



MEMORANDUM

DATE: July 20, 2021

To: Morgan Tracy
BUREAU OF PLANNING AND SUSTAINABILITY

FROM: Jerry Johnson
JOHNSON ECONOMICS LLC

SUBJECT: Economic Analysis of Proposed Changes to the Infill Development Standards on Property Zoned R10 and R20

In response to the State of Oregon’s Middle Housing rule, the City of Portland Bureau of Planning and Sustainability’s Residential Infill Project is being extended to include large-lot R10 and R20 zones. The Residential Infill Project established maximum floor area ratios (FAR) for several smaller-lot single dwelling zones, where a range of middle housing options were allowed. The intent of the limitation was to protect the scale of buildings in these zones to remain compatible with existing development while making development of middle housing economically competitive with the development of single-family homes.

This analysis looks at a range of prospective development forms that may be allowed in the R10 and R20 zones and assesses the comparative viability of these development prototypes in six distinct residential markets in the City of Portland. The current built FAR observed in these zones is as follows:

R10 at 0.28
R20 = 0.15.

The proposed FAR was assumed to have a base for single units at 0.30 under R10 and 0.20 under R20. It was also assumed that the FAR will be increased by 0.1 for the second unit and 0.1 for the 3rd unit. As with the initial Residential Infill Project, the changes allow for more units on individual parcels, and modest increases in allowed FAR as the number of units increases. This change will increase the marginal competitiveness of middle housing solutions for development and/or redevelopment.

This analysis evaluated just under 6,000 acres of land zoned R10 and R20 within the City of Portland, of which 990 acres is currently classified as vacant. The preponderance of this supply is located west of the Willamette River, although a significant inventory of sites is found in the Johnson Creek submarket in southeast Portland.

ZONING SUBAREA	Acres	
	Total	Vacant
R10		
NORTHWEST	922	287
SOUTHWEST	1,252	114
SOUTH OF BARBUR	688	76
COLUMBIA CORRIDOR	197	23
EAST PORTLAND	163	22
JOHNSON CREEK	996	219
TOTAL	4,219	741
R20		
NORTHWEST	297	65
SOUTHWEST	400	46
SOUTH OF BARBUR	924	110
COLUMBIA CORRIDOR	34	1
EAST PORTLAND	0	0
JOHNSON CREEK	117	27
TOTAL	1,771	249
TOTAL, BOTH ZONES		
NORTHWEST	1,219	352
SOUTHWEST	1,652	161
SOUTH OF BARBUR	1,612	186
COLUMBIA CORRIDOR	231	24
EAST PORTLAND	163	22
JOHNSON CREEK	1,112	245
TOTAL	5,990	990



In summary, the most recent proposed changes to the code increase allowable density in terms of units, and the FAR bonus structure provides incentives for greater unit counts at redevelopment. As with the previous infill project, the net impact is expected to be a significant proportion of redevelopment being multiple-unit properties. This would be expected to provide greater net residential unit yield and lower average price points.

I. PROTOTYPES

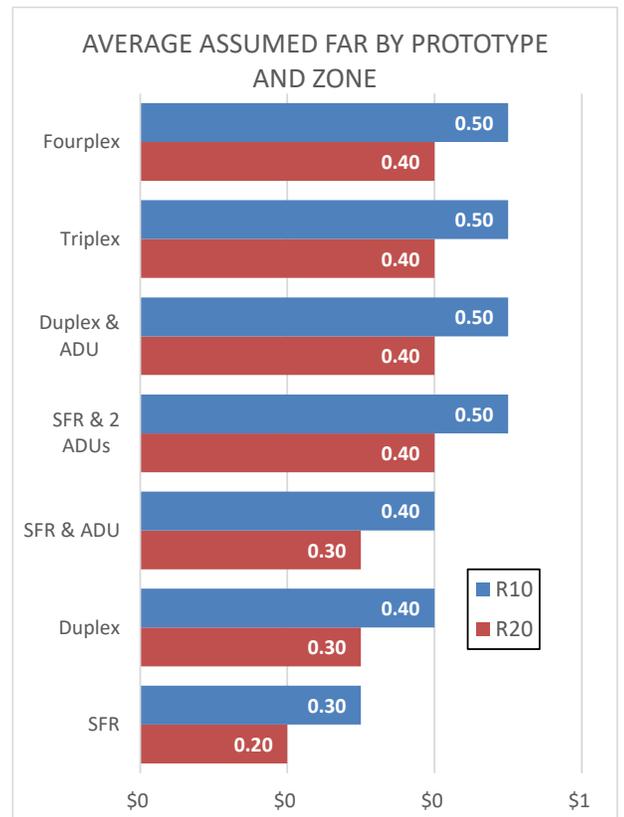
Johnson Economics modeled the economic feasibility of a series of prototypical development types. A total of fourteen development prototypes were evaluated, two representing current zoning standards with an additional twelve under the revised standards. The following is a summary of the prototypes evaluated:

		Current		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
PROGRAM	Property Assumptions														
	Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000
	SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-
	ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-
	Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4
	Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4
	Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400
	Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800
	Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000
	Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000
	Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000
	Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9
	FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40

Assumed size in square feet for each unit type is shown, as well as a weighted average size per unit, which reflects the average residential unit size of all units on a parcel.

The FAR in these examples has been set at the maximum allowable FAR under the proposed code. We would expect that realized FAR would be somewhat below the maximum allowed under the proposed FAR program, particularly for the larger R20 sites. While physically possible, the resulting residential programs would be well outside of market norms. The market will likely choose to limit the size of duplex units to better reflect local market activity. The R10 sites are more able to accommodate the full FAR allowed due to their smaller scale.

The following are summary pro formas for these development forms. The assumed pricing levels in these examples reflect the Northwest submarket as an example, with actual pricing varied based on the six submarkets containing R10 and R20 parcels. The projects were evaluated from both an ownership position as well as assuming rental residential for the duplex and ADU units.





EXAMPLE OF DEVELOPMENT PROTOTYPES, OWNERSHIP RESIDENTIAL ANALYSIS

	Current Zoning		New Zoning Assumptions													
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20		
PROGRAM	Property Assumptions															
	Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	
	SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-	
	ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-	
	Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4	
	Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4	
	Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400	
	Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800	
	Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000	
	Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000	
	Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000	
	Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9	
	FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40	
	Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	4	4	
	Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375	
	Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2	
	Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2	
	COST ASSUMPTIONS	Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220
		Construction Cost/SF/ADU	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242
Construction Cost/SF/Plex		\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	
Base Garage Costs/Space		\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Adjustment Factor		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Parking Cost/Space		\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Income Assumptions																
Sales Price/SF/SFR		\$395	\$415	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353	
Sales Price/SF/ADU		\$435	\$457	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388	
Sales Price/SF/Plex		\$375	\$394	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335	
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000		
Expenses																
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%		
SUPPORTABLE PROPERTY VALUE	Cost															
	Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200	
	Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
	Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950	
	Income															
	Gross Income - Units	\$1,185,000	\$1,660,000	\$1,276,000	\$2,010,000	\$1,371,200	\$2,146,000	\$1,734,400	\$2,880,000	\$1,635,800	\$2,722,400	\$1,595,000	\$2,680,000	\$1,595,000	\$2,680,000	
	Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000	
	Gross Sales Income	\$1,245,000	\$1,720,000	\$1,336,000	\$2,070,000	\$1,431,200	\$2,206,000	\$1,794,400	\$2,940,000	\$1,695,800	\$2,782,400	\$1,685,000	\$2,770,000	\$1,655,000	\$2,740,000	
	Less: Commission	(\$49,800)	(\$68,800)	(\$53,440)	(\$82,800)	(\$57,248)	(\$88,240)	(\$71,776)	(\$117,600)	(\$67,832)	(\$111,296)	(\$67,400)	(\$110,800)	(\$66,200)	(\$109,600)	
	Effective Gross Income	\$1,195,200	\$1,651,200	\$1,282,560	\$1,987,200	\$1,373,952	\$2,117,760	\$1,722,624	\$2,822,400	\$1,627,968	\$2,671,104	\$1,617,600	\$2,659,200	\$1,588,800	\$2,630,400	
Property Valuation																
Return on Sales	58.57%	69.57%	35.38%	44.61%	38.59%	47.96%	40.17%	49.42%	37.54%	46.46%	33.95%	43.91%	36.88%	46.06%		
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%		
Residual Property Value	\$242,250	\$402,250	\$121,450	\$281,850	\$153,610	\$333,450	\$206,570	\$463,050	\$173,010	\$402,090	\$140,375	\$368,175	\$163,250	\$391,050		
RPV/SF	\$24.23	\$20.11	\$12.15	\$14.09	\$15.36	\$16.67	\$20.66	\$23.15	\$17.30	\$20.10	\$14.04	\$18.41	\$16.33	\$19.55		

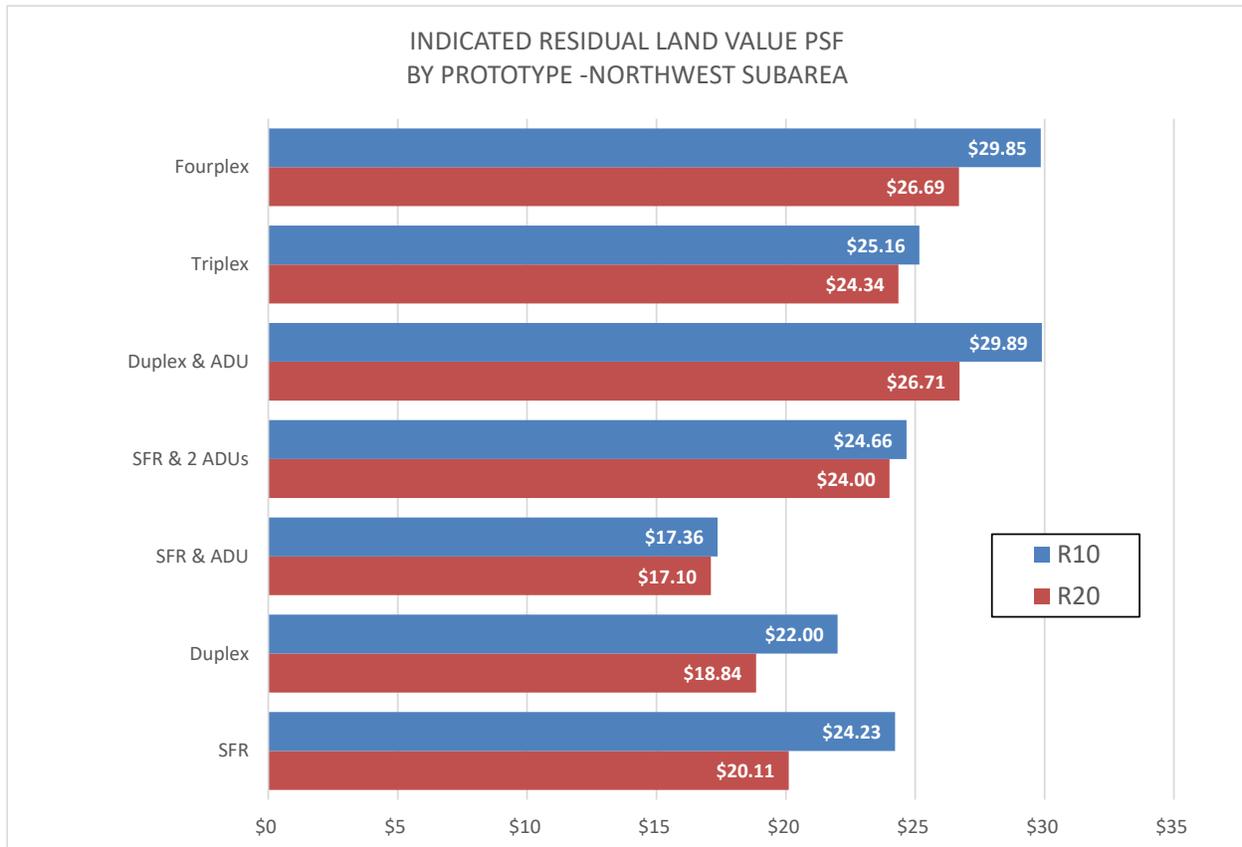
EXAMPLE OF DEVELOPMENT PROTOTYPES, OWNERSHIP/RENTAL RESIDENTIAL ANALYSIS

	Current Zoning		New Zoning Assumptions												
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	
SUPPORTABLE PROPERTY VALUE	Cost														
	Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200
	Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750
	Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950
	Income														
	Gross Income - Sales	\$1,245,000	\$1,720,000	\$0	\$0	\$1,135,200	\$1,895,600	\$1,202,400	\$2,319,200	\$0	\$0	\$0	\$0	\$0	\$0
	Less: Commission	(\$49,800)	(\$68,800)	\$0	\$0	(\$45,408)	(\$75,824)	(\$48,096)	(\$92,768)	\$0	\$0	\$0	\$0	\$0	\$0
	Net Sales Income	\$1,195,200	\$1,651,200	\$0	\$0	\$1,089,792	\$1,819,776	\$1,154,304	\$2,226,432	\$0	\$0	\$0	\$0	\$0	\$0
	Gross Lease Income	\$0	\$0	\$136,344	\$204,516	\$29,996	\$29,996	\$59,991	\$59,991	\$173,157	\$275,415	\$170,430	\$272,688	\$170,430	\$272,688
	Vacancy/OPEX	\$0	\$0	(\$49,084)	(\$73,626)	(\$10,798)	(\$10,798)	(\$21,597)	(\$21,597)	(\$62,336)	(\$99,149)	(\$61,355)	(\$98,168)	(\$61,355)	(\$98,168)
NOI - Residential Rentals	\$0	\$0	\$87,260	\$130,890	\$19,197	\$19,197	\$38,394	\$38,394	\$110,821	\$176,266	\$109,075	\$174,520	\$109,075	\$174,520	
Property Valuation															
Sup Cost-Ownership	\$996,000	\$1,376,000	\$0	\$0	\$908,160	\$1,516,480	\$961,920	\$1,855,360	\$0	\$0	\$0	\$0	\$0	\$0	
Sup Cost - Rental	\$0	\$0	\$1,167,360	\$1,751,040	\$256,819	\$256,819	\$513,638	\$513,638	\$1,482,547	\$2,358,067	\$1,459,200	\$2,334,720	\$1,459,200	\$2,334,720	
Residual Property Value	\$242,250	\$402,250	\$220,010	\$376,890	\$173,629	\$341,949	\$246,608	\$480,048	\$298,917	\$534,237	\$251,575	\$486,895	\$298,450	\$533,770	
RPV/SF	\$24.23	\$20.11	\$22.00	\$18.84	\$17.36	\$17.10	\$24.66	\$24.00	\$29.89	\$26.71	\$25.16	\$24.34	\$29.85	\$26.69	



Construction costs reflect market conditions from prior to the pandemic. Current material costs are currently exceptionally high, which has led to a short-term escalation in construction costs. Our assumption in this analysis is that as supply chains normalize that pricing will return to closer to historic patterns.

As outlined in the preceding examples, the multi-family program options are competitive with the single family residential in terms of supportable residual land value, particularly for R10 sites. The Northwest subarea has relatively high achievable pricing assumptions, and this relationship varies within each of the submarkets.



II. PREDICTIVE DEVELOPMENT MODELING

DESCRIPTION OF MODEL

Johnson Economics used a predictive development model, which is designed to estimate the marginal impact of changes in the development environment on the expected magnitude and character of development. The model is designed to predict the magnitude and form of likely development or redevelopment activity over an assumed time frame. The primary approach used to predict likely development patterns is the relationship between the supportable residual land value for prospective uses and the current value of the property (including land as well as improvements, if any). The underlying assumption is that when the value of a property for new development is high relative to the current value of the property, it will be more likely to see development or redevelopment over a defined time-period.



The model evaluates the likelihood of development at the parcel level, although the results are expressed in aggregated geographies. What the model solves for is probabilities to redevelop as well as anticipated development forms, and the results reflect the expected value of development/redevelopment activity. The model will not indicate that a specific parcel will or won't redevelop, rather, it will indicate the probability of that occurrence as well as predict the likely form of development.

SUBMARKET PRICING

The analysis used assumptions of achievable pricing by submarket based on RMLS sales data for residential product developed since 2018. As outlined in the following table, sales prices were highest in the Northwest and Southwest submarkets, while pricing was significantly lower in the East Portland and Johnson Creek submarkets. We have seen rapid escalation in home prices in most markets during the last few years, attributable to a shortage of inventory, low interest rates, and rising construction prices.

SUMMARY OF MARKET DATA, RESIDENTIAL SALES TRENDS BY SUBMARKET (MAY 2009-APRIL 2021)

	NORTHWEST PORTLAND	SOUTHWEST PORTLAND	SOUTH OF BARBUR	COLUMBIA CORRIDOR	EAST PORTLAND	JOHNSON CREEK
TOTAL						
Number of Sales	203	370	565	904	156	507
Average Price	\$1,040,934	\$834,900	\$708,834	\$573,317	\$308,473	\$330,223
Median Price	\$920,000	\$750,000	\$650,000	\$575,000	\$289,925	\$299,900
DETACHED						
Number of Sales	165	319	498	613	95	360
Average Price	\$1,167,007	\$881,002	\$739,899	\$581,826	\$305,607	\$349,232
Median Price	\$1,000,000	\$799,900	\$679,900	\$579,900	\$299,900	\$337,450
CONDOS						
Number of Sales	35	30	26	136	6	120
Average Price	\$472,384	\$549,870	\$559,596	\$547,322	\$346,267	\$289,548
Median Price	\$479,900	\$544,030	\$555,000	\$587,450	\$380,900	\$289,900
ATTACHED						
Number of Sales	3	21	41	155	41	27
Average Price	\$740,000	\$543,980	\$426,896	\$562,690	\$296,760	\$257,558
Median Price	\$985,000	\$545,000	\$404,000	\$549,900	\$294,900	\$252,000
AAGR - Pricing	12.3%	4.1%	4.0%	5.7%	10.6%	8.4%



SOURCE: RMLS



The model was broken down into six separate pricing bins based on the geographic submarkets. The table below shows the median assumed sales price per square foot in that submarket by product type. Pricing was elevated on a per square foot basis for ADU units due to their small size, while plex units were discounted vis-à-vis single-family residential options despite a lower square footage per unit. A total of 15,447 parcels were evaluated, which represented all parcels zoned either R10 or R20 in the study area. Achievable rent levels were assumed at a 9% return on achievable price.

ASSUMED PRICING PSF BY SUBMARKET AND PRODUCT TYPE

SUBAREA Zoning	TOTAL		ASSUMED PRICING PSF		
	LOTS	ACRES	SFR	ADU	PLEX
NORTHWEST					
R10	2,733	922.14	\$395	\$435	\$375
R20	445	297.33	\$415	\$457	\$394
SOUTHWEST					
R10	4,044	1,252.46	\$413	\$454	\$392
R20	706	399.57	\$433	\$476	\$411
SOUTH OF BARBUR					
R10	2,371	688.23	\$361	\$397	\$343
R20	1,354	923.59	\$379	\$417	\$360
COLUMBIA CORRIDOR					
R10	602	196.99	\$335	\$369	\$319
R20	50	33.96	\$352	\$387	\$334
EAST PORTLAND					
R10	439	163.36	\$310	\$341	\$294
R20	0	0.00	\$325	\$358	\$309
JOHNSON CREEK					
R10	2,608	995.78	\$298	\$328	\$283
R20	95	116.69	\$313	\$344	\$297
TOTAL/RANGE	15,447	5,990	\$298 -	\$328 -	\$283 -
			\$433	\$476	\$411

The assumed pricing per square foot for single family residential ranged from \$298 to \$433.

MODEL OUTPUT

Our predictive development model was run for the six submarkets based using the prototypes and pricing assumptions outlined. As modeled, the results showed a considerable amount of supportable new residential development in the study area, with over 2,500 residential units anticipated. The indicated highest and best use shifts to duplex units with an ADU in most of the R10 and R20 zoned property. As each of these sites either has or is currently zoned for a single residence, the net impact of the rezoning would be an expected increase of just under 2,600 units in the R10 zoned properties and 1,700 units in the R20 zoned properties.



PREDICTED RESIDENTIAL DEVELOPMENT/REDEVELOPMENT OVER A TWENTY-YEAR PERIOD

ZONING SUBAREA	Acres		Predicted Dev/Red.		Marginal FAR	Predicted H&BU Form	Construction Investment	Residential Units	RMV of Dev/Red
	Total	Vacant	Acres	% Total					
R10									
NORTHWEST	922	287	24	2.6%	0.50	Duplex & ADU	\$125,473,738	318	\$24,163,991
SOUTHWEST	1,252	114	70	5.6%	0.50	Duplex & ADU	\$362,770,168	919	\$114,665,603
SOUTH OF BARBUR	688	76	26	3.7%	0.50	Duplex & ADU	\$129,775,627	447	\$28,341,086
COLUMBIA CORRIDOR	197	23	7	3.4%	0.50	Fourplex	\$33,578,006	116	\$5,269,937
EAST PORTLAND	163	22	10	6.0%	0.50	Fourplex	\$47,322,015	171	\$4,727,560
JOHNSON CREEK	996	219	47	4.8%	0.50	Duplex & ADU	\$238,985,361	620	\$17,058,777
TOTAL	4,219	741	184	4.4%	0.50		\$937,904,915	2,592	\$194,226,954
R20									
NORTHWEST	297	65	21	7.2%	0.40	Duplex & ADU	\$84,560,753	278	\$11,985,157
SOUTHWEST	400	46	28	7.0%	0.40	Duplex & ADU	\$110,428,373	363	\$30,908,038
SOUTH OF BARBUR	924	110	46	5.0%	0.40	Duplex & ADU	\$181,941,763	808	\$38,672,928
COLUMBIA CORRIDOR	34	1	3	8.3%	0.40	Fourplex	\$11,096,916	49	\$1,090,411
EAST PORTLAND	0	0	0	0.0%	0.40	Fourplex	\$0	0	\$0
JOHNSON CREEK	117	27	14	12.0%	0.40	Duplex & ADU	\$54,276,327	183	\$2,503,271
TOTAL	1,771	249	112	6.3%	0.40		\$442,304,132	1,682	\$85,159,805
TOTAL, BOTH ZONES									
NORTHWEST	1,219	352	46	3.7%	0.45		\$210,034,491	596	\$36,149,147
SOUTHWEST	1,652	161	98	5.9%	0.47		\$473,198,541	1,283	\$145,573,641
SOUTH OF BARBUR	1,612	186	72	4.5%	0.44		\$311,717,390	1,255	\$67,014,014
COLUMBIA CORRIDOR	231	24	9	4.1%	0.47		\$44,674,922	165	\$6,360,347
EAST PORTLAND	163	22	10	6.0%	0.50		\$47,322,015	171	\$4,727,560
JOHNSON CREEK	1,112	245	61	5.5%	0.48		\$293,261,689	803	\$19,562,048
TOTAL	5,990	990	297	5.0%	0.46		\$1,380,209,047	4,273	\$279,386,759

While the highest and best use is viewed as a duplex with an ADU, the alternative development forms support competitive land values. As a result, the actual level of realized development would be expected to reflect a much more diverse range of housing types. The model predicts an expected net unit yield, and lower absolute price point per unit on properties that do redevelop. The level of development/redevelopment is expected to average 5.0% of all properties during the projection period, with an average FAR of 0.46.

Under the assumptions used, a duplex with and ADU and fourplexes typically outbid simple ownership residential solutions in the current pricing environment. As noted previously, the market is not likely to build duplex units of a size necessary to maximize allowable FAR, particularly for the larger R20 sites. The expected market outcome of the zoning shift would likely yield a lower number of multifamily units, and with smaller duplex units reducing the return advantage of these prototypes vis-à-vis single-family units (with and without ADU units).

III. SUMMARY

Our analysis indicates that the proposed changes in entitlements would likely result in a modest increase in residential unit yield through the development of multi-unit development forms. The proposed increases in allowable unit density combined with FAR bonuses is expected to increase the marginal competitiveness of middle housing development forms vis-à-vis single unit dwellings.

While the predicted marginal increase in unit capacity associated with the changes is significant, the level of development may be limited by market factors and demand. While the model indicates may indicate that a multi-unit solution represents the highest and best use within a specific zone and market, developer interest and market depth

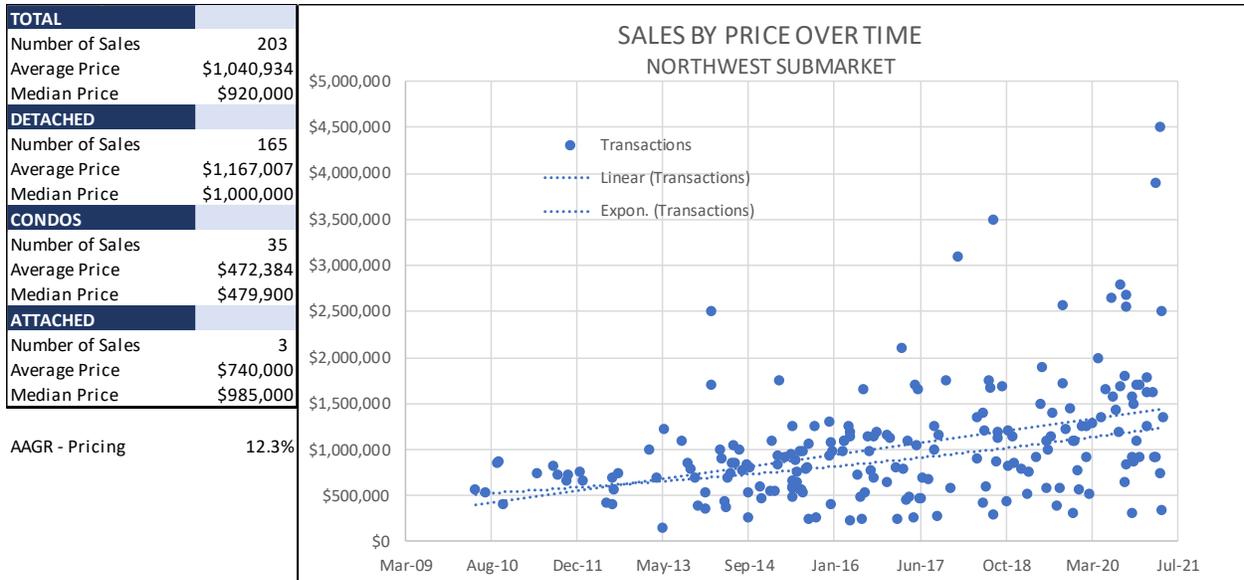


will both likely reduce the net impact, with a broader range of housing types realized. Nonetheless, our analysis indicates that the proposed changes will support an increase in residential yield as well as a reduction in average pricing for new units under the proposed changes. The modeled FAR bonus structure makes several alternative development programs viable and competitive for site acquisition.

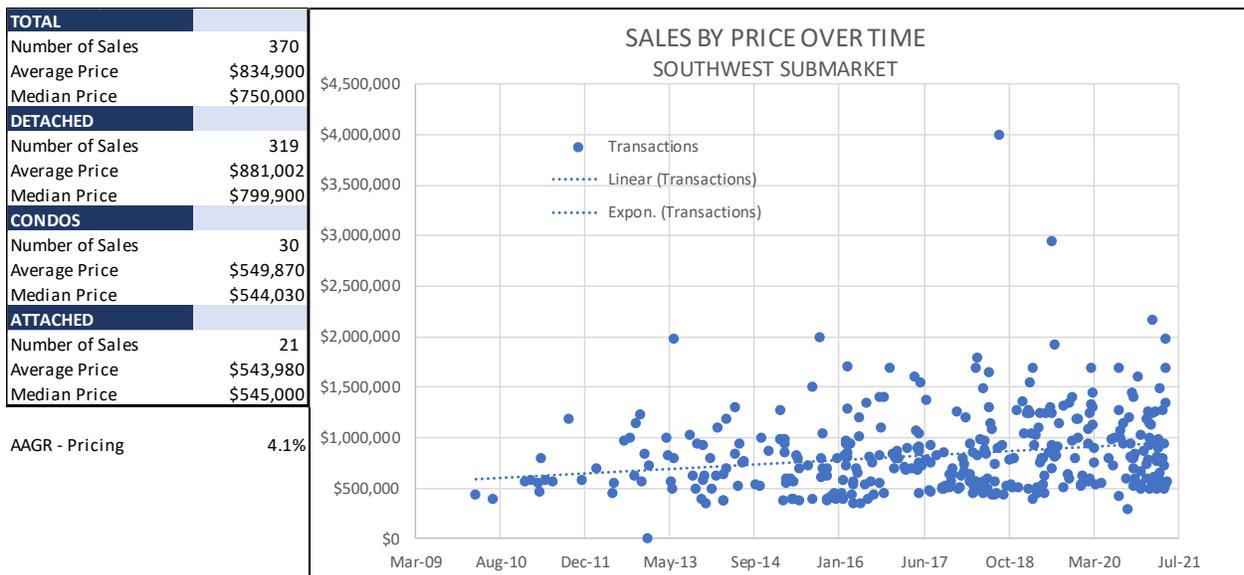


APPENDIX A: MARKET ANALYSIS

The following series of tables summarizes ownership residential sales transactions in each of the submarkets for product completed since 2018. As shown, each of these submarkets has seen a consistent pattern of escalation over the last decade.



SOURCE: RMLS

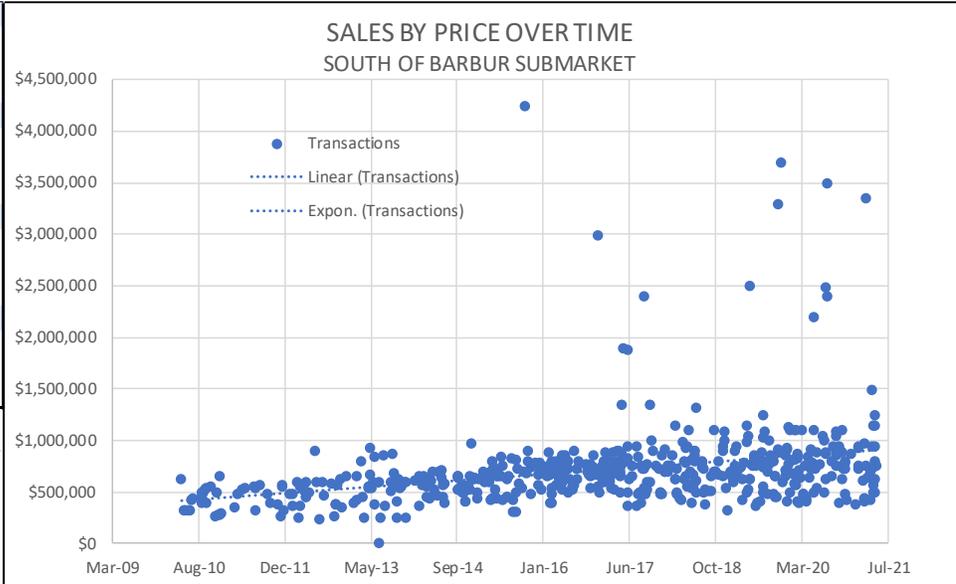


SOURCE: RMLS



TOTAL	
Number of Sales	565
Average Price	\$708,834
Median Price	\$650,000
DETACHED	
Number of Sales	498
Average Price	\$739,899
Median Price	\$679,900
CONDOS	
Number of Sales	26
Average Price	\$559,596
Median Price	\$555,000
ATTACHED	
Number of Sales	41
Average Price	\$426,896
Median Price	\$404,000

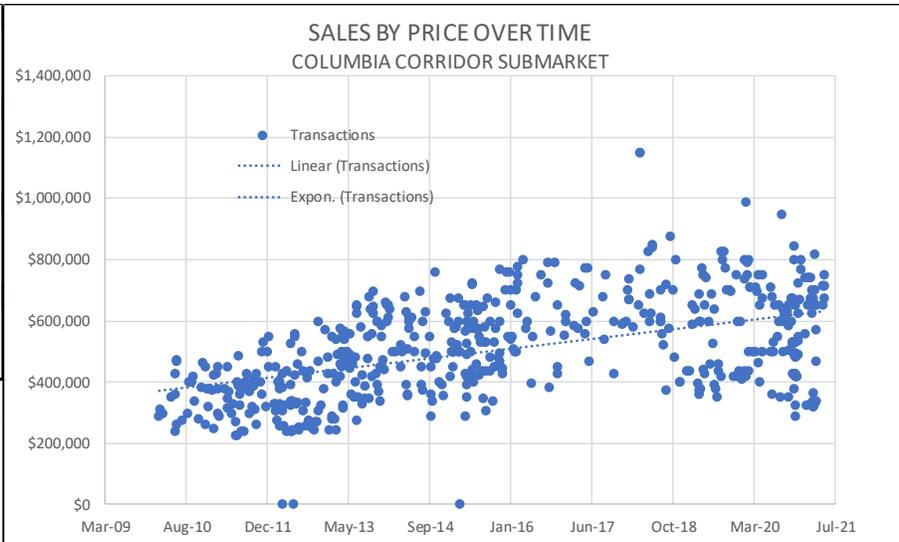
AAGR - Pricing 4.0%



SOURCE: RMLS

TOTAL	
Number of Sales	904
Average Price	\$573,317
Median Price	\$575,000
DETACHED	
Number of Sales	613
Average Price	\$581,826
Median Price	\$579,900
CONDOS	
Number of Sales	136
Average Price	\$547,322
Median Price	\$587,450
ATTACHED	
Number of Sales	155
Average Price	\$562,690
Median Price	\$549,900

AAGR - Pricing 5.7%

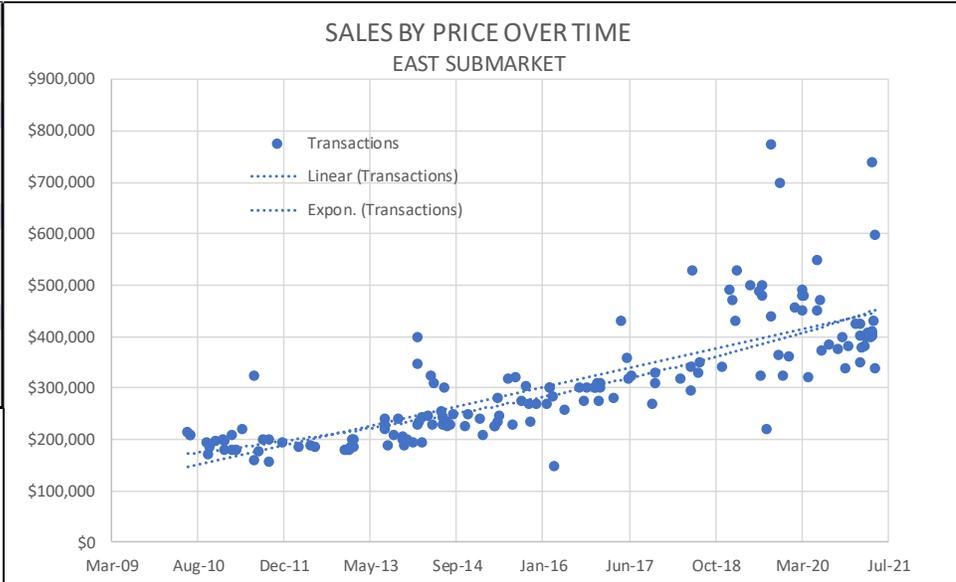


SOURCE: RMLS



TOTAL	
Number of Sales	156
Average Price	\$308,473
Median Price	\$289,925
DETACHED	
Number of Sales	95
Average Price	\$305,607
Median Price	\$299,900
CONDOS	
Number of Sales	6
Average Price	\$346,267
Median Price	\$380,900
ATTACHED	
Number of Sales	41
Average Price	\$296,760
Median Price	\$294,900

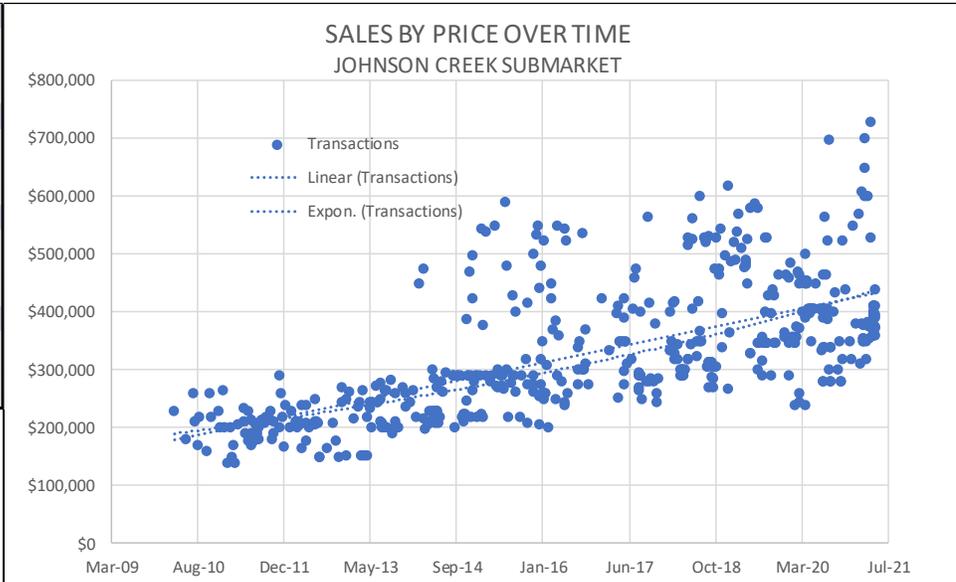
AAGR - Pricing 10.6%



SOURCE: RMLS

TOTAL	
Number of Sales	507
Average Price	\$330,223
Median Price	\$299,900
DETACHED	
Number of Sales	360
Average Price	\$349,232
Median Price	\$337,450
CONDOS	
Number of Sales	120
Average Price	\$289,548
Median Price	\$289,900
ATTACHED	
Number of Sales	27
Average Price	\$257,558
Median Price	\$252,000

AAGR - Pricing 8.4%



SOURCE: RMLS



APPENDIX B: DETAILED SUBMARKET PROTOTYPES

NORTHWEST SUBMARKET

	Current Zoning		New Zoning Assumptions											
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR_2ADUs, R10	SFR_2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
PROGRAM														
Property Assumptions														
Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000
SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-
ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-
Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4
Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4
Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400
Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000
Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000
Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000
Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9
FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40
Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	4	4
Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375
Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2
Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2
Cost Assumptions														
Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220
Construction Cost/SF/ADU	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242
Construction Cost/SF/Plex	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213
Base Garage Costs/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking Cost/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875
INCOME														
Income Assumptions														
Sales Price/SF/SFR	\$395	\$415	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353	\$336	\$353
Sales Price/SF/ADU	\$435	\$457	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388	\$370	\$388
Sales Price/SF/Plex	\$375	\$394	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335	\$319	\$335
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Expenses														
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
SUPPORTABLE PROPERTY VALUE														
Cost														
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950
Income														
Gross Income - Units	\$1,185,000	\$1,660,000	\$1,276,000	\$2,010,000	\$1,371,200	\$2,146,000	\$1,734,400	\$2,880,000	\$1,635,800	\$2,722,400	\$1,595,000	\$2,680,000	\$1,595,000	\$2,680,000
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000
Gross Sales Income	\$1,245,000	\$1,720,000	\$1,336,000	\$2,070,000	\$1,431,200	\$2,206,000	\$1,794,400	\$2,940,000	\$1,695,800	\$2,782,400	\$1,685,000	\$2,770,000	\$1,655,000	\$2,740,000
Less: Commission	(\$49,800)	(\$68,800)	(\$53,440)	(\$82,800)	(\$57,248)	(\$88,240)	(\$71,776)	(\$117,600)	(\$67,832)	(\$111,296)	(\$67,400)	(\$110,800)	(\$66,200)	(\$109,600)
Effective Gross Income	\$1,195,200	\$1,651,200	\$1,282,560	\$1,987,200	\$1,373,952	\$2,117,760	\$1,722,624	\$2,822,400	\$1,627,968	\$2,671,104	\$1,617,600	\$2,659,200	\$1,588,800	\$2,630,400
Property Valuation														
Return on Sales	58.57%	69.57%	35.38%	44.61%	38.59%	47.96%	40.17%	49.42%	37.54%	46.46%	33.95%	43.91%	36.88%	46.06%
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Residual Property Value	\$242,250	\$402,250	\$220,010	\$376,890	\$173,629	\$341,949	\$246,608	\$480,048	\$298,917	\$534,237	\$251,575	\$486,895	\$298,450	\$533,770
RPV/SF	\$24.23	\$20.11	\$22.00	\$18.84	\$17.36	\$17.10	\$24.66	\$24.00	\$29.89	\$26.71	\$25.16	\$24.34	\$29.85	\$26.69

OWNERSHIP/RENTAL HYBRID

	Current Zoning		New Zoning Assumptions											
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR_2ADUs, R10	SFR_2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
SUPPORTABLE PROPERTY VALUE														
Cost														
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950
Income														
Gross Income - Sales	\$1,245,000	\$1,720,000	\$0	\$0	\$1,135,200	\$1,895,600	\$1,202,400	\$2,319,200	\$0	\$0	\$0	\$0	\$0	\$0
Less: Commission	(\$49,800)	(\$68,800)	\$0	\$0	(\$45,408)	(\$75,824)	(\$48,096)	(\$92,768)	\$0	\$0	\$0	\$0	\$0	\$0
Net Sales Income	\$1,195,200	\$1,651,200	\$0	\$0	\$1,089,792	\$1,819,776	\$1,154,304	\$2,226,432	\$0	\$0	\$0	\$0	\$0	\$0
Gross Lease Income	\$0	\$0	\$136,344	\$204,516	\$29,996	\$29,996	\$59,991	\$59,991	\$173,157	\$275,415	\$170,430	\$272,688	\$170,430	\$272,688
Vacancy/OPEX	\$0	\$0	(\$49,084)	(\$73,626)	(\$10,798)	(\$10,798)	(\$21,597)	(\$21,597)	(\$62,336)	(\$99,149)	(\$61,355)	(\$98,168)	(\$61,355)	(\$98,168)
NOI - Residential Rentals	\$0	\$0	\$87,260	\$130,890	\$19,197	\$19,197	\$38,394	\$38,394	\$110,820	\$176,266	\$109,075	\$174,520	\$109,075	\$174,520
Property Valuation														
Sup Cost-Ownership	\$996,000	\$1,376,000	\$0	\$0	\$908,160	\$1,516,480	\$961,920	\$1,855,360	\$0	\$0	\$0	\$0	\$0	\$0
Sup Cost-Rental	\$0	\$0	\$1,167,360	\$1,751,040	\$256,819	\$256,819	\$513,638	\$513,638	\$1,482,547	\$2,358,067	\$1,459,200	\$2,334,720	\$1,459,200	\$2,334,720
Residual Property Value	\$242,250	\$402,250	\$220,010	\$376,890	\$173,629	\$341,949	\$246,608	\$480,048	\$298,917	\$534,237	\$251,575	\$486,895	\$298,450	\$533,770
RPV/SF	\$24.23	\$20.11	\$22.00	\$18.84	\$17.36	\$17.10	\$24.66	\$24.00	\$29.89	\$26.71	\$25.16	\$24.34	\$29.85	\$26.69



SOUTHWEST SUBMARKET

		Current Zoning		New Zoning Assumptions												
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	
		PROGRAM		Property Assumptions												
Site Size (SF)	10,000			20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000
SFR Units	1			1	-	-	1	1	1	1	-	-	-	-	-	-
ADU Units	-			-	-	-	1	1	2	2	1	1	-	-	-	-
Plex Units	-			-	2	2	-	-	-	-	2	2	3	3	4	4
Total Residential Units	1			1	2	2	2	2	3	3	3	3	3	3	4	4
Avg Size - SFR (SF)	3,000			4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400
Avg Size - ADU (SF)	800			800	800	800	800	800	800	800	800	800	800	800	800	800
Avg Size - Plex (SF)	2,000			3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000
Weighted Avg Size (SF)	3,000			4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000
Total Building Square Feet	3,000			4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000
Units Per Acre	4			2	9	4	9	4	13	7	13	7	13	7	17	9
FAR	0.30			0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40
Parking Ratio/Unit	2.00			2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total Parking Spaces	2			2	2	2	3	3	3	3	3	3	3	3	4	4
Parking SF/Space - Garage	375			375	375	375	375	375	375	375	375	375	375	375	375	375
Parking Spaces - Surface	-			-	-	-	1	1	1	1	1	1	-	-	2	2
Parking Spaces - Garage	2			2	2	2	2	2	2	2	2	2	3	3	2	2
Cost Assumptions																
Construction Cost/SF/SFR	\$220			\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220
Construction Cost/SF/ADU	\$242			\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242
Construction Cost/SF/Plex	\$213			\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213
Base Garage Costs/Space	\$46,875			\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875
Adjustment Factor	0%			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking Cost/Space	\$46,875			\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875
Income Assumptions																
Sales Price/SF/SFR	\$413	\$433	\$351	\$368	\$351	\$368	\$351	\$368	\$351	\$368	\$351	\$368	\$351	\$368		
Sales Price/SF/ADU	\$454	\$476	\$386	\$405	\$386	\$405	\$386	\$405	\$386	\$405	\$386	\$405	\$386	\$405		
Sales Price/SF/Plex	\$392	\$411	\$333	\$350	\$333	\$350	\$333	\$350	\$333	\$350	\$333	\$350	\$333	\$350		
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000		
Expenses																
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%		
Cost																
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200		
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750		
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950		
Income																
Gross Income - Units	\$1,237,524	\$1,732,000	\$1,332,000	\$2,100,000	\$1,432,000	\$2,237,600	\$1,811,000	\$3,003,200	\$1,707,400	\$2,844,000	\$1,665,000	\$2,800,000	\$1,665,000	\$2,800,000		
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000		
Gross Sales Income	\$1,297,524	\$1,792,000	\$1,392,000	\$2,160,000	\$1,492,000	\$2,297,600	\$1,871,000	\$3,063,200	\$1,767,400	\$2,904,000	\$1,755,000	\$2,890,000	\$1,725,000	\$2,860,000		
Less: Commission	(\$51,901)	(\$71,680)	(\$55,680)	(\$86,400)	(\$59,680)	(\$91,904)	(\$74,840)	(\$122,528)	(\$70,696)	(\$116,160)	(\$70,200)	(\$115,600)	(\$69,000)	(\$114,400)		
Effective Gross Income	\$1,245,623	\$1,720,320	\$1,336,320	\$2,073,600	\$1,432,320	\$2,205,696	\$1,796,160	\$2,940,672	\$1,696,704	\$2,787,840	\$1,684,800	\$2,774,400	\$1,656,000	\$2,745,600		
Property Valuation																
Return on Sales	65.26%	76.67%	41.06%	50.90%	44.48%	54.10%	46.15%	55.68%	43.35%	52.86%	39.51%	50.14%	42.67%	52.45%		
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%		
Residual Property Value	\$284,269	\$459,850	\$166,250	\$353,850	\$202,250	\$406,730	\$267,850	\$561,610	\$230,290	\$499,370	\$196,375	\$464,175	\$219,250	\$487,050		
RPV/SF	\$28.43	\$22.99	\$16.63	\$17.69	\$20.23	\$20.34	\$26.79	\$28.08	\$23.03	\$24.97	\$19.64	\$23.21	\$21.93	\$24.35		

OWNERSHIP/RENTAL HYBRID

		Current Zoning		New Zoning Assumptions												
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	
		SUPPORTABLE PROPERTY VALUE		Cost												
Cost/Construct w/o prkg.	\$660,000			\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200
Total Parking Costs	\$93,750			\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750
Estimated Project Cost	\$753,750			\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950
Income																
Gross Income - Sales	\$1,297,524			\$1,792,000	\$0	\$0	\$1,183,200	\$1,973,600	\$1,253,400	\$2,415,200	\$0	\$0	\$0	\$0	\$0	\$0
Less: Commission	(\$51,901)			(\$71,680)	\$0	\$0	(\$47,328)	(\$78,944)	(\$50,136)	(\$96,608)	\$0	\$0	\$0	\$0	\$0	\$0
Net Sales Income	\$1,245,623			\$1,720,320	\$0	\$0	\$1,135,872	\$1,894,656	\$1,203,264	\$2,318,592	\$0	\$0	\$0	\$0	\$0	\$0
Gross Lease Income	\$0			\$0	\$142,272	\$213,408	\$31,300	\$31,300	\$62,600	\$62,600	\$180,685	\$287,389	\$177,840	\$284,544	\$177,840	\$284,544
Vacancy/OPEX	\$0			\$0	(\$51,218)	(\$76,827)	(\$11,268)	(\$11,268)	(\$22,536)	(\$22,536)	(\$65,047)	(\$103,460)	(\$64,022)	(\$102,436)	(\$64,022)	(\$102,436)
NOI - Residential Rentals	\$0			\$0	\$91,054	\$136,581	\$20,032	\$20,032	\$40,064	\$40,064	\$115,639	\$183,929	\$113,818	\$182,108	\$113,818	\$182,108
Property Valuation																
Sup Cost-Ownership	\$1,038,019			\$1,433,600	\$0	\$0	\$946,560	\$1,578,880	\$1,002,720	\$1,932,160	\$0	\$0	\$0	\$0	\$0	\$0
Sup Cost -Rental	\$0			\$0	\$1,319,624	\$1,979,437	\$290,317	\$290,317	\$580,635	\$580,635	\$1,675,923	\$2,665,641	\$1,649,530	\$2,639,249	\$1,649,530	\$2,639,249
Residual Property Value	\$284,269			\$459,850	\$372,274	\$605,287	\$245,527	\$437,847	\$354,405	\$623,845	\$492,293	\$841,811	\$441,905	\$791,424	\$488,780	\$838,299
RPV/SF	\$28.43			\$22.99	\$37.23	\$30.26	\$24.55	\$21.89	\$35.44	\$31.19	\$49.23	\$42.09	\$44.19	\$39.57	\$48.88	\$41.91



SOUTH OF BARBUR SUBMARKET

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
PROGRAM	Property Assumptions														
	Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000
	SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-
	ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-
	Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4
	Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4
	Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400
	Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800
	Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000
	Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000
	Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000
	Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9
	FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40
	Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	4	4
	Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375
	Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2
	Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2
	Cost Assumptions														
	Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220
Construction Cost/SF/ADU	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	
Construction Cost/SF/Plex	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	
Base Garage Costs/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Parking Cost/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Income Assumptions															
Sales Price/SF/SFR	\$361	\$379	\$307	\$322	\$307	\$322	\$307	\$322	\$307	\$322	\$307	\$322	\$307	\$322	
Sales Price/SF/ADU	\$397	\$417	\$338	\$354	\$338	\$354	\$338	\$354	\$338	\$354	\$338	\$354	\$338	\$354	
Sales Price/SF/Plex	\$343	\$360	\$292	\$306	\$292	\$306	\$292	\$306	\$292	\$306	\$292	\$306	\$292	\$306	
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
Expenses															
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200	
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950	
Income															
Gross Income - Units	\$1,082,514	\$1,516,000	\$1,168,000	\$1,836,000	\$1,252,800	\$1,957,600	\$1,584,600	\$2,627,200	\$1,496,800	\$2,486,400	\$1,460,000	\$2,448,000	\$1,460,000	\$2,448,000	
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000	
Gross Sales Income	\$1,142,514	\$1,576,000	\$1,228,000	\$1,896,000	\$1,312,800	\$2,017,600	\$1,644,600	\$2,687,200	\$1,556,800	\$2,546,400	\$1,550,000	\$2,538,000	\$1,520,000	\$2,508,000	
Less: Commission	(\$45,701)	(\$63,040)	(\$49,120)	(\$75,840)	(\$52,512)	(\$80,704)	(\$65,784)	(\$107,488)	(\$62,272)	(\$101,856)	(\$62,000)	(\$101,520)	(\$60,800)	(\$100,320)	
Effective Gross Income	\$1,096,813	\$1,512,960	\$1,178,880	\$1,820,160	\$1,260,288	\$1,936,896	\$1,578,816	\$2,579,712	\$1,494,528	\$2,444,544	\$1,488,000	\$2,436,480	\$1,459,200	\$2,407,680	
Property Valuation															
Return on Sales	45.51%	55.37%	24.44%	32.46%	27.13%	35.32%	28.47%	36.57%	26.27%	34.03%	23.22%	31.86%	25.71%	33.69%	
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	
Residual Property Value	\$160,261	\$287,050	\$35,050	\$142,650	\$58,890	\$182,730	\$86,730	\$260,810	\$61,810	\$213,290	\$32,375	\$182,575	\$55,250	\$205,450	
RPV/SF	\$16.03	\$14.35	\$3.51	\$7.13	\$5.89	\$9.14	\$8.67	\$13.04	\$6.18	\$10.66	\$3.24	\$9.13	\$5.53	\$10.27	

OWNERSHIP/RENTAL HYBRID

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
SUPPORTABLE PROPERTY VALUE	Cost														
	Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200
	Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750
	Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950
	Income														
	Gross Income - Sales	\$1,142,514	\$1,576,000	\$0	\$0	\$1,042,400	\$1,734,400	\$1,103,800	\$2,120,800	\$0	\$0	\$0	\$0	\$0	\$0
	Less: Commission	(\$45,701)	(\$63,040)	\$0	\$0	(\$41,696)	(\$69,376)	(\$44,152)	(\$84,832)	\$0	\$0	\$0	\$0	\$0	\$0
	Net Sales Income	\$1,096,813	\$1,512,960	\$0	\$0	\$1,000,704	\$1,665,024	\$1,059,648	\$2,035,968	\$0	\$0	\$0	\$0	\$0	\$0
	Gross Lease Income	\$0	\$0	\$124,488	\$186,732	\$27,387	\$27,387	\$54,775	\$54,775	\$158,100	\$251,466	\$155,610	\$248,976	\$155,610	\$248,976
	Vacancy/OPEX	\$0	\$0	(\$44,816)	(\$67,224)	(\$9,859)	(\$9,859)	(\$19,719)	(\$19,719)	(\$56,916)	(\$90,528)	(\$56,020)	(\$89,631)	(\$56,020)	(\$89,631)
	NOI - Residential Rentals	\$0	\$0	\$79,672	\$119,508	\$17,528	\$17,528	\$35,056	\$35,056	\$101,184	\$160,938	\$99,590	\$159,345	\$99,590	\$159,345
	Property Valuation														
	Sup Cost-Ownership	\$914,011	\$1,260,800	\$0	\$0	\$833,920	\$1,387,520	\$883,040	\$1,696,640	\$0	\$0	\$0	\$0	\$0	\$0
	Sup Cost -Rental	\$0	\$0	\$1,154,671	\$1,732,007	\$254,028	\$254,028	\$508,055	\$508,055	\$1,466,433	\$2,332,436	\$1,443,339	\$2,309,343	\$1,443,339	\$2,309,343
	Residual Property Value	\$160,261	\$287,050	\$207,321	\$357,857	\$96,598	\$210,198	\$162,145	\$315,745	\$282,803	\$508,606	\$235,714	\$461,518	\$282,589	\$508,393
	RPV/SF	\$16.03	\$14.35	\$20.73	\$17.89	\$9.66	\$10.51	\$16.21	\$15.79	\$28.28	\$25.43	\$23.57	\$23.08	\$28.26	\$25.42



COLUMBIA CORRIDOR SUBMARKET

	Current Zoning		New Zoning Assumptions												
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	
	Property Assumptions														
Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	20,000
SFR Units	1	1	-	-	1	1	1	1	1	-	-	-	-	-	-
ADU Units	-	-	-	-	1	1	2	2	1	1	1	1	-	-	-
Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4	4
Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4	4
Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400	6,400
Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000	2,000
Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000	2,000
Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000	8,000
Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9	9
FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40	0.40
Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4
Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375
Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2	2
Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2
Cost Assumptions															
Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220
Construction Cost/SF/ADU	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242
Construction Cost/SF/Plex	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213	\$213
Base Garage Costs/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking Cost/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875

	Income Assumptions														
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	Fourplex, R20
Income Assumptions															
Sales Price/SF/SFR	\$335	\$352	\$285	\$299	\$285	\$299	\$285	\$299	\$285	\$299	\$285	\$299	\$285	\$299	\$299
Sales Price/SF/ADU	\$369	\$387	\$314	\$329	\$314	\$329	\$314	\$329	\$314	\$329	\$314	\$329	\$314	\$329	\$329
Sales Price/SF/Plex	\$319	\$334	\$271	\$284	\$271	\$284	\$271	\$284	\$271	\$284	\$271	\$284	\$271	\$284	\$284
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Expenses															
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

	SUPPORTABLE PROPERTY VALUE														
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	Fourplex, R20
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200	\$1,707,200
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	\$93,750
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950	\$1,800,950
Income															
Gross Income - Units	\$1,006,236	\$1,408,000	\$1,084,000	\$1,704,000	\$1,163,200	\$1,818,000	\$1,471,400	\$2,440,000	\$1,389,400	\$2,308,000	\$1,355,000	\$2,272,000	\$1,355,000	\$2,272,000	\$2,272,000
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Gross Sales Income	\$1,066,236	\$1,468,000	\$1,144,000	\$1,764,000	\$1,223,200	\$1,878,000	\$1,531,400	\$2,500,000	\$1,449,400	\$2,368,000	\$1,415,000	\$2,362,000	\$1,415,000	\$2,332,000	\$2,332,000
Less: Commission	(\$42,649)	(\$58,720)	(\$45,760)	(\$70,560)	(\$48,928)	(\$75,120)	(\$61,356)	(\$100,000)	(\$57,976)	(\$94,720)	(\$57,800)	(\$94,480)	(\$56,600)	(\$93,280)	(\$93,280)
Effective Gross Income	\$1,023,587	\$1,409,280	\$1,098,240	\$1,693,440	\$1,174,272	\$1,802,880	\$1,470,144	\$2,400,000	\$1,391,424	\$2,273,280	\$1,387,200	\$2,267,520	\$1,358,400	\$2,238,720	\$2,238,720
Property Valuation															
Return on Sales	35.80%	44.73%	15.93%	23.24%	18.45%	25.96%	19.63%	27.05%	17.56%	24.64%	14.87%	22.71%	17.03%	24.31%	24.31%
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Residual Property Value	\$99,239	\$200,650	(\$32,150)	\$37,050	(\$12,790)	\$71,050	(\$3,830)	\$111,050	(\$24,110)	\$70,570	(\$51,625)	\$41,775	(\$28,750)	\$64,650	\$64,650
RPV/SF	\$9.92	\$10.03	(\$3.22)	\$1.85	(\$1.28)	\$3.55	(\$0.38)	\$5.55	(\$2.41)	\$3.53	(\$5.16)	\$2.09	(\$2.88)	\$3.23	\$3.23

OWNERSHIP/RENTAL HYBRID

	Current Zoning		New Zoning Assumptions												
	SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20	
	Cost														
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$853,600	\$1,280,400	\$897,600	\$1,337,600	\$1,135,200	\$1,795,200	\$1,089,880	\$1,730,080	\$1,067,000	\$1,707,200	\$1,067,000	\$1,707,200	\$1,707,200
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	\$93,750
Estimated Project Cost	\$753,750	\$973,750	\$947,350	\$1,374,150	\$991,350	\$1,431,350	\$1,228,950	\$1,888,950	\$1,183,630	\$1,823,830	\$1,207,625	\$1,847,825	\$1,160,750	\$1,800,950	\$1,800,950
Income															
Gross Income - Sales	\$1,066,236	\$1,468,000	\$0	\$0	\$972,000	\$1,614,800	\$1,029,000	\$1,973,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less: Commission	(\$42,649)	(\$58,720)	\$0	\$0	(\$38,880)	(\$64,592)	(\$41,160)	(\$78,944)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Sales Income	\$1,023,587	\$1,409,280	\$0	\$0	\$933,120	\$1,550,208	\$987,840	\$1,894,656	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Gross Lease Income	\$0	\$0	\$115,824	\$173,736	\$25,481	\$25,481	\$50,963	\$50,963	\$147,096	\$233,964	\$144,780	\$231,648	\$144,780	\$231,648	\$231,648
Vacancy/OPEX	\$0	\$0	(\$41,697)	(\$62,545)	(\$9,173)	(\$9,173)	(\$18,347)	(\$18,347)	(\$52,955)	(\$84,227)	(\$52,121)	(\$83,393)	(\$52,121)	(\$83,393)	(\$83,393)
NOI - Residential Rentals	\$0	\$0	\$74,127	\$111,191	\$16,308	\$16,308	\$32,616	\$32,616	\$94,142	\$149,737	\$92,659	\$148,255	\$92,659	\$148,255	\$148,255
Property Valuation															
Sup Cost-Ownership	\$852,989	\$1,174,400	\$0	\$0	\$777,600	\$1,291,840	\$823,200	\$1,578,880	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sup Cost - Rental	\$0	\$0	\$1,074,310	\$1,611,464	\$236,348	\$236,348	\$472,696	\$472,696	\$1,364,373	\$2,170,105	\$1,342,887	\$2,148,619	\$1,342,887	\$2,148,619	\$2,148,619
Residual Property Value	\$99,239	\$200,650	\$126,960	\$237,314	\$22,598	\$96,838	\$66,946	\$162,626	\$180,743	\$346,275	\$135,262	\$300,794	\$182,137	\$347,669	\$347,669
RPV/SF	\$9.92	\$10.03	\$12.70	\$11.87	\$2.26	\$4.84	\$6.69	\$8.13	\$18.07	\$17.31	\$13.53	\$15.04	\$18.21	\$17.38	\$17.38



EAST SUBMARKET

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
		PROGRAM													
Property Assumptions															
Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	20,000
SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-	-
ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-	-
Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4	
Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4	
Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400	
Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800	
Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000	
Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000	
Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000	
Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9	
FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40	
Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	4	4	
Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375	
Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2	
Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2	
Cost Assumptions															
Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	
Construction Cost/SF/ADU	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	
Construction Cost/SF/Plex	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	\$202	
Base Garage Costs/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Parking Cost/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Income Assumptions															
Sales Price/SF/SFR	\$310	\$325	\$263	\$276	\$263	\$276	\$263	\$276	\$263	\$276	\$263	\$276	\$263	\$276	
Sales Price/SF/ADU	\$341	\$358	\$289	\$304	\$289	\$304	\$289	\$304	\$289	\$304	\$289	\$304	\$289	\$304	
Sales Price/SF/Plex	\$294	\$309	\$250	\$262	\$250	\$262	\$250	\$262	\$250	\$262	\$250	\$262	\$250	\$262	
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
Expenses															
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
SUPPORTABLE PROPERTY VALUE															
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$809,600	\$1,214,400	\$888,800	\$1,328,800	\$1,117,600	\$1,777,600	\$1,034,880	\$1,642,080	\$1,012,000	\$1,619,200	\$1,012,000	\$1,619,200	
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
Estimated Project Cost	\$753,750	\$973,750	\$903,350	\$1,308,150	\$982,550	\$1,422,550	\$1,211,350	\$1,871,350	\$1,128,630	\$1,735,830	\$1,152,625	\$1,759,825	\$1,105,750	\$1,712,950	
Income															
Gross Income - Units	\$928,659	\$1,300,000	\$1,000,000	\$1,572,000	\$1,072,800	\$1,678,400	\$1,356,600	\$2,252,800	\$1,281,200	\$2,129,600	\$1,250,000	\$2,096,000	\$1,250,000	\$2,096,000	
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000	
Gross Sales Income	\$988,659	\$1,360,000	\$1,060,000	\$1,632,000	\$1,132,800	\$1,738,400	\$1,416,600	\$2,312,800	\$1,341,200	\$2,189,600	\$1,340,000	\$2,186,000	\$1,310,000	\$2,156,000	
Less: Commission	(\$39,546)	(\$54,400)	(\$42,400)	(\$65,280)	(\$45,312)	(\$69,536)	(\$56,664)	(\$92,512)	(\$53,648)	(\$87,584)	(\$53,600)	(\$87,440)	(\$52,400)	(\$86,240)	
Effective Gross Income	\$949,113	\$1,305,600	\$1,017,600	\$1,566,720	\$1,087,488	\$1,668,864	\$1,359,936	\$2,220,288	\$1,287,552	\$2,102,016	\$1,286,400	\$2,098,560	\$1,257,600	\$2,069,760	
Property Valuation															
Return on Sales	25.92%	34.08%	12.65%	19.77%	10.68%	17.31%	12.27%	18.65%	14.08%	21.10%	11.61%	19.25%	13.73%	20.83%	
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	
Residual Property Value	\$37,177	\$114,250	(\$55,350)	(\$2,550)	(\$76,310)	(\$31,830)	(\$78,070)	(\$21,110)	(\$55,670)	\$15,850	(\$80,625)	(\$11,025)	(\$57,750)	\$11,850	
RPV/SF	\$3.72	\$5.71	(\$5.54)	(\$0.13)	(\$7.63)	(\$1.59)	(\$7.81)	(\$1.06)	(\$5.57)	\$0.79	(\$8.06)	(\$0.55)	(\$5.78)	\$0.59	

OWNERSHIP/RENTAL HYBRID

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR, 2ADUs, R10	SFR, 2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
		SUPPORTABLE PROPERTY VALUE													
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$809,600	\$1,214,400	\$888,800	\$1,328,800	\$1,117,600	\$1,777,600	\$1,034,880	\$1,642,080	\$1,012,000	\$1,619,200	\$1,012,000	\$1,619,200	
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
Estimated Project Cost	\$753,750	\$973,750	\$903,350	\$1,308,150	\$982,550	\$1,422,550	\$1,211,350	\$1,871,350	\$1,128,630	\$1,735,830	\$1,152,625	\$1,759,825	\$1,105,750	\$1,712,950	
Income															
Gross Income - Sales	\$988,659	\$1,360,000	\$0	\$0	\$901,600	\$1,495,200	\$954,200	\$1,826,400	\$0	\$0	\$0	\$0	\$0	\$0	
Less: Commission	(\$39,546)	(\$54,400)	\$0	\$0	(\$36,064)	(\$59,808)	(\$38,168)	(\$73,056)	\$0	\$0	\$0	\$0	\$0	\$0	
Net Sales Income	\$949,113	\$1,305,600	\$0	\$0	\$865,536	\$1,435,392	\$916,032	\$1,753,344	\$0	\$0	\$0	\$0	\$0	\$0	
Gross Lease Income	\$0	\$0	\$106,704	\$160,056	\$23,475	\$23,475	\$46,950	\$46,950	\$135,514	\$215,542	\$133,380	\$213,408	\$133,380	\$213,408	
Vacancy/OPEX	\$0	\$0	(\$38,413)	(\$57,620)	(\$8,451)	(\$8,451)	(\$16,902)	(\$16,902)	(\$48,785)	(\$77,595)	(\$48,017)	(\$76,827)	(\$48,017)	(\$76,827)	
NOI - Residential Rentals	\$0	\$0	\$68,291	\$102,436	\$15,024	\$15,024	\$30,048	\$30,048	\$86,729	\$137,947	\$85,363	\$136,581	\$85,363	\$136,581	
Property Valuation															
Sup Cost-Ownership	\$790,927	\$1,088,000	\$0	\$0	\$721,280	\$1,196,160	\$763,360	\$1,461,120	\$0	\$0	\$0	\$0	\$0	\$0	
Sup Cost-Rental	\$0	\$0	\$989,718	\$1,484,577	\$217,738	\$217,738	\$435,476	\$435,476	\$1,256,942	\$1,999,231	\$1,237,148	\$1,979,437	\$1,237,148	\$1,979,437	
Residual Property Value	\$37,177	\$114,250	\$86,368	\$176,427	-\$43,532	-\$8,652	-\$12,514	\$25,246	\$128,312	\$263,401	\$84,523	\$219,612	\$131,398	\$266,487	
RPV/SF	\$3.72	\$5.71	\$8.64	\$8.82	(\$4.35)	(\$0.43)	(\$1.25)	\$1.26	\$12.83	\$13.17	\$8.45	\$10.98	\$13.14	\$13.32	



JOHNSON CREEK SUBMARKET

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR_2ADUs, R10	SFR_2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
		PROGRAM													
Property Assumptions															
Site Size (SF)	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	20,000
SFR Units	1	1	-	-	1	1	1	1	-	-	-	-	-	-	-
ADU Units	-	-	-	-	1	1	2	2	1	1	-	-	-	-	-
Plex Units	-	-	2	2	-	-	-	-	2	2	3	3	4	4	
Total Residential Units	1	1	2	2	2	2	3	3	3	3	3	3	4	4	
Avg Size - SFR (SF)	3,000	4,000	3,000	4,000	3,200	5,200	3,400	6,400	3,400	6,400	3,400	6,400	3,400	6,400	
Avg Size - ADU (SF)	800	800	800	800	800	800	800	800	800	800	800	800	800	800	
Avg Size - Plex (SF)	2,000	3,000	2,000	3,000	2,000	3,000	2,000	3,000	2,100	3,600	1,667	2,667	1,250	2,000	
Weighted Avg Size (SF)	3,000	4,000	2,000	3,000	2,000	3,000	1,667	2,667	1,667	2,667	1,667	2,667	1,250	2,000	
Total Building Square Feet	3,000	4,000	4,000	6,000	4,000	6,000	5,000	8,000	5,000	8,000	5,000	8,000	5,000	8,000	
Units Per Acre	4	2	9	4	9	4	13	7	13	7	13	7	17	9	
FAR	0.30	0.20	0.40	0.30	0.40	0.30	0.50	0.40	0.50	0.40	0.50	0.40	0.50	0.40	
Parking Ratio/Unit	2.00	2.00	1.00	1.00	1.50	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Total Parking Spaces	2	2	2	2	3	3	3	3	3	3	3	3	4	4	
Parking SF/Space - Garage	375	375	375	375	375	375	375	375	375	375	375	375	375	375	
Parking Spaces - Surface	-	-	-	-	1	1	1	1	1	1	-	-	2	2	
Parking Spaces - Garage	2	2	2	2	2	2	2	2	2	2	3	3	2	2	
Cost Assumptions															
Construction Cost/SF/SFR	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	\$220	
Construction Cost/SF/ADU	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	\$231	
Construction Cost/SF/Plex	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	\$209	
Base Garage Costs/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Parking Cost/Space	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	\$46,875	
INCOME															
Income Assumptions															
Sales Price/SF/SFR	\$298	\$313	\$254	\$266	\$254	\$266	\$254	\$266	\$254	\$266	\$254	\$266	\$254	\$266	
Sales Price/SF/ADU	\$328	\$344	\$279	\$293	\$279	\$293	\$279	\$293	\$279	\$293	\$279	\$293	\$279	\$293	
Sales Price/SF/Plex	\$283	\$297	\$241	\$253	\$241	\$253	\$241	\$253	\$241	\$253	\$241	\$253	\$241	\$253	
Parking Charges/Space	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
Expenses															
Sales Commission	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
SUPPORTABLE PROPERTY VALUE															
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$836,000	\$1,254,000	\$888,800	\$1,328,800	\$1,117,600	\$1,777,600	\$1,062,600	\$1,689,600	\$1,045,000	\$1,672,000	\$1,045,000	\$1,672,000	
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
Estimated Project Cost	\$753,750	\$973,750	\$929,750	\$1,347,750	\$982,550	\$1,422,550	\$1,211,350	\$1,871,350	\$1,156,350	\$1,783,350	\$1,185,625	\$1,812,625	\$1,138,750	\$1,765,750	
Income															
Gross Income - Units	\$895,081	\$1,252,000	\$964,000	\$1,518,000	\$1,036,000	\$1,617,600	\$1,310,000	\$2,171,200	\$1,235,400	\$2,056,000	\$1,205,000	\$2,024,000	\$1,205,000	\$2,024,000	
Gross Income - Parking	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$90,000	\$90,000	\$60,000	\$60,000	
Gross Sales Income	\$955,081	\$1,312,000	\$1,024,000	\$1,578,000	\$1,096,000	\$1,677,600	\$1,370,000	\$2,231,200	\$1,295,400	\$2,116,000	\$1,295,000	\$2,114,000	\$1,265,000	\$2,084,000	
Less: Commission	(\$38,203)	(\$52,480)	(\$40,960)	(\$63,120)	(\$43,840)	(\$67,104)	(\$54,800)	(\$89,248)	(\$51,816)	(\$84,640)	(\$51,800)	(\$84,560)	(\$50,600)	(\$83,360)	
Effective Gross Income	\$916,877	\$1,259,520	\$983,040	\$1,514,880	\$1,052,160	\$1,610,496	\$1,315,200	\$2,141,952	\$1,243,584	\$2,031,360	\$1,243,200	\$2,029,440	\$1,214,400	\$2,000,640	
Property Valuation															
Return on Sales	21.64%	29.35%	5.73%	12.40%	7.08%	13.21%	8.57%	14.46%	7.54%	13.91%	4.86%	11.96%	6.64%	13.30%	
Threshold Return on Cost	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	
Residual Property Value	\$10,315	\$75,850	(\$110,550)	(\$85,350)	(\$105,750)	(\$80,470)	(\$115,350)	(\$86,390)	(\$120,030)	(\$90,550)	(\$149,625)	(\$121,425)	(\$126,750)	(\$98,550)	
RPV/SF	\$1.03	\$3.79	(\$11.06)	(\$4.27)	(\$10.58)	(\$4.02)	(\$11.54)	(\$4.32)	(\$12.00)	(\$4.53)	(\$14.96)	(\$6.07)	(\$12.68)	(\$4.93)	

OWNERSHIP/RENTAL HYBRID

		Current Zoning		New Zoning Assumptions											
		SFR, R10	SFR, R20	Duplex, R10	Duplex, R20	SFR, ADU, R10	SFR, ADU, R20	SFR_2ADUs, R10	SFR_2ADUs, R20	Duplex, ADU, R10	Duplex, ADU, R20	Triplex, R10	Triplex, R20	Fourplex, R10	Fourplex, R20
		SUPPORTABLE PROPERTY VALUE													
Cost															
Cost/Construct w/o prkg.	\$660,000	\$880,000	\$836,000	\$1,254,000	\$888,800	\$1,328,800	\$1,117,600	\$1,777,600	\$1,062,600	\$1,689,600	\$1,045,000	\$1,672,000	\$1,045,000	\$1,672,000	
Total Parking Costs	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$93,750	\$140,625	\$140,625	\$93,750	\$93,750	
Estimated Project Cost	\$753,750	\$973,750	\$929,750	\$1,347,750	\$982,550	\$1,422,550	\$1,211,350	\$1,871,350	\$1,156,350	\$1,783,350	\$1,185,625	\$1,812,625	\$1,138,750	\$1,765,750	
Income															
Gross Income - Sales	\$955,081	\$1,312,000	\$0	\$0	\$872,800	\$1,443,200	\$923,600	\$1,762,400	\$0	\$0	\$0	\$0	\$0	\$0	
Less: Commission	(\$38,203)	(\$52,480)	\$0	\$0	(\$34,912)	(\$57,728)	(\$36,944)	(\$70,496)	\$0	\$0	\$0	\$0	\$0	\$0	
Net Sales Income	\$916,877	\$1,259,520	\$0	\$0	\$837,888	\$1,385,472	\$886,656	\$1,691,904	\$0	\$0	\$0	\$0	\$0	\$0	
Gross Lease Income	\$0	\$0	\$103,056	\$154,584	\$22,672	\$22,672	\$45,345	\$45,345	\$130,881	\$208,173	\$128,820	\$206,112	\$128,820	\$206,112	
Vacancy/OPEX	\$0	\$0	(\$37,100)	(\$55,650)	(\$8,162)	(\$8,162)	(\$16,324)	(\$16,324)	(\$47,117)	(\$74,942)	(\$46,375)	(\$74,200)	(\$46,375)	(\$74,200)	
NOI - Residential Rentals	\$0	\$0	\$65,956	\$98,934	\$14,510	\$14,510	\$29,021	\$29,021	\$83,764	\$133,231	\$82,445	\$131,912	\$82,445	\$131,912	
Property Valuation															
Sup Cost-Ownership	\$764,065	\$1,049,600	\$0	\$0	\$698,240	\$1,154,560	\$738,880	\$1,409,920	\$0	\$0	\$0	\$0	\$0	\$0	
Sup Cost-Rental	\$0	\$0	\$955,882	\$1,433,823	\$210,294	\$210,294	\$420,588	\$420,588	\$1,213,970	\$1,930,881	\$1,194,852	\$1,911,763	\$1,194,852	\$1,911,763	
Residual Property Value	\$10,315	\$75,850	\$26,132	\$86,073	-\$74,016	-\$57,696	-\$51,882	-\$40,842	\$57,620	\$147,531	\$9,227	\$99,138	\$56,102	\$146,013	
RPV/SF	\$1.03	\$3.79	\$2.61	\$4.30	(\$7.40)	(\$2.88)	(\$5.19)	(\$2.04)	\$5.76	\$7.38	\$0.92	\$4.96	\$5.61	\$7.30	