WORKFORCE HOUSING REPORT
CENTRAL CITY PORTLAND, OREGON

September 2003

PREPARED FOR:

Portland Business Alliance
520 Southwest Yamhill, Suite 1000
Portland, Oregon 97204

And

Portland Development Commission
1900 Southwest 4th Avenue, Suite 7000
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September 16, 2003

Mr. Kevin Montgomery-Smith
Portland Business Alliance
520 Southwest Yamhill, Suite 1000
Portland, Oregon 97204

Ms. Leah Halstead
Portland Development Commission
1900 Southwest 4th Avenue, Suite 7000
Portland, Oregon 97201

Dear Mr. Montgomery-Smith and Ms. Halstead:

GVA Marquette Advisors is pleased to present our draft report on workforce housing in Central City Portland, Oregon. At your request, we have completed an analysis of the historic, current and projected market environment and have developed projections of 5-year workforce housing demand for the Central City neighborhoods. In addition, we have segmented demand by household group (% of MFI) and have evaluated the feasibility of constructing the needed units based on projected unit values compared with the estimated cost to construct workforce housing in the current development environment. Through fieldwork, focus groups, surveys and interviews, we have identified a number of ideas regarding workforce housing development opportunities and also key constraints to construction in the current development context.

For a variety of reasons, as documented herein, construction of workforce housing in Central City Portland will require public support, at an average of $45,000 per unit in subsidy according to our analysis. Nonetheless, supporting workforce housing development and growth in the middle-market resident base will result in impressive economic benefits that will accrue to the Central City economy over a number of years. In fact, we project a total economic impact of about $563,000 per unit over 20 years in the Central City.

We thank you for inviting us to complete this analysis and remain available to answer any questions that may arise regarding the report.

Sincerely,

GVA MARQUETTE ADVISORS

TABLE OF CONTENTS

EXECUTIVE SUMMARY

PURPOSE & SCOPE OF STUDY

GVA Marquette Advisors ("GVA") was retained by the Portland Business Alliance and Portland Development Commission to complete a study that identifies and explores the relationship between the availability of middle-market "workforce" housing in Central City Portland and the sustained, economic vitality of this area.

For this analysis, we define ***workforce households*** as those households whose members collectively earn between 60 and 150 percent of the Median Family Income, adjusted for household size, as defined by the Department of Housing and Urban Development. Assuming an average of approximately 1.5 persons per household, this includes households earning between $30,000 and $75,000 annually.

The study defines a ***workforce housing unit*** as a home that is affordable to the workforce if it consumes not more than 30 percent of the household's income (for rental) or falls within owner affordability standards common among lenders in today's mortgage environment.[1] Consequently, a workforce housing unit is either a rental unit with monthly rent between approximately $750 and $1,875 per month or a single-family home, townhouse or condominium priced below $240,000.

This report presents a summary of projected 5-year housing demand and supply for Central City Portland, based on a review of market data and economic/demographic trends for the Central City and the larger region. It also estimates the approximate shortfall of workforce housing in Central City Portland by price/rent and affordability range and estimates the cost to build workforce housing and the potential economic impact of adding these units and households to the Central City economy.

KEY FINDINGS

The following are key findings from our research:

General

- The Central City has become a very popular place to live, attracting buyers/renters from within the Portland region and from other parts of the country. Its popularity, coupled with the upward trend in land and construction costs, however, are creating a market environment that provides new housing opportunities mostly for the affluent. A stated goal of the Portland Comprehensive Plan (1999) is to create a Central City with a residential base that is reflective of the city as a whole. Current market trends are actually working against this goal.

[1] We used the following guidelines to determine mortgage capacity: 3% down payment, 30-year fixed rate mortgage @ 6.0 percent + mortgage interest, hazard insurance and real estate taxes.

Barriers to Development

By reviewing market data, development costs and from interviews with local government officials, housing experts and developers, we developed a listing of the barriers to the construction of workforce housing in Central City Portland. The primary barriers are as follows:

- Construction of workforce housing does not generate a positive economic return to developers. Limited land availability and increasing land and construction costs are primary impediments to workforce housing construction in the Central City. Meanwhile, Central City housing developers are generating 15+% returns on upscale housing products in this market.

- Larger developers, with a greater financial capacity, sometimes have the ability to develop large numbers of workforce housing units at lower per-unit returns. Most development in Central City Portland is done by small, local development companies, with the exception of Trammell-Crow. These developers are focusing on the high-end of the market, and are generating impressive returns in doing so. Therefore, without significant financial incentives, including tax abatement and additional subsidies, it is unlikely that these developers will shift their business away from upscale housing to middle market products.

- Portland, as a market, has not been targeted by many large national residential developers. One reason is the size of the market and the perception that there is not sufficient demand to support multiple large-scale developers. Another is a perception that some national apartment developers and owners have of the Portland region as not being "developer friendly" and that it can be difficult to do business there. This perception relates to growth management and the urban growth boundary, as well as a sometimes challenging and uncertain development approval process.

- There has not been a collective effort to increase the production of workforce housing in the Central City. Public programs and subsidies have focused primarily on the construction of low-income housing. There are insufficient resources and subsidy programs for "middle market" housing, in spite of strong demand. There is a perception among some that government programs should continue to focus on the neediest low-income households, and that the market should "figure out" a way to provide housing for middle-income households. Many do not understand the need for workforce housing to support a diverse and vibrant Central City economy, and the fact that the benefits of supporting workforce housing by far outweigh the costs.

Workforce Housing Demand

- We project total demand for 1,851 new workforce housing units in the Central City between 2002 and 2007. Based on a review of planned and proposed developments, due to several market inefficiencies identified in our analysis, we conclude that about 1,340 of these units will not be built, including about 830 rental units and 510 ownership units.

- From our market research and interviews, we believe that the estimated workforce housing demand is in fact conservative and that a collective marketing effort and development initiative targeting workforce households would likely result in an increase in demand for and construction of workforce housing in the Central City.

Development Feasibility

- We estimate a total development cost of approximately $202.4 million for 1,340 workforce housing units (the projected unmet demand over 5 years). This equates to an average of about $150,000 per unit.

- Based on current development costs and projected revenues, we estimate a total of about $60.3 million in subsidy would be required to support the construction of 1,340 units, generating a 15% return. This equates to an average subsidy requirement of about $45,000 per unit.

- It is important to note that the estimated $45,000 per unit in gap financing could be bridged through a combination of both *active* ($) and *passive* subsidies and support mechanisms. Examples are included in the recommendations section.

Economic Impact

- We have utilized the IMPLAN (IMpact Analysis for PLANning) economic model in order to measure the economic impacts associated with adding 1,340 workforce housing units to the Central City economy. We have measured the direct, indirect and induced impacts of 1) the construction project(s) (a one-time impact), and 2) the ongoing annual impact of 1,340 new workforce households residing in the Central City.

- We estimate the total construction impact of 1,340 units to equal $14.3 million, or about $10,700 per unit.

- We estimate the ongoing annual impact of adding 1,340 workforce households to the Central City resident base to equal $37.0 million, or about $27,600 per unit per year. This impact would accrue to the Central City economy in the form of increased expenditures, job opportunities, and earnings resulting from the increase in the resident base and consumer spending in the neighborhoods.

- In total, we project a 20-year economic impact of 1,340 workforce housing units in the Central City of $754.0 million. This equates to about $562,000 per unit over 20 years.

Return on Investment

The tables below measure the economic return against 1) the total development cost for 1,340 units and then 2) just the subsidy requirement to support the construction of the projected unmet demand. This analysis clearly demonstrates the positive economic return associated with supporting workforce housing construction in the Central City.

Return on Investment: *Total Workforce Housing Development Cost*
20-Year Return (in 2003 dollars)
1,340 Workforce Housing Units in Central City Portland

	Total	Per Unit
Estimated Total Cost to Develop 830 Workforce Rental Units	$109,560,000	$132,000
Estimated Total Cost to Develop 510 Workforce Ownership Units	$92,820,000	$182,000
Estimated Total Workforce Housing Development Cost	$202,380,000	$151,000
Projected Economic Impact over 20 Years	$754,000,000	$563,000
20-Year Return on Investment	$551,620,000	$412,000

Sources: IMPLAN; GVA Marquette Advisors

Return on Investment: *Workforce Housing Development Subsidy*
20-Year Return (in 2003 dollars)
1,340 Workforce Housing Units in Central City Portland

	Total	Per Unit
Estimated Total Subsidy Required for 830 Workforce Rental Units	$47,310,000	$57,000
Estimated Total Subsidy Required for 510 Workforce Ownership Units	$13,770,000	$27,000
Estimated Total Subsidy Required	$61,080,000	$45,582
Projected Economic Impact over 20 Years	$754,000,000	$563,000
20-Year Return on Investment	$692,920,000	$517,418

Sources: IMPLAN; GVA Marquette Advisors

RECOMMENDATIONS

Our research has lead us to the following recommendations which we believe will lead to the creation of a plan for increasing the construction of workforce housing in Central City Portland.

Educate

As documented in this report, the economic benefits associated with supporting workforce housing construction will have a lasting impact on the greater Central City economy, far outstripping the cost to construct the needed units. The full community, including citizens, the private market and the public sector, must be educated with respect to the real economic benefits associated with providing housing opportunities for households at all income levels.

There are some in the community who maintain that government programs and subsidies should be limited to the low-income household base, since this segment is the neediest. While this argument has merit, there are stronger counter-arguments rooted in the creation of a diverse Central City, one that is representative of the broader community. The social and economic ramifications of having only low-income and upscale housing in the Central City mandate that the City of Portland take a pro-active stance in increasing housing opportunities for middle-income households. This analysis has shown that the development community will not be able to do so on its own.

The City of Portland has been exemplary in its efforts to create a vibrant and livable Central City through creative public-private development partnerships. Other cities have made note of these successes, and are now working to create vibrant downtowns of their own. The City of Portland once again has an opportunity to lead the nation's cities by finding ways to increase the base of middle-income residents in its Central City. The first step in doing so should be to gain the support of city staff and elected officials by educating them with respect to the economic benefits of moving forward such an initiative.

A Streamlined Development Approval Process

Throughout this study, we have interviewed local and national developers who are building or have built housing in Central City Portland. In addition, we have clients throughout the country who are residential developers and investors with whom we have discussed Portland development trends. From these interviews, we know that there are developers who realize there is a largely unmet opportunity to construct workforce housing in Central City Portland. Several have noted, however, that a primary reason for Portland's inability to attract workforce housing development in the Central City, and more activity from large-scale national builders in general (who can often develop larger, more affordable projects at lower per-unit returns compared to small, local developers), is the city's reputation as a difficult place to do business. Some cite inconsistency in the process, and from planner to planner. Others note considerably higher city fees compared to other markets. Many indicated a great level of uncertainty regarding the city's objectives and inconsistency in the amount of up-front planning work and the time required to gain approvals. Inconsistencies and uncertainty have an impact on the bottom line from the perspective of a developer. In the end, this

increases the cost to develop housing, which results in fewer development proposals at affordable price points.

We note, however, that several developers related to us that the development approval process has improved greatly during the past one to two years. The city should work to communicate these successes and promote itself as a more developer-friendly city, with a streamlined and consistent approval process.

A Collective Marketing Effort

Portland has attracted limited investment by large national developers as compared to some other similar-sized cities in the U.S. This is due in part to its reputation as a difficult city with which to do business. As noted above, the city should work to streamline the development approval process. It should also seek out opportunities to work in partnership with local and national developers to create workforce housing in the Central City, and then market its past successes and future opportunities nationally.

A successful campaign would likely result in an increase in both workforce housing demand and supply in the Central City, beyond the levels projected in this report. Developers recognize the need for middle-market housing products nationwide. The middle of the market is being squeezed in many markets; this is not just a Portland problem. Therefore, if Portland shows a strong commitment to workforce housing, through a streamlined process and a commitment of direct subsidies and a variety of support mechanisms such as those outlined below, developers from throughout the country will take notice and in partnership with the public sector will make an investment in workforce housing in Portland. Portland can be a leader nationally in addressing this problem, if it can show a level of commitment to workforce housing production that is on par with its commitment to low-income housing. As documented in this report, the benefits associated with doing this will flow to the both city and the private development community for years to come.

Implementation Plan

It is our opinion that the Portland Business Alliance in partnership with the Portland Development Commission should reach out to Central City and other community based advocacy groups regarding the economic benefits of housing as a vehicle for economic development, targeted population in-migration and job formation. This includes joint advocacy for housing's key role in supporting employment at all income levels and thus the necessity for a balanced approach that includes both affordable and workforce housing groups together. Support from organizations such as the City Club, the Housing and Community Development Commission, the Community Development Network and the Metropolitan Alliance for the Common Good and others is essential for the support for the implementation of a successful workforce housing incentive program. Demonstration of the direct and indirect economic benefits of housing at all income levels will be a key to sustained funding for housing programs and key to the development of any new housing funding sources.

The Portland Business Alliance and Portland Development Commission should identify streamlining issues, collective marketing opportunities, and incentive guidelines leading to an implementation plan similar to the Retail Strategies, identifying a timeline for progress reports, responsible parties and expectations.

Offsetting the Need for Direct Subsidies

We have noted an average shortfall of $45,000 per workforce housing unit needed to generate a 15% return to the development community. This equates to nearly $61 million for the projected unmet demand of 1,340 units. However, below we suggest several strategies for offsetting the need for direct subsidies totaling $45,000 per unit.

Tax Abatement

The primary support mechanism for supporting workforce housing is tax abatement. Tax abatement is an essential component of any public-private development partnership initiative. From information provided by PDC, we estimate that tax abatement actually equates to a savings of $15,000 per unit, on average, offsetting our estimated subsidy requirement by 33%.

Tax Increment Financing (TIF)

We recommend that the city recommit TIF dollars to the creation of a workforce housing incentive program targeting 60% to 150% MFI households. In addition, any priorities for future TIF allocation in renewed or replacement districts should include workforce housing to respond to the market, capitalize on the return on investment identified in this report and address the city goals of income diversity within urban renewal districts. Annual investments in workforce housing will be most effective if integrated into a comprehensive economic development strategy focused on the preservation, maintenance and enhancement of family wage jobs, employment growth and employer attraction as direct or indirect benefit of all public capital spending by the city and other local, state and federal agencies. For example, synergy can be created between a workforce housing strategy and other public investments in transportation, transit, retail stabilization and small business growth. The availability of a critical mass of workforce housing in the Central City Area, in addition to existing urban lifestyle amenities already in place, will reinforce Portland's identity as a destination of choice for a desirable workforce population. A workforce population strategy targeted to a well-educated 20-40 year old demographic group can be directly linked with public and private objectives to retain and attract small and entrepreneurial business growth.

A Streamlined & Consistent Approval Process & a Reduction in City Fees

We estimate that the combination of a streamlined, consistent approval process and a reduction in city fees could reduce the cost to develop workforce housing by as much as $5,000 per unit, another 11% reduction in the total $45,000 gap. A streamlined approval process will result in less city staff time spent on projects, as well as less time and real cost on the part of developers. A reduction in

System Development Charges is warranted, considering the long-term economic benefits associated with adding workforce housing units in the Central City, as documented by this study.

Encourage Workforce Housing Construction by Large National Developers

A large share of recent developments in the Central City have been done by relatively small, local developers, generating returns of 15% on total development cost or more. Obviously, it makes good business sense for these developers to continue to focus on similar high-end projects, as long as market demand remains strong. However, the city should seek out opportunities with larger national developers with the financial capacity to construct large numbers of workforce housing units at lower per-unit returns, say in the 10% range. We estimate that the $45,000 per-unit subsidy requirement could be reduced by about $4,000 to $5,000 per unit, if the goal were to generate a 10% return on total development cost, rather than 15%. It is important to note, however, that in order for large-scale development to occur, the city must work in partnership with developers to identify larger tracts of land within the Central City which are ripe for development, as noted below.

Workforce Housing Target Areas

The amount of gap financing required to support workforce housing varies significantly within the Central City. For example, we estimate an average per-unit subsidy requirement of about $52,000 in the Pearl District, compared to $35,000 to $40,000 per unit on the Central East Side, Lloyd District and South Waterfront. Because of this, we recommend the development of plans for these areas that include considerable amounts of workforce housing. If large sites can be assembled in theses areas, there is an opportunity to construct workforce housing with much less direct subsidy from public sources, particularly if a developer can be identified who is willing to construct a large number of units at a 10% +/- return, rather than 15%.

Consider Smaller Units

The Mosaic Condos is a recent project which offers a unique product in Portland, with very small units and a distinctive urban-contemporary design. By offering smaller floor plans and providing no parking on site, the developer was able to offer several units at workforce-affordable price points. The Mosaic has successfully attracted price-sensitive buyers in spite of the fact that there is no on-site parking. The success of this project is evidence of the desirability of the Central City lifestyle, as buyers will forego a larger unit with parking elsewhere in the city or a suburban neighborhood. There is a lesson to be learned from this project and others with respect to unit sizes. From our interviews, we understand that smaller, more affordable units have been the first to sell among recent Central City projects. Price-sensitive workforce households with a strong preference for living in the Central City's urban environment (a growing share of the market we believe) will opt for a small unit there rather than purchase a home elsewhere in the region. Strong demand and appreciation of Central City housing also makes buying in this area an attractive investment.

INTRODUCTION

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GVA Marquette Advisors ("GVA") was retained by the Portland Business Alliance and Portland Development Commission to complete a study that identifies and explores the relationship between the availability of middle-market "workforce" housing in Central City Portland and the sustained, economic vitality of this area. This report presents a summary of projected 5-year housing demand and supply for Central City Portland, based on a review of market data and economic/demographic trends for the Central City and the larger region. It also estimates the approximate shortfall of workforce housing in Central City Portland by price/rent and affordability range and estimates the cost to build workforce housing and the potential economic impact of adding these units and households to the Central City economy.

DEFINITIONS

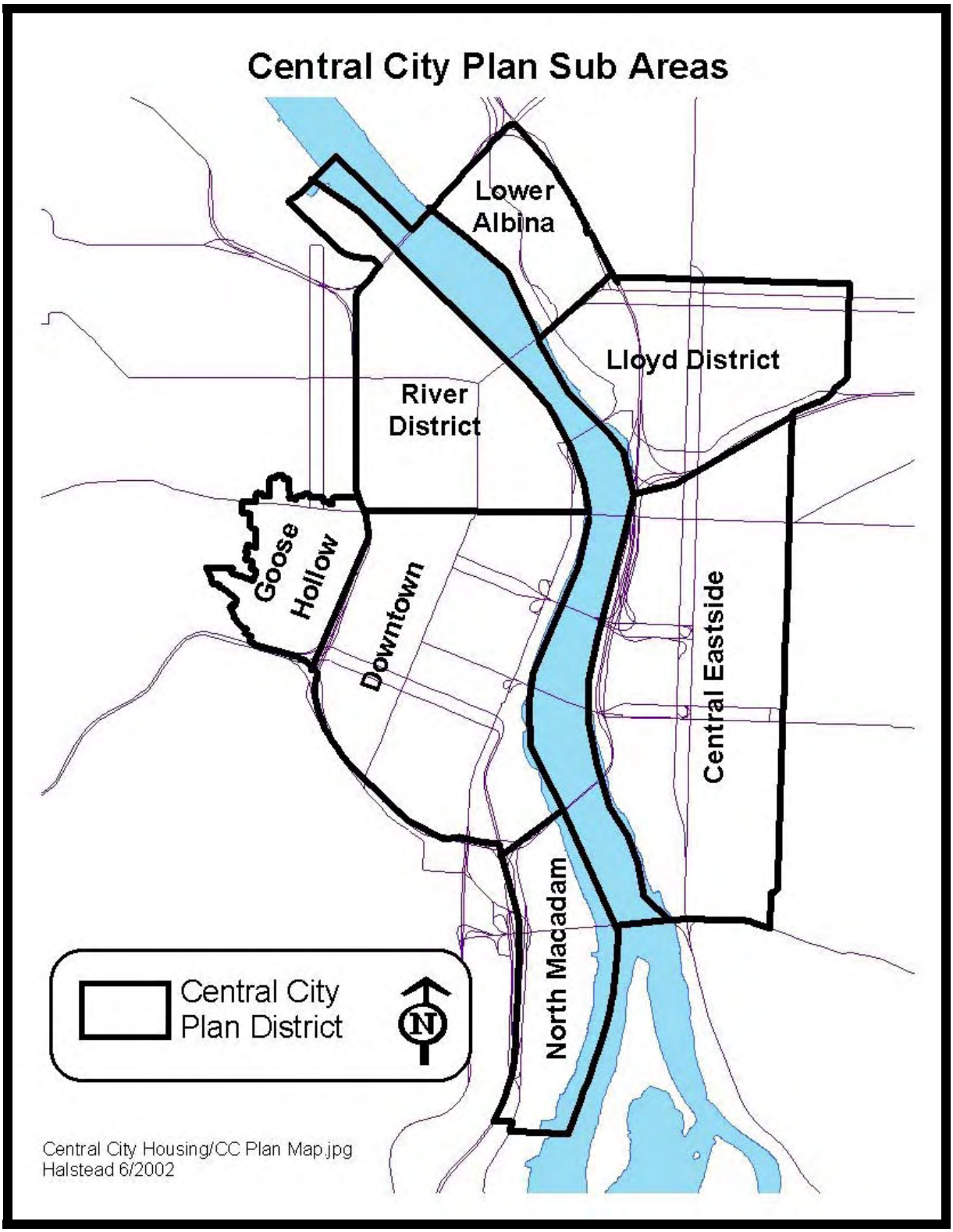
The approximate geographic boundaries of ***Central City Portland*** are illustrated by the map on the following page. As defined by the City of Portland, this area is comprised of the sub-districts generally referred to as Downtown, Old Town/Chinatown, South Waterfront, Goose Hollow, River District (including the "Pearl" District), Lower Albina, Lloyd District, and the Central East Side.

Those who hold ***workforce jobs*** are often the essential, frontline servers in the economy. They may be single persons with or without children, or married persons, one (or occasionally, both) with a workforce job. Examples of workforce jobs include a construction worker, police officer, teacher, nurse, retail salesperson and restaurant server. The importance of the workforce sector to the full economy cannot be overstated. Workers earning workforce wages fill the majority of jobs in nearly every sector of the economy, especially services and retail trade, the primary employment sectors in Central City Portland.

For this analysis, we define ***workforce households*** as those households whose members collectively earn between 60 and 150 percent of the Median Family Income, adjusted for household size, as defined by the Department of Housing and Urban Development. Assuming an average of approximately 1.5 persons per household, this includes households earning between $30,000 and $75,000 annually. Table 1 on page 3 presents a summary of workforce households and workforce housing affordability by income range.

The study defines a ***workforce housing unit*** as a home that is affordable to the workforce if it consumes not more than 30 percent of the household's income (for rental) or falls within owner affordability standards common among lenders in today's mortgage environment.[2] Consequently, a workforce housing unit is either a rental unit with monthly rent between approximately $750 and $1,875 per month or a single-family home, townhouse or condominium priced below $240,000.

[2] We used the following guidelines to determine mortgage capacity: 3% down payment, 30-year fixed rate mortgage @ 6.0 percent + mortgage interest, hazard insurance and real estate taxes.


Central City Plan Sub Areas
Lower Albina
Lloyd District
River District
Goose Hollow
Downtown
Central Eastside
North Macadam
Central City Plan District
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Central City Housing/CC Plan Map.jpg
Halstead 6/2002

Table 1

Central City Portland
Workforce Housing Affordability Assumptions

Income Range	Average Household Size	Approximate Income Range	Approximate Average Income	Approx. Monthly Rent Range [1]	Approximate Average Rent	Approximate Price Range [2]	Approximate Average Price
60-80% of MFI	1.5	$30,000 - $40,000	$35,000	$750 - $1,000	$865	N/A	N/A
80-100% of MFI	1.5	$40,000 - $50,000	$45,000	$1,000 - $1,250	$1,110	$130,000 - $160,000	$145,000
100-120% of MFI	1.5	$50,000 - $60,000	$55,000	$1,250 - $1,500	$1,355	$160,000 - $190,000	$175,000
120-150% of MFI	1.5	$60,000 - $75,000	$67,000	$1,500 - $1,875	$1,685	$190,000 - $240,000	$215,000

[1] Based on 30% of Monthly Income

[2] Based on 30% of Monthly Income; Assumes 3% down payment, 30-yr. fixed rate @ 6.0% + Mortgage Ins., Hazard Ins. & Taxes

Sources: HUD; Portland Development Commission; GVA Marquette Advisors

SCOPE OF RESEARCH

Market

The report first presents an overview of the current market situation, with a focus on the Central City neighborhoods within the context of the broader 4-county region. We discuss historical development trends and identify the primary issues impacting the workforce housing market. This includes a number of development opportunities and constraints, based on our review of market data and from interviews and focus groups held with local housing developers, business leaders and representatives of various government housing and planning agencies.

Demand

We then present our forecast of demand for workforce housing in Central City Portland over a 5-year period from 2002 to 2007. Based on these figures, the study then calculates the cost to produce workforce housing, presenting why this development task is not economically feasible for the private market. We also quantify the amount of subsidy, or gap financing, that we believe would entice private developers to build workforce housing in the Central City, given the projected development context.

Economic Impact

Next, we estimate the economic impact of workforce housing in the Central City based on the IMPLAN input/output model. This economic model measures the direct, indirect and induced impacts that would result from the addition of the needed Central City workforce housing units.

Cost/Benefit Analysis

Finally, we calculate the per-unit return on investment to the Central City by comparing the estimated economic benefits with the cost to construct workforce housing. As this part of the study shows, the return on investment from workforce housing is substantial.

Recommendations

We then draw conclusions about the substantial workforce housing opportunity and suggest strategies for increasing the workforce housing supply in Central City Portland.

RESEARCH METHODOLOGY AND DATA SOURCES

Determining Future Demand for Workforce Housing

In many regions, job creation is a primary indicator of housing demand. Household growth tends to lag job growth, and the demand for new housing units follows. As we recover from a national economic recession, demand for housing in many parts of the country is weak. Businesses have added few jobs in recent months. Nonetheless, in some regions like Portland, housing demand has remained strong, in spite of a weak economy. The Portland region has developed a reputation for offering a high-quality lifestyle, with its moderate climate, natural amenities, and abundance of recreational opportunities. Because of this, the region has continued to attract young to middle-age singles, couples and families. From 1990 to 2000, Portland saw in-migration of approximately 92,000 people, with more than 45,000 in the age 20 to 34 range. Most in this age cohort earn middle-market "workforce" incomes, and seek housing products and locations that are affordable to them and appropriate for their family needs and preferences.

The Central City in recent years has become extremely popular among households both young and old; including singles and couples, generally without children. However, in spite of demonstrated demand for middle-market housing, for a variety of reasons to be discussed throughout this report, most new construction in the Central City has targeted either affluent buyers/renters, or low-income households, with below-market housing supported by city, state and federal subsidies. Our demand calculation is based on a review of historical growth patterns, focusing on the Central City within the context of the 4-county region. We have reviewed on a number of statistical sources and also growth projections by other public agencies and consulting firms in developing a projection of regional housing demand. We have applied a potential capture rate to our regional demand estimate for the Central City market. We have segmented Central City housing demand by household income group based on the income distribution of the City of Portland as a whole. A stated goal of the Portland Comprehensive Plan (1999) is to strive for a household income distribution in the Central City that is consistent with the citywide income distribution. We concur that such a planning initiative is advisable. Providing increased housing opportunities for workforce households in the Central City will have numerous positive effects on the community, both socially and economically.

Throughout the report, and especially in the sections that examine the economic aspects of workforce housing development and present estimates of housing demand in the Central City, we utilized several sources and reports. Some of the primary data and information sources are as follows:

1. Greater Downtown Portland Housing Report (2002)
2. Central City Housing Inventory (2002 and historical)
3. Downtown Portland Retail Strategy (2002)
4. Metro Regional Data Book – Portland-Vancouver Metropolitan Area (Sept 2002)

5. Metro Report: Economic Report to the Metro Council, 2000-2030 Regional Forecast of Employment, Population, Housing and Income for the Portland Vancouver Metropolitan Area (released March 2002, revised Sept 2002)
6. Regional Economic Profile by the Oregon Employment Department (2002)
7. Employment Projections by Occupation, 2000-2010: Portland Metro (Oct 2001)
8. U.S. Census (1990 and 2000)
9. Spatial Reengineering Consultants (SRC) population, household growth and household income projections for Portland MSA and City of Portland, 2002 & 2007
10. Portland Metro Labor Trends
11. Downtown Portland Business Census and Survey (2001 & 2002)
12. Portland Comprehensive Plan (1999)
13. Midtown Blocks Planning Study (2001)
14. Downtown Portland Development Capacity Study (2000)
15. Downtown Target Area Housing Implementation Strategy (Fiscal Years 2001-2006)
16. Economic Development Strategy for the City of Portland (2002)
17. South Waterfront District Framework Plan (1999)
18. River District Housing Implementation Strategy (1999)
19. Lloyd District Housing Strategy (2002)
20. Development Review Process: Progress Made, Further Improvements Needed (2003)

Identifying Market Opportunities and Constraints

We developed an understanding of local market dynamics through telephone interviews, a survey of local housing developers, and focus group sessions with developers, business leaders and government employees. This research helped us to identify opportunities for workforce housing development in the Central City, such as particular locations therein. There is a general consensus throughout the region, in both the public and private sectors, that there is substantial pent-up demand for workforce housing in the Central City. Even still, the market has not produced a sufficient amount of new units to meet this demand.

Through our research, we identified a series of "barriers to workforce housing development," and have developed suggestions for reducing and/or eliminating some of these barriers in order to stimulate workforce housing construction. Development cost is a primary barrier, along with the lack of a strong commitment and public subsidy programs for middle-income housing. There are also few development sites of substantial size. Larger development sites allow for more cost-effective large-scale workforce housing development projects. Also, a large share of Central City housing construction is done by relatively small, local developers, who are keeping busy with such projects and generating impressive economic returns. These developers will likely continue to build upscale housing as long as market demand remains strong. Portland, thus far, has seen less investment in its Central City by large national builders compared to some other cities around the country. Larger developers sometimes have the financial capacity and desire to construct larger, more affordable housing developments at lower per-unit returns. Other, less obvious barriers are a sometimes inconsistent and drawn-out development approval process, as well as high city hook-up and impact fees. We have developed suggested strategies for reducing these various barriers to development, which are outlined in the *Recommendations* section.

Although there are a number of daunting barriers to workforce housing development in the Central City, there are also substantial opportunities. For one, there is strong pent-up demand for workforce housing in this market, and developers recognize the future opportunity to tap this demand through creative public-private partnerships if the public sector is determined to focus on this issue. Secondly, there are sub-districts within the Central City which are ripe for workforce housing development, because of a more ample land supply and lower land costs. Examples are South Waterfront, Central East Side and Lloyd District. Further, increasing the 24-hour population in these areas would have a profound social and economic effect upon them. Finally, there are commitments being made by the local business community to grow and remain in the Central City. Perhaps the best example is the major expansion planned by OHSU, and the corresponding increase in middle-income job opportunities in the area. The expanded workforce is a prime target for new workforce housing units in the Central City.

Calculating the Cost to Develop Workforce Housing and the Corresponding Subsidy Investment

For this task, we relied on information provided by Portland housing developers who have in the past or are currently constructing housing in the Central City. Representatives from local firms helped us define typical unit sizes for both new rental and owner units, as well as typical per-square foot costs for land, and direct and indirect construction costs. Using this data, we developed a pro forma analysis to determine the level of return on development, absent any subsidy investment, by sub-district within the Central City. This was done to reflect the varying cost of land by sub-district. We also developed a pro-forma analysis by sub-district for both mid-rise and high-rise products, to reflect the variance in construction costs by product type.

After determining the amount of shortfall for both new apartment and condo construction, we added a per-unit direct subsidy to provide approximately a 15% return on development cost to the developer, a reasonable rate of return based on other investment opportunities in the region. Multiplying this by the projected unmet demand for workforce housing yielded the total subsidy required to spur the private market to develop workforce housing.

Estimating the Economic Impact of Workforce Housing in the Central City

Capturing a greater share of the region's workforce households in the Central City by providing housing opportunities that are affordable to them will improve the 24-hour vitality of the neighborhoods, providing substantial social and economic benefits. The focus of this study is to determine demand for workforce housing in the Central City and measure the economic impact of constructing these units. Obviously, the construction projects associated with building these housing units would be substantial, and the Central City neighborhoods would benefit to some degree. However, because most of the construction workers would not reside downtown and most of the construction materials would be purchased elsewhere, most of this economic benefit would occur outside the Central City. Rather, the most substantial economic benefit would recur on an annual basis from consumer expenditures by these new workforce households residing in the Central City. This increase in resident incomes and spending will improve the Central City business climate, boosting revenues, stimulating business growth and supporting additional employment and earning opportunities in the neighborhoods. An additional and more intangible

result of increasing the supply of workforce housing in the Central City is the exposure to the entrepreneurial opportunities in the Central City for the new population.

We have utilized an economic model to measure the direct, indirect and induced effects of both the one-time impact of the construction project(s) and the ongoing annual impacts of adding workforce households to the Central City resident base. The concepts of indirect and induced impact are among the most widely used and poorly understood tools in economic analysis. Fundamentally they are based on an extension of the direct expenditures by a business, industry, or consumer group.

For estimates of indirect and induced impact, we use the IMPLAN (IMpact Analysis for PLANing) economic model originally developed for the USDA Forest Service in cooperation with the Federal Emergency Management Agency and the USDI Bureau of Land Management. The IMPLAN model has been in use since 1979. The IMPLAN model accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis and the rectangular format recommended by the United Nations.

Induced impact calculated by the IMPLAN model reflects changes in spending from households as income/population increases or decreases due to changes in production, effectively measuring the impact of wages paid as they cycle through the economy. Indirect impact calculated by the IMPLAN model reflects changes in inter-industry purchases, effectively measuring the impact of expenditures for other goods and services by the new or expanded business, industry or consumer group as they too cycle through the economy. A variety of levels of impact can be calculated: output - equivalent to GDP, employment, and earnings - equivalent to personal income.

The major components to the economic impact analysis regarding workforce housing in Central City Portland are as follows:

- The economic impact of the residential construction project(s) (i.e. the “one-time” impact of the construction process).

  Impact examples:

  - Direct construction jobs and wages.
  - Direct contractor spending on materials.
  - Increased earnings, wages and employment at suppliers and vendors supporting the construction project.
  - Indirect impact: increased earnings, wages and employment at area businesses that do not support the construction project directly, but support the businesses and vendors who do.
  - Induced impact: increased earnings at area businesses resulting from the increase in earnings and spending by consumers resulting from new jobs and wages supported by the construction project.

- The ongoing annual economic impact of adding these households to the Central City Portland economy.

  Impact examples:

  - Increased consumer spending resulting from the new Central City residents.
  - Business growth opportunities, including expansion, new jobs and wages resulting from new consumer spending and economic activity related to the increase in the resident base.

Measuring the Return on Workforce Housing Investment

The last step in our analysis compares the economic benefits (the return) of the needed workforce housing units with the cost of development (the investment). We measure the return against both the full development cost and the required subsidy, as determined in our pro forma analysis.

MARKET OVERVIEW

INTRODUCTION

The initial phase of our research included a tour of the Central City neighborhoods and its many housing communities, and a review of regional and neighborhood background, various reports, studies, planning documents, demographics and economic data. Key documents reviewed at this stage of the research process included the recently completed 2002 Greater Downtown Portland Housing Report and the 2002 Central City Housing Inventory. [2] We also conducted three focus group sessions regarding the Central City and the workforce housing market situation. The three groups included 1) housing developers, 2) business leaders in the Central City area, and 3) housing and planning officials from local government agencies. The focus group sessions were supplemented with telephone interviews. The developers interviewed either directly, by telephone, or through the focus group session represent an estimated 8,000 to 10,000 housing units in the Portland region. Businesses contacted represent approximately 5,000 total employees. A total of seven local, regional and state agencies were represented. In this section we present a summary of current market conditions and workforce housing development issues based on our research. This includes a listing of workforce housing development opportunities and constraints.

BACKGROUND

Portland has seen rapid growth in its Central City housing market during the past five years. The lion's share of development has occurred in the Pearl District. The creation of market rate housing opportunities in recent years, tapping the renewed interest in urban living, has resulted in an improved balance between jobs and housing in the Central City at a time when many downtowns have struggled. The recent economic recession has been hard on many downtowns, particularly those where the balance is heavily shifted toward employment rather than housing. In Portland, where the regional unemployment rate of 8.4 percent is among the nation's highest, the Central City remains a model for urban living. The growing resident base has stimulated the Central City economy, creating a vibrant 18-hour environment in which shopping, dining, cultural and entertainment opportunities abound. We are of the opinion, based on our recent experience in this market and many others, that Central City Portland is one of the most livable and pedestrian-friendly downtowns in the country.

From our research, however, it has also become clear to us that recent and expected future housing production trends and costs are resulting in a declining number of opportunities for workforce households. The popularity of the Central City has driven up demand across all income segments. However, the area's popularity and rising land and construction costs are also driving up the cost to build housing in the Central City. The result is a market that is effectively

[2] It is important at this point to call out the difference between *Downtown* Portland and *Central City* Portland. The Central City, which is the subject of this analysis, is comprised of the following planning districts: Downtown, South Waterfront, Goose Hollow, River District, Lower Albina, Lloyd District, and the Central East Side. The 2002 Greater Downtown Portland Housing Report studied an area which included just Downtown, the Northwest District, the River District west of the Willamette River, plus the Lloyd District.

"pricing out" a growing share of those most interested in supporting a Central City housing product. Today, based on household income distribution estimates from Spatial Reengineering Consultants, a nationally recognized econometric forecasting firm, workforce households (those earning roughly $30,000 to $75,000 per year) represent approximately 45 percent of the citywide household base, but only about 30 percent of the Central City resident base.

The high-end of the market is not going to dry up over the next five years, as it is supported primarily by older adults and empty nesters from throughout the region and beyond who are increasingly attracted to one of the country's hottest urban neighborhoods. Even still, there is a significant need to create housing opportunities in the Central City for middle-income "workforce" households. In order for the Central City to reach its full economic potential in terms of employment, business growth, retail, restaurants, cultural and entertainment opportunities, it must provide new housing opportunities for workforce households, not just the affluent.

HOUSING MARKET PROFILE

In August of 2002, the Portland Development Commission completed an inventory of all housing units in the Central City. The study area has a total of 16,881 housing units. Table 2 below illustrates the distribution of housing units by sub-district. The Central City has a homeownership rate of 14.0 percent.

Table 2

Central City Portland Housing Inventory, (as of August 2002)

	Central City Sub-Districts						
Tenure	Downtown	River District	Lloyd District	Central Eastside	Goose Hollow	Lower Albina	Total
Rental	7,326	2,866	850	1,118	2,338	23	14,521
Owner Occupied	859	1,071	120	61	248	1	2,360
Central City Total	8,185	3,937	970	1,179	2,586	24	16,881
% of Units	48.5%	23.3%	5.7%	7.0%	15.3%	0.1%	100.0%

Source: Portland Development Commission

Table 3 shows that about one-third of the current housing stock is affordable to households earning between 60%-150% of MFI. However, during the past five years, the Central City household base has become much more affluent. Recent low-income housing tax credit rental developments have successfully targeted low-income households. Meanwhile, the Central City has seen minimal middle-market and high-end rental housing construction and most for-sale products have price tags well in excess of affordability for workforce households. Between 1997 and 2002, the market saw the construction of 3,381 new units,[3] capturing about 2.0 percent of regional housing construction during this period. Of this total, we estimate that only about 20 percent are affordable to workforce households.

Table 3

Central City Housing Unit Affordability by % of MFI (as of 2002)

Central City	Income Affordability (% of MFI)							Total
Sub-Areas	0-30%	31-50%	51-60%	61-80%	81-120%	121-150%	151%+	Units*
Downtown	1,402	1,948	895	1,350	1,354	290	547	7,786
% of Units	18.0%	25.0%	11.5%	17.3%	17.4%	3.7%	7.0%	100.0%
River District	511	743	733	210	399	161	840	3,597
% of Units	14.2%	20.7%	20.4%	5.8%	11.1%	4.5%	23.4%	100.0%
Lloyd District	0	4	94	118	334	43	232	825
% of Units	0.0%	0.5%	11.4%	14.3%	40.5%	5.2%	28.1%	100.0%
Central Eastside	83	370	172	60	19	7	4	715
% of Units	11.6%	51.7%	24.1%	8.4%	2.7%	1.0%	0.6%	100.0%
Goose Hollow	41	564	729	609	158	68	100	2,269
% of Units	1.8%	24.9%	32.1%	26.8%	7.0%	3.0%	4.4%	100.0%
Lower Albina				Not Available				0
% of Units								
Total	2,037	3,629	2,623	2,347	2,264	569	1,723	15,192
% of Units	13.4%	23.9%	17.3%	15.4%	14.9%	3.7%	11.3%	100.0%

* Note: Includes 90% of total open market, unrestricted units, based on PDC Central City Housing Inventory, 2002.

Source: Central City Housing Inventory, 2002

The average rent in 2002 for the Central City market was $1.41 per square foot (psf), with sub-district averages ranging from $1.13 psf on the Central Eastside to $1.61 psf in Downtown.[4] Based on our fieldwork and recent surveys by the Portland Business Alliance, we estimate an overall average rent of $1.50 psf and a rental vacancy rate of about 7.0 percent. The current

[3] Central City Housing Inventory, 2002.
[4] Ibid.

vacancy rate is slightly above market equilibrium 5.0 percent and reflects a slow economy and stagnant job growth in Portland, and also a recent exodus to homeownership by former renters due to favorable mortgage interest rates. Nonetheless, when the economy improves, job growth returns, and interest rates edge upward, we expect vacancy levels for rental housing to return to sub-5.0 percent. We have concluded from our research that the long-term (5-year) demand for rental housing in the Central City is strong, with substantial demand for workforce-affordable units, particularly for households earning between 60%-100% of MFI. This trend and our demand forecast are discussed in detail later in the report.

The for-sale housing market in Central City Portland is quite strong. Demand comes primarily from empty nesters, as well as affluent younger households. An estimated 50 percent of Central City homebuyers come from outside the Portland Metropolitan Area. Households moving from within the region tend to be empty nesters, who are fairly affluent and are moving downtown to be close to their place of employment and to take advantage of the Central City's many restaurants, social and cultural assets.

Nearly 50 percent of the 2,360 ownership units in the Central City have been constructed since 1997, with the River District seeing the greatest increase in homeownership during this period, adding 775 units.[5] According to the Central City Housing Inventory, the River District (which consists mostly of the Pearl District) has a total of 1,071 ownership units, accounting for more than 45 percent of the Central City's owner-occupied housing.

Table 4 presents a summary of average sale prices for 2002 by sub-district in the Central City. Data is from the Central City Housing Inventory, 2002 and reflects both new construction and resales.

Table 4

Home Sales Summary
Central City Portland, 2002

Sub-District	# of Sales	Average Price	Average Price PSF
Central Eastside *	5	$227,000	$105
Downtown	22	$194,750	$187
Goose Hollow	3	$145,000	$180
Lloyd District	59	$171,500	$257
River District	57	$285,500	$264
Central City Total	146	$220,866	$242

* Central Eastside sales data is from 2001, since there were no sales there in 2002.

Source: Central City Housing Inventory, 2002

[5] Ibid.

The average price of approximately $220,000 does fall within the workforce affordability range (under $240,000), albeit at the high end of the range. Further, Central City units are becoming more and more expensive. Based on our market tour, we know that the average price at projects currently marketing and/or under construction (Marshall Wells Lofts, Bridgeport Condos, and Mosaic Condominiums) is in excess of $340,000 per unit ($306 psf). This data is presented on Table 5 on the following page. Bridgeport did not have any units available at the time of our survey that would be affordable to a workforce household earning between 60% and 150% of MFI. Marshall Wells Lofts had only five such units.

The Mosaic Condos offer a unique product in Portland, with very small units and a distinctive urban-contemporary design. By offering smaller floor plans and providing no parking on site, the developer was able to offer several units at workforce-affordable price points. In fact, nearly 50 percent of the units are under $200,000. Developers and realtors both confirmed strong market interest from first time buyers for the more affordable units. About 50% to 75% of the workforce households buying at Mosaic are from within the Portland MSA. Many of these work in the Central City, and some are moving from apartment units there.

The Mosaic has successfully attracted price-sensitive buyers in spite of the fact that there is no on-site parking. Buyers with a car must park on the street or pay for a space elsewhere in the neighborhood. The success of this project is evidence of the desirability of the Central City lifestyle, as buyers will forego a larger unit with parking elsewhere in the city or a suburban neighborhood. However, the depth of this market (those who will make this investment without on-site parking in particular) is questionable, as this was the only such project marketing in the Central City at the time of this study. This issue aside, there is a lesson to be learned from this project and others with respect to unit sizes. From our interviews, we understand that smaller, more affordable units have been the first to sell among recent Central City projects. Price-sensitive workforce households with a strong preference for living in the Central City's urban environment (a growing share of the market we believe) will opt for a small unit there rather than purchase a home elsewhere in the region. Strong demand and appreciation of Central City housing also makes buying in this area an attractive investment.

Table 5

Central City Portland, Field Survey of Active Condominium Projects, Summer 2003

Mosaic Condominiums (Downtown)				Marshall Wells Lofts (River District)				Bridgeport Condominiums (River District)			
Suite #	Sq. Ft.	List Price	Price PSF	Suite #	Sq. Ft.	List Price	Price PSF	Suite #	Sq. Ft.	List Price	Price PSF
307	460	$ 132,000	$287	326	773	$229,900	$297	208	1,285	$353,500	$275
301	513	$ 134,900	$263	426	775	$214,900	$277	200	1,274	$354,500	$278
407	460	$ 134,900	$293	524	773	$221,800	$287	308	1,285	$360,000	$280
305	454	$ 137,900	$304	625	714	$209,500	$293	300	1,274	$361,500	$284
303	471	$ 138,900	$295	629	778	$217,500	$280	408	1,285	$366,500	$285
201	513	$ 139,900	$273	205	1,600	$376,295	$235	400	1,274	$368,000	$289
207	460	$ 139,900	$304	308	1,482	$425,000	$287	114	1,372	$392,500	$286
302	493	$ 142,000	$288	319	767	$213,700	$279	202	1,461	$406,500	$278
405	454	$ 142,900	$315	404	1,486	$425,000	$286	302	1,461	$414,500	$284
403	471	$ 143,900	$306	410	1,851	$437,550	$236	402	1,461	$422,000	$289
203	471	$ 144,900	$308	503	1,497	$435,390	$291	502	1,461	$429,500	$294
401	513	$ 147,000	$287	508	1,545	$432,420	$280	600	1,363	$474,000	$348
402	493	$ 149,000	$302	603	1,493	$450,854	$302	614	1,507	$515,500	$342
202	493	$ 152,000	$308	708	2,785	$864,900	$311	616	1,560	$533,000	$342
304	590	$ 166,900	$283	713	2,867	$786,600	$274	706	1,625	$593,000	$365
306	557	$ 169,900	$305	715	2,337	$563,948	$241	700	2,180	$805,500	$369
404	590	$ 174,900	$296					415	830	$241,000	$290
102	792	$ 214,900	$271					205	1,285	$371,000	$289
101	873	$ 219,900	$252					305	1,285	$378,000	$294
608	678	$ 224,900	$332					219	1,325	$382,500	$289
105	821	$ 234,900	$286					405	1,285	$384,500	$299
106	799	$ 239,900	$300					319	1,325	$389,500	$294
808	678	$ 249,900	$369					505	1,285	$398,000	$310
601	779	$ 254,900	$327					203	1,393	$402,500	$289
607	805	$ 254,900	$317					303	1,393	$409,500	$294
807	758	$ 274,900	$363					503	1,393	$431,500	$310
603	940	$ 294,900	$314					201	1,471	$445,000	$303
803	884	$ 314,900	$356					615	1,507	$523,500	$347
605	1,020	$ 316,000	$310					705	1,692	$580,000	$343
602	1,017	$ 321,900	$317					707	1,615	$607,500	$376
606	1,016	$ 329,900	$325					701	2,112	$874,000	$414
802	946	$ 339,000	$358								
805	972	$ 357,900	$368								
604	1,143	$ 362,900	$317								
804	1,091	$ 377,900	$346								
806	924	$ 387,900	$420								
Average	705	$224,003	$318		1,470	$406,579	277		1,430	450,581	311
Overall Average	**1,123**	**$ 343,824**	**$306**								

* Not all units are shown fat the surveyed projects, only those for which pricing information was available at the time of our tour.

Source: GVA Marquette Advisors

SUMMARY

The Central City housing market is comprised of 16,881 units, with 2,360 ownership units and 14,521 rental units. The market has matured greatly over the past five years. Between 1997 and 2002, a total of 3,381 units have been constructed. This represents an average of 676 units per year, capturing about 2.0 percent of regional housing construction during that period.

The majority of recent housing construction in the Central City has been at the low-end of the market through the Low Income Housing Tax Credit program and at the high end, primarily lofts and condos in the River District. Developers site high-end market demand and rising development costs, together with a lack of subsidy programs for middle-market housing as primary reasons for this trend.

Creating a Central City that reflects the diversity of the broader community is not only a sensible planning goal, it makes economic sense, as will be documented later in the report. Further, based on our review of demographic and economic data, and from interviews with local market experts, we conclude that there is substantial unmet demand and the Central City has the potential to attract a much more diverse resident mix if housing is built that is affordable to a greater share of the area's household base.

OPPORTUNITIES & CONSTRAINTS

INTRODUCTION

In the previous section we provided a profile of the historic, current and projected Central City housing market. The Central City has obviously become very popular, attracting buyers/renters from within the Portland region and from other parts of the country. Its popularity, coupled with the upward trend in land and construction costs, however, are creating a market environment that provides new housing opportunities mostly for the affluent. A stated goal of the Portland Comprehensive Plan (1999) is to create a Central City with a residential base that is reflective of the city as a whole. Current market trends are actually working against this goal.

In an effort to gain local perspective on this issue, GVA solicited the insights and ideas of experienced local housing, business and government representatives. We conducted three focus group sessions regarding the Central City and the workforce housing market situation. The three groups included 1) housing developers, 2) business leaders in the Central City area, and 3) housing and planning officials from local government agencies. The focus group sessions were supplemented with telephone interviews. The developers interviewed either directly, by telephone, or through the focus group session represent an estimated 8,000 to 10,000 housing units in the Portland region. Businesses contacted represent approximately 5,000 total employees. A total of seven local, regional and state agencies were represented.

In this section we present a summary of findings from the focus groups and interviews, presented as a listing of workforce housing development opportunities and key constraints to production.

OPPORTUNITIES

- In spite of current market dynamics (notably +/- 7.0% vacancy rate for rental housing), there is a consensus among developers, property managers, leasing and sales agents that there is "huge" long-term market potential for workforce housing in the Central City. This is supported by various studies, such as the 2002 Greater Downtown Portland Housing Report, and demand indicators, notably continued household growth and in-migration trends.

- The Central City housing market is well established and the neighborhoods there are viewed as an attractive place to live for a growing share of the region's households. In other words, there is momentum in this market and Portland area residents have bought into the sales pitch that the Central City is a desirable place to live. The issue to be addressed, obviously, is to increase the production of housing products which are affordable to a larger share of the area's household base.

- Although the downtown economy (and that of the region) is sluggish, the long-term prospects for housing demand related to job growth are positive, as more than 30% of downtown businesses plan to expand over the next two years.[6] If this occurs, employment growth will certainly follow, stimulating workforce housing demand.

[6] Portland Business Alliance: Downtown Portland Business Census and Survey

- One of downtown's major employers is the Oregon Health and Sciences University (OHSU). While several employers have cut jobs in recent months, OHSU is one with exciting expansion plans. OHSU is planning two new research facilities in the Central City. The "Pill Hill" facility will focus on core medical research and a new facility in South Waterfront will focus on biotechnology development and discovery and technology research. OHSU expects to hire up to 5,000 new workers at the two facilities over the next five years. This is perhaps the most obvious opportunity at present related to Central City housing demand as a result of job growth. The majority of the new hires will be in Research Assistant and Research Associate positions, with salaries in the $35,000 to $75,000 range. The facilities will also have some PhD's and Scientists with salaries in excess of $100,000. The OHSU human resource director noted that most of its current employees choose to reside in suburban communities, rather than the central city, due primarily to affordability issues. This trend could change in the future, in her opinion. If more middle-market housing is built in the Central City, it is likely to attract a larger number of OHSU employees, particularly singles and couples without children.

- OHSU is just one example of an opportunity to grow the middle-income household base in the Central City by targeting new hires with housing that is close to their jobs and affordable to them. There should be a number of similar opportunities, considering that 30% of downtown businesses are projecting growth in the coming two years and the bulk of workers are earning "workforce" wages.

- Developers are anxious to tap the workforce housing market, recognizing that the bulk of the market is not being served with recent housing developments. They have noted that it is a positive sign that PDC and the Alliance are addressing the issue of workforce housing and are hopeful that public focus, programs and financial resources will be allocated to workforce housing so that this market can be tapped.

- Tax abatement is noted among developers as a tool which will be critical to the feasibility of all housing products in downtown, including workforce housing development. This program, combined with direct financial assistance, other financial incentives and public/private development partnerships, including techniques such as land write down and Tax Increment Financing are tools (opportunities) which must be explored in order to begin to "bridge the gap" between development returns and cost, in support of a fair and competitive return on investment for housing developers.

- Because of land availability (& cost), the South Waterfront area, Central East Side, and Lloyd District are viewed as the key opportunity areas within the Central City for workforce housing development. Workforce housing construction in the downtown core and Pearl District will be much more difficult due to challenges in assembling parcels for development, which forces developers to build high-rise product at a considerably higher cost.

- In addition, some have noted that downtown Portland's many surface parking lots could present an opportunity for infill development. However, research regarding the economics of the Central City parking market is beyond the scope of this study. Many have noted that

because of the lack of land and also due to regulations that restrict the development of additional surface parking in downtown, the economics of a housing development do not support the transition from surface parking.

CONSTRAINTS

- CONSTRUCTION COST is the primary impediment to the construction of workforce housing in Central City Portland, as it is in many downtowns across the country.

- Land *cost* is also an issue, but not so much as land *availability*. Because of Portland's small blocks, it is extremely difficult to assemble sites that are large enough to support mid-rise construction of workforce housing. Development on smaller sites requires high-rise construction, which necessitates higher price points to support the cost of development. (This is documented in the feasibility models presented later in this summary).

The cost issues identified above are, by far, the key constraints to workforce housing development in downtown. Listed below are other issues which have surfaced through our research and interviews.

- Like most other cities, the City of Portland has historically targeted its programs and financial assistance toward low-income housing construction. Many feel this is where the focus should remain, as these households are the "neediest." However, several have noted that a commitment to middle-market housing with similar programs and resources would bring results, as there is clearly market demand to support an increase in new construction of such housing in downtown. Further, the economic benefits associated with supporting new workforce housing construction outweigh the costs, by far, as will be documented by our economic impact analysis.

- Short-term market fundamentals are weak. Some look at the current 7.0% vacancy rate and job losses and question whether there is really a "need" for additional workforce housing. There is general consensus, however, that the long-term (5-yr) demand for workforce housing is substantial, supported by pent-up demand from throughout the region and beyond, and more positive long-term employment outlook, as evident by the most recent Downtown Business Census. (Our demand estimates presented later in the report take into account these positive trends).

- Relatively small, local development companies have historically done most housing developments in Central City Portland. Most of these developers do not have the financial capacity to develop large numbers of workforce housing units at lower per-unit returns. Currently, the only large builder in the area is Trammell-Crow, which is now developing two rental housing projects (363 total units). These projects will provide workforce housing, albeit near the top of the workforce affordability range. There is some question as to the depth of the rental market above the 120% of MFI affordability range due to current mortgage rates which have lured many renters to the for-sale market. The perceived limited

depth to the rental market (short-term) and the fact that Portland is a relatively small market is likely a key reason why more large development companies have not yet targeted the region. Another is a perception that some national apartment developers and owners have of the Portland region as not being "developer friendly" and that it can be difficult to do business there. This perception relates to growth management and the urban growth boundary, as well as a sometimes challenging and uncertain development approval process. It is important to note here that many of Portland's active developers indicated that the process has improved and is becoming more developer friendly. PDC and the Alliance should work on continually communicating recent successes and partnerships between private developers and the public sector in order to reverse any negative perceptions regarding the development process in Portland.

- Condo developers in downtown Portland are said to be generating 15%+ returns (return-on-cost) on their projects. Some may question whether this would be a "reasonable" return on investment for workforce hosing development. However, developers have noted that due to the complexity of downtown development and the increased risk associated with complex development deals, development will likely not occur in the near term at lesser returns. One developer noted that single-family homebuilders are making 6%-8% returns on projects in the suburbs, which are appropriate since these projects are not nearly as complex and the level of risk is much lower compared to downtown development.

CONCLUDING REMARKS

For the reasons noted above, most developers will continue to focus on the high-end of the market, as long as demand warrants, because of the higher returns. It is unlikely that middle-market development will occur without tax abatement plus additional government subsidies. The City or the Alliance may also want to recruit a large national developer(s) with the financial capacity and appetite for middle-market projects with large numbers of units generating slightly lower per-unit returns compared to smaller luxury projects. The city will need to prioritize and determine 1) to what extent it should allocate financial resources and subsidy to projects and 2) what is a fair return for developers utilizing information presented in this and other housing studies.

WORKFORCE HOUSING DEMAND

INTRODUCTION

In this section we discuss of Central City housing demand trends and present our demand estimates by price/affordability range and tenure for the five-year period from 2002 to 2007. We then compare our demand estimates with the projected supply of housing units by price/rent range to derive an estimated shortfall of workforce housing units by household income group.

CENTRAL CITY HOUSING DEMAND

In estimating Central City housing demand, GVA reviewed data from numerous sources. Key documents are noted below:

1. Greater Downtown Portland Housing Report (2002)
2. Central City Housing Inventory (2002 and historical)
3. Downtown Portland Retail Strategy (2002)
4. Metro Regional Data Book – Portland-Vancouver Metropolitan Area (Sept 2002)
5. Metro Report: Economic Report to the Metro Council, 2000-2030 Regional Forecast of Employment, Population, Housing and Income for the Portland Vancouver Metropolitan Area (released March 2002, revised Sept 2002)
6. Regional Economic Profile by the Oregon Employment Department (2002)
7. Employment Projections by Occupation, 2000-2010: Portland Metro (Oct 2001)
8. Portland Metro Labor Trends
9. Downtown Portland Business Census and Survey (2001 & 2002)

We also analyzed historical population and household growth trends and household incomes for the Central City and the region as a whole, according to the U.S. Census. In addition, we reviewed forecasts of population and household growth for the region and downtown by Spatial Reengineering Consultants (SRC), a national demographics and economic forecasting firm.

We have completed numerous housing studies and demand forecasts for downtowns throughout the country. Through these experiences we have developed a demand model that is sensitive to the unique market dynamics and demand indicators which are pertinent to the market in focus. In many regions, downtown housing demand is closely related to downtown employment growth. In other words, as downtown business and employment growth predominates, downtown housing demand follows, with growing a growing proportion of downtown workers taking residence in the downtown neighborhood if it is perceived as a "livable" and vibrant 18- to 24-hour neighborhood. In the case of Portland, however, housing demand in today's market is driven by in-migration corresponding with Portland's reputation for offering a high-quality of life. Even in an economy with 8.4% unemployment, one that has seen substantial job losses during the past two years, household growth remains strong in the region. Meanwhile, the Central City has become increasingly popular as a place to live, and is now noted nationally for its vibrancy, culture, restaurants, shopping and recreational opportunities. This has resulted in the Central City increasing its capture housing demand from regional in-migration. In addition,

the Central City continues to attract large numbers of households from other neighborhoods within the Portland region.

Table 6

Household & Employment Growth Analysis, 1990-2007
Portland Central City & Portland MSA

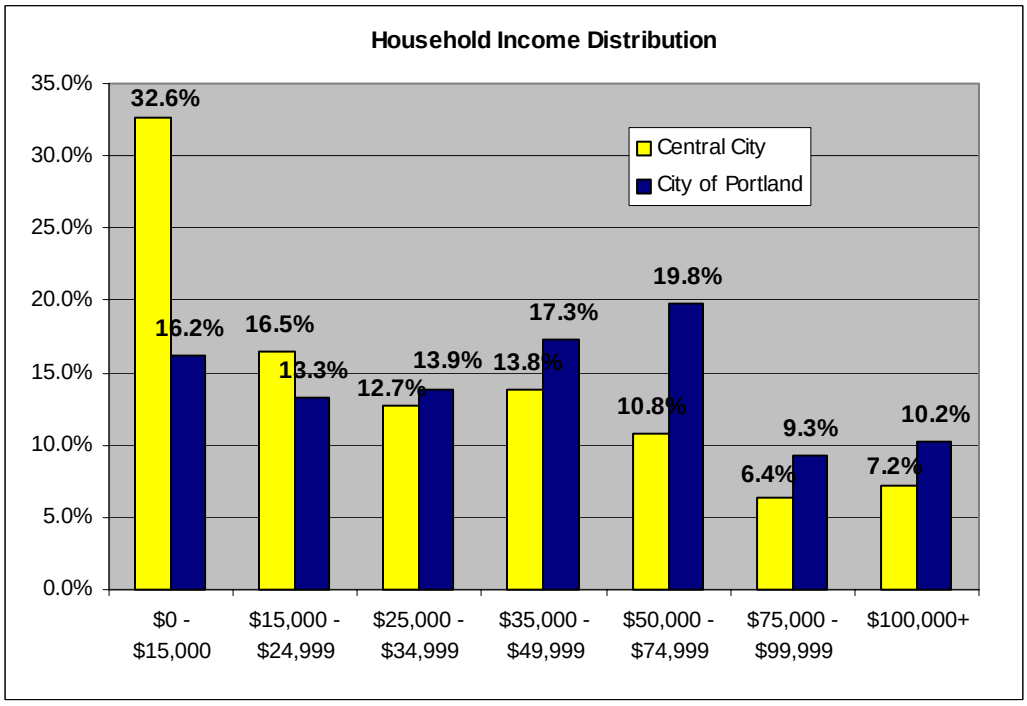
	U.S Census 2000	Estimate 2002	Forecast 2007
Households			
Metro Area	741,773	770,300	846,000
Portland Central City	14,655	15,840	19,940
Central City Share of Total Metro	2.0%	2.1%	2.4%
Employment			
Metro Area	958,000	935,000	1,050,000
Portland Central City	84,041	82,023	N/A
Central City Share of Total Metro	8.8%	8.8%	

Sources: Metro Council; Oregon Labor Market Information System; Spatial Reengineering Consultants; PDC: *Central City Housing Inventory* , 2002; Economic Research Associates: *Downtown Portland Retail Strategy* ; GVA Marquette Advisors

As shown on Table 6 above, even though the Portland MSA has seen significant declines in employment since 2000 (-23,000), household growth continues in the region (+28,527), as Portland has developed a reputation for offering a high quality of life. Based on a review of past Housing Inventory Reports, we estimate that during the past two years the Central City has added 1,185 households. We estimate five-year household growth in the Central City to be nearly 3,000 households. From our research and interviews, we estimate that about half of these new Central City residents moved there from within the region, with the other half coming from outside the Portland MSA.

The table shows that about 2.1% of the region's households reside in the Central City neighborhoods, up from 2.0% in 2000. Our estimates indicate that about 1.8% of the region's households lived in the Central City in 1997. Because of urban growth patterns and the increasing popularity of the area as a place to live, we believe that the Central City is positioned to capture an even greater share of regional household growth in the years ahead and also attract more households who will relocate from other neighborhoods. However, for this to happen there must be an increase in the production of housing at middle-market price points.

The graph on the following page shows the income distribution of Central City households compared to that for the City of Portland as a whole, according to the US Census. It shows some clear differences between the downtown resident composition and that for the city.



As is often the case in downtown areas, Portland's Central City is home to a larger share of lower income households compared to the city as a whole due to the presence of affordable low-income housing, goods and services and public transportation there.

The graph also shows that a smaller share of the Central City household base earns between $25,000 and $75,000 annually, the approximate income range of *"workforce households"* at 60% and 150% of the area median family income. Only 37.3% of Central City households earn between $25,000 and $75,000, compared to 51.0% of the citywide household base. A stated goal of the City of Portland in its Comprehensive Plan is to strive for a Central City resident base that is reflective in its income distribution to the city as a whole. In consideration of this goal, Central City should have approximately 8,870 workforce households. However, we estimate there are only about 5,900 workforce households residing there.

We have also analyzed the Central City resident income distribution in comparison to that of the downtown employee base, according to the Portland Business Alliance 2002 Downtown Business Census and Survey. This comparison is shown on the table on the following page.

Table 7

Household Income Distribution Comparison

Income Range	Central City Residents	Central City Workers	City of Portland
$0 - $15,000	32.6%	12.0%	16.2%
$15,000 - $24,999	16.5%	15.0%	13.3%
$25,000 - $34,999	**12.7%**	**19.0%**	**13.9%**
$35,000 - $49,999	**13.8%**	**20.0%**	**17.3%**
$50,000 - $74,999	**10.8%**	**21.0%**	**19.8%**
$75,000 - $99,999	6.4%	7.0%	9.3%
$100,000+	7.2%	6.0%	10.2%
Total	100.0%	100.0%	100.0%

Sources: US Census; Portland Business Alliance 2002 Downtown Business Census & Survey

The Central City workforce is clearly buoyed by employees earning between $25,000 and $75,000, with 60.0% of workers falling in this range, compared to only 37.3% of the Central City resident base. This is evidence of pent-up demand for workforce housing, considering that Central City workers typically represent a substantial share of the potential market for downtown housing products nationwide. According to a survey analysis presented in the 2002 Greater Downtown Portland Housing Report, 36.0% of downtown workers who do not currently live in the Central City indicated that they would consider moving to a home in downtown if housing were available in the area that was appropriately sized and priced. Based on these factors, we believe there is an opportunity to improve the household mix/income diversity and further establish a critical mass in support of expanded commercial development opportunities in the Central City by attracting a larger share of the region's workforce households with housing products that are affordable to them.

Table 8 on the following page presents a summary of our demand model for Central City housing units for a five-year period, 2002 to 2007. The demand model is linked directly to regional household growth (structural demand) and regional household turnover demand, with appropriate capture rates applied to each demand segment. Capture rates were derived from an analysis of historical capture rates for the Central City, and in consideration of achievable future capture rates assuming an increase in the supply of housing opportunities that are affordable to a larger portion of the market, i.e. a step up in the production of workforce housing.

Table 8

Projected 5-Year Housing Demand, 2002-2007
Central City Portland

Demand from Household Growth		
Projected MSA Household Growth		75,700 (1)
(times) Estimated Central City Capture Rate	x	2.75% (2)
(equals) Estimated Potential Demand in Central City from Regional Household Growth	**=**	**2,082**
Downtown Market Potential from Regional Household Turnover		
Total Regional Household Turnover Over 5-Year Period		600,000 (3)
(times) Estimated Central City Capture Rate	x	0.35% (4)
(equals) Estimated Potential Demand from Turnover in Regional Household Base	**=**	**2,100**
Projected Total 5-Year Market Potential in Central City Portland	**=**	**4,182**
	Rounded =	**4,200**

(1) Based on anlaysis of projections by the Metro Council and Spatial Reengineering Consultants.

(2) Based on historical trend: An estimated 1,485 new households have moved into the neighborhood from outside region during the past 5 years. This is about 50% of new Central City residents during this period: 1,485 / 74,200 regional household growth = 2.00% capture. We have conservatively stepped up the capture rate rate by about one-third to 2.75%, based on the assumption that the production of workforce housing will increase, therefore making the Central City housing stock affordable to a larger share of new households.

(3) Based on an analysis of apartment turnover trends and sales of existing homes regionwide.

(4) An estimated 1,485 new Central City households moved there from within the region during past 5 years / 600,000 = 0.25% capture. It is reasonable based on our interviews to assume that a greater percentage of workforce households would have moved to the Central City if there were units built that were affordable to them. We have again increased the capture rate by about one-third to 0.35% for households in turnover over the next five years, assuming the production of Central City workforce housing units increases during this period.

Source: GVA Marquette Advisors

The demand model multiplies projected regional household growth (75,700) by a Central City capture rate of 2.75%, resulting in ***projected structural demand equal to 2,082 units in the Central City over five years.*** The 2.75% capture rate is based on our analysis of the historical capture rate for downtown (2.00%) increased by about one-third based on the assumption that the production of workforce housing will increase and hence, the Central City will attract a larger number of middle-income households during the projection period.

Next we estimate the potential market support for new Central City housing units based on projected regional household turnover during the five-year projection period. According to a review of data from the Portland Regional Multiple Listing Service, there was an average of 12,000 sales of existing homes per year in the region during the past three years. In addition, we have estimated rental unit turnover at 40% of all rental units, or about 114,000 units per year in the region. In total, we estimate annual regional turnover of about 126,000, or 630,000 units over the five-year projection period. We reduce this figure by 30,000 to approximate 5-year turnover within the existing Central City housing stock to arrive at our five-year turnover projection of 600,000 units. We then multiply this figure by a 0.35% capture rate for downtown, resulting in ***demand for 2,100 units in downtown from turnover in the regional household base.*** Our 0.35% capture rate represents an increase of about one-third from the historical capture rate of 0.25%, based on the assumption that workforce housing production increases in the Central City. We believe that an increased capture rate is achievable, based on the apparent pent-up demand for workforce housing in this market according to our analysis of demographics and market data, as well as interviews with local housing developers, owners, sales and leasing agents.

Including structural and turnover demand, we project that there is sufficient market demand to support 4,200 new housing units in the Central City neighborhoods between 2002 and 2007.

Next, we have segmented the estimated market demand by household income range, based on the household income distribution for the City of Portland, according to estimates by Spatial Reengineering Consultants. Our segmentation of the projected 4,200-unit demand figure by household income range is presented on the following page. The table also shows projected new supply by income/affordability range according to the 2002 Greater Downtown Portland Housing Report, supplemented by information provided by the Portland Development Commission, and calculates the projected shortage (or surplus) of housing units by income range. We estimate five-year demand for 1,850 workforce housing units, and project a shortfall of approximately 1,340 workforce units in Central City Portland for 2002 to 2007. This equates to an average of about 268 units per year during this period.

Table 9
Projected Housing Demand & Supply
Central City Portland
2002-2007

Income Range	Projected Demand		Projected Supply [1]	Difference
$0 - $15,000	680	16.2%	203	(477)
$15,000 - $24,999	559	13.3%	151	(408)
$25,000 - $34,999	**584**	**13.9%**	**115**	**(469)**
$35,000 - $49,999	**727**	**17.3%**	**109**	**(618)**
$50,000 - $74,999	**832**	**19.8%**	**340**	**(492)**
$75,000 - $99,999	391	9.3%	288	(103)
$100,000+	428	10.2%	831	403
5-Year Total	**4,200**	**100.0%**	**2,037**	**(2,163)**
Annual	**840**		**407**	**(433)**

(1,340) Projected 5-Year Workforce Housing Shortfall (incomes of $30,000 to $75,000) in Central City Portland).

[1] Based on 2002 Greater Downtown Portland Housing Report.

Note: The projected income distribution here is based on the current (2000) income distribution for the City of Portland as a whole, according to the 2000 Census. A stated goal of the current comp plan, is to strive for a household income distribution in downtown that matches the City as a whole.

Estimated Unmet Workforce Housing Demand by % of MFI

Household Income as % of MFI	Total	Owners	Renters	Approx. Income Range	
60-80%	440	0	440	$30,000	$40,000
80-100%	410	120	290	$40,000	$50,000
100-120%	200	100	100	$50,000	$60,000
120-150%	290	290	0	$60,000	$75,000
Total	1,340	510	830	$30,000	$75,000

Source: GVA Marquette Advisors

DEVELOPMENT FEASIBILITY

INTRODUCTION

We have prepared a series of development models for workforce housing in Central City Portland at a variety of affordability ranges. The models present an analysis of per-unit housing values based on estimated revenues from sales or unit rental income. These revenues are then compared to the cost to build workforce housing to show the potential need for gap financing to support the development. Cost estimates include land, direct and indirect construction costs and are based on information provided by housing developers at the focus group, and also from the developer survey and interviews by GVA Marquette Advisors and reflect current development costs by sub-district in the Central City. In addition to developing cost estimates in various sub-districts to reflect the variance in land values, we have developed cost estimates for both mid-rise and high-rise housing products to account for the variance in construction costs by product type.

Each of the development models first presents a per-unit profitability analysis, showing the need for gap financing, with a second model provided showing the amount of direct subsidy needed to generate a 15.0% return on investment for the developer(s).

The housing affordability ranges used for our analysis are summarized on the next page. This is followed by a listing of the various assumptions used in developing the models and then a summary of the per-unit subsidy required to support various workforce housing products in the Central Eastside, Lloyd, Downtown and Pearl. The development feasibility models are provided in the Addenda.

Table 10

Central City Portland
Workforce Housing Affordability Assumptions

Income Range	Average Household Size	Approximate Income Range	Approximate Average Income	Approx. Monthly Rent Range [1]	Approximate Average Rent	Approximate Price Range [2]	Approximate Average Price
60-80% of MFI	1.5	$30,000 - $40,000	$35,000	$750 - $1,000	$865	N/A	N/A
80-100% of MFI	1.5	$40,000 - $50,000	$45,000	$1,000 - $1,250	$1,110	$130,000 - $160,000	$145,000
100-120% of MFI	1.5	$50,000 - $60,000	$55,000	$1,250 - $1,500	$1,355	$160,000 - $190,000	$175,000
120-150% of MFI	1.5	$60,000 - $75,000	$67,000	$1,500 - $1,875	$1,685	$190,000 - $240,000	$215,000

[1] Based on 30% of Monthly Income

[2] Based on 30% of Monthly Income; Assumes 3% down payment, 30-yr. fixed rate @ 6.0% + Mortgage Ins., Hazard Ins. & Taxes

Sources: HUD; Portland Development Commission; GVA Marquette Advisors

KEY ASSUMPTIONS: WORKFORCE HOUSING DEVELOPMENT MODELS

- **Average Unit Sizes:** Rental 775 sf; For-Sale 1,000 sf; based on a review of projects currently marketing in downtown.

- **Rental vacancy rate** @ 5% (assumes stabilized market)

- **Operating expenses** on apartments @ 40% of potential gross income. Based on industry average for Portland region according to the Institute of Real Estate Management (IREM)

- **Capitalization Rate** on per unit net operating income for apartments @ 8.0%. Based on industry data for the Portland region from various research firms and publications, notably Real Capital Analytics and Marcus & Millichap National Research Report.

- **Brokerage fees** @ 6% for for-sale units

- **Density:**

    - Mid-Rise @ 150 units per acre
    - High-Rise @ 300 units per acre
    - Based on a review of development densities for recent and current downtown housing projects.

- **Land Cost:**

    - Central East Side @ $60 psf
    - Lloyd District @ $75 psf
    - Downtown District @ $125 psf
    - Pearl District @ $150 psf
    - Based on focus groups, developer surveys and interviews.

- **Construction Costs:**

    - Mid-Rise Rental @ $80 psf
    - High-Rise Rental @ $115 psf
    - Mid-Rise For Sale @ $100 psf
    - High-Rise For Sale @ $125 psf
    - Based on focus groups, developer surveys and interviews

- **Indirect Costs** @ 28% of direct construction costs

- **Desired Return on Investment** @ 15%

Table 11

Central City Portland

Required Subsidy per Unit

Workforce Housing

RENTAL HOUSING

Targeted Income Group	*Average*	*Central East Side*		*Lloyd District*		*Downtown District*		*Pearl District*	
% of MFI	*Rent*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*
60-80%	$865	$43,500	$75,000	$47,000	$77,000	$60,000	$82,000	$66,000	$84,500
80-100%	$1,110	$26,000	$58,000	$30,000	$59,500	$42,000	$64,500	$48,500	$67,000
100-120%	$1,355	$8,500	$40,000	$12,000	$42,000	$25,000	$47,000	$31,000	$49,000
120-150%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FOR-SALE HOUSING

Targeted Income Group	*Average*	*Central East Side*		*Lloyd District*		*Downtown District*		*Pearl District*	
% of MFI	*Price*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*	*Mid-Rise*	*High-Rise*
60-80%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
80-100%	$145,000	$42,000	$66,000	$47,000	$67,000	$62,000	$72,000	$69,000	$75,000
100-120%	$175,000	$18,000	$41,000	$22,000	$43,000	$37,000	$48,000	$45,000	$50,000
120-150%	$215,000	$0	$8,000	$0	$10,000	$5,000	$15,000	$12,000	$18,000

Source: GVA Marquette Advisors

As illustrated above, the amount of gap financing required to support workforce housing varies dramatically by affordability range, product type and sub-district within in the Central City. Assuming for the purposes of this analysis an allocation of total unit demand (1,340 units) by the tenure split as presented in Table 9 (830 renters & 510 owners), and an approximately equal allocation of unit construction across the various sub-districts, we calculate an overall average per-unit cost and subsidy as follows.

Table 12

Central City Portland
Estimated Workforce Housing Subsidy Requirement

Household Group	Tenure	# of Units	Avg. Subidy per Unit	Estimated Total Subsidy
60-80% of MFI	Renters	440	$67,000	$29,480,000
60-80% of MFI	Owners	0	$0	$0
80-100% of MFI	Renters	290	$49,500	$14,355,000
80-100% of MFI	Owners	120	$62,500	$7,500,000
100-120% of MFI	Renters	100	$32,000	$3,200,000
100-120% of MFI	Owners	100	$38,000	$3,800,000
120-150% of MFI	Renters	0	$0	$0
120-150% of MFI	Owners	290	$8,500	$2,465,000
Total		1,340	$45,373	$60,800,000

Source: GVA Marquette Advisors

The average per-unit subsidy of $45,000 per unit equates to about $61 million in required subsidy to support the needed workforce housing units in Central City Portland in the current development environment.

While the demand for workforce housing is very strong, the required subsidy to meet this demand is obviously immense. However, it is important to note that the $45,000 per unit shortfall does not have to be bridged entirely with direct subsidies. Rather, a portion of the gap can be met with *passive* subsidy/support mechanisms, such as tax abatement, reductions in city fees, and a streamlined development approval process. These passive support mechanisms and strategies are discussed in the *Recommendations* section of the report. Further, the amount of subsidy required varies by sub-district, due to variable land costs within the Central City. In fact, from our development cost models, we estimate that the gap ranges from about $35,000 per unit on the Central East Side to about $52,000 per unit in the Pearl District.

The benefits from such an investment (or subsidy) in workforce housing would far outweigh the costs. In the next section, we will utilize an economic model to quantify these benefits and then measure the likely return on the sizable workforce housing investment opportunity.

ECONOMIC IMPACT ANALYSIS

INTRODUCTION

This analysis provides estimates of the direct, indirect and induced impacts which would accrue to the Central City economy as a result of the construction of 1,340 workforce housing units there, the projected unmet demand over the next five years.

Direct impacts are changes in which a final demand change is made, i.e. a net change in the demand for a particular good or service. In the case of a new residential neighborhood, or the addition of a specified number of units as in the case of Central City Portland, direct impacts would be those generated directly by the residential construction project and also the households coming to reside in the new neighborhood. Direct impacts would include purchases of goods and services and new employment and wages.

Estimates of *indirect* and *induced* impact were prepared by GVA Marquette Advisors using the IMPLAN (IMpact Analysis for PLANing) economic model originally developed for the USDA Forest Service in cooperation with the Federal Emergency Management Agency and the USDI Bureau of Land Management. The IMPLAN model has been in use since 1979. The IMPLAN model accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis and the rectangular format recommended by the United Nations.

The concepts of indirect and induced impact are among the most widely used and poorly understood tools in economic analysis. Fundamentally, they are based on an extension of the direct expenditures by new residents on goods and services. The incomes of the residents of the new housing units would be spent on goods and services in the area. The businesses to which those dollars are paid then further redistribute the money they receive in the form of wages to their employees and purchases for their own operating needs. It is this on-going cycle of redistribution that estimates of indirect and induced impact attempt to quantify.

Indirect impact calculated by the IMPLAN model reflects changes in inter-industry purchases, effectively measuring the impact of expenditures for goods and services related to the new housing units and the new households residing in the Central City as they cycle through the economy.

Induced impact calculated by the IMPLAN model reflects changes in spending from households as income and population increases as a result of the new housing units, effectively measuring the impact of the additional wages earned as they cycle through the economy.

Three levels of impact have been calculated here:

- Output (equivalent to GDP)
- Employment
- Earnings (equivalent to personal income)

In order to fully estimate the economic impact of 1,340 new workforce housing units in Central City Portland, we must include first an estimate of the economic impact of the construction

project (a one-time impact) and then the ongoing annual impact of adding these households (consumer spending units) to the Central City. This would be the impact of the expenditures made by 1,340 new households on goods and services in the Central City.

ECONOMIC IMPACT

As summarized in the Workforce Housing Demand Analysis section, we project five-year unmet demand for approximately 1,340 workforce housing units in Central City Portland, including 830 rental units and 510 ownership units. In the paragraphs and summary tables below we estimate the direct, indirect and induced impact of 1) the construction project (a *one-time* impact), and 2) the *ongoing annual* impact of 1,340 new households in the neighborhood.

Table 13 summarizes the economic impact of 1,340 workforce housing units in Central City Portland. Table 14 shows the average per-unit impact. Table 15 presents in detail the estimated impact by household group and tenure for the recommended workforce housing unit distribution.

Construction Impact

The estimates presented here are only the impacts estimated to occur in the Central City. The direct impact estimate is based on the total per-unit development value, not including the value of the land, and will come in the form of construction jobs and wages, as well as purchased goods and materials. Indirect impacts reflect the increase in inter-industry purchases as a result of increased economic activity from purchases made related to the construction project. Induced impacts reflect the increase in area purchases by consumers resulting from the direct and indirect employment and wage increases due to the construction project.

It is important to note that the majority of the construction impact will actually occur elsewhere in the Portland region, since most of the construction workers will not live in the Central City and spend only a portion of their incomes there. Further, most of the materials, goods and services purchased for the construction project will be purchased from businesses located outside the Central City. The construction impacts presented here reflect only the estimated Central City capture of 3.5% of the total regional impact. We have developed the 3.5% capture rate from a review of the regional distribution of retail sales from the Downtown Portland Retail Strategy report by ERA in April of 2002.

The total impact of the construction project on the Central City is projected to be approximately $14.3 million, or about $10,700 per unit. The $14.3 million includes about $11.1 million in output (GDP), the increase in sales at Central City businesses, and about $3.2 million in earnings in the Central City supported by the construction project(s).

Table 13

Estimated Total Economic Impact of 1,340 Workforce Housing Units
Central City, Portland, Oregon

	Construction Project(s) Impact	Annual Consumer Spending Impact	Projected 20-Year Impact
Output			
Direct	$6,197,000	$23,840,000	$482,997,000
Indirect	$3,243,000	$3,840,000	$80,043,000
Induced	$1,641,000	$1,274,000	$27,121,000
Total	$11,081,000	$28,954,000	$590,161,000
Employee Earnings			
Direct	$1,261,000	$5,904,000	$119,341,000
Indirect	$1,302,000	$1,610,000	$33,502,000
Induced	$624,000	$503,000	$10,684,000
Total	$3,187,000	$8,017,000	$163,527,000
Total Output & Earnings			
Direct	$7,458,000	$29,744,000	$602,338,000
Indirect	$4,545,000	$5,450,000	$113,545,000
Induced	$2,265,000	$1,777,000	$37,805,000
Total	$14,268,000	$36,971,000	$753,688,000

Sources: IMPLAN; GVA Marquette Advisors

Table 14

Estimated Per-Unit Economic Impact of 1,340 Workforce Housing Units
Central City, Portland, Oregon

	Construction Project(s) Impact	Annual Consumer Spending Impact	Projected 20-Year Impact
Output			
Direct	$4,625	$17,791	$360,446
Indirect	$2,420	$2,866	$59,734
Induced	$1,225	$951	$20,240
Total	$8,269	$21,607	$440,419
Employee Earnings			
Direct	$941	$4,406	$89,060
Indirect	$972	$1,201	$25,001
Induced	$466	$375	$7,973
Total	$2,378	$5,983	$122,035
Total Output & Earnings			
Direct	$5,566	$22,197	$449,506
Indirect	$3,392	$4,067	$84,735
Induced	$1,690	$1,326	$28,213
Total	$10,648	$27,590	$562,454

Sources: IMPLAN; GVA Marquette Advisors

Table 15
1,340 Workforce Housing Units
Projected Economic Impact on Central City Portland

	Household Income Group (as % of MFI)										
	60-80%		80-100%		100-120%		120-150%		All Units		
	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	TOTAL
Projected Unmet Market Demand (# of Units)	440	0	290	120	100	100	0	290	830	510	1,340
Average Household Size	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Average Household Income	$34,550	$34,550	$44,400	$44,400	$54,275	$54,275	$66,600	$66,600	$40,368	$58,960	$47,444
Estimated Central City Residents Disposable Income @ 75%	$25,913	$25,913	$33,300	$33,300	$40,706	$40,706	$49,950	$49,950	$30,276	$44,220	$35,583
Estimated Central City Capture of Residents Disposable Income @ 50%	$12,956	$12,956	$16,650	$16,650	$20,353	$20,353	$24,975	$24,975	$15,138	$22,110	$17,792
Average Rent	$865	N/A	$1,110	N/A	$1,355	N/A	N/A	N/A	$1,010	N/A	$1,010
Average Home Value	N/A	N/A	N/A	$145,000	N/A	$175,000	N/A	$215,000	N/A	$190,686	$190,686
ECONOMIC IMPACT											
ONE-TIME Economic Impact of the Construction Project [1]											
Output (GDP)											
Direct Output	$1,771,000	$0	$1,167,250	$672,000	$402,500	$560,000	$0	$1,624,000	$3,340,750	$2,856,000	$6,196,750
Indirect Output	$926,834	$0	$610,868	$351,687	$210,644	$293,073	$0	$849,910	$1,748,345	$1,494,670	$3,243,015
Induced Output	$468,884	$0	$309,037	$177,916	$106,565	$148,264	$0	$429,964	$884,485	$756,144	$1,640,629
Subtotal -- Output	$3,166,717	$0	$2,087,155	$1,201,603	$719,709	$1,001,336	$0	$2,903,874	$5,973,581	$5,106,814	$11,080,394
Employee Earnings											
Direct Earnings	$360,483	$0	$237,591	$136,786	$81,928	$113,988	$0	$330,565	$680,002	$581,339	$1,261,341
Indirect Earnings	$372,049	$0	$245,214	$141,175	$84,557	$117,646	$0	$341,172	$701,819	$599,992	$1,301,811
Induced Earnings	$178,363	$0	$117,557	$67,679	$40,537	$56,399	$0	$163,557	$336,457	$287,635	$624,092
Subtotal -- Earnings	$910,895	$0	$600,362	$345,639	$207,022	$288,033	$0	$835,294	$1,718,278	$1,468,966	$3,187,244
Subtotal -- Output & Earnings Impact from the Construction Project	$4,077,612	$0	$2,687,517	$1,547,242	$926,730	$1,289,369	$0	$3,739,169	$7,691,859	$6,575,779	$14,267,638
ANNUAL Impact from Increased Household Spending [2]											
Output (GDP)											
Direct Output	$5,700,000	$0	$4,829,000	$1,998,000	$2,035,000	$2,035,000	$0	$7,243,000	$12,564,000	$11,276,000	$23,840,000
Indirect Output	$932,000	$0	$772,000	$320,000	$327,000	$327,000	$0	$1,162,000	$2,031,000	$1,809,000	$3,840,000
Induced Output	$312,000	$0	$252,000	$104,000	$109,000	$109,000	$0	$388,000	$673,000	$601,000	$1,274,000
Subtotal -- Output	$6,944,000	$0	$5,853,000	$2,422,000	$2,471,000	$2,471,000	$0	$8,793,000	$15,268,000	$13,686,000	$28,954,000
Employee Earnings											
Direct Earnings	$1,442,000	$0	$1,163,000	$481,000	$507,000	$507,000	$0	$1,804,000	$3,112,000	$2,792,000	$5,904,000
Indirect Earnings	$390,000	$0	$324,000	$134,000	$137,000	$137,000	$0	$488,000	$851,000	$759,000	$1,610,000
Induced Earnings	$123,000	$0	$100,000	$41,000	$43,000	$43,000	$0	$153,000	$266,000	$237,000	$503,000
Subtotal -- Earnings	$1,955,000	$0	$1,587,000	$656,000	$687,000	$687,000	$0	$2,445,000	$4,229,000	$3,788,000	$8,017,000
Subtotal -- Annual Output & Earnings Impact from Household Spending	$8,899,000	$0	$7,440,000	$3,078,000	$3,158,000	$3,158,000	$0	$11,238,000	$19,497,000	$17,474,000	$36,971,000
Total 20-Year Economic Impact	$182,057,612	$0	$151,487,517	$63,107,242	$64,086,730	$64,449,369	$0	$228,499,169	$397,631,859	$356,055,779	$753,687,638
Total 20-Year Economic Impact per Unit	$413,767	$0	$522,371	$525,894	$640,867	$644,494	$0	$787,928	$479,075	$698,149	$562,453

[1] These are the economic impacts associated with the construction project(s). The direct impact is based on the total per-unit develpoment value, not including the value of the land, and will come in the form of construction jobs and wages and purchased goods and materials. Indirect impacts reflect the increase in inter-industry purchases as a result of increased economic activity from materials purchases made related to the construction project. Induced impacts reflect the increase in area purchases by consumers resulting from the direct and indirect employment and wage increases due to the construction project. It is important to note that the majority of the construction impact will actually occur elsewhere throughout the region, since most of the construction workers will not live in the Central City and spend only a portion of their incomes there. Further, most of the materials, goods and services purchased for the construction project will be purchased from businesses located outside the Central City. The construction impacts presented here reflect only the estimated Central City capture of 3.5% of the total regional impact from the construction project(s), based on a review of the regional distribution of retail sales from the *Downtown Portland Retail Strategy* report by ERA in April of 2002.

[2] This is the ongoing annual impact from new consumer spending in Central City Portland by residents of the new housing units. Disposable income is estimated to be 75% of gross income. We estimate a Central City capture of about 50% of the disposable incomes of Central City residents. This is based on a review of the *Downtown Retail Strategy* report and also takes into account the fact that a portion of the new residents will be persons who were already employed in the Central City and therefore were already spending a portion of their incomes there.

Source: IMPLAN

Household Spending Impact

The primary impact of the 1,340 workforce housing units will come in the form of increased expenditures from these new Central City residents. For the purposes of our analysis, we must only include *disposable* income in our estimate of the ongoing impact of household expenditures in the area. Disposable income is defined as income available after savings and income tax. We estimate the average disposable income to be 75% of total gross income. We estimate a Central City capture of about 50% of the disposable incomes of its residents. This is a conservative estimate, based on a review of the Downtown Portland Retail Strategy report and also taking into consideration the fact that some of the new Central City residents will be persons who were already employed there and, hence, were already spending a portion of their incomes on goods and services in the Central City neighborhoods.

The total annual consumer spending impact estimated to result from the construction of 1,340 units in the Central City is $37.0 million, or about $27,600 per unit. Included in the total impact of $37.0 million is about $29.0 million in output (GDP). This reflects the increase in sales at Central City businesses. Also included is $8.0 million in employee earnings resulting from increased household spending in the Central City.

Projected 20-Year Economic Impact

The economic benefits of adding 1,340 workforce households to the Central City economy will obviously accrue over a number of years. Therefore, in analyzing the potential "return on investment," from supporting the construction of these new units, we have projected the total impact over a 20-year period. **The total 20-year impact is estimated to be approximately $753.7 million, or $562,000 per unit.** Our projection is conservative, in that it is based on stabilized annual consumer spending, and does not factor in annual increases in earnings or spending by the 1,340 Central City households over the projection period. Included in the 20-year impact is $590.2 million in output (GDP) and $163.5 million in earnings as a result of the construction project(s) and increased consumer spending activity due to the 1,340 new Central City residents.

RETURN ON INVESTMENT

Tables 16 and 17 summarize the economic return on workforce housing construction in Central City Portland. Table 16 compares the projected 20-year economic impact with the estimated *total workforce housing development cost*. Table 17 measures the projected 20-year impact against *just the subsidy requirement* to support workforce housing construction. Table 18 presents a detailed summary by household group and tenure.

Return on Total Development Cost

Based on the IMPLAN economic model, we project a total 20-year impact of approximately $754 million ($563,000 per unit) in the Central City, resulting from the construction of 1,340 new workforce housing units. Comparing the $754 million in economic impact with the total development cost of these 1,340 units at $202.4 million ($151,000 per unit) results in a projected 20-year return on investment of $551.6 million ($412,000 per unit).

Return on Subsidy

Next, we compare the projected 20-year economic impact of $754 million ($563,000 per unit) with the estimated subsidy required to support 1,340 workforce housing units, $61.1 million ($45,000 per unit), generating a return of 15% for developers. This results in a 20-year return to the Central City economy $692.9 million ($517,000 per unit).

CONCLUDING REMARKS

Development of workforce housing will not occur in the Central City without public support. In fact, we project unmet demand for 1,340 workforce housing units in the Central City over the next five years. In today's development environment, we estimate an average subsidy requirement of approximately $45,000 per unit. As documented in this report, it will be possible to offset this estimated subsidy requirement to some extent through the removal or reduction of some of the primary barriers to development. Examples would include a streamlined development approval process, reduction of city fees, the use of public private partnerships and tools such as land write down, tax increment financing, and tax abatement. Nonetheless, some level of public support in the form of direct subsidy will likely be required to support new workforce housing construction. Meanwhile, the economic benefits of adding the needed workforce housing units to the Central City neighborhoods are impressive. It is apparent from this analysis that the required subsidy should be viewed as a wise investment strategy, one expected to generate momentous returns ($517,000 per unit over 20 years) that will be felt throughout the Central City economy for years to come.

Table 16

Return on Investment: Total Workforce Housing Development Cost
20-Year Return (in 2003 dollars)
1,340 Workforce Housing Units in Central City Portland

	Total	Per Unit
Estimated Total Cost to Develop 830 Workforce Rental Units	$109,560,000	$132,000
Estimated Total Cost to Develop 510 Workforce Ownership Units	$92,820,000	$182,000
Estimated Total Workforce Housing Development Cost	$202,380,000	$151,000
Projected Economic Impact over 20 Years	$754,000,000	$563,000
20-Year Return on Investment	$551,620,000	$412,000

Sources: IMPLAN; GVA Marquette Advisors

Table 17

Return on Investment: Workforce Housing Development Subsidy
20-Year Return (in 2003 dollars)
1,340 Workforce Housing Units in Central City Portland

	Total	Per Unit
Estimated Total Subsidy Required for 830 Workforce Rental Units	$47,310,000	$57,000
Estimated Total Subsidy Required for 510 Workforce Ownership Units	$13,770,000	$27,000
Estimated Total Subsidy Required	$61,080,000	$45,582
Projected Economic Impact over 20 Years	$754,000,000	$563,000
20-Year Return on Investment	$692,920,000	$517,418

Sources: IMPLAN; GVA Marquette Advisors

Table 18
1,340 Workforce Housing Units
Projected Economic Impact on Central City Portland
and Return on Investment Analysis

	Household Income Group (as % of MFI)										
	60-80%		80-100%		100-120%		120-150%		All Units		
	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	Renters	Owners	TOTAL
Projected Unmet Market Demand (# of Units)	440	0	290	120	100	100	0	290	830	510	1,340
Average Household Size	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Average Household Income	$34,550	$34,550	$44,400	$44,400	$54,275	$54,275	$66,600	$66,600	$40,368	$58,960	$47,444
Estimated Central City Residents Disposable Income @ 75%	$25,913	$25,913	$33,300	$33,300	$40,706	$40,706	$49,950	$49,950	$30,276	$44,220	$35,583
Estimated Central City Capture of Residents Disposable Income @ 50%	$12,956	$12,956	$16,650	$16,650	$20,353	$20,353	$24,975	$24,975	$15,138	$22,110	$17,792
Average Rent	$865	N/A	$1,110	N/A	$1,355	N/A	N/A	N/A	$1,010	N/A	$1,010
Average Home Value	N/A	N/A	N/A	$145,000	N/A	$175,000	N/A	$215,000	N/A	$190,686	$190,686
ECONOMIC IMPACT											
ONE-TIME Economic Impact of the Construction Project [1]											
Output (GDP)											
Direct Output	$1,771,000	$0	$1,167,250	$672,000	$402,500	$560,000	$0	$1,624,000	$3,340,750	$2,856,000	$6,196,750
Indirect Output	$926,834	$0	$610,868	$351,687	$210,644	$293,073	$0	$849,910	$1,748,345	$1,494,670	$3,243,015
Induced Output	$468,884	$0	$309,037	$177,916	$106,565	$148,264	$0	$429,964	$884,485	$756,144	$1,640,629
Subtotal -- Output	$3,166,717	$0	$2,087,155	$1,201,603	$719,709	$1,001,336	$0	$2,903,874	$5,973,581	$5,106,814	$11,080,394
Employee Earnings											
Direct Earnings	$360,483	$0	$237,591	$136,786	$81,928	$113,988	$0	$330,565	$680,002	$581,339	$1,261,341
Indirect Earnings	$372,049	$0	$245,214	$141,175	$84,557	$117,646	$0	$341,172	$701,819	$599,992	$1,301,811
Induced Earnings	$178,363	$0	$117,557	$67,679	$40,537	$56,399	$0	$163,557	$336,457	$287,635	$624,092
Subtotal -- Earnings	$910,895	$0	$600,362	$345,639	$207,022	$288,033	$0	$835,294	$1,718,278	$1,468,966	$3,187,244
Subtotal -- Output & Earnings Impact from the Construction Project	$4,077,612	$0	$2,687,517	$1,547,242	$926,730	$1,289,369	$0	$3,739,169	$7,691,859	$6,575,779	$14,267,638
ANNUAL Impact from Increased Household Spending [2]											
Output (GDP)											
Direct Output	$5,700,000	$0	$4,829,000	$1,998,000	$2,035,000	$2,035,000	$0	$7,243,000	$12,564,000	$11,276,000	$23,840,000
Indirect Output	$932,000	$0	$772,000	$320,000	$327,000	$327,000	$0	$1,162,000	$2,031,000	$1,809,000	$3,840,000
Induced Output	$312,000	$0	$252,000	$104,000	$109,000	$109,000	$0	$388,000	$673,000	$601,000	$1,274,000
Subtotal -- Output	$6,944,000	$0	$5,853,000	$2,422,000	$2,471,000	$2,471,000	$0	$8,793,000	$15,268,000	$13,686,000	$28,954,000
Employee Earnings											
Direct Earnings	$1,442,000	$0	$1,163,000	$481,000	$507,000	$507,000	$0	$1,804,000	$3,112,000	$2,792,000	$5,904,000
Indirect Earnings	$390,000	$0	$324,000	$134,000	$137,000	$137,000	$0	$488,000	$851,000	$759,000	$1,610,000
Induced Earnings	$123,000	$0	$100,000	$41,000	$43,000	$43,000	$0	$153,000	$266,000	$237,000	$503,000
Subtotal -- Earnings	$1,955,000	$0	$1,587,000	$656,000	$687,000	$687,000	$0	$2,445,000	$4,229,000	$3,788,000	$8,017,000
Subtotal -- Annual Output & Earnings Impact from Household Spending	$8,899,000	$0	$7,440,000	$3,078,000	$3,158,000	$3,158,000	$0	$11,238,000	$19,497,000	$17,474,000	$36,971,000
Total 20-Year Economic Impact	$182,057,612	$0	$151,487,517	$63,107,242	$64,086,730	$64,449,369	$0	$228,499,169	$397,631,859	$356,055,779	$753,687,638
Total 20-Year Economic Impact per Unit	$413,767	$0	$522,371	$525,894	$640,867	$644,494	$0	$787,928	$479,075	$698,149	$562,453
DEVELOPMENT COST (INVESTMENT)											
Total Development Cost per Unit	$132,000	$0	$132,000	$182,000	$132,000	$182,000	$0	$182,000	$132,000	$182,000	$151,030
Required Subsidy per Unit	$67,000	$0	$49,500	$62,500	$32,000	$38,000	$0	$8,500	$56,669	$26,990	$45,373
PER UNIT RETURN ON INVESTMENT											
20-Year Return on Total Development Cost per Unit ($)	$281,767	N/A	$390,371	$343,894	$508,867	$462,494	N/A	$605,928	$347,075	$516,149	$411,424
20-Year Return on Total Development Cost per Unit (%)	213%	N/A	296%	189%	386%	254%	N/A	333%	263%	284%	272%
20-Year Return on Subsidy per Unit ($)	$346,767	N/A	$472,871	$463,394	$608,867	$606,494	N/A	$779,428	$422,406	$671,158	$517,080
20-Year Return on Subsidy per Unit (%)	518%	N/A	955%	741%	1903%	1596%	N/A	9170%	745%	2487%	1140%

[1] that the majority of the construction impact will actually occur elsewhere throughout the region, since most of the construction workers will not live in the Central City and spend only a portion of their incomes there. Further, most of the materials, goods and services purchased for the construction project will be purchased from businesses located outside the Central City. The construction impacts presented here reflect only the estimated Central City capture of 3.5% of the total regional impact from the construction project(s), based on a review of the regional distribution of retail sales from the *Downtown Portland Retail Strategy* report by ERA in Apr

[2] *Downtown Retail Strategy* report and also takes into account the fact that a portion of the new residents will be persons who were already employed in the Central City and therefore were already spending a portion of their incomes there.

Sources: GVA Marquette Advisors; IMPLAN

RECOMMENDATIONS

The primary objectives of this analysis have been as follows:

- **Develop an estimate of the likely unmet demand for workforce housing in Central City Portland over the next five years.** (We estimate this figure to be approximately 1,340 units.)

- **Estimate the cost to construct workforce housing based on current development costs in the Central City.** (We estimate an approximate cost of about $151,000 per unit, on average).

- **Estimate the need for gap financing to support workforce housing.** (We estimate approximately a $45,000 per unit shortfall, on average, which can be offset in part by passive support mechanisms, as will be addressed in this section.)

- **Through the use of the IMPLAN model, estimate the economic impact of constructing workforce housing in the Central City.** (We estimate the benefits would equal about $563,000 per unit over 20 years).

- **Finally, develop recommendations to facilitate the creation of an implementation strategy to increase workforce housing construction in the Central City.**

Our research has lead us to the following recommendations which we believe will lead to the creation of a plan for increasing the construction of workforce housing in Central City Portland.

Educate

As documented in this report, the economic benefits associated with supporting workforce housing construction will have a lasting impact on the greater Central City economy, far outstripping the cost to construct the needed units. The full community, including citizens, the private market and the public sector, must be educated with respect to the real economic benefits associated with providing housing opportunities for households at all income levels.

There are some in the community who maintain that government programs and subsidies should be limited to the low-income household base, since this segment is the neediest. While this argument has merit, there are stronger counter-arguments rooted in the creation of a diverse Central City, one that is representative of the broader community. The social and economic ramifications of providing only low-income and upscale housing in the Central City mandate that the City of Portland take a pro-active stance in increasing housing opportunities for middle-income households. This analysis has shown that the development community will not be able to do so on its own.

The City of Portland has been exemplary in its efforts to create a vibrant and livable Central City through creative public-private development partnerships. Other cities have made note of these successes, and are now working to create vibrant downtowns of their own. The City of Portland

once again has an opportunity to lead the nation's cities by finding ways to increase the base of middle-income residents in the Central City. The first step in doing so should be to gain the support of city staff and elected officials by educating them with respect to the economic benefits of moving forward such an initiative.

A Streamlined Development Approval Process

Throughout this study, we have interviewed local and national developers who are building or have built housing in Central City Portland. In addition, we have clients throughout the country who are residential developers and investors with whom we have discussed Portland development trends. From these interviews, we know that there are developers who realize there is a largely unmet opportunity to construct workforce housing in Central City Portland. Several have noted, however, that a primary reason for Portland's inability to attract workforce housing development in the Central City, and more activity from large-scale national builders in general (who can often develop larger, more affordable projects at lower per-unit returns compared to small, local developers), is the city's reputation as a difficult place to do business. Some cite inconsistency in the process, and from planner to planner. Others note considerably higher city fees compared to other markets. Many indicated a great level of uncertainty regarding the city's objectives and inconsistency in the amount of up-front planning work and the time required to gain approvals. Inconsistencies and uncertainty have an impact on the bottom line from the perspective of a developer. In the end, this increases the cost to develop housing, which results in fewer development proposals at affordable price points.

We note, however, that several developers related to us that the development approval process has improved greatly during the past one to two years. The city should work to communicate these successes and promote itself as a more developer-friendly city, with a streamlined and consistent approval process.

A Collective Marketing Effort

Portland has attracted limited investment by large national developers as compared to some other similar-sized cities in the U.S. This is due in part to its reputation as a difficult city with which to do business. As noted above, the city should work to streamline the development approval process. It should also seek out opportunities to work in partnership with local and national developers to create workforce housing in the Central City, and then market its past successes and future opportunities nationally.

A successful campaign would likely result in an increase in both workforce housing demand and supply in the Central City, beyond the levels projected in this report. Developers recognize the need for middle-market housing products nationwide. The middle of the market is being squeezed in many markets; this is not just a Portland problem. Therefore, if Portland shows a strong commitment to workforce housing, through a streamlined process and a commitment of direct

subsidies and a variety of support mechanisms such as those outlined below, developers from throughout the country will take notice, and make an investment in workforce housing in Portland, along with the city. Portland can be a leader nationally in addressing this problem, if it can show a level of commitment to workforce housing production that is on par with its commitment to low-income housing. As documented in this report, the benefits associated with doing this will accrue to the both city and the private development community for years to come.

Implementation Plan

It is our opinion that the Portland Business Alliance in partnership with the Portland Development Commission should reach out to Central City and other community based advocacy groups regarding the economic benefits of housing as a vehicle for economic development, targeted population in-migration and job formation. This includes joint advocacy for housing's key role in supporting employment at all income levels and thus the necessity for a balanced approach that includes both affordable and workforce housing groups together. Support from organizations such as the City Club, the Housing and Community Development Commission, the Community Development Network and the Metropolitan Alliance for the Common Good and others is essential for the support for the implementation of a successful workforce housing incentive program. Demonstration of the direct and indirect economic benefits of housing at all income levels will be a key to sustained funding for housing programs and key to the development of any new housing funding sources.

The Portland Business Alliance and Portland Development Commission should identify streamlining issues, collective marketing opportunities, and incentive guidelines leading to an implementation plan similar to the Retail Strategies, identifying a timeline for progress reports, responsible parties and expectations.

Offsetting the Need for Direct Subsidies

We have noted an average shortfall of $45,000 per workforce housing unit needed to generate a 15% return to the development community. This equates to nearly $61 million for the projected unmet demand of 1,340 units. However, below we suggest several strategies for offsetting the need for direct subsidies totaling $45,000 per unit.

Tax Abatement

The primary support mechanism for supporting workforce housing is tax abatement. Tax abatement is an essential component of any public-private development partnership initiative. From information provided by PDC, we estimate that tax abatement actually equates to a savings of $15,000 per unit, on average, offsetting the subsidy requirement by 33%.

Tax Increment Financing (TIF)

We recommend that the city recommit TIF dollars to the creation of a workforce housing incentive program targeting 60% to 150% MFI households. In addition, any priorities for future TIF allocation in renewed or replacement districts should include workforce housing to respond to the market, capitalize on the return on investment identified in this report and address the city goals of income diversity within urban renewal districts. Annual investments in workforce housing will be most effective if integrated into a comprehensive economic development strategy focused on the preservation, maintenance and enhancement of family wage jobs, employment growth and employer attraction as direct or indirect benefit of all public capital spending by the city and other local, state and federal agencies. For example, synergy can be created between a workforce housing strategy and other public investments in transportation, transit, retail stabilization and small business growth. The availability of a critical mass of workforce housing in the Central City Area, in addition to existing urban lifestyle amenities already in place, will reinforce Portland's identity as a destination of choice for a desirable workforce population. A workforce population strategy targeted to a well educated 20-40 year old demographic group can be directly linked with public and private objectives to retain and attract small and entrepreneurial business growth.

A Streamlined & Consistent Approval Process & a Reduction in City Fees

We estimate that the combination of a streamlined, consistent approval process and a reduction in city fees could reduce the cost to develop workforce housing by as much as $5,000 per unit, another 11% reduction in the total $45,000 gap. A streamlined approval process will result in less city staff time spent on projects, as well as less time and real cost on the part of developers. A reduction in System Development Charges is warranted, considering the long-term economic benefits associated with adding workforce housing units in the Central City, as documented by this study.

Encourage Workforce Housing Construction by Large National Developers

A large share of recent developments in the Central City have been done by relatively small, local developers, generating returns of 15% on total development cost or more. Obviously, it makes good business sense for these developers to continue to focus on similar high-end projects, as long as market demand remains strong. However, the city should seek out opportunities with larger national developers with the financial capacity to construct large numbers of workforce housing units at lower per-unit returns, say in the 10% range. We estimate that the $45,000 per-unit subsidy requirement could be reduced by about $4,000 to $5,000 per unit, if the goal were to generate a 10% return on total development cost, rather than 15%. It is important to note, however, that in order for large-scale development to occur, the city must work in partnership with developers to identify larger tracts of land within the Central City which are ripe for development, as noted below.

Workforce Housing Target Areas

As documented in this report, the amount of gap financing required to support workforce housing varies significantly within the Central City. For example, we estimate an average per-unit subsidy requirement of about $52,000 in the Pearl District, compared to subsidy requirements ranging from $35,000 to $40,000 per unit on the Central East Side, Lloyd District and South Waterfront. Because of this, we recommend the development of plans for these areas which include considerable amounts of workforce housing. If large sites can be assembled in theses areas, there is an opportunity to construct workforce housing with much less direct subsidy from public sources, particularly if a developer can be identified who is willing to construct a large number of units at a 10% +/- return, rather than 15%.

Consider Smaller Units

The Mosaic Condos is a recent project which offers a unique product in Portland, with very small units and a distinctive urban-contemporary design. By offering smaller floor plans and providing no parking on site, the developer was able to offer several units at workforce-affordable price points. The Mosaic has successfully attracted price-sensitive buyers in spite of the fact that there is no on-site parking. The success of this project is evidence of the desirability of the Central City lifestyle, as buyers will forego a larger unit with parking elsewhere in the city or a suburban neighborhood. There is a lesson to be learned from this project and others with respect to unit sizes. From our interviews, we understand that smaller, more affordable units have been the first to sell among recent Central City projects. Price-sensitive workforce households with a strong preference for living in the Central City's urban environment (a growing share of the market we believe) will opt for a small unit there rather than purchase a home elsewhere in the region. Strong demand and appreciation of Central City housing also makes buying in this area an attractive investment.

ADDENDA

DEVEVELOPMENT FEASIBILITY MODELS

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($108,365)

SCHEDULE OF RETURNS	
Development Profit	($33,565)
Development Profit (%)	-31.0%

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($140,212)

SCHEDULE OF RETURNS	
Development Profit	($65,412)
Development Profit (%)	-46.7%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$43,500
Estimated Development Cost per Unit	($64,865)

SCHEDULE OF RETURNS	
Development Profit	$9,935
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$75,000
Estimated Development Cost per Unit	($65,212)

SCHEDULE OF RETURNS	
Development Profit	$9,588
Development Profit (%)	14.7%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($112,115)

SCHEDULE OF RETURNS	
Development Profit	($37,315)
Development Profit (%)	-33.3%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($141,712)

SCHEDULE OF RETURNS	
Development Profit	($66,912)
Development Profit (%)	-47.2%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$47,000
Estimated Development Cost per Unit	($65,115)

SCHEDULE OF RETURNS	
Development Profit	$9,685
Development Profit (%)	14.9%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$77,000
Estimated Development Cost per Unit	($64,712)

SCHEDULE OF RETURNS	
Development Profit	$10,088
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($124,615)

SCHEDULE OF RETURNS	
Development Profit	($49,815)
Development Profit (%)	-40.0%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($146,712)

SCHEDULE OF RETURNS	
Development Profit	($71,912)
Development Profit (%)	-49.0%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$60,000
Estimated Development Cost per Unit	($64,615)

SCHEDULE OF RETURNS	
Development Profit	$10,185
Development Profit (%)	15.8%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$82,000
Estimated Development Cost per Unit	($64,712)

SCHEDULE OF RETURNS	
Development Profit	$10,088
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($130,865)

SCHEDULE OF RETURNS	
Development Profit	($56,065)
Development Profit (%)	-42.8%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 60% to 80% of MFI
Average Rent: Say $865/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($149,212)

SCHEDULE OF RETURNS	
Development Profit	($74,412)
Development Profit (%)	-49.9%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$66,000
Estimated Development Cost per Unit	($64,865)

SCHEDULE OF RETURNS	
Development Profit	$9,935
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$10,380
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$10,880
Less: Allowance for 5% Vacancy	($544)
Equals: Effective Gross Income	$10,336
Less: Operating Expenses @ 40% of PGI	($4,352)
Equals: Net Operating Income	$5,984
Cap Rate	8.00%
Indicated Value per Unit	$74,800

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$84,500
Estimated Development Cost per Unit	($64,712)

SCHEDULE OF RETURNS	
Development Profit	$10,088
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($108,365)

SCHEDULE OF RETURNS	
Development Profit	($13,352)
Development Profit (%)	-12.3%

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($140,212)

SCHEDULE OF RETURNS	
Development Profit	($45,199)
Development Profit (%)	-32.2%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$26,000
Estimated Development Cost per Unit	($82,365)

SCHEDULE OF RETURNS	
Development Profit	$12,648
Development Profit (%)	15.4%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$58,000
Estimated Development Cost per Unit	($82,212)

SCHEDULE OF RETURNS	
Development Profit	$12,801
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($112,115)

SCHEDULE OF RETURNS	
Development Profit	($17,102)
Development Profit (%)	-15.3%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($141,712)

SCHEDULE OF RETURNS	
Development Profit	($46,699)
Development Profit (%)	-33.0%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$30,000
Estimated Development Cost per Unit	($82,115)

SCHEDULE OF RETURNS	
Development Profit	$12,898
Development Profit (%)	15.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$59,500
Estimated Development Cost per Unit	($82,212)

SCHEDULE OF RETURNS	
Development Profit	$12,801
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($124,615)

SCHEDULE OF RETURNS	
Development Profit	($29,602)
Development Profit (%)	-23.8%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($146,712)

SCHEDULE OF RETURNS	
Development Profit	($51,699)
Development Profit (%)	-35.2%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$42,000
Estimated Development Cost per Unit	($82,615)

SCHEDULE OF RETURNS	
Development Profit	$12,398
Development Profit (%)	15.0%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$64,500
Estimated Development Cost per Unit	($82,212)

SCHEDULE OF RETURNS	
Development Profit	$12,801
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($130,865)

SCHEDULE OF RETURNS	
Development Profit	($35,852)
Development Profit (%)	-27.4%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 80% to 100% of MFI
Average Rent: Say $1,110/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($149,212)

SCHEDULE OF RETURNS	
Development Profit	($54,199)
Development Profit (%)	-36.3%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$48,500
Estimated Development Cost per Unit	($82,365)

SCHEDULE OF RETURNS	
Development Profit	$12,648
Development Profit (%)	15.4%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$13,320
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$13,820
Less: Allowance for 5% Vacancy	($691)
Equals: Effective Gross Income	$13,129
Less: Operating Expenses @ 40% of PGI	($5,528)
Equals: Net Operating Income	$7,601
Cap Rate	8.00%
Indicated Value per Unit	$95,013

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$67,000
Estimated Development Cost per Unit	($82,212)

SCHEDULE OF RETURNS	
Development Profit	$12,801
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($108,365)

SCHEDULE OF RETURNS	
Development Profit	$6,860
Development Profit (%)	6.3%

Development Feasibility Analysis
Workforce Rental Housing
Central East Side
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($140,212)

SCHEDULE OF RETURNS	
Development Profit	($24,987)
Development Profit (%)	-17.8%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($15,000)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$8,500
Estimated Development Cost per Unit	($99,865)

SCHEDULE OF RETURNS	
Development Profit	$15,360
Development Profit (%)	15.4%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$40,000
Estimated Development Cost per Unit	($100,212)

SCHEDULE OF RETURNS	
Development Profit	$15,013
Development Profit (%)	15.0%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($112,115)

SCHEDULE OF RETURNS	
Development Profit	$3,110
Development Profit (%)	2.8%

Development Feasibility Analysis
Workforce Rental Housing
Lloyd District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($141,712)

SCHEDULE OF RETURNS	
Development Profit	($26,487)
Development Profit (%)	-18.7%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($18,750)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$12,000
Estimated Development Cost per Unit	($100,115)

SCHEDULE OF RETURNS	
Development Profit	$15,110
Development Profit (%)	15.1%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$42,000
Estimated Development Cost per Unit	($99,712)

SCHEDULE OF RETURNS	
Development Profit	$15,513
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($124,615)

SCHEDULE OF RETURNS	
Development Profit	($9,390)
Development Profit (%)	-7.5%

Development Feasibility Analysis
Workforce Rental Housing
Downtown District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($146,712)

SCHEDULE OF RETURNS	
Development Profit	($31,487)
Development Profit (%)	-21.5%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($31,250)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$25,000
Estimated Development Cost per Unit	($99,615)

SCHEDULE OF RETURNS	
Development Profit	$15,610
Development Profit (%)	15.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$47,000
Estimated Development Cost per Unit	($99,712)

SCHEDULE OF RETURNS	
Development Profit	$15,513
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Estimated Development Cost per Unit	($130,865)

SCHEDULE OF RETURNS	
Development Profit	($15,640)
Development Profit (%)	-12.0%

Development Feasibility Analysis
Workforce Rental Housing
Pearl District
Affordable to 100% to 120% of MFI
Average Rent: Say $1,355/month
Average Unit Size: Say 775 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Estimated Development Cost per Unit	($149,212)

SCHEDULE OF RETURNS	
Development Profit	($33,987)
Development Profit (%)	-22.8%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($37,500)
Direct Construction Costs @ $80 psf units + 15% common areas	($72,941)
Indirect @ 28% of Direct	($20,424)
Plus: Direct Subsidy	$31,000
Estimated Development Cost per Unit	($99,865)

SCHEDULE OF RETURNS	
Development Profit	$15,360
Development Profit (%)	15.4%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Potential Gross Rental Income	$16,260
Potential Gross Miscellaneous Income	$500
Potential Gross Income	$16,760
Less: Allowance for 5% Vacancy	($838)
Equals: Effective Gross Income	$15,922
Less: Operating Expenses @ 40% of PGI	($6,704)
Equals: Net Operating Income	$9,218
Cap Rate	8.00%
Indicated Value per Unit	$115,225

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $115 psf units + 15% common areas	($104,853)
Indirect @ 28% of Direct	($29,359)
Plus: Direct Subsidy	$49,000
Estimated Development Cost per Unit	($100,212)

SCHEDULE OF RETURNS	
Development Profit	$15,013
Development Profit (%)	15.0%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($160,222)

SCHEDULE OF RETURNS	
Development Profit	($23,922)
Development Profit (%)	-14.9%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($183,778)

SCHEDULE OF RETURNS	
Development Profit	($47,478)
Development Profit (%)	-25.8%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$42,000
Estimated Development Cost per Unit	($118,222)

SCHEDULE OF RETURNS	
Development Profit	$18,078
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$66,000
Estimated Development Cost per Unit	($117,778)

SCHEDULE OF RETURNS	
Development Profit	$18,522
Development Profit (%)	15.7%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($164,722)

SCHEDULE OF RETURNS	
Development Profit	($28,422)
Development Profit (%)	-17.3%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($185,278)

SCHEDULE OF RETURNS	
Development Profit	($48,978)
Development Profit (%)	-26.4%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$47,000
Estimated Development Cost per Unit	($117,722)

SCHEDULE OF RETURNS	
Development Profit	$18,578
Development Profit (%)	15.8%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$67,000
Estimated Development Cost per Unit	($118,278)

SCHEDULE OF RETURNS	
Development Profit	$18,022
Development Profit (%)	15.2%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($179,722)

SCHEDULE OF RETURNS	
Development Profit	($43,422)
Development Profit (%)	-24.2%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($190,278)

SCHEDULE OF RETURNS	
Development Profit	($53,978)
Development Profit (%)	-28.4%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$62,000
Estimated Development Cost per Unit	($117,722)

SCHEDULE OF RETURNS	
Development Profit	$18,578
Development Profit (%)	15.8%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$72,000
Estimated Development Cost per Unit	($118,278)

SCHEDULE OF RETURNS	
Development Profit	$18,022
Development Profit (%)	15.2%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($187,222)

SCHEDULE OF RETURNS	
Development Profit	($50,922)
Development Profit (%)	-27.2%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 80% to 100% of MFI
Average Sale Price: Say $145,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($192,778)

SCHEDULE OF RETURNS	
Development Profit	($56,478)
Development Profit (%)	-29.3%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$69,000
Estimated Development Cost per Unit	($118,222)

SCHEDULE OF RETURNS	
Development Profit	$18,078
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$145,000
Less: Brokerage Fees @ 6%	($8,700)
Net Income per Unit	$136,300

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$75,000
Estimated Development Cost per Unit	($117,778)

SCHEDULE OF RETURNS	
Development Profit	$18,522
Development Profit (%)	15.7%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($160,222)

SCHEDULE OF RETURNS	
Development Profit	$4,278
Development Profit (%)	2.7%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($183,778)

SCHEDULE OF RETURNS	
Development Profit	($19,278)
Development Profit (%)	-10.5%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$18,000
Estimated Development Cost per Unit	($142,222)

SCHEDULE OF RETURNS	
Development Profit	$22,278
Development Profit (%)	15.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$41,000
Estimated Development Cost per Unit	($142,778)

SCHEDULE OF RETURNS	
Development Profit	$21,722
Development Profit (%)	15.2%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($164,722)

SCHEDULE OF RETURNS	
Development Profit	($222)
Development Profit (%)	-0.1%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($185,278)

SCHEDULE OF RETURNS	
Development Profit	($20,778)
Development Profit (%)	-11.2%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$22,000
Estimated Development Cost per Unit	($142,722)

SCHEDULE OF RETURNS	
Development Profit	$21,778
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$43,000
Estimated Development Cost per Unit	($142,278)

SCHEDULE OF RETURNS	
Development Profit	$22,222
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($179,722)

SCHEDULE OF RETURNS	
Development Profit	($15,222)
Development Profit (%)	-8.5%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($190,278)

SCHEDULE OF RETURNS	
Development Profit	($25,778)
Development Profit (%)	-13.5%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$37,000
Estimated Development Cost per Unit	($142,722)

SCHEDULE OF RETURNS	
Development Profit	$21,778
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$48,000
Estimated Development Cost per Unit	($142,278)

SCHEDULE OF RETURNS	
Development Profit	$22,222
Development Profit (%)	15.6%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($187,222)

SCHEDULE OF RETURNS	
Development Profit	($22,722)
Development Profit (%)	-12.1%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 100% to 120% of MFI
Average Sale Price: Say $175,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($192,778)

SCHEDULE OF RETURNS	
Development Profit	($28,278)
Development Profit (%)	-14.7%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$45,000
Estimated Development Cost per Unit	($142,222)

SCHEDULE OF RETURNS	
Development Profit	$22,278
Development Profit (%)	15.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$175,000
Less: Brokerage Fees @ 6%	($10,500)
Net Income per Unit	$164,500

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$50,000
Estimated Development Cost per Unit	($142,778)

SCHEDULE OF RETURNS	
Development Profit	$21,722
Development Profit (%)	15.2%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($160,222)

SCHEDULE OF RETURNS	
Development Profit	$41,878
Development Profit (%)	26.1%

Development Feasibility Analysis
Workforce Ownership Housing
Central East Side
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($183,778)

SCHEDULE OF RETURNS	
Development Profit	$18,322
Development Profit (%)	10.0%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($18,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$0
Estimated Development Cost per Unit	($160,222)

SCHEDULE OF RETURNS	
Development Profit	$41,878
Development Profit (%)	26.1%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $60 psf	($6,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$8,000
Estimated Development Cost per Unit	($175,778)

SCHEDULE OF RETURNS	
Development Profit	$26,322
Development Profit (%)	15.0%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($164,722)

SCHEDULE OF RETURNS	
Development Profit	$37,378
Development Profit (%)	22.7%

Development Feasibility Analysis
Workforce Ownership Housing
Lloyd District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($185,278)

SCHEDULE OF RETURNS	
Development Profit	$16,822
Development Profit (%)	9.1%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($22,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$0
Estimated Development Cost per Unit	($164,722)

SCHEDULE OF RETURNS	
Development Profit	$37,378
Development Profit (%)	22.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $75 psf	($7,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$10,000
Estimated Development Cost per Unit	($175,278)

SCHEDULE OF RETURNS	
Development Profit	$26,822
Development Profit (%)	15.3%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($179,722)

SCHEDULE OF RETURNS	
Development Profit	$22,378
Development Profit (%)	12.5%

Development Feasibility Analysis
Workforce Ownership Housing
Downtown District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($190,278)

SCHEDULE OF RETURNS	
Development Profit	$11,822
Development Profit (%)	6.2%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($37,500)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$5,000
Estimated Development Cost per Unit	($174,722)

SCHEDULE OF RETURNS	
Development Profit	$27,378
Development Profit (%)	15.7%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $125 psf	($12,500)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$15,000
Estimated Development Cost per Unit	($175,278)

SCHEDULE OF RETURNS	
Development Profit	$26,822
Development Profit (%)	15.3%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 150 Units per Acre

Mid-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Estimated Development Cost per Unit	($187,222)

SCHEDULE OF RETURNS	
Development Profit	$14,878
Development Profit (%)	7.9%

Development Feasibility Analysis
Workforce Ownership Housing
Pearl District
Affordable to 120% to 150% of MFI
Average Sale Price: Say $215,000
Average Unit Size: Say 1,000 SF
Density @ 300 Units per Acre

High-Rise Construction

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Estimated Development Cost per Unit	($192,778)

SCHEDULE OF RETURNS	
Development Profit	$9,322
Development Profit (%)	4.8%

Mid-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($45,000)
Direct Construction Costs @ $100 psf units + 10% common areas	($111,111)
Indirect @ 28% of Direct	($31,111)
Plus: Direct Subsidy	$12,000
Estimated Development Cost per Unit	($175,222)

SCHEDULE OF RETURNS	
Development Profit	$26,878
Development Profit (%)	15.3%

High-Rise Construction with Direct Subsidy

DEVELOPMENT REVENUES per UNIT	
Sale Price per Unit	$215,000
Less: Brokerage Fees @ 6%	($12,900)
Net Income per Unit	$202,100

DEVELOPMENT COSTS per UNIT	
Land @ $150 psf	($15,000)
Direct Construction Costs @ $125 psf units + 10% common areas	($138,889)
Indirect @ 28% of Direct	($38,889)
Plus: Direct Subsidy	$18,000
Estimated Development Cost per Unit	($174,778)

SCHEDULE OF RETURNS	
Development Profit	$27,322
Development Profit (%)	15.6%

PROFILE OF
GVA MARQUETTE
ADVISORS

THE COMPANY

GVA Marquette Advisors is an international real estate counseling firm providing a broad array of specialized real estate advisory services. With a international practice and combined experience of over 50 years in all facets of the real estate industry, GVA Marquette Advisors is positioned to serve the global needs of institutional and corporate clients for real estate based advice and counsel.

We are committed to creating strategies to assist our clients in maximizing the potential of their real estate holdings. In an effort to focus on our clients' needs, we have evolved into six distinct groups, each of which offers differentiated services to clients with specialized real estate counseling needs. They are:

- The Residential Analytics Group
- The Hospitality Group
- The Aviation Group
- The Corporate and Investment Group
- The Valuation Group

The following paragraphs present an overview of the GVA's Residential Analytics Group, followed by the professional qualifications of Brent E. Wittenberg and Louis W. Frillman, the authors of this report.

Additional information on GVA Marquette Advisors other consulting groups is available at the following web address: www.gvamarquetteadvisors.com.

THE RESIDENTIAL ANALYTICS GROUP

The Residential Analytics Group provides a wide range of consulting and advisory services to residential real estate industry. GVA Marquette Advisors offers a team of experienced professionals to assist developers, lenders, designers and government officials to make informed decisions about the market potential and feasibility of existing or proposed residential projects.

With more than 25 years of experience, the Principals of GVA Marquette Advisors have been active participants in the financing, development, acquisition and disposition of al residential product types. Our professionals have made presentations on housing and economic impact issues at regional, national and international conferences in the United States and Canada.

Affordable and Workforce Housing Studies

GVA Marquette Advisors provides government agencies and housing authorities at the state and local levels with sophisticated evaluations not only of demographic and marketing trends, but also analysis of the economic impacts associated with increasing or merely maintaining current supplies of housing at various price/rent levels.

Project Feasibility Studies

GVA Marquette Advisors provide a wide-angle view of overall market conditions and demographic factors that will determine the success of residential development projects, coupled with a focused analysis of the competitive viability of a specific development. These studies, which often are used to secure financing, typically include the following:

- Site Analysis
- Draw Area Definition
- Demographic Analysis
- Competitive Market Conditions
- Financial Feasibility
- Conclusions and Recommendations

Economic and Social Impact

We regularly prepare estimates of the economic impact of individual development projects, businesses, or entire industries, including jobs created, wages and direct expenditures, tax revenue generated tourism impact and indirect impact or "multiplier effects".

Development Consulting

As fee-paid developers, GVA Marquette Advisors have executed programs for large residential parcels, including development conceptualization, programming, planning and sale for those owners and investors who require professional assistance to enhance and maximize their residential property assets.

Business Plans

GVA Marquette Advisors have developed business plans scaled for large single-family, multi-family and multi-use developments. We are expert at developing strategic plans required for successful implementation.

Appraisals

GVA Marquette Advisors offers a complete range of MAI appraisal products for all housing types throughout the country. Our valuations have been utilized to underwrite and support new developments execute re-merchandising strategies, assist in workouts of problem projects and complete acquisitions.

PROFESSIONAL QUALIFICATIONS OF BRENT E. WITTENBERG

Vice President
GVA MARQUETTE ADVISORS

Brent E. Wittenberg is vice president of GVA Marquette Advisors, a Minneapolis-based financial counseling firm providing comprehensive real estate consulting services to residential, retail, industrial, office, hospitality, entertainment and recreational developments.

Mr. Wittenberg has experience both as a real estate consultant and in city and regional planning. Prior to joining GVA Marquette Advisors, he worked as a research analyst with Maxfield Research Inc., a Twin Cities real estate research firm. He has also worked in land use planning with Region Nine Development Commission in Mankato, Minnesota and in community development at the City of Spartanburg, South Carolina.

Mr. Wittenberg has a diverse background and has completed numerous consulting assignments for income producing real estate developments. His assignments have included market analyses, feasibility studies, appraisals, and economic and fiscal impact studies. Brent is known as an expert in the field of real estate research and has evaluated numerous property types including multifamily housing, industrial warehouse and manufacturing facilities, office buildings, retail shopping centers, fuel stations and convenience stores, truck stops, community centers and health clubs, and aviation-related real estate operations such as hangar facilities and FBOs.

Brent is known as an expert on multifamily housing market trends and has provided articles for the *Minnesota Real Estate Journal* and *Heartland Business Real Estate* on this topic. He is also the author of a regular column focusing on the Minneapolis/St. Paul multifamily market for *The Advocate*, a publication of the Minnesota Multi Housing Association. Brent has spoken at Urban Land Institute conferences and seminars sponsored by The Minnesota Multi-Housing Association. He has been a guest lecturer at local universities. In addition, Mr. Wittenberg is quoted regularly in *The Business Journal of Minneapolis-St. Paul, Minnesota Real Estate Journal, The Minneapolis Star and Tribune, The Saint Paul Pioneer Press, Heartland Business Real Estate* and *Apartment Finance Today.*

Mr. Wittenberg holds a Master of City and Regional Planning Degree (MCRP) from Clemson University, where he was recognized by the American Institute of Certified Planners (AICP) for outstanding attainment in the study of planning. He earned a Bachelor of Arts Degree in Local and Urban Affairs at St. Cloud State University.

Mr. Wittenberg is a member of the Urban Land Institute, the Minnesota Multi-Housing Association, and the Sensible Land Use Coalition.

PROFESSIONAL QUALIFICATIONS OF LOUIS W. FRILLMAN

President
GVA MARQUETTE ADVISORS

Louis W. Frillman has been engaged in the real estate business nationwide since March 1975. During this time, he has developed skills in all areas of real estate practice including the acquisition, disposition, asset management, development, leasing, sale, financing, and valuation of industrial, commercial, and residential properties, including all major types of income-producing real estate. . Currently, Mr. Frillman is President of GVA Marquette Advisors, a national commercial real estate consulting firm.

GVA Marquette Advisors currently operates a national real estate counseling practice with offices in Minneapolis and Seattle. GVA Marquette provides comprehensive solutions to complex real estate problems and is practiced at managing and overseeing large real estate consulting projects nationwide. Mr. Frillman formerly was Executive Vice President of Marquette Partners, a 490 employee firm that managed and oversaw 45 million sf of investment properties of all types, including regional and community shopping centers nationwide, office properties and industrial investment and corporate portfolios.

In 1973, Mr. Frillman graduated from the College of St. Thomas with a Bachelor of Arts Degree in Finance. He has completed courses sponsored by the Society of Real Estate Appraisers, including Introduction to Real Property Appraisal and Course 10-1. He has also completed over a five–year period, Course 1B, Course 6, and Course 2, all case study courses presented by the Appraisal Institute. Mr. Frillman regularly attends professional educational seminars and has completed courses in a variety of related subjects including market feasibility analysis, syndication structure and analysis, subdivision development, the valuation of industrial real estate, the valuation of multiple-family properties, analysis of deminimus PUDs, methods of joint venture financing, valuation of business enterprises, and others.

In addition to attending courses in real estate, Mr. Frillman has lectured and taught real estate valuation for the University of St. Thomas and has been a guest lecturer at numerous continuing education seminars for the Law Board, NAIOP, American Society of Real Estate Counselors, and NACORE.

Mr. Frillman is a licensed and bonded real estate broker in the State of Minnesota and is an affiliate member of the National Association of Industrial and Office Parks (NAIOP), and served on the Legislative Committee of that association. He has also served as judge for the NAIOP "Awards of Excellence".

PROFESSIONAL QUALIFICATIONS OF LOUIS W. FRILLMAN - Continued

His community activities include being a full member of the Greater Minneapolis Board of Realtors, an member of the Urban Land Institute, a member of the National Trust for Historic Preservation, the Ramsey County Historical Society, the Ramsey Hill Association, and the Riverfront Development Committee of the Downtown Council of Minneapolis.

Mr. Frillman is a member of the American Society of Real Estate Counselors, the real estate counseling affiliate of the National Association of Realtors. He is an elected member of the Appraisal Institute, has served on the MAI Demonstration Appraisal Reports Committee nationally, and was a member of the Board of Directors for the local Institute Chapter as well as on the local admissions committee. He has also served as Chairman of the Candidate Guidance Committee.

He is an invited member of both the Real Estate Counselors (CRE) and Lambda Alpha, the international Land Economics Fraternity.

His charitable activities include eight years as board director of Catholic Charities for the Elderly. In that capacity, he served as development coordinator of Marion Center, a skilled care and assisted living care facility. He was responsible for coordinating all aspects of development including facility design and review, construction management, marketing programming, and ongoing management supervision.

He has completed counseling assignments dealing with significant decisions regarding real property utilized for real estate tax petitions, market feasibility and absorption analysis studies, valuations and disposition of major business properties, and investment analyses for acquisition of property by major pension accounts.

He has developed all types of income properties, and in addition, has developed single family custom housing. Finally, he has provided counsel to real estate buyers, sellers, investors and lenders concerning virtually all types of real estate.

Currently, he resides at 24642 SE 36th Ct, Issaquah, Washington. He and his wife maintain a pied' a tierre at Unit 1, 461 Holly, St. Paul, Minnesota. Mr. Frillman is married to the former Carol A Motsinger, and has four children.