BALTIMORE INCLUSIONARY ZONING STUDY

FINANCIAL FEASIBILITY ANALYSIS

AUGUST 2021

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BALTIMORE IZ STUDY PROCESS

SUMMARY OF FINDINGS AND INITIAL RECOMMENDATIONS

- **Current Policy:** The current IZ policy sets ambitious affordability goals but is limited by funding constraints.

  Implication: Realizing the full potential of the current policy would **require identifying additional sources of funding** for the City to support the increased cost of the policy.

- **Traditional Policy:** A traditional IZ policy, which puts the onus for meeting requirements on the developer, could support a 5-10% affordability set aside with the provision of tax abatements.

  Implication: Despite a lower affordability requirement than the current policy, a traditional policy would result in an **increase in the production of affordable housing units over the current policy**.

- **Market Conditions:** Market rate development feasibility is generally limited to Core Market locations and to rental apartments.

  Implication: Wide variation in market conditions throughout Baltimore suggests an IZ policy will be most successful when **targeted geographically to the strongest market locations**.

  Implication: Meeting policy goals to support affordable homeownership and investment in disinvested neighborhoods will require **structuring an in-lieu fee that can be allocated to meet those goals**.

Financial Model Framework

Current Policy

Traditional Inclusionary Zoning Policy

IZ Policy Impact

Recommendations

FINANCIAL ANALYSIS | POLICY OPTIONS

This analysis models the financial feasibility and corresponding impacts of inclusionary zoning (IZ), both under both the current policy structure of the City and a more traditional IZ policy structure.

	Existing Policy	Traditional IZ Policy
Responsibility for Funding Units	**City** Under the City's current policy, the City is responsible for providing direct resources to support the inclusion of IZ units in a building.	**Developer** Under traditional IZ policies, the developer building the project is responsible for providing the required IZ units within the building, typically in exchange for incentives provided by the City.
Funding Mechanism	**City Contribution** • **Direct funding of affordable units:** The City provides direct funding for any extra cost the policy incurs on a developer, in effect providing the funding for all affordable units. *or* • **Density Bonus:** The developer receives a density bonus to allow for the development of the additional affordable units.	**Land Use or Financial Incentives** • **Density Bonus:** The developer receives a density bonus to allow developers to build additional units than what would typically be permitted. • **Parking Requirement Reduction:** Traditional policies can also allow developments to reduce their parking requirements, using the saved costs to offset the cost of affordable units. • **Tax Abatement:** Traditional policies frequently provide a property tax abatement to offset the costs of providing affordable units.
Policy Constraints	**Availability of City funding** to support affordable unit production.	On-site unit production is limited to locations where market-rate units are being built. To address this, the City can structure an **in-lieu fee** to distribute housing funds to other neighborhoods.

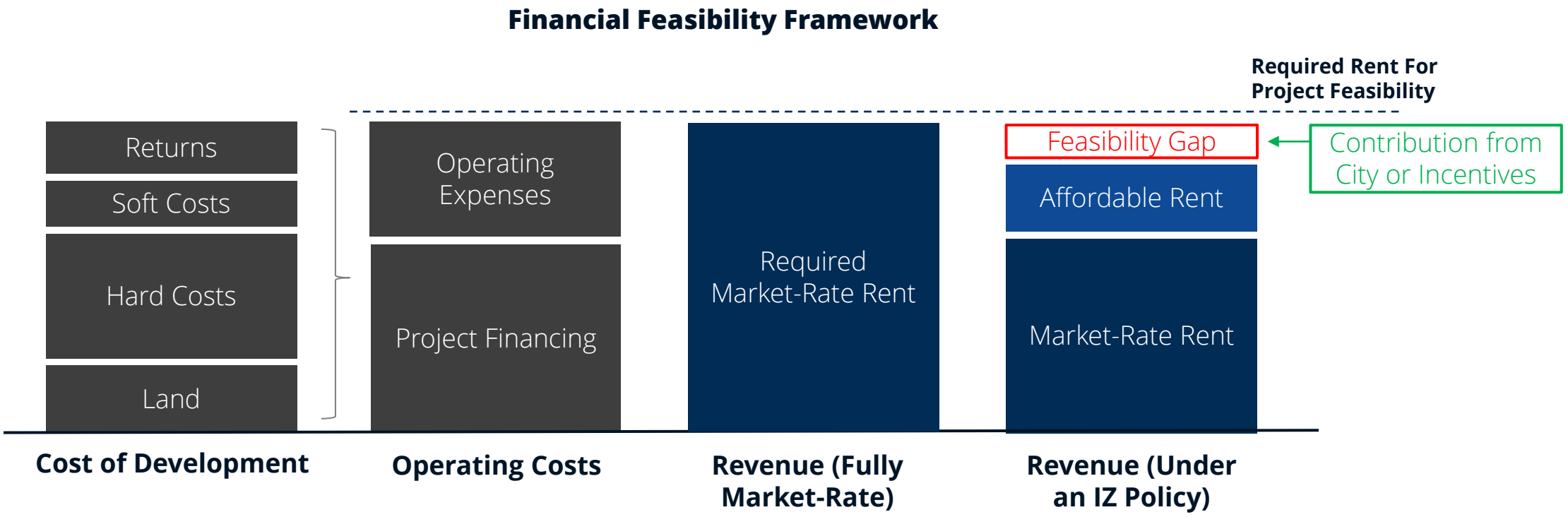
FINANCIAL ANALYSIS | KEY QUESTIONS

Our financial analysis was centered around three guiding questions:

1. What is the **baseline feasibility** of market rate multifamily development in Baltimore?
2. How could **potential changes** to the IZ policy impact development feasibility and production of affordable units?
3. What **funding or incentives** is required achieve the City's policy goals?

FINANCIAL ANALYSIS | GUIDING FRAMEWORK

A project is feasible when required rent can pay for project financing and operating expenses.

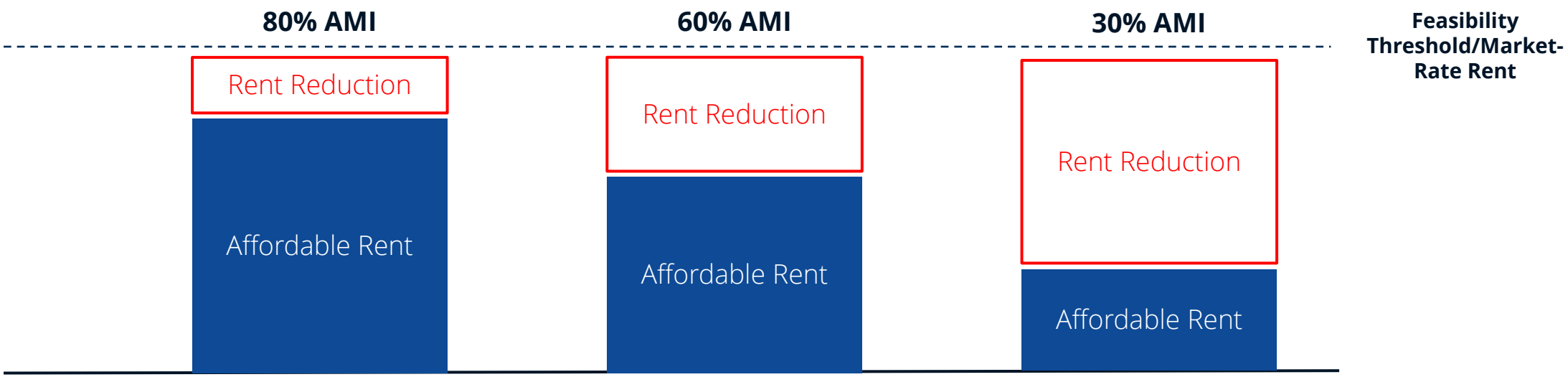


In the case of a feasibility gap, projects will not be feasible because they cannot meet financing obligations. The City's current policy addresses the feasibility gap by providing a direct City contribution to a project developer. A traditional IZ policy would provide incentives such as a tax abatement or density bonus to support the development.

FINANCIAL ANALYSIS | GUIDING FRAMEWORK

As affordability requirements deepen, the reduction in rent widens. For example, a 1-bedroom unit at 30% AMI compared to a 1-bedroom unit at 100% AMI represents a $670 decrease in monthly rent.

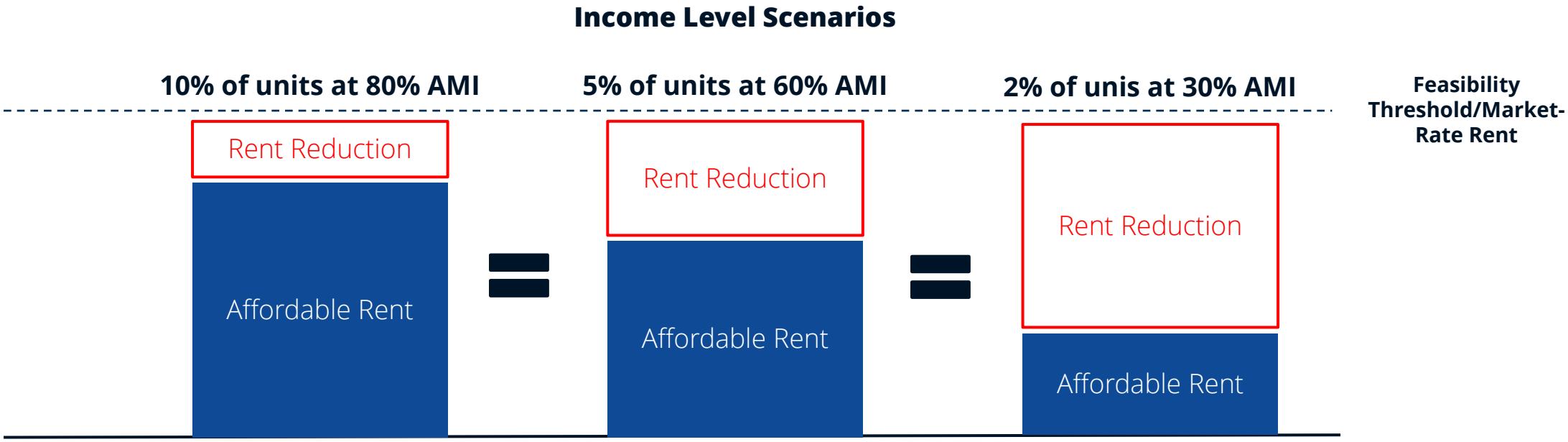
Income Level Scenarios



	1 BR Rent at 80% AMI	1 BR Rent at 60% AMI	1 BR Rent at 30% AMI
Affordable Rent	**$1,352**	**$1,050**	**$465**
100% AMI Rent	**$1,720**	**$1,720**	**$1,720**
Monthly Difference	**-$368**	**-$670**	**$1,255**

FINANCIAL ANALYSIS | GUIDING FRAMEWORK

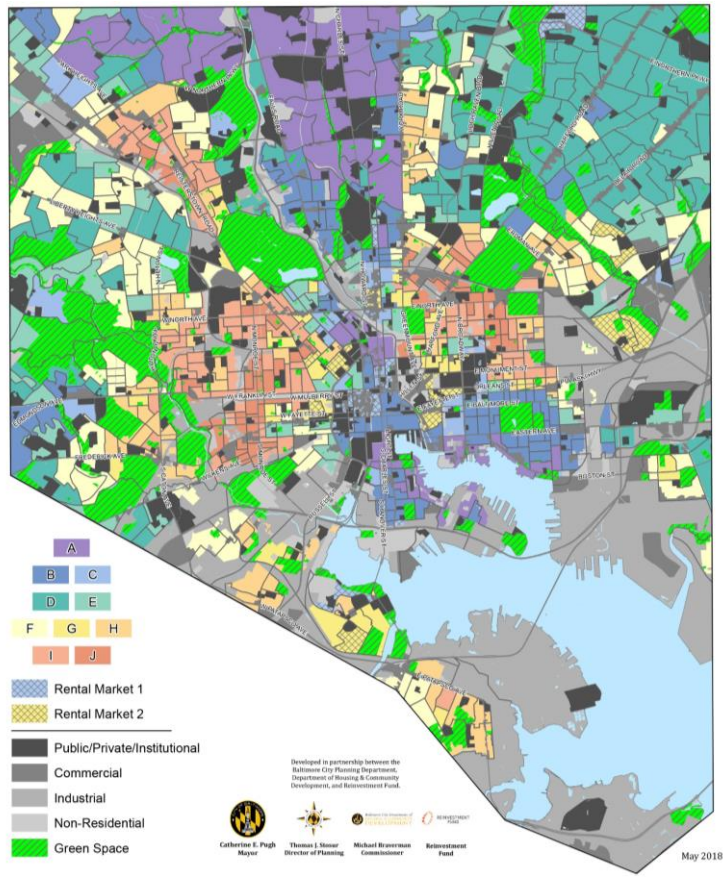
Deeper levels of affordability limit the total number of units that can be supported by the policy. For example, a policy that supports the feasibility of 10% of units at 80% AMI could only support 2% at 30% AMI.



FINANCIAL ANALYSIS| MARKET TYPOLOGIES

Baltimore's Housing Market Typology map provides an objective precedent for assessing market strength across geographies.

Market Typologies based on Baltimore's Housing Market Typology



The Housing Market Typology, developed by the City of Baltimore, established market conditions through metrics such as:

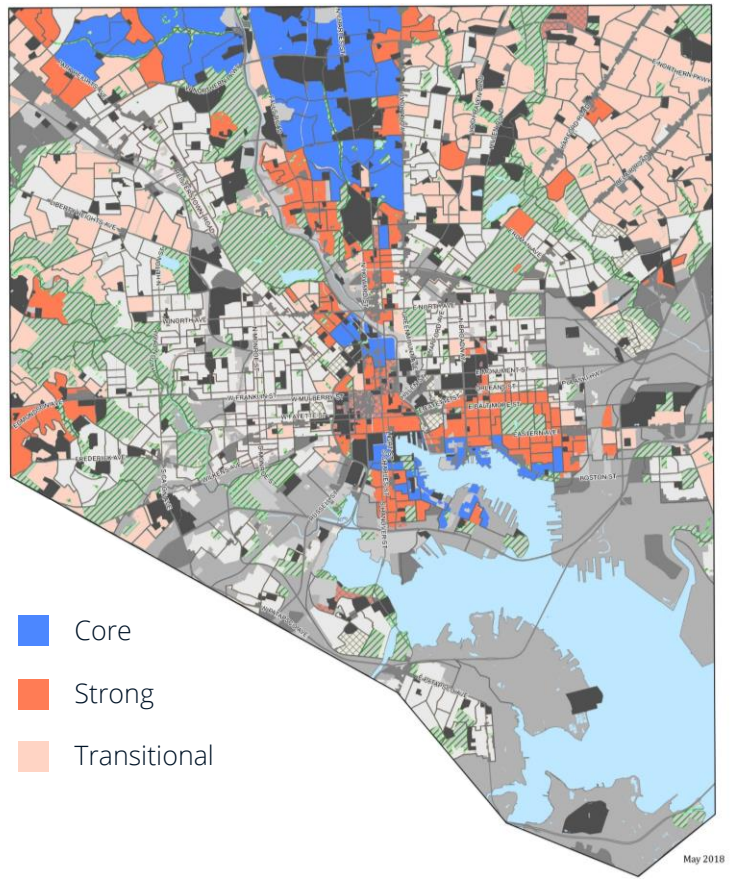
- Median sales price
- Sales price variation
- Vacant lots and buildings
- Foreclosure filings
- Residential permits over $10,000
- Percent owner occupied
- Housing units per square mile

Based on these variables, block groups were assigned a cluster of A through J, where A clusters represent the most competitive housing markets.

FINANCIAL ANALYSIS| MARKET TYPOLOGIES

Using Baltimore's Housing Market Typology as a base for understanding conditions, we defined three submarkets for evaluating market strength to support new market-rate development.

Market Typologies based on Baltimore's Housing Market Typology



Source: Baltimore Housing Market Typology

- **Core Submarket** areas represent locations where the majority of new market rate development is occurring today, prices are highest, and includes areas along the harbor and adjacent to Downtown.
- **Strong Submarket** areas are the remaining markets in Baltimore that could potentially to support new market rate development.
- **Transitional Submarket** areas are maturing and could possibly support market rate development in the future.

Targeting specific geographies allows the City to capture affordable housing in locations best positioned to support feasibility, without compromising development potential in locations where the margins for financial feasibility are thinner.

FINANCIAL ANALYSIS| TYPOLOGIES SUMMARY

We defined a set of potential building typologies across market types that are diverse and representative of existing buildings and potential future development.

	Low/Mid-Rise New Construction Rental	Low/Mid-Rise Rehab Rental	High-Rise New Construction Rental	Low/Mid-Rise New Construction For Sale
Core Submarket	X		X	X
Strong Submarket	X	X		
Transitional Submarket	X	X		

FINANCIAL ANALYSIS| INCENTIVES

There are several tools available to policy-makers to provide as incentives for inclusionary zoning, which are broadly divided into land use incentives and subsidy incentives (i.e. tax abatements). This analysis only considers tax abatements given market constraints in Baltimore for land use tools.

	Land Use Incentives	Subsidy Incentives
Typical IZ Incentives	• Density Bonuses • Parking Reductions	• Tax abatement for **affordable** units • Tax abatement for **market-rate** units
Incentives Modeled in Baltimore Analysis		• Tax abatement – Assumes projects receive a tax abatement for the full development, **in addition to the existing High-Performance Tax Credit**

This analysis focuses on modelled tax abatements since land use incentives are of limited value in the Baltimore market. All tax abatements are in addition to the High-Performance Tax Credit or other abatements a project may receive.

Note: Density bonus excluded from incentives modeled since it is only available for projects exceeding the current 10% set aside.

Financial Model Framework

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CURRENT POLICY| POLICY OVERVIEW

Under current City policy, developers are required to make a share of units affordable based on the benefits it receives from the City. The affordable units are funded by the City so long as the net cost to the City per unit is below established thresholds.

Overview of Current Policy Framework

Major Public Subsidy
6% at 30% AMI
5% at 60% AMI
5% at 80% AMI
4% at 100% AMI
(Total 20% affordable)

With Rezoning
5% at 60% AMI
5% at 80% AMI
(Total 10% affordable)

All Other Projects
10% at 100% AMI

City Threshold Limit of Price Per Affordable Unit

	Threshold
30% AMI	$125,000
60% AMI	$100,000
80% AMI	$50,000
100% AMI	$25,000

The currently IZ policy puts a threshold on the amount of money the City can contribute per affordable unit. If the cost per affordable unit exceeds the threshold, the developer can be exempted from providing the affordable units.

CURRENT POLICY| EXAMPLE DEVELOPMENT

To explore the impact of the existing policy and potential adjustments to it, we assumed an example development of 100 units.

Example Project – Unit Mix, Market-Rate Rents, and Required Affordability

	Number of Units	Market-Rate Rents	Required Affordable Units
Studio	20	$1,175	4
1 Bedroom	50	$1,763	11
2 Bedroom	25	$2,115	5
3 Bedroom	5	$2,585	0
Total	**100**	**-**	**20**

Modeled rents are representative of rents in the defined Core Submarket for mid-rise buildings, about $2.35 per square foot per month.

Note: This example project assumes a project is receiving a subsidy from the City, which requires a 20% affordable unit set aside. This is typical of most projects being built today.

CURRENT POLICY| EXAMPLE DEVELOPMENT – CURRENT THRESHOLD

Under current threshold levels, only 3 of the 20 required units fit within the thresholds and would be funded by the City. The developer of the building could be exempted from providing the remainder of required affordable units.

Example Project – Lifetime Subsidy Required Per Affordable Unit, Current Thresholds

	30% AMI	60% AMI	80% AMI	100% AMI	Units Within Threshold
Studio	$162,004	$53,149	$0	$0	1
1 Bedroom	$289,989	$172,918	$94,871	$23,134	2
2 Bedroom	$347,781	$207,604	$114,153	$27,761	0
3 Bedroom	$434,764	$272,509	$164,167	$56,660	0
Threshold Limit	$125,000	$100,000	$50,000	$25,000	3

Greater than threshold limit and ineligible for funding

Less than threshold limit and eligible for funding

Total Affordable Units Funded: 3

Total City Funding Required: $99,417

CURRENT POLICY| EXAMPLE DEVELOPMENT – NO THRESHOLD

Adjusting the thresholds to provide more affordable units would increase affordability but also impose significant costs to the City that are greater than the funding available to support the policy.

Example Project – Lifetime Subsidy Required Per Affordable Unit, No Thresholds

	30% AMI	60% AMI	80% AMI	100% AMI	Units Within Threshold
Studio	$162,004	$53,149	$0	$0	4
1 Bedroom	$289,989	$172,918	$94,871	$23,134	11
2 Bedroom	$347,781	$207,604	$114,153	$27,761	5
3 Bedroom	$434,764	$272,509	$164,167	$56,660	0
Threshold Limit	None	None	None	None	20

Greater than threshold limit and ineligible for funding

Less than threshold limit and eligible for funding

Total Affordable Units Funded: 20

Total City Funding Required: $2,979,834

Removing all thresholds would require the City to provide nearly $3 million in funding to support the 20 affordable units.

CURRENT POLICY| EXAMPLE DEVELOPMENT – DOUBLED THRESHOLD

Even maintaining a threshold that is increased above the limits of today would place significant strain on the resources the City has available to support IZ.

Example Project – Lifetime Subsidy Required Per Affordable Unit, Doubled Thresholds

	30% AMI	60% AMI	80% AMI	100% AMI	Units Within Threshold
Studio	$162,004	$53,149	$0	$0	2
1 Bedroom	$289,989	$172,918	$94,871	$23,134	8
2 Bedroom	$347,781	$207,604	$114,153	$27,761	1
3 Bedroom	$434,764	$272,509	$164,167	$56,660	0
Threshold Limit	$250,000	$200,000	$100,000	$50,000	11

Greater than threshold limit and ineligible for funding

Less than threshold limit and eligible for funding

Total Affordable Units Funded: 11

Total City Funding Required: $1,092,549

Doubling the current threshold levels would require over $1 million in City funding in the example project, a level of funding that is not sustainable for the City.

CURRENT POLICY| ADJUSTED AFFORDABILITY MIX

Alternatively, the City could consider shifting the mix of affordable units to higher AMI levels. However, this does not guarantee more affordable units and does not achieve the City's goal of achieving deeper levels of affordability.

Example Project – Total Subsidy Per Affordable Unit at Different AMI Requirements

20% of Units at 60% AMI

	60% AMI Threshold	Units Within Threshold
Studio	$53,149	4
1 Bedroom	$172,918	0
2 Bedroom	$207,604	0
3 Bedroom	$272,509	0
Threshold Limit	**$100,000**	Total Units: 4

Total Affordable Units Funded: 4

Total City Funding Required: $212,596

20% of Units at 100% AMI

	100% AMI Threshold	Units Within Threshold
Studio	$0	0
1 Bedroom	$23,134	10
2 Bedroom	$27,761	0
3 Bedroom	$56,660	0
Threshold Limit	**$25,000**	Total Units:10

Total Affordable Units Funded: 10

Total City Funding Required: $231,340

CURRENT POLICY| COMPARING ALTERNATIVES

The only way to realize full implementation of current affordability requirements is to significantly increase or eliminate the thresholds. However, that would require identifying additional sources of funding to support the increased cost of the policy.

Example Project – Summary of Policy Alternatives for Current Policy

		Threshold Adjustments		AMI Adjustments	
	Current Policy	**Current Policy + Doubled Threshold**	**Current Policy + No Thresholds**	**20% at 60% AMI**	**20% at 100% AMI**
Affordability Mix		6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI		20% at 60% AMI	20% at 100% AMI
Unit Cost Threshold	$25k – $125K	$50k – $250K	N/A	$25k – $125K	$25k – $125K
Total Affordable Units Supported	**3**	**11**	**20**	**4**	**10**
Total Cost to City	**$99K**	**$1.1 Million**	**$3 Million**	**$213K**	**$231K**

Financial Model Framework

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TRADITIONAL IZ POLICY | MODEL INPUTS

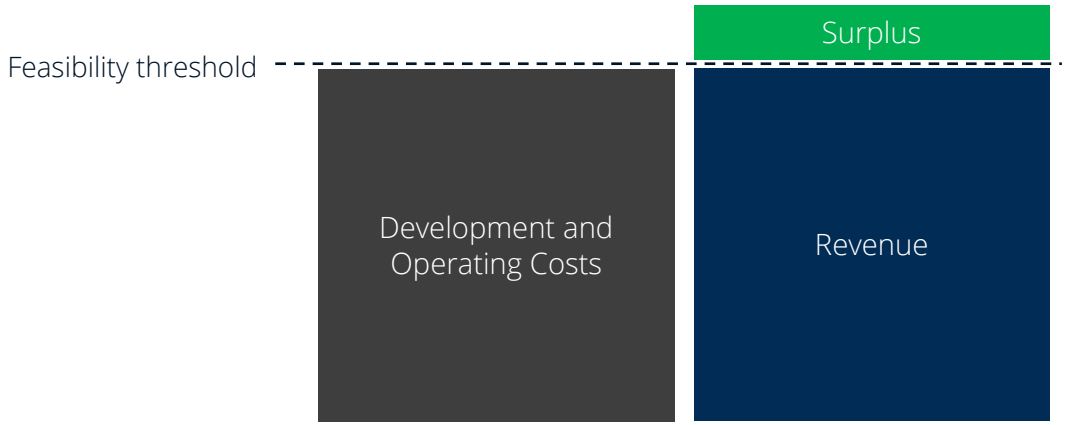
Under a traditional IZ policy, we modeled development in **core**, **strong**, and **transitional** markets across different building typologies to understand feasibility in various geographic locations.

Financial Feasibility Model Scenario Inputs by Market Type

	Core		Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Total Units	285 Units	360 Units	250 Units	200 Units	150 Units	100 Units
FAR	4.3 FAR	6.2 FAR	3.0 FAR	2.5 FAR	1.3 FAR	1.0 FAR
Total SF	215,175 NSF	271,800 NSF	188,750 NSF	151,000 NSF	113,250 NSF	75,500 NSF
Parking Spaces	285 spaces	288 spaces	313 spaces	250 spaces	188 spaces	125 spaces
Modeled Affordability Term	30 years	30 years	30 years	30 years	30 years	30 years

TRADITIONAL IZ POLICY | MODEL INPUTS

Each of the summary tables on the following pages reflects our analysis of development scenario feasibility, first measured at baseline for standard market rate development, and then tested with various affordability requirements and incentives.



When revenue generated exceeds the costs required to develop and operate the property, there is a feasibility surplus (greater than $0). In these cases, a project is **feasible**.

When revenue generated falls short of the costs required to develop and operate the property, there is a **feasibility gap** In these cases, a project is **infeasible**.

TRADITIONAL IZ POLICY | BASELINE FEASIBILITY – MARKET RATE DEVELOPMENT

Based on market conditions, market rate rental development is only feasible in core markets. This signals the need for a traditional IZ policy to be geographically focused on Core market locations.

	Core		Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Feasibility Threshold – Target Yield on Cost	6.00%	6.00%	6.50%	6.50%	7.00%	7.00%
Actual Yield on Cost	6.10%	6.09%	5.14%	5.71%	4.58%	5.02%
Δ Target Yield on Cost	**0.10%**	**0.09%**	**-1.36%**	**-0.79%**	**-2.42%**	**-1.98%**
Feasibility	**Feasible**	**Feasible**	**Infeasible**	**Infeasible**	**Infeasible**	**Infeasible**

Multi-family rental development within core markets are feasible

Multi-family developments outside of core markets are currently infeasible based on market conditions in these locations.

Note: The Yield on Cost feasibility threshold is determined based on the capitalization rate (cap rate) in each location plus a spread of 125 basis points. Additional detail on inputs and assumptions is provided in the Appendix section.
Note: Baseline analysis assumes inclusion of High-Performance Tax Credit, since the incentive is available to most new development occurring in Baltimore.

TRADITIONAL IZ POLICY | CORE MARKET FEASIBILITY WITH IZ REQUIREMENT

Without any incentive, a requirement of affordable units makes most projects infeasible in core market locations. Because of this, some form of incentive is necessary to develop a workable IZ policy.

Core Market Locations – Feasibility of IZ Requirement Without Incentives

	Baseline Feasibility: 0 Affordable Units	**Scenario 1: 5% at 60% AMI**	**Scenario 2: 5% at 80% AMI**	**Scenario 3: 10% at 80% AMI**	**Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)**	**Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)**
Mid-Rise New Construction	**Feasible**	**Infeasible**	**Feasible**	**Infeasible**	**Infeasible**	**Infeasible**
High-Rise New Construction	**Feasible**	**Infeasible**	**Infeasible**	**Infeasible**	**Infeasible**	**Infeasible**

TRADITIONAL IZ POLICY | STRONG MARKET FEASIBILITY WITH IZ REQUIREMENT

As described earlier, development within strong and transitional markets is currently infeasible, so requiring any affordable units without incentives only further increases infeasibility.

Strong Market Locations – Feasibility of IZ Requirement Without Incentives

	Baseline Feasibility: 0 Affordable Units	Scenario 1: 5% at 60% AMI	Scenario 2: 5% at 80% AMI	Scenario 3: 10% at 80% AMI	Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)	Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)
Mid-Rise New Construction	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible
Mid-Rise Rehab	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible

TRADITIONAL IZ POLICY | OTHER MARKET FEASIBILITY WITH IZ REQUIREMENT

As described earlier, development within strong and transitional markets is currently infeasible, so requiring any affordable units without incentives only further increases infeasibility.

Transitional Market Locations – Feasibility of IZ Requirement Without Incentives

	Baseline Feasibility: 0 Affordable Units	Scenario 1: 5% at 60% AMI	Scenario 2: 5% at 80% AMI	Scenario 3: 10% at 80% AMI	Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)	Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)
Mid-Rise New Construction	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible
Mid-Rise Rehab	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible	Infeasible

TRADITIONAL IZ POLICY | INCENTIVES

There are several tools available to policy-makers to provide as incentives for inclusionary zoning, which are broadly divided into land use incentives and subsidy incentives (i.e. tax abatements). This analysis only considers tax abatements given market constraints in Baltimore for land use tools.

	Land Use Incentives	**Subsidy Incentives**
Typical IZ Incentives	• Density Bonuses • Parking Reductions	• Tax abatement
Incentives Modeled in Baltimore Analysis		• Tax abatement – Assumes projects receive a tax abatement **in addition to the High-Performance Tax Credit**

This analysis focuses on modelled tax abatements since land use incentives are of limited value in the Baltimore market. All tax abatements are in addition to the High-Performance Tax Credit or other abatements a project may receive.

Note: Density bonus excluded from incentives modeled since it is only available for projects exceeding the current 10% set aside.

TRADITIONAL IZ POLICY | ABATEMENT REQUIREMENT

To offset the financial impact of the IZ requirement, an updated IZ policy will need to provide between a $25K and $48K total abatement per unit. This includes the total abatement requirement without the High-Performance Tax Credit. The abatement requirement decreases with the HPTC.

Core Market – Total Abatement Required to Offset IZ Requirement

	Baseline Feasibility: 0 Affordable Units	Scenario 1: 5% at 60% AMI	Scenario 2: 5% at 80% AMI	Scenario 3: 10% at 80% AMI	Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)	Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)
Mid-Rise New Construction	N/A	**$26,700 /unit**	**$25,100 /unit**	**$26,600 /unit**	**$28,100 /unit**	**$35,200 /unit**
High-Rise New Construction	N/A	**$35,200 /unit**	**$33,700 /unit**	**$36,500 /unit**	**$38,100 /unit**	**$47,600 /unit**

Note: Units are counted as all units in the project, not just the affordable units

TRADITIONAL IZ POLICY | CORE MARKET FEASIBILITY WITH IZ REQUIREMENT+ 15% TAX ABATEMENT

With a 15% tax abatement, a number of traditional IZ policy options are feasible for development of multi-family **rental housing** in **core markets.**

Core Market – Feasibility of IZ Requirement With Incentives

	Baseline Feasibility: 0 Affordable Units	**Scenario 1: 5% at 60% AMI**	**Scenario 2: 5% at 80% AMI**	**Scenario 3: 10% at 80% AMI**	**Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)**	**Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)**
Mid-Rise New Construction	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Infeasible**
High-Rise New Construction	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Infeasible**

This tax abatement is in **addition to the High-Performance Tax Credit,** which provides an effective abatement of 65% per year during its ten-year term. An additional 15% abatement would equate to a total effective incremental abatement of **80% for ten years**.

TRADITIONAL IZ POLICY | CORE MARKET FEASIBILITY WITH IZ REQUIREMENT+ 15% TAX ABATEMENT

With a 15% tax abatement, a number of traditional IZ policy options are feasible for development of multi-family **rental housing** in **core markets.**

Core Market – Feasibility of IZ Requirement With Incentives

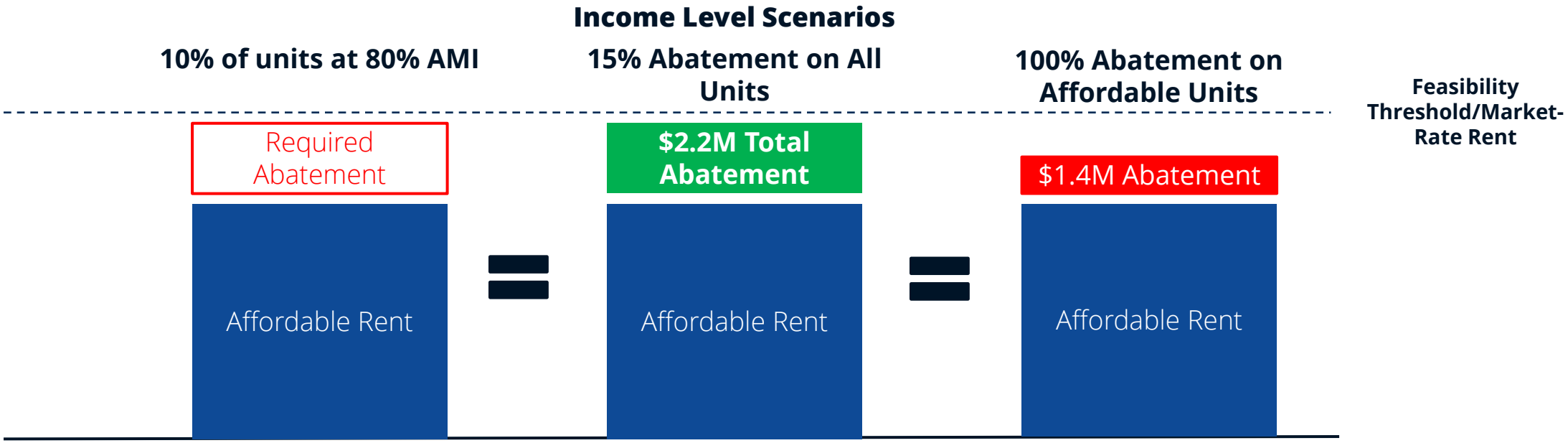
	Baseline Feasibility: 0 Affordable Units	**Scenario 1: 5% at 60% AMI**	**Scenario 2: 5% at 80% AMI**	**Scenario 3: 10% at 80% AMI**	**Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)**	**Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)**
Mid-Rise New Construction	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Infeasible**
High-Rise New Construction	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Feasible**	**Infeasible**

Under a 5%-10% affordability set-aside, market conditions and available incentives maintain overall feasibility of development in core market locations.

A 20% affordability set-aside places a larger cost-burden on development that current market conditions and available incentives cannot support.

TRADITIONAL IZ POLICY | Abatement Targeting

Sometimes IZ policies will provide abatement on just the affordable units, rather than all units in a project. If the City implemented a 10% requirement of units at 80% AMI, a 100% abatement on just the affordable units would not provide sufficient abatement to offset the additional cost of constructing the units, making development infeasible.



TRADITIONAL IZ POLICY | FOR-SALE UNITS

For-sale multifamily development is not currently occurring in Baltimore due to market infeasibility. Therefore, we did not test it for feasibility to determine supportability of an IZ policy.

For-Sale Units - Feasibility

	Core
Building Typology	Mid-rise For-sale
Target Equity Multiple	2.00x
Actual Equity Multiple	1.35x
Δ Target Equity Multiple	**-0.65x**
Feasibility	**Infeasible**

Since the market is not currently building for-sale multifamily, the best way an IZ policy can support affordable homeownership is by directing **in-lieu fees** collected by the policy to affordable homeownership initiatives

Financial Model Framework

Current Policy

Traditional Inclusionary Zoning Policy

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Recommendations

IMPACT OF TRADITIONAL IZ POLICY | POTENTIAL ADDITIONAL AFFORDABLE UNITS

Although the traditional IZ policies modeled have a lower affordability set aside than the current policy in Baltimore, they would result in an increased production of affordable housing units.

Total IZ Unit Production Under Different Modeled Policies, 2016-2021

	Current Policy	Scenario 1: 5% at 60% AMI	Scenario 2: 5% at 80% AMI	Scenario 3: 10% at 80% AMI	Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% total)	Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)
Mix of Affordable Units	6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% total set aside)	5% at 60% AMI	5% at 80% AMI	10% at 80% AMI	5% at 60% AMI 5% at 80% AMI (10% total set aside)	6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% total set aside)
Total Affordable Units	**36***	**270**	**270**	**540**	**540**	**NA (Infeasible)**

If a traditional IZ policy had been in place since 2016, **270-540 affordable units would have been created between 2016 and 2021** based on the potential scenarios modeled providing a 5-10% set aside.

**Includes all affordable units generated by the existing IZ policy since 2007*

IMPACT OF TRADITIONAL IZ POLICY | FUTURE IZ CONSIDERATIONS

While IZ is currently feasibly in core markets, there are challenges in producing units in other locations where limited new multifamily development is occurring today. However, future changes in conditions could allow for expansion of policy.

Current Challenges to Support IZ	Benchmark Indicators for Future IZ Consideration	Reason for Benchmark Indicator
Market Rents Market rent below rents required for new construction in strong and transitional markets	Rents at or above identified rent thresholds for feasibility (or future rent thresholds)	Value from rent increases can be used to support an IZ policy, if captured appropriately
HPTC Reliance All existing development scenarios, regardless of an affordable set aside require use of the HPTC	Most or all market-rate development occurs with reduced need for HPTC	Signal of stronger market conditions; HPTC can then be repurposed for public benefits
Zoning Incentives Limited value to developers for zoning incentives beyond what is already available	Developers seek additional zoning density	Market signal that density bonuses hold value and can be leveraged to support public benefits

IMPACT OF TRADITIONAL IZ POLICY | FUTURE IZ CONSIDERATIONS

For an IZ policy to be feasible and produce units in non-core market locations, market rents need to strengthen for market-rate projects to be feasible with reduced need for incentives.

2022

IZ is **infeasible** in strong and transitional markets

Current Market Conditions

Rent
$1.95 - $2.15/NSF

Land prices
$20 - $50/SF

Construction costs
$200-$270/GSF

Incentives required
Full tax abatement

Current IZ rent threshold
$2.35-$2.75/SF

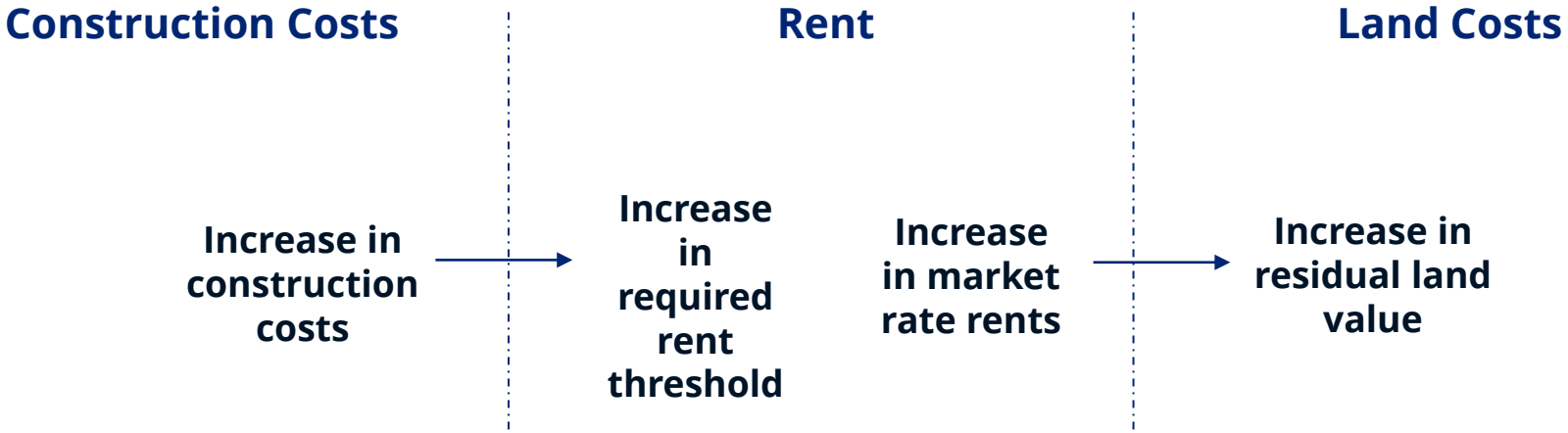
Under current market conditions, rents need to increase from $1.95 - $2.15/NSF to $2.35 - $2.75/NSF across the city for consideration of a feasible inclusionary zoning policy.

IMPACT OF TRADITIONAL IZ POLICY | FUTURE IZ CONSIDERATIONS

However, over time, market conditions will change such that the required rent benchmark for IZ implementation changes as well.

Development feasibility is driven by achievable market rents, but markets are dynamic and other market conditions such as land costs and construction costs, among many other factors, influence the rent pricing that meets development feasibility thresholds. Each of these variables is interconnected, so as one variable changes, it impacts other variables. For example, an increase in rents resulting from a strengthening market means developers will be able to pay more for land, increasing land costs. As a result, an increase in rents does not necessarily mean that development has become feasible or an IZ policy can be supported.

RELATIONSHIP BETWEEN REAL ESTATE VARIABLES



IMPACT OF TRADITIONAL IZ POLICY | FUTURE IZ CONSIDERATIONS

In addition to changing market conditions, conditions for incentives must adjust to accommodate market rate feasibility without City support. As market conditions strengthen over time through other City strategies, the City should seek to shift the market away from reliance on incentives to reach market rate development feasibility.

INCENTIVE DYNAMICS

HPTC

Benchmark Indicator: When developers can consistently produce most market rate housing with a reduced need for HPTC or other economic development incentives.

Additional Context: Under current conditions today, the HPTC is primarily used to support fully market rate development. In Core markets, there are opportunities to incorporate affordable units in conjunction with an additional tax abatement.

In the future, when development can occur without the provision of HPTC, tax abatements can be used more broadly and ambitiously to support increased affordable housing, deeper levels of affordability, or provision of other public benefits.

Zoning Policy

Benchmark Indicator: When developers seek additional density as part of project development.

Additional Context: The City would benefit most from an IZ policy that offers bonus density as an incentive because there would be no incurred fiscal cost. However, existing zoning throughout Baltimore provides sufficient density for what the market demands. As a result, developers do not seek bonus density since it does not represent additional value to a development project.

As the market strengthens such that there is market demand for housing at higher densities than currently allowed by zoning, there will be value in providing bonus density. The City can then leverage that value to require affordable units in exchange for granting bonus density.

Financial Model Framework

Current Policy

Traditional Inclusionary Zoning Policy

IZ Policy Impact

Recommendations

SUMMARY OF FINDINGS AND INITIAL RECOMMENDATIONS

- **Current Policy:** The current IZ policy sets ambitious affordability goals but is limited by funding constraints.

  Implication: Realizing the full potential of the current policy would **require identifying additional sources of funding** for the City to support the increased cost of the policy.

- **Traditional Policy:** A traditional IZ policy, which puts the onus for meeting requirements on the developer, could support a 5-10% affordability set aside with the provision of tax abatements.

  Implication: Despite a lower affordability requirement than the current policy, a traditional policy would result in an **increase in the production of affordable housing units over the current policy**.

- **Market Conditions:** Market rate development feasibility is generally limited to Core Market locations and to rental apartments.

  Implication: Wide variation in market conditions throughout Baltimore suggests an IZ policy will be most successful when **targeted geographically to the strongest market locations**.

  Implication: Meeting policy goals to support affordable homeownership and investment in disinvested neighborhoods will require **structuring an in-lieu fee that can be allocated to meet those goals**.

BALTIMORE INCLUSIONARY ZONING STUDY

FINANCIAL FEASIBILITY ANALYSIS

AUGUST 2021

HR&A Analyze. Advise. Act.

Enterprise℠

APPENDIX

APPENDIX | PRECEDENT IZ POLICIES

Precedent IZ policies typically target AMI levels between 60% to 80% AMI, with affordability requirements ranging from 5% to 15% of units. New Haven's potential IZ policy is comparable to policies enacted by other local governments.

City	Affordability Level	Portion Of Development	Length Of Affordability
Boston, MA	70% AMI	13% of total number of units on-site (citywide; percentage varies by zone)	30 years, with the right to renew for 20 years
New Orleans, LA	60% AMI	10% of units (Tier 1); 5% of units (Tier 2); voluntary (Tier 3)	99 years
Newtown, MA	80-120% AMI	10% of total habitable space	40 years
Norwalk, CT	60% AMI	10% of total units	In perpetuity
Seattle, WA	60% AMI	5-7% of total units	75 years
Stamford, CT	50% AMI	10% of units	Life of building
Washington, D.C.	60% AMI	8-10% of residential square footage	Life of building

- In New Orleans, the policy only applies to a **portion of the City**. Boston has different inclusionary requirements in **different parts of the city.**
- The number of units produced by inclusionary policies is **typically a small percentage of development** in the area subject to the policy.
- **Few IZ policies are effectively able to serve extremely low-income households** (30% AMI) because of the deep subsidy level required.
- Properly structured inclusionary policies can be effective at creating units with affordable rents and mixed-income neighborhoods, but **will not necessarily address racial segregation, displacement of existing residents, or other housing goals.**

APPENDIX | MODEL INPUTS (PROGRAM ASSUMPTIONS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Total Units	285 Units	360 Units	250 Units	250 Units	200 Units	150 Units	100 Units
Building GSF	253,147 GSF	319,765 GSF	275,000 GSF	222,059 GSF	177,647 GSF	133,235 GSF	88,824 GSF
Building NSF *(85% Efficiency)*	215,175 NSF	271,800 NSF	233,750 NSF	188,750 NSF	151,000 NSF	113,250 NSF	75,500 NSF
Land SF	59,564 SF	51,994 SF	78,571 SF	74,020 SF	71,059 SF	106,588 SF	88,824 SF
Modeled FAR	4.3 FAR	6.2 FAR	3.5 FAR	3.0 FAR	2.5 FAR	1.3 FAR	1.0 FAR
Parking Spaces	285 spaces	288 spaces	250 spaces	313 spaces	250 spaces	188 spaces	125 spaces
Unit Mix							
% Studios *(500 SF)*	20%	20%	5%	20%	20%	20%	20%
% 1BR *(750 SF)*	50%	50%	40%	50%	50%	50%	50%
% 2BR *(1,000 SF)*	25%	25%	45%	25%	25%	25%	25%
% 3BR *(1,200 SF)*	5%	5%	10%	5%	5%	5%	5%
Weighted Average Unit Size (NSF)	755 NSF	755 NSF	935 NSF	755 NSF	755 NSF	755 NSF	755 NSF

APPENDIX | MODEL INPUTS (DEVELOPMENT ASSUMPTIONS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Development Costs							
Land Costs *(per Land SF)*	$80/SF	$80/SF	$80/SF	$50/SF	$50/SF	$20/SF	$20/SF
Total Land Cost	$4,765,121	$4,159,541		$3,700,980	$3,552,941	$2,131,765	$1,776,471
Vertical Hard Cost per GSF *(excl. parking)*	$206 /NSF	$265 /NSF	$206 /NSF	$206 /NSF	$155 /NSF	$206 /NSF	$155 /NSF
Soft Costs per NSF	$41 /NSF	$53 /NSF	$41 /NSF	$41 /NSF	$39 /NSF	$41 /NSF	$39 /NSF
Parking Cost	$25,000 /space	$25,000 /space	$25,000 /space	$25,000 /space	$25,000 /space	$25,000 /space	$25,000 /space

APPENDIX | MODEL INPUTS (DEVELOPMENT ASSUMPTIONS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Operating Revenues + Expenses *(escalated annually at 2.5%)*							
Market Rent/Sale Price PSF	$2.35/SF	$2.75/SF	$425.00/SF	$2.15/SF	$2.05/SF	$2.05/SF	$1.95/SF
Parking Rent PSF	$150 /Mo	$150 /Mo	$0 /Mo	$75 /Mo	$75 /Mo	$25 /Mo	$25 /Mo
Vacancy	5%	5%	5%	5%	5%	5%	5%
OpEx per Unit *(excl. RE taxes)*	$5,500 /unit	$5,500 /unit	$0 /unit	$5,500 /unit	$5,500 /unit	$5,500 /unit	$5,500 /unit
Full RE Taxes	$4,355 /unit	$5,577 /unit	$0 /unit	$3,566 /unit	$3,242 /unit	$3,094 /unit	$2,772 /unit

APPENDIX | MODEL INPUTS (FINANCING ASSUMPTIONS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Construction Loan							
Loan to Cost	65%	65%	65%	65%	65%	65%	65%
Total Fees	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Rate	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Permanent Financing							
Debt Service Coverage Ratio (DSCR)	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Loan-to-Value	65%	65%	65%	65%	65%	65%	65%
Lender's Points	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Mortgage Recording Tax	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%
Loan Closing Costs	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Perm Loan Interest Rate	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Term	30 years	30 years	30 years	30 years	30 years	30 years	30 years

APPENDIX | MODEL INPUTS (TIMING ASSUMPTIONS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Construction Period	18 Mo.	24 Mo.	18 Mo.	18 Mo.	18 Mo.	18 Mo.	18 Mo.
Lease-Up Period	12 Mo.	12 Mo.	12 Mo.	12 Mo.	12 Mo.	12 Mo.	12 Mo.
Exit	Year 10	Year 10	Year 10	Year 10	Year 10	Year 10	Year 10
Construction Period	18 Mo.	24 Mo.	18 Mo.	18 Mo.	18 Mo.	18 Mo.	18 Mo.

APPENDIX | MODEL INPUTS (RETURN METRICS)

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Cap Rate	4.75%	4.75%		5.25%	5.25%	5.75%	5.75%
Yield on Cost Premium	1.25%	1.25%		1.25%	1.25%	1.25%	1.25%
Target Yield on Cost/Equity Multiple	6.00%	6.00%	2.00x	6.50%	6.50%	7.00%	7.00%

Note: Yield on cost is calculated as the average annual NOI after stabilization (deflated to Year 1 dollars) over the 10-year cashflow divided by the net cost. The target yield on cost is calculated as 125 basis points above the cap rate.

APPENDIX | OVERVIEW OF FEASIBILITY IMPACTS

	Core			Strong		Transitional	
Building Typology	Mid-rise New Construction	High-rise New Construction	Mid-rise For-sale	Mid-rise New Construction	Mid-rise Rehab	Mid-rise New Construction	Mid-rise Rehab
Feasibility Threshold	**6.00%**	**6.00%**	**2.00x**	**6.50%**	**6.50%**	**7.00%**	**7.00%**
SCENARIOS							
Baseline	**6.10%**	**6.09%**	**1.34x**	**5.14%**	**5.71%**	**4.58%**	**5.02%**
Current Policy*	**6.10%**	**6.09%**	**1.34x**	**5.14%**	**5.71%**	**4.58%**	**5.02%**
Scenario 1: 5% at 60% AMI	**6.22%**	**6.19%**	**1.30x**	**5.25%**	**5.83%**	**4.67%**	**5.13%**
Scenario 2: 5% at 80% AMI	**6.30%**	**6.26%**	**1.31x**	**5.32%**	**5.92%**	**4.75%**	**5.22%**
Scenario 3: 10% at 80% AMI	**6.23%**	**6.14%**	**1.28x**	**5.29%**	**5.90%**	**4.73%**	**5.22%**
Scenario 4: 5% at 60% AMI 5% at 80% AMI (10% Total)	**6.15%**	**6.07%**	**1.26x**	**5.21%**	**5.81%**	**4.65%**	**5.13%**
Scenario 5: 6% at 30% AMI 5% at 60% AMI 5% at 80% AMI 4% at 100% AMI (20% Total)	**5.80%**	**5.67%**	**1.17x**	**4.90%**	**5.47%**	**4.37%**	**4.81%**

*The current policy imposes no undue burden on the developer, so the same rate of return is assumed.

APPENDIX | 2020 BALTIMORE AREA MEDIAN INCOME

	1-Person	2-Person	3-Person	4-Person	5-Person	6-Person	7-Person	8-Person
30% AMI	$21,840	$24,960	$28,080	$31,200	$33,720	$36,210	$38,700	$41,190
50% AMI	$36,400	$41,600	$46,800	$52,000	$56,200	$60,350	$64,500	$68,650
60% AMI	$43,680	$49,920	$56,160	$62,400	$67,440	$72,420	$77,400	$82,380
80% AMI	$54,950	$62,800	$70,650	$78,500	$84,800	$91,100	$97,350	$103,650
100% AMI	$68,688	$78,500	$88,313	$98,125	$106,000	$113,875	$121,688	$129,563

Source: Novogradac; Maryland DHCD, https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2020_MD_Income_Limits.pdf

APPENDIX | 2020 BALTIMORE TOTAL RENT LIMITS, INCL. UTILITIES

	Studio	1BR	2BR	3BR
30% AMI	$546	$585	$702	$812
50% AMI	$910	$975	$1,170	$1,353
60% AMI	$1,092	$1,170	$1,404	$1,623
80% AMI	$1,374	$1,472	$1,766	$2,041
100% AMI	$1,717	$1,840	$2,208	$2,552

Source: Novogradac; Maryland DHCD, https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2020_MD_Income_Limits.pdf

*Note: Calculated as **1.5 persons per bedroom** and assumes that maximum rents **are 30% of monthly gross income.***

APPENDIX | 2020 BALTIMORE UTILITY ALLOWANCE ASSUMPTIONS

	Studio	1BR	2BR	3BR
Utility Allowance	$100	$120	$150	$180

Source: Apartment List

APPENDIX | 2020 BALTIMORE NET RENT LIMITS, ADJUSTED FOR UTILITIES

	Studio	1BR	2BR	3BR
30% AMI	$446	$465	$552	$632
50% AMI	$810	$855	$1,020	$1,173
60% AMI	$992	$1,050	$1,254	$1,443
80% AMI	$1,274	$1,352	$1,616	$1,861
100% AMI	$1,617	$1,720	$2,058	$2,372

Source: Novogradac; Maryland DHCD, https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2020_MD_Income_Limits.pdf

*Note: Calculated as **1.5 persons per bedroom** and assumes that maximum rents **are 30% of monthly gross income.** Assumes the following utility costs- Studio: $100, 1BR: $120, 2BR: $150, 3BR: $180.*

APPENDIX | 2020 BALTIMORE CARRYING COST LIMITS (FOR-SALE)

	Studio	1BR	2BR	3BR
30% AMI	$601	$644	$772	$893
50% AMI	$1,001	$1,073	$1,287	$1,488
60% AMI	$1,201	$1,287	$1,544	$1,785
80% AMI	$1,511	$1,619	$1,943	$2,245
100% AMI	$1,889	$2,024	$2,429	$2,807

Source: Novogradac; Maryland DHCD, https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2020_MD_Income_Limits.pdf

*Note: Calculated as **1.5 persons per bedroom.** This refers to the maximum monthly carrying costs, which includes a mortgage with principal and interest payments, property taxes, and homeowners' insurance, and may also include homeowners' association fees or maintenance and carrying costs but excludes utilities. Calculated as **33% of the annualized monthly gross income** of the household.*

APPENDIX | 2020 BALTIMORE SALE PRICES

	Studio	1BR	2BR	3BR
30% AMI	($0)	($0)	$24,420	$48,490
50% AMI	$70,143	$84,431	$127,296	$167,413
60% AMI	$110,150	$127,296	$178,734	$226,875
80% AMI	$172,085	$193,654	$258,364	$318,815
100% AMI	$247,582	$274,543	$355,431	$430,992

Source: Novogradac; Maryland DHCD, https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2020_MD_Income_Limits.pdf
*Note: Assumes a **$50 monthly insurance fee, $300 monthly maintenance, and $300 monthly taxes for an average unit**. The maximum sale price was sized assuming a 5% down payment on a 30-year mortgage with an interest rate of 4.75%.*

BALTIMORE INCLUSIUONARY ZONING STUDY

FINANCIAL FEASIBILITY ANALYSIS

JULY 2021

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