

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING



Office of the Director

TO: District of Columbia Zoning Commission
FROM: *MSG*
Ellen McCarthy, Director
DATE: July 15, 2005
SUBJECT: Zoning Commission Case #04-33, Inclusionary Zoning

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D.C. OFFICE OF PLANNING

On May 9, 2005 the Zoning Commission voted to seek comment on two concepts for mandatory Inclusionary Zoning (IZ) one from the Campaign for Mandatory Inclusionary Zoning (CMIZ) and one from the Office of Planning (OP) Under both proposals, market rate housing developments of 10 or more units, in unspecified areas of the District, would be required to construct a certain amount of affordable housing, and in return, the development would be entitled to a density bonus Both proposals target the affordable units to households earning between 50% and 80% of the Area Median Income (AMI) Both proposals offer a 20% density bonus to accommodate the inclusion of the affordable units and additional market rate units

The principal difference between the proposals is the amount of flexibility and the requirements in higher density zones. Under CMIZ's approach, the maximum number of required affordable units in a development must always be built on-site, unless a developer is able to demonstrate economic hardship to the BZA In OP's proposal, the goal is to provide both predictability and greater flexibility This is accomplished by permitting a broader range of alternative methods for delivering the affordable units, and establishing a graduated set of relief procedures

I. OP SUMMARY RECOMMENDATIONS

After extensive zoning and economic analysis, and discussions with housing providers and advocates, the Office of Planning recommends the Zoning Commission include the following major components in a mandatory Inclusionary Zoning program. They are listed on the following page and described in more detail later sections of the report

~~Zoning Commission~~
~~District of Columbia~~

~~CASE NO.~~ 04-33
~~EXHIBIT NO.~~ 28

01 North Capitol Street, N E , Suite 4000, Washington, D C 20002 202-442-7600, fax 202-442-7637

ZONING COMMISSION
District of Columbia
CASE NO.04-33
EXHIBIT NO.28

1 Targeted Incomes for the Affordable Units

- 50% of AMI for ½ of the required affordable square footage in residential zones, and in commercial zones with building heights restricted to less than 60 feet;
- 80% of AMI for ½ of the required affordable square footage in residential zones and in commercial zones with building heights restricted to less than 60 feet;
- 80% of AMI for all of required affordable square footage in commercial zones permitting heights of 60 feet or greater.

2 Percent of Bonus Density to Be Devoted to Affordable Housing ("Set-Asides")

- Lower Density Residential and Commercial Zones: The greater of 10% of the matter of right FAR or 75 % of the bonus density achieved.
- Higher Density Residential and Commercial Zones The greater of 8% the matter of right FAR or 50% of the bonus density achieved. units/SF in Residential and Commercial Zones Permitting Heights of 60 Feet or Greater.

3. Amount of Bonus Density Provided:

- Up to 20% of matter of right. This will require text amendments to permit minor adjustments in certain zones to the lot size, occupancy and height limit requirements governing IZ projects

4. Flexibility of IZ Requirement

All required affordable units are expected to be built on-site, and bonus density is provided to accommodate these units and additional market rate units. However, OP's proposal includes the following flexibility

- Subject to administrative review, up to 5% of the square footage of the affordability requirement may be reduced if the developer demonstrates an inability to access the permitted bonus density.
- Subject to administrative review, less than half of the required affordable square footage may be built off-site, but within the same census tract. A premium is attached to the square footage built off-site in order to encourage meeting requirements on-site. The required amount of affordable square footage must be increased by 50% if the affordable units are moved off-site.
- Subject BZA consent, up to 20% of the square footage of the affordable requirement may be reduced if the developer demonstrates an inability to

access bonus density, provided the minimum amount of affordable square footage is not less than 8% of the matter of right FAR for higher density zones and/or steel or concrete frame construction, and not less than 10% of the matter of right FAR for lower-density zones.

- Subject to demonstration of economic hardship and BZA approval:
 - More than 50% of the affordability requirement may be constructed off-site, and/or the affordability requirement may be reduced below the minimums defined above
 - The affordability requirement may be satisfied by a buyout payment equal to the difference between the affordable price and the market rate price.

The recommendations are summarized by three tables in the report:

- Table 1 (Section III.D.) expresses the recommended relationships among targeted incomes, zone districts and affordability set aside requirements;
- Table 2 (Section III.D) shows the adjustments needed to some zoning district to accommodate the density bonus,
- Table 5 (Section V. B) outlines the recommended types of relief and alternative methods of compliance.

II. BACKGROUND

A. Report Outline

The remainder of this report:

- Reviews issues the Commission asked to be addressed at this stage of the hearing process and notes which it asked to be deferred. (Sections II. B & II.C),
- Addresses how OP's recommendations comprise the necessary components of a successful IZ program (Section III).
- Examines limited aspects of program administration, including an update on empowering legislation and an outline of the OP's proposed review and relief process (Section IV).
- Summarizes OP's economic feasibility analysis of the mandatory IZ proposals (Section VI).

An appendix giving more detail on the economic feasibility analysis is attached. OP has been working closely with residential developers, affordable housing providers and advocates to:

- Secure broad and deep information on the development economics of IZ through a series of confidential interviews with development professionals;
- Develop an economic model that is seen as valid and sensitive by both developers and affordable housing advocates.

B. Current Issues

The Commission has emphasized that it wishes to address only the principles underlying the inclusionary zoning proposals. The issues to be addressed include:

- What percentage of the total units should be set aside as affordable units, in order to have an effective and achievable program?
- Does the program negatively affect housing in mixed use zones such as C-3-C?
- What should be the targeted household incomes?
- How much bonus density is appropriate.
 - To avoid any negative effect on the current robust housing market?
 - To maintain the intent of existing land use and zoning district categories?
- What types of relief provisions are needed?
- How can a unit be controlled as either for-sale or rental?
- Should there be a distinction between rental and for-sale, given the Commission's assumption that land value is not dictated by whether the product is rental or for-sale?

- How can the proposed regulations account for a developer's higher opportunity cost of providing a unit in a higher value neighborhood than in a lower value neighborhood?

This report attempts to address all of these items.

C. Issues The Commission Has Deferred

The Commission has decided to defer consideration of some issues until after it has received public comment on the matters noted in Section B, above. The deferred matters include:

- What Are the Appropriate Locations for Inclusionary Zoning in the District?
Including:
 - Infrastructure Capacity
 - Potential Impact of Increased Density on Infrastructure and Services
 - Possible Impact of Inclusionary Zoning or Increased Density on Neighborhood Character
 - Whether an Inclusionary Zoning Overlay Should Be Mapped.
- Program Be Administered and Enforced

III. THE GOALS OF OP'S RECOMMENDED INCLUSIONARY ZONING APPROPRIAL

A mandatory inclusionary zoning program requires developers to set aside a certain percentage of new units, in projects above a minimum size, to be provided to individuals or families whose income is below a certain level. There are four main elements in designing an Inclusionary Zoning (IZ) program:

- The percent of units required to be provided to families below a certain income level;
- The income of the households targeted,
- The amount of compensation provided to the developer (typically as bonus density), and ;
- The efficient administration and monitoring of the units

To evaluate the components, five issues must be answered:

A. Demonstration of Need

In Chapter IV of its April 29, 2005 setdown report to the Zoning Commission, OP demonstrated the growing need to create more affordable housing in the District.

B. Advancement of a Public Goal

As OP described in Chapter III of its setdown report, IZ is a useful tool for achieving more diverse communities through dispersing affordable housing, generating affordable units in places with strong market demand, and retaining workforce households

The two benchmarks chosen --1) the use of municipal tax-exempt bonds, and 2) the percentage of affordability required by other IZ programs -- suggest that an appropriate IZ objective is for at least 10% to 15% of units in affected developments to be set aside as affordable housing. These levels have been upheld in several jurisdictions when challenged in court. This suggests that these levels are effective in advancing public goals and do not overly burden developers. The range is the same affordability set-aside range as in both mandatory IZ proposals being considered by the

C. Impact on Development?

The Office of Planning tested the impact of IZ on development without any bonus, using the economic model developed in cooperation with the development community¹. The model indicates a developer's return on cost would drop from 21.2% to 13.9%. The model suggests that land prices would have to drop by roughly 20% before developers could achieve their original return. This suggests that, without a balancing mechanism, the combined impact would delay current development activity and damage residential development's ability to compete for land in commercially zoned areas. OP has also used this model to test the impact of IZ with bonus density and, as noted below found that the bonuses seem to effectively balance the proposed requirements negative impacts on return.

This findings are summarized in Section VI and discussed in much greater detail in the Attachment, the Economic Feasibility Analysis

D. Effective and Available Bonus Density

Effectiveness

¹ For the base economic model used by the Office Planning and a summary of inputs to the data see Attachment X Page Y

The projected impact on development examined in Section VI strongly suggests that compensation is needed to balance the affordability requirement and keep residential development active in the District of Columbia. However, OP's model indicates that IZ's impact and, therefore, the needed compensation must respond to two major factors.

- A building's construction-type: The impact of requiring affordable units is considerably less for low-rise construction (less than 60') than for mid-rise or high-rise construction (60' or greater). "Stick-built" structures with wooden or aluminum frames are less costly to build on a per-square-foot basis than are steel and concrete-frame buildings.
- Competing land uses in mixed-use zones.

Accordingly, OP recommends adjusting the targeted incomes and the percent of affordable requirements in relation to bonus density, to reflect the findings of our model. The levels listed in our Summary Recommendations and in the following Table 1 respond to these two factors.

Table 1. Summary of IZ Requirements by Zone Districts

Base Zone	Base Zone Height	Bonus Density Offered	OP Minimum IZ SF as % Bonus Density	Targeted Incomes	OP Minimum IZ SF *
R-1-A	40	NA	NA	NA	NA
R-1-B	40	NA	NA	NA	NA
R-2	40	NA	NA	NA	NA
R-3	40	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
R-4	40	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
R-5-A	40	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
R-5-B	50	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
R-5-C	60	20%	50% of Bonus	50%@50%AMI : 50%@80%AMI	8%
R-5-D	90	20%	50% of Bonus	50%@50%AMI : 50%@80%AMI	8%
R-5-E	90	20%	50% of Bonus	50%@50%AMI : 50%@80%AMI	8%
CR	90	20%	50% of Bonus	80% of AMI	8%
C-1	40	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
C-2-A	50	20%	75% of Bonus	50%@50%AMI : 50%@80%AMI	10%
C-2-B	65	20%	50% of Bonus	80% of AMI	8%
C-2-C	90	20%	50% of Bonus	80% of AMI	8%
C-3-A	65	20%	50% of Bonus	80% of AMI	8%
C-3-B	70	20%	50% of Bonus	80% of AMI	8%
C-3-C	90	20%	50% of Bonus	80% of AMI	8%
W-1	40	20%	50% of Bonus	80% of AMI	8%
W-2	60	20%	50% of Bonus	80% of AMI	8%
W-3	90	20%	50% of Bonus	80% of AMI	8%
SP-1	65	NA	NA	NA	NA
SP-2	90	NA	NA	NA	NA

* OP Minimum IZ affordable square footage as a percent of Matter of Right Floor Area Ratio

Availability

As noted in OP's setdown report, a 20% density increase does not seem to be inconsistent with the Comprehensive Plan, especially in areas of the District that have certain land use designations and/or are near transit. In addition, a 20% bonus density increase does not seem to be inconsistent with the Zoning Regulations.

To accommodate the bonus, there would need to be minor adjustments made to lot occupancy or height requirements in some zoning districts, just as there are for PUDs. As noted in Section V, the differences between the proposed IZ adjustments and matter-of-right are less than those between existing PUD adjustments and matter-of-right allowances.

Table 2 on the following page summarizes the adjustments to lot occupancy and height to accommodate the 20% bonus density in zones governed by FAR.

To achieve capacity:

- Adjustments to lot occupancy and height may be needed to C-2-A, C-2-B, C-2-C, C-R and the W-1, W-2, and W-3 zones.
- In the R-3 and R-4 zones, minimum lots sizes would be reduced for subdivision applications OP's preliminary report suggested that R-1 and R-2 zones may be inappropriate for inclusion in the IZ program.
- SP-1 and SP-2 Districts would similarly be excluded from IZ requirements due to limited quantity and special circumstances.

This is discussed in more detail in Section IV.

Table 2. IZ Adjustments to Certain Zoning Districts

Zone	Base Constraints			Base Envelope			MAX Possible Density(1)				IZ Adjustments & Bonus			
	FAR	Lot Occupancy	Height	Foot Print	GSF	Min # of Floor	Max # of Floors	MAX Potential GSF	MAX Potential FAR	% FAR Change	IZ Lot Occupancy	IZ Height	FAR	% FAR Change
CR	6	75%	90	32,670	261,360	8	8	261,360	6	0%	80%	100	7.2	20%
C-2-A	2.5	60%	50	26,136	108,900	5	4	104,544	2.4	-4%	80%	60	3.2	28%
C-2-B	3.5	80%	65	34,848	152,460	5	5	174,240	4	14%	80%	70	4.8	37%
C-2-C	6	80%	90	34,848	261,360	8	8	278,784	6.4	7%	90%	90	7.2	20%
W-1	2.5	80%	40	34,848	108,900	4	3	104,544	2.4	-4%	80%	50	3.2	28%
W-2	4	75%	60	32,670	174,240	6	5	163,350	3.75	-6%	75%	80	5.25	31%
W-3	6	75%	90	32,670	261,360	8	8	261,360	6	0%	75%	110	7.5	25%

E. Efficient & Flexible Relief Provisions

OP has outlined a three-tiered application process including:

- Matter of right IZ development,
- IZ development requiring administrative relief ;
- IZ development requiring a public hearing for relief.

The Office of Planning would provide review and recommendations to the Zoning Administrator for all applications involving IZ, similar to the process for antennas, Downtown Development District certification and roof structures. Full, on-site delivery of the required square footage of affordable housing would be expected of any development covered by the Inclusionary Zoning requirements. However, there would be a series of relief provisions.. These provisions are listed in Table 5, (see section V) and discussed in detail in that Section IV

IV. ZONING ANALYSIS

A. Zone District Envelope Constraints and Bonus Density

Both IZ proposals rely on the ability to achieve a 20% density bonus on a given site. As OP stated in its setdown report, language in the Comprehensive Plan supports offering density increases for affordable housing in several types of locations throughout the District. Density bonuses are offered in the Zoning Regulations to encourage the arts, retail, affordable housing, housing in general and economic revitalization in many parts of the District.

OP investigated how the bonus density could be accommodated across zoning categories. As stated earlier, to accommodate the bonus, there would need to be minor adjustments permitted to lot occupancy or height requirements in some zoning districts, just as there are for PUDs. These adjustments are noted in Tables 2 and 4. The differences between the proposed IZ adjustments and matter-of-right is less than the difference between existing PUD adjustments and matter-of-right.

The District's zoning restrictions on area are divided into lot size controls and FAR controls. Residential zones R-1 through R-4 have lot size requirements for single-family detached and attached row houses. Residential zones R-5-A through R-5-E, and all mixed-use and commercial zones use FAR restrictions in tandem with lot occupancy and height regulations, and sometimes restrictions on the number of floors.

Neither the CMIZ nor OP proposal recommends that R-1 or R-2 zones be included within IZ requirements. Adjustments to R-1 and R-2 are provided only as examples.

1. Lot-Size Based Zones: R-3 , R-4 and R-5-A Constraints

Table 3 below shows how bonus density would be accommodated in the lower density residential zones. This is accomplished by allowing smaller lot sizes in each of the zones

Table 3. Low Density Constraints and IZ Adjustments

Base Zone	Zoning Constraints						Inclusionary Zoning		
	Building Type	Zoning FAR*	Min Lot Size	Min Lot Width	Lot Occupancy	Height	Min Site Size for IZ Trigger	Min Lot Size with IZ	Min Lot Width
R-1-A	SFD	NP	7,500	75	40%	40	75,000	6,250	63
R-1-B	SFD	NP	5,000	50	40%	40	50,000	4,167	42
R-2	SFD	NP	3,000	30	40%	40	30,000	2,500	25
R-3	SFD	NP	2,000	20	60%	40	20,000	1,667	16
R-4	SFD/Apt Conversion	NP	1,800	18	60%	40	18,000	1,500	15
R-5-A	Garden Apartment	0.9	NP		40%	40		0	15

* None Prescribed

In the R-3 and R-4 zones it would be necessary to reduce lot width to 15 feet, i.e. below the 18 foot minimum of the R-4 zone

There are many examples of 15 foot, 14 foot and even 12 foot wide row-houses throughout the District, including Georgetown and Capitol Hill. The Paper Mill complex in Georgetown is but one example of a successful townhouse-type development built in the last 30 years with unit widths narrower than 18 feet. In addition, such widths have been approved by the Zoning Commission in PUDs and other large neighborhood development such as the Arthur Capper/Carrolsburg HOPE VI project

Finally, development standards considered by both proposals require the IZ units to be indistinguishable from the outside, helping to minimize any aesthetic impact on the neighborhood. All of this suggests houses on lots narrower than 18 feet are viable market products and can serve as starter homes in the IZ program.

OP notes that although the setdown report had suggested that proposed additional density would be accommodated in the R-4 zone primarily through garden-style apartment construction, on further examination, OP concluded that adjusting lot width within the row house format is more appropriate than a change in building type, and much more consistent with the character of R-4 neighborhoods

2. FAR-Based Zones: R-5-A through R-5-E; C-1 through C-3-C; W-1 through W3, and; CR

Table 4, on the following page, illustrates how bonus density can be accommodated in the zones limited by FAR, lot occupancy, and height. The extent to which density can be accommodated is determined by the lot occupancy permitted and the number of floors

that can fit within the existing height limits. The table assumes a floor height of 11 feet and shows the number of floors that can fit within a given height limit

As an example, the R-5-C zone has an FAR of 3.0, lot occupancy of 75%, and a height restriction of 60 feet. An FAR of 3.0 for a one acre lot would permit up to 130,680 square feet of development. The maximum footprint of the building on a one acre lot would be 32,670 square feet. Five floors could be fit within the 60' height limit, enabling 163,350 square feet of development (five floors times the footprint) on the site. This would be a 25% increase in FAR.

In some zoning districts, as noted earlier, a 20% bonus cannot fit into the existing lot occupancy and height constraints of the zone. These zones are bolded in Table 4. To fit the 20% bonus OP has suggested the smallest practical increments of increase in either height or lot occupancy.

In the CR, and C-2-A through C-2-C zones, increasing lot occupancy is done where possible, instead of adding height. Conversely, in the W-1 through W-3 zones -- where waterfront access is favored -- height is added instead of increasing lot occupancy, so as to preserve pedestrian-ways to the waterfront. (A map of these five zones is included in the Attachment, page 31). Changes are made in ways that are intended to minimize the impact on neighborhood character from the increase in density. OP notes that most of these zones are mapped in relatively limited areas of the District. However, the scale of the C-2-A zones, which serve as community business centers, is particularly important. OP will give this zone further consideration in our report to the Zoning Commission covering mapping and neighborhood impact.

3. Miscellaneous Zones

Given the extent to which zoning envelopes would require adjustment in the SP-1 and SP-2 zones, and given their limited quantity and special circumstances, OP has excluded these zones from the IZ requirements

Table 4. IZ in FAR-Based Zones: Incentives and Flexibility in Higher Density Residential, and Commercial Zones

Base Zone	Zoning Constraints			Base Envelope			MAX Possible Density(1)				IZ Adjustments & Bonus			
	Zoning FAR	Lot Occupancy	Zoning Height	SF Foot Print	GSF	# of Floors	Max # of Floors	Max GSF	FAR	%Change	Lot Occupancy	Height	FAR with Bonus IZ	%Change
R-5-A(2)	0.90	40%	40	17,424	39,204	3.0	3.0	52,272	1.20	33%	NA	NA	1.08	20%
R-5-B	1.80	60%	50	26,136	78,408	3.0	4.0	104,544	2.40	33%	NA	NA	2.16	20%
R-5-C	3.00	75%	60	32,670	130,680	4.0	5.0	163,350	3.75	25%	NA	NA	3.60	20%
R-5-D	3.50	75%	90	32,670	152,460	5.0	8.0	261,360	6.00	71%	NA	NA	4.20	20%
R-5-E	5.00	75%	90	32,670	217,800	7.0	8.0	261,360	6.00	20%	NA	NA	6.00	20%
CR	6.00	75%	90	32,670	261,360	8.0	8.0	261,360	6.00	0%	80%	100	7.20	20%
C-1	1.00	60%	40	26,136	43,560	2.0	3.0	78,408	1.80	80%	NA	NA	1.20	20%
C-2-A	2.50	60%	50	26,136	108,900	5.0	4.0	104,544	2.40	-4%	75%	50	3.00	20%
C-2-B	3.50	80%	65	34,848	152,460	5.0	5.0	174,240	4.00	14%	80%	70	4.80	37%
C-2-C	6.00	80%	90	34,848	261,360	8.0	8.0	278,784	6.40	7%	90%	90	7.20	20%
C-3-A	4.00	100%	65	43,560	174,240	4.0	5.0	217,800	5.00	25%	NA	NA	4.80	20%
C-3-B	5.00	100%	70	43,560	217,800	5.0	6.0	261,360	6.00	20%	NA	NA	6.00	20%
C-3-C	6.50	100%	90	43,560	283,140	7.0	8.0	348,480	8.00	23%	NA	NA	7.80	20%
W-1	2.50	80%	40	34,848	108,900	4.0	3.0	104,544	2.40	-4%	80%	50	3.20	28%
W-2	4.00	75%	60	32,670	174,240	6.0	5.0	163,350	3.75	-6%	75%	80	5.25	31%
W-3	6.00	75%	90	32,670	261,360	8.0	8.0	261,360	6.00	0%	75%	110	7.50	25%
SP-1	4.00	80%	65	34,848	174,240	5.0	5.0	174,240	4.00	0%	NA	NA	4.00	0%
SP-2	6.00	80%	90	34,848	261,360	8.0	8.0	278,784	6.40	7%	NA	NA	6.00	0%

Sample Property 43,560 1 Acre
 Floor to Floor Height 11

(1) Limited by Lot Occupancy & Height (Assumes 11' / Floor)

(2) Limited to 3 Stories

Bolded Zones require adjustments to Lot Occupancy and Height Regulations

B. Test of Bonus Appropriateness

The proposed 20% bonus has several advantages.

1. It is achievable in most zone districts within existing constraints

Based on the Zoning Analysis in Table 4, the 20% bonus is achievable in most of the District without changing height or lot occupancy. Changes to height and lot occupancy would be in limited areas. (See Map1 page 31 in Attachment).

2. It is lower than most PUD bonuses, which require public review.

In all zones, a 20% bonus is less than the increase permitted by a Planned Unit Development, even when the PUD does not involve a zoning change. In the last three years, the pattern of PUD approvals and affordable housing proffers has been this: much greater increases in density than the proposed 20% bonus under mandatory IZ have generated much smaller percentages of affordable units than would be required by either mandatory IZ proposal. The first PUD case (Chase Point) that included affordable housing generated 5% of the bonus density for affordable housing, and other significant public benefits. One of the more recent PUDs with affordable housing (the Dorchester Apartments expansion) has proposed 30% of the bonus density for affordable housing, but will include virtually no other amenities.

Typically, PUDs have dedicated approximately 15% - 20% of their bonus density to affordable units. When considering total density increases granted by the Commission – including any zoning changes – the bonus has been much greater than the 20% recommended by these proposals. A mandatory IZ program would accomplish 3 to 5 times as many affordable units. Therefore, from an efficiency standpoint, a 20% bonus under mandatory IZ provides a greater public benefit with less bonus density.

3. It has sufficient value as incentive

Finally, on a mandatory basis where every developer is under the same constraint, the economic modeling has indicated that the 20% bonus provides adequate compensation to developers.

Based on these three factors, OP concludes that the 20% bonus is an appropriate balance for the recommended Inclusionary Zoning requirements

V. ASPECTS OF PROGRAM ADMINISTRATION

A. Empowering Legislation

Several important legislative steps need to be taken in order to effectively run an Inclusionary Zoning program. OP is working concurrently with the City Council, the Mayor, and District Agencies to create empowering legislation for the administration and the ongoing management of the program.

Additional legislation will be needed to enable the following:

- The Council will need to complete action on legislation to enable tax assessments to be based on the restricted value of affordable units;
- Certification of incomes;
- Buyout contributions to the Housing Production Trust Fund;
- Monitoring of compliance;
- Enforcement Actions, including the enforcement of covenants and liens

B. Matter-of-Right Process

If the Commission amends the Zoning Regulations to provide for an Inclusionary Zoning program, it will have specified the criteria for determining the areas of the District to which the program will apply. OP will supply the Zoning Administrator with a list of Squares affected by the IZ regulations. These will also be available on the web, either as part of the Zoning Regulations, or as a supplemental document on the District's web site.

Because the regulations would specify OP's advisory role to the Zoning Administrator (ZA), it is likely that most developers affected by the regulations will contact OP for a pre-application consultation. OP's pre-application review would focus on compliance with required square footage, income targeting, distribution of units and unit-types, and ability to access the full bonus density permitted. If the applicant indicates that relief will be sought, OP will review, with the applicant, the provisions for relief that can be granted administratively, and relief that will require a public hearing

For any building permit application for residential construction involving ten or more units the ZA will need to determine if the project is covered by the IZ regulations. If it is, the ZA will refer the permit to OP for review, as is now done with applications in historic districts. OP would have a specified time limit by which to advise the ZA whether the application meets the matter-of-right IZ requirements

C. Relief and Alternative Compliance Process

Both the OP and the CMIZ proposals are intended to require the provision of on-site affordable units. Both provide for partial and full relief from the requirements, but they differ in intermediate degrees of relief and the methods of achieving it. OP's relief proposals are more flexible than CZIM's in the ways relief can be granted, and in the alternative means of delivery. The OP requirements are generally proportional to the bonus density achieved. However, there is a minimum requirement, below which additional relief must be sought through the normal BZA process.

1. Partial Relief, Administratively Granted

OP recognizes that there may be situations where projects may not be able to achieve all the requirements of the Zoning Regulations, including the IZ requirements or the ability to fully utilize the bonus density. Relief is available through §3103 (11DCMR) which allows for variances. OP recommends additional relief avenues be established to allow for up to up to 50% off-site location of required affordable units.

- The zoning administrator would be empowered to grant up to 5% relief on the required amount of affordable square footage or number of units that may be constructed off-site if special physical circumstances preclude the developer's meeting the full IZ requirements.
- With a change in building type from stick-built to steel / concrete frame construction, the affordability requirements would decrease from 75% of the bonus to 50% of the bonus. The triggering conditions would require certification by the ZA in consultation with OP.
- At the developer's discretion, up to 50% of the required affordable square footage may be located off-site within the same census tract, subject to certification by the ZA in consultation with OP. (See Map of census tracts in Attachment).
- With any off-site option, the following requirements would apply:
 - The developer must demonstrate site control of the off-site location;
 - The number of affordable units being moved off-site must increase by 50%;
 - The off-site units must be developed by the same legal entity as is developing the on-site market rate and affordable units;
 - The District would place a lien upon the on-site market rate units replacing the affordable units moved off-site, equal to the difference between the affordable price and the market rate price;

- The applicant must have begun significant construction of the off-site affordable units (i.e.. construction must be above-ground) before the District will issue building permits for the original on-site market-rate units,
- Offsite affordable units must receive Certificates of Occupancy before the last on-site market rate unit may receive its Certificate of Occupancy;
- Affordable units constructed off-site shall not be counted by the developer toward any affordable unit requirement directly applicable to the off-site location;
- Offsite development is ineligible for additional District-administered subsidies

Alternatively, the developer may donate to the District government, land that is sufficient in size and existing zoning to fulfill the off-site requirement plus any premium for off-site development. In this case, the developer is relieved of the timing requirements noted above.

- In cases where achievable bonus density has been reduced by HPRB action, up to 20% of the square footage of the affordability requirements may be proportionately reduced.

Table 5. IZ Relief Provisions

Administrative Review: Zoning Administrator w/OP Review and Recommendation			
Degree of Compliance	Type of Difficulty	Criteria	IZ Compliance Options
Full 20% Bonus Achieved		Developer's Discretion	Less than 50% of the OPIZ minimum may be located offsite within the same census tract. SF off-site increased 50%
IZ Minimum to Full IZ Requirement	Less than 20% Bonus Achievable	HPRB Limits Achievable Bonus Density	IZ Minimum Requirement or 50% of Bonus Achieved, which ever is greater
Public Hearing: Board of Zoning Adjustment			
IZ Minimum to Full IZ Requirement	Less than 20% Bonus Achievable	Unique Size, Shape, or Slope Lot Limits Achievable Bonus Density	Full IZ Requirement On-Site
		Set at Use-Variance Standards	
Less than IZ Minimum On-Site		Economic Hardship Standards	To Be Determined by BZA
			Option 1 - Greater than 50% of On-Site IZ requirement located offsite
			Option 1 - Buyout of greater than 50% of On-Site IZ Requirement equal to difference in Affordable & Market Rate Price
Full Relief of IZ Requirement		Deprivation of all reasonable economic use	To Be Determined by BZA

2) Partial Relief, Requiring BZA Consent

When relief exceeding the limits above is requested, additional review will be needed. OP recommends that the following intermediate stages of relief request be handled administratively, subject to the consent of the BZA. This is similar to the process the BZA now uses when reviewing relief applications for foreign missions.

In each case, the required number of affordable units would be the greater of 1) the affordable square footage required, proportional to the bonus density that could be achieved on-site, or 2) A percentage of the on-site project's matter-of-right density, which is 8% for higher density zones and 10% for lower density zones.

The following types of situations would apply:

- Inability to access more than 15% Bonus Density: if a developer is able to achieve at least 16% bonus density, but not the full 20% bonus density.
- Proposals to build more than 50% of the affordable units off-site, but within the same census tract.

3) Partial Relief, BZA Review as Variance, and Demonstration of Economic Hardship

When permission is sought:

- to build more than 50% of the affordable units off-site,
- to build any of the affordable units off-site outside of the census tract
- to "buy out" of the IZ requirement by payments *in lieu* of the requirements,

This would require demonstration of a hardship, and the granting of permission by the BZA as a use variance.

Relevant situations would include the provision of special services (such as independent living housing) or exceptionally high condominium fees that would make the on-site units unaffordable.

If this option is granted, a developer would be required to provide a significant increase in the number of affordable units. The requirement would vary depending on whether the off-site units were located within adjacent census tracts, a Housing Opportunity Area, or elsewhere in the District. The required number of units would need to be "Significantly Greater", to be defined later.

If the buyout option is chosen, the payment in lieu of affordable units would be equal to the difference between the purchase prices of the affordable units and the purchase price of the market rate units.

VI. ECONOMIC FEASIBILITY ANALYSIS

A. Introduction

1) Purpose and Findings

There are two goals of conducting an economic feasibility analysis. The first is to ensure that the program can be effective at fulfilling the public goal of providing affordable housing. The second is to fully understand how implementing that public goal will impact residential development in general. Both IZ proposals seek to accommodate developers who are required to include affordable units by providing additional density that can be used for market rate development as well. A suitable economic model will help determine if the proposed IZ programs adequately balance the requirements.

The complete discussion of the methodology, model assumptions, data inputs, and pro-formas are found in the Attachment at the end of this report. What follows is a discussion of the base case scenarios and the impact of various Inclusionary Zoning requirements

OP notes that the results of model are very comparable to the study completed by the Furman Center for Real Estate and Urban Policy at New York University². That study is the most comprehensive economic analysis on Inclusionary Zoning the Office of Planning has seen

OP believes that the model has significant economic flexibility. In some cases, minor variations of less than 5% change in land or hard costs, revenues, or other factors can actually make the IZ projects more profitable than the original.

2) Condo vs Rental

At the setdown hearing the Zoning Commission asked the Office of Planning to explain why there should be potentially two different ratios – one for rental and one for condominiums. There are three reasons why the Zoning Commission may wish to adjust the program requirements based on the types of tenure

- First, because of current market dynamics, condominiums have a superior ability to compete for land with office uses. Revenues and investment returns for

² *Reducing the Cost of New Housing in Construction in New York City, Chapter 11 Inclusionary Zoning*, Furman Center for Real Estate and Urban Policy, New York University www.law.nyu.edu/realestatecenter/, 2005

condominiums are higher and can, therefore, pay considerably more for land. As an example, places where new condominiums are being sold for \$525 per marketable square foot, land prices may be around \$90 to \$100 dollars a gross square foot. This is comparable to office values in some areas. However, monthly list rents are topping-out at approximately \$2.80 to \$3.00 per marketable square foot in the same areas. These rents suggest that land for rental projects has a value of between \$40 and \$60 a square foot. For this reason any ratio should be geared to maintaining condominium development in commercial areas.

- Second, the economic impact on condominiums and rentals is different because of two factors. The first is the difference in unit type distribution between condo and rental. Rental projects in the District tend to have more one-bedrooms than two-bedrooms. Condominiums tend to have more two-bedrooms than one bedrooms. Pricing IZ units by expected occupancy means that studios priced for 1.0 person and one-bedrooms priced for 1.5 – 2.0 people have greater value per square foot than two-bedrooms priced for 3.0 people or three-bedrooms priced for 4.0 – 4.5. The difference between affordable and market is, therefore, smaller for studios and one-bedrooms. Secondly, expenses are distributed across all units with rental projects, whereas with condominiums expenses are assigned to the individual units and affect the individual value of the affordable units. The net result of these two economic factors in the model is that affordable rental rates are 63% of market rents, whereas affordable condominium prices are 45% of the market condominium prices
- Third, the Commission may wish to consider different ratios to encourage homeownership units because of public policy reasons including. 1) there are fewer affordable housing units available for purchase to lower income households, 2) owner-occupied units provide greater stability to families; 3) home-ownership can be a source of wealth creation for moderate and lower income households, and; 4) homeownership tends to have beneficial impacts on neighborhood character and stability.

These three reasons for adjusting program requirements based on the types of tenure are supported by changes made by other jurisdictions to their IZ programs.

B. Development Scenario Analysis

There were five basic scenarios tested to determine how construction type, project size and tenure might be affected by Inclusionary Zoning requirements. Within each scenario inputs were varied to measure the impact of different target incomes and the percentage of affordable units. Across all variations the assumption of a 20% density increase was kept constant. The scenarios were:

- 20 Unit Row House
- 25 Unit Low-Rise Condominium Building

- 25 Unit Low-Rise Rental Building
- 150 Unit High-Rise Condominium Building
- 200 Unit High-Rise Condominium Building

1) 20 Unit Row-House Scenario

A twenty unit row-house development has been added since the setdown report to test the impact of the IZ requirements on this development type.³ Table 11 on page 14 of the Attachment is the base case for the 20 unit row house development. There are two factors that make low density development such as row houses more suitable for Inclusionary Zoning. First, the hard costs are much lower for stick frame construction and no expensive underground parking is necessary. Second, land makes up a relatively large percentage of total development cost -- around 40% of Total Development Cost (TDC). The bonus density is therefore more valuable in low-rise development and can create a greater number of affordable units for lower incomes. Costs were tested at \$110 per square foot, around the mid-range of prices quoted by developers and architects. Both parking costs and revenues are zeroed-out because parking spaces are included with the unit and cannot be separated out. Finally revenues were tested at \$320 per square foot for 2-3 bedroom row houses varying in price between \$691,000 and \$864,000. Return on cost was 20.2% and the internal rate of return (IRR) was 37%.

Developers agreed that Inclusionary Zoning had a smaller impact on development at lower densities. For this reason only two scenarios were tested, the CMIZ proposal (15% of the original unit count with a 20 % bonus density) with half at 50% of AMI and half at 80% of AMI, and OP's previous setdown proposal of 75% of bonus density at the HUD Section 8 Low-Income Limits (approximately 65% of AMI). The two result in a very similar average impact on the development.

The results of the tests indicate that there is minimal impact on developers' return, and, therefore, on land values at either of these ratios and levels of affordability. The OP proposal kept return on cost the same at 20.2% with a slight decrease to the project's IRR at 35.5%. The CMIZ proposal actually created a slight increase to the project's return on cost, to 20.4% and an IRR of 35.6%. However, the model does not test the CMIZ split between 50% of AMI and 80% of AMI. It only tests the average of the two. The CMIZ proposal states that in the event of an odd number of affordable units, the majority is allocated to incomes at 50% of AMI. When this is added in it reduces value of the affordable units by \$40,000 and reduces the return on cost slightly, to 20.1%.⁴

This indicates that if this relationship between land cost, hard costs and revenue is stable across different locations in the District, then either IZ proposal would have negligible economic impact on row-house development

³ Twenty units is the smallest project where 75% of a 20% density bonus would result in three affordable units and one bonus market rate unit

⁴ For actual IZ Analysis see Attachment X page X

2) 25 Unit Low-Density Condominium

The next scenario tested was a low-rise garden style multi-family condominium. Table 13 on page 16 of the Attachment details the base case pro-forma. This type of project differs from a row house development because there are now common areas built into the building's efficiency factor, and surface parking costs are now included. Another difference is the market sales prices of \$400 per square foot. This approximates current sales values for the lower density areas of the city around metro stations such as Takoma or Brookland. Hard cost are a little higher, at \$115 per square foot. As in the row house scenario, parking is included in the price of the unit. The results of this base scenario provide a return on cost of 21.4% and an IRR of 38.5%.

This development type was tested with three different IZ Scenarios including:

- CMIZ's 15% of the original unit count with a 20% bonus and 50% of IZ units at 50% of AMI and 50% of units at 80% of AMI,
- OP's 75% of bonus density at 80% of AMI;
- OP's 75% of bonus density at HUD Section 8 Low Income (65% of AMI)

The model indicates that under these scenarios the IZ requirements and bonus density modestly improves developers' return on cost and IRR. Return on cost went to 22.2% and IRR dropped slightly to 38.0% under the CMIZ proposal. At 75% of the bonus density and 80% of AMI, return on cost increased to 23.5% and IRR increased to 39.5%. Finally, even under the last and most restrictive scenario of 75% of bonus at 65% of AMI, return on cost improved to 21.7%, while IRR saw a small drop to 37.3%.

Similar to the row house scenario, IZ requirements with a density bonus should cause no harm to the current development activity in the District.

2) 25 Unit Low-Density Rental

There is very little market revenue data available to create an accurate development pro-forma of a low-rise rental project. Table 17 on page 20 of the Attachment provides the base case scenario. Based on reviewing listings of existing buildings, a new construction rental property might be able to receive \$2.00 per square foot in rent for a site zoned for lower density near an outlying Metro station in the District. At this rent and land cost, driven by the condominium market, the rental project fails to provide a return that would attract investors.

The project's returns improve when the IZ requirements and bonus are applied, but the returns are still insufficient to create a viable project. Based on this data OP concludes that either the CMIZ proposal or the OP proposal would work for low-density rental projects in the District, when rental projects in general return to profitability.

3) 150 Unit High-Density Condominium

A 150 unit condominium project is a relatively large condominium project. For the sake of lot coverage and density bonus, it is assumed to be in an R-5-E zone. However, a large steel and concrete building could also be in a commercially zoned area. Table 8 on page 11 in the Attachment is the base case for a 150 unit condominium project. It represents a project in one of the more active developing neighborhoods of the District that is delivering a relatively high level of finishes. The land costs are \$90/gsf; cost of above-grade construction are \$180/gsf; and sales price is \$525/nsf. It represents a fairly optimal site with parking that is fairly efficiently laid out (375gsf/space). This type of product is being developed in many places across the District. Given the importance of the product type, four scenarios were run including:

- The CMIZ proposal of 12% of base units and a 20% bonus (ie 60% of bonus density) at 50% of IZ units at 50% of AMI and 50% of units at 80% of AMI;
- OP's setdown proposal of 50% of bonus density at 70% of AMI;
- OP Alternate 1: 50% of bonus density at 80% of AMI,
- OP Alternate 2: 60% of bonus density at 80% of AMI.

Given these inputs, the base project achieves an estimated return on cost of 21.2% and an IRR of 30.3%. Table 6 compares the return on cost and the IRR for all five scenarios.

Table 6. Comparison of Project Returns: High-Density Condominium

	Base Case	CMIZ	OP Proposal	OP Alternate 1	OP Alternate 2
IZ Units		18	16	16	19
Return on Cost	21.2%	20.1%	20.9%	21.5%	20.3%
IRR	30.3%	27.3%	28.0%	28.6%	27.5%
Land Impact		-3.4%	-0.9%	Not Calculated	-2.9%

According to the analysis, most of the IZ proposals have some relatively minor impact on land with the exception of OP Alternate 1. Impact on land for Alternate 1 was not calculated because it improved return on cost of the project. For this reason, it also suggests that OP Alternate 1 would be appropriate where housing competes for land in mixed-use districts.

4) 200 Unit High-Density Rental

A high density rental project was tested to determine the impact on rental housing. The model tested a location carrying similar land costs as the condominium scenario and rent that might be expected in the same location. The project fails to provide an un-leveraged return (5.9%) that would attract investors in the project. The results of the model are supported by current development patterns. OP is aware of very few large rental projects being currently planned in the District. In most instances, rental projects cannot compete with the land values and higher returns offered by condominium development.

An interesting result of the model is that when IZ requirements and bonuses are added, return is improved. In part, this is due to the reasons discussed in section VI A 2).

Table X below shows the changes to unleveraged and leveraged return across the four scenarios tested. The complete set of pro-formas is found in Attachment X, Page X.

Table 7. 200 Unit High Rise Rental IRR Comparisons.

	Base Case	CMIZ	50% @ 80%AMI	50%@ 65%AMI
Unleveraged IRR	5 9%	6 69%	6 82%	6.69%
Leveraged IRR	6 4%	8 96%	9 46%	8.95%

Once again, the above table suggests that IZ would not harm rental development in the District.

C. Model Sensitivity to Input Changes

1) Interest Rates

The model is potentially sensitive to changes in mortgage rates, which affect the purchase price the target households can afford. As interest rates climb, the target households' purchasing power will be reduced. To provide ample room for contingencies, several steps were taken. First, the analysis priced the units using an interest rate roughly 100 basis points⁵ higher than the current national average mortgage rate posted by FreddieMac⁶. Second, if interest rates fluctuate within a project's development period the District government can provide some flexibility with below market rate financing from the Housing Finance Agency, and down payment assistance from the Department of Housing and Community Development. However, if interest rates climb over a sustained period of time, such as during the early 1980's, they may exceed the District's ability to

⁵ One hundred (100) basis points are equal to one full percentage point, or the difference between 6% and 7%

⁶ Primary Mortgage Market Survey, FreddieMac. <http://www.freddiemac.com/>

balance with subsidized financing. It would then become a policy decision to review the program and adjust it or let the rise be capitalized in a reduced value of land.

2) Area Median Income

The AMI is the best benchmark for choosing target households by income. It is based on changes in income within the metro area and is posted annually by HUD, but it does not always increase. Between 2002 and 2003 the Washington Metro Region's AMI dropped by almost \$7,000 but has climbed steadily since then. If future economic shocks happen to the regional economy it may be grounds for adjusting the program, but OP notes the decline was short-lived. Similar to interest rates, a sustained economic downturn may be grounds for adjusting the program. At such points it becomes a policy decision to adjust the program or let land values reflect the change.

2) Land Costs

OP has previously noted that the analysis assumes that there is a linear relationship between the land and the difference in revenue between affordable units and market rate units. In other words, as the value of bonus density in the form of land value drops, the gap between affordable and market rate get smaller, too. Some developers expressed concerns that this is not necessarily the case, that the model might negatively affect development where land is less expensive. However, other development professionals who tested the analysis with real numbers felt that the model was remarkably consistent across different location in the District

3) Hard Costs

Some interviewed stated that hard costs are rising as much as 1% per month. The major factors have been the rising prices for steel and concrete, a shortage of labor, and the distribution/delivery costs affected by the rising price of oil. All these, while exerting additional pressures on developers, would affect them regardless of Inclusionary Zoning. If costs continue to escalate, while other factors are held constant, then no development will get built unless land starts to absorb the impact.

D. Analysis Conclusions

Many factors affecting the costs and revenues of a project have not been quantified in the model. Some of these include.

- 1 IZ units may be located – as long as they are not overly concentrated – in areas of a project that do not capture floor or view premiums. This reduces their negative impact on the average revenue per square foot used by the model
- 2 IZ units may have lower-grade interior finishes and appliances, which may reduce hard costs by more than \$10 - \$30 per square foot .

3. The minor increases proposed in height for certain zones may offer higher revenues for the top floor units.
4. There are administrative costs on the developer/owner for managing the additional IZ documentation – a.k.a., the “hassle factor”.

OP believes that while these factors may vary across projects, when added up they create significant economic flexibility in the IZ program. Minor variations of less than 5% change in land or hard costs, revenues, or other factors can actually make the IZ projects more profitable than the original. However, to refine the analysis further may overestimate/underestimate a given factor and unbalance the model.

VII. Conclusion

Based on the Office of Planning’s examination of the zoning districts and the economic feasibility analysis and extensive consultations with housing providers and advocates, OP recommends the adoption of Mandatory Inclusionary Zoning Regulations based on the concepts contained in this report

Attachments

EMC/ar/slc

OP Hearing Report on Inclusionary Zoning

Zoning Commission Case # 04-33

July 15, 20005

ATTACHMENTS

ECONOMIC FEASIBILITY ANALYSIS

I. Methodology

The basic methodology for analyzing the economic impacts of Inclusionary Zoning stems from two models crafted by different developers. The models are at a typical level of analysis used by the development community to describe the basics of a deal and test the value of a project and, therefore, the value of the land needed to build it. These simple models provide a solid starting point for evaluating IZ, but they do not measure certain facets of IZ that provide additional value to the developer.¹ A more complex model could include these factors, but might also make assumptions that would be too specific to too few projects. Given it does not count these additional factors the Office of Planning thinks the model is adequately conservative on measuring the impact of IZ on residential development.

The models were reviewed, critiqued, adapted, and inputs tested through a series of interviews with a variety of development professionals including developers, architects, construction estimators, marketing specialists and development consultants from supporters and critics of IZ. The complete list of those contributing to the creation of the model are found in page 7 of this attachment. The Office of Planning thanks all those who contributed their expertise to the development of the models and the inputs that went into them.

A. Model Assumptions

- The primary assumption of model is that developers demand a certain range of profit associated with the risk of doing residential development. If factors result in profits below a certain percent of costs then developers will build elsewhere. If profits start to exceed a certain amount then it is likely that land owners, suppliers or competition will act to reduce those profits. Based on the interviews conducted, developers are seeking profits between 18% and 23% for condominiums. To provide flexibility within an IZ program the model tried to maintain a target return for condominiums between 20%-21% profit on the total development cost (see section on outputs below). This would permit development to absorb short term fluctuations that might drive down return.
- There are two important secondary assumptions made by the model.
 - The first is that there is a linear relationship between the gap in revenue of the market and affordable units and the cost of land. Essentially this

¹ For Example. The models use average revenues across the entire building. If IZ units are located in less desirable locations (lower floors & interior courtyards) where revenues would be lower anyways, then the models overstates IZ's reduction of average revenues. In addition, the models do not capture floor premiums if bonus height is necessary to access a 20% density bonus. Floor premiums can be as much as 1% per floor in taller buildings.

means that in places where land prices are lower and therefore the value of bonus density is less, the gap that has to be balanced between affordable and market-rate is smaller too. The assumption results in a constant balance between the bonus and the IZ requirement across different locations in the District. Some developers disagreed with this assumption, but most interviewed who had tested the base model concluded that this assumption held.

- The second major assumption made by the model is that, notwithstanding changes in building type – i.e. stick construction to concrete steel frame –, there is no change in the per square foot hard costs created by adding additional density. Some developers argued that under certain circumstances there was an increase in development costs. Based on the interviews this may be largely due to having to dig to a fourth or fifth level of parking, caused by an unusually narrow or odd shaped lot.

From a policy standpoint, the problem is that developers choose to provide significantly more parking than is required by the District's zoning regulations. This is the developers' market decision. This is relevant because neither the CMIZ or OP proposal require subsidized affordable parking. The target households may purchase parking, but only at the full market price. The model includes the implications of the number of parking levels for the sake of cost information, but OP regards the decision to provide excess parking a business decision made by the developer.

Other less significant changes to construction costs include adding an additional elevator core, or losing marketable space to an additional loading dock required by the increase in units. In addition, adding another elevator core might not only add cost but also lower building efficiency, thereby decreasing marketable square feet.

- Tertiary model assumptions include.
 - Federal Department of Housing & Urban Development 2005 Washington Metropolitan Area Median Income;
 - Affordable Units purchase price based on mortgage rate of 6.75% (100 basis points above current national average at the time of writing);
 - Condo Fees are tied to a Par Value calculation of the affordable unit,
 - DC Property Taxes are restricted to the control price (DC Council recently passed a law enacting this);
 - IZ units on average may be slightly smaller,
 - Bonus density adds one to two months to development period depending on the size of the project.

B. Inputs

As important as developing an appropriate model is identifying the set of data for inputs that reflect current economics. If they do not reflect current conditions then the model will result in skewed answers. Table 1 below provides detail on the ranges determined from the interviews and the actual numbers used in the model. The numbers below are primarily for new construction

Table 1. Development Model Data Inputs

	Current Ranges		Used in Model		Comments
	Low	High			
Land Prices	\$ 40	\$ 150	\$ 90	Gross FAR Square Feet	\$40 is the lowest and still attract market rate interest
Hard Cost					
High Rise	\$ 140	\$ 200	\$ 180	per SF	Dependent on quality of materials, fixtures and appliances
Low Rise	\$ 90	\$ 130	\$ 110	per SF	
Under Ground Parking	\$ 75	\$ 90	\$ 75	per SF	\$75-\$80 for 1-3 levels \$85-\$90 for 4-5 levels Cost / space varies by # of SF 375sf - 410sf / space
	\$ 26,250	\$ 36,900	\$ 28,125	per space	
Soft Costs	18%	26%	23%	% of Land & Hard Costs	Typical range when pricing land
Net Square Feet	82%	85%	84%	% of GSF	100% effective efficiency for row houses
Potential Unit Revenue					
Sales	\$450	\$800	\$525	per NSF	\$320/SF for Row Houses \$400/SF for Garden Style Condos Based on list rents of recently completed rental buildings
Rent	\$ 2 10	\$ 3 20	\$ 3 00	per NSF	
Other Revenue					
For Sale Parking	\$ 30,000	\$ 50,000	\$ 40,000	Per space	
For Rent Parking	\$ 180	\$ 275	\$ 200	Per Month Per Space	
Operating Expenses					
Rental (Annual)	\$ 3,500	\$ 6,000	\$ 5,900	per Unit	Model uses Par Value calculation for affordable unit
Condo Fees (Annual)	\$ 3 00	\$ 6 60	NA	per SF	
Capital					
Debt 80%					
Construction	6.50%	7.25%	NA		
Permanent	5.75%	6.25%	6.50%		
Equity 20%	18.00%	23.00%			
Cap Rates		7.50%		Return on Cost	Highly variable by location
Unit Sizes					
Studio	450	500	500	NSF	Popular models w/den typically adds 150SF Popular models w/den typically adds 150SF Row houses sizes add 500sf minimum
1-Bedroom	600	800	700	NSF	
2-Bedroom	850	1,100	1,120	NSF	
3-Bedroom	1,000	1,350		NSF	
Ceiling Heights	9'6"	11'5"		Floor to Floor feet	9'8" for highrise 11'6" for stickbuilt

Source DC Office of Planning, Interviews conducted 4/15/05 – 7/7/05

1) Land Costs

Land prices in the District are highly variable, ranging from \$40 to \$50 per FAR square foot. According to the Office of Tax and Revenue, land prices are even lower than even \$40 per FAR square foot in some parts of the District. However, \$40 was the lowest land purchase price quoted by developers for market rate development.

2) Hard Costs

Hard construction costs varied by the quality of construction and finishes. High-rise steel and concrete construction varies between \$140 and \$200 per gross square foot depending on the type and quality of finishes. Low-rise construction costs are roughly 65% of high-rise construction, ranging from \$90 to \$130 per gross square foot, not including the cost of parking. Developers of condominiums use optional upgrades to fixtures and finishes as a profit center, offering purchasers a series of choices. For this reason it is likely that the hard costs of IZ units would be lower than the average hard costs used in the model. Developers of rental product may more carefully these cost decisions. Given the cost per square foot that higher grade fixtures and finishes add to the cost of a unit, OP concludes it is likely appliances and other unit costs will be lower for the affordable units. This is not captured in the model.

Below grade parking costs vary by how deep a project is going and the efficiency with which the space can be laid out. Below grade parking costs are around \$75 to \$80 per square foot for the first three levels, with cost increasing to \$90 per square foot for a fourth or fifth level. This is especially true construction requires digging below the cellar levels of adjacent properties. Standard below-grade parking typically might require 350 sf – 375 sf per space, with less efficient parking exceeding 410sf per space. This means the cost of parking may range from \$25,000 to \$35,000 per space.

3) Soft Costs

Soft costs for developers such as architecture and engineering, approval fees, marketing and construction interest range between 18% and 23% of the land and hard costs. In some cases it was lower, but most interviewed agreed that, based on their past projects, these were typical ranges developers use to test a project,. A contingency line item was included in the model ensure a conservative estimate.

4. Revenue

a Market-Rate Units

Interviews with developers and brokers of new construction indicate that sales revenues for new construction are varying between \$450 and \$800 per marketable square foot. This is supported by the Office of Tax and Revenue's sales database over the past one and half years. Rents are ranging from \$2.10 to over \$3.00 per rentable square foot, based on recent listings. These figures do not include concession-related rent reductions. Parking spaces sell between \$30,000 and \$50,000 for sale, and rent between \$180 and \$225 per month. It is important to note that parking in certain locations parking is a profit center for development, encouraging developers to build more than a 1:1 ratio of units to spaces.

b. Affordable Units

Revenues from affordable units vary between the two IZ proposals based on the methodology for pricing the units. Regardless of target income chosen, the CMIZ and OP proposal vary by household size assumptions.² This is due to the OP proposal's using the Low Income Housing Tax Credit Rules (LIHTC). Using the LIHTC rules to administer the IZ units provides advantages to the program, because the rules are well known to many developers and have been well tested over time. Table 2 below shows the differences in occupancy assumptions between the two proposals.

Table 2. Household Size Occupancy Assumptions

Occupancy Assumptions	Studio	1-Bedroom	2-Bedroom	3-Bedroom
CMIZ	1	2	3	4
OP (LIHTC)	1	1.5	3	4.5

Due to the small number of 3-bedroom units expected in most future development, this difference in occupancy assumptions will result in slightly greater value to the developer from the CMIZ proposal on a per unit basis.

In addition to occupancy assumptions, the LIHTC rules used by OP's proposal include a utility allowance, which the CMIZ proposal does not. The result is a small but significant reduction in total revenues paid to the developer. Table 3 below shows the affect on the total monthly housing payment even when the same income ranges are being used. These differences cause an approximately 6% change in revenues to the developer. Multiplied across a number of units they result in a noticeable difference in revenue to the developer.

Table 3. Maximum Housing Payment Comparison

	Unit Type			
	Studio	1-Bedroom	2-Bedroom	3-Bedroom
CMIZ Proposal				
Occupancy Factor	1	2	3	4
50% of AMI	\$ 781	\$ 893	\$ 1,005	\$ 1,116
80% of AMI	\$ 1,250	\$ 1,429	\$ 1,607	\$ 1,786
50/50 Average	\$ 1,016	\$ 1,161	\$ 1,306	\$ 1,451
OP Proposal (LIHTC)				
Occupancy Factor	1	1.5	3	4.5
Utility Allowance (est)	\$ 45	\$ 59	\$ 74	\$ 89
50% of AMI	\$ 736	\$ 778	\$ 931	\$ 1,072
80% of AMI	\$ 1,205	\$ 1,280	\$ 1,534	\$ 1,768
50/50 Average	\$ 971	\$ 1,029	\$ 1,233	\$ 1,420

² To keep units affordable unit types are priced based on assumptions regarding the number of people that will be living there.

5) Capital Costs

The model assumes a standard 20% equity and 80% debt ratio³. Construction interest rates were researched and are provided below, but are assumed to be included in the soft costs line item of the project. Construction financing is typically based on a spread off of either the LIBOR index or the Prime lending rate. Permanent financing is usually based on a spread off of the 10-year U.S. treasury notes. Interest rates for permanent financing play a role in analyzing the impact of IZ on apartment development. The above spreads change over time as investment conditions change.

6) Investment Return

Based on interviews with developers, return on cost is the primary measurement by which they make investment decisions. Condominium developers seek a minimum of 18% to 23% return on cost. The Internal Rate of Return (IRR), the secondary measurement used to evaluate a project, is the value of payments made to the equity investor over time.

7) Development Standards

The model assumes that 2-3 bedroom row houses vary between 2,100 and 2,500 square feet in size. IZ units were adjusted to reflect that smaller lot sizes would result in two-bedroom row houses of 1,680 sf and three-bedroom row houses of 2,100 sf.

According to the Office of Tax and Revenue's Computer Aided Mass Appraisal file (CAMA), the base unit sizes for low-rise and high-rise multi-family buildings were 500 square feet for a studio, 700 square feet for a one-bedroom, and 1,120 square feet for a two-bedroom unit. Slight variations to these standards were made in order to build out the theoretical net square footage of the building. The IZ units were assumed to be slightly smaller than the market rate units, but with the same unit mix as the market rate units.

B. Outputs

The model has three outputs

1) The Return on Cost

is equal to the percent of profits divided by the Total Development Cost (TDC). Developers stated that return on cost ranged from 18% or slightly lower to upwards of 23%, or whatever higher risks might accomplish.

2) The Internal Rate of Return (IRR)

³ A 15% equity assumption was made in a model provided by a developer, based on the timing of equity invested in the project.

IRR is the percentage return of the equity investment over time, and

3) The Impact on Land

If the first two measures were significantly affected by the IZ requirements, then OP estimated the impact on land value by holding return constant and backing out the equation.

Inclusionary Zoning Feasibility Interview List

Contributing Firms

Adam's Investment Group
Affordable Housing Developers
Alan Myers Architects
Cunningham & Quill
Davis Construction
Eakin/Youngentob
Esocoff & Associates
JBG
Metropolis
Monument Realty
Trammell Crow
Neighborhood Development Corporation
PN Hoffman
Somerset Development

July 15, 20005

Page 8 of 32

Table 4. CMIZ Income Standards & Housing Payment

Campaign for Mandatory Inclusionary Zoning
Housing Cost Calculation

HUD DC Area Median Income '05 \$89,300
Affordable Definition 30%

Household Sizes HH Size Factor	2005 Area Median Income by Family Size				
	1	2	3	4	5
	70%	80%	90%	100%	108%
	\$ 62,510	\$ 71,440	\$ 80,370	\$ 89,300	\$ 96,444

Target Incomes

	% AMI	Maximum Target Income by Household Size				
		1	2	3	4	5
HUD Section 8 Very Low Income(1)	50%	\$ 31,255	\$ 35,720	\$ 40,185	\$ 44,650	\$ 48,222
LIHTC Income Methodology	80%	\$ 50,008	\$ 57,152	\$ 64,296	\$ 71,440	\$ 77,155

Maximum Housing Payment

Unit Type Occupancy Factor	Maximum Monthly Housing Cost by Unit			
	Studio 1	1-Bedroom 2	2-Bedroom 3	3-Bedroom 4
50% of AMI	\$ 781	\$ 893	\$ 1,005	\$ 1,116
80% of AMI	\$ 1,250	\$ 1,429	\$ 1,607	\$ 1,786
50/50 Average	\$1,016	\$1,161	\$1,306	\$1,451

Table 5. OP Income Standards & Housing Payment

HH Size Factor	2005 Area Median Income by Family Size				
	1	2	3	4	5
	70%	80%	90%	100%	108%
	\$ 62,510	\$ 71,440	\$ 80,370	\$ 89,300	\$ 96,444

	% AMI	Maximum Target Income by Household Size				
		1	2	3	4	5
HUD Section 8 Very Low Income(1)	50%	\$31,250	\$35,700	\$40,200	\$44,650	\$48,200
LIHTC Income Methodology	1 2 60%	\$37,500	\$42,840	\$48,240	\$53,580	\$57,840
HUD Section 8 Low Income(2)	65%	\$40,600	\$46,400	\$52,200	\$58,000	\$62,650
LIHTC Income Methodology	1 4 70%	\$43,750	\$49,980	\$56,280	\$62,510	\$67,480
LIHTC Income Methodology	1 6 80%	\$50,000	\$57,120	\$64,320	\$71,440	\$77,120

Maximum Housing Cost

Unit Type Occupancy Factor	Maximum Monthly Housing Cost by Unit (Includes Utilities)(3)			
	Studio 1	1-Bedroom 1 5	2-Bedroom 3	3-Bedroom 4 5
50%	\$781	\$837	\$1,005	\$1,161
60%	\$938	\$1,004	\$1,206	\$1,393
65%	\$1,015	\$1,088	\$1,305	\$1,508
70%	\$1,094	\$1,172	\$1,407	\$1,625
80%	\$1,250	\$1,339	\$1,608	\$1,857

Utility Allowance (4)

	\$45	\$59	\$74	\$89
--	------	------	------	------

Maximum Rent/Mortgage Payment

50%	\$736	\$778	\$931	\$1,072
60%	\$893	\$945	\$1,132	\$1,304
65%	\$970	\$1,029	\$1,231	\$1,419
70%	\$1,049	\$1,113	\$1,333	\$1,536
80%	\$1,205	\$1,280	\$1,534	\$1,768

(1) Numbers Rounded by HUD

(2) HUD Section 8 Low Income approximates 65% of AMI

(3) LIHTC uses occupancy factors by unit type

(4) Estimated

Table 6. CMIZ Ownership Price Methodology

Pricing Assumptions

Interest Rate	6.75% (1)	Down Payment	-	5%
Term	30 years	Tax Rate		0.0096
Payments per Year	12	Homestead Deduction	\$	38,000
		Building Condo Fees	\$	4.00

Incomes		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$781	\$893	\$1,005	\$1,116
	80%	\$1,250	\$1,429	\$1,607	\$1,786

Taxes		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$55	\$66	\$78	\$90
	80%	\$104	\$123	\$142	\$161

Condo Fees		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$67	\$77	\$86	\$95
	80%	\$107	\$122	\$137	\$151

Mortgages Payments		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$659	\$749	\$840	\$931
	80%	\$1,039	\$1,184	\$1,329	\$1,474

Maximum Mortgage		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$101,677	\$115,555	\$129,485	\$143,554
	80%	\$160,178	\$182,512	\$204,848	\$227,334

Purchase Price		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$107,028	\$121,637	\$136,300	\$151,109
	80%	\$168,609	\$192,118	\$215,630	\$239,299

Taxed Value		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$107,028	\$121,637	\$136,300	\$151,109
	80%	\$168,609	\$192,118	\$215,630	\$239,299

Monthly Taxes		Studio	1-Bedroom	2-Bedroom	3-Bedroom
	50%	\$ 55.22	\$ 66.91	\$ 78.64	\$ 90.49
	80%	\$ 104.49	\$ 123.29	\$ 142.10	\$ 161.04

Par Value Condo Fee Calculation

Mkt \$ Price	\$	262,500	\$ 341,250	\$ 587,475	\$ 616,875
Unit Size		500	650	1,119	1,175
Mkt Condo Fee	\$	166.67	\$ 216.67	\$ 373.00	\$ 391.67

AU % of Market Value

	50%	41%	36%	23%	24%
	80%	64%	56%	37%	39%

Estimated AU Par Value Condo Fee

	50%	\$ 67.95	\$ 77.23	\$ 86.54	\$ 95.94
	80%	\$ 107.05	\$ 121.98	\$ 136.91	\$ 151.94

Table 7. OP Ownership Pricing Methodology

Pricing Assumptions

Interest Rate	6.75% (1)	Down Payment	5%
Term	30 years	Tax Rate	0.0096
Payments per Year	12	Homestead Deduction	\$ 38,000
		Building Condo Fees	\$ 4.00

Incomes	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$736	\$778	\$931	\$1,072
60%	\$893	\$945	\$1,132	\$1,304
65%	\$970	\$1,029	\$1,231	\$1,419
70%	\$1,049	\$1,113	\$1,333	\$1,536
80%	\$1,205	\$1,280	\$1,534	\$1,768

Taxes	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$50	\$54	\$71	\$85
60%	\$66	\$72	\$92	\$110
65%	\$74	\$80	\$101	\$121
70%	\$83	\$90	\$113	\$134
80%	\$99	\$107	\$134	\$159

Condo Fees	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$64	\$67	\$80	\$92
60%	\$77	\$81	\$97	\$111
65%	\$83	\$88	\$105	\$121
70%	\$90	\$95	\$114	\$131
80%	\$103	\$109	\$130	\$150

Mortgages Payments	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$822	\$857	\$780	\$895
60%	\$750	\$792	\$943	\$1,083
65%	\$813	\$861	\$1,025	\$1,177
70%	\$876	\$928	\$1,106	\$1,271
80%	\$1,003	\$1,064	\$1,270	\$1,459

Maximum Mortgage	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$95,938	\$101,276	\$120,259	\$137,932
60%	\$115,557	\$122,148	\$145,390	\$166,937
65%	\$125,347	\$132,871	\$158,033	\$181,488
70%	\$135,022	\$143,020	\$170,522	\$195,942
80%	\$154,641	\$164,046	\$195,807	\$224,947

Purchase Price	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$100,987	\$106,606	\$126,589	\$145,192
60%	\$121,639	\$128,577	\$153,043	\$175,723
65%	\$131,944	\$139,653	\$166,351	\$191,040
70%	\$142,128	\$150,547	\$179,496	\$206,255
80%	\$162,780	\$172,680	\$206,113	\$236,786

Taxed Value	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$100,987	\$106,606	\$126,589	\$145,192
60%	\$121,639	\$128,577	\$153,043	\$175,723
65%	\$131,944	\$139,653	\$166,351	\$191,040
70%	\$142,128	\$150,547	\$179,496	\$206,255
80%	\$162,780	\$172,680	\$206,113	\$236,786

Monthly Taxes	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$ 50.39	\$ 54.89	\$ 70.87	\$ 85.75
60%	\$ 66.91	\$ 72.46	\$ 92.03	\$ 110.18
65%	\$ 75.16	\$ 81.32	\$ 102.68	\$ 122.43
70%	\$ 83.30	\$ 90.04	\$ 113.20	\$ 134.60
80%	\$ 99.82	\$ 107.74	\$ 134.49	\$ 159.03

Par Value Condo Fee Calculation	Studio	1-Bedroom	2-Bedroom	3-Bedroom
Mkt \$ Price	\$ 262,500	\$ 341,250	\$ 587,475	\$ 616,875
Unit Size	500	650	1,119	1,175
Mkt Condo Fee	\$ 166.67	\$ 216.67	\$ 373.00	\$ 391.67

AU % of Market Value	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	38%	31%	22%	24%
60%	46%	38%	26%	28%
65%	50%	41%	28%	31%
70%	54%	44%	31%	33%
80%	62%	51%	35%	38%

Estimated AU Par Value Condo Fee	Studio	1-Bedroom	2-Bedroom	3-Bedroom
50%	\$ 64.12	\$ 67.69	\$ 80.37	\$ 92.19
60%	\$ 77.23	\$ 81.64	\$ 97.17	\$ 111.57
65%	\$ 83.77	\$ 88.67	\$ 105.62	\$ 121.29
70%	\$ 90.24	\$ 95.59	\$ 113.97	\$ 130.96
80%	\$ 103.35	\$ 109.64	\$ 130.87	\$ 150.34

Table 8. Base Case High-Density Condominium Scenario

High Rise Style Market Condominium

Property Information	
Land Area	30,500
Zoning	R-6-E
FAR	5.00
GSF Capacity	152,500
Lot Occupancy	75%
Building Information	
Foot Print	22,875
Height	90
Floor to Floor	11.0
Floors	8.0
Efficiency Factor	84%
NSF	128,100
Number of Units	150
Parking Ratio	1.00
Parking Spaces	150
Min SF per space	375
Min Parking SF	56,250
Min Parking Levels	2

Development Costs	Per GSF	Per Unit/Space	Totals
Land	\$ 90.00	\$ 91,500	\$ 13,725,000
Hard Cost	\$ 180.00	\$ 183,000	\$ 27,450,000
Parking	\$ 75.00	\$ 28,125	\$ 4,218,750
Soft Costs	23% \$ 68.46	\$ 69,604	\$ 10,440,563
Contingency	5% \$ 10.38	\$ 10,556	\$ 1,583,438
Total Development Cost	\$ 376.51	\$ 382,785	\$ 57,417,750

Unit & Revenue Information								
Unit Information	Unit Mix	Avg Market Size	Units	Unit NSF	\$Price/NSF	\$Price/Unit	Total \$Sales	
Studio	20%	500	30	15,000	\$ 525.00	\$ 262,500	\$7,875,000	
1-Bedroom	33%	701	50	35,050	\$ 525.00	\$ 368,025	\$18,401,250	
2-Bedroom	47%	1,115	70	78,050	\$ 525.00	\$ 585,375	\$40,976,250	
3-Bedroom	0%	1,350	0	-	\$ 525.00	\$ 708,750	\$0	
	100%	854	150	128,100	\$ 525.00		\$67,252,500	
Parking Revenue			150			\$ 40,000	\$6,000,000	
Total Revenue							\$73,252,500	

Capital	Required
Debt	80% 45,934,200
Equity	20% 11,483,550

Less Cost of Sales	5%	(\$3,362,625)
Less Total Cost		(\$57,417,750)
Less Warranty	\$2,000 per unit	(\$300,000)
Net Profit		\$12,172,125
Return on Cost		21.2%
IRR		30.3%

High Rise IZ Condominium

IZ Changes		
IZ Density Bonus		0%
IZ Requirement		10%
FAR		5
GSF Capacity	152,500	
IZ Bonus SF	-	
Lot Occupancy		75%
Building Information		
Foot Print	22,875	
Height	90	
Floor to Floor	11 0	
Floors	8 0	
Efficiency Factor		84%
Total NSF	128,100	
Market NSF	115,290	
Affordable NSF	12,810	
Total Units	150	
Market Units	135	
Affordable Units	16	
Parking Ratio		0 91
Parking Spaces	137	
Min SF per space		375
Min Parking SF	51,375	
Min Parking Levels		2

Development Costs	Per GSF	Per Unit	Totals	Impact On Land
Land	\$ 90 00	\$ 91,500	\$ 13,725,000	\$ 10,950,000
Hard Cost	\$ 180 00	\$ 183,000	\$ 27,450,000	\$ 27,450,000
Parking	\$ 75 00	\$ 28,125	\$ 3,853,125	\$ 3,853,125
Soft Costs	23% \$ 67 81	\$ 69,043	\$ 10,358,489	\$ 9,718,219
Contingency	5% \$ 10 28	\$ 10,434	\$ 1,585,158	\$ 1,585,158
Total Development Cost	\$ 373 44	\$ 379,665	\$ 56,949,750	\$ 53,536,500

Unit & Revenue Information									
Unit Information		Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales	
Studio		20%	500	27	13,500	\$ 525 00	\$ 282,500	\$7,087,500	\$7,087,500
1-Bedroom		33%	712	45	32,040	\$ 525 00	\$ 373,800	\$16,821,000	\$16,821,000
2-Bedroom		47%	1,125	62	69,750	\$ 525 00	\$ 590,625	\$36,818,750	\$36,818,750
3-Bedroom		0%	1,350	0	-	\$ 525 00	\$ 708,750	\$0	\$0
		100%	854	134	115,290	\$ 525 00		\$60,527,250	\$60,527,250
Affordable Units		Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales	
Studio		19%	500	3	1,500	\$ 275 64	\$ 137,819	\$413,456	\$413,456
1-Bedroom		31%	622	5	3,110	\$ 252 21	\$ 156,877	\$784,387	\$784,387
2-Bedroom		50%	1,025	8	8,200	\$ 171 67	\$ 175,965	\$1,407,719	\$1,407,719
3-Bedroom		0%	1,350	0	-	\$ 144 60	\$ 195,204	\$0	\$0
			801	16	12,810	\$ 203 40		\$2,605,562	\$2,605,562
Unit Sub-Totals				150	128,100			\$63,132,812	\$63,132,812
Parking Revenue				137			\$ 40,000	\$5,480,000	\$5,480,000
Total Revenue								\$68,612,812	\$68,612,812
Capital		Required		Less Cost of Sales		5%		(\$3,430,641)	(\$3,430,641)
Debt	80%	45,559,800		Less Total Cost				(\$56,949,750)	(\$53,536,500)
Equity	20%	11,389,950		Less Warranty		\$2,000 per unit		(\$300,000)	(\$300,000)
				Net Profit				\$7,932,421	\$11,345,671
				Return on Cost				13.9%	21.2%
				IRR				27.3%	

Table 10. Base Case 20-Unit Row House Scenario

**Inclusionary Zoning Economic Feasibility
 Market Rate 20 Unit Row-House**

Property Information	
Land Area	36,000
Zoning	R-4
FAR	NA
GSF Capacity	48,600
Lot Occupancy	60%
Building Information	
Foot Print	21,600
Height	40
Floor to Floor	11.5
Floors	2.3
Efficiency Factor	100%
NSF	48,600
Number of Units	20
Parking Ratio	1.00
Parking Spaces	20
Min Parking SF	8,500
Min Parking Levels	1

Development Costs	Per GSF	Per Unit/Space	Totals
Land	\$ 100.00	\$ 243,000	\$ 4,860,000
Hard Cost	\$ 105.00	\$ 255,150	\$ 5,103,000
Parking	\$ -	\$ -	\$ -
Soft Costs	23% \$ 47.15	\$ 114,575	\$ 2,291,490
Contingency	0% \$ -	\$ -	\$ -
Total Development Cost	\$ 252.15	\$ 612,725	\$ 12,254,490

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit NSF	\$Price/NSF	\$Price/Unit	Total \$Sales
Studio	0%	499	0	-	\$ 320.00	\$ 159,680	\$0
1-Bedroom	0%	700	0	-	\$ 320.00	\$ 224,000	\$0
2-Bedroom	50%	2,160	10	21,600	\$ 320.00	\$ 691,200	\$6,912,000
3-Bedroom	50%	2,700	10	27,000	\$ 320.00	\$ 864,000	\$8,640,000
	100%	2,430	20	48,600	\$ 320.00		\$15,552,000
Parking Revenue			20			\$ -	\$0
Total Revenue							\$15,552,000

Capital	Required
Debt	85% 9,803,592
Equity	20% 2,450,898

Less Cost of Sales	5%	(\$777,600)
Less Total Cost		(\$12,254,490)
Less Warranty	\$2,000 per unit	(\$40,000)
Net Profit		\$2,479,910
Return on Cost		20.2%
IRR		37.0%

Table 11. CMIZ 24-Unit Row House Scenario

**Inclusionary Zoning Economic Feasibility
 CMIZ 24 Unit Row-House**

IZ Changes	
IZ Density Bonus	0.2
IZ Requirement	0.75
FAR	NA
GSF Capacity	57180
IZ Bonus SF	9720
Lot Occupancy	0.6
Building Information	
Foot Print	21600
Height	40
Floor to Floor	11.5
Floors	3
Efficiency Factor	1
Total NSF	57180
Market NSF	51030
Affordable NSF	7290
Total Units	24
Market Units	21
Affordable Units	3
Parking Ratio	1
Parking Spaces	24
Min Parking SF	10200
Min Parking Levels	1

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 84.99	\$ 202,500	\$ 4,860,000
Hard Cost	\$ 105.00	\$ 250,163	\$ 6,003,900
Parking	\$ -	\$ -	\$ -
Soft Costs	23% \$ 51.41	\$ 104,112	\$ 2,498,697
Contingency	0% \$ -	\$ -	\$ -
Total Development Cost	\$ 274.95	\$ 668,130	\$ 13,362,597

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	0%	499	0	-	\$ 320.00	\$ 159,680	\$0
1-Bedroom	0%	700	0	-	\$ 320.00	\$ 224,000	\$0
2-Bedroom	50%	2,160	10	21,600	\$ 320.00	\$ 691,200	\$6,912,000
3-Bedroom	50%	2,700	11	29,700	\$ 320.00	\$ 864,000	\$9,504,000
	100%	2,430	21	51,300	\$ 320.00		\$16,416,000
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	0%	500	0	-	\$ 275.64	\$ 137,819	\$0
1-Bedroom	0%	620	0	-	\$ 253.03	\$ 156,877	\$0
2-Bedroom	33%	1,680	1	1,680	\$ 104.74	\$ 175,965	\$175,965
3-Bedroom	67%	2,100	2	4,200	\$ 92.95	\$ 195,204	\$390,408
		1,960	3	5,880	\$ 96.32		\$568,373
Unit Sub-Totals		1,960	3	5,880			\$16,982,373
Parking Revenue			7,290		\$ -		\$0
Total Revenue							\$16,982,373

Capital	Required
Debt	85% 10,690,078
Equity	20% 2,672,519

Less Cost of Sales	5%	(\$849,119)
Less Total Cost		(\$13,362,597)
Less Warranty	\$2,000 per unit	(\$48,000)
Net Profit		\$2,722,658
Return on Cost		20.4%
IRR		35.6%

Table 12. OP1Z 24 Unit Row House Scenario

Inclusionary Zoning Economic Feasibility
OP1Z 24 Unit Row-House @ 65% of AMI

IZ Changes		
IZ Density Bonus		20%
IZ Requirement		75%
FAR	NA	
GSF Capacity	57,180	
IZ Bonus SF	9,720	
Lot Occupancy	80%	
Building Information		
Foot Print	21,800	
Height	40	
Floor to Floor	12	
Floors	3 0	
Efficiency Factor	100%	
Total NSF	57,180	
Market NSF	51,030	
Affordable NSF	7,290	
Total Units	24	
Market Units	21	
Affordable Units	3	
Parking Ratio	1 00	
Parking Spaces	24	
Min Parking SF	10,200	
Min Parking Levels	1	

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 84 99	\$ 202,500	\$ 4,860,000
Hard Cost	\$ 105 00	\$ 250,163	\$ 6,003,900
Parking	\$ -	\$ -	\$ -
Soft Costs	23% \$ 51 41	\$ 104,112	\$ 2,498,697
Contingency	0% \$ -	\$ -	\$ -
Total Development Cost	\$ 274 95	\$ 668,130	\$ 13,362,597

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Pnce/SF	\$Pnce/Unit	Total \$Sales
Studio	0%	499	0	-	\$ 320 00	\$ 159,680	\$0
1-Bedroom	0%	700	0	-	\$ 320 00	\$ 224,000	\$0
2-Bedroom	50%	2,160	10	21,600	\$ 320 00	\$ 891,200	\$6,912,000
3-Bedroom	50%	2,700	11	29,700	\$ 320 00	\$ 864,000	\$9,504,000
	100%	2,430	21	51,300	\$ 320 00		\$16,416,000
Affordable Units							
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Pnce/SF	\$Pnce/Unit	Total \$Sales
Studio	0%	500	0	-	\$ 263 89	\$ 131,944	\$0
1-Bedroom	0%	620	0	-	\$ 225 25	\$ 139,653	\$0
2-Bedroom	33%	1,680	1	1,680	\$ 99 02	\$ 166,351	\$166,351
3-Bedroom	67%	2,100	2	4,200	\$ 90 97	\$ 191,040	\$382,079
		1,960	3	5,880	\$ 93 27		\$548,430
Unit Sub-Totals		2,383	24	57,180			\$16,964,430
Parking Revenue			24		\$ -		\$0
Total Revenue							\$16,964,430

Capital	Required
Debt	85% 10,690,078
Equity	20% 2,672,519

Less Cost of Sales	5%	(\$848 221)
Less Total Cost		(\$13,362 597)
Less Warranty	\$2,000 per unit	(\$48,000)
Net Profit		\$2,705,611
Return on Cost		20 2%
IRR		35 5%

Table 13. Base Case Low-Rise Condominium Scenario

Inclusionary Zoning Economic Feasibility

Low Rise Style Market Condominium

Property Information	
Land Area	14,170
Zoning	R-5-B
FAR	1.80
GSF Capacity	25,506
Lot Occupancy	60%
Building Information	
Foot Print	8,502
Height	50
Floor to Floor	11.5
Floors	4.0
Efficiency Factor	85%
NSF	21,680
Number of Units	25
Parking Ratio	1.00
Parking Spaces	25
Min SF per Space	350
Min Parking SF	8,750
Min Parking Levels	1

Development Costs	Per GSF	Per Unit/Space	Totals
Land	\$ 90.00	\$ 91,822	\$ 2,295,540
Hard Cost	\$ 115.00	\$ 117,328	\$ 2,933,180
Parking	\$ 15.00	\$ 5,250	\$ 131,250
Soft Costs	23% \$ 48.33	\$ 49,312	\$ 1,232,795
Contingency	5% \$ 6.01	\$ 6,129	\$ 153,222
Total Development Cost	\$ 284.48	\$ 289,840	\$ 6,745,997

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit NSF	\$Price/NSF	\$Price/Unit	Total \$Sales
Studio	16%	500	4	2,000	\$ 400.00	\$ 200,000	\$800,000
1-Bedroom	36%	700	9	6,300	\$ 400.00	\$ 280,000	\$2,520,000
2-Bedroom	48%	1,115	12	13,380	\$ 400.00	\$ 446,000	\$5,352,000
3-Bedroom	0%	1,350	0	-	\$ 400.00	\$ 540,000	\$0
	100%	867	25	21,680	\$ 400.00		\$8,672,000
Parking Revenue			25				\$0
Total Revenue							\$8,672,000

Capital	Required
Debt	85% 5,396,798
Equity	20% 1,349,199

Less Cost of Sales	5%	(\$433,600)
Less Total Cost		(\$6,745,997)
Less Warranty	\$2,000 per unit	(\$50,000)
Net Profit		\$1,442,403
Return on Cost		21.4%
IRR		38.5%

Table 14. CMIZ Low-Rise Condominium Scenario

Inclusionary Zoning Economic Feasibility

Low Rise CMIZ Condominium

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	75%
FAR	2.16
GSF Capacity	30,607
IZ Bonus SF	5,101
Lot Occupancy	60%
Building Information	
Foot Print	8,502
Height	50
Floor to Floor	11.5
Floors	4.0
Efficiency Factor	85%
Total NSF	26,016
Market NSF	22,764
Affordable NSF	3,252
Total Units	30
Market Units	28
Affordable Units	4
Parking Ratio	1.00
Parking Spaces	30
Min SF per Space	350
Min Parking SF	10,500
Min Parking Levels	2,625

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 76,518	\$ 2,295,540
Hard Cost	\$ 115.00	\$ 117,328	\$ 3,519,828
Parking	\$ 15.00	\$ 6,058	\$ 157,500
Soft Costs	23% \$ 53.86	\$ 45,792	\$ 1,373,760
Contingency	5% \$ 7.21	\$ 6,129	\$ 183,866
Total Development Cost	\$ 295.24	\$ 301,220	\$ 7,530,494

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	16%	501	4	2,004	\$ 400.00	\$ 200,400	\$801,600
1-Bedroom	36%	720	10	7,200	\$ 400.00	\$ 288,000	\$2,880,000
2-Bedroom	48%	1,130	12	13,560	\$ 400.00	\$ 452,000	\$5,424,000
3-Bedroom	0%	1,350	0	-	\$ 400.00	\$ 540,000	\$0
	100%	876	26	22,764	\$ -		\$9,105,600
Affordable Units							
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	25%	600	1	500	\$ 275.64	\$ 137,819	\$137,819
1-Bedroom	25%	652	1	652	\$ 240.61	\$ 156,877	\$156,877
2-Bedroom	50%	1,020	2	2,040	\$ 172.51	\$ 175,965	\$351,930
3-Bedroom	0%	1,300	0	-	\$ 150.16	\$ 195,204	\$0
		798	4	3,192	\$ 202.58		\$646,626
Unit Sub-Totals		865	30	25,956			\$9,752,226
Parking Revenue			30		\$ -		\$0
Total Revenue							\$9,752,226

Capital	Required
Debt	80% 6,024,395
Equity	20% 1,506,099

Less Cost of Sales	5%	(\$487,611)
Less Total Cost		(\$7,530,494)
Less Warranty	\$2,000 per unit	(\$60,000)
Net Profit		\$1,674,120
Return on Cost		22.2%
IRR		38.0%

Inclusionary Zoning Economic Feasibility

Low Rise IZ Condominium @ 80% of AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	75%
FAR	2.16
GSF Capacity	30,807
IZ Bonus SF	5,101
Lot Occupancy	60%
Building Information	
Foot Print	8,502
Height	50
Floor to Floor	11.5
Floors	4.0
Efficiency Factor	85%
Total NSF	28,018
Market NSF	22,784
Affordable NSF	3,252
Total Units	30
Market Units	26
Affordable Units	4
Parking Ratio	1.00
Parking Spaces	30
Min SF per Space	350
Min Parking SF	10,500
Min Parking Levels	1

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 76,518	\$ 2,295,540
Hard Cost	\$ 115.00	\$ 117,328	\$ 3,519,828
Parking	\$ 15.00	\$ 6,058	\$ 157,500
Soft Costs	23% \$ 53.86	\$ 45,792	\$ 1,373,760
Contingency	5% \$ 7.21	\$ 6,129	\$ 183,866
Total Development Cost	\$ 295.24	\$ 301,220	\$ 7,530,494

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	16%	501	4	2,004	\$ 400.00	\$ 200,400	\$801,600
1-Bedroom	36%	720	10	7,200	\$ 400.00	\$ 288,000	\$2,880,000
2-Bedroom	48%	1,130	12	13,560	\$ 400.00	\$ 452,000	\$5,424,000
3-Bedroom	0%	1,350	0	-	\$ 400.00	\$ 540,000	\$0
	100%	876	26	22,764	\$ 400.00		\$9,105,600
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	25%	500	1	500	\$ 325.56	\$ 162,780	\$162,780
1-Bedroom	25%	652	1	652	\$ 264.85	\$ 172,680	\$172,680
2-Bedroom	50%	1,050	2	2,100	\$ 196.30	\$ 206,113	\$412,225
3-Bedroom	0%	1,300	0	-	\$ 182.14	\$ 236,788	\$0
		813	4	3,252	\$ 229.92		\$747,685
Unit Sub-Totals		867	30	26,016			\$9,853,285
Parking Revenue			30			\$ -	\$0
Total Revenue							\$9,853,285

Capital	Required
Debt	85% 6,024,395
Equity	20% 1,506,099

Less Cost of Sales	5%	(\$492,664)
Less Total Cost		(\$7,530,494)
Less Warranty	\$2,000 per unit	(\$80,000)
Net Profit		\$1,770,127
Return on Cost		23.5%
IRR		39.5%

Table 15. OPIZ Low-Rise Condominium Scenario 75% of Bonus at 80% of AMI

Table 16. OP1Z Low-Rise Condominium Scenario 75% of Bonus at 65% of AMI

Inclusionary Zoning Economic Feasibility

Low Rise IZ Condominium @ 65% of AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	75%
FAR	2.16
GSF Capacity	30,607
IZ Bonus SF	5,101
Lot Occupancy	60%
Building Information	
Foot Print	8,502
Height	50
Floor to Floor	11.5
Floors	4.0
Efficiency Factor	85%
Total NSF	26,016
Market NSF	22,764
Affordable NSF	3,252
Total Units	30
Market Units	26
Affordable Units	4
Parking Ratio	1.00
Parking Spaces	30
Min SF per Space	350
Min Parking SF	10,500
Min Parking Levels	2,625

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 76,518	\$ 2,295,540
Hard Cost	\$ 115.00	\$ 117,328	\$ 3,619,828
Parking	\$ 15.00	\$ 8,058	\$ 157,500
Soft Costs	23% \$ 53.86	\$ 45,792	\$ 1,373,760
Contingency	5% \$ 7.21	\$ 6,129	\$ 183,868
Total Development Cost	\$ 295.24	\$ 301,220	\$ 7,530,494

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	16%	501	4	2,004	\$ 400.00	\$ 200,400	\$801,600
1-Bedroom	36%	720	10	7,200	\$ 400.00	\$ 288,000	\$2,880,000
2-Bedroom	48%	1,130	12	13,560	\$ 400.00	\$ 452,000	\$5,424,000
3-Bedroom	0%	1,350	0	-	\$ 400.00	\$ 540,000	\$0
	100%	876	26	22,764	\$ -		\$9,105,600
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	25%	500	1	500	\$ 263.89	\$ 131,944	\$131,944
1-Bedroom	25%	652	1	652	\$ 214.19	\$ 139,653	\$139,653
2-Bedroom	50%	1,020	2	2,040	\$ 163.09	\$ 166,351	\$332,701
3-Bedroom	0%	1,300	0	-	\$ 146.95	\$ 191,040	\$0
		798	4	3,192	\$ 189.32		\$604,299
Unit Sub-Totals		865	30	25,956			\$9,709,899
Parking Revenue			30		\$ -		\$0
Total Revenue							\$9,709,899

Capital	Required
Debt	80% 6,024,395
Equity	20% 1,506,099

Less Cost of Sales	5%	(\$485,495)
Less Total Cost		(\$7,530,494)
Less Warranty	\$2,000 per unit	(\$60,000)
Net Profit		\$1,633,910
Return on Cost		21.7%
IRR		37.3%

Table 17. Base Case Low-Rise Rental Scenario

Inclusionary Zoning Economic Feasibility

Low Rise Style Market Rental

Property Information	
Land Area	14,170
Zoning	R-5-B
FAR	1.80
GSF Capacity	25,506
Lot Occupancy	60%
Building Information	
Foot Print	8,502
Height	50
Floor to Floor	11.5
Floors	4.0
Efficiency Factor	85%
NSF	21,880
Number of Units	26
Parking Ratio	1.00
Parking Spaces	26
Min SF per Space	350
Min Parking SF	9,100
Min Parking Levels	1

Development Costs		Per GSF	Per Unit/Space	Totals
Land	\$	90.00	\$ 88,290	\$ 2,295,540
Hard Cost	\$	90.00	\$ 88,290	\$ 2,295,540
Parking	\$	15.00	\$ 5,250	\$ 138,500
Soft Costs	23%	42.63	\$ 41,821	\$ 1,087,343
Contingency	0%	-	\$ -	\$ -
Total Development Cost		\$	227.98	\$ 5,814,923

Inflators	
Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Assumptions	
Debt Financing	
Interest Rate	6.50%
Term	30
Debt Ratio	1.20
Loan Payment	\$ 323,585
Max Loan Amount	\$4,225,589
Cap Rate	7.35%
Estimated Value	\$5,283,017
LTV	80.0%
Required Equity	\$ 1,589,335

Unit & Revenue Information						
Unit Information	Unit Mix	Avg Market Size	Units	Unit NSF	\$Price/NSF	\$Price/Unit
Studio	12%	500	3	1,500	\$ 2.10	\$ 1,050
1-Bedroom	50%	700	13	9,100	\$ 2.10	\$ 1,470
2-Bedroom	38%	1,115	10	11,150	\$ 2.10	\$ 2,342
3-Bedroom	0%	1,350	0	-	\$ 2.10	\$ 2,835
	100%	-	26	21,750	\$ 2.10	\$548,100
Parking Revenue			26		\$	75
Total Revenue						\$571,500

Capital	Required
Debt	73% 4,225,589
Equity	27% 1,589,335

	Year	1	2	3	4	5	6	7	8	9	10	11
Gross Potential Rent		\$571,500	\$588,845	\$606,304	\$624,493	\$643,228	\$662,525	\$682,401	\$702,873	\$723,959	\$745,678	\$768,048
Less Vacancy/Economic Loss		(\$28,575)	(\$29,432)	(\$30,315)	(\$31,225)	(\$32,161)	(\$33,126)	(\$34,120)	(\$35,144)	(\$36,198)	(\$37,284)	(\$38,402)
Less Expenses	3800 per unit	(\$98,800)	(\$101,764)	(\$104,817)	(\$107,961)	(\$111,200)	(\$114,536)	(\$117,972)	(\$121,512)	(\$125,157)	(\$128,912)	(\$132,779)
Less Taxes	0.0096 per assessed value	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)	(\$55,823)
UnLeveraged Cash Flow	\$ (5,814,923) 0	\$388,302	\$401,625	\$415,349	\$429,484	\$444,043	\$459,039	\$474,485	\$480,394	\$508,781	\$523,659	\$6,327,606
UnLeveraged IRR	6.83% Cash on Cash Return	6.7%	6.9%	7.1%	7.4%	7.6%	7.9%	8.2%	8.4%	8.7%	9.0%	
Leveraged Cash Flow	\$ (1,589,335) 0	(\$323,585)	(\$323,584.78)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)	(\$323,585)
Leveraged IRR	7.92%	6.41%	7.8041%	8.1764%	8.5899%	8.9459%	9.3455%	9.7380%	10.1281%	10.5156%	10.9007%	11.2821%
	Balance		\$4,176,687	\$4,124,566	\$4,069,078	\$4,009,983	\$3,947,047	\$3,880,021	\$3,808,637	\$3,732,614	\$3,651,849	\$3,565,421
	Interest	\$274,663	\$271,483	\$268,097	\$264,490	\$260,649	\$256,558	\$252,201	\$247,561	\$242,620	\$237,357	\$231,752
	Principal	\$48,922	\$52,101	\$55,488	\$59,095	\$62,936	\$67,027	\$71,383	\$76,023	\$80,965	\$86,228	\$91,832

Table 18. CMIZ Low-Rise Rental Scenario

Inclusionary Zoning Economic Feasibility

CMIZ Low-Rise Rental

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	75%
FAR	2.16
GSF Capacity	30,607
IZ Bonus SF	5,101
Lot Occupancy	75%
Building Information	
Foot Print	10,628
Height	90
Floor to Floor	11.0
Floors	8.0
Efficiency Factor	85%
Total NSF	28,016
Market NSF	22,764
Affordable NSF	3,252
Total Units	30
Market Units	26
Affordable Units	4
Parking Ratio	0.91
Parking Spaces	27
Min SF per Space	375
Min Parking SF	10,125
Min Parking Levels	1

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 75,518	\$ 2,295,540
Hard Cost	\$ 90.00	\$ 91,822	\$ 2,754,648
Parking	\$ 15.00	\$ 5,625	\$ 151,875
Soft Costs	23% \$	\$ 664,708	\$ 39,882
Contingency	0% \$	\$ -	\$ -
Total Development Cost	\$ 209.05	\$ 213,285	\$ 6,398,537

Inflation	
Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Assumptions	
Debt Financing	
Interest Rate	6.50%
Term	30
Debt Ratio	1.20
Loan Payment	\$ 372,325
Max Loan Amount	\$ 4,862,067
Cap Rate	7.35%
Estimated Value	\$ 6,078,770
LTV	80.0%
Required Equity	\$ 1,536,470

Unit & Revenue Information						
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Rent/NSF	Monthly/Unit Annual Rent
Studio	12%	507	3	1,521	\$ 2.10	\$ 1,085 \$38,329
1-Bedroom	50%	710	12	8,520	\$ 2.10	\$ 1,491 \$214,704
2-Bedroom	38%	1,155	11	12,705	\$ 2.10	\$ 2,426 \$320,166
3-Bedroom	0%	1,350	0	-	\$ 2.10	\$ 2,835 \$0
	100%	-	26	22,746	\$ 2.10	\$573,199
Affordable Units						
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Rent/NSF	Monthly/Unit Total \$Sales
Studio	25%	510	1	510	\$ 1.99	\$ 1,016 \$12,189
1-Bedroom	25%	620	1	620	\$ 1.87	\$ 1,181 \$13,931
2-Bedroom	50%	1,060	2	2,120	\$ 1.23	\$ 1,306 \$31,344
3-Bedroom	0%	1,300	0	-	\$ 1.12	\$ 1,451 \$0
		813	4	3,250	\$ 1.47	\$57,465
Unit Sub-Totals		887	30	25,996		\$630,684
Parking Revenue			27		\$ 75	\$24,300
Total Revenue						\$654,984

Capital to Cost	Required
Debt	76% 4,862,067
Equity	24% 1,536,470

	Year	1	2	3	4	5	6	7	8	9	10	11
Gross Potential Rent		\$654,984	\$674,813	\$694,851	\$715,697	\$737,167	\$759,282	\$782,061	\$805,523	\$829,688	\$854,579	\$880,217
Less Vacancy/Economic Loss		(\$32,748)	(\$33,731)	(\$34,743)	(\$35,785)	(\$36,858)	(\$37,964)	(\$39,103)	(\$40,276)	(\$41,484)	(\$42,729)	(\$44,011)
Less Expenses	3800 per unit	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)
Less Taxes	0.0096	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)
Unleveraged Cash Flow		(\$6,398,537)	\$0	\$446,790	\$465,456	\$484,683	\$504,486	\$524,883	\$545,892	\$567,532	\$589,821	\$612,778
Unleveraged IRR	7.87%		Cash on Cash Return	7.0%	7.3%	7.6%	7.9%	8.2%	8.5%	8.9%	9.2%	9.6%
Leveraged Cash Flow		(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)	(\$372,325)
Leveraged IRR	11.43%	(\$1,536,470)	\$0	\$74,465	\$93,131	\$112,358	\$132,181	\$152,558	\$173,496	\$195,207	\$217,496	\$240,453
			Balance	\$4,805,777	\$4,745,828	\$4,681,982	\$4,613,986	\$4,541,570	\$4,464,448	\$4,382,312	\$4,294,838	\$4,201,678
			Interest	\$316,034	\$312,375	\$308,479	\$304,329	\$299,909	\$295,202	\$290,189	\$284,850	\$279,164
			Principal	\$56,290	\$59,949	\$63,846	\$67,996	\$72,416	\$77,123	\$82,136	\$87,474	\$93,160

Table 19. OP1Z Low-Rise Rental Scenario 75% of Bonus at 65% of AMI

Inclusionary Zoning Economic Feasibility

OP1Z Low-Rise Rental 75% of Bonus at 65%AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	75%
FAR	2.18
GSF Capacity	30,607
IZ Bonus SF	5,101
Lot Occupancy	75%
Building Information	
Foot Print	8
Height	90
Floor to Floor	11.0
Floors	8.0
Efficiency Factor	85%
Total NSF	26,019
Market NSF	22,764
Affordable NSF	3,252
Total Units	30
Market Units	26
Affordable Units	4
Parking Ratio	0.91
Parking Spaces	27
Min SF per Space	375
Min Parking SF	10,125
Min Parking Levels	1

Development Costs		Per GSF	Per Unit	Totals
Land	\$	75.00	\$	76,518
Hard Cost	\$	90.00	\$	91,822
Parking	\$	15.00	\$	5,625
Soft Costs	23%	664,708	\$	39,882
Contingency	0%	-	\$	-
Total Development Cost		\$	209.05	\$ 213,285
				\$ 6,398,537

Inflation	
Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Assumptions	
Debt Financing	
Interest Rate	6.50%
Term	30
Debt Ratio	1.20
Loan Payment	\$ 389,207
Max Loan Amount	\$4,821,350
Cap Rate	7.35%
Estimated Value	\$6,027,864
LTV	80.0%
Required Equity	\$ 1,577,188

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Rent/NSF	Monthly/Unit	Annual Rent
Studio	25%	507	3	1,521	\$ 2.10	\$ 1,065	\$36,329
1-Bedroom	50%	710	12	8,520	\$ 2.10	\$ 1,491	\$214,704
2-Bedroom	0%	1,155	11	12,705	\$ 2.10	\$ 2,426	\$320,186
3-Bedroom	0%	813	0	-	\$ 2.10	\$ 1,708	\$0
	75%	875	26	22,746	\$ -		\$573,199
Affordable Units							
Studio	25%	510	1	510	\$ 1.90	\$970	\$11,640
1-Bedroom	25%	620	1	620	\$ 1.66	\$1,029	\$12,342
2-Bedroom	50%	1,080	2	2,120	\$ 1.16	\$1,231	\$29,544
3-Bedroom	0%	1,300	0	-	\$ 1.09	\$1,419	\$0
		813	4	3,250	\$ 1.37		\$53,526
Unit Sub-Totals							
		867	30	25,996			\$626,725
Parking Revenue			27		\$	75	\$24,300
Total Revenue							\$651,025

Capital to Cost		Required
Debt	75%	4,821,350
Equity	25%	1,577,188

	Year	1	2	3	4	5	6	7	8	9	10	11
Gross Potential Rent		\$651,025	\$670,556	\$690,673	\$711,393	\$732,735	\$754,717	\$777,358	\$800,679	\$824,699	\$849,440	\$874,923
Less Vacancy/Economic Loss		(\$32,551)	(\$33,528)	(\$34,534)	(\$35,570)	(\$36,637)	(\$37,736)	(\$38,868)	(\$40,034)	(\$41,235)	(\$42,472)	(\$43,746)
Less Expenses	3800 per unit	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)	(\$114,000)
Less Taxes	0.0096	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)	(\$61,426)
UnLeveraged Cash Flow		(\$6,398,537)	\$0	\$443,048	\$461,602	\$480,713	\$500,397	\$520,672	\$541,555	\$563,064	\$585,219	\$608,038
UnLeveraged IRR	7.77%	Cash on Cash Return	6.9%	7.2%	7.5%	7.8%	8.1%	8.5%	8.8%	9.1%	9.5%	9.9%
Leveraged Cash Flow												
Leveraged Cash Flow		(\$1,577,188)	\$0	\$73,841	\$92,396	\$111,506	\$131,191	\$151,465	\$172,348	\$193,858	\$216,012	\$238,832
Leveraged IRR	11.04%		4.7%	5.9%	7.1%	8.3%	9.6%	10.9%	12.3%	13.7%	15.1%	16.6%
Balance												
Interest		\$313,388	\$309,760	\$305,895	\$301,780	\$297,398	\$292,730	\$287,759	\$282,465	\$276,827	\$270,822	\$264,427
Principal		\$55,819	\$59,447	\$63,311	\$67,426	\$71,809	\$76,477	\$81,448	\$86,742	\$92,380	\$98,385	\$104,780

Table 20. CMIZ High-Density Condominium Scenario

Inclusionary Zoning Economic Feasibility

CMIZ High-Rise Condominium Scenario

IZ Changes	
IZ Density Bonus	20%
CMIZ % of Units	12%
FAR	6
GSF Capacity	183,000
IZ Bonus SF	30,500
Lot Occupancy	80%
Building Information	
Foot Print	24,400
Height	90
Floor to Floor	11.0
Floors	8.0
Efficiency Factor	84%
Total NSF	153,720
Market NSF	139,245
Affordable NSF	14,475
Total Units	180
Market Units	162
Affordable Units	18
Parking Ratio	1.00
Parking Spaces	180
Min SF per space	375
Min Parking SF	67,500
Min Parking Levels	3

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 76,250	\$ 13,725,000
Hard Cost	\$ 180.00	\$ 183,000	\$ 32,940,000
Parking	\$ 75.00	\$ 31,250	\$ 5,062,500
Soft Costs	23% \$ 78.02	\$ 66,096	\$ 11,897,325
Contingency	5% \$ 12.46	\$ 10,556	\$ 1,900,125
Total Development Cost	\$ 429.67	\$ 436,833	\$ 65,524,950

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Pnce/SF	\$Pnce/Unit	Total \$Sales
Studio	20%	511	33	16,863	\$ 525.00	\$ 268,275	\$8,853,075
1-Bedroom	33%	708	54	38,232	\$ 525.00	\$ 371,700	\$20,071,800
2-Bedroom	46%	1,122	75	84,150	\$ 525.00	\$ 589,050	\$44,178,750
3-Bedroom	0%	1,350	0	-	\$ 525.00	\$ 708,750	\$0
	100%	860	162	139,245	\$ 525.00		\$73,103,625
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Pnce/SF	\$Pnce/Unit	Total \$Sales
Studio	17%	500	3	1,500	\$ 275.64	\$ 137,819	\$413,456
1-Bedroom	33%	631	6	3,786	\$ 248.62	\$ 156,877	\$941,264
2-Bedroom	50%	1,021	9	9,189	\$ 172.35	\$ 175,965	\$1,583,684
3-Bedroom	0%	1,350	0	-	\$ 144.60	\$ 195,204	\$0
		804	18	14,475	\$ 203.00		\$2,938,404
Unit Sub-Totals			180	153,720			\$76,042,029
Parking Revenue			180			\$ 40,000	\$7,200,000
Total Revenue							\$83,242,029

Capital	Required
Debt	80% 52,419,960
Equity	20% 13,104,990

Less Cost of Sales	5%	(\$4,162,101)
Less Total Cost		(\$65,524,950)
Less Warranty	\$2,000 per unit	(\$360,000)
Net Profit		\$13,194,978
Return on Cost		20.1%
IRR		27.3%

Table 21. OP1Z High-Rise Condominium 50% of Bonus at 80% AMI

Inclusionary Zoning Economic Feasibility

High Rise IZ Condominium 50% @ 80% of AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	50%
FAR	6
GSF Capacity	183,000
IZ Bonus SF	30,500
Lot Occupancy	75%
Building Information	
Foot Print	22,875
Height	90
Floor to Floor	11 0
Floors	8 0
Efficiency Factor	84%
Total NSF	153,720
Market NSF	140,910
Affordable NSF	12,810
Total Units	180
Market Units	165
Affordable Units	16
Parking Ratio	1 00
Parking Spaces	180
SF per Space	375
Min Parking SF	67,500
Min Parking Levels	3

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75 00	\$ 76,250	\$ 13,725,000
Hard Cost	\$ 180 00	\$ 183,000	\$ 32,940,000
Parking	\$ 75 00	\$ 30,682	\$ 5,062,500
Soft Costs	23% \$ 78 02	\$ 66,096	\$ 11,897,325
Contingency	5% \$ 12 48	\$ 10,556	\$ 1,900,125
Total Development Cost	\$ 429 67	\$ 436,833	\$ 65,524,950

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	20%	501	33	16,533	\$ 525 00	\$ 263,025	\$8,879,825
1-Bedroom	33%	719	55	39,545	\$ 525 00	\$ 377,475	\$20 781,125
2-Bedroom	47%	1,116	76	84,816	\$ 525 00	\$ 585,900	\$44,528,400
3-Bedroom	0%	1,350	0	-	\$ 525 00	\$ 708,750	\$0
	100%	854	164	140,894	\$ 525 00		\$73,969,350
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Price/SF	\$Price/Unit	Total \$Sales
Studio	19%	500	3	1,500	\$ 325 58	\$ 162,780	\$488,341
1-Bedroom	31%	630	5	3,150	\$ 274 10	\$ 172,860	\$863,401
2-Bedroom	50%	1,020	8	8,160	\$ 202 07	\$ 208,113	\$1,648,900
3-Bedroom	0%	1,300	0	-	\$ 182 14	\$ 236,786	\$0
		801	16	12,810	\$ 234 24		\$3,000,642
Unit Sub-Totals			180	153,704			\$76,969,992
Parking Revenue			180			\$ 40,000	\$7,200,000
Total Revenue							\$84,169,992

Capital	Required
Debt	80% 52,419,960
Equity	20% 13,104,990

Less Cost of Sales	5%	(\$4,208 500)
Less Total Cost		(\$65,524 950)
Less Warranty	\$2,000 per unit	(\$360 000)
Net Profit		\$14,076,542
Return on Cost		21 5%
IRR		28 6%

Inclusionary Zoning Economic Feasibility

OPIZ High-Rise Condominium 50% of Bonus @ 50/50 Split between 50% & 80% of AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	50%
FAR	6
GSF Capacity	183,000
IZ Bonus SF	30,500
Lot Occupancy	80%
Building Information	
Foot Pnnt	24,400
Height	90
Floor to Floor	11 0
Floors	8 0
Efficiency Factor	84%
Total NSF	153,720
Market NSF	140,910
Affordable NSF	12,810
Total Units	180
Market Units	165
Affordable Units	16
Parking Ratio	1 00
Parking Spaces	180
Min SF per space	375
Min Parking SF	67,500
Min Parking Levels	3

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75 00	\$ 78,250	\$ 13,725,000
Hard Cost	\$ 180 00	\$ 183,000	\$ 32,940,000
Parking	\$ 75 00	\$ 30,682	\$ 5 062,500
Soft Costs	23% \$ 78 02	\$ 68,098	\$ 11 897,325
Contingency	5% \$ 12 46	\$ 10,556	\$ 1,900,125
Total Development Cost	\$ 429 67	\$ 436,833	\$ 65,524,950

Unit & Revenue Information							
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Price/SF	\$Pnce/Unit	Total \$Sales
Studio	20%	500	33	16,500	\$ 525 00	\$ 262,500	\$8,662,500
1-Bedroom	33%	717	55	39,435	\$ 525 00	\$ 376,425	\$20,703,375
2-Bedroom	47%	1,115	76	84,740	\$ 525 00	\$ 585,375	\$44,488,500
3-Bedroom	0%	1,350	0	-	\$ 525 00	\$ 708,750	\$0
	100%	854	164	140,675	\$ 525 00		\$73,854,375
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Pnce/SF	\$Price/Unit	Total \$Sales
Studio	19%	501	3	1,503	\$ 275 09	\$ 137,819	\$413,456
1-Bedroom	31%	630	5	3,150	\$ 249 01	\$ 156,877	\$784,387
2-Bedroom	50%	1,020	8	8,160	\$ 172.51	\$ 175,965	\$1,407,719
3-Bedroom	0%	1,300	0	-	\$ 150 16	\$ 195,204	\$0
		801	16	12,813	\$ 203 35		\$2,605,562
Unit Sub-Totals			180	153,488			\$76,459,937
Parking Revenue			180			\$ 40,000	\$7,200,000
Total Revenue							\$83,659,937

Capital	Required
Debt	80% 52,419,960
Equity	20% 13,104,990

Less Cost of Sales	5%	(\$4,182,997)
Less Total Cost		(\$65,524,950)
Less Warranty	\$2,000 per unit	(\$360,000)
Net Profit		\$13,591,990
Return on Cost		20 7%
IRR		27 9%

Table 22. OPIZ High-Rise Condominium - 50% of Bonus @ 50/50 split between 50% & 80% of AMI

Table 23. Base Case High-Rise Rental Scenario

Inclusionary Zoning Economic Feasibility

High Rise Style Market Rental

Property Information	
Land Area	38 400
Zoning	R-5-E
FAR	5 00
GSF Capacity	192,000
Lot Occupancy	75%
Building Information	
Foot Print	28 800
Height	90
Floor to Floor	11 0
Floors	8 0
Efficiency Factor	85%
NSF	163 200
Number of Units	200
Parking Ratio	1 00
Parking Spaces	200
Min SF per Space	375
Min Parking SF	75,000
Min Parking Levels	2

Development Costs		Per GSF	Per Unit/Space	Totals
Land	\$	90 00	\$ 86,400	17 280,000
Hard Cost	\$	165 00	\$ 158 400	31 680,000
Parking		75 00	\$ 28 125	5 625,000
Soft Costs	18%	51 17	\$ 49,127	9 825,300
Contingency	5%	9 71	\$ 9,326	1,865,250
			\$ 244 878	48,995,550
Total Development Cost	\$	345 19	\$ 331,378	68,275,550

Inflators	
Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Assumptions	
Debt Financing	
Interest Rate	6 50%
Term	30
Debt Ratio	1 20
Loan Payment	\$ 3 605,082
Max Loan Amount	(\$47 077,601)
Cap Rate	7 35%
Estimated Value	\$58 858,486
LTV	80 0%
Required Equity	\$ 19 197 949

Unit & Revenue Information						
Unit Information	Unit Mix	Avg Market Size	Units	Unit NSF	\$Rent/NSF	Monthly/Unit
Studio	10%	510	20	10 200	\$	2 80
1-Bedroom	60%	700	120	84 000	\$	2 80
2-Bedroom	30%	1 150	60	69 000	\$	2 80
3-Bedroom	0%	1 350	0	-	\$	2 80
	100%	818	200	163 200	\$	2 80
Parking Revenue					\$	225
Total Revenue						\$540,000
						\$6,023,520

Capital to Cost		Required
Debt	71%	47 077,601
Equity	29%	19,197,949

Year	0	1	2	1	2	3	4	5	6	7	8	9	10	11
Gross Potential Rent				\$6,023,520	\$6,204,226	\$6,390,352	\$6,582,063	\$6,779,525	\$6,982,911	\$7,192,398	\$7,408,170	\$7,630,415	\$7,859,327	\$8,095,107
Less Vacancy/Economic Loss				(\$301 176)	(\$310 211)	(\$319 518)	(\$329 103)	(\$338 976)	(\$349 146)	(\$359 620)	(\$370 408)	(\$381 521)	(\$392 966)	(\$404 755)
Less Expenses				(\$760 000)	(\$782 800)	(\$806 284)	(\$830 473)	(\$855,387)	(\$881 048)	(\$907 480)	(\$934 704)	(\$962 745)	(\$991 628)	(\$1 021 376)
Less Taxes				(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)	(\$636 245)
Unleveraged Cash Flow	(\$66 275 550 00)	\$0	\$0	\$4,326 099	\$4 474 969	\$4,628 305	\$4,786,242	\$4 948 917	\$5,118 471	\$5,289,053	\$5,466,812	\$5,649,904	\$5 838 488	\$70,553 908
Unleveraged IRR	5 90%			6 5%	6 6%	7 0%	7 2%	7 5%	7 7%	8 0%	8 2%	8 5%	8 8%	
Leveraged Cash Flow				(\$3 605 082 27)	(\$3 605 082 27)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)	(\$3 605 082)
Leveraged IRR	6 36%			3 8%	4 5%	5 3%	6 2%	7 0%	7 9%	8 8%	9 7%	10 7%	11 6%	
Balance				\$ 721 016	\$ 869,887	\$ 1,023,223	\$ 1 181 160	\$ 1,343 834	\$ 1,511 389	\$ 1,683,971	\$ 1 881,730	\$ 2 044,821	\$ 2,233,408	\$ 23,364 930
Interest				(\$3 060 044)	(\$3 024,617)	(\$2 988 886)	(\$2 946 704)	(\$2 903 909)	(\$2,858 333)	(\$2 809 794)	(\$2 758 100)	(\$2 703 046)	(\$2 644 414)	(\$2 581 971)
Principal				\$ (545,038)	(\$580,466)	(\$618,196)	(\$658,379)	(\$701,173)	(\$748,750)	(\$795,288)	(\$846,982)	(\$902,036)	(\$960,668)	(\$1,023,112)

Table 24. CMIZ High-Density Rental Scenario

Inclusionary Zoning Economic Feasibility

High Rise IZ Rental CMIZ

IZ Changes	
IZ Density Bonus	20%
CMIZ 12% of Units	12%
FAR	6
GSF Capacity	230,400
IZ Bonus SF	38,400
Lot Occupancy	75%
Building Information	
Foot Print	8
Height	90
Floor to Floor	11.0
Floors	8.0
Efficiency Factor	85%
Total NSF	195,840
Market NSF	177,770
Affordable NSF	18,070
Total Units	240
Market Units	218
Affordable Units	24
Parking Ratio	0.91
Parking Spaces	218
Min SF per Space	375
Min Parking SF	81,750
Min Parking Levels	3

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75.00	\$ 72,000	\$ 17,280,000
Hard Cost	\$ 165.00	\$ 158,400	\$ 38,016,000
Parking	\$ 75.00	\$ 28,125	\$ 6,131,250
Soft Costs	18% \$ 57.59	\$ 46,070	\$ 11,058,905
Contingency	0% \$ -	\$ -	\$ -
Total Development Cost	\$ 377.52	\$ 362,421	\$ 72,484,155

Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Financing	
Interest Rate	6.50%
Term	30
Debt Ratio	1.20
Loan Payment	\$ 4,121,228
Max Loan Amount	(\$53,817,781)
Cap Rate	7.35%
Estimated Value	\$87,285,355
LTV	80.0%
Required Equity	\$ 18,666,374
Weighted Average Calculation	

Unit & Revenue Information						
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Rent/NSF	Monthly/Unit
Studio	10%	507	21	10,647	\$ 2.80	\$ 1,420
1-Bedroom	60%	710	131	93,010	\$ 2.80	\$ 1,988
2-Bedroom	30%	1,155	64	73,920	\$ 2.80	\$ 3,234
3-Bedroom	0%	1,350	0	-	\$ 2.80	\$ 3,780
	100%	816	216	177,677	\$ -	\$ 5,966,587
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Rent/NSF	Monthly/Unit
Studio	14%	510	3	1,530	\$ 1.99	\$ 1,016
1-Bedroom	62%	620	13	8,060	\$ 1.87	\$ 1,181
2-Bedroom	38%	1,080	8	8,480	\$ 1.23	\$ 1,306
3-Bedroom	0%	1,300	0	-	\$ 1.12	\$ 1,451
		753	24	18,070	\$ 1.58	\$ 343,046
Unit Sub-Totals		815	240	195,647		\$6,309,633
Parking Revenue			218			\$ 225
Total Revenue						\$6,886,233

Capital to TDC	Required
Debt	74% 53,817,781
Equity	26% 18,666,374

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Gross Potential Rent				\$6,898,233	\$7,105,180	\$7,318,336	\$7,537,886	\$7,764,022	\$7,998,943	\$8,238,851	\$8,483,957	\$8,738,476	\$9,000,630	\$9,270,849
Less Vacancy/Economic Loss				(\$344,912)	(\$355,259)	(\$365,817)	(\$376,894)	(\$388,201)	(\$399,847)	(\$411,843)	(\$424,198)	(\$436,924)	(\$450,031)	(\$463,532)
Less Expenses				(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)	(\$912,000)
Less Taxes				(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)	(\$695,848)
Unleveraged Cash Flow				\$4,945,474	\$5,142,073	\$5,344,671	\$5,553,143	\$5,767,973	\$5,989,248	\$6,217,181	\$6,451,911	\$6,693,704	\$6,942,750	\$7,199,789
Unleveraged IRR				6.8%	7.1%	7.4%	7.7%	8.0%	8.3%	8.6%	8.9%	9.2%	9.6%	
Leveraged Cash Flow				(\$4,121,228.00)	(\$4,121,228.00)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)	(\$4,121,228)
Leveraged IRR				4.4%	5.5%	6.6%	7.7%	8.8%	10.0%	11.2%	12.5%	13.8%	15.1%	
				Balance	(\$53,194,709)	(\$52,531,137)	(\$51,824,433)	(\$51,071,793)	(\$50,270,231)	(\$49,416,568)	(\$48,507,417)	(\$47,539,171)	(\$46,507,989)	(\$45,409,781)
				Interest	(\$3,498,156)	(\$3,457,656)	(\$3,414,624)	(\$3,368,588)	(\$3,319,667)	(\$3,267,565)	(\$3,212,077)	(\$3,152,982)	(\$3,090,046)	(\$2,951,636)
				Principal	\$ (623,072)	(\$663,672)	(\$706,704)	(\$752,640)	(\$801,561)	(\$853,663)	(\$909,151)	(\$968,246)	(\$1,031,182)	(\$1,098,209)

Table 25. OP/LZ High-Density Rental Scenario 50% of Bonus @ 80% of AMI

Inclusionary Zoning Economic Feasibility

High Rise IZ Rental 50% @ 80% of AMI

IZ Changes	
IZ Density Bonus	20%
IZ Requirement	50%
FAR	6
GSF Capacity	230,400
IZ Bonus SF	38,400
Lot Occupancy	75%
Building Information	
Foot Print	28 800
Height	90
Floor to Floor	11 0
Floors	8 0
Efficiency Factor	85%
Total NSF	195 840
Market NSF	179 520
Affordable NSF	16 320
Total Units	240
Market Units	220
Affordable Units	21
Parking Ratio	0 91
Parking Spaces	218
Min SF per Space	375
Min Parking SF	81 750
Min Parking Levels	3

Development Costs	Per GSF	Per Unit	Totals
Land	\$ 75 00	\$ 72 000	\$ 17,280,000
Hard Cost	\$ 165 00	\$ 158 400	\$ 38 016,000
Parking	\$ 75 00	\$ 28,125	\$ 6 131 250
Soft Costs	18% \$ 57 59	\$ 46,070	\$ 11 056 905
Contingency	0% \$ -	\$ -	\$ -
Total Development Cost	\$ 377 52	\$ 362,421	\$ 72,484,155

Unit & Revenue Information					
Unit Information	Unit Mix	Avg Market Size	Units	Unit SF	\$Rent/NSF
Studio	10%	507	22	11,154	\$ 2.80
1-Bedroom	60%	710	133	94,430	\$ 2.80
2-Bedroom	30%	1,155	64	73,920	\$ 2.80
3-Bedroom	0%	1,350	0	-	\$ 2.80
	100%	816	219	179 504	\$ 2.80
					\$6 031,334
Affordable Units	Unit Mix	Avg AU Size	Units	Unit SF	\$Rent/NSF
Studio	10%	510	2	1 020	\$ 2.36
1-Bedroom	52%	620	11	6,820	\$ 2.06
2-Bedroom	38%	1,060	8	8,480	\$ 1.45
3-Bedroom	0%	1,300	0	-	\$ 1.36
		777	21	16 320	\$ 1.76
					\$345 144
Unit Sub-Totals		816	240	195 824	
					\$6,376,478
Parking Revenue			218		\$ 225
Total Revenue					\$588,600

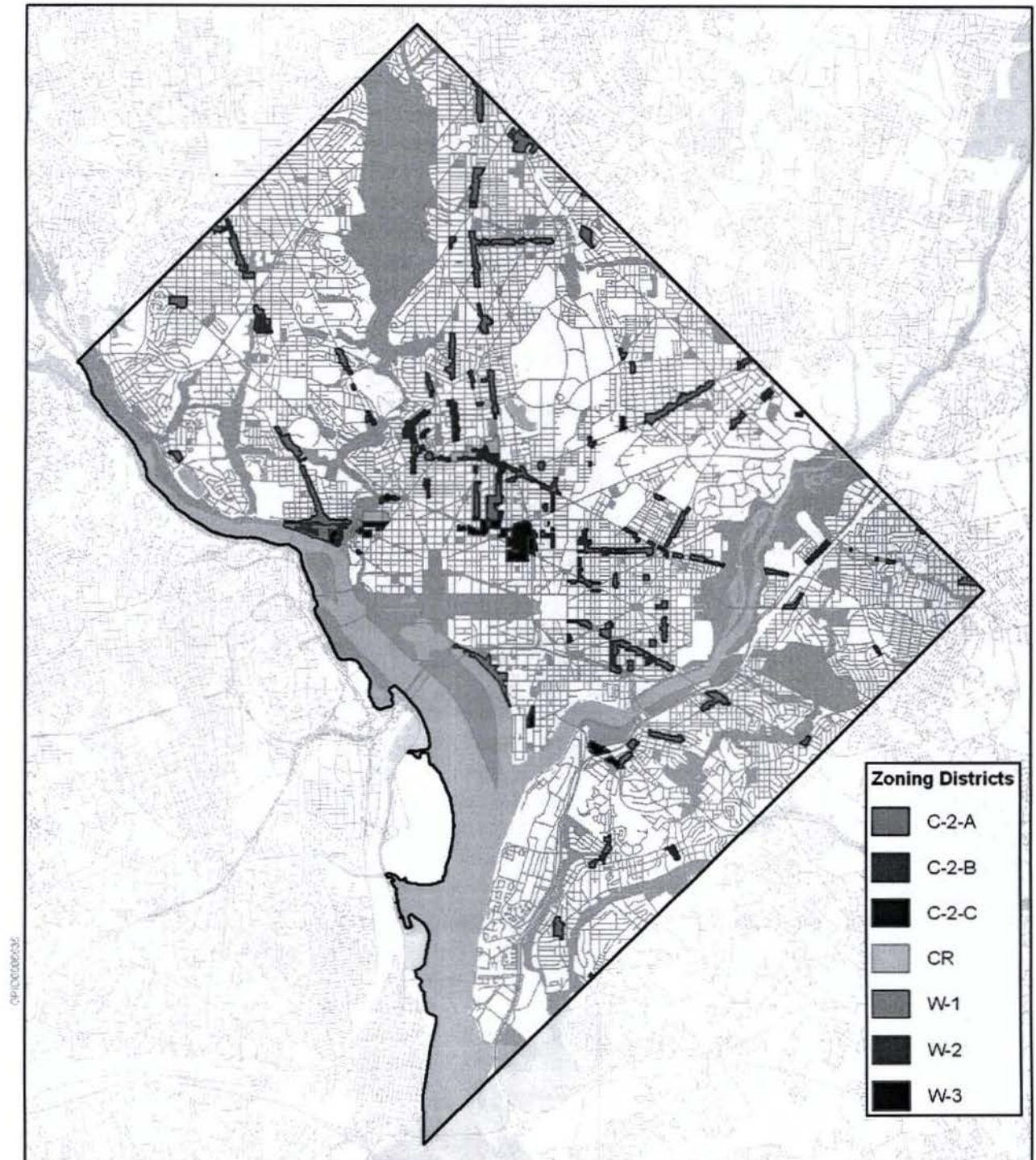
Capital to Cost	Required
Debt	75% 54,508,835
Equity	25% 17,975,320

Rent Growth	3%
Vacancy/Economic Loss	5%
Expense Growth	3%
Debt Financing	
Interest Rate	6.50%
Term	30
Debt Ratio	1.20
Loan Payment	\$ 4 174,147
Max Loan Amount	(\$54 508 835)
Cap Rate	7.35%
Estimated Value	\$68 149 341
LTV	80.0%
Required Equity	\$ 17 975 320
Weighted Average Calculation	

63% 1 762377451

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Gross Potential Rent				\$6 965 078	\$7 174 031	\$7,389,252	\$7 610,929	\$7 839,257	\$8,074,435	\$8 316 668	\$8,566 168	\$8,823,153	\$9,087 848	\$9 360,483
Less Vacancy/Economic Loss				(\$348 254)	(\$358 702)	(\$369 463)	(\$380 546)	(\$391 963)	(\$403 722)	(\$415 833)	(\$428 308)	(\$441 158)	(\$454 392)	(\$468 024)
Less Expenses	3800 per unit			(\$912 000)	(\$912 000)	(\$912 000)	(\$912 000)	(\$912 000)	(\$912 000)	(\$912,000)	(\$912,000)	(\$912 000)	(\$912 000)	(\$912 000)
Less Taxes	0 0096			(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)	(\$695 848)
UnLeveraged Cash Flow		(\$72 484 155)	\$0	\$5 008,977	\$5,207,481	\$5,411,941	\$5,622,535	\$5,839,446	\$6,062 865	\$6 292,987	\$6,530 012	\$6 774,147	\$7,025,607	\$7 284,888
UnLeveraged IRR	6.82%		Cash on Cash Return	6.9%	7.2%	7.5%	7.8%	8.1%	8.4%	8.7%	9.0%	9.3%	9.7%	
Leveraged Cash Flow		(\$17 975 320)	\$0	(\$4 174 147 16)	(\$4 174 147 16)	(\$4 174 147)	(\$4 174 147)	(\$4,174 147)	(\$4 174 147)	(\$4 174 147)	(\$4 174 147)	(\$4 174 147)	(\$4 174,147)	(\$4 174 147)
Leveraged IRR	9.46%			\$ 834,829	\$ 1,033,334	\$ 1,237,794	\$ 1 448 388	\$ 1,665,299	\$ 1,888 718	\$ 2,118 839	\$ 2 355,864	\$ 2,600,000	\$ 2,851,460	\$ 3,093,254
				4.6%	5.7%	6.9%	8.1%	9.3%	10.5%	11.8%	13.1%	14.5%	15.9%	
			Balance		(\$53 877 762)	(\$53 205 669)	(\$52 489 891)	(\$51 727 587)	(\$50 915,732)	(\$50,051 108)	(\$49 130 283)	(\$48 149 604)	(\$47 105 181)	(\$45 992 871)
			Interest		(\$3 543 074)	(\$3 502 055)	(\$3 458 369)	(\$3 411 843)	(\$3 362 293)	(\$3 309 523)	(\$3 253 322)	(\$3 193 468)	(\$3 129 724)	(\$3 061 837)
			Principal		(\$631,079)	(\$672 093)	(\$715 779)	(\$762 304)	(\$811,854)	(\$864,625)	(\$920,825)	(\$980,679)	(\$1,044,423)	(\$1,112,310)

Map 1. Zoning Areas Requiring IZ Adjustments to Lot Occupancy and Height



★ ★ ★ Government of the
District of Columbia
Anthony A. Williams, Mayor

Office of Planning ~ July 14, 2005

This map was created for planning
purposes from a variety of sources.
It is neither a survey nor a legal document.
Information provided by other agencies
should be verified with them where appropriate.

**District of Columbia
Zoning Areas Requiring
IZ Adjustments**

