

# DOWNTOWN OAKLAND DEVELOPMENT FEASIBILITY STUDY 

## FINAL REPORT

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## 1. Introduction

In early 2013, AECOM began work on the Downtown Oakland Development Feasibility Study for the City of Oakland's Department of Planning and Building. This project is conducted as part of AECOM's Smart Growth Technical Assistance master service agreement with the Metropolitan Transportation Commission (MTC).

As there have been a series of recent development feasibility studies ${ }^{1}$ in Oakland, primarily in the Lake Merritt area, the purpose of this study is to build on existing work to answer the following questions:

1. Given existing planning and economic conditions, is development in downtown Oakland feasible? What kind of development is feasible?
2. Is there potential to require a developer contribution, as suggested in previous reports? What should the scale of the contribution be?
3. Is there potential to implement development incentive and bonus programs? Which parts of downtown would it apply to, and what triggers or thresholds should be considered?

AECOM uses a static land residual analysis methodology which evaluates the feasibility of a project at stabilized occupancy. This point-in-time evaluation considers the remaining value, if any, after accounting for land value, development costs, and developer profits. The development feasibility analysis methodology builds an understanding of the relationship between location, planning parameters, building configuration, and feasibility, and highlights where potential incentive and bonus programs might be most useful to promote feasible development in the Downtown.

In order to evaluate the feasibility of development, as well as the potential for a developer contribution or incentive program, the City of Oakland identified three sites in Downtown Oakland, which are reflective of the Downtown sites mostly likely to be redeveloped. Sixteen scenarios, reflecting a mix of residential and office land uses as well as a mix of building heights were explored across the three sites. Once of the scenarios (1c) reflects a scenario in which land is provided free of charge, and the development relies on construction methods which allow for up to 15 percent savings.

A summary of the three sites and the various scenarios analyzed is presented in Figure 1 and Table 1 below.

[^0]Figure 1. Site Locations, Downtown Oakland, California


Source: AECOM
Table 1. Development Scenarios Summary

| Scenario | Site | Mixed Use (Retail / \&) | Low / High Rise (Construction Type) | Parking (Y/N) |
| :---: | :---: | :---: | :---: | :---: |
| 1a | 226 13th Street | Residential | Low (Type V) | Y |
| 1b |  | Residential | Low (Type V) | N |
| 1c ** |  | Residential | Low (Type V) | Y |
| 2a* |  | Residential | High (Type I) | $Y$ |
| $2 b^{*}$ |  | Residential | High (Type I) | N |
| 3 a | 301 19th Street | Residential | Low (Type V) | Y |
| 3 b |  | Residential | Low (Type V) | N |
| 4a* |  | Residential | High (Type I) | Y |
| 4b* |  | Residential | High (Type I) | N |
| 5 |  | Office | Low (Type III) | Y |
| 6* |  | Office | High (Type I) | $Y$ |
| 7 a | 2100 Telegraph Avenue and 495 22nd Street | Residential | Low (Type V) | Y |
| 7 b |  | Residential | Low (Type V) | N |
| $8 a^{*}$ |  | Residential | High (Type I) | Y |
| 8b* |  | Residential | High (Type I) | N |
| 9 |  | Residential -- Condo | Low (Type V) | Y |

## Source: City of Oakland, AECOM

* Indicates high-rise development / "a" indicates parking, "b" indicates no parking
** Scenario 1c represents a Chinatown development, with free land, and modular construction


## 2. Key Feasibility Findings

The development feasibility results support the findings of previous studies undertaken by the City of Oakland. The key findings of the current analysis include:

- Under today's market conditions, new development in Oakland is difficult, yet becoming increasingly more feasible- Of the sixteen evaluated scenarios, five currently break even (after developer profit). The five scenarios that are currently feasible include the four rental residential development scenarios on the Telegraph Avenue site, as well as the low-rise, parked residential scenario on the $19^{\text {th }}$ Street site. The Telegraph Avenue scenarios received premium rental rates due to their location, with the $19^{\text {th }}$ Street site evaluated with market-rate rates.
- Despite current market challenges, rental residential developments are projected to become increasingly attractive - While not all sites are currently feasible, attractive locations near a BART station and along accessible corridors show great promise for development as soon as next year (2014). Given current market assumptions, residential rental rates ranging from \$3.00 per square foot at sites commanding premium retail/commercial rates to $\$ 3.30$ per square foot in Chinatown (a 26 percent rate increase from current market conditions) would render the all the project scenarios feasible. Office lease rates would need to increase by up to 200 percent, to as much as $\$ 49.00$ per square foot, in order to make office projects feasible.

Given these primary findings, the following points review the differences among the development types:

- Residential developments are more feasible than office developments - Residential developments consistently perform better than commercial developments. For low-rise scenarios, the low-rise office building scenario is as infeasible as the least feasible residential site $\left(13^{\text {th }}\right.$ Street high-rise scenario $\left.2 b\right)$, while the high-rise office building is more than 2 times less feasible than high-rise residential.
- Feasible high-rise scenarios generate more revenue than low-rise, but low-rise scenarios are more readily feasible than high-rise - While few of the developments are feasible, high-rise development's attractiveness depends on the rental rate tipping point. The Telegraph Avenue scenarios, which benefit from a 10 percent rental premium assumption, represent the tipping
point between low-rise and high-rise feasibility. For the four rental residential Telegraph sites, the high-rise buildings generate more than 30 percent additional revenue than the low-rise scenarios. For sites with rental revenue assumptions below this 10 percent premium assumption, low-rise buildings are much more feasible than high-rise. Despite the Telegraph Avenue site's high-rise feasibility, for all scenarios, low-rise residential scenarios generated an average of 30 percent more value per gross floor area (GFA) and per unit than the high-rise scenarios. This is primarily due to the significant increase in construction costs associated with the transition from low-rise (type V) to high-rise (type I) residential development.
- Location matters - Of the three sites evaluated, the Telegraph Avenue site, with its favorable lease and rental rates is far and away the most feasible.
- Development contributions tied to high-rise development are becoming increasingly more viable as a significant as a potential source of income in strategic locations - Based on the feasibility analysis, high-rise development on large sites in premium locations (ex. Telegraph Avenue) are increasingly demonstrating the ability to support a public amenity contribution, as they generate larger returns than their low-rise counterpoints. For the four feasible scenarios on the Telegraph Avenue site, potential developer contribution ranges from $\$ 22$ to $\$ 27$ per GSF. It is important to note, however, that this potential reflects ideal location and rental conditions. This is still not the case for less-central sites, such as $22613^{\text {th }}$ Street, near Chinatown, or for all high-rise or commercial buildings. For those sites, developers will need to be creative to finance development under current conditions. Additional costs in the form of developer contributions on the $13^{\text {th }}$ Street and $19^{\text {th }}$ Street sites placed on new development would likely further stall new construction in Downtown, as either rental rates will need to climb to justify new construction, alternative construction methods will need to be used, or the cost of land will need to be reduced.
- Community benefit contributions can be small and incremental - As most locations in Downtown Oakland remain infeasible for future development, requiring significant developer contribution for high-rise residential buildings will further incentivize low-rise development. Rather, if rental housing continues to escalate above the rate of construction costs, the City could consider smaller developer contributions from across all residential projects, but below $3 \%$ of total development costs. As currently evaluated, the five feasible projects generate an average of 6 percent of development costs for possible contribution. However, it is not advised
to set community benefit requirements on the exception, as it will ultimately undermine typical development projects that do not have the specific advantages of a single site/location.
- Community benefit contributions should not be considered for commercial development. Under prevailing market conditions, private office development leasing levels are well below development costs. Additional costs placed on commercial development would only further delay new commercial construction and continue a market interest to build residential over commercial uses.
- Consider a development fee program over a density bonus program. The development feasibility analysis found that market forces already drive developers to low-rise development as wood frame construction (i.e. one story of concrete podium with five stories of wood-frame residential) is more profitable per dollar of investment and has lower capital risks. Additional costs placed specifically on high-rise development may further incentivize developers to build at lower densities, which, in turn could limit proceeds for community benefit. A development fee can be charged to all residential development regardless of height. It would neither incentivize low- or high-rise development but would set a reasonable nexus of developments' impact on community infrastructure, which the developer would offset through a predefined development impact fee.
- Chinatown development is difficult even under ideal situation - A test scenario (1c) was evaluated to understand the potential feasibility of a Chinatown site in which the land is provided free of charge, by a public entity or other agency, and the development relies on modular construction, resulting in residential construction cost savings of up to 15 percent. Even under these favorable conditions, scenario 1c is not currently feasible.

It is important to note that while the feasibility study demonstrates the challenges of new development, in the past few months there has been a growing amount of renovation and repurposing of existing buildings. This study does not review the feasibility of these types of projects, which can often pave the way for a more successful development atmosphere.

## COMPARISON OF KEY FINDINGS TO PREVIOUS REPORTS

In December of 2012, Strategic Economics completed a separate development feasibility study for the Lake Merritt Station Area Plan Area, entitled the Lake Merritt Station Area Plan Community Benefits Analysis. The Strategic Economics memorandum summarized some key findings, which continue to be very much in line with the findings presented in this report. The key findings of the Strategic Economics analysis include:

Table 2. Comparison of Findings with Previous Report

| Lake Merritt Station Area Plan Community Benefits Analysis (December 2012) | Downtown Oakland Development Feasibility Study (October 2013) |
| :---: | :---: |
| Under current market conditions, none of the development scenarios tested are financially feasible | Because the analysis was performed just shy of a year ago, the increase in rental revenue since that point has adjusted feasibility upwards, rendering just under half of the rental residential sites feasible. |
| Lower parking ratios may or may not improve development feasibility | This study reaches the same conclusion (see p.54) |
| The smaller parcels in the planning area will be more challenging to develop than larger sites of 1 to 2 acres. | The sites evaluated in this study range from 1.3 to 2.2 acres. No sites less than 1 acre were evaluated. However, it is generally understood that smaller sites can pose significant design challenges, which increase development costs and reduce expected revenue. |
| Significant increases in rents will be required for residential development to occur in the Plan Area. | The rental rates evaluated in the Strategic Economics Lake Merritt Analysis range from $\$ 2.03$ to $\$ 2.50$ per square foot, significantly lower than the $\$ 2.60$ to $\$ 3.20$ rates reviewed in this analysis. The rates evaluated in this report reflect a portion of the increase needed to support new development. The analysis demonstrates that the required rates are within the range presented in the Lake Merritt Analysis (\$3.00-\$3.35 compared to \$2.87 to \$3.73) |
| Low-rise wood frame construction will be the first building type to become feasible, likely followed by high-rise concrete and steel construction. | This study reaches the same conclusion (see p. 4) |
| The majority of development in the Lake Merritt Station Area over the next two decades will be low-rise rather than mid-rise or high-rise. | This study reviewed the entire Downtown area rather than the Lake Merritt Station Area, but did conclude that while low-rise is currently more feasible on less premium sites, the scale is slowly tipping to make high-rise development more attractive. |

Source: AECOM; "Lake Merritt Station Area Plan Community Benefits Analysis," Strategic Economics, December 2012.

## 3. Site Scenarios

In coordination with the City, AECOM has developed 16 site scenarios for evaluation. The scenarios vary by site, building use, and height, in order to tease out development differences between the variations.

## DEVELOPMENT SCENARIO FACTORS

Five varying development factors were considered in across scenarios:

1. Sites - three sites were used
2. Building uses - two mixed-use building types were applied
3. Building height - low-rise and high-rise developments were evaluated
4. Parking ratios - two parking ratios were applied to residential buildings
5. Rental vs. ownership - two leasing/ownership structures were explored

## SITES

As part of the study, the City identified three specific site locations within Downtown Oakland. The sites were chosen for their distribution throughout Downtown Oakland's Priority Development Area (PDA). Each of the three sites currently hosts a parking lot or parking garage, and is otherwise empty and represents a realistic development opportunity. The sites include:

1. $22613^{\text {th }}$ Street
2. $30119^{\text {th }}$ Street
3. 2100 Telegraph Avenue and $49522^{\text {nd }}$ Street

Figure 2. Site Locations, Downtown Oakland, California


All Sites, Downtown Oakland


301 19 ${ }^{\text {th }}$ Street

$22613^{\text {th }}$ Street


2100 Telegraph Avenue and $49522^{\text {nd }}$ Street

Source: AECOM

Figure 3. Low-Rise Mixed Use Development

## BUILDING USES

On the three sites, two building use mixes will be considered:

1. Mixed use - Retail / Rental Residential
2. Mixed use - Retail / Office


Source: AECOM (Tetsuya Yaguchi)

## BUILDING HEIGHTS

Additionally, because of findings from previous studies, particularly Strategic Economics' Lake Merritt Station Area Plan Community Benefits Analysis, completed in December 2012, only low and high rise buildings are considered. Mid-range buildings around 8 stories were identified as currently unfeasible in the Strategic Economics report. ${ }^{2}$ The following building heights are considered, allowing for type V wood-frame, low-rise residential buildings, type III low-rise office buildings, and type I construction-concrete frame, high-rise buildings. The four building heights reviewed are:

1. +/-65' (residential low-rise) - ranges from $50^{\prime}$ to $75^{\prime}$
2. $+/-85^{\prime}$ (office low-rise) - ranges from $40^{\prime}$ to $85^{\prime}$
3. $+/-175^{\prime}$ (residential high-rise)
4. $+/-240^{\prime}$ (residential and office high-rise) - ranges from $240^{\prime}$ to $270^{\prime}$

Figure 4. High-Rise Mixed Use Development (left) and Low-Rise Mixed Use Development (right)


Source: AECOM (Tetsuya Yaguchi)

[^1]
## PARKING RATIOS

Evaluating multiple parking scenarios is essential to this analysis due to the varied responses of stakeholders to the necessity of parking as a development component. While most of the developers who were interviewed for this report indicated that they would be hesitant to develop a property without adequate parking, particularly in areas that are less BART-accessible, the City of Oakland has also indicated that their staff has had recent conversations expressing the opposite - that the burden of developing parking on-site limits development potential. Evaluating two parking ratios also provides this analysis support for whether changes in required parking ratios can encourage development and increase feasibility.

In order to evaluate both development options, two parking ratio scenarios have been developed for each of the rental residential scenarios: a) one parking space per unit (1:1), and b) zero parking spaces per unit (0:1).

Figure 5. Low-Rise Live/Work Residential Development


Source: AECOM (Tetsuya Yaguchi)

For the residential units with no parking, the ground floor is built out as live/work lofts.

## RENTAL VS. OWNERSHIP

While previous market studies have indicated that the residential ownership market is currently not a viable one, there is increasing evidence that developers are revisiting ownership properties. The San Francisco Business Times recently published an article identifying four projects in Oakland that are currently selling new condominiums during the summer of 2013: two near Jack London Square, and two in Uptown Oakland, north of West Grand Avenue. ${ }^{3}$ Aside from these projects, however, there are few other condo buildings on the market in Oakland. Given the upswing in the San Francisco real estate market, the City of Oakland asked that one property on Telegraph Avenue be evaluated as an ownership scenario. Aside from the one Telegraph scenario, the rest of the residential development scenarios are all rental properties.

## DEVELOPMENT SCENARIOS

Table 3 summarizes the 15 development scenarios identified for review. While this study is primarily reviewing rental residential, AECOM has included two additional sites (4a and 8b), which provide more typical condominium parking ratios for comparison.

The following figures present conceptual designs and layouts for each of the 15 proposed scenario variations on the three opportunity sites. ${ }^{4}$ The building designs adhere to existing planning codes and restrictions. In addition to conceptual building floor plans and sections, massing diagrams representing the buildings on site are included to provide context and an understanding of how the types of development being proposed

[^2]compares to the existing neighborhoods. AECOM focused the retail on specific retail corridors rather than wrap the entire building in retail frontage. This is in response to the developer interviews which cautioned that 100 percent ground floor retail would drain the economic feasibility of the project.

It is also important to note that the proposed development scenarios are hypothetical. While they have been vetted with the City and with the real estate development community, any future development would be expected to follow current zoning and development standards, or design guidelines, which are subject to change.

Table 3. Development Scenarios Summary

| Scenario | Site | Mixed Use (Retail / \&) | Total Site Area (Sq. Ft.) | Base Building Height (Ft.) | Tower Height (Ft.) | Total Uses (GFA) |  |  |  | $\frac{\frac{\text { Total }}{\text { Live/Work }}}{\underline{\text { Units }}}$ | Total Residential Units | $\frac{\frac{\text { Residential }}{\text { or Office }}}{\frac{\text { Parking }}{\text { Ratio }}}$ | Total Parking Spaces |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { Retail } \\ & \text { (Sq. Ft.) } \end{aligned}$ | Office (Sq. Ft.) | Live I Work (Sq. Ft) | Residential (Sq. Ft.) |  |  |  |  |
| 1a |  | Residential | 59,727 | 70 | 0 | 18,500 | 0 | 0 | 203,300 | 0 | 200 | 1.0 | 199 |
| 1b |  | Residential | 59,727 | 70 | 0 | 15,300 | 0 | 26,600 | 217,900 | 17 | 214 | 0.0 | 0 |
| $1 \mathrm{c}^{* *}$ | $226 \text { 13th }$ |  | 59,727 | 70 | 0 | 18,500 | 0 | 0 | 203,300 | 0 | 200 | 1.0 | 199 |
| $2 \mathrm{a}^{*}$ |  | Residential | 59,727 | 50 | 270 | 18,500 | 0 | 0 | 368,700 | 0 | 365 | 1.1 | 397 |
| $2 b^{*}$ |  | Residential | 59,727 | 50 | 270 | 8,000 | 0 | 29,800 | 436,200 | 19 | 431 | 0.0 | 0 |
| 3 a |  | Residential | 57,935 | 70 | 0 | 14,200 | 0 | 0 | 184,100 | 0 | 175 | 1.0 | 183 |
| 3b |  | Residential | 57,935 | 70 | 0 | 15,400 | 0 | 16,700 | 220,000 | 11 | 211 | 0.0 | 0 |
| $4 \mathrm{a}^{*}$ | $301 \text { 19th }$ | Residential | 57,935 | 75 | 175 | 14,300 | 0 | 0 | 254,800 | 0 | 246 | 1.0 | 253 |
| 4b* |  | Residential | 57,935 | 75 | 175 | 20,300 | 0 | 6,000 | 263,900 | 4 | 257 | 0.0 | 0 |
| 5 |  | Office | 57,935 | 85 | 0 | 11,000 | 145,900 | 0 | 0 | 0 | 0 | N/A | 86 |
| 6* |  | Office | 57,935 | 40 | 240 | 10,600 | 387,100 | 0 | 0 | 0 | 0 | N/A | 196 |
| 7 a | 2100 | Residential | 93,334 | 70 | 0 | 12,700 | 0 | 11,300 | 326,900 | 7 | 323 | 1.0 | 337 |
| 7b | Telegraph | Residential | 93,334 | 70 | 0 | 16,200 | 0 | 40,000 | 330,900 | 26 | 323 | 0.0 | 0 |
| 8a* | Avenue and 495 | Residential | 93,334 | 75 | 175 | 19,000 | 0 | 0 | 456,000 | 0 | 446 | 1.0 | 465 |
| $8 \mathrm{~b}^{*}$ | 22nd | Residential | 93,334 | 75 | 175 | 20,300 | 0 | 33,700 | 488,100 | 22 | 479 | 0.0 | 0 |
| 9 | Street | Residential <br> - Condo | 93,334 | 70 | 0 | 12,700 | 0 | 11,300 | 326,900 | 7 | 323 | 1.0 | 337 |

Source: City of Oakland, AECOM

* Indicates high-rise development / "a" indicates parking, "b" indicates no parking
** Scenario 1c represents a Chinatown development, with free land, and modular construction - representing a $15 \%$ savings in construction costs
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Figure 6. Scenarios 1a and 1c (Mixed Use Residential with Parking, +/-65')


Podium Plan


Legend

- Elevator Core

Development Summary

| Retail | 18,500 sf |
| :--- | :--- |
| Residential | $203,300$ sf (200 units $)$ |
| Parking | $69,600$ sf (199 spaces $)$ |

Figure 7. Scenario 1a In Situ (Mixed Use Residential with Parking, +/-65')


Source: AECOM

Figure 8. Scenario 1b (Mixed Use Residential without Parking, +/-65')


Podium Plan

Legend
O Elevator Core
Development Summary

| Retail | $15,300 \mathrm{sf}$ |
| :--- | :--- |
| Live Work | $26,600 \mathrm{sf}$ |
| Residential | 217,900 sf (214 units) |

Figure 9. Scenario 1b In Situ (Mixed Use Residential without Parking, +/-65')


Source: AECOM

Figure 10. Scenario 2a (Mixed Use Residential with Parking, +/-240')


Legend
Elevator Core
Development Summary

| Retail | $18,500 \mathrm{sf}$ |
| :--- | :--- |
| Residential | 368,700 sf (365 units) |
| Parking | 139,200 sf (397 spaces) |

Figure 11. Scenario 2a In Situ (Mixed Use Residential with Parking, +/-240')


Source: AECOM

Figure 12. Scenario 2b (Mixed Use Residential without Parking, +l-240')


Legend

- Elevator Core

Development Summary

| Retail | 8,000 sf |
| :--- | :--- |
| Live Work | 29,800 sf |
| Residential | 436,200 sf (431 units) |

Figure 13. Scenario 2b In Situ (Mixed Use Residential without Parking, +/-240')


Source: AECOM

Figure 14. Scenario 3a (Mixed Use Residential with Parking, +/-65’)


Podium Plan

## Legend

O Elevator Core

## Development Summary

| Retail | 14,200 sf |
| :--- | :--- |
| Residential | 184,100 sf (175 units) |
| Parking | 64,000 sf (183 spaces) |

Figure 15. Scenario 3a In Situ (Mixed Use Residential with Parking, +/-65’)


## Source: AECOM

Figure 16. Scenario 3b (Mixed Use Residential without Parking, +/-65')


Podium Plan


## Legend

- Elevator Core

| Development Summary |  |
| :--- | :--- |
| Retail | 15,400 sf |
| Live Work | 16,700 SF |
| Residential | 220,000 sf (211 units) |

Figure 17. Scenario 3b In Situ (Mixed Use Residential without Parking, +/-65')


## Source: AECOM

Figure 18. Scenario 4a (Mixed Use Residential with Parking, +/-175')


Figure 19. Scenario 4a In Situ (Mixed Use Residential with Parking, +/-175')


Figure 20. Scenario 4b (Mixed Use Residential without Parking, +/-175')


Figure 21. Scenario 4b In Situ (Mixed Use Residential without Parking, +/-175')


Source: AECOM

Figure 22. Scenario 5 (Mixed Use Office, +/-85')



Podium Plan


Legend


| Development Summary |  |
| :--- | :--- |
| Retail | $11,000 \mathrm{sf}$ |
| Office | $145,900 \mathrm{sf}$ |
| Parking | $30,400 \mathrm{sf}$ (86 spaces) |

Figure 23. Scenario 5 In Situ (Mixed Use Office, $+/-85$ ')


Source: AECOM

Figure 24. Scenario 6 (Mixed Use Office, $+/-240^{\prime}$ )


Parking Deck and Tower Plan


Figure 25. Scenario 6 In Situ (Mixed Use Office, $+/-240$ ')


Source: AECOM

Figure 26. Scenario 7a (Mixed Use Residential with Parking, +/-65’)


Podium Plan


Figure 27. Scenarios 7a and 9 In Situ (Mixed Use Residential with Parking, +/-65')


Source: AECOM

Figure 28. Scenario 7b (Mixed Use Residential without Parking, +/-65')


Podium Plan


Figure 29. Scenario 7b In Situ (Mixed Use Residential without Parking, +/-65')


Source: AECOM

Figure 30. Scenario 8a (Mixed Use Residential with Parking, +/-175')


Podium Plan


Figure 31. Scenario 8a In Situ (Mixed Use Residential with Parking, +/-175')


Source: AECOM

Figure 32. Scenario 8b (Mixed Use Residential without Parking, +/-175’)


Podium Plan


Figure 33. Scenario 8b In Situ (Mixed Use Residential without Parking, +/-175')


Source: AECOM
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## 4. Development Assumptions

This section presents the relevant real estate market assessment and development assumptions that will be used in this study. The following assumptions were developed based on a review of current Oakland development feasibility reports, provided by the City; detailed interviews with developers active in Oakland; external data sources; and input from internal AECOM architecture and costing groups on typical planning, architecture, construction cost, and economic parameters. The following tables summarize the proposed development assumptions.

Many assumptions, such as floor heights, efficiency ratios, property tax assumptions, and architecture and engineering costs are based on typical industry standards. Meanwhile, other inputs such as land values, soft costs, and revenue assumptions are adjusted to reflect Oakland's market conditions.

Table 4. Basic Building Assumptions

|  | Number | Unit | Sources |
| :--- | ---: | :--- | :--- |
| Ground Floor Height | 15.0 | Feet | AECOM; Developer Interviews |
| Average Retail/Office Floor Height | 13.5 | Feet | AECOM; Developer Interviews |
| Average Residential Floor Height | 10.0 | Feet | AECOM; Developer Interviews |
| Average Residential Unit Size (Net) | 850 | Square Feet | AECOM; Developer Interviews |
| Average Live/Work Loft Unit Size (Net) | 1300 | Square Feet | AECOM |
| Average Parking Space Size | 350 | Square Feet | AECOM; Developer Interviews |
| Efficiency Ratios |  |  |  |
| $\quad$ Retail | $90 \%$ | Net as \% of Gross | AECOM; Developer Interviews |
| Office | $90 \%$ | Net as \% of Gross | AECOM; Developer Interviews |
| Residential | $85 \%$ | Net as \% of Gross | AECOM; Developer Interviews |
| Parking Ratios |  |  |  |
| Retail | 0.5 | $/ 1000$ SF | AECOM; Developer Interviews |
| Office | 0.5 | $/ 1000$ SF | AECOM; Developer Interviews |
| Residential | 1 or 0 | $/$ Residential Unit | AECOM; Developer Interviews, City |

Sources: Individual sources indicated in table
On the development side, key feasibility factors include building and parking construction costs. Parking alone can run upwards of $\$ 30,000$ to $\$ 50,000$ per space, depending on the type of construction or parking system.

Developers and AECOM's internal building costing group also acknowledge that there is a wide range of construction costs. For example, for a 65' residential building, hard costs range from a low of approximately $\$ 220$ per building square foot to as high as $\$ 380$ per square foot. There are numerous reasons for the variability, including the complexity and constructability of the site, whether it includes prevailing wage requirements, the quality of finishes envisioned, and contractor competitiveness. For the purposes of this study, a relatively favorable construction cost estimate has been applied. However, the sensitivity of
development inputs will be evaluated in the pro forma analysis (in the Development Sensitivity Analysis section on page 54) to understand the relative impact on the underlying development feasibility.

Table 5. Hard Cost Assumptions

|  | Number | Unit | Sources |
| :---: | :---: | :---: | :---: |
| Site Preparation Costs |  |  |  |
| Land Cost | \$50.00 | /Square Foot | Strategic Economics Lake Merritt Station Area Plan Community Benefits Analysis |
| Demolition Cost | \$5.00 | /Square Foot | AECOM |
| Site Work Cost | \$5.00 | /Square Foot | AECOM |
| Construction Costs from Development Scenarios |  |  |  |
| LEED Adjustment Factor | 3\% |  |  |
| 65' Base |  |  |  |
| Retail (Ground Floor) | \$250 | /Square Foot |  |
| Residential (Floors 2-6) - Rental | \$250 | /Square Foot |  |
| Residential (Floors 2-6) - Condo | \$260 | /Square Foot |  |
| 85' Base |  |  |  |
| Retail (Ground Floor) | \$280 | ISquare Foot |  |
| Office (Floors 2-6) | \$280 | /Square Foot |  |
| 175' Tower |  |  |  |
| Retail (Ground Floor) | \$275 | ISquare Foot | AECOM, Developer Interview |
| Residential (Floors 2-15) | \$275 | /Square Foot |  |
| 240' Tower |  |  |  |
| Retail (Ground Floor) | \$265-275 | ISquare Foot |  |
| Office (Floors 2-18) | \$275 | ISquare Foot |  |
| Residential (Floors (2-21) | \$265 | /Square Foot |  |
| Parking Costs |  |  |  |
| Podium Parking - Half Below Grade | \$20,000 | /Space |  |
| Podium Parking - Ground Floor / Above Grade | \$20,000 | /Space |  |
| Podium Parking - Mechanical System | \$30,000 | /Space |  |

Sources: Individual sources indicated in table

## Table 6. Soft Cost Assumptions

|  | Number | Unit | Sources |
| :---: | :---: | :---: | :---: |
| Architecture \& Engineering |  |  |  |
| 65' Base | 7.5\% | of Hard Costs | RS Means |
| 85' Base | 7.0\% | of Hard Costs | RS Means |
| 175' Tower | 6.5\% | of Hard Costs | RS Means |
| 240' Tower | 5.0\% | of Hard Costs | RS Means |
| Financing Costs |  |  |  |
| Construction Loan | 70\% | Loan to Cost | Developer Interviews, Commercial Real Estate Lender Interviews |
| Interest Rate | 5.50\% | of Cost | Developer Interviews, Commercial Real Estate Lender Interviews |
| Construction Term |  | Varies by size of the project | AECOM |
| Construction Term-65' and 85' Buildings | 18 | Months |  |
| Construction Term- 175' and 240' Buildings | 28 | Months |  |
| Loan Points | 0.5\% |  | Developer Interviews, Commercial Real Estate Lender Interviews |
| Drawdown Factor | 50\% |  | AECOM, Developer Interviews |
| Other |  |  |  |
| Property Taxes (including BID) | 1.25\% | of Total Costs | Alameda County Property Tax register |
| Building/Permitting/Impact Fees |  |  |  |
| Retail and Office | 10\% | of Total Costs | AECOM, Developer Interviews |
| Residential | \$20,000 | /Unit | AECOM, Developer Interviews |
| Overhead/Other | 3\% | of Total Costs | AECOM |
| Contingency | 5\% | of Total Costs | AECOM |
| Defect Liability Insurance - Condo Only | 2\% | of Hard Costs | AECOM |

Sources: Individual sources indicated in table

## Table 7. Developer Threshold Assumptions

|  | Number | Unit | Sources |
| :--- | :--- | :--- | :--- |
| Retail and Office Profit Requirements | $10 \%$ | of Total Costs | Strategic Economics Lake Merritt Station <br> Area Plan Community Benefits Analysis; <br> Developer Interviews |
| Rental Profit Requirements |  |  | of Total Costs | | Strategic Economics Lake Merritt Station |
| :--- |
| Area Plan Community Benefits Analysis; |
| Condo Profit Requirements |

Sources: Individual sources indicated in table
Operating costs and revenue assumptions were similarly developed based on local market research, and by building on work previously done by Strategic Economics. Vacancy rates for building uses are based on current values as well as trends over the past 5 to 10 years.

Table 8. Operating Costs Assumptions

|  | Number | Unit | Sources |
| :---: | :---: | :---: | :---: |
| Retail/Office Broker Fees | 5\% | of Lease | AECOM |
| Condo Broker/Marketing Fees | 4\% | of Unit Price | AECOM |
| Operating Expenses |  |  |  |
| Retail | \$0.10 | /Gross Sq. Ft. | AECOM; Developer Interviews |
| Office Full Service Lease Costs | \$0.60 | /Gross Sq. Ft. | AECOM; BOMA; Developer Interviews |
| Rental Residential | 28\% | of Gross Rental Revenue | Strategic Economics Lake Merritt Station Area Plan Community Benefits Analysis; Developer Interviews |
| Vacancy Rates (Stabilized) |  |  |  |
| Retail | 10.0\% | of Net Sq. Ft. | AECOM (CoStar) |
| Office | 10.0\% | of Net Sq. Ft. | AECOM (CoStar) |
| Residential | 5\% | of Net Sq. Ft. | AECOM (CoStar) |

Sources: Individual sources indicated in table

Revenue assumptions are based on rates for similar developments in Downtown Oakland, adjusted slightly upwards to reflect the premium that new developments can charge in a market. The average rate of $\$ 2.90$ per square foot translates to an average rent for 1 bedrooms of $\$ 2,195$, and an average rent across all units of $\$ 2,300$. This rental rate reflects market research as of August 2013, and does not include parking rental. Some of the higher end buildings surveyed present all-in rents, which include parking. For this feasibility study, parking rental is estimated to add an additional $\$ 0.15$ per square foot to the rental revenue, resulting in a total average rental rate of $\$ 3.05$ per square foot for buildings with parking.

In order to reflect variation in the market across Downtown Oakland, three different rental revenue prices are applied to the three developments, based on their location. The $13^{\text {th }}$ Street site is evaluated with rental revenues at 90 percent of area average, the $19^{\text {th }}$ Street site at 100 percent of area average, and the Telegraph Avenue site at 110 percent of the area average (Table 9, Table 10).

Table 9. Rental Rates for Units Across the Three Development Sites

| Unit Type | Current Estimated <br> Downtown Oakland <br> Rent | 13th Street | 19th Street | Telegraph <br> Avenue |
| :--- | :---: | :---: | :---: | :---: |
| 1 BD / 1 BA | $\$ 2,195$ | $\$ 1,940$ | $\$ 2,170$ | $\$ 2,390$ |
| $2 \mathrm{BD} / 2 \mathrm{BA}$ | $\$ 2,797$ | $\$ 2,940$ | $\$ 3,280$ | $\$ 3,620$ |
| $3 \mathrm{BD} / 2 \mathrm{BA}$ | $\$ 3,896$ | $\$ 4,070$ | $\$ 4,540$ | $\$ 5,010$ |
| Average | $\mathbf{\$ 2 , 3 0 0}$ | $\mathbf{\$ 2 , 2 1 0}$ | $\mathbf{\$ 2 , 4 6 0}$ | $\mathbf{\$ 2 , 7 2 0}$ |

Source: AECOM
In addition to the rental rate variations at the three sites, this study also assigns a 10 percent rental premium to high-rise tower units, which benefit from views not available to lower buildings.

## Table 10. Revenue Assumptions

|  | Number | Unit | Sources |
| :---: | :---: | :---: | :---: |
| Lease and Rental Rates - Average |  |  |  |
| Average Retail Lease Rate | \$25.00 | /SF/mo./NNN | AECOM (CoStar) |
| Average Office Lease Rate | \$32.00 | /SF/mo./Full Service | AECOM (CoStar) |
| Average Rent Per Sq. Ft. of Living Area | \$2.90 | /SF/Mo. | AECOM (August 2013), Downtown Oakland Rental Property Listings |
| Average Rent Per Sq. Ft. of Live/Work Area | \$1.60 | /SF/Mo. | AECOM |
| Revenue Premium for Towers | 110\% | /SF/Mo. | AECOM; Developer Interviews |
| Parking Revenue - Average |  |  |  |
| Office | \$120 | /Space/mo. | AECOM |
| Residential | \$90 | /Space/mo. | AECOM |
| Lease and Rental Rates - 226 13th Street |  |  |  |
| Average Retail Lease Rate | \$20.00 | /SF/mo./NNN | AECOM; Developer Interviews |
| Average Office Lease Rate | \$25.60 | /SF/mo./Full Service | AECOM; Developer Interviews |
| Average Rent Per Sq. Ft. of Living Area | \$2.60 | ISF/Mo. | AECOM; Developer Interviews |
| Average Rent Per Sq. Ft. of Live/Work Area | \$1.40 |  | AECOM |
| Parking Revenue - 226 13th Street |  |  |  |
| Office | \$120 | /Space/mo. | AECOM |
| Residential | \$90 | /Space/mo. | AECOM |
| Lease and Rental Rates - 301 19th Street |  |  |  |
| Average Retail Lease Rate | \$20.00 | /SF/mo./NNN | AECOM; Developer Interviews |
| Average Office Lease Rate | \$25.60 | /SF/mo./Full Service | AECOM; Developer Interviews |
| Average Rent Per Sq. Ft. of Living Area | \$2.90 | ISF/Mo. | AECOM; Developer Interviews |
| Average Rent Per Sq. Ft. of Live/Work Area | \$1.60 |  | AECOM |
| Parking Revenue - 301 19th Street |  |  |  |
| Office | \$120 | /Space/mo. | AECOM |
| Residential | \$90 | /Space/mo. | AECOM |
| Lease and Rental Rates - 2100 Telegraph |  |  |  |
| Avenue |  |  |  |
| Average Retail Lease Rate | \$27.50 | /SF/mo./NNN | AECOM; Developer Interviews |
| Average Office Lease Rate | \$35.20 | /SF/mo./Full Service | AECOM; Developer Interviews |
| Average Rent Per Sq. Ft. of Living Area | \$3.20 | /SF/Mo. | AECOM; Developer Interviews |
| Average Condo Sales Price Per Sq. Ft. of Living Area | \$500 |  |  |
| Average Rent Per Sq. Ft. of Live/Work Area | \$1.80 | ISF/Mo. | AECOM; Developer Interviews |
| Average Live/Work Condo Sales Price per Sq. Ft. | \$420 | ISF | AECOM |
| Parking Revenue - 2100 Telegraph Avenue |  |  |  |
| Office | \$120 | /Space/mo. | AECOM |
| Residential | \$90 | /Space/mo. | AECOM |
| Residential - For Sale | \$20,000 | / Space | AECOM |
| Capitalization Rates |  |  |  |
| Retail | 7.50\% | Cap Rate | Strategic Economics Lake Merritt Station Area Plan Community Benefits Analysis |
| Office | 7.50\% | Cap Rate | Korpacz 2010 4Q report - San Francisco Office Market Cap Rate |
| Residential (Uptown) | 5.00\% | Cap Rate |  |
| Residential (Chinatown) | 5.50\% | Cap Rate | Area Plan Community Benefits Analysis; |
| Residential Absorption Period - Base Building | 120 | Units / Year | Developer Interviews |
| Residential Absorption Period - Tower | 180 | Units / Year |  |
| Residential Absorption Period - Base Building Condo | 100 | Units / Year | AECOM |

Sources: Individual sources indicated in table

## 5. Feasibility Analysis

The following section reviews the detailed findings of the feasibility analysis and addresses the topics identified in the introduction.

The results of all pro forma analyses are provided in Appendix A.
The three Downtown Oakland sites evaluated range in size from 1.3 acres to over 2 acres. Given the large site sizes and convenient configuration, the evaluated scenarios reflect some of the more ideal development options in Downtown Oakland. As such, the findings presented in this report reflect optimistic potential. Smaller, more difficult sites are likely to be even less feasible. This finding is supported by the analysis done previously by Strategic Economics in the Lake Merritt Station Area Plan Community Benefits Analysis Memorandum (December 2012).

Unless otherwise noted, the results presented below reflect the all scenarios except development scenario 1c. Feasibility of scenario 1 c is reviewed at the bottom of this page, and in Figure 48.

## QUANTIFIED BONUS AND BENEFITS OVERVIEW

After accounting for developer profit (of 8\% on rental residential projects, $9 \%$ on the condominium project, and $10 \%$ on commercial projects), the fifteen projects generate revenues of up to $+\$ 14.0$ million, and losses of as much as $-\$ 95.3$ million, or +150 to $-\$ 1,645$ per square foot of land (Table 11, Figure 34). For residential scenarios, additional return per GFA, or "public benefit value" per GFA ranges from $+\$ 27$ to $-\$ 91$ (per square foot), while for office developments, the losses increase (and potential for public benefits decrease) to -\$204 to $\$-227$ per square foot (Table 11, Figure 35). These values indicate how much revenue above or below the breakeven point (after accounting for developer profit) a development would generate, or need to collect to be attractive to a developer/investor, and to allow for potential public benefit charges.

The five feasible scenarios, generate between $\$ 129$ and $\$ 33,000$ in additional revenue per unit. For the eight currently infeasible residential developments, there is an estimated gap of approximately - $\$ 97,000$ to -\$5,000 per unit, with scenario 2 a (high-rise, parked residential on $13^{\text {th }}$ Street) being the least feasible on a per unit measure. The average for all residential sites is roughly $\$ 21,500$ per unit (Figure 36). For the $13^{\text {th }}$ Street and $19^{\text {th }}$ Street development sites, the average drops to $-\$ 47,000$ per unit, a direct result of the lower estimated rental revenue rates applied to the scenarios.

These additional revenue calculations assumed a $\$ 50$ per square foot land cost. It is worth noting that land prices vary considerably from site to site in Downtown Oakland based on a number of factors, including the existing returns of the property, the landowner's perception of value, the landowner's appetite for risk, and the landowner's interest in selling in general. Under a zero land value scenario, all of the residential scenarios on the Telegraph site, as well as three scenarios on the $19^{\text {th }}$ Street site would become feasible.

Scenario 1c represents a potential Chinatown development in which land is granted free of charge by a public agency, and the construction relies on a modular approach, resulting in $15 \%$ construction cost savings. Accounting for developer profit, despite its cost savings advantages, scenario 1c still does not break even.

## Table 11. Feasibility Analysis Summary

| Scenario | Site | Mixed Use (Retail / \&) | Total Development Costs | Total Capitalized Revenue | Additional Return above Developer Profit Threshold ${ }^{5}$ | Additional Return/Total Project GFA |  | Additional Return/Leasable Building Square Foot |  | Additional Return/Unit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 a |  | Residential | \$83,761,400 | \$74,309,195 | -\$16,153,116 | -\$55 | 11 | -\$970 | 13 | -\$80,766 | 11 |
| 1b |  | Residential | \$91,932,796 | \$78,944,773 | -\$20,342,646 | -\$78 | 13 | -\$1,477 | 14 | -\$87,914 | 12 |
| $1 \mathrm{c}^{* *}$ | 13th |  | \$69,702,102 | \$74,309,195 | -\$969,074 | -\$3 | 7 | -\$58 | 7 | -\$4,845 | 8 |
| $2 a^{*}$ |  | Residential | \$165,689,011 | \$143,562,545 | -\$35,381,586 | -\$67 | 12 | -\$2,125 | 15 | -\$96,936 | 14 |
| $2 b^{*}$ |  | Residential | \$189,969,121 | \$162,246,330 | -\$42,920,320 | -\$91 | 14 | -\$5,961 | 16 | -\$95,276 | 13 |
| 3 a |  | Residential | \$74,893,653 | \$80,907,685 | \$22,540 | \$0 | 5 | \$2 | 5 | \$129 | 5 |
| 3b |  | Residential | \$89,045,850 | \$95,196,730 | -\$972,788 | -\$4 | 8 | -\$70 | 8 | -\$4,384 | 7 |
| $4 a^{*}$ |  | Residential | \$108,584,793 | \$114,773,803 | -\$2,497,773 | -\$7 | 9 | -\$194 | 9 | -\$10,154 | 9 |
| $4 \mathrm{~b}^{*}$ | 19th Street | Residential | \$108,076,317 | \$115,920,116 | -\$802,305 | -\$3 | 6 | -\$44 | 6 | -\$3,075 | 6 |
| 5 |  | Office | \$63,947,684 | \$27,810,208 | -\$42,532,244 | -\$227 | 16 | -\$301 | 11 | N/A | N/A |
| 6* |  | Office | \$157,163,681 | \$77,570,221 | -\$95,309,828 | -\$204 | 15 | -\$266 | 10 | N/A | N/A |
| 7 a |  | Residential | \$136,148,553 | \$158,054,611 | \$11,014,173 | \$24 | 3 | \$964 | 1 | \$33,337 | 1 |
| 7b |  | Residential | \$139,917,771 | \$160,996,028 | \$9,884,836 | \$28 | 1 | \$678 | 4 | \$28,311 | 3 |
| 8a* | Avenue and 495 | Residential | \$195,237,899 | \$224,898,474 | \$14,041,543 | \$22 | 4 | \$821 | 2 | \$31,483 | 2 |
| $8{ }^{\text {* }}$ |  | Residential | \$207,468,588 | \$237,701,027 | \$13,634,952 | \$27 | 2 | \$746 | 3 | \$27,214 | 4 |
| 9 |  | Residential Condo | \$141,755,297 | \$150,162,501 | -\$4,350,772 | -\$10 | 10 | -\$381 | 12 | -\$13,169 | 10 |

## Source: AECOM

* Indicates high-rise development
** Scenario 1c represents a Chinatown development, with free land, and modular construction - representing a 15\% savings in construction costs

[^3]Figure 34. Comparison of Additional Return above Developer Profit Threshold (\$) by Scenario


Source: AECOM

Figure 35. Comparison of Additional Return (\$) per GFA by Scenario


Source: AECOM

Figure 36. Comparison of Additional Return (\$) per Unit by Scenario


Source: AECOM

## HEIGHT-RELATED DEVELOPMENT BONUSES

Under current market conditions, development bonuses only work as a tool to generate public benefit in premium rental revenue locations (Telegraph Avenue). For the other sites, average area rents will need to increase by another 10 percent, holding all other costs constant, in order to support height-related bonuses. For residential developments, the significant cost differential between low-rise (Types III \& V) construction and high-rise (Type I) construction would not be recovered by rental rates, even with a development bonus. Office lease rates, which are currently lower than residential rates per GFA, make this offer even less attractive.

## LOW-RISE RESIDENTIAL FEASIBILITY

The Telegraph Avenue scenarios highlight the importance of premium rents, supported by location, in encouraging development. For the four feasible residential scenarios on the Telegraph Avenue site, high-rise developments generate roughly 30 percent more additional return than the low-rise scenarios, indicating that once projects tip the scale into feasibility, high-rise quickly begins to outpace low-rise, offering potential for community benefits.

## HIGH-RISE RESIDENTIAL FEASIBILITY

As discussed earlier, rents would need to increase by up to 30 percent on the $13^{\text {th }}$ and $19^{\text {th }}$ Street sites (holding construction and other costs constant) to compel developers to consider high-rise above low-rise development.

On the Telegraph Avenue site, the rental rates (10 percent above market) already support development of high-rise over low-rise.

## PARKING-RELATED DEVELOPMENT BONUSES

The City currently has modest parking requirements for new residential and commercial development. Residential multi-family developments require one parking space per unit, while retail and commercial developments have no parking requirements.

In order to evaluate the impact of the City's parking provision requirements on development feasibility, paired residential scenarios were developed in which one development provides a 1:1 parking ratio per unit, and another provides a 0:1 parking ratio per unit. It is important to note that interviews conducted with developers during this project indicate that a no-parking scenario is unlikely to be developed, as it does not reflect market conditions and competitive development strategies. Developers indicated that to achieve premium rents, new residential projects need to offer available on-site parking.

The non-parked projects proved to have lower returns than the parked scenarios because the net revenue per square foot decreased to the extent that the overall project returns were lower than the parked scenarios. In other words, the reduced marketability of the non-parked residential developments combined with offering lower revenue live/work units on the ground floors in place of parking offset the benefits of eliminating the parking.

It is important to note that in a previous version of this study, scenarios with reduced parking ratios, less than 1:1 were evaluated. In some cases, these scenarios were slightly more profitable than either the 1:1 parked scenarios or the 0:1 non-parked scenario. It's clear that there is an optimal middle ground in providing parking that may provide, given improved market conditions, an opportunity for development bonus. This is due, in part, because while parking can be a limiting factor in the number of residential units allowed to be developed, nonparked scenarios generally have an overall smaller floor plate, as area in between taller buildings is unusable as residential.

Parking configuration can be very site specific and allowing for flexibility in the provision of parking can increase development feasibility. Parking costs are considerably lower in a tuck-under parking environment rather than a multi-story parking solution. Underground parking can cost upwards of \$30,000 per space in hard costs and over $\$ 50,000$ per space total. Developers that are able to introduce lifts and stay at a ground level parking configuration save considerably more than developers forced to build multilevel parking structures either above or below ground. Also, stand-alone parking structures are significantly cheaper per square foot than structured parking within a given building due to the structural requirements needed for in-building construction.

As a result, non-parked scenarios have on average 15 percent smaller GFAs than the parked scenarios. By reducing the parking requirement, but not eliminating it all together, developers would be able to take advantage of useless space, converting it to parking on the lower levels, generating some additional amount of revenue. Unfortunately, given the nature of this analysis, the exact ideal parking ratio varies for each development and site, and is not standardized.

## Community Benefits and On-site Public Amenities

At current market levels, the provision of a community benefit, or on-site public amenity, is really only possible for a premium site, premium rental rate scenario.

## DEVELOPMENT SENSITIVITY ANALYSIS

Due to the wide variance in development costs, revenues, and building scenarios, a sensitivity analysis was conducted to determine whether the proposed projects' feasibility and public benefit capacity would be affected
by changes in the market. Five aspects of project feasibility as well as one combination scenario were reviewed:

1. Construction costs (+/-15\%)
2. Developer thresholds (+/-15\%)
3. Project revenues $(+15 \%,+30 \%)$
4. Decrease of construction costs by $15 \%$, and an increase in project revenues by $15 \%$
5. Land values discussion

The values associated with the sensitivity ranges are summarized in Appendix B in Table 13 - Table 15. In each of the following sections, 100 percent reflects the value of each input assumed in the original baseline feasibility analysis.

In general, marginal changes in costs, profit, and revenue do not significantly alter the viability of the reviewed scenarios. As the most feasible of the fifteen scenarios, the feasibility of the three residential developments on the Telegraph Avenue site are most affected by changes in the market conditions.

## PROJECT CONSTRUCTION SENSITIVITY

As discussed under the development assumptions, construction costs can vary considerably from site to site. AECOM modeled variances of up to 15 percent to consider potential changes in development feasibility. The results reflect the developments' susceptibility to construction cost changes, and the importance of location.

These results support the initial findings that the Telegraph Avenue residential site is most viable. While a 15 percent increase in costs would render all projects infeasible, a 15 percent decrease in costs results in the Telegraph Avenue as well as the $19^{\text {th }}$ Street sites generating profit and potential for community benefit charges (Figure 37).

Figure 37. Impacts of Construction Costs on Additional Revenue per GFA


Source: AECOM

## DEVELOPER THRESHOLD SENSITIVITY

The expected developer return for the scenarios range from 10 percent for office developments to 8 percent for rental residential. As discussed earlier, developers have different thresholds in considering a site for development. Adjusting these profit assumptions up and down by 15 percent $^{6}$ (Appendix B - Table 14) has minimal impacts on overall project feasibility and the expected amount available for public benefits. The change in the amount "available" for public benefits per building GFA also stays within $+/-5$ percent of the original value (Figure 38) for most sites.

Figure 38. Impacts of Developer Threshold on Additional Revenue per GFA


Source: AECOM

[^4]
## REVENUE SENSITIVITY

Of the three input categories reviewed, adjustments in revenue assumptions (Appendix B - Table 15) have the largest impact on development feasibility and the potential for public benefit contributions. A 15 percent increase in revenue renders not only the Telegraph Avenue development site feasible, but also all of the average-rent $19^{\text {th }}$ Street development scenarios. A 25 to 30 percent increase in revenue (with all other costs being held constant) brings the Telegraph Avenue condominium project as well as the two low-rise residential developments on the $13^{\text {th }}$ Street site within range of viability (Figure 39). This translates to a rent of $\$ 3,400$ to $\$ 3,600$ for an average 2 bedroom/2 bath apartment of roughly 1,130 square feet - up from an average rent of $\$ 2,800$ for a similar unit today. Note that a 30 percent increase in rents over the next three years is a possibility considering the rate of rent inflation in the larger metropolitan area. In Alameda County overall, rents have increased at approximately 8 percent per year for the last two years. ${ }^{7}$ Most recent estimates show rents increasing by roughly +5 percent in the East Bay since January of this year, although some developments have increased rents by more than 10 percent in the same time period.

Figure 39. Impacts of Revenue Assumptions on Additional Revenue per GFA


[^5][^6]
## CONSTRUCTION COSTS AND PROJECT REVENUES

In addition to the impacts of individual assumptions presented above, the combined impact of a decrease in construction costs by 15 percent and an increase in project revenue by 15 percent was evaluated. This analysis is meant to reflect what may be closer to anticipated market conditions in the coming months. The scenario results in all rental residential scenarios becoming feasible. These favorable conditions also reflect a tipping point between the feasibility of low-rise against high-rise as well as the point where a no-parking scenario becomes more attractive than a parked scenario.

Figure 40. Impacts of Decrease in Construction Costs (85\%) and Increase in Revenue (115\%)


## Source: AECOM

## LAND VALUES

With land valued at an average price of $\$ 50$ per square foot, land for the fifteen projects represents between 2 and 5 percent of the total project costs. If the cost of land were eliminated entirely ( $\$ 0$ per square foot), all of the five Telegraph Avenue development scenarios would become feasible, with between $\$ 0.5$ to $\$ 4.5$ million becoming "available" as additional revenue about the developer profit threshold. The $13^{\text {th }}$ and $19^{\text {th }}$ Street sites would remain infeasible. If the land value were doubled, to $\$ 100$ per square foot, to a value closer to what developers suggested might be charged on good development sites, the feasibility drops significantly, with even the most "feasible" development scenario, 7a on the Telegraph Avenue site experiencing an increase in infeasibility by $\$ 6$ million. Such an increase would delay development feasibility in Downtown Oakland, especially in Chinatown where current conditions are below development feasibility thresholds.

## DEVELOPMENT THRESHOLDS FOR PUBLIC AMENITIES

Summarizing the lessons learned from the above analyses, the following section outlines the revenue conditions under which residential and office uses will become profitable, as well as estimates of when such developments might become feasible, given projected revenue and construction cost trends.

## RESIDENTIAL USES

For residential developments, excepting particularly ideal locations (such as the Telegraph Avenue site) that may command higher rental rates, high-rise (type I) construction will not currently generate adequate returns to support a public amenity. Among low-rise development, variations in site area do not appear to affect the project's viability or ability to support a public amenity.

For residential developments, excepting particularly ideal locations (such as the Telegraph Avenue site) that may command higher rental rates, high-rise (type I) construction will not currently generate adequate returns to support a public amenity. Among low-rise development, variations in site area do not appear to affect the project's viability or ability to support a public amenity.

As noted previously, with all else held constant, premium location scenarios (Telegraph Avenue) could currently support a public benefit fee or community amenity request for high-rise projects. Scenarios that command lower rents, however, need revenues to rise by as much as 30 percent to justify the higher cost of high-rise development. This indicates that while a public benefit fee associated with high-rise development may not yet be a solution for all sites, it is becoming viable at key locations in Downtown.

## OFFICE USES

Because office is currently less feasible than residential, no thresholds for public amenity support were found. Office lease revenue would need to increase by between 85 and 105 percent (assuming stable assumptions) to consider charging a public benefit fee.

## PROJECTED DEVELOPMENT FEASIBILITY

In order to understand the point at which developments in Downtown Oakland are expected to become feasible, and thus support the potential for a development bonus or community benefit, an analysis of capitalized income over time was prepared. The analysis (Table 12) projects revenue and construction cost growth rates forward, holding all other assumptions and variables constant.

## Table 12. Projected Growth Rates for Feasibility Assessment

|  | Year-over-Year |
| :--- | :---: |
| Construction Index $^{1}$ | $3 \%$ |
| Rental Rate Increase $^{2}$ | 8\% through 2014 |
| Condominium Sales Increase $^{3}$ | 4\% from 2015 through 2023 |
| Office Lease Rate Increase |  |

[^7]The following scenarios are compared over time to understand how changes in the market affect development type feasibility:

- Low-rise vs. high-rise residential developments (Figure 41)
- Low-rise residential scenario range, with and without parking development (Figure 42)
- High-rise residential scenario range, with and without parking development (Figure 43)
- Rental residential vs. condominium (ownership) development (Figure 44)
- Office low-rise vs. high-rise range (Figure 45)

Figure 41 highlights the difference between the most and least feasible low- and high-rise developments. As it is currently, the least feasible for both low- and high-rise scenarios are the 0:0 parking ratio developments. It should be noted again, that the 0:0 parking ratio is likely not marketable in a residential development. The figure also shows, that for the feasible Telegraph Avenue site, high-rise development has already passed the threshold into increased feasibility over low-rise, and will only continue to grow, as an increase in rents start to tip the scale towards larger residential developments. For the less-feasible scenarios, however, low-rise remains the preferred development type.

Figure 41. Projected Development Feasibility - Low-rise vs. High-rise


Source: AECOM

* Light lines indicate low-rise developments, dark lines indicate high-rise developments. Solid lines indicate developments with 1:1 parking ratio, dashed lines indicate developments with 0:1 parking ratio

Among the low-rise scenarios, again, less competitive locations ( $13^{\text {th }}$ Street), a projected increase in rents over the next ten years is not able to combat relatively lower rates, combined with rising construction costs (Figure 42). Interestingly enough, on the Telegraph Avenue site, a no-parking scenario becomes more attractive than a parked scenario within just three years, based on assumed growth rates. This indicates an opportunity for revisiting the use of parking regulations as a potential development bonus.

Figure 42. Projected Development Feasibility - Low-rise Scenario Range


Source: AECOM

* Light lines indicate low-rise developments, dark lines indicate high-rise developments.

Solid lines indicate developments with 1:1 parking ratio, dashed lines indicate developments with 0:1 parking ratio

Among the high-rise scenarios, again, location and the ability to charge premium rents makes all of the difference (Figure 43). Again, on the Telegraph Avenue site, a no-parking scenario becomes more attractive than a parked scenario within less than two years, based on assumed growth rates. Unfortunately, for less competitive locations, this trajectory takes much longer, and a parking ratio bonus might take many more years to become an effective tool.

Figure 43. Projected Development Feasibility - High-rise Scenario Range


Source: AECOM

* Light lines indicate low-rise developments, dark lines indicate high-rise developments.

Solid lines indicate developments with 1:1 parking ratio, dashed lines indicate developments with 0:1 parking ratio

While condominium properties are not supported in current market conditions, the projections indicate that, if current trends continue, even at somewhat conservative rates, for sale housing may become feasible within the next few years (Figure 44).

Figure 44. Projected Development Feasibility - Rental vs. Condominium


## Source: AECOM

* Light lines indicate low-rise developments, dark lines indicate high-rise developments.

Solid lines indicate developments with 1:1 parking ratio, dashed lines indicate developments with 0:1 parking ratio

Finally, given the challenging office market in Downtown Oakland over the previous years, even with an aggressive growth in lease rates compared to the past five and ten years (4 percent), office development in Downtown Oakland remains currently infeasible (Figure 45). Just as important, office rents continue to lag behind residential rents, which means that developers will be motivated to build housing over office if given an option.

Figure 45. Projected Development Feasibility - Office Scenarios


## Source: AECOM

* Light lines indicate low-rise developments, dark lines indicate high-rise developments.


## 6. Developer Strategies for Increasing Feasibility

The pro forma findings described above assume typical development inputs and average revenue assumptions for new product, be it residential, retail, or office. Developers are often challenged with project feasibility in the planning stage and use a number of strategies to improve the viability of a potential project. These include:

1. Decreasing unit sizes for rental product to achieve higher rents per square foot. This works best in student markets but economizing on the square footage per bedroom in general can increase yield as rents are more driven by bedrooms than square feet.
2. Change the unit mix to increase the number of smaller units, which generally command higher rents per square foot. Studio and one-bedroom apartments have traditionally commanded higher rents per square foot than two- and three-bedroom apartments.
3. Increase building efficiency and limit non-leasable area by reducing building circulation and assigning a share of non-leasable area to the tenant (i.e. traditionally only considered in commercial developments).
4. Reduce the parking to the extent feasible, recognizing that each parking space can cost more than $\$ 25,000$. Note that market constraints may limit the amount of parking a developer can reduce. If a project provides no parking, it often commands lower rents because the majority of middle- and high-income renters in the East Bay own cars.
5. Reconfigure parking design to lift parking which -in certain cases- allows developers to accommodate parking at one level versus multiple levels that require additional circulation and associated costs.
6. Actively manage and reduce construction costs through a number of methods such as in-house contractors, pre-negotiated building inputs, novel modular construction practices, and typical value engineering. ${ }^{8}$

[^8]7. Partner with the landowner to reduce developer upfront costs, including financing, or a lower land cost, which could help make development more feasible.
8. Command premium rents above surrounding competition based on the quality of the product, design, and available amenities. For example, developers can often justify higher rents for view premiums of tower buildings. Assuming premium rents is a difficult strategy and overly optimistic assumptions can ultimately undermine the success of the project.

In most cases, developers are considering all of the above options -and more- in each project not only to maximize profitability, but also to justify the development to potential investors. Regardless, AECOM does not recommend considering these development exceptions in a public benefit analysis as it can overstate the potential benefit when many of these exceptions would not apply to a given project. Furthermore, projects can also have an equal if not greater chance of higher development costs than modeled due to landowner land value expectations, site configuration constraints, additional infrastructure needs, site clean-up requirements, entitlement constraints, increased financing requirements, escalating construction costs, and a number of other factors that can ultimately undermine the economic feasibility of a project.
asking price to be used as dorm rooms. "Small is beautiful for Patrick Kennedy's micro units." San Francisco Business Times, 7 June 2013. http://www.bizjournals.com/sanfrancisco/blog/real-estate/2013/06/patrick-kennedy-to-sell-micro-units.html?page=all

Urban Core, a San Francisco developer, also has plans for a high-rise modular project in Downtown Oakland. According to CEO Michael Johnson, Urban Core expects to save roughly 10 to 20 percent in construction costs by using modular units. In addition to cost savings, Mr. Johnson has also noted that a reduced on-site construction schedule also leads to minimized neighborhood impacts from construction. Additionally, factory-constructed units have allowed for a greater range of finishes and materials, and provide greater construction precision. Urban Core is currently using a similar modular technology in a high-rise building in San Diego. Phone call with Michael Johnson of Urban Core. 16 September 2013.

## 7. Conclusion

This analysis clearly indicates that under current market conditions, development of both residential and office buildings remains challenging but are improving. While the findings of this study do not yet endorse public amenity charges in Downtown Oakland, it is important to keep in mind that developers are constantly reconsidering the feasibility of multifamily projects in the Downtown area. Under specific conditions and with certain development advantages, developers are finding ways to make their projects work. The findings also show that requiring public benefit payments on high rise development is unlikely to generate significant revenue in the next five years because it will remain more economically advantageous to build low rise residential. As market conditions improve, the potential for a public benefit fee or provision should be revisited.

To this end, the City should continue to monitor rental rates as well as construction cost fluctuations in Downtown Oakland to determine when such programs may become viable. Rental rates have grown at an average of 8 percent per year for the past two years in the East Bay ${ }^{9}$ and such growth offers significant momentum for increase in development feasibility. Even since the beginning of this study, in February of 2013, the rate of change in the market has been unpredictable. While, on average, rental rates in the East Bay have increased roughly 4 percent in the past six months ${ }^{10}$ some developments, such as the Grand in Downtown Oakland have increased rents by as much as 17 percent over the past six months. ${ }^{11}$

It should be noted, however, that as developers wait for market conditions in Oakland to improve enough to support new development, there are a few items that the City of Oakland can work on to simultaneously reduce risk and increase ease of development. Key improvements include:

- Improving planning staffing levels, and therefore adding responsiveness to permitting applications and approval timing;
- Continuing to encourage amenity development and retail opportunities, particularly along key corridors that are most primed for development;
- Increasing government responsiveness to community problems and nuisances;
- Developing a comprehensive development fee schedule to provide better economic certainty;
- Generating a development pipeline report to increase awareness of new projects and to allow for more predictable absorption;

[^9]- Consider forming special assessment districts which would pay for community improvements over time rather under a single one-time payment;
- Consider adopting a development impact fee program that would charge all new residential development regardless of height, which would result in no bias towards low-rise or high-rise development;
- Enhancing the BART system through additional transit connections to increase accessibility and connectivity; and
- Continue to enhance Oakland's image and further vibrancy of its Downtown.

Such improvements will help make Oakland more attractive to new development and will better prepare it for the point when market conditions change.

## Appendix A - Development Scenario Static Pro Forma Summaries

Figure 46. Static Pro Forma - Scenario 1a (Mixed Use Residential with Parking, +/-65')

| Development Program (Scenario 1a-226 13th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 59,727 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 4.88 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | - | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 56,600 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 18,500 | Square Feet |
| Gross Retail Area in Base | 18,500 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 16,650 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower |  | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 203,300 | Square Feet |
| Gross Residential Area in Base | 203,300 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Net Residential Unit Space | 172,805 | 22\% Efficiency |
| Total Units | 200 | Units |
| Residential Absorbtion Period | 20 | Months |
| Parking |  |  |
| Total Parking Area | 69,600 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 198 | Spaces |
| Podium Parking - Half Below Grade | 99 | Spaces |
| Podium Parking - Ground Floor / Above Grade | 99 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 198 | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |  |
| :---: | :---: | :---: |
| Average Capitalized Revenue per GFA |  | \$255 |
| Capitalized Revenue by Buliding Use per GFA |  |  |
| Retail |  | \$256 |
| Office |  | N/A |
| Residential |  | \$323 |
| Parking |  | \$56 |
| Square Feet Available for Community Benefit |  | -63,344 |
| Community Benefit Space as \% of GFA |  | -22\% |
| Sensitivity Analysis |  |  |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs |  |  |
| 85\% | $(\$ 3,906,498)$ | (\$13) |
| 100\% | (\$16,153,117) | (\$55) |
| 115\% | (\$28,399,736) | (\$97) |
| Developer Thresholds |  |  |
| 85\% | (\$15,147,980) | (\$52) |
| 100\% | (\$16,153,117) | (\$55) |
| 115\% | (\$17,158,254) | (\$59) |
| Revenue Assumptions |  |  |
| 100\% | (\$16,153,117) | (\$55) |
| 115\% | $(\$ 4,946,192)$ | (\$17) |
| 130\% | \$6,260,733 | \$21 |
| 85\% Construction Costs, 115\% Revenue | \$7,300,427 | \$25 |
| Land Costs |  |  |
| 0\% | (\$12,392,997) | (\$43) |
| 100\% | $(\$ 16,153,117)$ | (\$55) |
| 200\% | (\$19,913,237) | (\$68) |

Pro Forma Analysis - Development Costs

| Land Costs |  |
| :---: | :---: |
| Land Costs | \$2,986,350 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$15,635 |
| Parking Costs | \$3,960,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$4,625,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$50,825,000 |
| Total Base Construction Costs | \$55,450,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$59,425,635 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$4,158,750 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$4,158,750 |
| Building/Permitting/Impact Fees | \$5,275,939 |
| Property Taxes | \$898,083 |
| Construction Loan | \$4,434,399 |
| Construction Loan Points | \$270,127 |
| Overhead/Other | \$2,323,478 |
| Contingency | \$3,988,638 |
| Total Soft Costs | \$21,349,415 |
| Total Development Cost | \$83,761,400 |


| Pro Forma Analysis - Development Revenue |  |
| :--- | :--- |
| Retail |  |


| Annual Leasing Revenue | \$333,000 |
| :---: | :---: |
| Less Vacancy | (\$33,300) |
| Less Operating Expenses | $(\$ 22,200)$ |
| Less Broker Fees | (\$16,650) |
| Retail Revenue Sub Total | \$260,850 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$5,391,516 |
| Less Vacancy | (\$269,576) |
| Less Operations and Maintenance Expenses | (\$1,509,624) |
| Residential Rental Revenue Sub Total | \$3,612,316 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$213,840 |
| Parking Revenue Sub Total | \$213,840 |
| Net Annual Revenue | \$4,087,006 |
| Capitalized Value | \$74,309,195 |


| Pro Forma Analysis - Net Revenue |  |
| :---: | :---: |
| Capitalized Value | \$74,309,195 |
| Total Development Cost | (\$83,761,400) |
| Net Revenue | (\$9,452,205) |
| Capitalized Value / Development Cost | 89\% |
| Developer Profit | \$6,700,912 |
| Difference Available for Public Benefits | (\$16,153,117) |
| Public Benefit per Building Sq. Ft. | (\$55) |
| Public Benefit per Residential Unit | $(\$ 80,766)$ |

Figure 47. Static Pro Forma - Scenario 1b (Mixed Use Residential without Parking, +/-65’)

| Development Program (Scenario 1b-226 13th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 59,727 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 4.35 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | - | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 45,800 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 15,300 | Square Feet |
| Gross Retail Area in Base | 15,300 | Square Feet |
| Gross Retail Area in Tower |  | Square Feet |
| Net Leasable Retail Area | 13,770 | Square Feet |
| Office |  |  |
| Gross Office Area |  | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower |  | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 244,500 | Square Feet |
| Gross Residential Area in Base | 217,900 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Gross Live/Work Space in Base | 26,600 | Square Feet |
| Net Residential Unit Space | 207,825 | 20\% Efficiency |
| Total Units | 231 | Units |
| Residential Absorbtion Period | 24 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade |  | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 304$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 256$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 307$ |
| Parking | $\mathrm{N} / \mathrm{A}$ |
| Square Feet Available for Community Benefit | $-66,946$ |
| Community Benefit Space as \% of GFA | $-26 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $(\$ 6,910,843)$ | $(\$ 27)$ |
| $85 \%$ | $(\$ 20,342,647)$ | $(\$ 78)$ |
| $100 \%$ | $(\$ 33,774,450)$ | $(\$ 130)$ |
| $115 \%$ |  |  |
| Developer Thresholds | $(\$ 19,239,453)$ | $(\$ 74)$ |
| $85 \%$ | $(\$ 20,342,647)$ | $(\$ 78)$ |
| $100 \%$ | $(\$ 21,445,840)$ | $(\$ 83)$ |
| $115 \%$ | $(\$ 20,342,647)$ | $(\$ 78)$ |
| Revenue Assumptions | $(\$ 8,450,858)$ | $(\$ 33)$ |
| $100 \%$ | $\$ 3,440,931$ | $\$ 13$ |
| $115 \%$ | $(\$ 6,910,843)$ | $(\$ 27)$ |
| $130 \%$ | $(\$ 16,559,785)$ | $(\$ 64)$ |
| $85 \%$ Construction Costs, 115\% Revenue | $(\$ 20,342,647)$ | $(\$ 78)$ |
| Land Costs | $(\$ 24,125,508)$ | $(\$ 93)$ |
| $0 \%$ |  |  |
| $100 \%$ |  |  |
| $200 \%$ |  |  |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$2,986,350 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$69,635 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$3,825,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$61,125,000 |
| Total Base Construction Costs | \$64,950,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$65,019,635 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$4,871,250 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$4,871,250 |
| Building/Permitting/Impact Fees | \$5,504,435 |
| Property Taxes | \$979,771 |
| Construction Loan | \$5,346,977 |
| Construction Loan Points | \$296,479 |
| Overhead/Other | \$2,550,147 |
| Contingency | \$4,377,752 |
| Total Soft Costs | \$23,926,811 |
| Total Development Cost | \$91,932,796 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$275,400 |
| Less Vacancy | $(\$ 27,540)$ |
| Less Operating Expenses | $(\$ 18,360)$ |
| Less Broker Fees | $(\$ 13,770)$ |
| Retail Revenue Sub Total | \$215,730 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$6,158,556 |
| Less Vacancy | $(\$ 307,928)$ |
| Less Operations and Maintenance Expenses | (\$1,724,396) |
| Residential Rental Revenue Sub Total | \$4,126,233 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$4,341,963 |
| Capitalized Value | \$78,944,773 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 78,944,773$ |
| Total Development Cost | $(\$ 91,932,796)$ |
| Net Revenue | $(\$ 12,988,023)$ |
| Capitalized Value / Development Cost | $86 \%$ |
|  | $\$ 7,354,624$ |
| Developer Profit | $(\$ 20,342,647)$ |
|  | $(\$ 78)$ |
| Difference Available for Public Benefits | $\mathbf{( \$ 8 7 , 9 1 4 )}$ |
| Public Benefit per Building Sq. Ft. |  |

Figure 48. Static Pro Forma - Scenario 1c (Zero Land Costs; 15\% Construction Cost Savings)

| Development Program (Scenario 1c-226 13th Street / Chinatown) |  |  | Pro Forma Analysis - Development Costs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Unit | Land Costs |  |
| Site Size | 59,727 | Square Feet | Land Costs | \$0 |
| Amount of Area to be Demolished | - | Square Feet | Hard Costs |  |
| Floor Area Ratio | 4.88 | Coverage | Demolition Costs | \$0 |
| Base Building Height | 65 | Feet | Site Work Cost | \$15,635 |
| Tower Building Height | - | Feet | Parking Costs | \$3,960,000 |
| Building Type | Residential | Use | Base Construction Costs |  |
| Construction Term | 18 | Months | Retail Construction Costs | \$3,931,250 |
| Building Footprint | 56,600 | Square Feet | Office Construction Costs | \$0 |
|  |  |  | Residential Construction Costs | \$43,201,250 |
| Retail |  |  | Total Base Construction Costs | \$47,132,500 |
| Gross Retail Area | 18,500 | Square Feet | Tower Construction Costs |  |
| Gross Retail Area in Base | 18,500 | Square Feet | Retail Construction Costs | \$0 |
| Gross Retail Area in Tower |  | Square Feet | Office Construction Costs | \$0 |
| Net Leasable Retail Area | 16,650 | Square Feet | Residential Construction Costs | \$0 |
|  |  |  | Total Tower Construction Costs | \$0 |
| Office |  |  | Hard Costs Sub Total | \$51,108,135 |
| Gross Office Area | - | Square Feet | Soft Costs |  |
| Gross Office Area in Base | - | Square Feet | Architecture and Engineering |  |
| Gross Office Area in Tower | - | Square Feet | Base Building | \$3,534,938 |
| Net Leasable Office Area | - | Square Feet | Tower Building | \$0 |
|  |  |  | Total Architecture and Engineering | \$3,534,938 |
| Residential |  |  |  |  |
| Gross Residential Area | 203,300 | Square Feet | Building/Permitting/lmpact Fees | \$5,144,182 |
| Gross Residential Area in Base | 203,300 | Square Feet | Property Taxes | \$747,341 |
| Gross Residential Area in Tower | - | Square Feet | Construction Loan | \$3,690,088 |
| Net Residential Unit Space | 172,805 | 22\% Efficiency | Construction Loan Points | \$224,786 |
| Total Units | 200 | Units | Overhead/Other | \$1,933,484 |
| Residential Absorbtion Period | 20 | Months | Contingency | \$3,319,148 |
|  |  |  | Total Soft Costs | \$18,593,967 |
| Parking |  |  |  |  |
| Total Parking Area | 69,600 | Square Feet | Total Development Cost | \$69,702,102 |
| Average Parking Space | 350 | Square Feet |  |  |
| Total Parking Spaces | 198 | Spaces | Pro Forma Analysis - Development Revenu |  |
| Podium Parking - Half Below Grade | 99 | Spaces | Retail |  |
| Podium Parking - Ground Floor / Above Grade | 99 | Spaces | Annual Leasing Revenue | \$333,000 |
| Podium Parking - Mechanical System | - | Spaces | Less Vacancy | $(\$ 33,300)$ |
| Parking Use DistributionRetail |  |  | Less Operating Expenses | $(\$ 22,200)$ |
|  | On Street | Spaces | Less Broker Fees | (\$16,650) |
| Office |  | Spaces | Retail Revenue Sub Total | \$260,850 |
| Residential | 198 | Spaces | Office |  |
|  |  |  | Annual Leasing Revenue | \$0 |
| Annual Opportunity Cost of Providing Space for Public Benefit |  |  | Less Vacancy | \$0 |
| Average Capitalized Revenue per GFA |  | \$255 | Less Operations and Maintenance Expenses | \$0 |
| Capitalized Revenue by Buliding Use per GFA |  |  | Less Broker Fees | \$0 |
| Retail |  | \$256 | Office Revenue Sub Total | \$0 |
| Office |  | N/A | Residential |  |
| Residential |  | \$323 | Annual Rental Revenue | \$5,391,516 |
| Parking |  | \$56 | Less Vacancy | $(\$ 269,576)$ |
|  |  |  | Less Operations and Maintenance Expenses | (\$1,509,624) |
| Square Feet Available for Community Benefit Community Benefit Space as \% of GFA |  | $-3,800$ | Residential Rental Revenue Sub Total | \$3,612,316 |
|  |  |  | Parking |  |
|  |  |  | Annual Office Parking Rental Revenue | \$0 |
|  |  |  | Annual Residential Parking Rental Revenue | \$213,840 |
|  |  |  | Parking Revenue Sub Total | \$213,840 |
| Sensitivity Analysis |  |  |  |  |
| Category | Public Benefit Per Building Sq. Ft. |  | Net Annual Revenue | \$4,087,006 |
| Construction Costs |  |  | Capitalized Value | \$74,309,195 |
| 85\% | \$9,563,956 | \$33 |  |  |
| 100\% | $(\$ 969,075)$ | (\$3) | Pro Forma Analysis - Net Revenue |  |
| 115\% | (\$11,502,106) | (\$39) | Capitalized Value | \$74,309,195 |
| Developer Thresholds |  |  | Total Development Cost | (\$69,702,102) |
| 85\% | $(\$ 132,650)$ | (\$0) | Net Revenue | \$4,607,093 |
| 100\% | $(\$ 969,075)$ | (\$3) | Capitalized Value / Development Cost | 107\% |
| 115\% | (\$1,805,500) | (\$6) |  |  |
| Revenue Assumptions |  |  | Developer Profit | \$5,576,168 |
| 100\% | (\$969,075) | (\$3) |  |  |
| 115\% | \$10,237,850 | \$35 | Difference Available for Public Benefits | (\$969,075) |
| 130\% | \$21,444,774 | \$74 | Public Benefit per Building Sq. Ft. | (\$3) |
| 85\% Construction Costs, 115\% Revenue | \$20,770,881 | \$71 | Public Benefit per Residential Unit | (\$4,845) |

Figure 49. Static Pro Forma - Scenario 2a* (Mixed Use Residential with Parking, +/-240')

| Development Program (Scenario 2a-226 13th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 59,727 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 8.81 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | 240 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 56,600 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 18,500 | Square Feet |
| Gross Retail Area in Base | 18,500 | Square Feet |
| Gross Retail Area in Tower |  | Square Feet |
| Net Leasable Retail Area | 16,650 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 368,700 | Square Feet |
| Gross Residential Area in Base | - | Square Feet |
| Gross Residential Area in Tower | 368,700 | Square Feet |
| Gross Live/Work Space in Base | - | Square Feet |
| Net Residential Unit Space | 313,395 | 19\% Efficiency |
| Total Units | 365 | Units |
| Residential Absorbtion Period | 25 | Months |
| Parking |  |  |
| Total Parking Area | 139,200 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 397 | Spaces |
| Podium Parking - Half Below Grade | 99 | Spaces |
| Podium Parking - Ground Floor / Above Grade | 298 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 397 | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 273$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 256$ |
| Office | N/A |
| Residential | $\$ 355$ |
| Parking | $\$ 56$ |
| Square Feet Available for Community Benefit | $-129,733$ |
| Community Benefit Space as \% of GFA | $-25 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $(\$ 18,090,603)$ | $(\$ 56)$ |
| $85 \%$ | $(\$ 32,082,466)$ | $(\$ 99)$ |
| $100 \%$ | $(\$ 46,074,329)$ | $(\$ 142)$ |
| $115 \%$ | $(\$ 30,938,170)$ | $(\$ 96)$ |
| Developer Thresholds | $(\$ 32,082,466)$ | $(\$ 99)$ |
| $85 \%$ | $(\$ 33,226,762)$ | $(\$ 103)$ |
| $100 \%$ |  |  |
| $115 \%$ | $(\$ 35,381,586)$ | $(\$ 67)$ |
| Revenue Assumptions | $(\$ 15,727,959)$ | $(\$ 30)$ |
| $100 \%$ | $\$ 3,925,668$ | $\$ 7$ |
| $115 \%$ | $\$ 11,064,842$ | $\$ 21$ |
| $13 \% \%$ | $(\$ 31,536,187)$ | $(\$ 60)$ |
| 85\% Construction Costs, 115\% Revenue | $(\$ 35,381,586)$ | $(\$ 67)$ |
| Land Costs | $(\$ 39,226,986)$ | $(\$ 75)$ |
| $0 \%$ |  |  |
| $100 \%$ |  |  |
| 200\% |  |  |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$2,986,350 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$15,635 |
| Parking Costs | \$7,940,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$4,625,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Base Construction Costs | \$4,625,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$97,705,500 |
| Total Tower Construction Costs | \$97,705,500 |
| Hard Costs Sub Total | \$110,286,135 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$346,875 |
| Tower Building | \$6,350,858 |
| Total Architecture and Engineering | \$6,697,733 |
| Building/Permitting/Impact Fees | \$18,998,387 |
| Property Taxes | \$1,737,108 |
| Construction Loan | \$11,962,917 |
| Construction Loan Points | \$534,340 |
| Overhead/Other | \$4,596,089 |
| Contingency | \$7,889,953 |
| Total Soft Costs | \$52,416,526 |
| Total Development Cost | \$165,689,011 |
| Pro Forma Analysis - Development Revenue |  |
| Retail |  |
| Annual Leasing Revenue | \$333,000 |
| Less Vacancy | $(\$ 33,300)$ |
| Less Operating Expenses | $(\$ 22,200)$ |
| Less Broker Fees | $(\$ 16,650)$ |
| Retail Revenue Sub Total | \$260,850 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$10,755,716 |
| Less Vacancy | $(\$ 537,786)$ |
| Less Operations and Maintenance Expenses | (\$3,011,601) |
| Residential Rental Revenue Sub Total | \$7,206,330 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$428,760 |
| Parking Revenue Sub Total | \$428,760 |
| Net Annual Revenue | \$7,895,940 |
| Capitalized Value | \$143,562,545 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 143,562,545$ |
| Total Development Cost | $\frac{(\$ 165,689,011)}{}$ |
| Net Revenue | $(\$ 22,126,466)$ |
| Capitalized Value / Development Cost | $87 \%$ |
|  | $\$ 13,255,121$ |
| Developer Profit | $\mathbf{( \$ 3 5 , 3 8 1 , 5 8 6 )}$ |
|  | $(\$ 67)$ |
| Difference Available for Public Benefits |  |
| Public Benefit per Building Sq. Ft. |  |
| Public Benefit per Residential Unit | $\mathbf{( \$ 9 6 , 9 3 6 )}$ |

Figure 50. Static Pro Forma - Scenario 2b* (Mixed Use Residential without Parking, +l-240')

| Development Program (Scenario 2b-226 13th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 59,727 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 7.94 | Coverage |
| Base Building Height | \$65 | Feet |
| Tower Building Height | 240 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 43,500 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 8,000 | Square Feet |
| Gross Retail Area in Base | 8,000 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 7,200 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 466,000 | Square Feet |
| Gross Residential Area in Base | - | Square Feet |
| Gross Residential Area in Tower | 436,200 | Square Feet |
| Gross Live/Work Space in Base | 29,800 | Square Feet |
| Net Residential Unit Space | 396,100 | 16\% Efficiency |
| Total Units | 450 | Units |
| Residential Absorbtion Period | 31 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | - | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 342$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 256$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 344$ |
| Parking | $\mathrm{N} / \mathrm{A}$ |
| Square Feet Available for Community Benefit | $-125,391$ |
| Community Benefit Space as \% of GFA | $-26 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $(\$ 14,500,289)$ | $(\$ 31)$ |
| $85 \%$ | $(\$ 42,920,320)$ | $(\$ 91)$ |
| $100 \%$ | $(\$ 71,340,352)$ | $(\$ 151)$ |
| $115 \%$ |  |  |
| Developer Thresholds | $(\$ 30,938,170)$ | $(\$ 96)$ |
| $85 \%$ | $(\$ 32,082,466)$ | $(\$ 99)$ |
| $100 \%$ | $(\$ 33,226,762)$ | $(\$ 103)$ |
| $115 \%$ | $(\$ 42,920,320)$ | $(\$ 91)$ |
| Revenue Assumptions | $(\$ 19,668,592)$ | $(\$ 41)$ |
| $100 \%$ | $\$ 3,583,136$ | $\$ 8$ |
| $115 \%$ | $\$ 9,862,842$ | $\$ 21$ |
| $130 \%$ |  |  |
| $85 \%$ Construction Costs, 115\% Revenue | $(\$ 39,040,809)$ | $(\$ 82)$ |
| Land Costs | $(\$ 42,920,320)$ | $(\$ 91)$ |
| $0 \%$ | $(\$ 46,799,832)$ | $(\$ 99)$ |
| $100 \%$ |  |  |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$2,986,350 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$81,135 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$2,000,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$7,450,000 |
| Total Base Construction Costs | \$9,450,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$115,593,000 |
| Total Tower Construction Costs | \$115,593,000 |
| Hard Costs Sub Total | \$125,124,135 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$708,750 |
| Tower Building | \$7,513,545 |
| Total Architecture and Engineering | \$8,222,295 |
| Building/Permitting/Impact Fees | \$21,599,335 |
| Property Taxes | \$1,974,151 |
| Construction Loan | \$15,134,462 |
| Construction Loan Points | \$612,643 |
| Overhead/Other | \$5,269,601 |
| Contingency | \$9,046,149 |
| Total Soft Costs | \$61,858,636 |
| Total Development Cost | \$189,969,121 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$144,000 |
| Less Vacancy | (\$14,400) |
| Less Operating Expenses | $(\$ 9,600)$ |
| Less Broker Fees | (\$7,200) |
| Retail Revenue Sub Total | \$112,800 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$13,150,370 |
| Less Vacancy | $(\$ 657,519)$ |
| Less Operations and Maintenance Expenses | (\$3,682,104) |
| Residential Rental Revenue Sub Total | \$8,810,748 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$8,923,548 |
| Capitalized Value | \$162,246,330 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 162,246,330$ |
| Total Development Cost | $(\$ 189,969,121)$ |
| Net Revenue | $(\$ 27,722,791)$ |
| Capitalized Value / Development Cost | $85 \%$ |
|  | $\$ 15,197,530$ |
| Developer Profit |  |
| Difference Available for Public Benefits | $\mathbf{( \$ 4 2 , 9 2 0 , 3 2 0 )}$ |
| Public Benefit per Building Sq. Ft. | $(\$ 91)$ |
| Public Benefit per Residential Unit | $\mathbf{( \$ 9 5 , 2 7 6 )}$ |

Figure 51. Static Pro Forma - Scenario 3a (Mixed Use Residential with Parking, +/-65’)

| Development Program (Scenario 3a-301 19th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 57,935 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 4.53 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height |  | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 55,300 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 14,200 | Square Feet |
| Gross Retail Area in Base | 14,200 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 12,780 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 184,100 | Square Feet |
| Gross Residential Area in Base | 184,100 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Gross Live/Work Space in Base | - | Square Feet |
| Net Residential Unit Space | 156,485 | 21\% Efficiency |
| Total Units | 175 | Units |
| Residential Absorbtion Period | 18 | Months |
| Parking |  |  |
| Total Parking Area | 64,000 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 182 | Spaces |
| Podium Parking - Half Below Grade | 91 | Spaces |
| Podium Parking - Ground Floor / Above Grade | 91 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 182 | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 308$ |
| Capitalized Revenue by Buliding Use per GFA | $\$ 282$ |
| Retail | $\mathrm{N} / \mathrm{A}$ |
| Office | $\$ 396$ |
| Residential | $\$ 61$ |
| Parking | 73 |
| Square Feet Available for Community Benefit | $0 \%$ |
| Community Benefit Space as \% of GFA |  |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $\$ 10,948,112$ |  |
| $85 \%$ | $\$ 22,540$ | $\$ 42$ |
| $100 \%$ | $(\$ 10,903,032)$ | $\$ 0$ |
| $115 \%$ |  | $(\$ 42)$ |
| Developer Thresholds | $\$ 921,264$ | $\$ 4$ |
| $85 \%$ | $\$ 22,540$ | $\$ 0$ |
| $100 \%$ | $(\$ 876,184)$ | $(\$ 3)$ |
| $115 \%$ | $\$ 22,540$ |  |
| Revenue Assumptions | $\$ 12,209,813$ | $\$ 0$ |
| $100 \%$ | $\$ 24,397,086$ | $\$ 47$ |
| $115 \%$ | $\$ 23,135,385$ | $\$ 93$ |
| $130 \%$ |  | $\$ 88$ |
| $85 \%$ Construction Costs, $115 \%$ Revenue |  |  |
| Land Costs | $\$ 3,658,815$ | $\$ 14$ |
| $0 \%$ | $\$ 22,540$ | $\$ 0$ |
| $100 \%$ | $(\$ 3,613,735)$ | $(\$ 14)$ |
| $200 \%$ |  |  |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$2,896,750 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$13,175 |
| Parking Costs | \$3,640,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$3,550,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$46,025,000 |
| Total Base Construction Costs | \$49,575,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$53,228,175 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$3,718,125 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$3,718,125 |
| Building/Permitting/Impact Fees | \$4,592,130 |
| Property Taxes | \$805,440 |
| Construction Loan | \$3,767,646 |
| Construction Loan Points | \$241,529 |
| Overhead/Other | \$2,077,494 |
| Contingency | \$3,566,364 |
| Total Soft Costs | \$18,768,728 |
| Total Development Cost | \$74,893,653 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$255,600 |
| Less Vacancy | $(\$ 25,560)$ |
| Less Operating Expenses | $(\$ 17,040)$ |
| Less Broker Fees | (\$12,780) |
| Retail Revenue Sub Total | \$200,220 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$5,445,678 |
| Less Vacancy | $(\$ 272,284)$ |
| Less Operations and Maintenance Expenses | (\$1,524,790) |
| Residential Rental Revenue Sub Total | \$3,648,604 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$196,560 |
| Parking Revenue Sub Total | \$196,560 |
| Net Annual Revenue | \$4,045,384 |
| Capitalized Value | \$80,907,685 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 80,907,685$ |
| Total Development Cost | $(\$ 74,893,653)$ |
| Net Revenue | $\mathbf{\$ 6 , 0 1 4 , 0 3 2}$ |
| Capitalized Value / Development Cost | $108 \%$ |
| Developer Profit | $\$ 5,991,492$ |
|  |  |
| Difference Available for Public Benefits | $\$ 22,540$ |
| Public Benefit per Building Sq. Ft. | $\$ 0$ |
| Public Benefit per Residential Unit | $\$ 129$ |

Figure 52. Static Pro Forma - Scenario 3b (Mixed Use Residential without Parking, +/-65')

| Development Program (Scenario 3b-301 19th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 57,935 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 4.35 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | - | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 41,600 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 15,400 | Square Feet |
| Gross Retail Area in Base | 15,400 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 13,860 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base |  | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 236,700 | Square Feet |
| Gross Residential Area in Base | 220,000 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Gross Live/Work Space in Base | 16,700 | Square Feet |
| Net Residential Unit Space | 201,195 | 20\% Efficiency |
| Total Units | 222 | Units |
| Residential Absorbtion Period | 23 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | - | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 378$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| $\quad$ Retail | $\$ 282$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 384$ |
| Parking | $\mathrm{N} / \mathrm{A}$ |
| Square Feet Available for Community Benefit | $-2,576$ |
| Community Benefit Space as \% of GFA | $-1 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs |  |  |
| $85 \%$ | $\$ 12,043,958$ | $\$ 48$ |
| $100 \%$ | $(\$ 972,788)$ | $(\$ 4)$ |
| $115 \%$ | $(\$ 13,989,534)$ | $(\$ 55)$ |
| Developer Thresholds |  |  |
| $85 \%$ | $\$ 95,762$ | $\$ 0$ |
| $100 \%$ | $(\$ 972,788)$ | $(\$ 4)$ |
| $115 \%$ | $(\$ 2,041,339)$ | $(\$ 8)$ |
| Revenue Assumptions | $(\$ 972,788)$ | $(\$ 4)$ |
| $100 \%$ | $\$ 13,362,161$ | $\$ 53$ |
| $115 \%$ | $\$ 27,697,110$ | $\$ 110$ |
| $130 \%$ | $\$ 26,378,907$ | $\$ 105$ |
| $85 \%$ Construction Costs, $115 \%$ Revenue |  |  |
| Land Costs | $\$ 2,691,060$ | $\$ 11$ |
| $0 \%$ | $(\$ 972,788)$ | $(\$ 4)$ |
| $100 \%$ | $(\$ 4,636,637)$ | $(\$ 18)$ |
| $200 \%$ |  |  |

Pro Forma Analysis - Development Costs

| Land Costs |  |
| :---: | :---: |
| Land Costs | \$2,896,750 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$81,675 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$3,850,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$59,175,000 |
| Total Base Construction Costs | \$63,025,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$63,106,675 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$4,726,875 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$4,726,875 |
| Building/Permitting/Impact Fees | \$5,304,240 |
| Property Taxes | \$950,432 |
| Construction Loan | \$5,063,366 |
| Construction Loan Points | \$287,169 |
| Overhead/Other | \$2,470,065 |
| Contingency | \$4,240,279 |
| Total Soft Costs | \$23,042,425 |
| Total Development Cost | \$89,045,850 |

Pro Forma Analysis - Development Revenue

## Retail

| Annual Leasing Revenue | \$277,200 |
| :---: | :---: |
| Less Vacancy | $(\$ 27,720)$ |
| Less Operating Expenses | $(\$ 18,480)$ |
| Less Broker Fees | (\$13,860) |
| Retail Revenue Sub Total | \$217,140 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$6,780,144 |
| Less Vacancy | $(\$ 339,007)$ |
| Less Operations and Maintenance Expenses | (\$1,898,440) |
| Residential Rental Revenue Sub Total | \$4,542,696 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$4,759,836 |
| Capitalized Value | \$95,196,730 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 95,196,730$ |
| Total Development Cost | $\mathbf{( \$ 8 9 , 0 4 5 , 8 5 0 )}$ |
| Net Revenue | $\$ 6,150,880$ |
| Capitalized Value / Development Cost | $107 \%$ |
| Developer Profit | $\$ 7,123,668$ |
|  | $(\$ 972,788)$ |
| Difference Available for Public Benefits | $(\$ 4)$ |
| Public Benefit per Building Sq. Ft. |  |
| Public Benefit per Residential Unit | $\mathbf{( \$ 4 , 3 8 4 )}$ |

Figure 53. Static Pro Forma - Scenario 4a* (Mixed Use Residential with Parking, +/-175')

| Development Program (Scenario 4a-301 19th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 57,935 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 6.17 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | 175 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 52,100 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 14,300 | Square Feet |
| Gross Retail Area in Base | 14,300 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 12,870 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 254,800 | Square Feet |
| Gross Residential Area in Base | 146,800 | Square Feet |
| Gross Residential Area in Tower | 108,000 | Square Feet |
| Gross Live/Work Space in Base | - | Square Feet |
| Net Residential Unit Space | 216,580 | 20\% Efficiency |
| Total Units | 246 | Units |
| Residential Absorbtion Period | 17 | Months |
| Parking |  |  |
| Total Parking Area | 88,600 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 253 | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | 253 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 253 | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 321$ |
| Capitalized Revenue by Buliding Use per GFA | $\$ 282$ |
| Retail | $\mathrm{N} / \mathrm{A}$ |
| Office | $\$ 413$ |
| Residential | $\$ 62$ |
| Parking | $-7,784$ |
| Square Feet Available for Community Benefit | $-2 \%$ |
| Community Benefit Space as \% of GFA |  |


| Community Benefit Space as \% of GFA | -2\% |  |
| :---: | :---: | :---: |
| Sensitivity Analysis |  |  |
| Category | Public Benefit | ilding Sq. Ft. |
| Construction Costs |  |  |
| 85\% | \$13,594,899 | \$38 |
| 100\% | (\$2,497,773) | (\$7) |
| 115\% | $(\$ 18,590,446)$ | (\$52) |
| Developer Thresholds |  |  |
| 85\% | (\$1,194,756) | (\$3) |
| 100\% | (\$2,497,773) | (\$7) |
| 115\% | (\$3,800,791) | (\$11) |
| Revenue Assumptions |  |  |
| 100\% | (\$2,497,773) | (\$7) |
| 115\% | \$14,769,777 | \$41 |
| 130\% | \$32,037,328 | \$90 |
| 85\% Construction Costs, 115\% Revenue | \$30,862,450 | \$86 |
| Land Costs |  |  |
| 0\% | \$1,188,134 | \$3 |
| 100\% | (\$2,497,773) | (\$7) |
| 200\% | (\$6,183,681) | (\$17) |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$2,896,750 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$29,175 |
| Parking Costs | \$5,060,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$3,575,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$36,700,000 |
| Total Base Construction Costs | \$40,275,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$29,700,000 |
| Total Tower Construction Costs | \$29,700,000 |
| Hard Costs Sub Total | \$75,064,175 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$3,020,625 |
| Tower Building | \$1,930,500 |
| Total Architecture and Engineering | \$4,951,125 |
| Building/Permitting/Impact Fees | \$9,251,530 |
| Property Taxes | \$1,152,045 |
| Construction Loan | \$6,736,222 |
| Construction Loan Points | \$350,181 |
| Overhead/Other | \$3,012,061 |
| Contingency | \$5,170,704 |
| Total Soft Costs | \$30,623,868 |
| Total Development Cost | \$108,584,793 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$257,400 |
| Less Vacancy | $(\$ 25,740)$ |
| Less Operating Expenses | $(\$ 17,160)$ |
| Less Broker Fees | (\$12,870) |
| Retail Revenue Sub Total | \$201,630 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$7,856,448 |
| Less Vacancy | $(\$ 392,822)$ |
| Less Operations and Maintenance Expenses | (\$2,199,805) |
| Residential Rental Revenue Sub Total | \$5,263,820 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$273,240 |
| Parking Revenue Sub Total | \$273,240 |
| Net Annual Revenue | \$5,738,690 |
| Capitalized Value | \$114,773,803 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 114,773,803$ |
| Total Development Cost | $(\$ 108,584,793)$ |
| Net Revenue | $\mathbf{\$ 6 , 1 8 9 , 0 1 0}$ |
| Capitalized Value / Development Cost | $106 \%$ |
| Developer Profit | $\$ 8,686,783$ |
| Difference Available for Public Benefits <br> Public Benefit per Building Sq. Ft. <br> Public Benefit per Residential Unit | $\mathbf{( \$ 2 , 4 9 7 , 7 7 3 )}$ |

Figure 54. Static Pro Forma - Scenario 4b* (Mixed Use Residential without Parking, +/-175')

| Development Program (Scenario 4b-301 19th Street) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 57,935 | Square Feet |
| Amount of Area to be Demolished | - | Square Feet |
| Floor Area Ratio | 4.91 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | 240 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 33,200 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 20,300 | Square Feet |
| Gross Retail Area in Base | 20,300 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 18,270 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 263,900 | Square Feet |
| Gross Residential Area in Base | 155,900 | Square Feet |
| Gross Residential Area in Tower | 108,000 | Square Feet |
| Gross Live/Work Space in Base | 6,000 | Square Feet |
| Net Residential Unit Space | 224,315 | 21\% Efficiency |
| Total Units | 261 | Units |
| Residential Absorbtion Period | 18 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | - | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |

Pro Forma Analysis - Development Costs

| Land Costs |  |
| :---: | :---: |
| Land Costs | \$2,896,750 |
| Hard Costs |  |
| Demolition Costs | \$0 |
| Site Work Cost | \$123,675 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$5,075,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$40,475,000 |
| Total Base Construction Costs | \$45,550,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$28,620,000 |
| Total Tower Construction Costs | \$28,620,000 |
| Hard Costs Sub Total | \$74,293,675 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$3,416,250 |
| Tower Building | \$1,860,300 |
| Total Architecture and Engineering | \$5,276,550 |
| Building/Permitting/Impact Fees | \$9,127,984 |
| Property Taxes | \$1,144,937 |
| Construction Loan | \$6,843,431 |
| Construction Loan Points | \$348,542 |
| Overhead/Other | \$2,997,956 |
| Contingency | \$5,146,491 |
| Total Soft Costs | \$30,885,892 |
| Total Development Cost | \$108,076,317 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$365,400 |
| Less Vacancy | $(\$ 36,540)$ |
| Less Operating Expenses | $(\$ 24,360)$ |
| Less Broker Fees | $(\$ 18,270)$ |
| Retail Revenue Sub Total | \$286,230 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$8,223,546 |
| Less Vacancy | $(\$ 411,177)$ |
| Less Operations and Maintenance Expenses | (\$2,302,593) |
| Residential Rental Revenue Sub Total | \$5,509,776 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$5,796,006 |
| Capitalized Value | \$115,920,116 |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 408$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 282$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 418$ |
| Parking | $\mathrm{N} / \mathrm{A}$ |
| Square Feet Available for Community Benefit | $-1,967$ |
| Community Benefit Space as \% of GFA | $-1 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs |  |  |
| 85\% | $\$ 15,128,832$ | $\$ 53$ |
| $100 \%$ | $(\$ 802,305)$ | $(\$ 3)$ |
| $115 \%$ | $(\$ 16,733,443)$ | $(\$ 59)$ |
| Developer Thresholds |  |  |
| 85\% | $\$ 494,610$ | $\$ 2$ |
| $100 \%$ | $(\$ 802,305)$ | $(\$ 3)$ |
| $115 \%$ | $(\$ 2,099,221)$ | $(\$ 7)$ |
| Revenue Assumptions | $(\$ 802,305)$ | $(\$ 3)$ |
| $100 \%$ | $\$ 16,658,792$ | $\$ 59$ |
| $115 \%$ | $\$ 34,119,889$ | $\$ 120$ |
| $130 \%$ | $\$ 32,589,929$ | $\$ 115$ |
| 85\% Construction Costs, 115\% Revenue |  |  |
| Land Costs | $\$ 2,889,117$ | $\$ 10$ |
| $0 \%$ | $(\$ 802,305)$ | $(\$ 3)$ |
| $100 \%$ | $(\$ 4,493,728)$ | $(\$ 16)$ |
| $200 \%$ |  |  |

Figure 55. Static Pro Forma - Scenario 5 (Mixed Use Office, $+/-85$ ')


Figure 56. Static Pro Forma - Scenario 6* (Mixed Use Office, $+/-240$ ')


Figure 57. Static Pro Forma - Scenario 7a (Mixed Use Residential with Parking, +/-65')

| Development Program (Scenario 7a-2100 Telegraph Avenue) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 93,334 | Square Feet |
| Amount of Area to be Demolished | 69,400 | Square Feet |
| Floor Area Ratio | 4.90 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | - | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 87,300 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 12,700 | Square Feet |
| Gross Retail Area in Base | 12,700 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 11,430 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 326,900 | Square Feet |
| Gross Residential Area in Base | 326,900 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Gross Live/Work Space in Base | 11,300 | Square Feet |
| Net Residential Unit Space | 277,865 | 18\% Efficiency |
| Total Units | 330 | Units |
| Residential Absorbtion Period | 34 | Months |
| Parking |  |  |
| Total Parking Area | 117,800 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 336 | Spaces |
| Podium Parking - Half Below Grade | 168 | Spaces |
| Podium Parking - Ground Floor / Above Grade | 168 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 336 | Spaces |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$4,666,700 |
| Hard Costs |  |
| Demolition Costs | \$347,000 |
| Site Work Cost | \$30,170 |
| Parking Costs | \$6,720,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$3,175,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$84,550,000 |
| Total Base Construction Costs | \$87,725,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$94,822,170 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$6,579,375 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$6,579,375 |
| Building/Permitting/Impact Fees | \$8,292,924 |
| Property Taxes | \$1,429,515 |
| Construction Loan | \$9,658,873 |
| Construction Loan Points | \$439,073 |
| Overhead/Other | \$3,776,659 |
| Contingency | \$6,483,264 |
| Total Soft Costs | \$36,659,683 |
| Total Development Cost | \$136,148,553 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$314,325 |
| Less Vacancy | $(\$ 31,433)$ |
| Less Operating Expenses | $(\$ 15,240)$ |
| Less Broker Fees | (\$15,716) |
| Retail Revenue Sub Total | \$251,936 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$10,877,484 |
| Less Vacancy | $(\$ 543,874)$ |
| Less Operations and Maintenance Expenses | (\$3,045,696) |
| Residential Rental Revenue Sub Total | \$7,287,914 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$362,880 |
| Parking Revenue Sub Total | \$362,880 |
| Net Annual Revenue | \$7,902,731 |
| Capitalized Value | \$158,054,611 |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 346$ |
| Capitalized Revenue by Buliding Use per GFA | $\$ 397$ |
| Retail | $\mathrm{N} / \mathrm{A}$ |
| Office | $\$ 446$ |
| Residential | $\$ 62$ |
| Parking | 31,874 |
| Square Feet Available for Community Benefit | $7 \%$ |
| Community Benefit Space as \% of GFA |  |


| Sensitivity Analysis |  |  |
| :--- | :---: | :---: |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $\$ 30,815,792$ | $\$ 67$ |
| $85 \%$ | $\$ 11,014,173$ | $\$ 24$ |
| $100 \%$ | $(\$ 8,787,445)$ | $(\$ 19)$ |
| $115 \%$ |  |  |
| Developer Thresholds | $\$ 12,647,956$ | $\$ 28$ |
| $85 \%$ | $\$ 11,014,173$ | $\$ 24$ |
| $100 \%$ | $\$ 9,380,391$ | $\$ 21$ |
| $115 \%$ |  |  |
| Revenue Assumptions | $\$ 11,014,173$ | $\$ 24$ |
| $100 \%$ | $\$ 34,768,085$ | $\$ 76$ |
| $115 \%$ | $\$ 58,521,997$ | $\$ 128$ |
| $130 \%$ | $\$ 54,569,703$ | $\$ 119$ |
| $85 \%$ Construction Costs, $115 \%$ Revenue |  |  |
| Land Costs | $\$ 17,014,406$ | $\$ 37$ |
| $0 \%$ | $\$ 11,014,173$ | $\$ 24$ |
| $100 \%$ | $\$ 5,013,941$ | $\$ 11$ |
| $200 \%$ |  |  |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 158,054,611$ |
| Total Development Cost | $(\$ 136,148,553)$ |
| Net Revenue | $\$ 21,906,058$ |
| Capitalized Value / Development Cost | $116 \%$ |
|  | $\$ 10,891,884$ |
| Developer Profit | $\mathbf{\$ 1 1 , 0 1 4 , 1 7 3}$ |
|  | $\$ 24$ |
| Difference Available for Public Benefits | $\mathbf{\$ 3 3}, \mathbf{3 3 7}$ |

Figure 58. Static Pro Forma - Scenario 7b (Mixed Use Residential without Parking, +/-65’)

| Development Program (Scenario 7b-2100 Telegraph Avenue) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 93,334 | Square Feet |
| Amount of Area to be Demolished | 69,400 | Square Feet |
| Floor Area Ratio | 3.72 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | - | Feet |
| Building Type | Residential | Use |
| Construction Term | 18 | Months |
| Building Footprint | 64,600 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 16,200 | Square Feet |
| Gross Retail Area in Base | 16,200 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 14,580 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 330,900 | Square Feet |
| Gross Residential Area in Base | 330,900 | Square Feet |
| Gross Residential Area in Tower | - | Square Feet |
| Gross Live/Work Space in Base | 40,000 | Square Feet |
| Net Residential Unit Space | 281,265 | 19\% Efficiency |
| Total Units | 349 | Units |
| Residential Absorbtion Period | 35 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | - | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$4,666,700 |
| Hard Costs |  |
| Demolition Costs | \$347,000 |
| Site Work Cost | \$143,670 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$4,050,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$92,725,000 |
| Total Base Construction Costs | \$96,775,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$0 |
| Total Tower Construction Costs | \$0 |
| Hard Costs Sub Total | \$97,265,670 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$7,258,125 |
| Tower Building | \$0 |
| Total Architecture and Engineering | \$7,258,125 |
| Building/Permitting/Impact Fees | \$8,162,956 |
| Property Taxes | \$1,466,918 |
| Construction Loan | \$10,102,207 |
| Construction Loan Points | \$451,229 |
| Overhead/Other | \$3,881,214 |
| Contingency | \$6,662,751 |
| Total Soft Costs | \$37,985,401 |
| Total Development Cost | \$139,917,771 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$400,950 |
| Less Vacancy | $(\$ 40,095)$ |
| Less Operating Expenses | $(\$ 19,440)$ |
| Less Broker Fees | $(\$ 20,048)$ |
| Retail Revenue Sub Total | \$321,368 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$11,534,976 |
| Less Vacancy | $(\$ 576,749)$ |
| Less Operations and Maintenance Expenses | (\$3,229,793) |
| Residential Rental Revenue Sub Total | \$7,728,434 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$8,049,801 |
| Capitalized Value | \$160,996,028 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 160,996,028$ |
| Total Development Cost | $(\$ 139,917,771)$ |
| Net Revenue | $\$ 21,078, \mathbf{2 5 8}$ |
| Capitalized Value / Development Cost | $115 \%$ |
| Developer Profit | $\$ 11,193,422$ |
| Difference Available for Public Benefits | $\$ 9,884,836$ |
| Public Benefit per Building Sq. Ft. | $\$ 28$ |
| Public Benefit per Residential Unit | $\$ 28, \mathbf{3 1 1}$ |

Figure 59. Static Pro Forma - Scenario 8a* (Mixed Use Residential with Parking, +/-175')

| Development Program (Scenario 8a-2100 Telegraph Avenue) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 93,334 | Square Feet |
| Amount of Area to be Demolished | 69,400 | Square Feet |
| Floor Area Ratio | 6.83 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | 175 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 83,600 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 19,000 | Square Feet |
| Gross Retail Area in Base | 19,000 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 17,100 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 456,000 | Square Feet |
| Gross Residential Area in Base | 276,000 | Square Feet |
| Gross Residential Area in Tower | 180,000 | Square Feet |
| Gross Live/Work Space in Base | - | Square Feet |
| Net Residential Unit Space | 387,600 | 18\% Efficiency |
| Total Units | 446 | Units |
| Residential Absorbtion Period | 30 | Months |
| Parking |  |  |
| Total Parking Area | 162,800 | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | 465 | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | 465 | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | 465 | Spaces |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 353$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 397$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 455$ |
| Parking | $\$ 62$ |
| Square Feet Available for Community Benefit | 39,821 |
| Community Benefit Space as \% of GFA | $6 \%$ |


| Community Benefit Space as \% of GFA |  | $6 \%$ |
| :--- | :--- | :--- |
| Sensitivity Analysis |  |  |
| Category | Public Benefit Per Building Sq. Ft. |  |
| Construction Costs | $\$ 42,941,742$ | $\$ 67$ |
| $85 \%$ | $\$ 14,041,543$ | $\$ 22$ |
| $100 \%$ | $(\$ 14,858,655)$ | $(\$ 23)$ |
| $115 \%$ |  |  |
| Developer Thresholds | $\$ 16,384,398$ | $\$ 26$ |
| $85 \%$ | $\$ 14,041,543$ | $\$ 22$ |
| $100 \%$ | $\$ 11,698,688$ | $\$ 18$ |
| $115 \%$ | $\$ 14,041,543$ | $\$ 22$ |
| Revenue Assumptions | $\$ 47,844,714$ | $\$ 75$ |
| $100 \%$ | $\$ 81,647,885$ | $\$ 128$ |
| $115 \%$ | $\$ 76,744,913$ | $\$ 120$ |
| $130 \%$ |  |  |
| $85 \%$ Construction Costs, 115\% Revenue | $\$ 20,095,081$ | $\$ 32$ |
| Land Costs | $\$ 14,041,543$ | $\$ 22$ |
| $0 \%$ | $\$ 7,988,005$ | $\$ 13$ |
| $100 \%$ |  |  |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$4,666,700 |
| Hard Costs |  |
| Demolition Costs | \$347,000 |
| Site Work Cost | \$48,670 |
| Parking Costs | \$9,300,000 |
| Base Construction Costs |  |
| Retail Construction Costs | \$4,750,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$69,000,000 |
| Total Base Construction Costs | \$73,750,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$49,500,000 |
| Total Tower Construction Costs | \$49,500,000 |
| Hard Costs Sub Total | \$132,945,670 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$5,531,250 |
| Tower Building | \$3,217,500 |
| Total Architecture and Engineering | \$8,748,750 |
| Building/Permitting/Impact Fees | \$16,189,442 |
| Property Taxes | \$2,031,882 |
| Construction Loan | \$15,313,025 |
| Construction Loan Points | \$629,634 |
| Overhead/Other | \$5,415,753 |
| Contingency | \$9,297,043 |
| Total Soft Costs | \$57,625,529 |
| Total Development Cost | \$195,237,899 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$470,250 |
| Less Vacancy | $(\$ 47,025)$ |
| Less Operating Expenses | (\$22,800) |
| Less Broker Fees | (\$23,513) |
| Retail Revenue Sub Total | \$376,913 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$15,471,360 |
| Less Vacancy | $(\$ 773,568)$ |
| Less Operations and Maintenance Expenses | (\$4,331,981) |
| Residential Rental Revenue Sub Total | \$10,365,811 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$502,200 |
| Parking Revenue Sub Total | \$502,200 |
| Net Annual Revenue | \$11,244,924 |
| Capitalized Value | \$224,898,474 |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 224,898,474$ |
| Total Development Cost | $(\$ 195,237,899)$ |
| Net Revenue | $\$ 29,660,575$ |
| Capitalized Value / Development Cost | $115 \%$ |
| Developer Profit | $\$ 15,619,032$ |
| Difference Available for Public Benefits | $\$ 14,041,543$ |
| Public Benefit per Building Sq. Ft. | $\$ 22$ |
| Public Benefit per Residential Unit | $\$ 31, \mathbf{4 8 3}$ |

Figure 60. Static Pro Forma - Scenario 8b* (Mixed Use Residential without Parking, $\mathbf{+ / - 1 7 5}$ ')

| Development Program (Scenario 8b -2100 Telegraph Avenue) |  |  |
| :---: | :---: | :---: |
|  | Number | Unit |
| Site Size | 93,334 | Square Feet |
| Amount of Area to be Demolished | 69,400 | Square Feet |
| Floor Area Ratio | 5.45 | Coverage |
| Base Building Height | 65 | Feet |
| Tower Building Height | 175 | Feet |
| Building Type | Residential | Use |
| Construction Term | 28 | Months |
| Building Footprint | 63,100 | Square Feet |
| Retail |  |  |
| Gross Retail Area | 20,300 | Square Feet |
| Gross Retail Area in Base | 20,300 | Square Feet |
| Gross Retail Area in Tower | - | Square Feet |
| Net Leasable Retail Area | 18,270 | Square Feet |
| Office |  |  |
| Gross Office Area | - | Square Feet |
| Gross Office Area in Base | - | Square Feet |
| Gross Office Area in Tower | - | Square Feet |
| Net Leasable Office Area | - | Square Feet |
| Residential |  |  |
| Gross Residential Area | 488,100 | Square Feet |
| Gross Residential Area in Base | 308,100 | Square Feet |
| Gross Residential Area in Tower | 180,000 | Square Feet |
| Gross Live/Work Space in Base | 33,700 | Square Feet |
| Net Residential Unit Space | 414,885 | 18\% Efficiency |
| Total Units | 501 | Units |
| Residential Absorbtion Period | 34 | Months |
| Parking |  |  |
| Total Parking Area | - | Square Feet |
| Average Parking Space | 350 | Square Feet |
| Total Parking Spaces | - | Spaces |
| Podium Parking - Half Below Grade | - | Spaces |
| Podium Parking - Ground Floor / Above Grade | - | Spaces |
| Podium Parking - Mechanical System | - | Spaces |
| Parking Use Distribution |  |  |
| Retail | On Street | Spaces |
| Office | - | Spaces |
| Residential | - | Spaces |


| Pro Forma Analysis - Development Costs |  |
| :---: | :---: |
| Land Costs |  |
| Land Costs | \$4,666,700 |
| Hard Costs |  |
| Demolition Costs | \$347,000 |
| Site Work Cost | \$151,170 |
| Parking Costs | \$0 |
| Base Construction Costs |  |
| Retail Construction Costs | \$5,075,000 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$85,450,000 |
| Total Base Construction Costs | \$90,525,000 |
| Tower Construction Costs |  |
| Retail Construction Costs | \$0 |
| Office Construction Costs | \$0 |
| Residential Construction Costs | \$49,500,000 |
| Total Tower Construction Costs | \$49,500,000 |
| Hard Costs Sub Total | \$140,523,170 |
| Soft Costs |  |
| Architecture and Engineering |  |
| Base Building | \$6,789,375 |
| Tower Building | \$3,217,500 |
| Total Architecture and Engineering | \$10,006,875 |
| Building/Permitting/Impact Fees | \$16,528,697 |
| Property Taxes | \$2,146,568 |
| Construction Loan | \$17,293,020 |
| Construction Loan Points | \$669,078 |
| Overhead/Other | \$5,755,023 |
| Contingency | \$9,879,457 |
| Total Soft Costs | \$62,278,718 |
| Total Development Cost | \$207,468,588 |


| Pro Forma Analysis - Development Revenue |  |
| :---: | :---: |
| Retail |  |
| Annual Leasing Revenue | \$502,425 |
| Less Vacancy | $(\$ 50,243)$ |
| Less Operating Expenses | $(\$ 24,360)$ |
| Less Broker Fees | (\$25,121) |
| Retail Revenue Sub Total | \$402,701 |
| Office |  |
| Annual Leasing Revenue | \$0 |
| Less Vacancy | \$0 |
| Less Operations and Maintenance Expenses | \$0 |
| Less Broker Fees | \$0 |
| Office Revenue Sub Total | \$0 |
| Residential |  |
| Annual Rental Revenue | \$17,137,836 |
| Less Vacancy | $(\$ 856,892)$ |
| Less Operations and Maintenance Expenses | (\$4,798,594) |
| Residential Rental Revenue Sub Total | \$11,482,350 |
| Parking |  |
| Annual Office Parking Rental Revenue | \$0 |
| Annual Residential Parking Rental Revenue | \$0 |
| Parking Revenue Sub Total | \$0 |
| Net Annual Revenue | \$11,885,051 |
| Capitalized Value | \$237,701,027 |


| Annual Opportunity Cost of Providing Space for Public Benefit |  |
| :--- | :---: |
| Average Capitalized Revenue per GFA | $\$ 468$ |
| Capitalized Revenue by Buliding Use per GFA |  |
| Retail | $\$ 397$ |
| Office | $\mathrm{N} / \mathrm{A}$ |
| Residential | $\$ 470$ |
| Parking | $\mathrm{N} / \mathrm{A}$ |
| Square Feet Available for Community Benefit | 29,163 |
| Community Benefit Space as \% of GFA | $6 \%$ |


| Sensitivity Analysis |  |  |
| :--- | :--- | :--- |
| Category | Public Benefit |  |
| Construction Costs |  |  |
| $85 \%$ | $\$ 44,263,013$ |  |
| $100 \%$ | $\$ 13,634,953$ | $\$ 87$ |
| $115 \%$ | $(\$ 16,993,107)$ | $\$ 27$ |
| Developer Thresholds |  |  |
| $85 \%$ | $\$ 16,124,576$ | $\$ 32$ |
| $100 \%$ | $\$ 13,634,953$ | $\$ 27$ |
| $115 \%$ | $\$ 11,145,330$ | $\$ 22$ |
| Revenue Assumptions |  |  |
| $100 \%$ | $\$ 13,634,953$ | $\$ 27$ |
| $115 \%$ | $\$ 49,363,187$ | $\$ 97$ |
| $130 \%$ | $\$ 85,091,421$ | $\$ 167$ |
| $\mathbf{8 5 \%} \%$ | $\$ 79,991,247$ | $\$ 157$ |
| Land Costr |  |  |
| $0 \%$ | $\$ 19,724,028$ | $\$ 39$ |
| $100 \%$ | $\$ 13,634,953$ | $\$ 27$ |
| $200 \%$ | $\$ 7,545,878$ | $\$ 15$ |


| Pro Forma Analysis - Net Revenue |  |
| :--- | ---: |
| Capitalized Value | $\$ 237,701,027$ |
| Total Development Cost | $(\$ 207,468,588)$ |
| Net Revenue | $\mathbf{\$ 3 0 , 2 3 2 , 4 4 0}$ |
| Capitalized Value / Development Cost | $115 \%$ |
| Developer Profit | $\$ 16,597,487$ |
| Difference Available for Public Benefits | $\mathbf{\$ 1 3 , 6 3 4 , 9 5 3}$ |
| Public Benefit per Building Sq. Ft. | $\$ 27$ |
| Public Benefit per Residential Unit | $\mathbf{\$ 2 7 , 2 1 4}$ |

Figure 61. Static Pro Forma - Scenario 9 (Mixed Use Condo with Parking, +/-65’)

| Development Program (Scenario 9-2100 Telegraph Avenue) |  |  | Pro Forma Analysis - Development Costs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Unit | Land Costs |  |
| Site Size | 93,334 | Square Feet | Land Costs | \$4,666,700 |
| Amount of Area to be Demolished | 69,400 | Square Feet | Hard Costs |  |
| Floor Area Ratio | 4.90 | Coverage | Demolition Costs | \$347,000 |
| Base Building Height | 65 | Feet | Site Work Cost | \$30,170 |
| Tower Building Height | - | Feet | Parking Costs | \$6,720,000 |
| Building Type | Residential | Use | Base Construction Costs |  |
| Construction Term | 18 | Months | Retail Construction Costs | \$3,175,000 |
| Building Footprint | 87,300 | Square Feet | Office Construction Costs | \$0 |
|  |  |  | Residential Construction Costs | \$87,932,000 |
| Retail |  |  | Total Base Construction Costs | \$91,107,000 |
| Gross Retail Area | 12,700 | Square Feet | Tower Construction Costs |  |
| Gross Retail Area in Base | 12,700 | Square Feet | Retail Construction Costs | \$0 |
| Gross Retail Area in Tower |  | Square Feet | Office Construction Costs | \$0 |
| Net Leasable Retail Area | 11,430 | Square Feet | Residential Construction Costs | \$0 |
|  |  |  | Total Tower Construction Costs | \$0 |
| Office |  |  | Hard Costs Sub Total | \$98,204,170 |
| Gross Office Area | - | Square Feet | Soft Costs |  |
| Gross Office Area in Base | - | Square Feet | Architecture and Engineering |  |
| Gross Office Area in Tower | - | Square Feet | Base Building | \$6,833,025 |
| Net Leasable Office Area | - | Square Feet | Tower Building | \$0 |
|  |  |  | Total Architecture and Engineering | \$6,833,025 |
| Residential |  |  |  |  |
| Gross Residential Area | 326,900 | Square Feet | Building/Permitting/Impact Fees | \$8,318,289 |
| Gross Residential Area in Base | 326,900 | Square Feet | Property Taxes | \$1,475,277 |
| Gross Residential Area in Tower | - | Square Feet | Construction Loan | \$11,118,243 |
| Gross Live/Work Space in Base | 11,300 | Square Feet | Construction Loan Points | \$457,155 |
| Net Residential Unit Space | 277,865 | 18\% Efficiency | Overhead/Other | \$3,932,186 |
| Total Units | 330 | Units | Defect Liability Insurance | \$0 |
| Residential Absorbtion Period | 40 | Months | Contingency | \$6,750,252 |
|  |  |  | Total Soft Costs | \$38,884,427 |
| Parking |  |  |  |  |
| Total Parking Area | 117,800 | Square Feet | Total Development Cost | \$141,755,297 |
| Average Parking Space | 350 | Square Feet |  |  |
| Total Parking Spaces | 336 | Spaces | Pro Forma Analysis - Development Revenu |  |
| Podium Parking - Half Below Grade | 168 | Spaces | Retail |  |
| Podium Parking - Ground Floor / Above Grade | 168 | Spaces | Annual Leasing Revenue | \$314,325 |
| Podium Parking - Mechanical System |  | Spaces | Less Vacancy | $(\$ 31,433)$ |
| Parking Use Distribution |  |  | Less Operating Expenses | $(\$ 15,240)$ |
| Retail | On Street | Spaces | Less Broker Fees | (\$15,716) |
| Office |  | Spaces | Retail Revenue Sub Total | \$251,936 |
| Residential | 336 | Spaces | Office |  |
|  |  |  | Annual Leasing Revenue | \$0 |
| Annual Opportunity Cost of Providing Space for Public Benefit |  |  | Less Vacancy | \$0 |
| Average Capitalized Revenue per GFA |  | \$6,346 | Less Operations and Maintenance Expenses | \$0 |
| Capitalized Revenue by Buliding Use per GFA |  |  | Less Broker Fees | \$0 |
| Retail |  | \$397 | Office Revenue Sub Total | \$0 |
| Office |  | N/A | Residential |  |
| Residential |  | \$8,877 | Sales Revenue | \$151,139,100 |
| Parking |  | \$5 | Less Broker and Marketing Expenses | (\$6,045,564) |
|  |  |  | Residential Rental Revenue Sub Total | \$145,093,536 |
| Square Feet Available for Community Benefit Community Benefit Space as \% of GFA |  | -686 | Parking |  |
|  |  | 0\% | Annual Office Parking Rental Revenue | \$0 |
|  |  |  | Residential Parking Purchase Revenue | \$30,240 |
| Sensitivity Analysis |  |  | Parking Revenue Sub Total | \$30,240 |
| Category | Public Benefit Per Building Sq. Ft. |  |  |  |
| Construction Costs |  |  | Net Residential Revenue | \$145,123,776 |
| 85\% | (\$13,098,893) | (\$28) | Capitalized Value of Retail | \$5,038,725 |
| 100\% | (\$37,324,626) | (\$80) | Total Net Revenue | \$150,162,501 |
| 115\% | (\$61,550,360) | (\$132) |  |  |
| Developer Thresholds |  |  |  |  |
| 85\% | (\$35,132,265) | (\$75) |  |  |
| 100\% | (\$37,324,626) | (\$80) | Pro Forma Analysis - Net Revenue |  |
| 115\% | (\$39,516,988) | (\$85) | Total Net Revenue | \$150,162,501 |
| Revenue Assumptions |  |  | Total Development Cost | (\$141,755,297) |
| 100\% | (\$37,324,626) | (\$80) | Net Revenue | \$8,407,204 |
| 115\% | (\$16,317,742) | (\$35) | Net Revenue / Development Cost | 106\% |
| 130\% | \$4,689,142 | \$10 |  |  |
| 85\% Construction Costs, 115\% Revenue | \$39,100,778 | \$85 | Developer Profit | \$12,757,977 |
| Land Costs |  |  |  |  |
| 0\% | \$1,758,817 | \$4 | Difference Available for Public Benefits | (\$4,350,773) |
| 100\% | (\$4,350,773) | (\$10) | Public Benefit per Building Sq. Ft. | (\$10) |
| 200\% | (\$10,460,362) | (\$23) | Public Benefit per Residential Unit | $(\$ 13,169)$ |

## Appendix B - Sensitivity Analyses Values

Table 13. Construction Cost Ranges for Sensitivity Analysis

|  | 85\% | 100\% | 115\% |
| :---: | :---: | :---: | :---: |
| 65' Base |  |  |  |
| Retail (Ground Floor) | \$213 | \$250 | \$288 |
| Office (Floors 2-6) | \$247 | \$290 | \$334 |
| Residential (Floors 2-6) | \$213 | \$250 | \$288 |
| 85' Base |  |  |  |
| Retail (Ground Floor) | \$238 | \$280 | \$322 |
| Office (Floors 2-6) | \$238 | \$280 | \$322 |
| Residential (Floors 2-7) | \$230 | \$270 | \$311 |
| 175' Tower |  |  |  |
| Retail (Ground Floor) | \$234 | \$275 | \$316 |
| Office (Floors 1-12) | \$247 | \$290 | \$334 |
| Residential (Floors 2-15) | \$234 | \$275 | \$316 |
| 240' Tower |  |  |  |
| Retail (Ground Floor) | \$265-\$275 | \$305-\$316 | \$345-\$358 |
| Office (Floors 2-18) | \$234 | \$275 | \$316 |
| Residential (Floors (2-21) | \$225 | \$265 | \$305 |
| Parking Costs |  |  |  |
| Podium Parking - Half Below Grade | \$17,000 | \$20,000 | \$23,000 |
| Podium Parking - Ground Floor / Above Grade | \$17,000 | \$20,000 | \$23,000 |
| Podium Parking - Mechanical System | \$25,500 | \$30,000 | \$34,500 |

Source: AECOM

Table 14. Developer Threshold Ranges for Sensitivity Analysis

|  | $85 \%$ | $100 \%$ | $1.15 \%$ |
| :--- | :---: | ---: | :---: |
| Retail and Office Profit Requirements | $9 \%$ | $10 \%$ | $12 \%$ |
| Rental Profit Requirements | $7 \%$ | $8 \%$ | $9 \%$ |
| Condominium Profit Requirements | $8 \%$ | $9 \%$ | $10 \%$ |

[^10]
## Table 15. Revenue Ranges for Sensitivity Analysis

|  | 100\% | 115\% | 130\% |
| :---: | :---: | :---: | :---: |
| Lease and Rental Rates - Average |  |  |  |
| Average Retail Lease Rate |  |  |  |
| Average Office Lease Rate | \$25.00 | \$28.75 | \$32.50 |
| Average Rent Per Sq. Ft. of Living Area | \$32.00 | \$36.80 | \$41.60 |
| Average Rent Per Sq. Ft. of Live/Work Area | \$2.90 | \$3.34 | \$3.77 |
| Revenue Premium for Towers | \$1.60 | \$1.84 | \$2.08 |
| Parking Revenue - Average | \$1.10 | \$1.27 | \$1.43 |
| Office |  |  |  |
| Residential | \$120.00 | \$138.00 | \$156.00 |
| Lease and Rental Rates - 226 13th Street | \$90.00 | \$103.50 | \$117.00 |
| Average Retail Lease Rate |  |  |  |
| Average Office Lease Rate | \$20.00 | \$23.00 | \$26.00 |
| Average Rent Per Sq. Ft. of Living Area | \$25.60 | \$29.44 | \$33.28 |
| Average Rent Per Sq. Ft. of Live/Work Area | \$2.60 | \$2.99 | \$3.38 |
| Parking Revenue-226 13th Street | \$1.40 | \$1.61 | \$1.82 |
| Office |  |  |  |
| Residential | \$120.00 | \$138.00 | \$156.00 |
| Lease and Rental Rates - 301 19th Street | \$90.00 | \$103.50 | \$117.00 |
| Average Retail Lease Rate |  |  |  |
| Average Office Lease Rate | \$20.00 | \$23.00 | \$26.00 |
| Average Rent Per Sq. Ft. of Living Area | \$25.60 | \$29.44 | \$33.28 |
| Average Rent Per Sq. Ft. of Live/Work Area | \$2.90 | \$3.34 | \$3.77 |
| Parking Revenue-301 19th Street | \$1.60 | \$1.84 | \$2.08 |
| Office |  |  |  |
| Residential | \$120.00 | \$138.00 | \$156.00 |
| Lease and Rental Rates - 2100 Telegraph Avenue | \$90.00 | \$103.50 | \$117.00 |
| Average Retail Lease Rate |  |  |  |
| Average Office Lease Rate | \$27.50 | \$31.63 | \$35.75 |
| Average Rent Per Sq. Ft. of Living Area | \$35.20 | \$40.48 | \$45.76 |
| Average Condo Sales Price Per Sq. Ft. of Living Area | \$3.20 | \$3.68 | \$4.16 |
| Average Rent Per Sq. Ft. of Live/Work Area | \$500.00 | \$575.00 | \$650.00 |
| Parking Revenue - 2100 Telegraph Avenue | \$1.80 | \$2.07 | \$2.34 |
| Office |  |  |  |
| Residential - Rental | \$120.00 | \$138.00 | \$156.00 |
| Residential - For Sale | \$90.00 | \$103.50 | \$117.00 |

Source: AECOM

## AECOM


[^0]:    1 "Lake Merritt Station Area Plan Community Benefits Analysis," Strategic Economics, December 2012; "Lake Merritt Station Area Plan Market Opportunity Analysis," June 2010; "Affordable Housing Assessment Lake Merritt Station Area Plan," Conley Consulting Group, June 2010.

[^1]:    ${ }^{2}$ Mid-rise 8-story projects are significantly more expensive to build as building type and materials change, but the development receives insufficient incremental revenue to justify the change in building cost.

[^2]:    3 "Bridgewater Condos Hit the Market." San Francisco Business Times. 27.51 (July 12, 2013): 10.
    ${ }^{4}$ Scenario 9 (condo) is a duplicate of scenario 7 a, in terms of site, building use, height, and parking ratio. Scenario 9 only varies in terms of financing and feasibility analysis, and thus is not presented as a separate diagram.

[^3]:    ${ }^{5}$ Additional return takes into account the amount set aside as developer profit.

[^4]:    ${ }^{6}$ For residential projects, the change is a lower developer threshold of roughly 7 percent and higher developer threshold of 9 percent.

[^5]:    Source: AECOM

[^6]:    ${ }^{7}$ Cassidy Turley $1^{\text {st }}$ Quarter 2013 Apartment Market Report (Accessed June 10, 2013),
    http://www.ctbtapartments.com/images/reports/ApartmentMarketReportQ1-13.pdf ; Cassidy Turley 2 ${ }^{\text {nd }}$ Quarter 2013 Apartment Market Report (Accessed August 18,2013),
    http://www.ctbtapartments.com/images/reports/CT East Bay Multifamily Q2 2013 Report.pdf

[^7]:    Source: AECOM; Engineering News Records Building Construction Index; Costar; Trulia
    1/ Based on growth trends from Engineering News Records Building Construction Index
    2/ Rental rate increase through 2014 reflects annual growth in past year. Increase expected to slow as additional housing stock enters
    3/ Based on average annual change in sales per square foot in Oakland (2000 to August 2013)
    4/ Based on lease trend data (2000 to 2013) and increased to reflect increasing supply constraints in adjacent markets

[^8]:    ${ }^{8}$ Modular construction practices have already been explored by developers in San Francisco and throughout California. In 2012, Panoramic Interests built a 23 -unit modular apartment building in San Francisco, which was subsequently purchased for an above-

[^9]:    ${ }^{9}$ Cassidy Turley $2{ }^{\text {nd }}$ Quarter 2013 Apartment Market Report (Accessed August 18,2013),
    http://www.ctbtapartments.com/images/reports/CT East Bay Multifamily Q2 2013 Report.pdf; Various rental rate comparisons for Downtown multi-family properties.
    ${ }^{10}$ Ibid.
    ${ }^{11}$ The Grand Website (Accessed February 17 and August 20, 2013), http://www.livethegrand.com/

[^10]:    Source: AECOM

