minimize impact to the local real estate market and return expectations.

Interpreting Results

The financial model calculates the basic go/ no-go decision a developer must make about a potential project. The decision to pursue a project comes down to overall financial return and risk exposure. If there is confidence that the desired returns will be reached, then the project will be pursued, otherwise the project will not be undertaken.

From a financial perspective, the model calculates outputs that can be helpful when determining whether a developer or a lender will choose to go forward with a project. Of these outputs, both the Internal Rate of Return (IRR) and Net Present Value (NPV) are industry standard financial viability metrics for a given project. While these are important metrics, they are not the sole arbitrators of financial viability, as project risk assessment and developer track record are also important factors. The IRR and NPV when examined together, offer significant insight to both a lender and developer. The IRR is the calculated annual return on investment, taking into consideration net operating income, investment holding period, and sales value. The NPV is the present value of all future cash flows (both revenues and expenditures) for the project based on an expected return rate (discount rate) and over the course of the determined holding period.

Based on the size of the initial upfront capital investment in a project, small percentage changes in the IRR can have dramatic effects on the net present value. The decision factor for not pursuing a project is if the IRR does not meet the required rate of return, or if the NPV is below zero. It is possible that a project results in a positive NPV and a lower than desired IRR. In cases such as this, the decision process becomes more nuanced as the developer would have to get comfortable with realizing a lower return. Within the development industry, IRR return thresholds of 15% for a new construction rental project and 20% for new construction ownership units.

Analysis Limitations

The undertaken analysis is not without limitations. The financial model is based upon assumptions which were collected through developer interviews, market research, and professional judgement. These assumptions are the main drivers of the financial model. The developments that are modeled in this analysis are prototypical developments that could potentially be found in Nashua, and not actual developments. While all the assumptions that drive the model can be customizable, RKG calibrated the model such that the base assumptions are the default. There are countless permutations that can be modeled, but RKG in consultation with the city, chose to model prototypical developments with relatively standardized inputs.

The model is not able to test every variable or possibility, rather it can be used as an ordinance tool to help inform the decision-making process. The model output helps show the relative impact of ordinance changes on development financial feasibility.

10-UNIT SINGLE FAMILY OWNERSHIP DEVELOPMENT

The 10-unit single family ownership development scenario offers an assessment of how inclusionary zoning could impact the existing development landscape for smaller-scale ownership projects. Table 8 presents the results of the four scenarios tested. Under the current market/baseline scenario assumptions, a 10-unit single family development yielded a 42.80% IRR assuming the market-quoted \$65,000 land value per unit. This return is more than double the expected return of 20% but only a net present value of \$228,295, meaning the smaller scale of the project creates greater sensitivity in calculating the return levels. Adjusting the land costs to achieve the expected 20% return on ownership projects resulted in a per-unit cost of \$89,971. Effectively, this differential shows how market assumptions can create variability in the financial performance of a real estate deal.

To understand financial sensitivity toward the model inclusionary zoning policy, RKG tested inclusionary zoning requirements of 10% of the units to be priced at 80% of AMI. Under the scenario, that means one of the 10 new units would be required to be sold at a fixed price affordable to a household earning 80% of AMI. This single change reduced the IRR of the project from 20% to slightly below 2% with a net present value of -\$191,545. In short, requiring income-controlled thresholds in smaller, homeownership projects have a substantial impact on the financial feasibility of the project.

That said, the inclusionary/bonus density analysis revealed that allowing the developer to build an additional unit (11 instead of 10), provided sufficient value to return the project to the minimum return threshold. In other words, implementing a 1:1 bonus ratio for each unit required to be income controlled created a sufficient financial benefit to mitigate the financial impact of the affordable unit. As seen in the table, the IRR for this scenario is 21.62% and the NPV is \$18,017.

25-UNIT MULTIFAMILY (STICK) RENTAL DEVELOPMENT

The 25-unit multifamily (stick) rental development scenario reveals how inclusionary zoning could impact smaller rental housing development projects outside downtown Nashua. Table 9 presents the results of the analysis. The market-based assumptions under the current market/baseline scenario yields an IRR of 13.58% based on the market pricing assumption of \$50,000 per unit land value. This return is less than the expected return of 15% for rental projects, and well below current market expectations of 20%+. To reach the 15% IRR return level requires a land price of \$36,803 per unit (as detailed in the second scenario). In other words, the market is not strong enough to support a market rate only project at the anticipated land values for smaller multifamily projects. Land costs need to be reduced (either through greater density and/or a financial inducement) to meet market return expectations.

RKG Associates applied the model inclusionary zoning policy to the second scenario to understand developer sensitivity toward inclusionary zoning. Under the scenario, 23 market rate units and two affordable unit at 80% AMI would be required. As seen in the table, the impact to the developer of having to provide the affordable unit is negative, resulting in an IRR of 14.34% and a NPV of -\$108,064. The reason the NPV is negative is because of the loss of revenue (the value gap) between delivering a market rate unit versus an affordable unit. From the developer's standpoint, the inability to realize

full value from the affordable unit, which has a similar cost to that of a market unit, results in a financial loss.

The Inclusionary/Bonus Density Scenario reveals that a 1:1 bonus density would result in having an IRR that met the proposed minimum return threshold. The table reveals that adding one market rate unit would nearly achieve the expected financial return (IRR of 14.93% and NPV of -\$11,689).

Table 8. 10-Unit Ownership Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Suburban	Suburban	Suburban	Suburban
Unit Style	Single Family	Single Family	Single Family	Single Family
Unit Type	Owner	Owner	Owner	Owner
Construction Type	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Construction Cost	\$165	\$165	\$165	\$165
Number of Units	10	10	10	11
Market Rate Units	10	10	9	10
Affordable Units	0	0	1	1
Parking	Surface	Surface	Surface	Surface
Special Permit	No	No	No	No
Inclusionary %	0%	0%	10%	10%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	1	1
Payment in Lieu	\$0	\$0	\$0	\$0
AMI Split	0	0	80%	80%
IRR	42.80%	20.01%	1.84%	21.62%
NPV	\$228,295	\$127	(\$191,545)	\$18,017
All costs	\$4,665,797	\$4,915,502	\$4,915,502	\$5,177,723
Land cost	\$650,000	\$899,705	\$899,705	\$899,705
Land cost per unit	\$65,000	\$89,971	\$89,971	\$84,559
Average cost per unit (inclusive of land)	\$466,580	\$491,550	\$491,550	\$486,628
Hard cost construction (exclusive of land)	\$401,580	\$401,580	\$401,580	\$402,069
Return on Cost (ROC)	15.52%	9.65%	4.97%	10.07%

Table 9. 25-Unit Multifamily (Stick) Rental Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1
Unit Style	25-Unit Multifamily	25-Unit Multifamily	25-Unit Multifamily	25-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Stick Only	MF - Stick Only	MF - Stick Only	MF - Stick Only
Construction Cost	\$185	\$185	\$185	\$185
Number of Units	25	25	25	26
Market Rate Units	25	25	23	24
Affordable Units	0	0	2	2
Parking	Surface	Surface	Surface	Surface
Special Permit	No	No	No	No
Inclusionary %	0%	0%	10%	10%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	2	2
Payment in Lieu	\$0	\$0	\$18,219	\$18,219
AMI Split	0	0	80%	80%
IRR	13.58%	15.08%	14.34%	14.93%
NPV	(\$239,329)	\$13,268	(\$108,064)	(\$11,689)
All costs	\$6,626,402	\$6,296,489	\$6,296,489	\$6,409,734
Land cost	\$1,250,000	\$920,087	\$920,087	\$920,087
Land cost per unit	\$50,000	\$36,803	\$36,803	\$35,885
Average cost per unit (inclusive of land)	\$265,056	\$251,860	\$251,860	\$249,990
Hard cost construction (exclusive of land)	\$215,056	\$215,056	\$215,056	\$214,105
Return on Cost (ROC)	7.08%	7.45%	7.29%	7.44%

25-UNIT MULTIFAMILY (PODIUM) RENTAL DEVELOPMENT

The impact of requiring podium parking on small rental housing developments is substantial. The Current Market/Baseline Scenario yields 11.70% IRR assuming a \$50,000 land value per unit. The net present value difference to the surface parking assumption is nearly \$340,000 due to the much higher costs of podium parking instead of surface spaces. As a result, the land value per unit would need to be \$19,587 per unit to meet the proposed return threshold.

Because the inclusionary policy is the same for this and the previous program, the relative financial impact of the inclusionary zoning policy for the podium programs is like the surface parking program. The Inclusionary Policy Scenario yields a 14.28% IRR and a -\$117,178 NPV.

However, the bonus density needed to return the inclusionary zoning scenario to the proposed market return threshold differs to the surface parking scenario. The higher costs of parking additional units reduce the financial benefit of each new market rate unit. As a result, a podium parked scenario would require a 2:1 bonus density to make the IZ scenario return to the proposed market return threshold. Under this scenario, adding four market rate units would be required to achieve the expected financial return of 15%.

50-UNIT TOWNHOUSE OWNERSHIP DEVELOPMENT

City staff wanted a larger single family attached program modeled in addition to a smaller detached program. For this program, RKG Associates modeled a 50-unit townhouse-style development. Based on the market assumption of a \$38,338 per unit land cost, a 50-unit townhouse development yields a 52.17% IRR, with a NPV of almost \$1.4 million. Based on current market performance metrics, this development program could support land prices approximately \$30,000 higher than current averages (\$68,596) and still yield a 20% IRR (Table 11).

Because this program has 50 units, it triggers the second level of inclusionary requirement (15%). As a result, the development program would need 7.5 income-controlled units priced to be affordable to a household earning 80% of AMI. As noted earlier, the RKG Associates model apportions any fractional units to a payment into the City's housing trust equaling the market value differential between a market rate unit and the income-controlled unit. Thus, the Inclusionary Policy Scenario includes seven income-controlled units and a cash payment of \$48,880 (50% of the value differential of \$97,760). The impact of the inclusionary zoning policy is substantial, with an expected IRR of 6.13% and a NPV of -\$1,218,294. The value differential between market rate ownership and income-controlled ownership is greater than rental housing.

As a result, the Inclusionary/Bonus Density Scenario indicates a bonus density program would require a 2.5:1 ratio to income-controlled units to make the inclusionary scenario meet the modeled return expectation threshold. The project would require an additional 19 market rate units to account for the seven units priced to households earning 80% of AMI.

Table 10. 25-Unit Multifamily (Podium) Rental Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Downtown	Downtown	Downtown	Downtown
Unit Style	25-Unit Multifamily	25-Unit Multifamily	25-Unit Multifamily	25-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Podium	MF - Podium	MF - Podium	MF - Podium
Construction Cost	\$215	\$215	\$215	\$215
Number of Units	25	25	25	29
Market Rate Units	25	25	23	27
Affordable Units	0	0	2	2
Parking	Aboveground	Aboveground	Aboveground	Aboveground
Special Permit	No	No	No	No
Inclusionary %	0%	0%	10%	10%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	2	2
Payment in Lieu	\$0	\$0	\$18,219	\$18,219
AMI Split	0	0	80%	80%
IRR	11.70%	15.03%	14.28%	15.03%
NPV	(\$577,986)	\$4,155	(\$117,178)	\$6,263
All costs	\$7,068,716	\$6,308,391	\$6,308,391	\$7,090,351
Land cost	\$1,250,000	\$489,675	\$489,675	\$489,675
Land cost per unit	\$50,000	\$19,587	\$19,587	\$17,118
Average cost per unit (inclusive of land)	\$282,749	\$252,336	\$252,336	\$247,859
Hard cost construction (exclusive of land)	\$232,749	\$232,749	\$232,749	\$230,741
Return on Cost (ROC)	6.64%	7.44%	7.28%	7.46%

Table 11. 50-Unit Townhome Ownership Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Suburban	Suburban	Suburban	Suburban
Unit Style	Townhomes	Townhomes	Townhomes	Townhomes
Unit Type	Owner	Owner	Owner	Owner
Construction Type	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Construction Cost	\$165	\$165	\$165	\$165
Number of Units	50	50	50	69
Market Rate Units	50	50	43	62
Affordable Units	0	0	7	7
Parking	Surface	Surface	Surface	Surface
Special Permit	No	No	No	No
Inclusionary %	0%	0%	15%	15%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	7	7
Payment in Lieu	\$0	\$0	\$48,880	\$48,880
AMI Split	0	0	80%	80%
IRR	52.17%	20.00%	-6.13%	19.10%
NPV	\$1,382,541	\$118	(\$1,218,294)	(\$55,247)
All costs	\$20,026,402	\$21,539,314	\$21,539,314	\$28,354,949
Land cost	\$1,916,898	\$3,429,810	\$3,429,810	\$3,429,810
Land cost per unit	\$38,338	\$68,596	\$68,596	\$49,707
Average cost per unit (inclusive of land)	\$400,528	\$430,786	\$430,786	\$410,941
Hard cost construction (exclusive of land)	\$362,190	\$362,190	\$362,190	\$361,234
Return on Cost (ROC)	17.93%	9.65%	3.13%	9.62%

125-UNIT MULTIFAMILY (STICK) RENTAL DEVELOPMENT

The next four scenarios focus on larger multifamily rental developments. The first program includes 125 units of multifamily rental housing developed in the Amherst/Exit 1 area. For this program, RKG Associates assumed that all parking will be surface space. The Current Market/Baseline Scenario resulted in an IRR of 16.85% based on the current market average of \$21,299 per unit land costs. This performance level is above the modeled minimum threshold of 15%, but well below the current market expectations of 20%+ returns. This is consistent with current practices, which developers seek incentives from the City (i.e., additional density and/or financial inducements) to increase return levels. Based on the modeled 15% IRR return threshold, land costs could be as high as \$36,944 per unit (Table 12).

The Inclusionary Policy Scenario would require the program to commit 20% of all units to be priced affordably to households earning 80% of AMI. As a result, IRR is reduced by over 100 basis points (13.91%) and create a negative impact on the value of the program exceeding \$870,000. The Inclusionary/Bonus Density Scenario reveals that this program would require a 1.5:1 bonus density ratio (35 additional market rate units to accommodate the 25 income-controlled units) to return the program to the tested minimum return threshold.

125-UNIT MULTIFAMILY (PODIUM) RENTAL DEVELOPMENT

This program assumes the 125-unit rental development is in the Downtown area and requires podium parking instead of surface parking. The higher cost of the parking has a negative impact on all scenarios. The Current Market/Baseline Scenario yields an IRR of 14.71%, more than 210 basis points below the surface parked scenario. As a result, the current market pricing of \$21,299 per unit for land does not meet the modeled minimum return threshold. In this scenario, land values would need to be \$18,625 to meet the minimum return threshold of 15% (Table 13).

The impact of the model inclusionary zoning policy has a similar impact for this scenario as the previous scenario, reducing IRR by approximately 100 basis points. However, the Inclusionary/Bonus Density Scenario reveals that the higher cost of parking in Downtown would require a much higher bonus density ratio to offset the income-controlled unit requirement. With podium parking the bonus density would need to have a 2.5:1 ratio to return the Inclusionary Policy Scenario to the minimum return threshold of 15% IRR.

Table 12. 125-Unit Multifamily (Stick) Rental Development

	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1
Unit Style	125-Unit Multifamily	125-Unit Multifamily	125-Unit Multifamily	125-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Stick Only	MF - Stick Only	MF - Stick Only	MF - Stick Only
Construction Cost	\$185	\$185	\$185	\$185
Number of Units	125	125	125	160
Market Rate Units	125	125	101	136
Affordable Units	0	0	24	24
Parking	Surface	Surface	Surface	Surface
Special Permit	No	No	No	No
Inclusionary %	0%	0%	20%	20%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	24	24
Payment in Lieu	\$0	\$0	\$36,438	\$36,438
AMI Split	0	0	80%	80%
IRR	16.85%	14.94%	13.91%	15.01%
NPV	\$1,448,804	(\$48,481)	(\$876,656)	\$14,989
All costs	\$29,442,087	\$31,397,668	\$31,397,668	\$38,914,180
Land cost	\$2,662,418	\$4,617,998	\$4,617,998	\$4,617,998
Land cost per unit	\$21,299	\$36,944	\$36,944	\$28,823
Average cost per unit (inclusive of land)	\$235,537	\$251,181	\$251,181	\$242,879
Hard cost construction (exclusive of land)	\$214,237	\$214,237	\$214,237	\$214,056
Return on Cost (ROC)	7.91%	7.41%	7.17%	7.44%

Table 13. 125-Unit Multifamily (Podium) Rental Development

	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Downtown	Downtown	Downtown	Downtown
Unit Style	125-Unit Multifamily	125-Unit Multifamily	125-Unit Multifamily	125-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Podium	MF - Podium	MF - Podium	MF - Podium
Construction Cost	\$215	\$215	\$215	\$215
Number of Units	125	125	125	189
Market Rate Units	125	125	101	165
Affordable Units	0	0	24	24
Parking	Aboveground	Aboveground	Aboveground	Aboveground
Special Permit	No	No	No	No
Inclusionary %	0%	0%	20%	20%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	24	24
Payment in Lieu	\$0	\$0	\$36,438	\$36,438
AMI Split	0	0	80%	80%
IRR	14.71%	15.02%	13.99%	15.07%
NPV	(\$239,602)	\$16,370	(\$811,805)	\$78,589
All costs	\$31,647,288	\$31,312,967	\$31,312,967	\$46,076,832
Land cost	\$2,662,418	\$2,328,097	\$2,328,097	\$2,328,097
Land cost per unit	\$21,299	\$18,625	\$18,625	\$12,320
Average cost per unit (inclusive of land)	\$253,178	\$250,504	\$250,504	\$243,841
Hard cost construction (exclusive of land)	\$231,879	\$231,879	\$231,879	\$231,520
Return on Cost (ROC)	7.36%	7.43%	7.19%	7.45%

200-UNIT MULTIFAMILY (STICK) RENTAL DEVELOPMENT

RKG Associates also modeled a larger, 200-unit multifamily rental development program to understand if larger projects had different financial performance measures. The analysis revealed that 200-unit programs performed similarly to the 125-unit programs. Under the surface parking assumption, the Current Market/Baseline Scenario yielded an IRR that is above the proposed 15% minimum return threshold but still well below the current market expectations of 20+% (17.63%). Incorporating the model inclusionary zoning policy (20% of units committed to affordability) reduces the Target Return Scenario return by approximately 100 basis points to 13.95% IRR (Table 14). A bonus density ratio of 1:1 provides sufficient additional market rate units to offset the financial impact of the model inclusionary zoning policy, ultimately requiring 42 additional market rate units to compensate for the 40 income-controlled units priced at 80% of AMI.

200-UNIT MULTIFAMILY (PODIUM) RENTAL DEVELOPMENT

The cost of podium parking in the Downtown area has similar impacts on a 200-unit project as it does on a 125-unit project. The Current Market/Baseline Scenario yields a 15.42% IRR, approximately 220 basis points below the surface parking scenario. The model inclusionary zoning policy negatively impacts the financial performance of the project, requiring a 2.5:1 bonus density ratio to have the Inclusionary/Bonus Density Scenario meet the target return threshold of 15% IRR.

Table 14. 200-Unit Multifamily (Stick) Rental Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1	Amherst/Exit 1
Unit Style	200-Unit Multifamily	200-Unit Multifamily	200-Unit Multifamily	200-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Stick Only	MF - Stick Only	MF - Stick Only	MF - Stick Only
Construction Cost	\$185	\$185	\$185	\$185
Number of Units	200	200	200	242
Market Rate Units	200	200	160	202
Affordable Units	0	0	40	40
Parking	Surface	Surface	Surface	Surface
Special Permit	No	No	No	No
Inclusionary %	0%	0%	20%	20%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	40	40
Payment in Lieu	\$0	\$0	\$0	\$0
AMI Split	0	0	80%	80%
IRR	17.63%	15.01%	13.95%	14.92%
NPV	\$3,242,153	\$8,236	(\$1,343,770)	(\$114,769)
All costs	\$45,806,535	\$50,030,300	\$50,030,300	\$58,884,825
Land cost	\$3,000,000	\$7,223,765	\$7,223,765	\$7,223,765
Land cost per unit	\$15,000	\$36,119	\$36,119	\$29,899
Average cost per unit (inclusive of land)	\$229,033	\$250,151	\$250,151	\$243,723
Hard cost construction (exclusive of land)	\$214,033	\$214,033	\$214,033	\$213,824
Return on Cost (ROC)	8.12%	7.43%	7.17%	7.41%

Table 15. 200-Unit Multifamily (Stick) Rental Development				
	No Inclusionary	No Inclusionary Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value	Inclusionary 80% AMI W/ Adjusted Land Value and Bonus Market Units
Location	Downtown	Downtown	Downtown	Downtown
Unit Style	200-Unit Multifamily	200-Unit Multifamily	200-Unit Multifamily	200-Unit Multifamily
Unit Type	Rental	Rental	Rental	Rental
Construction Type	MF - Podium	MF - Podium	MF - Podium	MF - Podium
Construction Cost	\$215	\$215	\$215	\$215
Number of Units	200	200	200	297
Market Rate Units	200	200	160	257
Affordable Units	0	0	40	40
Parking	Aboveground	Aboveground	Aboveground	Aboveground
Special Permit	No	No	No	No
Inclusionary %	0%	0%	20%	20%
Inclusionary Treatment	No Inclusionary	No Inclusionary	Proposed	Proposed
Inclusionary Units	0	0	40	40
Payment in Lieu	\$0	\$0	\$0	\$0
AMI Split	0	0	80%	80%
IRR	15.42%	14.99%	13.93%	15.05%
NPV	\$542,652	(\$16,919)	(\$1,368,926)	\$97,653
All costs	\$49,332,308	\$50,063,155	\$50,063,155	\$72,424,393
Land cost	\$3,000,000	\$3,730,847	\$3,730,847	\$3,730,847
Land cost per unit	\$15,000	\$18,654	\$18,654	\$12,577
Average cost per unit (inclusive of land)	\$246,662	\$250,316	\$250,316	\$244,149
Hard cost construction (exclusive of land)	\$231,662	\$231,662	\$231,662	\$231,572
Return on Cost (ROC)	7.54%	7.43%	7.16%	7.44%

POTENTIAL HOUSING TRUST FUNDING STRATEGIES

The proposed payment in lieu of partial inclusionary units detailed earlier in the report can create some revenue for the City's housing trust. However, the value differential between market rate and 80% of AMI is not substantial and the number of developments each year likely will be limited. To this point, RKG Associates was asked to identify some other best practices for creating revenue sources—particularly consistent revenue sources—for the city to consider. Some potential recommendations around funding a housing trust fund include:

- ***Transfer tax on property sales*** – The City of Nashua could levy a surcharge on the sale of property, levied on the seller, the buyer, or both parties. The surcharge could be a fixed percentage and allow the city to collect funds when a property changes ownership. The tax could provide a dependable source of revenue for the affordable housing trust fund. One caveat with a transfer tax is that they work well in healthy real estate markets with consistent turnover and sales. In less-healthy housing markets, declining home sales and prices reduce real estate transfer tax revenues, which consequently reduces funding for the affordable housing trust fund.
- ***Dedicated millage rate on real property*** – The current real estate property tax in the City of Nashua is \$20.61 per \$1,000 in assessed value. The City of Nashua could add an additional \$.01 as a dedicated tax to fund the Affordable Housing Trust Fund. This penny property tax would be collected annually and provide a consistent stream of income for the affordable housing trust. Additionally, the tax would be equitable in the everyone in the city would be contributing towards ensuring that there is an adequate supply of affordable housing.
- ***Linkage/Impact fees*** – Linkage/Impact fees attempt to link the production of market-rate real estate to the production of affordable housing. Under this type of program, the City could charge developers a fee for each square foot of new market-rate construction and use the funds to pay for affordable housing. The city could direct the funds specifically toward the Affordable Housing Trust Fund. The money collected in the trust fund could then be used to support existing subsidized units, or to build new units across the city.
- ***Development review process fee*** – For proposed developments which require changes to zoning or a variance, the city should institute a development review fee. Given that many developers of market rate units can build beyond established zoning guidelines the city should institute a fee which is applied to development beyond established maximum densities. The fee can be assessed on either a per square foot or per unit basis. The money collected from the fee can be earmarked for the Affordable Housing Trust Fund and can be used to build or subsidize affordable housing in the City of Nashua.

APPENDIX 1

Baseline Model Assumptions	
Revenues	Assumptions
Downtown/Amherst/Exit 1 Market Rents	
Studio	\$1,779
1BR	\$1,860
2BR	\$2,316
3BR	\$2,688
Downtown/Amherst/Exit 1 Market Rents per SF	
Studio	\$3.38
1BR	\$2.44
2BR	\$2.41
3BR	\$2.24
Suburban Market Rents	
Studio	\$1,601
1BR	\$1,674
2BR	\$2,084
3BR	\$2,419
Suburban Market Rents per SF	
Studio	\$3.04
1BR	\$2.20
2BR	\$2.17
3BR	\$2.02
Market Sales Values for Single Family/Townhomes	
1BR	\$300,000
2BR	\$350,000
3BR	\$550,000
Parking Income (Rental) (per spot)	\$75
Vacancy Rate (Rental)	5%
Unit Sizing	
Size of Multifamily Units in SF	
Studio	526
1BR	762
2BR	961
3BR	1,200
Size of Townhomes in SF	1,294
Size of Single-Family Homes in SF	1,853

Development Costs	
Construction Costs (PSF)	
Fee Simple	\$165
MF - Stick	\$185
MF - Podium	\$215
Special Permit Costs (addition to soft cost)	10%
Soft Costs	20%
Land Costs Per Unit	
Single Family	\$65,000
Townhomes	\$38,338
25-Unit Multifamily	\$50,000
125-Unit Multifamily	\$21,299
200-Unit Multifamily	\$15,000
Parking Costs (per stall)	
Surface	\$8,000
Parking Ratios	
Single Family/Townhome	2.00
Multifamily	1.50
Financing Costs	
First Year of Operations	2021
Construction Period	1 year
Inflation Rate	2%
Mortgage Term	
Rental (Years)	20
For Sale (Years)	2
Interest Rate	
Rental	5.50%
For Sale	5.00%
Equity	
Rental	25.00%
For Sale	25.00%
Capitalization Rate (Rental)	5.50%
Cost of Sale	2.00%
Reversion (Years)	
Rental (Years)	10
For Sale (Years)	1
Stabilization Period (Years)	1
Origination Fee %	1.50%
Developer Operating Expense Ratio (OE/PGI)	25.00%
Discount Rate (NPV) Rental	15.00%
Discount Rate (NPV) For Sale	20.00%

GLOSSARY OF TERMS

- Capitalization Rate** – Ratio between the net operating income of a property and its sales value
- Discount Rate** – The interest rate used in discounted cash flow analysis to determine the present value of future cash flows
- Density Bonus** - A ordinance mechanism allowing a developer to build a greater number of units than the existing underlying zoning dictates in exchange for the creation of additional affordable units
- Equity** – Initial out-of-pocket investment on the part of developer that is required to obtain financing
- Effective Gross Income** – Gross income minus the vacancy collection loss
- Fee in-Lieu** – Payment made to City to account for fractional affordable unit not built.
- Internal Rate of Return** - Annualized rate of return sought by a developer based on the project discounted cashflow
- Net Operating Income** – Net income after deducting operating expenses from potential gross income
- Net Present Value** – Net value of the initial investment and cashflows generated from a project, discounted back to the current year
- Operating Expenses** – Expenses related to operating the building such as maintenance, salaries, and repairs
- Other Income** – Income generated from the property aside from rent, this income is parking revenues for leased spaces
- Potential Gross Income** – Potential income generated from rental income or sale of a property. Calculated by multiplying the number of units and rent for each unit
- Residual Land Value** - The price a developer pays for a piece of land. Generally, involves calculating the income expectations for the developed land, subtract all expenses associated with this development, and the remainder is the land residual
- Vacancy and Collection Loss** – Percent of rent that is uncollectable
- Value Gap** – Difference in value between a market rate unit and affordable unit