



bae urban economics

RESIDENTIAL AND MIXED-USE PROTOTYPE FEASIBILITY ANALYSIS

City of Portland

December 2, 2022

PRESENTATION OVERVIEW

- BAE Introduction
- Study Overview
- Analysis Methodology
- Development Prototypes
- Next Steps
- Questions and Comments

BAE INTRODUCTION



Award-winning urban economics practice with more than 2,200 engagements since 1986



Areas of expertise include market and financial feasibility analysis, affordable housing policy analysis, public-private partnerships, economic and fiscal impacts, cultural districts, and parks and open space feasibility studies.



Staff in Portland, San Francisco, Sacramento, Los Angeles, New York, Atlanta, and Washington D.C. Certified MBE/DBE/SBE.

STUDY OVERVIEW

1. Site Utilization Analysis – City
2. IH Resident Survey - PSU
3. Comparison City IH Analysis – City
4. **IH Financial Feasibility Analysis – BAE**
Assess financial feasibility of residential and mixed-use developments under the existing inclusionary housing ordinance and incentive options

ANALYSIS METHODOLOGY

ANALYSIS METHODOLOGY

OVERVIEW

- Review Prior Analyses
- Create Development Prototypes
- Conduct Market Analysis
- Developer and Stakeholder Interviews
- Feasibility Assessment

ANALYSIS METHODOLOGY

REVIEW PRIOR ANALYSES

2016 Financial Feasibility Analysis

- 22 Prototypes, Rental Properties Only
- Various Inclusionary Ordinance Options
 - Different Affordability Levels
 - Different Delivery Options
- Various Development Incentive Options
- Supported City Approving Current Ordinance

ANALYSIS METHODOLOGY

CREATE DEVELOPMENT PROTOTYPES

- Review Prior Study Prototypes
- Review characteristics of recent multifamily developments
- Propose Development Prototypes based on density, height, unit mix, etc.



ANALYSIS METHODOLOGY

CONDUCT MARKET ANALYSIS & STAKEHOLDER INTERVIEWS

- Compile rental rates and for-sale prices for comparable multifamily developments
 - High, Medium, Low rental rates and for-sale prices
- Conduct interviews with developers, contractors, property managers, etc.
 - High, Medium, Low Development Costs
 - High, Medium, Low Operating Costs

ANALYSIS METHODOLOGY

FINANCIAL FEASIBILITY ANALYSIS

- Create series of pro forma development feasibility models
 - Assess Residential Development Cost, broken down by cost components (site preparation, hard costs, soft costs, financing costs, etc.)
 - Estimate Rental Revenue or Sale Proceeds, based on various ways to abide by current inclusionary ordinance
 - Estimate Value of Development
 - Calculate Residual Land Value

ANALYSIS METHODOLOGY

FINANCIAL FEASIBILITY ANALYSIS EXAMPLE

Development Program Assumptions						Cost Assumptions				Development Cost Analysis			Feasibility Analysis					
Site Size - acres / square feet						43,560				Construction			Development Cost			Financial Feasibility		
Total Units						100				Site Prep Costs (per site. sq.ft)			\$20					
Affordable (% - count)						15				Hard Cost per residential sf			\$350					
Market Rate (% - count)						85				Parking cost per space, Podium			\$45,000			Site Preparation		
Leasable sq.ft.						96,450				Soft Costs (% of hard costs)			20%			\$871,200		
Circulation & Communal Space						20%				SDC Fees (per unit) (a)			\$31,486			Vertical Construction		
Total Project sq.ft						120,563				MR Developer Fee (% of hard and soft)			3%			Hard Cost		
Total Parking Spaces						180				MR Developer Profit (% of hard and soft)			12%			Parking Cost		
Parking spaces per du						1.80										Soft Costs		
																Impact Fees		
																Subtotal		
																\$65,079,195		
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DEVELOPMENT PROTOTYPES

DEVELOPMENT PROTOTYPES

OVERVIEW

- Create series of prototypes to inform feasibility of various development intensities, heights, densities, and tenure.
- Define prototypes based on current zoning and critical construction cost thresholds.
- Maintain continuity with prior City analyses.

DEVELOPMENT PROTOTYPES

APPROACH

- Development types tend to differ between the Central City and outside of the Central City
 - Height, density, construction type, parking provision, etc.
 - Market Characteristics (rents, sale prices, operating costs, etc.)
- Construction type (wood-frame, concrete, steel) is most significant cost threshold, which is driven by height/number of stories
- Define prototypes to capture range of feasibility conclusions

DEVELOPMENT PROTOTYPES

PROTOTYPE HEIGHT AND FORM

Central City Prototypes

- 5 Stories



- 7 Stories



- 9 Stories



- 15 Stories



- 30 Stories



Outside CC Prototypes

- 3 Stories



- 4 Stories



- 5 Stories



- 7 Stories



- 12 Stories



DEVELOPMENT PROTOTYPES

PROTOTYPE FEASIBILITY TESTING

■ Assumptions

- Same Site Size (~0.5 Acres)
- Same Unit Mix
 - Rental: 30% Studio, 50% 1BR, 20% 2BR
 - For-Sale: 30% 1BR, 50% 1BR, 20% 3BR

■ Feasibility Testing

- High/Med/Low Construction Costs
- High/Med/Low Rents or Sale Prices
- Tenure (owner v. renter)
- Ground Floor Use (retail or residential)

DEVELOPMENT PROTOTYPES

CRITICAL COST/REVENUE ASSUMPTIONS

■ Revenues/Expenses

- Rental Rates by Unit Type by Geography (High, Medium, Low)
- Sale Prices by Unit Type by Geography (High, Medium, Low)
- Annual Operating Costs (rental prototypes)

■ Development Cost Inputs

- Site Preparation Cost (per site SF)
- Hard Cost (per bldg SF)
- Parking Costs (per space)
- SDCs (per SF/Unit)
- Soft Costs (% of Hard Costs)
- Developer Fee
- Financing Assumptions

■ Property Valuation

- Market Capitalization Rates
- Developer Return Requirements
 - Yield-on-Cost
 - Return-on-Cost
 - Internal Rate of Return
- Typical Land Purchase Prices

NEXT STEPS & QUESTIONS

NEXT STEPS

- Continue Market Analysis
- Conduct Developer/Contractor Stakeholder Interviews
- Create Feasibility Models
 - Test all inclusionary ordinance options
 - High / Low Development Cost Sensitivities
 - High / Med / Low rental rates and sale prices
- Working Group Updates
 - March 17th – Present Feasibility Findings

QUESTIONS FOR WORKING GROUP

- Comments on Prototypes?
- Comments on Feasibility Analysis Approach?
- Interested in one-on-one stakeholder interview to discuss cost/revenue inputs?



QUESTIONS AND DISCUSSION