

---

# Bend Climate-Friendly Areas

## Market and Feasibility Study Summary

---

June 30, 2023

Prepared for: City of Bend and Department of Land Conservation and Development  
(DLCD)

**ECON**orthwest  
ECONOMICS • FINANCE • PLANNING



This page intentionally blank

# Acknowledgments

---

## **Bend Growth Management Division**

- BreAnne Gale
- Brian Rankin
- Jennifer Knapp
- Elyse Vukelich

## **Consulting Team**

- Becky Hewitt, ECONorthwest
- Scott Goodman, ECONorthwest
- Andrew Parish, MIG|APG
- Brandon Crawford, MIG|APG

# Table of Contents

---

- EXECUTIVE SUMMARY ..... 1
  - INTRODUCTION ..... 1
  - APPROACH ..... 1
  - RESULTS ..... 2
    - Financial Feasibility Analysis..... 2
    - Residential Development Potential..... 3
  - CONCLUSIONS ..... 3
  
- 1. INTRODUCTION ..... 5
  - WHAT ARE THE IMPLICATIONS OF CFA DESIGNATION? ..... 7
  
- 2. APPROACH ..... 8
  - PROTOTYPES ANALYZED ..... 8
  - INTERVIEWS WITH INDUSTRY EXPERTS..... 11
  - EVALUATION OF FINANCIAL FEASIBILITY ..... 11
  - ANALYSIS OF CHANGES TO (RE)DEVELOPMENT POTENTIAL ..... 12
  
- 3. ZONING COMPARISON ..... 14
  - BUILDING HEIGHT CONSIDERATIONS ..... 17
    - CFEC Requirements and Methods ..... 17
    - Building Code..... 17
  
- 4. ANALYSIS RESULTS: FINANCIAL FEASIBILITY AND CAPACITY IMPACTS BY STUDY AREA 19
  - MARKET AREAS 1, 3, AND 5: NORTH HWY 97, SOUTH 3RD ST, AND EASTSIDE COMMERCIAL AREAS ..... 19
    - Market Conditions ..... 19
    - Feasibility Results ..... 19
    - Impacts to Residential Development Potential ..... 20
  - MARKET AREA 2: BEND CENTRAL DISTRICT (BCD) EXPANDED STUDY AREA ..... 22
    - Market Conditions ..... 22
    - Feasibility Results ..... 22
    - Impacts to Residential Development Potential ..... 23
  - MARKET AREA 4: CENTRAL WESTSIDE STUDY AREA ..... 25
    - Market Conditions ..... 25
    - Feasibility Results ..... 25
    - Impacts to Residential Development Capacity ..... 26
  
- 5. CONCLUSIONS..... 28
  
- TECHNICAL APPENDIX: DETAILED ASSUMPTIONS AND RESULTS..... 30
  - FINANCIAL FEASIBILITY ASSUMPTIONS AND DETAILS ..... 31
  - MARKET-FEASIBLE CAPACITY ASSUMPTIONS ..... 35
  - EXPECTED REDEVELOPMENT ASSUMPTIONS ..... 36
  - COMPARISON TO EXISTING ZONING ..... 36





This page intentionally blank

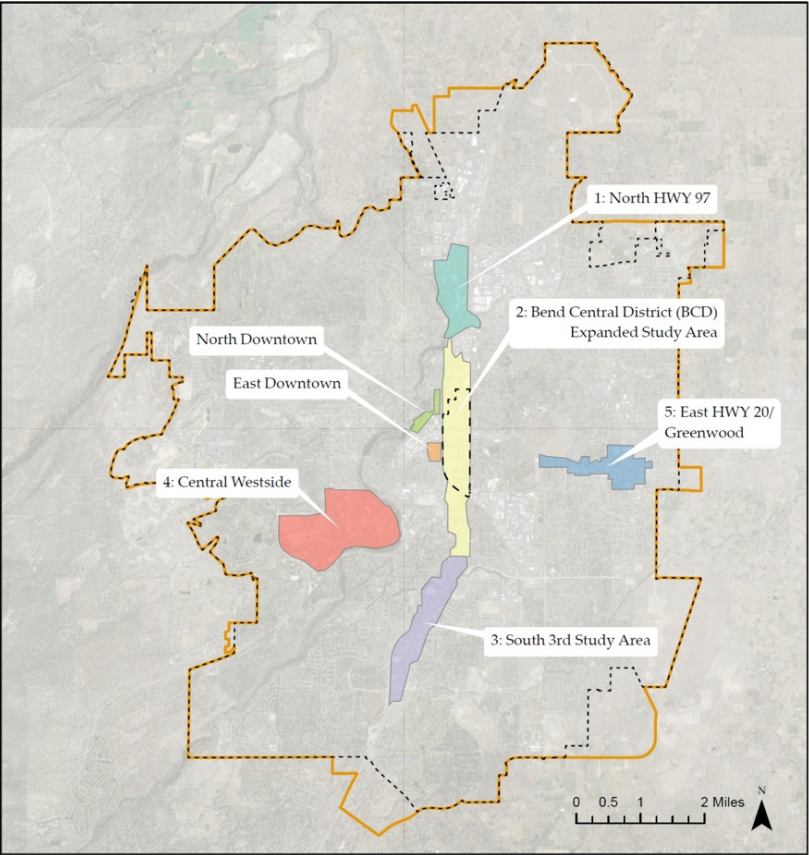
# Executive Summary

## Introduction

The City of Bend is evaluating several areas for potential designation as “Climate-Friendly Areas” in response to recent updates to state rules related to mitigating climate change. Climate-Friendly Areas (CFAs) must be zoned for walkable mixed-use development. This study evaluates residential and mixed-use development potential within the areas under consideration and how CFA designation could impact the type, scale, and amount of (re)development that might occur in these areas.

The areas under consideration include three highway-oriented commercial corridors (North Highway 97 Study Area, South 3rd Street Study Area, and East Highway 20/Greenwood Study Area); the Bend Central District (BCD) Expanded Study Area, plus adjacent commercial and employment areas; and the Central Westside Study Area.

The purpose of this study is to inform the City’s overall evaluation of areas for potential CFA designation.



## Approach

This study evaluates:

- how zoning regulations might need to change to meet CFA requirements;
- the relative financial feasibility of the new types and scales of development that could be allowed pursuant to those zoning changes, using prototypical example developments;
- how much residential and mixed-use development might be market feasible in each area under “reasonable best case” assumptions; and
- roughly how much new development could realistically occur in each area over twenty years, and how that differs from what is likely under current zoning.

In addition to research and analysis by ECONorthwest and MIG|APG, this study was informed by interviews with developers, brokers, and builders with experience in Bend.

# Results

## Financial Feasibility Analysis

Financial feasibility for residential and mixed-use development “prototypes” tested for this analysis varied based on the estimated market rents in each area and whether those rents would be high enough to support the cost of construction at different scales. Taller buildings and mixed-use buildings typically cost more to build due to increasing building code requirements, need for higher-cost materials, elevators, etc. and are generally only feasible in areas with higher rents. Demand for parking also impacts financial feasibility because of the cost of building structured parking and the potential for lower rents if residents do not have on-site parking available. Generally, areas with higher rents and less demand for parking can more readily support higher-density and mixed-use development. Among the study areas, the Central Westside has the highest rents and can more readily support six- to seven-story mixed-use development. However, local developers observed more tolerance for reduced parking ratios in the BCD Expanded Study Area, and smaller-scale development with reduced or no parking may be feasible in that area, in addition to some five- to six-story developments. In the highway-oriented study areas, three-story apartments are most likely to be feasible, with limited potential for higher-density development.

Exhibit 1 shows a generalized financial feasibility rating for the different types and scales of development tested in this analysis across the five different study areas.

**Exhibit 1: Financial Feasibility of Residential and Mixed-Use Development Prototypes by Market Area**

Source: ECONorthwest analysis

	6-Story Mixed-Use Podium Apartments (market parking)	7-Story Mixed-Use Podium Apartments (reduced parking)	7-Story Mixed-Use Podium Apartments (market parking)	4-Story Mixed-Use Apartment (reduced parking)	4-Story Mixed-Use apartments (no parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-up Apartments
<b>Feasibility Rating</b>							
Market Area 1: North HWY 97	—	●	●	▼	▼	—	▲
Market Area 2: BCD Expanded	▲	▼	▼	—	▲	▲	▲
Market Area 3: South HWY 97/3rd St	▼	●	●	●	●	▼	—
Market Area 4: Central Westside	●	▲	●	▲	▲	●	▲
Market Area 5: East HWY 20/Greenwood	▼	●	●	●	▼	—	▲

Rating	Explanation
●	Highly unlikely to be feasible
▼	Not feasible in current market conditions, but could become feasible in future
—	Possibly feasible with unusually low-cost land/construction
▲	Likely feasible on vacant/low-cost sites, possibly feasible for redevelopment on underutilized sites
●	Likely feasible for redevelopment on underutilized sites

## Residential Development Potential

Applying the findings regarding financial feasibility of the specific properties included within each study area provides an estimate of how much housing could be built in these areas. This is shown in Exhibit 2. The maximum market-feasible capacity is quite high for the BCD Expanded Study Area and the Central Westside Study Area. Even after roughly accounting for other factors that could reduce development, both areas show relatively high potential for (re)development; however, these numbers should be taken with a grain of salt. The variability across the large BCD Expanded Study Area means that these results are even more uncertain than those for other areas. In the Central Westside Study Area, because the market-feasible capacity is so large, the pace of demand for new units in the area could slow development and mean that fewer units would be built within a twenty-year period. In the three highway-oriented areas, market-feasible capacity is low under existing market conditions, but if conditions were to change substantially (e.g., because of investments to make the areas more walkable and desirable for housing), that capacity could increase.

### Exhibit 2: Estimated Market-Feasible Capacity and Expected (Re)Development Under Existing Zoning and CFA-Compliant Zoning

Source: ECONorthwest and MIG|APG analysis

	Market Area 1: North HWY 97	Market Area 2: BCD Expanded	Market Area 3: South 97/3rd	Market Area 4: Central Westside	Market Area 5: East HWY 20/ Greenwood	Total
Est. Maximum Market-Feasible Capacity with CFA zoning	433	2845	782	8,673	256	12,988
Est. Maximum Market-Feasible Capacity under existing zoning	18	1,969	0	7,216	0	9,203
Expected (re)development with CFA zoning	126	847	240	2,328	127	3,668
Expected (re)development with existing zoning	5	586		1937	0	2,529
Net increase in expected (re)development	121	261	240	391	127	1,139

## Conclusions

This analysis suggests that CFA designation could have a marginal impact in areas where zoning is already largely compliant with CFA requirements and a variable impact in other areas. The efforts the City has already made to designate and invest in mixed-use opportunity areas have created development conditions and regulations like those intended for CFAs, and these areas could support substantial (re)development with or without CFA designation. In other areas that the City is considering for potential CFA designation, there are important

policy choices to consider with allowing stand-alone residential uses, increasing heights, or shifting away from industrial zoning. While these areas have less development potential under existing market conditions, over the longer term, policies and investments like those the City has applied to existing mixed-use opportunity areas could maximize the potential of areas the City chooses to designate as CFAs.

# 1. Introduction

---

The City of Bend is evaluating options to comply with new Climate-Friendly and Equitable Communities (CFEC) rules from the Land Conservation and Development Commission (LCDDC). These rules are intended to reduce pollution, increase housing and transportation choice, and increase equitable land use planning outcomes in Oregon’s eight most populated areas, including Bend. The rules direct cities to plan for land use and transportation patterns that reduce greenhouse gas emissions from vehicles. One component of the CFEC rules is to designate “Climate-Friendly Areas” (CFAs)—areas planned for walkable, mixed-use development and high-quality pedestrian, bicycle, and transit infrastructure.

The rules include requirements related to the amount of land that must be included in CFAs and the expected mix and intensity of uses in these areas, but local governments determine where CFAs will be located within their jurisdictions. Local governments covered by the rules must study the potential designation of CFAs, then adopt development standards for those areas. The rules provide options for jurisdictions to adopt zoning standards that meet certain use and intensity requirements spelled out in the rules or apply their own standards and show that those standards will achieve certain target densities.

This study is one component of the City’s efforts to evaluate areas for potential CFA designation as required under the rules. This study, conducted by ECONorthwest and MIG|APG, evaluated market conditions and redevelopment potential within areas under consideration as potential CFAs within the City of Bend to inform the City’s CFA evaluation process. The study includes five study areas in Bend as potential CFAs:

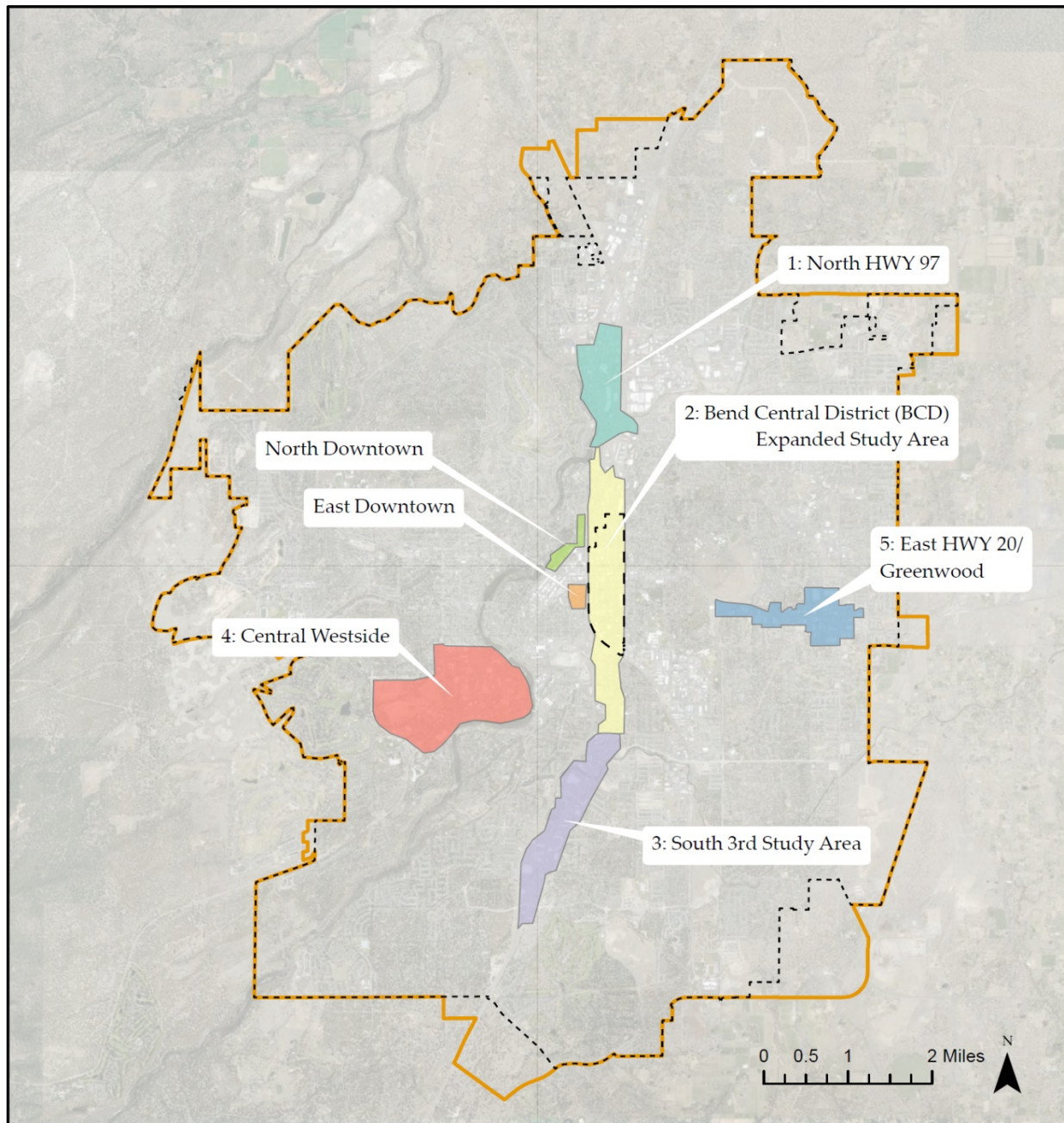
1. North Study Area
2. BCD Expanded Study Area (as well as adjacent North and East Downtown submarket areas)
3. South 3rd Study Area
4. Central Westside Study Area,
5. Eastside Highway 20/Greenwood Study Area

These areas are shown on Exhibit 3.



### Exhibit 3: Bend CFA Study Areas

Source: MIG|APG based on geographies identified by City of Bend



- City Limits
- Urban Growth Boundary
- Bend Central District



## What are the implications of CFA designation?

While the City has the option of applying other standards that would achieve target density levels, the prescriptive approach to CFA-compliant zoning requires the following for at least one CFA (referred to in this study as the primary CFA), given Bend's size:<sup>1</sup>

- Allow single-use and mixed-use development, including the following outright permitted uses:
  - Multifamily residential and attached single-family residential. Local governments may require ground floor commercial and office uses within otherwise single-use multifamily residential buildings.
  - Office-type uses.
  - Nonauto-dependent retail, services, and other commercial uses.
  - Childcare, schools, and other public uses, including public-serving government facilities.
- A minimum residential density requirement of 25 dwelling units per net acre (du/na) or minimum floor area ratio (FAR) of 2.0 for nonresidential and mixed-use development.
- Maximum building height of no less than 85 feet.

Additional CFAs (referred to in this study as secondary CFAs) must allow the same mix of uses, but they only require a minimum residential density of 15 dwelling units per net acre (du/na) and a maximum building height of no less than 50 feet.

As discussed in this study, some of the zones within the selected study areas are nearly compliant with these requirements already, while others would require bigger changes to meet these requirements. (See page 14 for details.)

---

<sup>1</sup> OAR 660-012-0320(2) and (8). Additional requirements apply (e.g., block length, bicycle parking, vehicle parking, etc.) that are not the focus of this evaluation. The City recently eliminated all parking requirements citywide, which addresses one component of the CFA requirements regardless of which areas are selected.

## 2. Approach

---

Our approach to evaluating financial feasibility and development potential within the potential CFA study areas included:

- pro forma analyses of selected development “prototypes” that serve as examples of the types of development that could be allowed by the designation of CFAs, accounting for differences in market conditions between the CFA study areas;
- interviews with developers, brokers, and builders to gain insights into their perspectives on market conditions and development costs applicable to the selected types of development and study areas; and
- analysis of changes to (re)development potential in the study areas, focused on prototypes that would be financially feasible in each study area and those that could potentially be newly allowed under CFA-compliant zoning.

These components are described in greater detail below.

### Prototypes Analyzed

The analysis focused on seven development prototypes that include a mixture of residential and mixed-use prototypes, from three to seven stories, with a range of parking ratios and physical forms. The prototypes were selected to illustrate a range of potential development forms that are consistent with the density and intensity intended for CFAs and are most likely to be viable in Bend’s market. Details of the selected prototypes are provided in Exhibit 4, followed by illustrative images of similar developments.

The analysis did not include a detailed feasibility analysis for commercial or office development, in part because these uses are already allowed throughout most of the CFA study areas and in part because market conditions for commercial and office development are particularly uncertain at the moment, with overall reduced demand for retail and office space. However, specific types of commercial development are still moving forward in some circumstances. The evaluation considers these uses qualitatively rather than through a pro forma analysis.

**Exhibit 4: Prototype Summary Table**

Description	6-Story Mixed-Use Podium Apartments (market parking)	7-Story Mixed-Use Podium Apartments (reduced parking)	7-Story Mixed-Use Podium Apartments (market parking)	4-Story Mixed-Use Apartments (reduced parking)	4-Story Mixed-Use Apartments (no parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments
Stories	6	7	7	4	4	5	3
Estimated Height (ft)	65	75	75	45	45	55	30
Assumed site size (acres)	2.24	0.92	0.92	0.34	0.34	1.38	1.36
Total unit count	232	215	169	40	58	140	60
Density (DU/net acre)	104	234	184	116	168	102	44
Parking ratio (per unit, avg)	1.00	0.75	1.00	0.50	0.00	0.75	1.08
Ground floor retail (Gross sq. ft.)	5,710	14,824	11,638	5,615	5,100	0	0
Average unit size (sq. ft.)	675	675	675	675	675	675	790
Use	Mixed	Mixed	Mixed	Mixed	Mixed	Residential	Residential
Parking location/configuration	Surface, 1-level podium with some parking and some retail	2-level podium (1 parking, 1 parking / retail)	2-level podium (extends beyond wood "tower")	Surface and tuck under	None	Surface and tuck under	Surface

**Exhibit 5: Example of 6-Story Mixed-Use Podium Apartments (Market Parking)**

Source: Apartments.com



Anthem PDX

**Exhibit 6: Example of 7-Story Mixed-Use Podium Apartments (Reduced Parking)**

Source: Apartments.com



**Exhibit 7: Example of 7-Story Mixed-Use Podium Apartments (Market Parking)**

Source: The Hixon Apartments



**Exhibit 8: Example of 4-Story Mixed-Use Apartment (Reduced Parking)**

Source: Live Meeting House



**Exhibit 10: Example of 5-Story "Faux Podium" Apartments**

Source: Apartments.com



The 72nd

**Exhibit 9: Example of 4-Story Mixed-Use Apartments (No Parking)**

Source: Google Street View (Portland, OR)



**Exhibit 11: Example of 3-Story Compact Walk-Up Apartments**

Source: Range Apartments (Bend)





## Interviews with Industry Experts

ECONorthwest conducted interviews with developers, brokers, and builders with experience in Bend to gather and refine information about local market conditions and development costs as well as perspectives on what types of development were most likely to be supported by the market within different types of CFA study areas. Interviews were conducted in April and May of 2023 and included Compass Commercial, KELCON Construction Development, Taylor Brooks (Development), and R&H Construction. Additionally, more general interviews were conducted in January 2023 as part of Bend’s Housing Capacity Analysis with Stemach Design + Architecture, TenOver Studio, and developers Kennedy Wilson, Brooks Resources, and Killian Pacific.

## Evaluation of Financial Feasibility






To assess the financial feasibility of developing the selected prototypes within the CFA study areas, ECONorthwest used pro forma analysis to estimate a residual land value for each prototype. Residual land value (RLV) is an estimate of what a developer would be able to pay for land given the property’s income from rental or sales revenue, the cost to build and operate the building, and the investment returns needed to attract capital for the project. In other words, it is the budget that developers have remaining for land after accounting for the value of the finished development and all other development costs. The estimated RLV (expressed per square foot of land to normalize results between different scales of development) can then be compared among the different prototypes and to the estimated value of existing property within the study areas. A higher RLV indicates greater development feasibility, as described below:

- If the RLV (land budget) is greater than the estimated current value of properties in the target area, it is more likely that the developer would be able to reach agreement on a purchase price with a current property owner.
- The development prototype with the highest RLV could afford to pay the most for land and is most likely to succeed in acquiring new property if it becomes available for development.
- If the RLV is lower than the current value of properties in the target area, it is unlikely that the development will be able to acquire land at current values and would only move forward if a developer had acquired land previously at a much lower cost or if a developer was otherwise able to achieve lower-than-typical land or development costs.
- If the RLV is negative, it is unlikely the development would be financially feasible under current market conditions, even with free or very low-cost land, as the other costs of development are estimated to exceed the value of the finished property.
- If the RLV is only slightly negative, the development could potentially become financially feasible in the future if market conditions shift such that costs are lower or rents/values are higher. If the RLV is far below zero, there is little chance that market

conditions will change enough within the foreseeable future to make the development financially feasible.

Given the potential variability in development costs and market conditions on individual sites within a given area, the RLV results are most appropriately generalized to give a broader indication of development feasibility. This analysis uses the feasibility ratings and criteria shown in Exhibit 12 to reflect the feasibility outcomes more generally. The thresholds used to set these ratings are based on the range of results among the prototypes and the range of estimated property values within the selected study areas.

**Exhibit 12: Residual Land Value (per Square Foot of Land) and Generalized Feasibility Rating**

Min	Max	Rating	Explanation
(\$87)	(\$15)		Highly unlikely to be feasible
(\$15)	\$0		Not feasible in current market conditions, but could become feasible in future
\$0	\$15		Possibly feasible with unusually low-cost land/construction
\$15	\$35		Likely feasible on vacant/low-cost sites, possibly feasible for redevelopment on underutilized sites
\$35	\$41		Likely feasible for redevelopment on underutilized sites

As noted above, market and cost assumptions were informed by interviews with local industry experts. Given the current challenges in the market with high interest rates and ongoing inflation but slowing rent growth, development overall is less likely to be feasible under current market conditions than it has been in the past several years. To account for this while still providing useful information about how the prototypes compare to one another and the extent of possible redevelopment potential, the assumptions used in this analysis are intentionally on the more optimistic end of the spectrum but still generally within the range described by local experts. Specific assumptions are further detailed in the appendix.

## Analysis of Changes to (Re)Development Potential

To evaluate how applying CFA-compliant zoning to each of the study areas could impact residential development potential, MIG|APG and ECONorthwest used results from the RLV analysis and development industry interviews to estimate changes to development potential. This analysis includes:

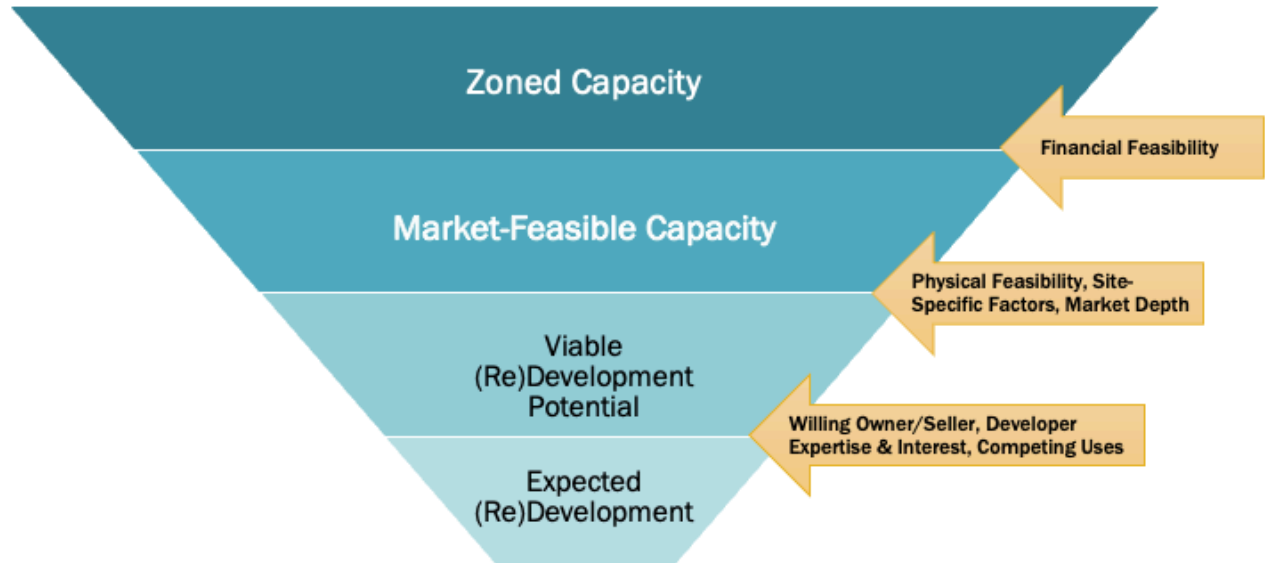
- estimates of the maximum market-feasible capacity using reasonable best-case assumptions to identify where residential and mixed-use development (re)development could be financially feasible and the resulting density, and
- estimates of expected (re)development for each area that attempt to broadly account for the other factors that can impact development outcomes beyond financial feasibility and zoning, such as site-specific market and physical conditions, the depth of demand for a

given type of development in a given area, or owner willingness to sell or redevelop their property.

These concepts are illustrated in Exhibit 13.

**Exhibit 13: Illustration of Market-Feasible Capacity**

Source: ECONorthwest



This analysis also considers how much of the estimated market-feasible capacity and estimated reasonable (re)development potential comes from development that is allowed under existing zoning. (See the appendix for details.) Some areas may have substantial development potential under CFA-compliant zoning, but if the existing zoning largely already allows this development, the CFA designation itself may do little to increase that market-feasible capacity. Other areas may have less estimated market-feasible capacity but would see a larger change based on implementing CFA-compliant zoning.

# 3. Zoning Comparison

The CFA study areas encompass a range of existing zones, as shown in Exhibit 14.

**Exhibit 14: Existing Zones by Study Area**

Source: MIG|APG using City of Bend zoning data

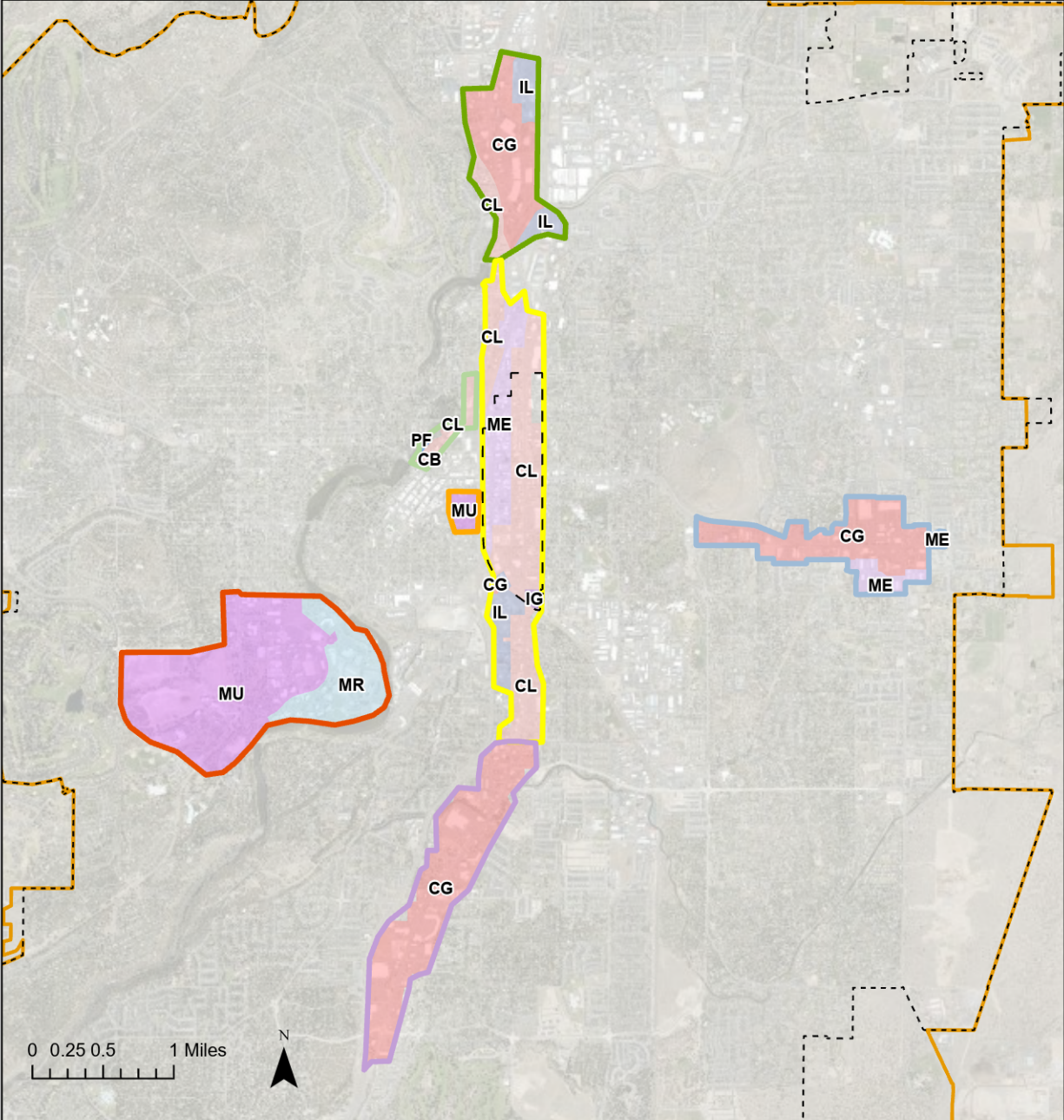


Exhibit 15 summarizes the key zoning considerations that are addressed by CFA requirements and this analysis (allowance of residential uses, with or without ground floor commercial, and maximum height limits) for each of the zones represented within the CFA study areas. Note



that minimum residential densities may need to be addressed as well but were not a constraint for the prototypes evaluated.

**Exhibit 15: Current Zone Residential Allowances and Maximum Heights**

Zone	Allows New Residential?	Max Height
Bend Central District (BCD) <sup>2</sup>	Yes (BDC 2.7.3220)	65' (up to 85' if 10% min of units are affordable). 45' for 4th street subdistrict. (BDC 2.7.3230)
Commercial General (CG)	As part of mixed-use (BDC 2.2.300)	55' (65' if vertical mixed-use) (BDC 2.2.400)
Central Business (CB)	As part of mixed-use (BDC 2.2.300)	35' to 70' subject to 2.2.800 (may be increased by 10' for vertical mixed-use, except along west side of Brooks St) (BDC 2.2.800)
Commercial Limited (CL)	As part of mixed-use (BDC 2.2.300)	55', except within 100' of the Deschutes River where height may be limited subject to WOZ Review (10' increase for VMU) (BDC 2.2.400)
Mixed Urban (MU)	Yes (BDC 2.3.200)	65' (75' if vertical mixed-use and not abutting a residential zone) (BDC 2.3.300)
Mixed Employment (ME)	As part of mixed-use (BDC 2.3.200)	45' (BDC 2.3.300)
Mixed Riverfront (MR)	Yes (BDC 2.3.200)	45' or 35' if within 100' of the Deschutes River (BDC 2.3.300)
Industrial Light (IL)	No (BDC 2.4.300)	50' (BDC 2.4.600)
Primary CFA Requirements	Yes (can require ground floor nonresidential use)	85' or more
Secondary CFA Requirements	Yes (can require ground floor nonresidential use)	50' or more

Color key:

Blue = CFA-compliant (including for Primary CFA)

Purple = CFA-compliant (including for Primary CFA), but could be considered for a change to expand residential options

Yellow = meets secondary CFA standards but not primary CFA standards

Orange = not CFA-complaint

In sum, nearly all the zones allow the required mix of uses.<sup>3</sup> The commercial zones only allow residential as part of a mixed-use development, but this is allowed under the CFA rules. However, the City may consider allowing stand-alone multiunit development in some of these areas to expand options for residential development. None of the zones allow maximum heights up to 85' (except BCD in limited circumstances), though the MU zone comes close to this standard by allowing 75' for vertical mixed use. Exhibit 16 illustrates how these zones relate to the development prototypes included in this analysis.

<sup>2</sup> The Bend Central District is an overlay zone that largely supersedes the underlying base zone designations and is treated as if it were a zone for purposes of this analysis.

<sup>3</sup> Only the IL zone does not allow a mix of uses today; changing the zoning for areas currently zoned IL would create a much larger shift in the intended development and land uses for those areas and is considered in this study for exploratory purposes.

### Exhibit 16: Development Prototypes Allowed by Zoning

Source: ECONorthwest analysis

	6-Story Mixed-Use Podium Apartments (Market Parking)	7-Story Mixed-Use Podium Apartments (Reduced Parking)	7-Story Mixed-Use Podium Apartments (Market Parking)	4-Story Mixed-Use Apartment (Reduced Parking)	4-Story Mixed-Use Apartments (No Parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments	Stand-Alone Commercial*
<b>BCD</b>	/**	X***	X***	✓	✓	✓**	✓	✓
<b>CG</b>	/	X	X	✓	✓	X	X	✓
<b>CL</b>	X	X	X	✓	✓	X	X	✓
<b>CB</b>	?	X	X	?	?	X	X	✓
<b>ME</b>	X	X	X	/	/	X	X	✓
<b>IL</b>	X	X	X	X	X	X	X	X
<b>MU</b>	/	/	/	✓	✓	✓	✓	✓
<b>MR</b>	X	X	X	?	?	X	✓	✓
<b>Primary CFA</b>	✓	✓	✓	✓	✓	Optional	Optional	✓
<b>Secondary CFA</b>	Optional	Optional	Optional	✓	✓	Optional	Optional	✓

\* Stand-alone commercial was not analyzed quantitatively but was considered qualitatively.

\*\* Not allowed within the 4<sup>th</sup> Street Subdistrict.

\*\*\* Allowed if at least 10% of units are affordable.

Key:

✓ = Allowed

/ = Not considered to be allowed under DLCD methodology, but may be possible in practice for some building designs.

X = Not allowed

? = Depends on location within the zone

# Building Height Considerations

As noted above, CFEC rules require a maximum building height of at least 85' for a primary CFA for a city of Bend's size. However, there are multiple factors that influence the development possible within that height limit.

## CFEC Requirements and Methods

A "Methods Guide" developed by the Department of Land Conservation and Development (DLCD) requires jurisdictions to translate heights to floors based on a specific formula: number of floors = allowed height minus 10' divided by 10. This is shown in Exhibit 17.

**Exhibit 17: DLCD Building Height to Building Floors Crosswalk**

Number of Floors	Building Height Required
3	At least 40'
4	At least 50'
5	At least 60'
6	At least 70'
7	At least 80'

The actual number of floors that is possible in practice within a given maximum building height varies depending on the site, the building design and roof shape, and how height is measured in a given development code.

## Building Code

In addition to height limits in the development code, the building code limits building height (in feet and stories) based on the type of construction, occupancy classification, and use of sprinklers. These building code requirements tend to have a substantial impact on construction costs and development feasibility. Current building code requirements in Oregon allow a maximum of 85' for wood-frame construction, with a maximum of five stories of wood-frame construction over a concrete podium.<sup>4</sup> The number of floors of concrete podium is not explicitly limited, but the total building height with the upper wood-frame stories may not exceed 85'. (Note that for building code purposes, height is measured from the lowest point surrounding the building to the average height of the highest roof surface.<sup>5</sup> This is different than how the Bend Development Code measures building height.<sup>6</sup>)

Most developers and builders interviewed did not identify a meaningful difference between being allowed 75' vs. 85' for several reasons:

<sup>4</sup> 2022 Oregon Structural Specialty Code, Chapters 5 and 6.

<sup>5</sup> 2022 Oregon Structural Specialty Code, Chapter 2.

<sup>6</sup> BDC Chapter 1.2.

- They did not see a 75' height limit in the development code as a barrier to building a seven-story building, though 85' would allow for greater flexibility regarding rooftop spaces and facilities.
- They would generally build no more than seven stories in a podium development given building code limitations and their implications for construction costs. To build an eight-story building, the additional story would be required to be part of the concrete podium, or the whole building would have to be built from a more expensive material, increasing construction costs. Most podium development in Oregon to date has one or two stories of concrete podium, and many developers believe or assume that is the maximum allowed or possible. However, in Seattle, buildings with five stories of wood-frame construction over a three-story concrete podium are increasingly common within the same 85' height limit.<sup>7</sup> This suggests that the higher construction costs for the eighth story would likely not be justified by the rents for the additional units under current market conditions, although over the longer term, if market conditions and/or building code requirements change, an eighth story could potentially become both viable and valuable.

---

<sup>7</sup> See, for example, recent multifamily and mixed-use projects by Jackson Main Architecture: <https://static1.squarespace.com/static/5b6881db7e3c3ad28f15d2ba/t/624741d09bc82f7b1bdd311c/1648837107895/JMA+Multifamily+Brochure.pdf>. Seattle's building code also has some differences from Oregon's, which could impact the viability of building eight-story podium buildings.

## 4. Analysis Results: Financial Feasibility and Capacity Impacts by Study Area

This section summarizes results of the feasibility and development capacity analysis for each CFA study area. Market Areas 1 (North Study Area), 3 (South 3rd Study Area), and 5 (Eastside Study Area) are discussed together because of their commonalities in being more highway-oriented commercial areas.

### Market Areas 1, 3, and 5: North Hwy 97, South 3rd St, and Eastside Commercial Areas

#### Market Conditions

Residential rents in these areas are lower than in more central locations. Among the three, the North Study Area (Market Area 1) rents for new apartments are anticipated to be slightly higher than other highway-oriented commercial areas included in this study, while the South 3rd St Study Area (Market Area 3) rents are the lowest of the areas studied.

#### Feasibility Results

Few of the tested development prototypes are likely to be feasible in any of these areas, even with unusually low development costs, as shown in Exhibit 18 and Exhibit 19.

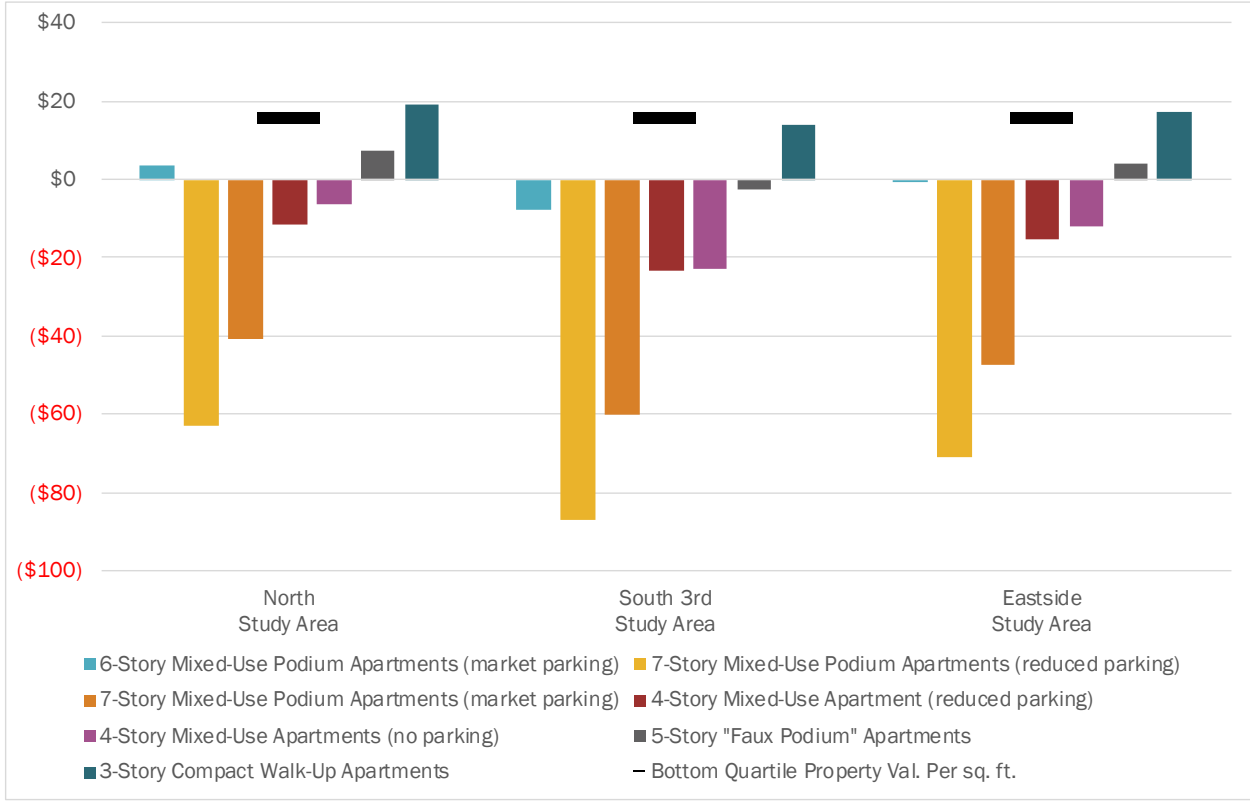
#### Exhibit 18: Market Feasibility of Tested Prototypes in Highway-Oriented Commercial Study Areas

Source: ECONorthwest analysis

	6-Story Mixed-Use Podium Apartments (market parking)	7-Story Mixed-Use Podium Apartments (reduced parking)	7-Story Mixed-Use Podium Apartments (market parking)	4-Story Mixed-Use Apartment (reduced parking)	4-Story Mixed-Use apartments (no parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-up Apartments
<b>Feasibility Rating</b>							
Market Area 1: North HWY 97	—	●	●	▼	▼	—	▲
Market Area 3: South HWY 97/3rd St	▼	●	●	●	●	▼	—
Market Area 5: East HWY 20/Greenwood	▼	●	●	●	▼	—	▲
<b>Rating</b>	<b>Explanation</b>						
●	Highly unlikely to be feasible						
▼	Not feasible in current market conditions, but could become feasible in future						
—	Possibly feasible with unusually low-cost land/construction						
▲	Likely feasible on vacant/low-cost sites, possibly feasible for redevelopment on underutilized sites						
●	Likely feasible for redevelopment on underutilized sites						

**Exhibit 19: RLV per Sq. Ft. by Prototype, Highway-Oriented Commercial Areas**

Source: ECONorthwest



In Market Areas 1 (North Study Area), 3 (South 3rd St Study Area), and 5 (Eastside Study Area), the three-story apartments are most likely to be feasible but may still only be viable in situations where land and/or construction costs are below what’s typical for redevelopment in the current market. This is because rents in these areas are generally not high enough to support higher-cost construction types. However, in the North and Eastside Study Areas, five-story apartments may be viable. Six-story mixed-use development may also be viable in the North Study Area in limited circumstances. However, developments with reduced parking and mixed uses do not appear to be feasible, in part due to the lack of transportation options and lack of street parking options in those areas, which would mean a greater impact to achievable rents if development did not provide parking.

These areas also have relatively strong demand for commercial development, and highly desirable commercial sites (e.g., sites with good visibility located at major intersections) could potentially see commercial development outcompete all the residential and mixed-use prototypes tested.

**Impacts to Residential Development Potential**

Estimated maximum market-feasible development capacities for Market Areas 1 (North Study Area), 3 (South 3rd Study Area), and 5 (Eastside Study Area) are shown in Exhibit 20. This reflects redevelopment only on sites with very low value given relatively low residual land

values and primarily three-story apartment densities. As shown in Exhibit 20, the South 3rd Study Area has more market-feasible development capacity than the other areas due to the presence of several relatively large, low-value sites that may be financially feasible to redevelop, despite the weaker market conditions in this area.

**Exhibit 20: Potential Residential Development Capacity, Market Areas 1 (North Study Area), 3 (South 3rd Study Area), and 5 (Eastside Study Area) Highway-Oriented Commercial Areas**

Source: ECONorthwest and MIG | APG analysis

	<b>Market Area 1: North HWY 97</b>	<b>Market Area 3: South 97/3rd</b>	<b>Market Area 5: East HWY 20/ Greenwood</b>
Total Acres	148.9	209.2	151.3
Total Vacant Acres	4.8	10.7	6.4
Total Redevelopable Acres	5.2	9.9	
Est. Maximum Market-Feasible Capacity (Units)	433	782	256
% of Units Allowed Under Existing Zoning	4%	0%	0%
Est. Market-Feasible Capacity under existing zoning (units)	18	0	0
Expected (Re)Development as % of Market-Feasible Capacity	29%	31%	50%
<b>Expected (Re)Development with CFA zoning (Units)</b>	<b>126</b>	<b>240</b>	<b>127</b>
Expected (Re)Development with Existing Zoning (Units)	5	0	0
Net Increase (Units)	121	240	127

These three study areas are primarily zoned CG, as shown in Exhibit 14. Other zones include CL, ME, and IL. (See the appendix for a detailed breakdown of capacity by existing zone.) Potential changes to zoning in these areas would generally allow taller buildings (five to seven stories) and could also potentially allow stand-alone residential uses, though this is not required. In the IL zone, none of the prototypes tested are currently allowed.

Because six- and seven-story mixed-use buildings do not appear to be feasible in this area (particularly for seven-story buildings), a height increase alone would have limited impact on what is viable in the majority of the area for the foreseeable future. While six-story buildings could be feasible in very limited circumstances in Market Area 1 (North Study Area), because the CG zone already allows 65' for mixed-use development, and this zone covers most of these areas, the change to allow heights above 65' would have an even smaller impact. One exception to this could be for CL-zoned areas adjacent to the river that may be able to command higher rents than the surrounding areas.

Allowing stand-alone residential uses would have a bigger impact in these areas because these development types are more likely to be financially feasible, at least on low-cost sites. In areas currently zoned IL, allowing both commercial and residential uses would represent a major change to policy and could allow stand-alone commercial development on desirable sites in addition to allowing residential and mixed-use development.

# Market Area 2: Bend Central District (BCD) Expanded Study Area

## Market Conditions

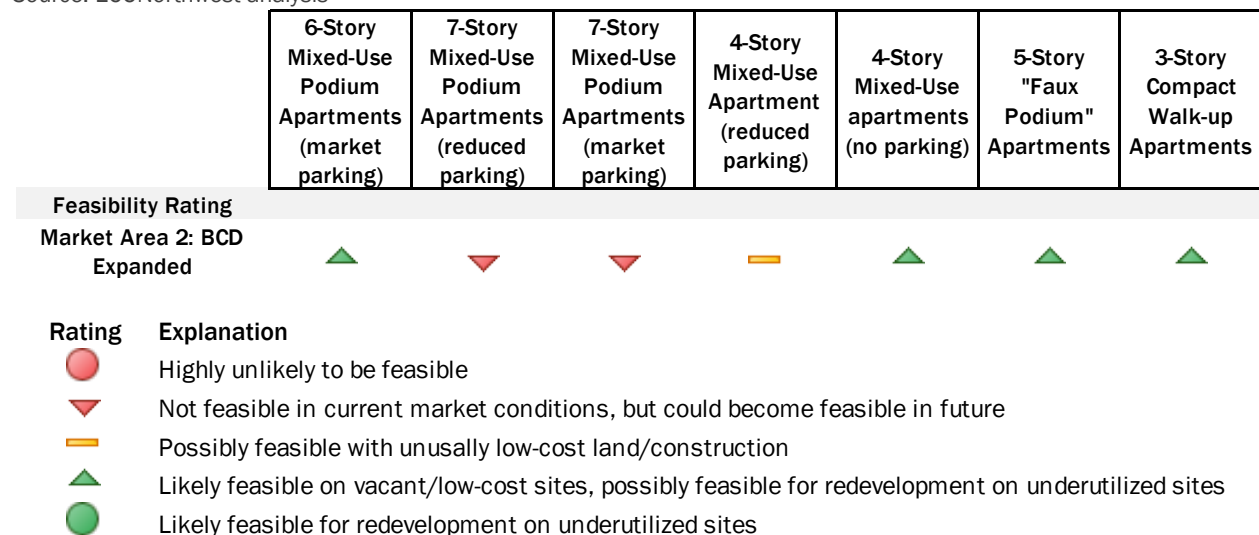
Rents in the BCD Expanded Study Area are difficult to predict given the lack of development activity within the area. However, given the input from local industry experts and the development interest in this area, ECONorthwest estimated rents in this area to fall between the Central Westside Study Area and the North Study Area based on its proximity to downtown and other central areas and the anticipated public investments in the area. This is a very large study area and has a wide range of site conditions, which could lead to a wide range of market rents; for example, sites located adjacent to the railroad tracks may have lower rents than sites with more prime, midblock locations on streets with future public improvements planned. Given these uncertainties, results for this area should be interpreted with additional caution.

## Feasibility Results

In the BCD Expanded Study Area, multiple types of development may be feasible on lower-cost sites, including three- and five-story apartments and six-story mixed-use buildings. In addition, in this area, there is greater tolerance for lower parking ratios due to better availability of transportation options, proximity to downtown, street parking, and rents that are somewhat lower than in the Central Westside Study Area or other premium locations. However, this is a large area and variation within the study area could mean that in the most desirable locations redevelopment could be more feasible than shown and in less desirable locations residential and mixed-use development may not be feasible at all.

### Exhibit 21: Market Feasibility of Tested Prototypes in the BCD Expanded Study Area

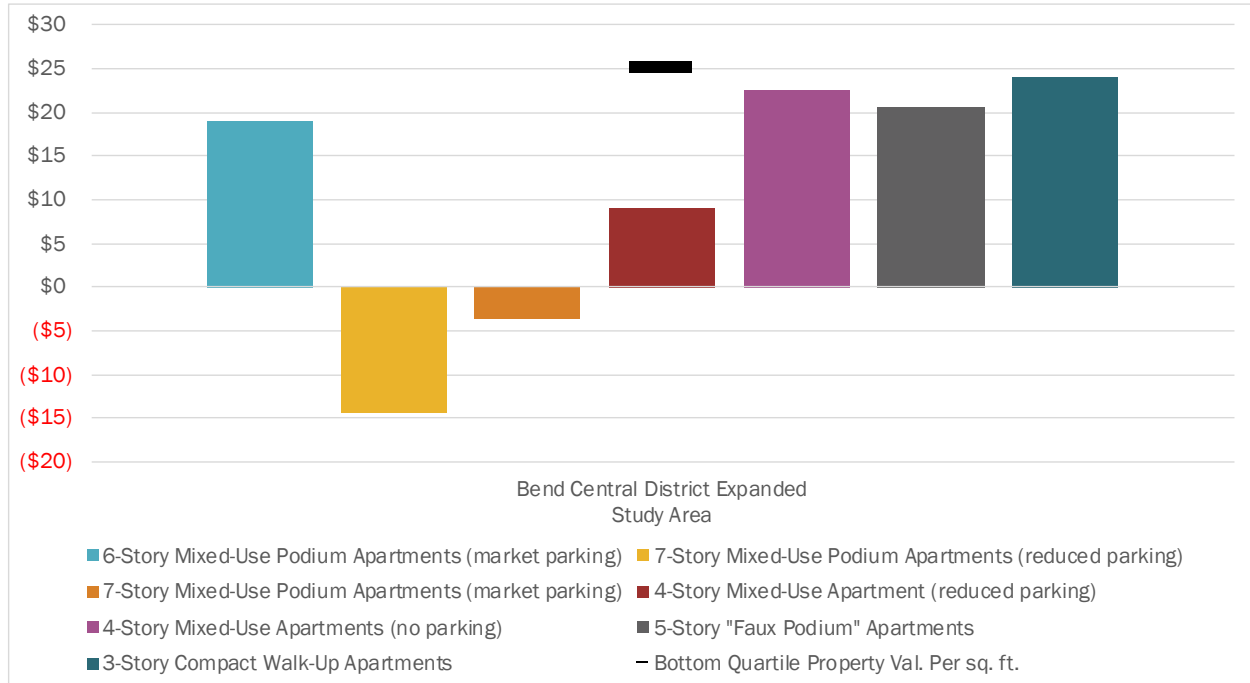
Source: ECONorthwest analysis





## Exhibit 22: RLV per Sq. Ft. by Prototype, BCD Expanded Study Area

Source: ECONorthwest analysis



Also note that the City offers a partial property tax abatement (the Multiple Unit Property Tax Exemption Program, or MUPTE) in portions of this area. This incentive program could make qualifying development feasible that would not otherwise be feasible. Development must provide public benefits identified by the City to qualify. All tested prototypes could potentially be eligible for MUPTE if located in a qualifying area and if they provide the required public benefits.

### Impacts to Residential Development Potential

Estimated change in development capacity for Market Area 2 (BCD Expanded Study Area) is shown in Exhibit 23. As noted previously, the wide range of site conditions in this area makes it difficult to accurately estimate (re)development potential, and these results could be based on site-specific factors to an even greater extent than the other areas.

**Exhibit 23: Potential Residential Development Capacity, Market Area 2 (BCD Expanded Study Area)**

Source: ECONorthwest and MIG | APG analysis

	Market Area 2: BCD Expanded
Total Acres	116.0
Total Vacant Acres	6.6
Total Redevelopable Acres	6.7
Est. Maximum Market-Feasible Capacity (Units)	2,845
% of Units Allowed Under Existing Zoning	69%
Est. Market-Feasible Capacity under existing zoning (units)	1969
Expected (Re)Development as % of Market-Feasible Capacity	30%
<b>Expected (Re)Development with CFA zoning (Units)</b>	<b>847</b>
Expected (Re)Development with Existing Zoning (Units)	586
Net Increase (Units)	261

While much of the BCD Expanded Study Area is subject to the BCD overlay, there are also substantial areas of CL, ME, and IL zoning included, as shown in Exhibit 14.

Potential changes to zoning in these areas vary by zone. Impacts are more subtle in the BCD Expanded Study Area and most dramatic in the IL zone, with differences in the CL and ME zones based on allowing taller mixed-use buildings and potentially stand-alone residential.

While seven-story mixed-use buildings may be feasible in this area in very limited circumstances, the increase from six stories to seven stories in the BCD Expanded Study Area (assuming that the current height limit allows six stories in at least some circumstances) likely makes development less feasible in this area given the estimated rents and development costs. This is because the additional story must be concrete, as discussed on page 17, which increases overall development costs without increasing revenues. For the specific prototypical developments used in this analysis, the seven-story prototype substitutes some surface parking for more structured parking, which increases density but is only helpful if the savings on land costs outweighs the increase in construction costs, which is not likely in this area.

In the CL, ME, and IL areas, changes would be more impactful. Allowing six stories could have value in some areas where localized rents are high enough to support this form of development, but allowing stand-alone residential uses would likely have the greatest impact.

Details of estimated capacity and changes by zone are provided in the appendix.

# Market Area 4: Central Westside Study Area

## Market Conditions

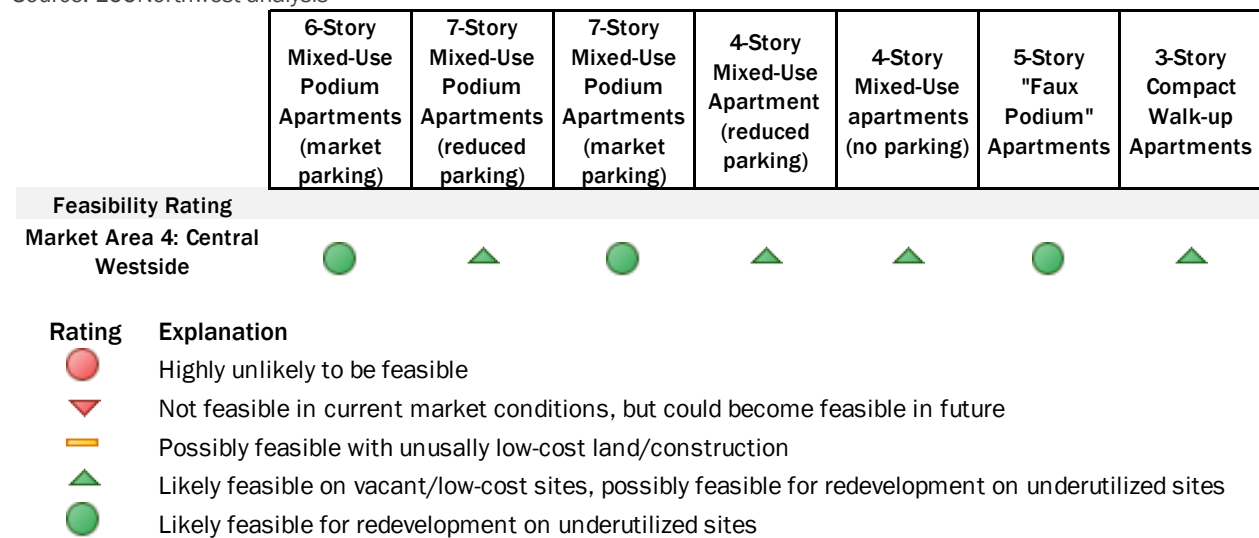
Market Area 4 (Central Westside Study Area) commands the highest rents of the study areas analyzed due to its higher surrounding home sales prices and proximity to local amenities. Relatively dense development has already taken place recently in this area, such as The Hixon and The Eddy, proving a market for this type of development exists.

## Feasibility Results

In Market Area 4 (Central Westside Study Area), all development types tested are likely to be feasible at least on vacant or low-cost sites, as shown in Exhibit 24. The most feasible forms of development are likely to be six-story mixed-use, seven-story mixed-use with market parking, or 5-story apartments, depending on site conditions. While all three forms are likely financially feasible, the six-story mixed-use development appears to offer the highest residual land value by a small margin, as shown in Exhibit 25.

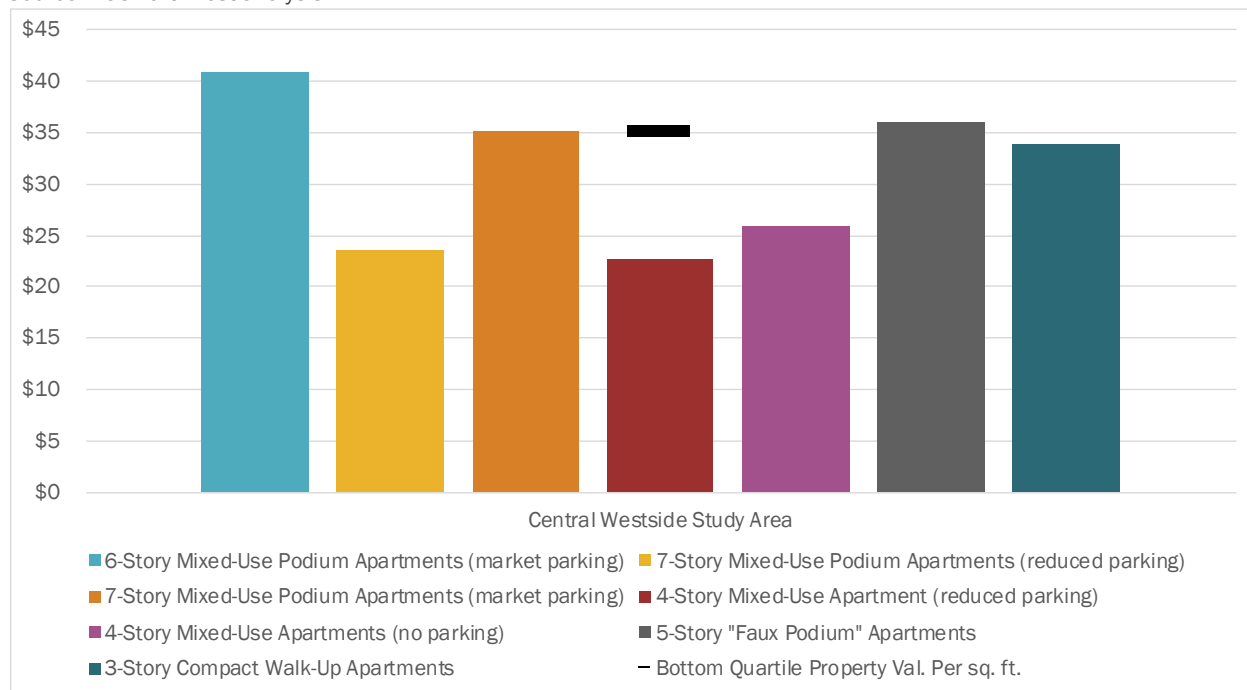
**Exhibit 24: Market Feasibility of Tested Prototypes in Central Westside Study Area**

Source: ECONorthwest analysis



### Exhibit 25: RLV per Sq. Ft. by Prototype, Central Westside Study Area

Source: ECONorthwest analysis



### Impacts to Residential Development Capacity

Estimated change in development capacity for Market Area 4 (Central Westside Study Area) is shown in Exhibit 26.

### Exhibit 26: Potential Residential Development Capacity, Market Area 4 (Central Westside Study Area)

Source: ECONorthwest and MIG|APG analysis

Market Area 4: Central Westside	
Total Acres	438.9
Total Vacant Acres	31.8
Total Redevelopable Acres	43.7
Est. Maximum Market-Feasible Capacity (Units)	8,673
% of Units Allowed Under Existing Zoning	83%
Est. Market-Feasible Capacity under existing zoning (units)	7,216
Expected (Re)Development as % of Market-Feasible Capacity	27%
<b>Expected (Re)Development with CFA zoning (Units)</b>	<b>2,328</b>
Expected (Re)Development with Existing Zoning (Units)	1,937
<b>Net Increase (Units)</b>	<b>391</b>

\* In this area, because the market-feasible capacity is so large, absorption (the pace of demand for new units) may limit (re)development further than shown because only a portion of the overall demand for apartments citywide is likely to be captured in any one area at any given time, and developers may avoid competing directly within the same submarket at the same time, which could slow the pace of development and mean that fewer units would be built within a twenty-year period.

Most of Market Area 4 (Central Westside Study Area) is currently zoned MU, as shown in Exhibit 14, which is the zone closest to meeting Primary CFA requirements. The remainder of the area is zoned MR, which has a much lower height limit in order to create a transition to the Deschutes River, but it also allows stand-alone residential. Impacts of CFA designation in the MU zone would be limited (primarily seven vs. six stories and providing greater flexibility for six-story development relative to height limits), but impacts in the MR zone would be more substantial given the difference in height limits.

While seven-story development does appear to be feasible in this area, because it does not appear to be more feasible than six-story development, the increase from six stories to seven stories in the MU zone (assuming that the current height limit does allow six stories in at least some circumstances) would likely have limited impact. As discussed for the BCD Expanded Study Area, the addition of another floor of structured parking, rather than relying partially on surface parking, appears to increase construction costs more than the savings on land costs from building at higher density, even in this area.

In the MR zone, changes would be more impactful. Allowing six stories would likely be somewhat more feasible than the lower-intensity options that are allowed under existing zoning. This could depend on site-specific factors, but given the availability of river views from this area, the premium for building taller could be higher than in other areas.

## 5. Conclusions

---

This analysis suggests that CFA designation could have a marginal impact in areas where zoning is already largely compliant with CFA requirements and a variable impact in other areas.

- The MU zone and BCD overlay, which cover large portions of the Central Westside Study Area and BCD Expanded Study Area, respectively, would see effectively no difference in likely development outcomes as a result of allowing taller buildings. Developers may be able to build seven stories under the existing zoning already and the increased cost of building the additional level of structured parking to reach seven stories likely outweighs the financial benefits. However, these areas are more likely to support dense, mixed-use (re)development than other areas, so capturing the existing (re)development potential within a CFA may be appropriate, even if the designation does not have much impact.
- Allowing taller buildings could have value in the MR zone where policy direction to date has intentionally kept building heights lower if they were near the river, and also potentially in the CL-zoned parcels adjacent to the river on the east side.
- In highway-oriented commercial areas, the primary impact would come from a policy choice to allow stand-alone residential development, which is not required for CFA designation, because rents are generally not yet high enough to support taller vertical mixed-use development given current construction costs. (One exception to this could be for CL-zoned areas that are adjacent to the river that may be able to command higher rents than the surrounding areas.)
- If areas currently zoned industrial were designated as CFAs, this would represent a major policy shift and would potentially open these areas to a mix of residential and commercial uses.

The key factors driving feasibility include rents, development costs, building code, and parking demand.

- **Rents:** Differences in market rents due to proximity to amenities and employment centers, among other factors, drive differences in the scale and amount of development that is likely to be financially feasible. Areas that can command premium rents can more readily absorb the cost of building higher-density developments. Some of the discrepancy in rents could change if less desirable areas see increased investment and placemaking (e.g., BCD Expanded Study Area, which is part of a larger effort to reinvest in Bend's Central Area). Higher rents on a per-square-foot basis would likely be offset by a shift toward smaller units, as is generally the pattern across new construction in Bend.

- **Costs:** Construction costs as well as SDCs and other fees are high in Bend compared to other parts of the state. The costs of development (excluding land) are relatively constant across the different market areas analyzed (though they can vary substantially based on site-specific factors). However, development costs vary substantially based on building height because building code requires different materials (e.g., concrete podiums) and fire safety elements as buildings get taller, which generally increases construction costs.
- **Parking:** Perceived demand for parking makes it difficult to economize by building apartments with little or no parking. The cost of building structured parking means that only areas with higher rents can generally justify this cost. Rocky soils make building underground parking virtually impossible in many cases, which limits developers' ability to maximize development potential within a seven-story building. Improved transit service (including to top recreation destinations) and investments in making areas more walkable and bikeable could reduce perceived need for parking over time. Given the cost of structured parking, making buildings with less or no parking viable in the market could meaningfully impact these results.

**This analysis suggests that the efforts the City has already made to designate and invest in mixed-use opportunity areas have created development conditions and regulations similar to those intended for CFAs, and these areas could support substantial (re)development with or without CFA designation.** However, over the longer term, additional density and redevelopment may be possible based on changing rents, costs, parking demand, or building code requirements that could increase the value of building above six stories.

**In other areas that the City is considering for potential CFA designation, there are important policy choices to consider and trade-offs associated with allowing stand-alone residential uses, increasing heights, or shifting away from industrial zoning.** This analysis does not address those trade-offs, but they merit evaluation through an update to the City's Economic Opportunities Analysis and community and stakeholder engagement. These areas have less (re)development potential under current market conditions because they are not yet desirable places to build higher-density mixed-use development. However, if the City chose to invest in one or more of these areas similar to other mixed-use opportunity areas, over time the rents and parking demand could change, potentially expanding residential (re)development potential.

The City could also impact these results through expanding tax abatement programs to encompass any of the highway commercial areas selected (Market Areas 1 [North Study Area], 3 [South 3rd Study Area], and 5 [Eastside Study Area]), either using a Vertical Housing Development Zone (VHDZ), which specifically incentivizes multistory mixed-use development, or by extending the City's existing MUPTE program, which can apply to mixed-use or stand-alone residential development that provides qualifying public benefits. Preliminary sensitivity testing suggests that the incentive provided by either VHDZ or MUPTE could be enough to meaningfully increase feasibility for higher-density mixed-use development where it is not feasible today. Placemaking investments could also boost the achievable rents, making more development financially feasible.

# Technical Appendix: Detailed Assumptions and Results

---

The appendix provides additional details regarding assumptions and results for the analysis of financial feasibility, market-feasible capacity, and expected (re)development.



## Financial Feasibility Assumptions and Details

**Exhibit 27: Prototype Financial Assumptions and Feasibility Results by Market Area**

Source: ECONorthwest analysis

Description	6-Story Mixed-Use Podium Apartments (Market Parking)	7-Story Mixed-Use Podium Apartments (Reduced Parking)	7-Story Mixed-Use Podium Apartments (Market Parking)	4-Story Mixed-Use Apartment (Reduced Parking)	4-Story Mixed-Use Apartments (No Parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments
Stories	6	7	7	4	4	5	3
Estimated Height (ft)	65	75	75	45	45	55	30
Use	Mixed	Mixed	Mixed	Mixed	Mixed	Residential	Residential
Parking Location/Configuration	Surface, 1-level podium with some parking and some retail	2-level podium (1 parking, 1 parking/retail)	2-level podium (extends beyond wood "tower")	Surface and tuck under	None	Surface and tuck under	Surface
Assumed Site Size (acres)	2.24	0.92	0.92	0.34	0.34	1.38	1.36
Total Unit Count	232	215	169	40	58	130	60
Density (DU/net acre)	104	234	184	116	168	95	44
Parking Ratio (per unit, avg)	1.0	0.75	1.0	0.5	0	0.75	1.08
Ground Floor Retail (gross sq. ft.)	5,710	14,824	11,638	5,615	5,100	0	0
Average Unit Size (sq. ft.)	675	675	675	675	675	675	790

### Building Details

#### Unit Mix

Studio	25%	25%	25%	25%	25%	25%	15%
1-BR	50%	50%	50%	50%	50%	50%	50%
2-BR	25%	25%	25%	25%	25%	25%	25%
3-BR	0%	0%	0%	0%	0%	0%	10%

Description	6-Story Mixed-Use Podium Apartments (Market Parking)	7-Story Mixed-Use Podium Apartments (Reduced Parking)	7-Story Mixed-Use Podium Apartments (Market Parking)	4-Story Mixed-Use Apartment (Reduced Parking)	4-Story Mixed-Use Apartments (No Parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments
<b>Unit Size</b>							
Studio	500	500	500	500	500	500	550
1-BR	675	675	675	675	675	675	700
2-BR	850	850	850	850	850	850	950
3-BR	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Surface Parking Spaces	142	-	23	7	-	77	64
Structured Podium Spaces	90	162	122	13	-	-	-
Structured (above ground, not within building) or Tuck Under (open-air)			23			20	
Gross Sq. Ft. of Residential	184,614	170,476	133,839	31,819	45,900	103,359	55,568
Gross Sq. Ft. of Retail	5,710	14,824	11,638	5,615	5,100	-	-
Landscaping (sq. ft.)	14,625	6,000	6,000	2,250	2,250	9,000	11,875
<b>Hard Costs</b>							
Total Hard Cost per Gross Sq. Ft. Residential	\$269	\$292	\$298	\$294	\$259	\$250	\$217
Total Hard Cost per Unit	\$214,308	\$231,178	\$235,965	\$233,727	\$205,061	\$198,691	\$201,242
<b>Soft Costs</b>							
Soft Costs as a % of Hard Costs	26%	25%	26%	27%	27%	26%	27%
Total Dev. Costs (excl. land) per Gross Sq. Ft. Residential	\$366	\$396	\$405	\$404	\$357	\$341	\$298
Total Dev. Costs (excl. land) per Unit	\$291,161	\$313,706	\$320,366	\$321,262	\$282,217	\$271,158	\$276,221

Description	6-Story Mixed-Use Podium Apartments (Market Parking)	7-Story Mixed-Use Podium Apartments (Reduced Parking)	7-Story Mixed-Use Podium Apartments (Market Parking)	4-Story Mixed-Use Apartment (Reduced Parking)	4-Story Mixed-Use Apartments (No Parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments
<b>Revenue</b>							
Rent Reduction for No Parking (BCD)	0%	-2%	0%	-4%	-8%	-2%	0%
Rent Reduction for No Parking (other areas)	0%	-3%	0%	-5%	-10%	-3%	0%
<b>Blended Average Monthly Residential Rent per Unit (with escalation)</b>							
Market Area 1: North HWY 97	\$1,979	\$1,930	\$1,979	\$1,880	\$1,781	\$1,930	\$2,078
Market Area 2: BCD Expanded	\$1,979	\$1,942	\$1,979	\$1,905	\$1,831	\$1,942	\$2,078
Market Area 3: South HWY 97/3rd St	\$1,949	\$1,900	\$1,949	\$1,851	\$1,754	\$1,900	\$2,046
Market Area 4: Central Westside	\$2,040	\$1,989	\$2,040	\$1,938	\$1,836	\$1,989	\$2,143
Market Area 5: East HWY 20/Greenwood	\$1,969	\$1,920	\$1,969	\$1,871	\$1,772	\$1,920	\$2,068
<b>Blended average Monthly Residential Rent per sq. ft. (with escalation)</b>							
Market Area 1: North HWY 97	\$2.93	\$2.86	\$2.93	\$2.79	\$2.64	\$2.86	\$2.63
Market Area 2: BCD Expanded	\$2.93	\$2.88	\$2.93	\$2.82	\$2.71	\$2.88	\$2.63
Market Area 3: South HWY 97/3rd St	\$2.89	\$2.81	\$2.89	\$2.74	\$2.60	\$2.81	\$2.59
Market Area 4: Central Westside	\$3.02	\$2.95	\$3.02	\$2.87	\$2.72	\$2.95	\$2.71
Market Area 5: East HWY 20/Greenwood	\$2.92	\$2.84	\$2.92	\$2.77	\$2.63	\$2.84	\$2.62

Description	6-Story Mixed-Use Podium Apartments (Market Parking)	7-Story Mixed-Use Podium Apartments (Reduced Parking)	7-Story Mixed-Use Podium Apartments (Market Parking)	4-Story Mixed-Use Apartment (Reduced Parking)	4-Story Mixed-Use Apartments (No Parking)	5-Story "Faux Podium" Apartments	3-Story Compact Walk-Up Apartments
<b>Op Ex (with taxes) as a % of Gross Rent</b>							
Market Area 1: North HWY 97	29%	30%	30%	31%	30%	29%	29%
Market Area 2: BCD Expanded	29%	30%	30%	31%	30%	29%	29%
Market Area 3: South HWY 97/3rd St	30%	30%	30%	31%	30%	29%	29%
Market Area 4: Central Westside	29%	30%	30%	30%	30%	29%	29%
Market Area 5: East HWY 20/Greenwood	29%	30%	30%	31%	30%	29%	29%
<b>RLV per Sq. Ft. Based on Target ROC</b>							
Market Area 1: North HWY 97	\$3	(\$63)	(\$41)	(\$11)	(\$7)	\$7	\$19
Market Area 2: BCD Expanded	\$19	(\$14)	(\$4)	\$9	\$23	\$21	\$24
Market Area 3: South HWY 97/3rd St	(\$8)	(\$87)	(\$60)	(\$23)	(\$23)	(\$2)	\$14
Market Area 4: Central Westside	\$41	\$24	\$35	\$23	\$26	\$36	\$34
Market Area 5: East HWY 20/Greenwood	(\$0)	(\$71)	(\$47)	(\$15)	(\$12)	\$4	\$17

## Market-Feasible Capacity Assumptions

The market-feasible capacity analysis is based on the following assumptions:

- Properties in each study area were assumed to be financially feasible to redevelop if the existing property value is less than the highest estimated RLV (per square foot of site area) of the prototypes in that study area. Vacant land is assumed to be market feasible to develop regardless of current value. Properties excluded from the Buildable Lands Inventory (public properties, etc.) were also excluded from this analysis.
- All identified properties were assumed to develop with the residential or mixed-use development prototypes analyzed for this study, with the exception of properties at high-visibility corners. These were assumed to (re)develop with commercial uses (if at all), based on input from brokers and developers in the area indicating these locations would be highly desirable for certain commercial uses that could outcompete residential development. In reality, other types of nonresidential development that were not the focus of this study (e.g., hotel/hospitality, self-storage, medical office, etc.) may also occur on some of the sites identified as market feasible for residential or mixed-use development.
- All properties assumed to be market feasible for residential or mixed-use development were assumed to develop at weighted average residential densities that reflect the mix of prototypes most likely to be financially feasible within each area.<sup>8</sup>

Given that these assumptions generally represent the most optimistic reasonable assumption, the results should be interpreted as an estimate of the maximum market-feasible residential development capacity of each study area—a “reasonable best-case” scenario of how much residential and mixed-use development could be accommodated on sites that are estimated to be financially feasible for (re)development under current or reasonably foreseeable market conditions.

---

<sup>8</sup> While the analysis did not explicitly evaluate a traditional garden-style walk-up apartment prototype, its financial feasibility is likely similar to the three-story walk-up apartment but with somewhat higher costs for landscaping and shared amenities. To account for this, the weighted average densities factor in an assumption of some of this form of development (typically built at roughly 30 units per acre).

## Exhibit 28: Detailed Assumptions for Market-Feasible Capacity Analysis by Study Area

Source: MIG|APG and ECONorthwest analysis

Study Area	Total Acres	Non-developable Acres*	Acres Assumed for Commercial Uses **	Maximum Land Budget ("Strike Price")	Acres Assumed for Future ROW and Public Facilities ***	CFA Density (Net DU/AC)
1. North HWY 97 Market Study Area	150.2	19.2	8.2	\$19	0.9	43
2. BCD Expanded Market Study Area	252.2	6.0	17.7	\$28	3.8	94
3. South 97/3rd Market Study Area	227.4	15.2	10.2	\$14	2.7	38
4. Central Westside Market Study Area	438.9	193.0	0.0	\$41	4.7	115
5. East HWY20/ Greenwood	154.2	3.2	5.2	\$17	0.0	40

## Expected Redevelopment Assumptions

Key assumptions include:

- In addition to excluding land at key commercial corners, 50% of the remaining vacant land is assumed to develop with other uses other than those modeled.
- On sites identified as financially feasible to redevelop with residential or mixed use, 10% are assumed to redevelop.

For each area, these factors were weighted based on the share of the capacity from vacant land vs. redevelopment.

## Comparison to Existing Zoning

To estimate how much of the capacity would be allowed under existing zoning, the share of the units coming from prototypes that would be allowed under the existing zoning was calculated for each zone and each market area. This share varies between market areas, even if the existing zoning is the same, because the estimated development densities are weighted based on which prototypes are most likely to be financially feasible. Where a prototype is shown as “not considered to be allowed under DLCD methodology, but may be possible in practice for some building designs” in Exhibit 16 on page 16, the potential development from that prototype was counted as allowed under the existing zoning, consistent with the input from developers, to avoid overestimating the true impact of a CFA designation.

### Exhibit 29: Detailed Breakout of Market-Feasible Capacity by Study Area and Existing Zoning

Source: MIG|APG and ECONorthwest analysis

Zone	Market Area 1: North HWY 97	Market Area 2: BCD Expanded	Market Area 3: South 97/3rd	Market Area 4: Central Westside	Market Area 5: East HWY 20/ Greenwood	Total
<b>Commercial General (CG)</b>	Total Acres	98.5	209.2		125.7	433.4
	Vacant Acres	4.3	10.7		5.4	20.4
	Est. Acres Redevelopable with Residential/Mixed Use	1.6	9.9			11.5
	Est. Maximum Market-Feasible Capacity (Units)	255	782		215	1252
	% of Units Allowed under Existing Zoning	7%	0%		0%	7%
	Est. Market-Feasible Capacity under Existing Zoning	18	0		0	18
<b>Bend Central District Overlay (BCD)</b>	Total Acres		133.3			133.3
	Vacant Acres		8.7			8.7
	Est. Acres Redevelopable with Residential/Mixed Use		8.6			8.6
	Est. Maximum Market-Feasible Capacity		1612			1612
	% of Units Allowed under Existing Zoning		100%			100%
	Est. Market-Feasible Capacity under Existing Zoning		1612			1612
<b>Commercial Limited (CL)</b>	Total Acres	23.7	71.2			94.9
	Vacant Acres	0.3	4.1			4.4
	Est. Acres Redevelopable with Residential/Mixed Use		4.1			4.1
	Est. Maximum Market-Feasible Capacity (Units)	11	762			773
	% of Units Allowed under Existing Zoning	0%	47%			47%
	Est. Market-Feasible Capacity under Existing Zoning	0	356			356
	Total Acres		17.7		25.6	43.3
	Vacant Acres		1.9		1.0	2.9



Zone		Market Area 1: North HWY 97	Market Area 2: BCD Expanded	Market Area 3: South 97/3rd	Market Area 4: Central Westside	Market Area 5: East HWY 20/ Greenwood	Total
<b>Mixed Employment (ME)</b>	Est. Acres Redevelopable with Residential/Mixed Use		1.8				1.8
	Est. Maximum Market-Feasible Capacity (Units)		344			41	385
	% of Units Allowed under Existing Zoning		0%			0%	0%
	Est. Market-Feasible Capacity under Existing Zoning					0	0
<b>Industrial Light (IL)</b>	Total Acres	26.8	27.0				53.8
	Vacant Acres	0.3	0.6				0.8
	Est. Acres Redevelopable with Residential/Mixed Use	3.6	0.8				4.4
	Est. Maximum Market-Feasible Capacity (Units)	166	126				293
	% of Units Allowed under Existing Zoning	0%	0%				0%
	Est. Market-Feasible Capacity under Existing Zoning	0					0
<b>Mixed Residential (MR)</b>	Total Acres				111.3		111.3
	Vacant Acres				14.6		14.6
	Est. Acres Redevelopable with Residential/Mixed Use				6.0		6.0
	Est. Maximum Market-Feasible Capacity				2369		2369
	% of Units Allowed under Existing Zoning				38%		38%
	Est. Market-Feasible Capacity under Existing Zoning				912		912
<b>Mixed Use (MU)</b>	Total Acres				327.6		327.6
	Vacant Acres				17.2		17.2
	Est. Acres Redevelopable with Residential/Mixed Use				37.7		37.7
	Est. Maximum Market-Feasible Capacity				6304		6304
	% of Units Allowed under Existing Zoning				100%		100%

Zone	Market Area 1: North HWY 97	Market Area 2: BCD Expanded	Market Area 3: South 97/3rd	Market Area 4: Central Westside	Market Area 5: East HWY 20/ Greenwood	Total	
	Est. Market-Feasible Capacity under Existing Zoning					6304	6304
Residential (RL, RS, RM, RH)	Total Acres		2.7	11.5		14.2	
	Vacant Acres			3.4		3.4	
	Est. Acres Redevelopable with Residential/Mixed Use			4.4		4.4	
	Est. Maximum Market-Feasible Capacity (Units)			298		298	
	% of Units Allowed under Existing Zoning		4%	35%		39%	
	Est. Market-Feasible Capacity under Existing Zoning			105		105	
Totals	Total Acres	148.9	118.7	220.8	438.9	151.3	1078.6
	Total Vacant Acres	4.8	6.6	14.1	31.8	6.4	63.6
	Total Redevelopable Acres	5.2	6.7	14.3	43.7		69.9
	Est. Maximum Market-Feasible Capacity (Units)	433	2845	1080	8673	256	13286
	% of Units Allowed under Existing Zoning	4%	69%	10%	83%	0%	70%
	Est. Market-Feasible Capacity under Existing Zoning	18	1969	105	7216	0	9308
	Expected (Re)Development as % of Market-Feasible Capacity	29%	30%	30%	27%	50%	28%
	<b>Expected (Re)Development with CFA Zoning</b>	<b>126</b>	<b>847</b>	<b>322</b>	<b>2328</b>	<b>127</b>	<b>3750</b>
	Expected (Re)Development with Existing Zoning	5	586	31	1937	0	2560
	Net increase	121	261	291	391	127	1190