

MEMORANDUM

To: Tyler Bump, Senior Economic Planner
City of Portland Bureau of Planning and Sustainability

From: Dan Guimond and David Schwartz,
Economic & Planning Systems

Subject: Multi-Dwelling Unit district density bonus
residual land value analysis; EPS #153070

Date: May 18, 2018

The Economics of Land Use



This memorandum outlines the process, objectives, and findings of an analysis the City of Portland Bureau of Planning and Sustainability (BPS) engaged Economic & Planning Systems (EPS) to undertake regarding whether proposed density bonuses would create sufficient additional residual land value to compensate for newly-established regulatory requirements in Multi-Dwelling Unit zone districts.

Summary of Findings

- 1) For sale townhomes continue to be the most feasible development type in the lower density RM1 zone in inner neighborhoods due to market conditions.
- 2) Rental stacked flat development types in the RM1 zone are feasible, especially in eastern neighborhoods where rents could support this development type over ownership townhomes.
- 3) Larger multifamily ownership development types in the RM2 and RM3 demonstrate higher feasibility than rental buildings when the market can support this development type.
- 4) The affordable housing density bonus in the RM2 and RM3 zones are marginally effective for rental development types that cross the threshold for compliance with the Inclusionary Housing (IH) program. Development in this product type could still be feasible depending on market conditions and supportable residual values.

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Process

The process began with discussions with City BPS staff to understand specific goals and desired outcomes of the effort. After developing a preliminary modeling framework, EPS met with and interviewed numerous developers that are active in areas of the city, primarily those active in MDU zone districts. One purpose of these meetings was to gain an understanding of the market's perspective and receptivity to the proposed entitlement changes. Another purpose of the meetings was to open lines of communication with the specific developers to seek review of critical cost and revenue assumptions that would be used in the modeling framework. It should be noted that EPS also obtained additional feedback from numerous other developers who were contacted by telephone to be interviewed.

Objectives

The City is currently in the process of substantially re-writing its Multi-Dwelling Unit (MDU) zone districts. Whereas the zone districts were previously defined on a per-unit basis, the City would like to move to a FAR basis to be consistent with the approach in other zones in the city. Because the City has observed under-building in a few geographies that include MDU zone districts, this analysis is intended to demonstrate the changes to the MDU zones do not disincentivize higher density development. The core objectives of this effort are to:

- Re-evaluate the IH density bonus under each MDU zoning category, and to
- Identify whether the proposed density bonus under each zoning category is sufficient to offset the "costs" associated with the new IH ordinance requirements, new construction excise tax (CET), and revamped system development charges (SDC).

Several guiding questions are also at the root of the City's motivation to recalibrate these MDU zone districts.

- Can the City facilitate better use of its entitlements?
- What is the value of the zoning flexibility and density bonus increase in each district?
- Will the market shift from townhomes to stacked flats (i.e. rental or apartment projects) if more flexibility is allowed in these zone districts?

Technical Analysis

To accommodate these technical questions, EPS structured a static pro forma to understand the residual land value (RLV) and profitability implications of four regulatory program scenarios (for each development prototype). That is, for each development prototype, performance metrics were calculated for the following regulatory scenarios:

- No IH or CET
- IH and CET, but no incentives
- IH and CET, with current incentives
- IH and CET, with bonus FAR

It is intended that the composite of this technical analysis will assist in quantifying the value created by additional entitlements (i.e. bonus FAR) and whether or not that value is sufficient to compensate for the “costs” associated with regulatory requirements (i.e. IH and CET) that are perceived to be one explanation of the market’s hesitation to build in some of the MDU zones.

Prototype assumptions

To inform the technical analysis, the City BPS worked with OTAK to identify a series of prototypical development scales and building forms in three zone districts: R1, R2, and RH. In total, 12 building form prototypes were designed, including townhome and stacked flat concepts. Each prototype was scaled in total building square footage, open space, set-back requirements, height, site dimensions, lot coverage, common area, number of units, average square feet of units, and the number of parking spaces, if any.

- Prototype #2 – Inner neighborhood R2 zone (50x100 lot) – stacked flats, townhomes
- Prototype #3 – Eastern neighborhood R2 zone (95x180 lot) – stacked flats, townhomes
- Prototype #4 – Inner neighborhood R1 zone (100x100 lot) – stacked flats, townhomes
- Prototype #6 – Eastern neighborhood R1 zone (95x180 lot) – stacked flats, townhomes
- Prototype #8 – Inner neighborhood RH zone - (100x100 lot) – stacked flats
- Prototype #10 – Inner neighborhood RH zone (100x100 lot) – stacked flats
- Prototype #12 – Eastern neighborhood RH zone (140x310 lot) – stacked flats

Inputs and Assumptions

Development Program

The development program assumptions used were structured initially with the City and OTAK. Additionally, feedback from the development community active with projects in the close-in neighborhoods—East Portland, Northeast Portland—and other outer neighborhoods were consulted at length to vet the initial development program assumptions, development costs, and appropriate ranges of supportable market sales prices and rents, depending on neighborhood. For the proforma, the parameters of prototypes were simplified to provide greater uniformity for comparison of the impacts of regulatory and density changes on financial returns. Following are the core type of assumptions used for each development prototype:

- Site area: parcel sizes among the prototypes situated in R1 and R2 zones range between 5,000 and 17,100 square feet, and the parcel size of prototypes in the RH zones are either 10,000 or 43,100 square feet.
- Total units: development programs in the R1 and R2 prototypes range between 2 and 29 units, but are generally smaller than 20 units, and the prototypes in the RH zones range between 18 and 113 units.
- Average unit size: while there is variation in the unit sizes and distribution of units within a project, average unit sizes were applied uniformly to individual prototypes. Stacked flats ranged between 775 and 975 square feet, and townhome units ranged between 1,400 and 2,050 square feet.

- Gross floor area (GFA): the GFA was estimated based on the sum of total unit square footage plus any gross square footage for tuck-under parking plus any space for common area, which was relevant to the stacked flat projects. Common area was assumed at 10 percent of GFA in smaller stacked flat projects and 15 percent of GFA in larger-scale projects.
- Parking: the development community was clear regarding the necessity of parking to meet market demands for projects not close to transit. As such, each development program includes parking. Stacked flat projects were structured with 1 parking space per 2 units, and townhome projects were structured with 1 parking space per 1 unit.

Development Costs

The inputs and assumptions used for development costs were vetted with developers active in the areas of MDU zone districts. While varying degree of details were discussed with developers regarding components of total development costs, the following factors were used for the major development program components:

- Hard costs (HC): hard costs for projects of these scales ranged between \$140 and \$160 per square foot, excluding parking costs, which are calculated separately. At this level of HC, total development costs (TDC) for projects range between approximately \$200 and \$225 per square foot (not including land), as shown in the tables below.
- Parking: to give the modeling scenarios greater flexibility, parking costs on a per-space basis were estimated separately. Feedback generally indicated that tuck-under spaces were most common for these scale projects and were \$30,000 per space. For the larger-scale projects in which podium-style construction might be used, this factor was still considered reasonable (translated as \$100 per square foot HC) given that the GFA of parking was just one-third of the floor plate at most in the highest density scenarios (RH).
- Soft costs: as a percent of HC, the soft cost assumption was used as a gauge to calibrate the total soft costs, which include independently calculated system development charges, and a few other individual soft costs. Soft costs on each prototype evaluated ranged between 30 and 35 percent, consistent with the feedback from the development community.
- SDCs: included in the modeling were individual calculations of the SDCs for sanitary sewer, stormwater, parks and recreation, as well as Portland Bureau of Transportation (PBOT). The methodologies for calculating each SDC were pulled from the City's respective websites (from Portland Development Services) and applied as such to each pro forma, as shown in the tables below. Each SDC was calculated according to the City's requirements and by the size of unit or location in the city.
- Inclusionary zoning: when applicable, the City's recently established IH requirements were applied to the prototypes exceeding the threshold of applicability of 20 units. Based on the level of affordability, the appropriate incentives were also applied to each prototype by relevant regulatory scenario, as described below.
- Construction excise tax (CET): each prototype also includes the appropriate estimation of the City's recently adopted CET, calculated with the International Code Council's (ICC) Building Valuation Data (BVD) for 2017.

- General liability insurance premium: to give the modeling structure additional flexibility and nuance, a risk premium was included for all for-sale projects (i.e. stacked flat projects). Based on feedback from insurance providers as well as the development community, this premium typically increases GL insurance costs by approximately \$10,000 per unit.
- Construction loan interest carry: this soft cost also builds nuance into the pro forma, adding additional costs associated with the financing of conventional debt used for the construction of a project. This factor accounts for the construction loan interest rate, which ranges between 5.5 and 6.5 percent depending on the scale of the project, the construction period—which ranges between 10 and 16 months—and the loan to cost ratio, which is generally 75 percent for most (not all) developers.

Development Revenues

Again, the inputs and assumptions used for development revenue potentials were vetted with developers active in the areas of MDU zone districts. And while the market supportability for sales prices per square foot and rents per square foot per month vary greatly between districts and parts of the city, low and high ranges were used in the model with sensitivities performed for each. The following assumptions were used in the pro forma, related to revenue generation:

- Market-rate sales prices: because the markets in which these zone districts are situated vary widely, the model's assumptions generally reflect sales prices not as strong as close-in neighborhoods, but not as soft as eastern-most neighborhoods. Feedback from the development community indicates a general consensus about price points converging around the \$450,000 mark. Some product price points for ownership stacked flats range between \$350,000 and \$450,000, but for townhomes, price points are generally falling in the range of \$450,000 and \$750,000 or higher. The model assumes stacked flat price points of \$350,000 to \$460,000 and assumes townhome pricing between \$550,000 and \$740,000.
- Market-rate rents: the development community acknowledges that the market for rental product is weaker than that of a few years ago. As such, rental projects are not as readily feasible as they were. As with the market differences in sales prices, there are significant differences between rental rates by market. For close-in neighborhoods, rental projects are more capable of achieving rents around \$3.00 per square foot, but neighborhoods in East Portland struggle to achieve this high rent level. It should be noted that even at \$2.85 per square foot in East Portland (as assumed in the RH prototypes)—which reflect 120 percent median household income (MHI) according to the Portland Bureau of Housing's (PHB) 2018 income limits and affordable price maximums—that these prototypes as modeled possess negative residual land values. It should also be noted that this general rental rate range has been applied only to the stacked flat prototype configuration, whereas the townhomes when analyzed as rental projects use lower market rents; i.e. given the size of units and supportability of the market for high monthly payments, the model uses rents averaging \$2.00 per square foot for 4- and 5-bedroom products rather than \$2.85 to \$3.00.
- Affordable housing sales prices: the maximum sales prices in the model are based directly on the limits as defined by PHB's 2016 schedule of incomes, sales prices by unit size, and maximum rents by unit size.
- Affordable housing rents: the maximum sales prices in the model are based directly on the limits as defined by PHB's 2016 schedule of incomes, sales prices by unit size, and maximum rents by unit size.

Regulatory Requirements & Incentives

In addition to the SDCs and CET costs, which are identified as components of soft costs (calculated individually in the pro forma), EPS identified the following regulatory requirements for each development prototype and scale:

- Applicability of the IH ordinance
- Application of IH options (i.e. providing 20 percent of units at 60 percent AMI or providing 10 percent of units at 80 percent AMI)
- Current density bonus under existing MDU zone districts
- Proposed density bonus for MDU zone districts

Proforma Modeling

The outcomes of the modeling are structured to identify a selection of metrics that, when compared to one another, provide an understanding of whether or not and to what extent the additional bonus FAR contributes a net positive offsetting effect of the costs associated with the IH, CET, and revamped SDCs for each prototype in each of the MDU zone districts. Again, the four scenarios are as follows:

- (A) No IH or CET
- (B) IH and CET, but no incentives
- (C) IH and CET, with current incentives
- (D) IH and CET, with bonus FAR

The following residual land value metrics are calculated in the model:

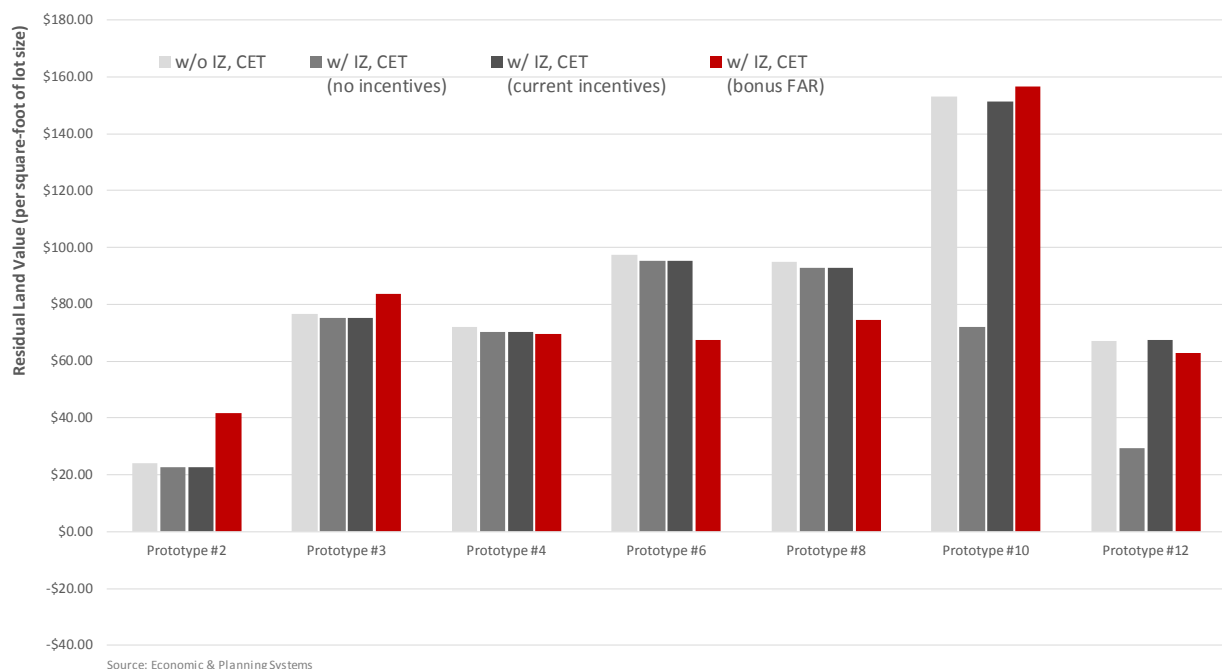
- Difference in RLV between (A) and (B): this value identifies the “costs” associated with the regulatory requirements absent the incentives currently available.
- Difference in RLV between (B) and (C): this value identifies to what extent the current incentives offset the costs associated with current regulatory requirements.
- Difference in RLV between (B) and (D): this value identifies to what extent the additional bonus FAR offsets the costs associated with current regulatory requirements.

Findings

For-Sale Prototypes

- **R2:** The proposed bonus has a net positive impact on the RLV of the lower-density prototypes (#2 and #3), situated in the R2 district.
- **R1:** There is a slightly net negative impact to the prototype #4 in the R1 district when the proposed bonus is applied to base zoning (increasing from 10 to 16 units). There is, however, a more substantial net negative impact to the RLV to the prototype #6 in the R1 district (increasing from 19 to 29 units). This impact is the result of crossing the 20-unit threshold and requiring compliance with Inclusionary Housing program requirements. For the larger building type utilizing the full density bonus to maintain parity with the base entitlement RLV, achievable sales prices would need to increase beyond what is currently supportable in the market.
- **RH:** In the prototype #8, the proposed bonus has a net negative impact on the project's RLV where the additional density crosses the threshold of the IH policy applicability. The proposed bonus has a net positive impact on RLV to the prototype #10 but not the prototype #12. The scale of prototype #10 is smaller (54 versus 113 units) and is thus less sensitive to the substantial increase in costs associated with: a) building more GFA; and b) building more units that must satisfy the IH policy. This finding is also consistent with the understanding that developers will utilize the density bonus to the extent that adding density does not require a higher-cost building construction type.
- Another finding of the RLV analysis relates specifically to prototypes #6 and #8. Because of the wide range in land values throughout non-Central City Portland, this analysis does not suggest that the proposed bonus FAR will not work in areas where the land value is actually equal to or lower than the estimated RLV in the analysis. In other words, developments under the proposed bonus FAR for prototypes #6 and #8 may still be feasible where land values differ.

Figure 1
Residual Land Value Summary by Scenario (as for-sale projects)



Rental Prototypes

- **R2:** As with this scale of for-sale projects, the proposed bonus has a net positive impact on the RLV of the lower-density stacked flat prototypes in both inner and eastern neighborhoods situated in the R2 district.
- **R1:** There is also a slightly net positive impact to the prototype #4 in the R1 district when the proposed bonus is applied to base zoning (increasing from 10 to 16 units). But there is a substantial net negative impact to the RLV to the prototype #6 in the R1 district (increasing from 19 to 29 units), because of the cost impacts of complying with the Inclusionary Housing program requirements. Again, at this scale, the only compensating mechanism (i.e. change in assumption yielding an accretive result to the RLV) would be an increase to the market rents beyond what is currently supportable in the market.
- **RH:** In the prototype #8, as with prototype #6, the additional density under the proposed bonus means that a project crosses the threshold of the IH policy applicability. As such, the RLV for the first three regulatory scenarios is net positive, but is negative in the proposed bonus scenario. As for the other prototypes, the results indicate two patterns: 1) that the Inclusionary Housing requirements have a net negative impact on RLV to these prototypes in general; 2) that with the current incentive structures, the RLV is brought into a positive RLV; and 3) that the additional density in projects of this scale does not increase RLV to market supportable levels unless rents can be pushed beyond current market conditions.
- In general, it should be clarified that the RLV in prototypes #10 and #12 under the proposed bonus FAR are negative to the extent they are for a variety of reasons. While hard costs are held constant and not assumed to cross a threshold into a higher density building construction type, soft costs are applied consistently at 30 to 35 percent of hard costs, which may be contributing to some degree of this negative RLV effect. The major reason why these results are considerably more negative is that for each additional unit that can be built within the form of the proposed bonus FAR, additional IH units must be set-aside.

Figure 2
Residual Land Value Summary by Scenario (as rental projects)

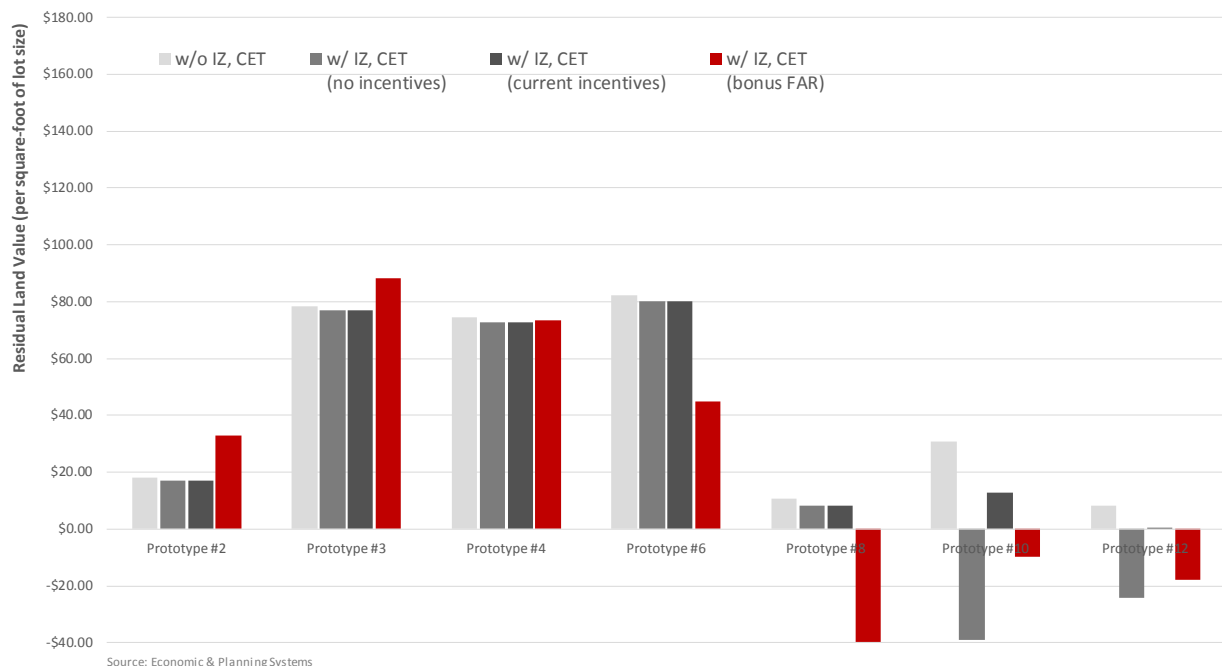


Table 1
Residual Land Value Summary by Scenario

	Stacked flats				Townhomes			
	w/o IZ, CET	w/ IZ, CET (no incentives)	w/ IZ, CET (current incentives)	w/ IZ, CET (bonus FAR)	w/o IZ, CET	w/ IZ, CET (no incentives)	w/ IZ, CET (current incentives)	w/ IZ, CET (bonus FAR)
Prototype (as a for-sale project)								
Prototype #2	\$24.15	\$22.85	\$22.85	\$41.85	\$51.08	\$49.78	\$49.78	\$49.78
Prototype #3	\$76.51	\$75.22	\$75.22	\$83.83	\$49.67	\$48.37	\$48.37	\$48.37
Prototype #4	\$72.13	\$70.30	\$70.30	\$69.64	\$129.82	\$127.35	\$127.35	\$127.35
Prototype #6	\$97.47	\$95.47	\$95.47	\$67.37	\$99.00	\$96.80	\$96.80	\$96.80
Prototype #8	\$95.09	\$92.75	\$92.75	\$74.43	---	---	---	---
Prototype #10	\$153.02	\$71.93	\$151.35	\$156.70	---	---	---	---
Prototype #12	\$66.95	\$29.42	\$67.54	\$62.75	---	---	---	---
Prototype (as a rental project)								
Prototype #2	\$18.27	\$16.97	\$16.97	\$33.03	\$87.73	\$86.43	\$86.43	\$86.43
Prototype #3	\$78.24	\$76.95	\$76.95	\$88.23	\$60.01	\$58.71	\$58.71	\$58.71
Prototype #4	\$74.41	\$72.58	\$72.58	\$73.28	\$151.55	\$149.08	\$149.08	\$149.08
Prototype #6	\$82.14	\$80.15	\$80.15	\$44.94	\$96.39	\$94.19	\$94.19	\$94.19
Prototype #8	\$10.71	\$8.37	\$8.37	-\$39.69	---	---	---	---
Prototype #10	\$30.75	-\$38.92	\$12.80	-\$9.57	---	---	---	---
Prototype #12	\$8.25	-\$24.01	\$0.56	-\$17.79	---	---	---	---

Source: Economic & Planning Systems

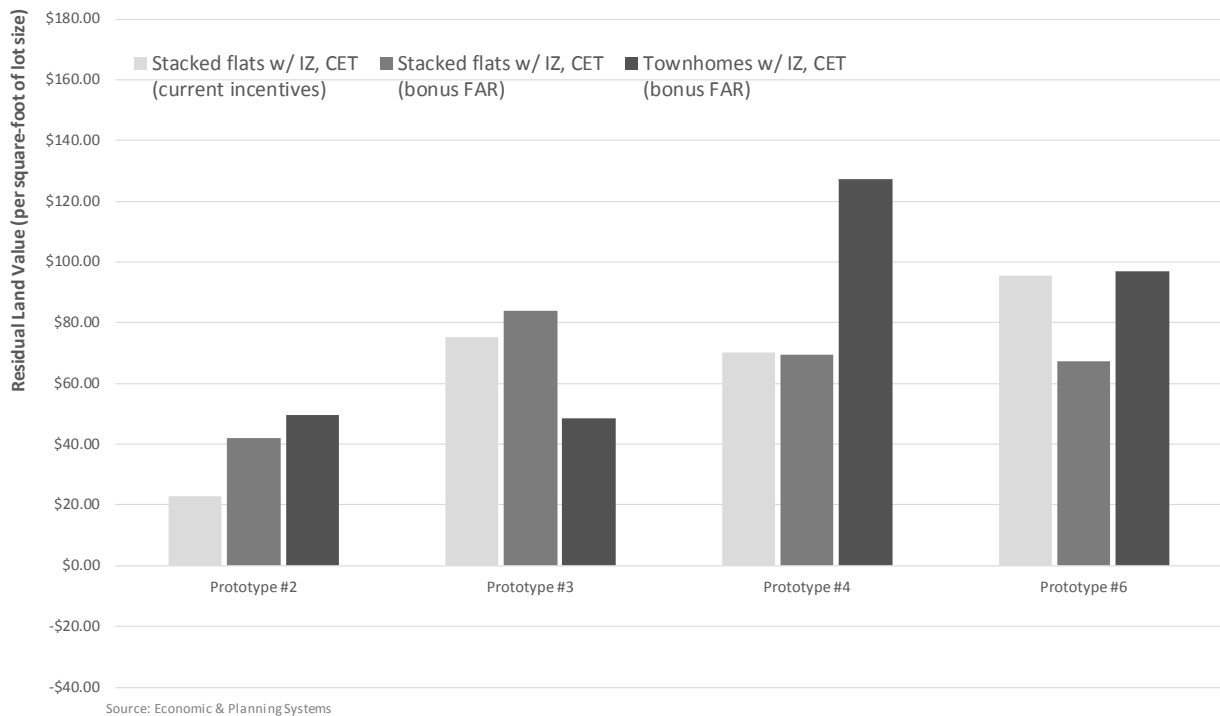
H:\153070-Portland On-Call Economic Services\Models\Project 2 - MDU Analysis\153070-MDU Model-051518.xlsx\T5 - Summary RLV per sqft

Market Considerations

The following analysis of findings deals with a disposition and development consideration in zone districts where the additional density (via a bonus FAR) creates an opportunity to build a different type of project, such as stacked flats as opposed to townhomes, in a neighborhood where townhomes would be more commonplace.

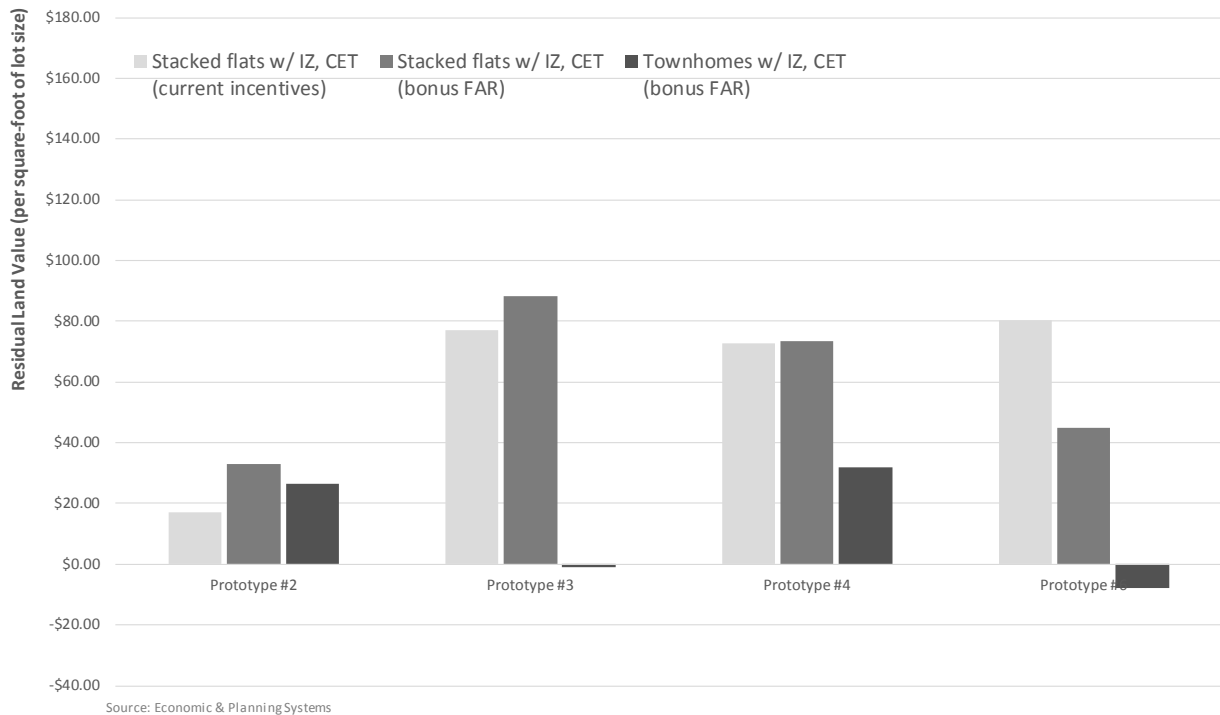
- The following figure provides a visual comparison of RLVs for prototypes in R1 and R2 districts showing the RLV of stacked flats versus townhomes as for-sale projects.
- R2: The findings of the analysis for the prototype #2 indicate that under the proposed bonus structure, townhomes have a slightly higher land value (this finding could also vary by location depending on the actual cost of land), but that the prototype #3 in the R2 district would have a higher RLV under the stacked flat configuration than a townhome. This would imply that developers of this prototype in this particular zone would begin contemplating the development of stacked flats (as for-sale projects) rather than townhomes.
- R1: The findings of the analysis for prototypes #4 and #6 indicate that under current market conditions, the townhome possesses a higher RLV than stacked flats (as for-sale projects).

Figure 3
Comparison of RLV Among Different Prototypes (as for-sale projects)



- The following figure provides a visual comparison of RLVs for prototypes in R1 and R2 districts showing the RLV of stacked flats versus townhomes as rental projects.
- R2: Because of the market supportability for high-enough rents in the townhome project, these findings indicate that stacked flats as a rental project would have a higher RLV. The finding is consistent for the prototype #3, as well.
- R1: The findings of the analysis for prototypes #4 and #6 also indicate that townhomes as a rental project would have lower RLVs than stacked flats.

Figure 4
Comparison



Comparison of RLV by Project Tenure

The following is a comparison of the RLV for each of these project prototypes to illustrate the consideration a developer might make in identifying whether or not to build a rental project, in so far as these assumptions represent current market conditions of supply and demand for for-sale and rental projects.

- This graphic illustrates the difference between the RLV for rental prototypes compared to for-sale prototypes under each scenario.
- The findings indicate that, in general, under current market conditions, rental townhomes have lower RLV than for-sale townhome projects, which is consistent with the market reality that townhome projects are typically built as for-sale products.
- The findings also indicate that for prototypes #3 and #4, the rental stacked flats generally have a higher RLV than the for-sale iterations do. This would also be consistent with the market reality that stacked flats of this scale (i.e. larger than 6 units) are typically brought to the market as rentals, not for-sale products.

Following are summary tables representing the RLV calculations for each prototype under each regulatory scenario.

Table 2
Prototype 2 Pro forma

Prototype 2								
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
<u>Construction Costs</u>								
Hard costs (per sqft of GFA)	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 946,111	\$ 650,000
<u>Parking Costs</u>								
Structured, tuck-under (per space)	\$ 120,000	\$ 60,000	\$ 120,000	\$ 60,000	\$ 120,000	\$ 60,000	\$ 180,000	\$ 60,000
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total (HC)	\$ 770,000	\$ 710,000	\$ 770,000	\$ 710,000	\$ 770,000	\$ 710,000	\$ 1,126,111	\$ 710,000
<u>Soft Costs (per sqft)</u>								
<u>System Development Charges</u>								
Sanitary Sewer	\$ 19,348	\$ 12,092	\$ 19,348	\$ 12,092	\$ 19,348	\$ 12,092	\$ 29,022	\$ 12,092
Stormwater	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089
Transportation (PBOT)	\$ 8,096	\$ 5,628	\$ 8,096	\$ 5,628	\$ 8,096	\$ 5,628	\$ 12,144	\$ 5,628
Parks & Recreation	\$ 36,776	\$ 25,102	\$ 36,776	\$ 25,102	\$ 36,776	\$ 25,102	\$ 55,164	\$ 25,102
Construction Excise Taxes (CET)	\$ -	\$ 6,352	\$ -	\$ 6,352	\$ -	\$ 6,352	\$ -	\$ 6,352
Other Soft Costs (as % of HC)	\$ 192,500	\$ 177,500	\$ 192,500	\$ 177,500	\$ 192,500	\$ 177,500	\$ 281,528	\$ 177,500
Subtotal (SC, excluding loan interest carry)	\$ 257,875	\$ 221,411	\$ 264,227	\$ 227,763	\$ 264,227	\$ 227,763	\$ 388,259	\$ 227,763
as % of HC	33%	31%	34%	32%	34%	32%	34%	32%
Construction Loan Interest	\$ 25,054	\$ 22,703	\$ 25,209	\$ 22,858	\$ 25,209	\$ 22,858	\$ 36,913	\$ 22,858
Total (SC)	\$ 282,929	\$ 244,114	\$ 289,437	\$ 250,621	\$ 289,437	\$ 250,621	\$ 425,172	\$ 250,621
<u>Cost-Reducing Incentives</u>								
SDC Waivers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CET Waivers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Cost-Reducing Incentives	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Development Costs (TDC) (excluding land)	\$ 1,052,929	\$ 954,114	\$ 1,059,437	\$ 960,621	\$ 1,059,437	\$ 960,621	\$ 1,551,283	\$ 960,621
per unit	\$ 263,232	\$ 477,057	\$ 264,859	\$ 480,311	\$ 264,859	\$ 480,311	\$ 258,547	\$ 480,311
per GFA sqft	\$ 211	\$ 191	\$ 212	\$ 192	\$ 212	\$ 192	\$ 213	\$ 192
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 40,000	\$ 20,000	\$ 40,000	\$ 20,000	\$ 40,000	\$ 20,000	\$ 60,000	\$ 20,000
<u>For-Sale Revenues</u>								
MR Revenues	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 2,185,500	\$ 1,476,000
AH Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Sales	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 2,185,500	\$ 1,476,000
Sales Marketing Costs	\$ (29,140)	\$ (29,520)	\$ (29,140)	\$ (29,520)	\$ (29,140)	\$ (29,520)	\$ (43,710)	\$ (29,520)
Total Sales Revenues	\$ 1,427,860	\$ 1,446,480	\$ 1,427,860	\$ 1,446,480	\$ 1,427,860	\$ 1,446,480	\$ 2,141,790	\$ 1,446,480
Unleveraged Hurdle Rate	\$ (142,786)	\$ (144,648)	\$ (142,786)	\$ (144,648)	\$ (142,786)	\$ (144,648)	\$ (214,179)	\$ (144,648)
Leveraged Hurdle Rate	\$ (214,179)	\$ (216,972)	\$ (214,179)	\$ (216,972)	\$ (214,179)	\$ (216,972)	\$ (321,269)	\$ (216,972)
Revenues, Less Profit	\$ 1,213,681	\$ 1,229,508	\$ 1,213,681	\$ 1,229,508	\$ 1,213,681	\$ 1,229,508	\$ 1,820,522	\$ 1,229,508
Revenues - TDC = Residual Land Value	\$ 120,752	\$ 255,394	\$ 114,244	\$ 248,887	\$ 114,244	\$ 248,887	\$ 209,239	\$ 248,887
Land Value (per sqft)	\$ 24.15	\$ 51.08	\$ 22.85	\$ 49.78	\$ 22.85	\$ 49.78	\$ 41.85	\$ 49.78
Land Value (per unit)	\$ 53,545	\$ 108,486	\$ 53,545	\$ 108,486	\$ 53,545	\$ 108,486	\$ 53,545	\$ 108,486
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (6,507)	\$ (6,507)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ 94,994	\$ -
<u>Rental Revenue Assumptions</u>								
MR Rental Income	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 167,400	\$ 98,400
AH Rental Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Gross Annual Revenues	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 167,400	\$ 98,400
Vacancy	\$ (5,580)	\$ (4,920)	\$ (5,580)	\$ (4,920)	\$ (5,580)	\$ (4,920)	\$ (8,370)	\$ (4,920)
<u>Operational Costs</u>								
O&M	\$ (17,000)	\$ (8,500)	\$ (17,000)	\$ (8,500)	\$ (17,000)	\$ (8,500)	\$ (25,500)	\$ (8,500)
Annual Property Taxes	\$ (3,164)	\$ (3,020)	\$ (3,164)	\$ (3,020)	\$ (3,164)	\$ (3,020)	\$ (4,745)	\$ (3,020)
NOI	\$ 85,856	\$ 81,960	\$ 85,856	\$ 81,960	\$ 85,856	\$ 81,960	\$ 128,785	\$ 81,960
Gross Value of Rental Project	\$ 1,373,702	\$ 1,311,359	\$ 1,373,702	\$ 1,311,359	\$ 1,373,702	\$ 1,311,359	\$ 2,060,553	\$ 1,311,359
Sales Marketing Costs (as % of Gross)	\$ (27,474)	\$ (26,227)	\$ (27,474)	\$ (26,227)	\$ (27,474)	\$ (26,227)	\$ (41,211)	\$ (26,227)
Net Proceeds of Rental Project	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 2,019,342	\$ 1,285,132
<u>Revenue-Enhancing Incentives</u>								
PV of Property Tax Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Value (w/ R-E Incentives)	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 2,019,342	\$ 1,285,132
Unleveraged Hurdle Rate	\$ (134,623)	\$ (128,513)	\$ (134,623)	\$ (128,513)	\$ (134,623)	\$ (128,513)	\$ (201,934)	\$ (128,513)
Leveraged Hurdle Rate	\$ (201,934)	\$ (192,770)	\$ (201,934)	\$ (192,770)	\$ (201,934)	\$ (192,770)	\$ (302,901)	\$ (192,770)
Revenues, Less Profit	\$ 1,144,294	\$ 1,092,362	\$ 1,144,294	\$ 1,092,362	\$ 1,144,294	\$ 1,092,362	\$ 1,716,440	\$ 1,092,362
Revenues - TDC = Residual Land Value	\$ 91,364	\$ 138,248	\$ 84,857	\$ 131,741	\$ 84,857	\$ 131,741	\$ 165,158	\$ 131,741
Land Value (per sqft)	\$ 18.27	\$ 27.65	\$ 16.97	\$ 26.35	\$ 16.97	\$ 26.35	\$ 33.03	\$ 26.35
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (6,507)	\$ (6,507)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ 80,301	\$ 46,884

Source: Economic & Planning Systems

H:\153070-Portland On-Call Economic Services\Models\Project 2 - MDU Analysis\153070-MDU Model-051518.xlsx\T4 - Pro forma - Ptp 2

Table 3
Prototype 3 Pro forma

Prototype 3								
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
<u>Construction Costs</u>								
Hard costs (per sqft of GFA)	\$ 2,372,067	\$ 2,391,480	\$ 2,372,067	\$ 2,391,480	\$ 2,372,067	\$ 2,391,480	\$ 3,656,800	\$ 2,391,480
<u>Parking Costs</u>								
Structured, tuck-under (per space)	\$ 210,000	\$ 270,000	\$ 210,000	\$ 270,000	\$ 210,000	\$ 270,000	\$ 330,000	\$ 270,000
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total (HC)	\$ 2,582,067	\$ 2,661,480	\$ 2,582,067	\$ 2,661,480	\$ 2,582,067	\$ 2,661,480	\$ 3,986,800	\$ 2,661,480
<u>Soft Costs (per sqft)</u>								
<u>System Development Charges</u>								
Sanitary Sewer	\$ 62,881	\$ 54,414	\$ 62,881	\$ 54,414	\$ 62,881	\$ 54,414	\$ 96,740	\$ 54,414
Stormwater	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089
Transportation (PBOT)	\$ 26,312	\$ 25,326	\$ 26,312	\$ 25,326	\$ 26,312	\$ 25,326	\$ 40,480	\$ 25,326
Parks & Recreation	\$ 119,522	\$ 99,486	\$ 119,522	\$ 99,486	\$ 119,522	\$ 99,486	\$ 183,880	\$ 99,486
Construction Excise Taxes (CET)	\$ 21,526	\$ 21,702	\$ 21,526	\$ 21,702	\$ 21,526	\$ 21,702	\$ 33,185	\$ 21,702
Other Soft Costs (as % of HC)	\$ 645,517	\$ 665,370	\$ 645,517	\$ 665,370	\$ 645,517	\$ 665,370	\$ 996,700	\$ 665,370
Subtotal (SC, excluding loan interest carry)	\$ 858,182	\$ 845,685	\$ 879,708	\$ 867,387	\$ 879,708	\$ 867,387	\$ 1,354,935	\$ 867,387
as % of HC	33%	32%	34%	33%	34%	33%	34%	33%
Construction Loan Interest	\$ 83,856	\$ 85,487	\$ 84,381	\$ 86,016	\$ 84,381	\$ 86,016	\$ 130,205	\$ 86,016
Total (SC)	\$ 942,038	\$ 931,172	\$ 964,089	\$ 953,403	\$ 964,089	\$ 953,403	\$ 1,485,140	\$ 953,403
<u>Cost-Reducing Incentives</u>								
SDC Waivers					\$ -	\$ -	\$ (32,505)	\$ -
CET Waivers					\$ -	\$ -	\$ (3,318)	\$ -
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ (35,824)	\$ -
Total Development Costs (TDC) (excluding land)	\$ 3,524,104	\$ 3,592,652	\$ 3,546,155	\$ 3,614,883	\$ 3,546,155	\$ 3,614,883	\$ 5,436,116	\$ 3,614,883
per unit	\$ 271,085	\$ 399,184	\$ 272,781	\$ 401,654	\$ 272,781	\$ 401,654	\$ 271,806	\$ 401,654
per GFA sqft	\$ 208	\$ 210	\$ 209	\$ 212	\$ 209	\$ 212	\$ 208	\$ 212
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 130,000	\$ 90,000	\$ 130,000	\$ 90,000	\$ 130,000	\$ 90,000	\$ 180,000	\$ 90,000
<u>For-Sale Revenues</u>								
MR Revenues	\$ 5,957,250	\$ 5,440,500	\$ 5,957,250	\$ 5,440,500	\$ 5,957,250	\$ 5,440,500	\$ 8,248,500	\$ 5,440,500
AH Revenues							\$ 214,400	
Subtotal Sales	\$ 5,957,250	\$ 5,440,500	\$ 5,957,250	\$ 5,440,500	\$ 5,957,250	\$ 5,440,500	\$ 8,462,900	\$ 5,440,500
Sales Marketing Costs	\$ (119,145)	\$ (108,810)	\$ (119,145)	\$ (108,810)	\$ (119,145)	\$ (108,810)	\$ (169,258)	\$ (108,810)
Total Sales Revenues	\$ 5,838,105	\$ 5,331,690	\$ 5,838,105	\$ 5,331,690	\$ 5,838,105	\$ 5,331,690	\$ 8,293,642	\$ 5,331,690
Unleveraged Hurdle Rate	\$ (583,811)	\$ (533,169)	\$ (583,811)	\$ (533,169)	\$ (583,811)	\$ (533,169)	\$ (829,364)	\$ (533,169)
Leveraged Hurdle Rate	\$ (875,716)	\$ (799,754)	\$ (875,716)	\$ (799,754)	\$ (875,716)	\$ (799,754)	\$ (1,244,046)	\$ (799,754)
Revenues, Less Profit	\$ 4,962,389	\$ 4,531,937	\$ 4,962,389	\$ 4,531,937	\$ 4,962,389	\$ 4,531,937	\$ 7,049,596	\$ 4,531,937
Revenues - TDC = Residual Land Value	\$ 1,308,285	\$ 849,284	\$ 1,286,234	\$ 827,053	\$ 1,286,234	\$ 827,053	\$ 1,433,479	\$ 827,053
Land Value (per sqft)	\$ 76.51	\$ 49.67	\$ 75.22	\$ 48.37	\$ 75.22	\$ 48.37	\$ 83.83	\$ 48.37
Land Value (per unit)	\$ 67,363	\$ 88,862	\$ 67,363	\$ 88,862	\$ 67,363	\$ 88,862	\$ 62,202	\$ 88,862
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (22,051)	\$ (22,231)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ 147,245	\$ -
<u>Rental Revenue Assumptions</u>								
MR Rent Income	\$ 456,300	\$ 334,800	\$ 456,300	\$ 334,800	\$ 456,300	\$ 334,800	\$ 631,800	\$ 334,800
AH Rental Income							\$ 26,376	
Subtotal Gross Annual Revenues	\$ 456,300	\$ 334,800	\$ 456,300	\$ 334,800	\$ 456,300	\$ 334,800	\$ 658,176	\$ 334,800
Vacancy	\$ (22,815)	\$ (16,740)	\$ (22,815)	\$ (16,740)	\$ (22,815)	\$ (16,740)	\$ (32,909)	\$ (16,740)
<u>Operational Costs</u>								
O&M	\$ (55,250)	\$ (38,250)	\$ (55,250)	\$ (38,250)	\$ (55,250)	\$ (38,250)	\$ (85,000)	\$ (38,250)
Annual Property Taxes	\$ (13,442)	\$ (9,944)	\$ (13,442)	\$ (9,944)	\$ (13,442)	\$ (9,944)	\$ (19,200)	\$ (9,944)
NOI	\$ 364,793	\$ 269,866	\$ 364,793	\$ 269,866	\$ 364,793	\$ 269,866	\$ 521,067	\$ 269,866
Gross Value of Rental Project	\$ 5,836,690	\$ 4,317,856	\$ 5,836,690	\$ 4,317,856	\$ 5,836,690	\$ 4,317,856	\$ 8,337,071	\$ 4,317,856
Sales Marketing Costs (as % of Gross)	\$ (116,734)	\$ (86,357)	\$ (116,734)	\$ (86,357)	\$ (116,734)	\$ (86,357)	\$ (166,741)	\$ (86,357)
Net Proceeds of Rental Project	\$ 5,719,956	\$ 4,231,499	\$ 5,719,956	\$ 4,231,499	\$ 5,719,956	\$ 4,231,499	\$ 8,170,329	\$ 4,231,499
<u>Revenue-Enhancing Incentives</u>								
PV of Property Tax Exemption					\$ -	\$ -	\$ 11,798	\$ -
Total Project Value (w/ R-E Incentives)	\$ 5,719,956	\$ 4,231,499	\$ 5,719,956	\$ 4,231,499	\$ 5,719,956	\$ 4,231,499	\$ 8,182,127	\$ 4,231,499
Unleveraged Hurdle Rate	\$ (571,996)	\$ (423,150)	\$ (571,996)	\$ (423,150)	\$ (571,996)	\$ (423,150)	\$ (817,033)	\$ (423,150)
Leveraged Hurdle Rate	\$ (857,993)	\$ (634,725)	\$ (857,993)	\$ (634,725)	\$ (857,993)	\$ (634,725)	\$ (1,225,549)	\$ (634,725)
Revenues, Less Profit	\$ 4,861,962	\$ 3,596,774	\$ 4,861,962	\$ 3,596,774	\$ 4,861,962	\$ 3,596,774	\$ 6,944,780	\$ 3,596,774
Revenues - TDC = Residual Land Value	\$ 1,337,858	\$ 4,122	\$ 1,315,807	\$ (18,110)	\$ 1,315,807	\$ (18,110)	\$ 1,508,664	\$ (18,110)
Land Value (per sqft)	\$ 78.24	\$ 0.24	\$ 76.95	\$ (1.06)	\$ 76.95	\$ (1.06)	\$ 88.23	\$ (1.06)
Land Value (per unit)	\$ 65,999	\$ 70,525	\$ 65,999	\$ 70,525	\$ 65,999	\$ 70,525	\$ 61,277	\$ 70,525
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (22,051)	\$ (22,231)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ 192,857	\$ (1,333,917)

Table 4
Prototype 4 Pro forma

Prototype 4								
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
Construction Costs								
Hard costs (per sqft of GFA)	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 3,154,447	\$ 2,660,000
Parking Costs								
Structured, tuck-under (per space)	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ 720,000	\$ 150,000
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total (HC)	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 3,874,447	\$ 2,810,000
Soft Costs (per sqft)								
System Development Charges								
Sanitary Sewer	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 77,392	\$ 60,460
Stormwater	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089
Transportation (PBOT)	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 32,384	\$ 28,140
Parks & Recreation	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 147,104	\$ 110,540
Construction Excise Taxes (CET)	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 28,626	\$ 24,139
Other Soft Costs (as % of HC)	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 968,612	\$ 702,500
Subtotal (SC, excluding loan interest carry)	\$ 715,742	\$ 902,729	\$ 733,634	\$ 926,868	\$ 733,634	\$ 926,868	\$ 1,256,428	\$ 926,868
as % of HC	32%	32%	33%	33%	33%	33%	32%	33%
Construction Loan Interest	\$ 68,608	\$ 87,017	\$ 69,027	\$ 87,583	\$ 69,027	\$ 87,583	\$ 120,255	\$ 87,583
Total (SC)	\$ 784,350	\$ 989,746	\$ 802,661	\$ 1,014,451	\$ 802,661	\$ 1,014,451	\$ 1,376,683	\$ 1,014,451
Cost-Reducing Incentives								
SDC Waivers					\$ -	\$ -	\$ -	\$ -
CET Waivers					\$ -	\$ -	\$ -	\$ -
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ -	\$ -
Total Development Costs (TDC) (excluding land)	\$ 2,995,880	\$ 3,799,746	\$ 3,014,190	\$ 3,824,451	\$ 3,014,190	\$ 3,824,451	\$ 5,251,130	\$ 3,824,451
per unit	\$ 299,588	\$ 379,975	\$ 301,419	\$ 382,445	\$ 301,419	\$ 382,445	\$ 328,196	\$ 382,445
per GFA sqft	\$ 213	\$ 200	\$ 214	\$ 201	\$ 214	\$ 201	\$ 233	\$ 201
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 160,000	\$ 100,000
For-Sale Revenues								
MR Revenues	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 7,332,000	\$ 6,240,000
AH Revenues								
Subtotal Sales	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 7,332,000	\$ 6,240,000
Sales Marketing Costs	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (146,640)	\$ (124,800)
Total Sales Revenues	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 7,185,360	\$ 6,115,200
Unleveraged Hurdle Rate	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (718,536)	\$ (611,520)
Leveraged Hurdle Rate	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (1,077,804)	\$ (917,280)
Revenues, Less Profit	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 6,107,556	\$ 5,197,920
Revenues - TDC = Residual Land Value	\$ 721,343	\$ 1,298,174	\$ 703,032	\$ 1,273,469	\$ 703,032	\$ 1,273,469	\$ 696,426	\$ 1,273,469
Land Value (per sqft)	\$ 72.13	\$ 129.82	\$ 70.30	\$ 127.35	\$ 70.30	\$ 127.35	\$ 69.64	\$ 127.35
Land Value (per unit)	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728
Value of (in terms of RLV):								
IZ + CET req't			\$ (18,311)	\$ (24,705)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ (6,606)	\$ -
Rental Revenue Assumptions								
MR Rental Income	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 561,600	\$ 384,000
AH Rental Income								
Subtotal Gross Annual Revenues	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 561,600	\$ 384,000
Vacancy	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (28,080)	\$ (19,200)
Operational Costs								
O&M	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (68,000)	\$ (42,500)
Annual Property Taxes	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (16,544)	\$ (11,454)
NOI	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 448,976	\$ 310,846
Gross Value of Rental Project	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 7,183,618	\$ 4,973,535
Sales Marketing Costs (as % of Gross)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (143,672)	\$ (99,471)
Net Proceeds of Rental Project	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 7,039,946	\$ 4,874,064
Revenue-Enhancing Incentives								
PV of Property Tax Exemption					\$ -	\$ -	\$ -	\$ -
Total Project Value (w/ R-E Incentives)	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 7,039,946	\$ 4,874,064
Unleveraged Hurdle Rate	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (703,995)	\$ (487,406)
Leveraged Hurdle Rate	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (1,055,992)	\$ (731,110)
Revenues, Less Profit	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 5,983,954	\$ 4,142,955
Revenues - TDC = Residual Land Value	\$ 744,091	\$ 343,209	\$ 725,781	\$ 318,504	\$ 725,781	\$ 318,504	\$ 732,824	\$ 318,504
Land Value (per sqft)	\$ 74.41	\$ 34.32	\$ 72.58	\$ 31.85	\$ 72.58	\$ 31.85	\$ 73.28	\$ 31.85
Land Value (per unit)	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111
Value of (in terms of RLV):								
IZ + CET req't			\$ (18,311)	\$ (24,705)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ 7,043	\$ (407,277)

Source: Economic & Planning Systems

H:\153070-Portland On-Call Economic Services\Models\Project 2 - MDU Analysis\153070-MDU Model-051518.xlsx\T4 - Pro forma - Ppt 4

Table 5
Prototype 6 Pro forma

Prototype 6								
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
Construction Costs								
Hard costs (per sqft of GFA)	\$ 3,670,800	\$ 4,046,000	\$ 3,670,800	\$ 4,046,000	\$ 3,670,800	\$ 4,046,000	\$ 5,602,800	\$ 4,046,000
Parking Costs								
Structured, tuck-under (per space)	\$ 300,000	\$ 270,000	\$ 300,000	\$ 270,000	\$ 300,000	\$ 270,000	\$ 870,000	\$ 270,000
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total (HC)	\$ 3,970,800	\$ 4,316,000	\$ 3,970,800	\$ 4,316,000	\$ 3,970,800	\$ 4,316,000	\$ 6,472,800	\$ 4,316,000
Soft Costs (per sqft)								
System Development Charges								
Sanitary Sewer	\$ 91,903	\$ 102,782	\$ 91,903	\$ 102,782	\$ 91,903	\$ 102,782	\$ 140,273	\$ 102,782
Stormwater	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089	\$ 3,950	\$ 1,089
Transportation (PBOT)	\$ 38,456	\$ 47,838	\$ 38,456	\$ 47,838	\$ 38,456	\$ 47,838	\$ 58,696	\$ 47,838
Parks & Recreation	\$ 174,686	\$ 187,918	\$ 174,686	\$ 187,918	\$ 174,686	\$ 187,918	\$ 266,626	\$ 187,918
Construction Excise Taxes (CET)	\$ 33,312	\$ 36,717	\$ 33,312	\$ 36,717	\$ 33,312	\$ 36,717	\$ 50,845	\$ 36,717
Other Soft Costs (as % of HC)	\$ 992,700	\$ 1,079,000	\$ 992,700	\$ 1,079,000	\$ 992,700	\$ 1,079,000	\$ 1,618,200	\$ 1,079,000
Subtotal (SC, excluding loan interest carry)	\$ 1,301,695	\$ 1,418,627	\$ 1,335,007	\$ 1,455,344	\$ 1,335,007	\$ 1,455,344	\$ 2,138,590	\$ 1,455,344
as % of HC	33%	33%	34%	34%	34%	34%	33%	34%
Construction Loan Interest	\$ 123,574	\$ 134,405	\$ 124,355	\$ 135,266	\$ 124,355	\$ 135,266	\$ 201,829	\$ 135,266
Total (SC)	\$ 1,425,269	\$ 1,553,032	\$ 1,459,362	\$ 1,590,610	\$ 1,459,362	\$ 1,590,610	\$ 2,340,419	\$ 1,590,610
Cost-Reducing Incentives								
SDC Waivers					\$ -	\$ -	\$ (48,574)	\$ -
CET Waivers					\$ -	\$ -	\$ (5,260)	\$ -
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ (53,833)	\$ -
Total Development Costs (TDC) (excluding land)	\$ 5,396,069	\$ 5,869,032	\$ 5,430,162	\$ 5,906,610	\$ 5,430,162	\$ 5,906,610	\$ 8,759,386	\$ 5,906,610
per unit	\$ 284,004	\$ 345,237	\$ 285,798	\$ 347,448	\$ 285,798	\$ 347,448	\$ 302,048	\$ 347,448
per GFA sqft	\$ 206	\$ 203	\$ 207	\$ 204	\$ 207	\$ 204	\$ 219	\$ 204
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 190,000	\$ 170,000	\$ 190,000	\$ 170,000	\$ 190,000	\$ 170,000	\$ 260,000	\$ 170,000
For-Sale Revenues								
MR Revenues	\$ 8,706,750	\$ 9,282,000	\$ 8,706,750	\$ 9,282,000	\$ 8,706,750	\$ 9,282,000	\$ 11,914,500	\$ 9,282,000
AH Revenues							\$ 296,052	
Subtotal Sales	\$ 8,706,750	\$ 9,282,000	\$ 8,706,750	\$ 9,282,000	\$ 8,706,750	\$ 9,282,000	\$ 12,210,552	\$ 9,282,000
Sales Marketing Costs	\$ (174,135)	\$ (185,640)	\$ (174,135)	\$ (185,640)	\$ (174,135)	\$ (185,640)	\$ (244,211)	\$ (185,640)
Total Sales Revenues	\$ 8,532,615	\$ 9,096,360	\$ 8,532,615	\$ 9,096,360	\$ 8,532,615	\$ 9,096,360	\$ 11,966,341	\$ 9,096,360
Unleveraged Hurdle Rate	\$ (853,262)	\$ (909,636)	\$ (853,262)	\$ (909,636)	\$ (853,262)	\$ (909,636)	\$ (1,196,634)	\$ (909,636)
Leveraged Hurdle Rate	\$ (1,279,892)	\$ (1,364,454)	\$ (1,279,892)	\$ (1,364,454)	\$ (1,279,892)	\$ (1,364,454)	\$ (1,794,951)	\$ (1,364,454)
Revenues, Less Profit	\$ 7,252,723	\$ 7,731,906	\$ 7,252,723	\$ 7,731,906	\$ 7,252,723	\$ 7,731,906	\$ 10,171,390	\$ 7,731,906
Revenues - TDC = Residual Land Value	\$ 1,666,654	\$ 1,692,874	\$ 1,632,561	\$ 1,655,296	\$ 1,632,561	\$ 1,655,296	\$ 1,152,004	\$ 1,655,296
Land Value (per sqft)	\$ 97.47	\$ 99.00	\$ 95.47	\$ 96.80	\$ 95.47	\$ 96.80	\$ 67.37	\$ 96.80
Land Value (per unit)	\$ 67,363	\$ 80,262	\$ 67,363	\$ 80,262	\$ 67,363	\$ 80,262	\$ 61,895	\$ 80,262
Value of (in terms of RLV):								
IZ + CET req't			\$ (34,093)	\$ (37,577)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ (480,557)	\$ -
Rental Revenue Assumptions								
MR Rental Income	\$ 666,900	\$ 571,200	\$ 666,900	\$ 571,200	\$ 666,900	\$ 571,200	\$ 912,600	\$ 571,200
AH Rental Income							\$ 35,526	
Subtotal Gross Annual Revenues	\$ 666,900	\$ 571,200	\$ 666,900	\$ 571,200	\$ 666,900	\$ 571,200	\$ 948,126	\$ 571,200
Vacancy	\$ (33,345)	\$ (28,560)	\$ (33,345)	\$ (28,560)	\$ (33,345)	\$ (28,560)	\$ (47,406)	\$ (28,560)
Operational Costs								
O&M	\$ (104,500)	\$ (93,500)	\$ (104,500)	\$ (93,500)	\$ (104,500)	\$ (93,500)	\$ (159,500)	\$ (93,500)
Annual Property Taxes	\$ (18,802)	\$ (15,962)	\$ (18,802)	\$ (15,962)	\$ (18,802)	\$ (15,962)	\$ (26,342)	\$ (15,962)
NOI	\$ 510,253	\$ 433,178	\$ 510,253	\$ 433,178	\$ 510,253	\$ 433,178	\$ 714,878	\$ 433,178
Gross Value of Rental Project	\$ 8,164,051	\$ 6,930,852	\$ 8,164,051	\$ 6,930,852	\$ 8,164,051	\$ 6,930,852	\$ 11,438,049	\$ 6,930,852
Sales Marketing Costs (as % of Gross)	\$ (163,281)	\$ (138,617)	\$ (163,281)	\$ (138,617)	\$ (163,281)	\$ (138,617)	\$ (228,761)	\$ (138,617)
Net Proceeds of Rental Project	\$ 8,000,770	\$ 6,792,235	\$ 8,000,770	\$ 6,792,235	\$ 8,000,770	\$ 6,792,235	\$ 11,209,288	\$ 6,792,235
Revenue-Enhancing Incentives								
PV of Property Tax Exemption					\$ -	\$ -	\$ 16,744	\$ -
Total Project Value (w/ R-E Incentives)	\$ 8,000,770	\$ 6,792,235	\$ 8,000,770	\$ 6,792,235	\$ 8,000,770	\$ 6,792,235	\$ 11,226,032	\$ 6,792,235
Unleveraged Hurdle Rate	\$ (800,077)	\$ (679,223)	\$ (800,077)	\$ (679,223)	\$ (800,077)	\$ (679,223)	\$ (1,120,929)	\$ (679,223)
Leveraged Hurdle Rate	\$ (1,200,116)	\$ (1,018,835)	\$ (1,200,116)	\$ (1,018,835)	\$ (1,200,116)	\$ (1,018,835)	\$ (1,681,393)	\$ (1,018,835)
Revenues, Less Profit	\$ 6,800,655	\$ 5,773,400	\$ 6,800,655	\$ 5,773,400	\$ 6,800,655	\$ 5,773,400	\$ 9,527,895	\$ 5,773,400
Revenues - TDC = Residual Land Value	\$ 1,404,585	\$ (95,633)	\$ 1,370,493	\$ (133,210)	\$ 1,370,493	\$ (133,210)	\$ 768,509	\$ (133,210)
Land Value (per sqft)	\$ 82.14	\$ (5.59)	\$ 80.15	\$ (7.79)	\$ 80.15	\$ (7.79)	\$ 44.94	\$ (7.79)
Land Value (per unit)	\$ 63,164	\$ 59,931	\$ 63,164	\$ 59,931	\$ 63,164	\$ 59,931	\$ 57,979	\$ 59,931
Value of (in terms of RLV):								
IZ + CET req't			\$ (34,093)	\$ (37,577)				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ (601,983)	\$ (1,503,703)

Table 6
Prototype 8 Pro forma

	Prototype 8							
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
Construction Costs								
Hard costs (per sqft of GFA)	\$ 2,884,659	---	\$ 2,884,659	---	\$ 2,884,659	---	\$ 4,350,706	---
Parking Costs								
Structured, tuck-under (per space)	\$ 270,000	---	\$ 270,000	---	\$ 270,000	---	\$ 450,000	---
Surface (per space)	\$ -	---	\$ -	---	\$ -	---	\$ -	---
Total (HC)	\$ 3,154,659	\$ -	\$ 3,154,659	\$ -	\$ 3,154,659	\$ -	\$ 4,800,706	\$ -
Soft Costs (per sqft)								
System Development Charges								
Sanitary Sewer	\$ 87,066	---	\$ 87,066	---	\$ 87,066	---	\$ 130,599	---
Stormwater	\$ 2,310	---	\$ 2,310	---	\$ 2,310	---	\$ 2,310	---
Transportation (PBOT)	\$ 36,432	---	\$ 36,432	---	\$ 36,432	---	\$ 54,648	---
Parks & Recreation	\$ 165,492	---	\$ 165,492	---	\$ 165,492	---	\$ 248,238	---
Construction Excise Taxes (CET)	\$ 22,844	---	\$ 22,844	---	\$ 22,844	---	\$ 34,454	---
Other Soft Costs (as % of HC)	\$ 788,665	---	\$ 788,665	---	\$ 788,665	---	\$ 1,200,176	---
Subtotal (SC, excluding loan interest carry)	\$ 1,079,965	\$ -	\$ 1,102,809	\$ -	\$ 1,102,809	\$ -	\$ 1,670,425	\$ -
as % of HC	34%	---	35%	---	35%	---	35%	---
Construction Loan Interest	\$ 96,073	---	\$ 96,591	---	\$ 96,591	---	\$ 146,814	---
Total (SC)	\$ 1,176,038	---	\$ 1,199,400	---	\$ 1,199,400	---	\$ 1,817,239	---
Cost-Reducing Incentives								
SDC Waivers					\$ -	\$ -	\$ (48,422)	\$ -
CET Waivers					\$ -	\$ -	\$ (3,828)	\$ -
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ (52,250)	\$ -
Total Development Costs (TDC) (excluding land)	\$ 4,330,697	---	\$ 4,354,059	---	\$ 4,354,059	---	\$ 6,565,695	---
per unit	\$ 240,594	\$ -	\$ 241,892	\$ -	\$ 241,892	\$ -	\$ 243,174	\$ -
per GFA sqft	\$ 210	\$ -	\$ 211	\$ -	\$ 211	\$ -	\$ 211	\$ -
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 180,000	---	\$ 180,000	---	\$ 180,000	---	\$ 240,000	---
For-Sale Revenues								
MR Revenues	\$ 6,556,500	---	\$ 6,556,500	---	\$ 6,556,500	---	\$ 8,742,000	---
AH Revenues		---		---		---	\$ 321,600	---
Subtotal Sales	\$ 6,556,500	\$ -	\$ 6,556,500	\$ -	\$ 6,556,500	\$ -	\$ 9,063,600	\$ -
Sales Marketing Costs	\$ (131,130)	---	\$ (131,130)	---	\$ (131,130)	---	\$ (181,272)	---
Total Sales Revenues	\$ 6,425,370	\$ -	\$ 6,425,370	\$ -	\$ 6,425,370	\$ -	\$ 8,882,328	\$ -
Unleveraged Hurdle Rate	\$ (642,537)	---	\$ (642,537)	---	\$ (642,537)	---	\$ (888,233)	---
Leveraged Hurdle Rate	\$ (963,806)	---	\$ (963,806)	---	\$ (963,806)	---	\$ (1,332,349)	---
Revenues, Less Profit	\$ 5,461,565	---	\$ 5,461,565	---	\$ 5,461,565	---	\$ 7,549,979	---
Revenues - TDC = Residual Land Value	\$ 950,868	---	\$ 927,506	---	\$ 927,506	---	\$ 744,284	---
Land Value (per sqft)	\$ 95.09	---	\$ 92.75	---	\$ 92.75	---	\$ 74.43	---
Land Value (per unit)	\$ 53,545	---	\$ 53,545	---	\$ 53,545	---	\$ 49,346	---
Value of (in terms of RLV):								
IZ + CET req't			\$ (23,362)	\$ -				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ (183,222)	\$ -
Rental Revenue Assumptions								
MR Rent Income	\$ 477,090	---	\$ 477,090	---	\$ 477,090	---	\$ 636,120	---
AH Rental Income		---		---		---	\$ 39,564	---
Subtotal Gross Annual Revenues	\$ 477,090	\$ -	\$ 477,090	\$ -	\$ 477,090	\$ -	\$ 675,684	\$ -
Vacancy	\$ (23,855)	---	\$ (23,855)	---	\$ (23,855)	---	\$ (33,784)	---
Operational Costs								
O&M	\$ (108,000)	---	\$ (108,000)	---	\$ (108,000)	---	\$ (162,000)	---
Annual Property Taxes	\$ (12,269)	---	\$ (12,269)	---	\$ (12,269)	---	\$ (17,055)	---
NOI	\$ 332,966	\$ -	\$ 332,966	\$ -	\$ 332,966	\$ -	\$ 462,845	\$ -
Gross Value of Rental Project	\$ 5,327,462	---	\$ 5,327,462	---	\$ 5,327,462	---	\$ 7,405,518	---
Sales Marketing Costs (as % of Gross)	\$ (106,549)	---	\$ (106,549)	---	\$ (106,549)	---	\$ (148,110)	---
Net Proceeds of Rental Project	\$ 5,220,912	\$ -	\$ 5,220,912	\$ -	\$ 5,220,912	\$ -	\$ 7,257,408	\$ -
Revenue-Enhancing Incentives								
PV of Property Tax Exemption					\$ -	---	\$ 11,644	---
Total Project Value (w/ R-E Incentives)	\$ 5,220,912	\$ -	\$ 5,220,912	\$ -	\$ 5,220,912	---	\$ 7,269,052	---
Unleveraged Hurdle Rate	\$ (522,091)	---	\$ (522,091)	---	\$ (522,091)	---	\$ (725,741)	---
Leveraged Hurdle Rate	\$ (783,137)	---	\$ (783,137)	---	\$ (783,137)	---	\$ (1,088,611)	---
Revenues, Less Profit	\$ 4,437,776	---	\$ 4,437,776	---	\$ 4,437,776	---	\$ 6,168,797	---
Revenues - TDC = Residual Land Value	\$ 107,079	---	\$ 83,717	---	\$ 83,717	---	\$ (396,898)	---
Land Value (per sqft)	\$ 10.71	---	\$ 8.37	---	\$ 8.37	---	\$ (39.69)	---
Land Value (per unit)	\$ 43,508	---	\$ 43,508	---	\$ 43,508	---	\$ 40,319	---
Value of (in terms of RLV):								
IZ + CET req't			\$ (23,362)	\$ -				
Current incentives available					\$ -	\$ -		
Proposed Bonus FAR							\$ (480,615)	\$ -

Source: Economic & Planning Systems

H:\153070-Portland On-Call Economic Services\Models\Project 2 - MDU Analysis\153070-MDU Model-051518.xlsx\T4 - Pro forma - Ptp 8

Table 7
Prototype 10 Pro forma

	Prototype 10							
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
<u>Construction Costs</u>								
Hard costs (per sqft of GFA)	\$ 5,698,165	---	\$ 5,698,165	---	\$ 6,846,988	---	\$ 8,458,306	---
<u>Parking Costs</u>								
Structured, tuck-under (per space)	\$ 540,000	---	\$ 540,000	---	\$ 540,000	---	\$ 600,000	---
Surface (per space)	\$ -	---	\$ -	---	\$ -	---	\$ -	---
Total (HC)	\$ 6,238,165	\$ -	\$ 6,238,165	\$ -	\$ 7,386,988	\$ -	\$ 9,058,306	\$ -
<u>Soft Costs (per sqft)</u>								
<u>System Development Charges</u>								
Sanitary Sewer	\$ 174,132	---	\$ 174,132	---	\$ 217,665	---	\$ 261,198	---
Stormwater	\$ 2,310	---	\$ 2,310	---	\$ 2,310	---	\$ 2,310	---
Transportation (PBOT)	\$ 72,864	---	\$ 72,864	---	\$ 91,080	---	\$ 109,296	---
Parks & Recreation	\$ 330,984	---	\$ 330,984	---	\$ 413,730	---	\$ 496,476	---
Construction Excise Taxes (CET)			\$ 45,125	---	\$ 54,222	---	\$ 66,982	---
Other Soft Costs (as % of HC)	\$ 1,559,541	---	\$ 1,559,541	---	\$ 1,846,747	---	\$ 2,264,576	---
Subtotal (SC, excluding loan interest carry)	\$ 2,139,831	\$ -	\$ 2,184,956	\$ -	\$ 2,625,754	\$ -	\$ 3,200,839	\$ -
as % of HC	34%	---	35%	---	36%	---	35%	---
Construction Loan Interest	\$ 190,076	---	\$ 191,100	---	\$ 227,164	---	\$ 278,129	---
Total (SC)	\$ 2,329,907	---	\$ 2,376,055	---	\$ 2,852,918	---	\$ 3,478,968	---
<u>Cost-Reducing Incentives</u>								
SDC Waivers					\$ (80,532)	\$ -	\$ (96,587)	\$ -
CET Waivers					\$ (6,025)	---	\$ (7,442)	---
Subtotal Cost-Reducing Incentives					\$ (86,556)	\$ -	\$ (104,029)	\$ -
Total Development Costs (TDC) (excluding land)	\$ 8,568,072	---	\$ 8,614,220	---	\$ 10,153,350	---	\$ 12,433,245	---
per unit	\$ 238,002	\$ -	\$ 239,284	\$ -	\$ 282,038	\$ -	\$ 230,245	\$ -
per GFA sqft	\$ 211	\$ -	\$ 212	\$ -	\$ 208	\$ -	\$ 206	\$ -
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 360,000	---	\$ 320,000	---	\$ 400,000	---	\$ 480,000	---
<u>For-Sale Revenues</u>								
MR Revenues	\$ 12,555,000	---	\$ 11,160,000	---	\$ 13,950,000	---	\$ 16,740,000	---
AH Revenues			\$ 428,800	---	\$ 536,000	---	\$ 643,200	---
Subtotal Sales	\$ 12,555,000	\$ -	\$ 11,588,800	\$ -	\$ 14,486,000	\$ -	\$ 17,383,200	\$ -
Sales Marketing Costs	\$ (251,100)	---	\$ (231,776)	---	\$ (289,720)	---	\$ (347,664)	---
Total Sales Revenues	\$ 12,303,900	\$ -	\$ 11,357,024	\$ -	\$ 14,196,280	\$ -	\$ 17,035,536	\$ -
Unleveraged Hurdle Rate	\$ (1,230,390)	---	\$ (1,135,702)	---	\$ (1,419,628)	---	\$ (1,703,554)	---
Leveraged Hurdle Rate	\$ (1,845,585)	---	\$ (1,703,554)	---	\$ (2,129,442)	---	\$ (2,555,330)	---
Revenues, Less Profit	\$ 10,458,315	---	\$ 9,653,470	---	\$ 12,066,838	---	\$ 14,480,206	---
Revenues - TDC = Residual Land Value	\$ 1,530,243	---	\$ 719,250	---	\$ 1,513,488	---	\$ 1,566,961	---
Land Value (per sqft)	\$ 153.02	---	\$ 71.93	---	\$ 151.35	---	\$ 156.70	---
Land Value (per unit)	\$ 51,266	---	\$ 47,321	---	\$ 59,151	---	\$ 47,321	---
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (810,993)	\$ -				
Current incentives available					\$ 794,237	\$ -		
Proposed Bonus FAR							\$ 847,710	\$ -
<u>Rental Revenue Assumptions</u>								
MR Rent Income	\$ 954,180	---	\$ 848,160	---	\$ 1,060,200	---	\$ 1,272,240	---
AH Rental Income			\$ 52,752	---	\$ 65,940	---	\$ 79,128	---
Subtotal Gross Annual Revenues	\$ 954,180	\$ -	\$ 900,912	\$ -	\$ 1,126,140	\$ -	\$ 1,351,368	\$ -
Vacancy	\$ (47,709)	---	\$ (45,046)	---	\$ (56,307)	---	\$ (67,568)	---
<u>Operational Costs</u>								
O&M	\$ (216,000)	---	\$ (216,000)	---	\$ (270,000)	---	\$ (324,000)	---
Annual Property Taxes	\$ (24,538)	---	\$ (22,740)	---	\$ (28,425)	---	\$ (34,110)	---
NOI	\$ 665,933	\$ -	\$ 617,127	\$ -	\$ 771,408	\$ -	\$ 925,690	\$ -
Gross Value of Rental Project	\$ 10,654,923	---	\$ 9,874,024	---	\$ 12,342,530	---	\$ 14,811,037	---
Sales Marketing Costs (as % of Gross)	\$ (213,098)	---	\$ (197,480)	---	\$ (246,851)	---	\$ (296,221)	---
Net Proceeds of Rental Project	\$ 10,441,825	\$ -	\$ 9,676,544	\$ -	\$ 12,095,680	\$ -	\$ 14,514,816	\$ -
<u>Revenue-Enhancing Incentives</u>								
PV of Property Tax Exemption					\$ 19,406	---	\$ 23,288	---
Total Project Value (w/ R-E Incentives)	\$ 10,441,825	\$ -	\$ 9,676,544	\$ -	\$ 12,115,086	---	\$ 14,538,104	---
Unleveraged Hurdle Rate	\$ (1,044,182)	---	\$ (967,654)	---	\$ (1,209,568)	---	\$ (1,451,482)	---
Leveraged Hurdle Rate	\$ (1,566,274)	---	\$ (1,451,482)	---	\$ (1,814,352)	---	\$ (2,177,222)	---
Revenues, Less Profit	\$ 8,875,551	---	\$ 8,225,062	---	\$ 10,281,328	---	\$ 12,337,593	---
Revenues - TDC = Residual Land Value	\$ 307,480	---	\$ (389,158)	---	\$ 127,978	---	\$ (95,652)	---
Land Value (per sqft)	\$ 30.75	---	\$ (38.92)	---	\$ 12.80	---	\$ (9.57)	---
Land Value (per unit)	\$ 43,508	---	\$ 40,319	---	\$ 50,399	---	\$ 40,319	---
<u>Value of (in terms of RLV):</u>								
IZ + CET req't			\$ (696,637)	\$ -				
Current incentives available					\$ 517,135	\$ -		
Proposed Bonus FAR							\$ 293,506	\$ -

Source: Economic & Planning Systems

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Table 8
Prototype 12 Pro forma

	Prototype 12							
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)	
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs
Development Costs								
Construction Costs								
Hard costs (per sqft of GFA)	\$ 12,141,294	---	\$ 12,141,294	---	\$ 14,566,588	---	\$ 17,930,706	---
Parking Costs								
Structured, tuck-under (per space)	\$ 930,000	---	\$ 930,000	---	\$ 930,000	---	\$ 1,320,000	---
Surface (per space)	\$ -	---	\$ -	---	\$ -	---	\$ -	---
Total (HC)	\$ 13,071,294	\$ -	\$ 13,071,294	\$ -	\$ 15,496,588	\$ -	\$ 19,250,706	\$ -
Soft Costs (per sqft)								
System Development Charges								
Sanitary Sewer	\$ 362,775	---	\$ 362,775	---	\$ 454,678	---	\$ 546,581	---
Stormwater	\$ 10,025	---	\$ 10,025	---	\$ 10,025	---	\$ 10,025	---
Transportation (PBOT)	\$ 151,800	---	\$ 151,800	---	\$ 190,256	---	\$ 228,712	---
Parks & Recreation	\$ 689,550	---	\$ 689,550	---	\$ 864,236	---	\$ 1,038,922	---
Construction Excise Taxes (CET)			\$ 96,149	---	\$ 115,355	---	\$ 141,996	---
Other Soft Costs (as % of HC)	\$ 3,267,824	---	\$ 3,267,824	---	\$ 3,874,147	---	\$ 4,812,676	---
Subtotal (SC, excluding loan interest carry)	\$ 4,481,974	\$ -	\$ 4,578,122	\$ -	\$ 5,508,697	\$ -	\$ 6,778,913	\$ -
as % of HC	34%	---	35%	---	36%	---	35%	---
Construction Loan Interest	\$ 579,258	---	\$ 582,431	---	\$ 693,174	---	\$ 858,977	---
Total (SC)	\$ 5,061,232	---	\$ 5,160,553	---	\$ 6,201,872	---	\$ 7,637,890	---
Cost-Reducing Incentives								
SDC Waivers					\$ (161,617)	\$ -	\$ (193,725)	\$ -
CET Waivers					\$ (12,272)	---	\$ (15,079)	---
Subtotal Cost-Reducing Incentives					\$ (173,888)	\$ -	\$ (208,804)	\$ -
Total Development Costs (TDC) (excluding land)	\$ 18,132,526	---	\$ 18,231,847	---	\$ 21,524,572	---	\$ 26,679,792	---
per unit	\$ 241,767	\$ -	\$ 243,091	\$ -	\$ 286,994	\$ -	\$ 236,104	\$ -
per GFA sqft	\$ 209	\$ -	\$ 210	\$ -	\$ 207	\$ -	\$ 208	\$ -
Revenues & Valuation Assumptions								
Less: GL insurance premium for construction defects	\$ 750,000	---	\$ 670,000	---	\$ 840,000	---	\$ 1,010,000	---
For-Sale Revenues								
MR Revenues	\$ 26,156,250	---	\$ 23,366,250	---	\$ 29,295,000	---	\$ 35,223,750	---
AH Revenues			\$ 857,600	---	\$ 1,072,000	---	\$ 1,286,400	---
Subtotal Sales	\$ 26,156,250	\$ -	\$ 24,223,850	\$ -	\$ 30,367,000	\$ -	\$ 36,510,150	\$ -
Sales Marketing Costs	\$ (523,125)	---	\$ (484,477)	---	\$ (607,340)	---	\$ (730,203)	---
Total Sales Revenues	\$ 25,633,125	\$ -	\$ 23,739,373	\$ -	\$ 29,759,660	\$ -	\$ 35,779,947	\$ -
Unleveraged Hurdle Rate	\$ (2,563,313)	---	\$ (2,373,937)	---	\$ (2,975,966)	---	\$ (3,577,995)	---
Leveraged Hurdle Rate	\$ (3,844,969)	---	\$ (3,560,906)	---	\$ (4,463,949)	---	\$ (5,366,992)	---
Revenues, Less Profit	\$ 21,788,156	---	\$ 20,178,467	---	\$ 25,295,711	---	\$ 30,412,955	---
Revenues - TDC = Residual Land Value	\$ 2,905,630	---	\$ 1,276,620	---	\$ 2,931,139	---	\$ 2,723,163	---
Land Value (per sqft)	\$ 66.95	---	\$ 29.42	---	\$ 67.54	---	\$ 62.75	---
Land Value (per unit)	\$ 51,266	---	\$ 47,479	---	\$ 59,519	---	\$ 47,496	---
Value of (in terms of RLV):								
IZ + CET req't			\$ (1,629,011)	\$ -				
Current incentives available					\$ 1,654,520	\$ -		
Proposed Bonus FAR							\$ 1,446,543	\$ -
Rental Revenue Assumptions								
MR Rent Income	\$ 1,987,875	---	\$ 1,775,835	---	\$ 2,226,420	---	\$ 2,677,005	---
AH Rental Income			\$ 105,504	---	\$ 131,880	---	\$ 158,256	---
Subtotal Gross Annual Revenues	\$ 1,987,875	\$ -	\$ 1,881,339	\$ -	\$ 2,358,300	\$ -	\$ 2,835,261	\$ -
Vacancy	\$ (99,394)	---	\$ (94,067)	---	\$ (117,915)	---	\$ (141,763)	---
Operational Costs								
O&M	\$ (450,000)	---	\$ (450,000)	---	\$ (564,000)	---	\$ (678,000)	---
Annual Property Taxes	\$ (51,121)	---	\$ (47,525)	---	\$ (59,576)	---	\$ (71,628)	---
NOI	\$ 1,387,360	\$ -	\$ 1,289,747	\$ -	\$ 1,616,809	\$ -	\$ 1,943,870	\$ -
Gross Value of Rental Project	\$ 22,197,757	---	\$ 20,635,959	---	\$ 25,868,941	---	\$ 31,101,924	---
Sales Marketing Costs (as % of Gross)	\$ (443,955)	---	\$ (412,719)	---	\$ (517,379)	---	\$ (622,038)	---
Net Proceeds of Rental Project	\$ 21,753,802	\$ -	\$ 20,223,240	\$ -	\$ 25,351,562	\$ -	\$ 30,479,885	\$ -
Revenue-Enhancing Incentives								
PV of Property Tax Exemption					\$ 38,944	---	\$ 46,739	---
Total Project Value (w/ R-E Incentives)	\$ 21,753,802	\$ -	\$ 20,223,240	\$ -	\$ 25,390,506	---	\$ 30,526,624	---
Unleveraged Hurdle Rate	\$ (2,175,380)	---	\$ (2,022,324)	---	\$ (2,535,156)	---	\$ (3,047,989)	---
Leveraged Hurdle Rate	\$ (3,263,070)	---	\$ (3,033,486)	---	\$ (3,802,734)	---	\$ (4,571,983)	---
Revenues, Less Profit	\$ 18,490,732	---	\$ 17,189,754	---	\$ 21,548,828	---	\$ 25,907,902	---
Revenues - TDC = Residual Land Value	\$ 358,206	---	\$ (1,042,094)	---	\$ 24,256	---	\$ (771,890)	---
Land Value (per sqft)	\$ 8.25	---	\$ (24.01)	---	\$ 0.56	---	\$ (17.79)	---
Land Value (per unit)	\$ 43,508	---	\$ 40,446	---	\$ 50,703	---	\$ 40,460	---
Value of (in terms of RLV):								
IZ + CET req't			\$ (1,400,299)	\$ -				
Current incentives available					\$ 1,066,350	\$ -		
Proposed Bonus FAR							\$ 270,204	\$ -

Source: Economic & Planning Systems

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Appendix C - Part 2

Better Housing by Design - Feasibility Analysis

MEMORANDUM

To: Tyler Bump, Senior Economic Planner
City of Portland Bureau of Planning and Sustainability

From: Dan Guimond and David Schwartz,
Economic & Planning Systems

Subject: Multi-Dwelling Unit district density bonus
residual land value analysis; EPS #153070

Date: October 28, 2018

The purpose of this memorandum is to update three of the prototypes evaluated and reported in a memorandum dated May 18, 2018, to City of Portland Bureau of Planning and Sustainability (BPS).

Prototype Updates

Economic & Planning Systems (EPS) was requested to perform a pro-forma and feasibility analysis update to two of the development prototypes identified in the previous modeling effort. The new assumptions to be modeled were as follows:

- 1) Prototype 2 (stacked flat): with 9 units, 555 gross square feet per unit using a 90 percent efficiency factor, and zero parking spaces.
- 2) Prototype 4 (stacked flat): with 19 units, 790 gross square feet per unit using an 85 percent efficiency factor, and zero parking spaces.
- 3) Prototype 4 (stacked flat): with 32 units, 700 gross square feet per unit using an 85 percent efficiency factor, and zero parking spaces. (This prototype is referred to in the memo as "Prototype 4B")

The following findings outline the results of the feasibility modeling and provide comparisons to the original level of feasibility for greater depth of understanding the results.

The Economics of Land Use



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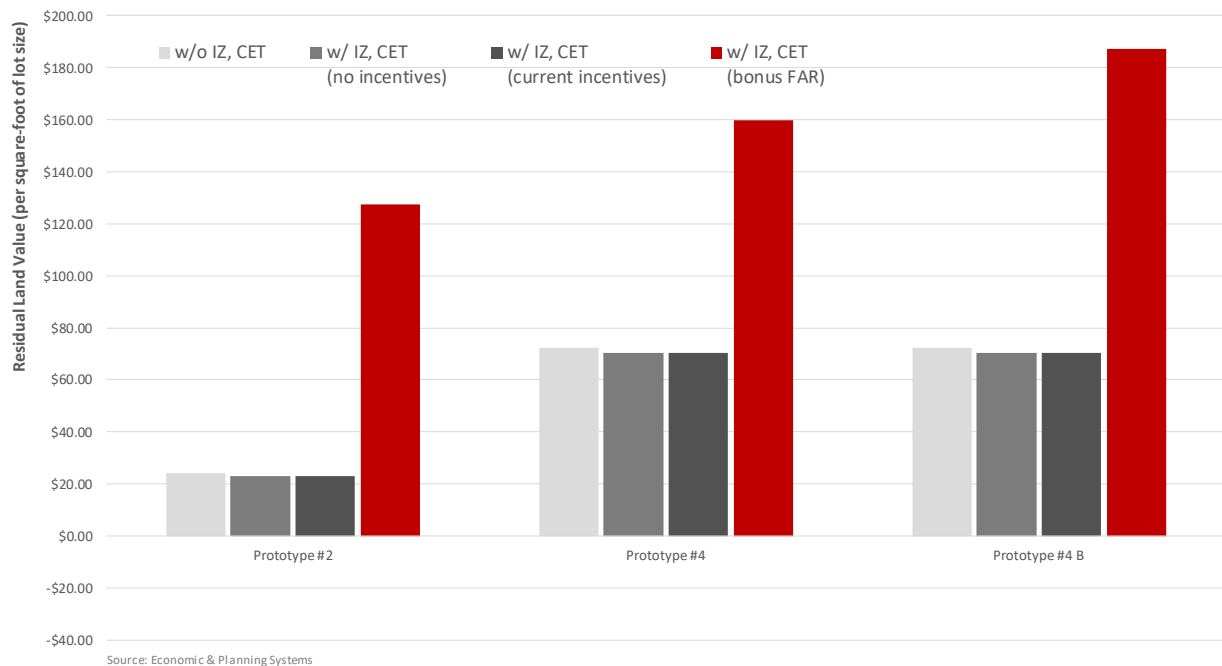
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Findings

For-Sale Prototypes

- **R2:** Under the conditions evaluated in the previous memorandum (dated May 18, 2018), the bonus FAR scenario for Prototype #2 yielded a RLV of approximately \$42, double the other scenarios in Prototype #2. In this current configuration, the RLV (with more units, smaller units, and zero parking), the RLV exceeds \$120 per square foot. The substantial difference is attributable to the elimination of parking costs and 50 percent more units and, thus, revenues (the old "bonus FAR" scenario had 6 units).
- **R1:** In the previous versions of Prototype #4 with bonus FAR, in which there were 16 units with associated parking, the resulting RLV was nearly equivalent to the scenarios without bonus FAR as a result of the mitigating effects of more units but greater costs. In this new version, in which there are 3 more units of a smaller size and zero parking, the RLV in the bonus FAR scenario more than doubles to \$160 per square foot. In the version of Prototype #4 (shown as #4B below), which has 32 smaller units and zero parking, the RLV exceeds \$190 per square foot.

Figure 1
Residual Land Value Summary by Scenario (as for-sale projects)



Rental Prototypes

- **R2:** In the previous version of Prototype #2 with bonus FAR, the RLV was estimated to be approximately \$33 per square foot, double the RLV of the other scenarios. In this version with several more, smaller units and zero parking, the RLV is estimated to reach \$90 per square foot.
- **R1:** In Prototype #4 with bonus FAR, the RLV in the previous version was estimated to have been nearly equivalent to the RLV of the other scenarios. In this version, the RLV is estimated (of Prototype #4) to increase to nearly \$140 per square foot. Similarly, the RLV of the Prototype #4B (with 32 units) to just above \$120 per square foot.

Figure 2
Residual Land Value Summary by Scenario (as rental projects)

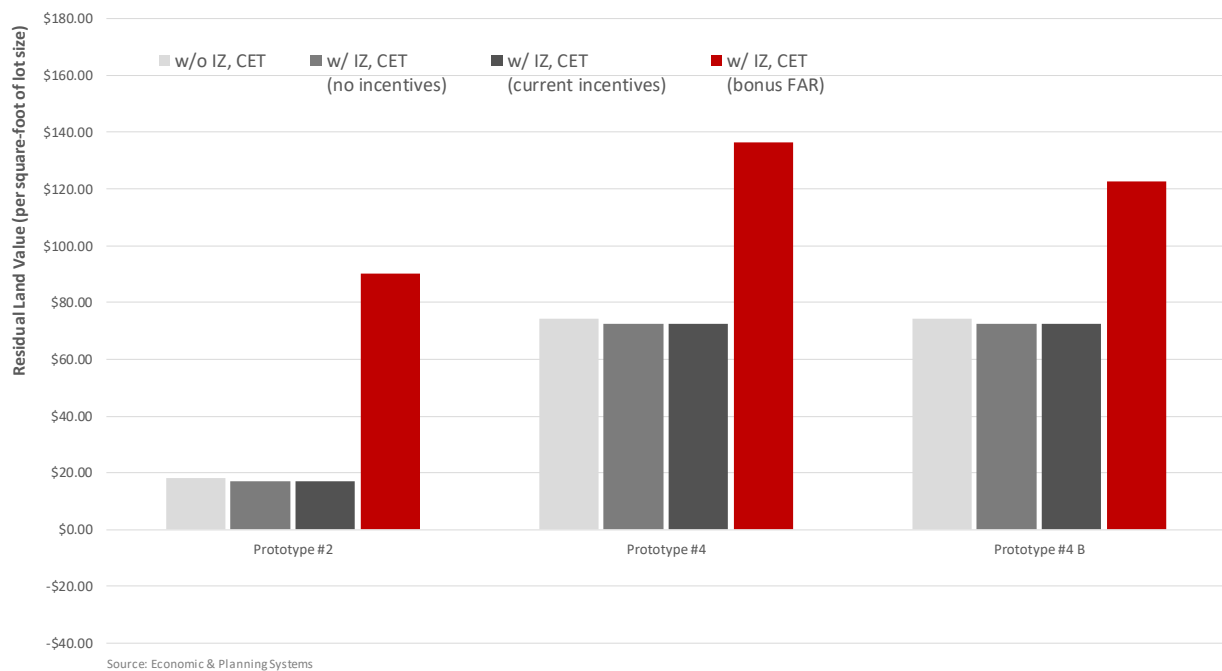


Table 1
Residual Land Value Summary by Scenario

	Stacked flats				Townhomes			
	w/o IZ, CET	w/ IZ, CET (no incentives)	w/ IZ, CET (current incentives)	w/ IZ, CET (bonus FAR)	w/o IZ, CET	w/ IZ, CET (no incentives)	w/ IZ, CET (current incentives)	w/ IZ, CET (bonus FAR)
Prototype (as a for-sale project)								
Prototype #2	\$24.15	\$22.85	\$22.85	\$127.28	\$51.08	\$49.78	\$49.78	\$49.78
Prototype #4	\$72.13	\$70.30	\$70.30	\$159.75	\$129.82	\$127.35	\$127.35	\$127.35
Prototype #4 B	\$72.13	\$70.30	\$70.30	\$187.25	\$129.82	\$127.35	\$127.35	\$127.35
Prototype (as a rental project)								
Prototype #2	\$18.27	\$16.97	\$16.97	\$90.20	\$27.65	\$26.35	\$26.35	\$26.35
Prototype #4	\$74.41	\$72.58	\$72.58	\$136.33	\$34.32	\$31.85	\$31.85	\$31.85
Prototype #4 B	\$74.41	\$72.58	\$72.58	\$122.70	\$34.32	\$31.85	\$31.85	\$31.85

Source: Economic & Planning Systems

H:\63070- Portland On-Call Economic Services\Models\Project 2 - MDU Analysis\63070-MDU Model-102518.xlsx\T5 - Summary RLV per sqft

Table 2
Prototype 2 Pro forma

Prototype 2									
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)		
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	
Development Costs									
Construction Costs									
Hard costs (per sqft of GFA)	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 707,128	\$ 650,000	
Parking Costs									
Structured, tuck-under (per space)	\$ 120,000	\$ 60,000	\$ 120,000	\$ 60,000	\$ 120,000	\$ 60,000	\$ -	\$ 60,000	
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total (HC)	\$ 770,000	\$ 710,000	\$ 770,000	\$ 710,000	\$ 770,000	\$ 710,000	\$ 707,128	\$ 710,000	
Soft Costs (per sqft)									
System Development Charges									
Sanitary Sewer	\$ 19,348	\$ 12,092	\$ 19,348	\$ 12,092	\$ 19,348	\$ 12,092	\$ 43,533	\$ 12,092	
Stormwater	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089	\$ 1,155	\$ 1,089	
Transportation (PBOT)	\$ 8,096	\$ 5,628	\$ 8,096	\$ 5,628	\$ 8,096	\$ 5,628	\$ 18,216	\$ 5,628	
Parks & Recreation	\$ 36,776	\$ 25,102	\$ 36,776	\$ 25,102	\$ 36,776	\$ 25,102	\$ 55,314	\$ 25,102	
Construction Excise Taxes (CET)	\$ 6,352	\$ 6,352	\$ 6,352	\$ 6,352	\$ 6,352	\$ 6,352	\$ 6,911	\$ 6,352	
Other Soft Costs (as % of HC)	\$ 192,500	\$ 177,500	\$ 192,500	\$ 177,500	\$ 192,500	\$ 177,500	\$ 176,782	\$ 177,500	
Subtotal (SC, excluding loan interest carry)	\$ 257,875	\$ 221,411	\$ 264,227	\$ 227,763	\$ 264,227	\$ 227,763	\$ 301,911	\$ 227,763	
as % of HC	33%	31%	34%	32%	34%	32%	43%	32%	
Construction Loan Interest	\$ 25,054	\$ 22,703	\$ 25,209	\$ 22,858	\$ 25,209	\$ 22,858	\$ 24,595	\$ 22,858	
Total (SC)	\$ 282,929	\$ 244,114	\$ 289,437	\$ 250,621	\$ 289,437	\$ 250,621	\$ 326,506	\$ 250,621	
Cost-Reducing Incentives									
SDC Waivers					\$ -	\$ -	\$ -	\$ -	
CET Waivers					\$ -	\$ -	\$ -	\$ -	
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ -	\$ -	
Total Development Costs (TDC) (excluding land)	\$ 1,052,929	\$ 954,114	\$ 1,059,437	\$ 960,621	\$ 1,059,437	\$ 960,621	\$ 1,033,634	\$ 960,621	
per unit	\$ 263,232	\$ 477,057	\$ 264,859	\$ 480,311	\$ 264,859	\$ 480,311	\$ 114,848	\$ 480,311	
per GFA sqft	\$ 211	\$ 191	\$ 212	\$ 192	\$ 212	\$ 192	\$ 190	\$ 192	
Revenues & Valuation Assumptions									
Less: GL insurance premium for construction defects	\$ 40,000	\$ 20,000	\$ 40,000	\$ 20,000	\$ 40,000	\$ 20,000	\$ 90,000	\$ 20,000	
For-Sale Revenues									
MR Revenues	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 2,112,885	\$ 1,476,000	
AH Revenues			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Sales	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 1,457,000	\$ 1,476,000	\$ 2,112,885	\$ 1,476,000	
Sales Marketing Costs	\$ (29,140)	\$ (29,520)	\$ (29,140)	\$ (29,520)	\$ (29,140)	\$ (29,520)	\$ (42,258)	\$ (29,520)	
Total Sales Revenues	\$ 1,427,860	\$ 1,446,480	\$ 1,427,860	\$ 1,446,480	\$ 1,427,860	\$ 1,446,480	\$ 2,070,627	\$ 1,446,480	
Unleveraged Hurdle Rate	\$ (142,786)	\$ (144,648)	\$ (142,786)	\$ (144,648)	\$ (142,786)	\$ (144,648)	\$ (207,063)	\$ (144,648)	
Leveraged Hurdle Rate	\$ (214,179)	\$ (216,972)	\$ (214,179)	\$ (216,972)	\$ (214,179)	\$ (216,972)	\$ (310,594)	\$ (216,972)	
Revenues, Less Profit	\$ 1,213,681	\$ 1,229,508	\$ 1,213,681	\$ 1,229,508	\$ 1,213,681	\$ 1,229,508	\$ 1,760,033	\$ 1,229,508	
Revenues - TDC = Residual Land Value	\$ 120,752	\$ 255,394	\$ 114,244	\$ 248,887	\$ 114,244	\$ 248,887	\$ 636,399	\$ 248,887	
Land Value (per sqft)	\$ 24.15	\$ 51.08	\$ 22.85	\$ 49.78	\$ 22.85	\$ 49.78	\$ 127.28	\$ 49.78	
Land Value (per unit)	\$ 53,545	\$ 108,486	\$ 53,545	\$ 108,486	\$ 53,545	\$ 108,486	\$ 34,510	\$ 108,486	
Value of (in terms of RLV):									
IZ + CET req't			\$ (6,507)	\$ (6,507)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 522,155	\$ -	
Rental Revenue Assumptions									
MR Rental Income	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 161,838	\$ 98,400	
AH Rental Income			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Gross Annual Revenues	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 111,600	\$ 98,400	\$ 161,838	\$ 98,400	
Vacancy	\$ (5,580)	\$ (4,920)	\$ (5,580)	\$ (4,920)	\$ (5,580)	\$ (4,920)	\$ (8,092)	\$ (4,920)	
Operational Costs									
O&M	\$ (17,000)	\$ (8,500)	\$ (17,000)	\$ (8,500)	\$ (17,000)	\$ (8,500)	\$ (38,250)	\$ (8,500)	
Annual Property Taxes	\$ (3,164)	\$ (3,020)	\$ (3,164)	\$ (3,020)	\$ (3,164)	\$ (3,020)	\$ (4,105)	\$ (3,020)	
NOI	\$ 85,856	\$ 81,960	\$ 85,856	\$ 81,960	\$ 85,856	\$ 81,960	\$ 111,392	\$ 81,960	
Gross Value of Rental Project	\$ 1,373,702	\$ 1,311,359	\$ 1,373,702	\$ 1,311,359	\$ 1,373,702	\$ 1,311,359	\$ 1,782,265	\$ 1,311,359	
Sales Marketing Costs (as % of Gross)	\$ (27,474)	\$ (26,227)	\$ (27,474)	\$ (26,227)	\$ (27,474)	\$ (26,227)	\$ (35,645)	\$ (26,227)	
Net Proceeds of Rental Project	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,746,619	\$ 1,285,132	
Revenue-Enhancing Incentives									
PV of Property Tax Exemption					\$ -	\$ -	\$ -	\$ -	
Total Project Value (w/ R-E Incentives)	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,346,228	\$ 1,285,132	\$ 1,746,619	\$ 1,285,132	
Unleveraged Hurdle Rate	\$ (134,623)	\$ (128,513)	\$ (134,623)	\$ (128,513)	\$ (134,623)	\$ (128,513)	\$ (174,662)	\$ (128,513)	
Leveraged Hurdle Rate	\$ (201,934)	\$ (192,770)	\$ (201,934)	\$ (192,770)	\$ (201,934)	\$ (192,770)	\$ (261,993)	\$ (192,770)	
Revenues, Less Profit	\$ 1,144,294	\$ 1,092,362	\$ 1,144,294	\$ 1,092,362	\$ 1,144,294	\$ 1,092,362	\$ 1,484,627	\$ 1,092,362	
Revenues - TDC = Residual Land Value	\$ 91,364	\$ 138,248	\$ 84,857	\$ 131,741	\$ 84,857	\$ 131,741	\$ 450,993	\$ 131,741	
Land Value (per sqft)	\$ 18.27	\$ 27.65	\$ 16.97	\$ 26.35	\$ 16.97	\$ 26.35	\$ 90.20	\$ 26.35	
Value of (in terms of RLV):									
IZ + CET req't			\$ (6,507)	\$ (6,507)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 366,136	\$ 46,884	

Source: Economic & Planning Systems

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Table 3
Prototype 4 Pro forma

Prototype 4									
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)		
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	
Development Costs									
Construction Costs									
Hard costs (per sqft of GFA)	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 2,291,141	\$ 2,660,000	
Parking Costs									
Structured, tuck-under (per space)	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ -	\$ 150,000	
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total (HC)	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 2,291,141	\$ 2,810,000	
Soft Costs (per sqft)									
System Development Charges									
Sanitary Sewer	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 91,903	\$ 60,460	
Stormwater	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	
Transportation (PBOT)	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 38,456	\$ 28,140	
Parks & Recreation	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 116,774	\$ 110,540	
Construction Excise Taxes (CET)	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 20,792	\$ 24,139	
Other Soft Costs (as % of HC)	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 572,785	\$ 702,500	
Subtotal (SC, excluding loan interest carry)	\$ 715,742	\$ 902,729	\$ 733,634	\$ 926,868	\$ 733,634	\$ 926,868	\$ 843,020	\$ 926,868	
as % of HC	32%	32%	33%	33%	33%	33%	37%	33%	
Construction Loan Interest	\$ 68,608	\$ 87,017	\$ 69,027	\$ 87,583	\$ 69,027	\$ 87,583	\$ 73,457	\$ 87,583	
Total (SC)	\$ 784,350	\$ 989,746	\$ 802,661	\$ 1,014,451	\$ 802,661	\$ 1,014,451	\$ 916,477	\$ 1,014,451	
Cost-Reducing Incentives									
SDC Waivers					\$ -	\$ -	\$ -	\$ -	
CET Waivers					\$ -	\$ -	\$ -	\$ -	
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ -	\$ -	
Total Development Costs (TDC) (excluding land)	\$ 2,995,880	\$ 3,799,746	\$ 3,014,190	\$ 3,824,451	\$ 3,014,190	\$ 3,824,451	\$ 3,207,618	\$ 3,824,451	
per unit	\$ 299,588	\$ 379,975	\$ 301,419	\$ 382,445	\$ 301,419	\$ 382,445	\$ 168,822	\$ 382,445	
per GFA sqft	\$ 213	\$ 200	\$ 214	\$ 201	\$ 214	\$ 201	\$ 196	\$ 201	
Revenues & Valuation Assumptions									
Less: GL insurance premium for construction defects	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 190,000	\$ 100,000	
For-Sale Revenues									
MR Revenues	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 5,996,495	\$ 6,240,000	
AH Revenues			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Sales	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 5,996,495	\$ 6,240,000	
Sales Marketing Costs	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (119,930)	\$ (124,800)	
Total Sales Revenues	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 5,876,565	\$ 6,115,200	
Unleveraged Hurdle Rate	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (587,657)	\$ (611,520)	
Leveraged Hurdle Rate	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (881,485)	\$ (917,280)	
Revenues, Less Profit	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 4,995,080	\$ 5,197,920	
Revenues - TDC = Residual Land Value	\$ 721,343	\$ 1,298,174	\$ 703,032	\$ 1,273,469	\$ 703,032	\$ 1,273,469	\$ 1,597,462	\$ 1,273,469	
Land Value (per sqft)	\$ 72.13	\$ 129.82	\$ 70.30	\$ 127.35	\$ 70.30	\$ 127.35	\$ 159.75	\$ 127.35	
Land Value (per unit)	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 46,394	\$ 91,728	
Value of (in terms of RLVI):									
IZ + CET req't			\$ (18,311)	\$ (24,705)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 894,430	\$ -	
Rental Revenue Assumptions									
MR Rental Income	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 459,306	\$ 384,000	
AH Rental Income			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal Gross Annual Revenues	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 459,306	\$ 384,000	
Vacancy	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (22,965)	\$ (19,200)	
Operational Costs									
O&M	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (80,750)	\$ (42,500)	
Annual Property Taxes	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (12,637)	\$ (11,454)	
NOI	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 342,954	\$ 310,846	
Gross Value of Rental Project	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 5,487,257	\$ 4,973,535	
Sales Marketing Costs (as % of Gross)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (109,745)	\$ (99,471)	
Net Proceeds of Rental Project	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 5,377,512	\$ 4,874,064	
Revenue-Enhancing Incentives									
PV of Property Tax Exemption					\$ -	\$ -	\$ -	\$ -	
Total Project Value (w/ R-E Incentives)	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 5,377,512	\$ 4,874,064	
Unleveraged Hurdle Rate	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (537,751)	\$ (487,406)	
Leveraged Hurdle Rate	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (806,627)	\$ (731,110)	
Revenues, Less Profit	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 4,570,885	\$ 4,142,955	
Revenues - TDC = Residual Land Value	\$ 744,091	\$ 343,209	\$ 725,781	\$ 318,504	\$ 725,781	\$ 318,504	\$ 1,363,267	\$ 318,504	
Land Value (per sqft)	\$ 74.41	\$ 34.32	\$ 72.58	\$ 31.85	\$ 72.58	\$ 31.85	\$ 136.33	\$ 31.85	
Land Value (per unit)	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 42,454	\$ 73,111	
Value of (in terms of RLVI):									
IZ + CET req't			\$ (18,311)	\$ (24,705)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 637,486	\$ (407,277)	

Source: Economic & Planning Systems

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Table 4
Prototype 4B Pro forma

Prototype 4B									
	w/o IZ, CET		w/ IZ, CET (no incentives)		w/ IZ, CET (current incentives)		w/ IZ, CET (bonus FAR)		
	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	Stacked flats	THs	
Development Costs									
Construction Costs									
Hard costs (per sqft of GFA)	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 1,971,529	\$ 2,660,000	\$ 3,325,741	\$ 2,660,000	
Parking Costs									
Structured, tuck-under (per space)	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ 240,000	\$ 150,000	\$ -	\$ 150,000	
Surface (per space)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total (HC)	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 2,211,529	\$ 2,810,000	\$ 3,325,741	\$ 2,810,000	
Soft Costs (per sqft)									
System Development Charges									
Sanitary Sewer	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 48,370	\$ 60,460	\$ 154,784	\$ 60,460	
Stormwater	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	\$ 2,310	\$ 1,089	
Transportation (PBOT)	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 20,240	\$ 28,140	\$ 64,768	\$ 28,140	
Parks & Recreation	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 91,940	\$ 110,540	\$ 196,672	\$ 110,540	
Construction Excise Taxes (CET)	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 17,891	\$ 24,139	\$ 30,181	\$ 24,139	
Other Soft Costs (as % of HC)	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 552,882	\$ 702,500	\$ 831,435	\$ 702,500	
Subtotal (SC, excluding loan interest carry)	\$ 715,742	\$ 902,729	\$ 733,634	\$ 926,868	\$ 733,634	\$ 926,868	\$ 1,280,150	\$ 926,868	
as % of HC	32%	32%	33%	33%	33%	33%	38%	33%	
Construction Loan Interest	\$ 68,608	\$ 87,017	\$ 69,027	\$ 87,583	\$ 69,027	\$ 87,583	\$ 107,951	\$ 87,583	
Total (SC)	\$ 784,350	\$ 989,746	\$ 802,661	\$ 1,014,451	\$ 802,661	\$ 1,014,451	\$ 1,388,101	\$ 1,014,451	
Cost-Reducing Incentives									
SDC Waivers					\$ -	\$ -	\$ (52,317)	\$ -	
CET Waivers					\$ -	\$ -	\$ (3,773)	\$ -	
Subtotal Cost-Reducing Incentives					\$ -	\$ -	\$ (56,089)	\$ -	
Total Development Costs (TDC) (excluding land)	\$ 2,995,880	\$ 3,799,746	\$ 3,014,190	\$ 3,824,451	\$ 3,014,190	\$ 3,824,451	\$ 4,657,752	\$ 3,824,451	
per unit	\$ 299,588	\$ 379,975	\$ 301,419	\$ 382,445	\$ 301,419	\$ 382,445	\$ 145,555	\$ 382,445	
per GFA sqft	\$ 213	\$ 200	\$ 214	\$ 201	\$ 214	\$ 201	\$ 196	\$ 201	
Revenues & Valuation Assumptions									
Less: GL insurance premium for construction defects	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 280,000	\$ 100,000	
For-Sale Revenues									
MR Revenues	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 7,830,200	\$ 6,240,000	
AH Revenues			\$ -	\$ -	\$ -	\$ -	\$ 345,394	\$ -	
Subtotal Sales	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 4,582,500	\$ 6,240,000	\$ 8,175,594	\$ 6,240,000	
Sales Marketing Costs	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (91,650)	\$ (124,800)	\$ (163,512)	\$ (124,800)	
Total Sales Revenues	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 4,490,850	\$ 6,115,200	\$ 8,012,082	\$ 6,115,200	
Unleveraged Hurdle Rate	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (449,085)	\$ (611,520)	\$ (801,208)	\$ (611,520)	
Leveraged Hurdle Rate	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (673,628)	\$ (917,280)	\$ (1,201,812)	\$ (917,280)	
Revenues, Less Profit	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 3,817,223	\$ 5,197,920	\$ 6,810,270	\$ 5,197,920	
Revenues - TDC = Residual Land Value	\$ 721,343	\$ 1,298,174	\$ 703,032	\$ 1,273,469	\$ 703,032	\$ 1,273,469	\$ 1,872,517	\$ 1,273,469	
Land Value (per sqft)	\$ 72.13	\$ 129.82	\$ 70.30	\$ 127.35	\$ 70.30	\$ 127.35	\$ 187.25	\$ 127.35	
Land Value (per unit)	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 67,363	\$ 91,728	\$ 37,557	\$ 91,728	
Value of (in terms of RLVI):									
IZ + CET req't			\$ (18,311)	\$ (24,705)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 1,169,485	\$ -	
Rental Revenue Assumptions									
MR Rental Income	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 599,760	\$ 384,000	
AH Rental Income			\$ -	\$ -	\$ -	\$ -	\$ 25,293	\$ -	
Subtotal Gross Annual Revenues	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 351,000	\$ 384,000	\$ 625,053	\$ 384,000	
Vacancy	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (17,550)	\$ (19,200)	\$ (31,253)	\$ (19,200)	
Operational Costs									
O&M	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (42,500)	\$ (136,000)	\$ (42,500)	
Annual Property Taxes	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (10,340)	\$ (11,454)	\$ (16,270)	\$ (11,454)	
NOI	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 280,610	\$ 310,846	\$ 441,531	\$ 310,846	
Gross Value of Rental Project	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 4,489,761	\$ 4,973,535	\$ 7,064,500	\$ 4,973,535	
Sales Marketing Costs (as % of Gross)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (89,795)	\$ (99,471)	\$ (141,290)	\$ (99,471)	
Net Proceeds of Rental Project	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 6,923,210	\$ 4,874,064	
Revenue-Enhancing Incentives									
PV of Property Tax Exemption					\$ -	\$ -	\$ 12,496	\$ -	
Total Project Value (w/ R-E Incentives)	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 4,399,966	\$ 4,874,064	\$ 6,935,706	\$ 4,874,064	
Unleveraged Hurdle Rate	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (439,997)	\$ (487,406)	\$ (692,321)	\$ (487,406)	
Leveraged Hurdle Rate	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (659,995)	\$ (731,110)	\$ (1,038,481)	\$ (731,110)	
Revenues, Less Profit	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 3,739,971	\$ 4,142,955	\$ 5,884,728	\$ 4,142,955	
Revenues - TDC = Residual Land Value	\$ 744,091	\$ 343,209	\$ 725,781	\$ 318,504	\$ 725,781	\$ 318,504	\$ 1,226,976	\$ 318,504	
Land Value (per sqft)	\$ 74.41	\$ 34.32	\$ 72.58	\$ 31.85	\$ 72.58	\$ 31.85	\$ 122.70	\$ 31.85	
Land Value (per unit)	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 65,999	\$ 73,111	\$ 32,453	\$ 73,111	
Value of (in terms of RLVI):									
IZ + CET req't			\$ (18,311)	\$ (24,705)					
Current incentives available					\$ -	\$ -			
Proposed Bonus FAR							\$ 501,195	\$ (407,277)	

Source: Economic & Planning Systems

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