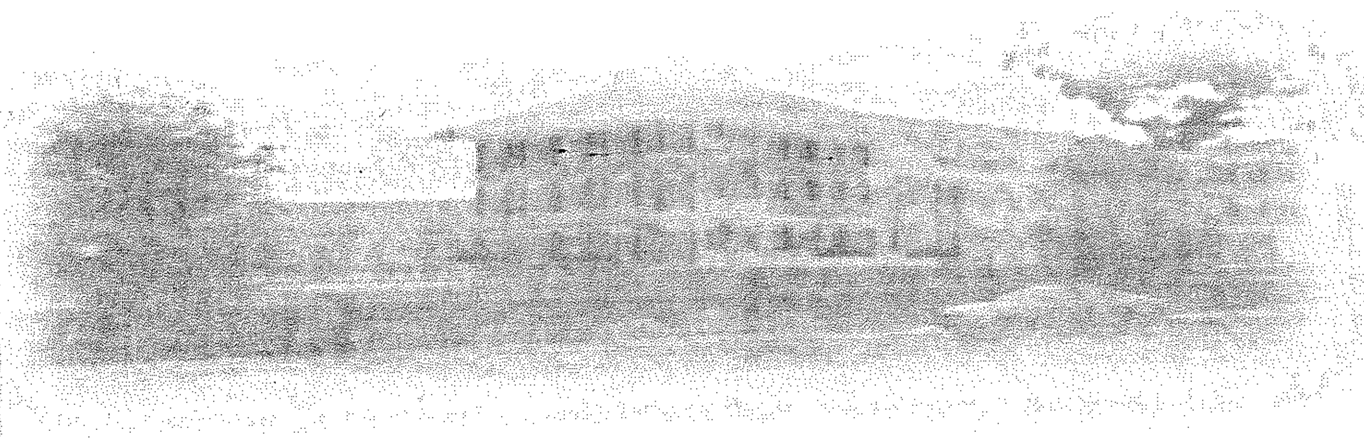
Port Jefferson Harbor View Apartments

Rental Apartment Development in Port Jefferson, NY



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Analysis of a real estate development opportunity from the perspective of a **domestic** *equity investor*

Long Island, New York faces a severe rental-housing deficit, a problem that is exacerbated by the area's high cost of living and, in turn, has led to a massive flight of both younger and older populations from Long Island. Fletcher Real Estate Company (Fletcher), a well-respected commercial real estate firm based in Long Island, is attempting to address such challenges by expanding the island's affordable, quality rental housing options. In November 2013, Fletcher publicly announced plans to develop a mid-sized, upscale apartment building in the Village of Port Jefferson, a quaint and bustling hamlet located on the north shore of central Long Island.

Swot

A few short weeks after Fletcher's announcement, Finley Capital Partners (Finley) contacted the developer's management team, expressing an interest in investing in the Port Jefferson Harbor View Apartments, as the project had been termed. Fletcher released its equity investment proposal to the investment group and patiently awaits Finley Capital's response.

Now, with the investment proposal in hand, Finley Capital must take the time to analyze all aspects of the project and determine whether or not to go forth with the investment opportunity. From the surface, Finley believes the project's market potential to be quite promising. That said, the firm is wary of taking on an investment that currently faces acute environmental obstacles. The group must take a deeper look into the proposed project before making any final decisions.

THE DOMESTIC EQUITY INVESTOR

Finley Capital Partners

SWOT

Finley Capital Partners (Finley) is a venture capitalist firm headquartered in New York, NY. The company, founded in 2002, has established a proven track record in real estate investments, namely in office properties, with individual project-level outlays averaging $20 million. Finley Capital, looking to expand its portfolio and diversify its real estate investments, has recently shifted its focus to multifamily housing given the space's attractive and steady performance. When Robert Thompson, CEO of Finley Capital and long-time resident of Long Island, first learned of the proposed Harbor View project, he promptly contacted Fletcher. Thompson believed the moderate size of the project was an ideal opportunity for Finley to test the waters of the multifamily market. 2 Upon expressing interest in the project, Finley Capital received Fletcher's equity investment proposal.

Like most venture capitalists, Finley exercises fairly short-term investment-holding periods. If the group proceeds with Fletcher's proposed investment opportunity, Finley Capital plans to hold the investment for no more than five years. The firm requires relatively standard rates of return, typically ranging from 15% to 19% depending on the circumstances of the project.

THE DEVELOPER

Fletcher Real Estate Company

Fletcher, founded in 1986, is a high-end, full-service commercial real estate company that offers development, construction, property and asset management services. The firm, which has established itself as a leader among New York commercial real estate companies, is headquartered in Long Island and has additional offices located in New York, NY and Bethesda, MA.

Fletcher Real Estate Company (Fletcher) had been named the master developer of the Harbor View project. Although Harbor View is a relatively small-scale project for Fletcher, the firm believes the property holds tremendous potential with respect to its financial returns, environmental revitalization, and community enhancement prospects. Fletcher is well-versed in the construction of multifamily developments. In fact, the developer is currently in the process of developing several large transit-oriented, mixed-use[1] projects that incorporate rental housing, including a $2 billion, 424-acre smart growth sustainable development in Loudoun County, Virginia; a $100 million, 400,000 square foot development in southern Long Island; and a $400 million, 50-acre project in central Long Island.

[1] *Mixed-use development* is a term used to describe the blending of residential, office, retail, and community spaces.

PROJECT OVERVIEW

Location

The Village of Port Jefferson is a hamlet in the Town of Brookhaven, located along the North Shore of Suffolk County, Long Island between New York City (60 miles westward) and the renowned Hampton beaches (50 miles eastward).[2] Boasting a walkability score of 74, Port Jefferson is well-situated to provide daily necessities to residents within a walkable environment given the village's strong "downtown" retail and dining presence.[3] The village is home to the Bridgeport-Port Jefferson Ferry, with hourly ferry connections to Bridgeport, Connecticut. Port Jefferson also serves the Long Island Railroad, with train service running to the JFK Airport's Air Train system and Manhattan's Penn Station. The village is easily accessible to vibrant employment centers, including Stony Brook University, Stony Brook Hospital, two local hospitals, Port Jefferson School District and a prominent research and development park – all of which are located within a four-mile radius around the site.[4]

Port Jefferson is a historical shipping village with remnants of the Colonial and Victorian periods still clearly visible throughout the handsome architecture of the "downtown" storefronts and surrounding neighborhood homes.[5] It is a well-established, reputable residential community with low crime rates and a strong public school system. Port Jefferson houses its own sewer district, which, although uncommon for Long Island, allows for greater housing density. The village also enjoys high property values and affluent households, both

[2] Exhibits I offers visual representations of the project's location.

[3] Exhibit II is a map of the area surrounding Port Jefferson, highlighting specific amenities and places of interest.

[4] These "employment centers" greatly support the local economy of Port Jefferson.

[5] Exhibit III displays local photographs of Port Jefferson Village.

of which have experienced significant appreciation over the past decade. In fact, as per the 2010 U.S. Census, Port Jefferson's median household income was $108,060 and the median home value was $525,800, with respective growth rates of 65.9% and 109.4% since 2000.[6]

Port Jefferson is a bustling community that attracts hoards of visitors from across Long Island, New Jersey, and Connecticut. The village hosts local events year-round, as well as a weekly farmers' market and outdoor music concerts during the summer months. Port Jefferson also features a public golf course, two marinas, maintained parks, an outdoor ice-skating rink, a village theater, and a maritime museum.

The project site itself sits at one of the main entranceways into the Village of Port Jefferson. Currently, the property operates as a depressed motel, directly adjacent to a foreclosed ship dealer. Over time, the property has fallen into a state of dilapidation, serving as a visible eyesore to passerby.

Opportunity

The proposed development of the Harbor View Apartments is a 112-unit market-rate, luxury rental apartment complex on 3.4 acres of land situated in the Village of Port Jefferson.[7] The four-story apartment building will consist of three stories of wood-framed apartment units over a partially below-grade concrete parking structure that will consist of 168 parking spaces.[8] Fletcher will employ a Colonial design to best encapsulate the local historical character of the village, which is deep-rooted in a nautical past. The property offers unobstructed waterfront views and easy access to the village's charming, lively retail center.

[6] "Port Jefferson, NY." USA.com. 2014. <http://www.usa.com/port-jefferson-ny.htm>.
[7] The project's total rentable area is 121,632 square feet. The total gross area is 126,291 square feet.
[8] Exhibit IV portrays the site plans and floor plans as provided by Fletcher Real Estate Company.

The apartment building will be fully amenitized with features including a clubhouse, a patio and roof deck overlooking the harbor, bike storage, elevator access, and on-site management.

Zoning for the apartment building is in place and full-site plan approval is expected in the first quarter of 2014. Construction, anticipated to commence in third quarter of 2014, is projected to last fourteen months. Statistical demand analysis indicates that the market could absorb Fletcher's proposed 112 units within an eight-month lease-up period, including two to three months of pre-leasing. Time to stabilization is forecasted to be one year.[9]

MARKET ANALYSIS

Macro & Micro Market Conditions[10]

From a developer's standpoint, rental housing is an attractive investment, offering a steady income stream and the potential for condominium transformation. In 2013, apartments ranked the highest among commercial and multifamily property types in terms of both investment and development prospects. Apartments in the United States are expected to remain the most preferred asset class in the long run, outpacing all other property types with respect to risk-adjusted performance.[11]

Long Island's local economy relies on the accessibility of a working population that varies in both age and proficiency. In order for Long Island to effectively vie for the workers of

[9] Stabilized occupancy is assumed to be 95%.
[10] Exhibits V, VI, and VII depict rental and housing statistics on regional and local levels.
[11] "2013 Emerging Trends in Real Estate." PricewaterhouseCoopers LLP; Urban Land Institute. 2012. <www.uli.org/wp-content/uploads/ULI-Documents/Emerging-Trends-in-Real-Estate-US-2013.pdf>. 15 Jan. 2014.

"tomorrow", it will need to keep pace with comparable markets by offering a diverse menu of housing options, particularly affordable rental housing. Nevertheless, relative to neighboring, comparable suburban markets (i.e. Westchester, New Jersey and southwestern Connecticut), Long Island's rental housing supply is dreadfully scarce. The island's 4.3% rental vacancy rate signifies fewer available rental options relative to any other suburban area in Greater New York.[12] The breakdown of Long Island's housing stock is roughly 79% ownership and 21% rental, in which more than one-third of Long Island renters reside in single-family homes.[13] The Town of Brookhaven's housing outlook is even more acute - with a population of 486,000 people,[14] Brookhaven's housing supply is comprised of 93% home ownership and only 7% multifamily.[15] The shortage in the supply of new, high-quality, professionally-managed apartments in Long Island has led not only to a rise in illegal rental units and accessory dwelling units, but also to higher housing prices.

The demography of Long Island's rental population is quite comprehensive. Although the average renter is younger than the average homeowner, nearly half of Long Island renters are over 35 years old. In addition, 55% of residents between the ages of 20 and 34 reside with their parents or elderly relatives. Racially and ethnically varied, 47% of renters are white, 30% Hispanic, 16% black and 6% Asian. Occupationally diverse, approximately 28% of Long Island renters work in management and professional positions, while 25% hold sales and

[12] In fact, there is only one rental unit available for every 107 households on Long Island, whereas there is, on average, one vacant rental unit for every 41 households in comparable markets.
[13] "Long Island's Rental Housing Crisis." Regional Plan Association. September 2013. <http://www.rpa.org/article/long-islands-rental-housing-crisis>.
[14] 2010 Census Interactive Population Search: New York." United States Census Bureau. 2010. <www.census.gov/2010census/popmap/ipmtext.php?fl=36>.
[15] As stated by Tullio Bertoli, the Commissioner of Planning for the Town of Brookhaven (quarter 4 of 2013).

administrative positions.[16]

As of 2012, the median household income on Long Island was $89,600; however, the median income for the average Long Island renter was nearly half of that at $46,900.[17] Approximately 56% of Long Island renters paid more than 30%of their income on housing and associated housing expenses.[18] Long Island's high cost of living has resulted in a considerable exodus of both younger and older populations. In fact, between 2000 and 2004, 60,000 people between the ages of 25 and 44 moved off Long Island due largely to the high cost of living and lack of adequate housing options. Moreover, in a survey executed by the Long Island Index, it was found that "65% of those between the ages of 18 and 24 said they were likely to move away from Long Island in the next five years".[19] As Legislator Sarah Anker stated, "The bottom line is that Long Island is experiencing a brain drain. We are raising smarts kids through an excellent educational system but many of our kids are not staying on Long Island because they can't find affordable housing that meets their needs."[20]

Fletcher hopes to stave off the future flight of – or even go as far as attracting new additions to – both the young labor pool and senior populace through the development of upscale, amenitized rental housing. Without growth in rental housing options, Long Island's economy

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16 "Long Island's Rental Housing Crisis." Regional Plan Association. September 2013. <http://www.rpa.org/article long-islands-rental-housing-crisis>.
17 "Household Income Distribution." Long Island Index. 2014. <http://www.longislandindex.org/explore/b2aa5de1-6e6a-4ce0-9a4b-40edb77e0336>; "Long Island's Rental Housing Crisis." Regional Plan Association. September 2013. <http://www.rpa.org/article/long-islands-rental-housing-crisis>.
18 According to the National Low Income Housing Coalition, a unit is deemed "affordable" if it costs less than 30% of the renter's income level. (Source: "What is Affordable Housing?" YIMBY: Yes In My Backyard. <www.yimbyli.com/what-is-affordable-housing.php>. Nov. 2013.)[18]
19 "What is Affordable Housing?" YIMBY: Yes In My Backyard. <www.yimbyli.com>.
20" Moller, Vickie. "Legislator Anker Proposes Development of Workforce Housing to Stem "Brain Drain" on LI." LongIsland.com. 11 Dec. 2013. <http://www.longisland.com/news/12-11-13/legislator-anker-proposes-development-of-workforce-housing-to-stem-brain-drainonli.html>.

is prone to stagnation.[21] The introduction of new rental alternatives will enrich the quality of life for local communities as village centers become livelier and businesses more prosperous. Such development will further enable Long Island to effectively compete for the "workers of tomorrow". In fact, the New York Regional Plan Association estimated that every 100 new units of rental housing is capable of generating 32 local jobs, $2.3 million in income and $395,000 in tax revenue annually.[22]

With plans to capitalize on the underserved rental market, Fletcher acknowledges that new apartments in comparably undersupplied locations across Long Island have exhibited the ability to notably reset the top of the market. Given the uniqueness of this luxury apartment project, it is possible that the Harbor View Apartments can achieve significant rental rate growth within the first several years of operation.

Primary Rental Target Audience

The strong performance of apartments is characteristically contingent upon continued job creation. However, with little past or projected household or employment growth on Long Island, the demand for new, upscale apartments will largely stem from existing renters in Suffolk County who currently settle for inferior products due to limited alternatives to the luxury rental apartment space. The Harbor View Apartments will target young professionals, mature professionals, and baby boomers.[23] Roughly half of the rental demand is expected to arise from individuals aged 25 to 44. Empty nesters and retirees, aged 55 and up, will

[21] "Long Island's Rental Housing Crisis." Regional Plan Association. September 2013. <http://www.rpa.org/article/long-islands-rental-housing-crisis>.
[22] "The Local Impact of Home Building in a Typical Metro Area: Income, Jobs, and Taxes Generated". National Association of Home Builders. June 2009. <www.nahb.org/fileUpload_details.aspx?contentTypeID=3&content ID=35601&subContentID=219188>.
[23] Exhibit VIII portrays a breakdown of the primary rental target audience.

comprise approximately one-third of demand. Specifically, anticipated sources of demand include the following:

- Pre-existing renters in Suffolk County whom are likely to be currently renting single-family homes or accessory dwelling units;
- Faculty and staff from Stony Brook University, other surrounding colleges as well as interns, doctors, and nurses from nearby hospitals;
- Empty nesters seeking upscale, amenitized, and professionally managed units.

FINANCIAL ANALYSIS[24]

As part of its equity investment proposal, Fletcher provided a crude analysis of the project's cost structure and expected rates of return. However, in an effort not to be swayed by the developer's projected returns, Finley Capital put the proposal's financials aside, only daring to examine Fletcher's results once Finley had completed a full financial analysis of its own. The group would run its own in-house financial analysis, employing internal assumptions while utilizing Fletcher's market research and project cost breakdown expectations. Exhibit IX depicts the project's monetary inflows and outflows, as provided in the developer's equity investment proposal. Breakdown

Finley Capital will apply the following financial assumptions to its analysis:

- *Loan:* Banks are becoming increasingly more aggressive in their underwriting efforts and are looking to carry out more construction loans, particularly in the multifamily

[24] Appendix II offers a detailed breakdown of the Harbor View project costs. Appendix III provides an overview of terminology and calculations commonly used in the financial analysis of a real estate development project.

space. Without solicitation, Fletcher has already been approached by five banks that have expressed an interest in supporting the Harbor View Apartments. The developer is confident that a 70% loan-to-value on a 30-year loan is attainable at an interest rate of 5.50%. Finley Capital deems the proposed leverage amount acceptable and requires that the debt coverage ratio remain at a minimum of 1.25.

- *Target Rental Price:* Finley understood that determining an appropriate rental rate would be critical to the group's financial analysis. Often, renters deem location a more valuable factor than amenities. As such, older apartment complexes in prime locations, i.e. along the waterfront or within active community centers, are likely to demand higher rental rates than newer, more amenitized, and professionally-managed properties in less sought-after locales. Third-party market analysts estimated that the Harbor View Apartment can be aggressively priced to achieve a 20% per square foot premium above existing comparable projects, which Fletcher believes to be possible given current rental market conditions in Long Island. Exhibit X depicts the island's competitive landscape. On top of rental income, Fletcher assumes an additional income stream ("other income") of $0.09 per square foot stemming from concessions and parking fees.[25]
- *Terminal Capitalization Rate:* The developer assumes that even if interest rates climb 50 to 75 basis points, capitlization rates will remain fairly stable given the relatively large spread that currently exists between long-term rates and capitalization rates (Exhibit XI).
- *Tax Assumptions:* Finley's internal accounting department assumes a tax rate of 28%,

[25] With respect to parking, for instance, there is a potential to charge a monthly fee of $100 per parking space based on similar suburban parking fees.

a recapture rate of 25%, and a capital gain tax rate of 20%.

ENVIRONMENTAL & SOCIAL ANALYSIS

Background

For Fletcher Real Estate Company, Harbor View poses not only a financially profitable opportunity, but also a chance to enhance the Village of Port Jefferson through environmental remediation as well as economic and aesthetic benefits, i.e. eradicating blighted land, increasing property values and diversifying residential offerings. That said, like many development projects, there has been some pushback from local community members that fear further environmental degradation of the property. They question the developer's true intentions, expressing concern over the project's potential adverse environmental impact.

Fletcher has attempted to ease such anxieties, claiming that the development will only proceed under the condition that the property passes a full environmental inspection. In fact, the developer has contractually required the current property owner to address any environmental issues and to attend to any environmental cleanup procedures, if necessary, prior to Fletcher assuming title. From Fletcher's standpoint, such stipulations mitigate future environmental issues and the risk of holding a potential brownfield site in its portfolio.[26] However, it ought to be noted that after title has been transferred, Fletcher will be be in the

[26] According to the Environmental Protection Agency, "the term *brownfield site* means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." <http://www.epa.gov/brownfields/overview/glossary.htm>.

chain of title and, thus, responsible for attending to any environmental complications that may arise down the road.[27]

Environmental Issues

Partially dividing the property and further enriching the charm of the Harbor View vision is a small stream, Old Mill Creek. Given that the headwaters of Old Mill Creek is classified as a wetlands area,[28] the New York State Department of Environmental Conservation (DEC) mandates certain setbacks as well as the incorporation of a bridge so as to access the apartment's subterranean parking. These setbacks create a "green buffer" around the rear of the property, thus providing a unique natural area for the enjoyment of the Harbor View residents.

Raising cause for concern is the project's fairly close proximity to the 126-acre Lawrence Aviation Industries (LAI) Superfund site. Established in 1959, LAI was historically used to manufacture titanium sheeting for the aeronautics industry. The site, which sits on a hilltop in Port Jefferson, was found to include down-gradient contaminated ground waters and sediments. The toxins have since drained downhill, polluting Old Mill Creek.

Although the Harbor View property may certainly meet the qualifications of a brownfield, the site will not be officially designated as such given that the necessary environmental remediation will take place prior to Fletcher assuming title of the property. In an attempt to wholly cover its bases, Fletcher engaged two highly regarded environmental consultants to

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[27] Having said that, if the contamination stemmed from the EPA-recognized Lawrence Aviation Industries (LAI) Superfund site, Fletcher would have recourse to the U.S. government. Issues related to the LAI Superfund will be addressed in the proceeding section entitled "Environmental Issues".

[28] The Village of Port Jefferson has proposed plans to restore and rejuvenate the wetlands area surrounding Old Mill Creek.

evaluate the associated risks of the project.[29] To date, all reports and tests revealed that there is no serious environmental contamination on the site, and the few minor issues can be wholly mitigated.[30]

Environmental & Social Implications of Redevelopment

Although not officially classified a brownfield site, the implications of the Harbor View development are rather analogous to those of brownfield redevelopment projects given the nature of the Port Jefferson site. Fletcher is the driving impetus behind the site's environmental remediation, which in turn supports the following benefits:[31]

- Increase surrounding residential property values;
- Lessen public health, crime activities and ecological risks on existing properties that are vacant or underutilized due to such risks;
- Gain support through state and federal inventive programs (most notably in the United States);
- Stimulate the local economy by enhancing the community's surrounding area with respect to environmental and aesthetic elements;
- Serve as an alternative to greenfield[32] development and consumption by promoting the restoration and reuse of contaminated land.

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29 The environmental consultants are also responsible for appropriately assessing the feasibility and cost of crossing the creek. Estimated bridge costs have been included in the project's hard costs (Exhibit IX).

30 For instance, the building design calls for the development of a vented parking garage to act as a buffer to any possible ground vapors.

31 "Brownfields and Land Revitalization." U.S. Environmental Protection Agency. 11. Dec. 2013. <http://www.epa.gov/brownfields/>. Jan. 2014.

32 The term *greenfield* refers to land that has never been used. By reutilizing formerly developed property, you avoid the development of untouched, natural land.

There have been a number of successful brownfield redevelopment cases, both domestically and overseas, that Fletcher can draw upon to better understand the positive economic, social, and environmental implications often associated with redeveloping environmentally contaminated and/or blighted properties. The following is a short – and by no means, comprehensive – list of successful brownfield remediation cases around the world:

- *Kings Waterfront – United Kingdom:* Brownfield redevelopment is a vital and strategic policy objective aimed at coping with growing urban populations in various regions of the European Union. In 2005, EU and UK-based public and private sector partners invested €560 million into the redevelopment of Kings Waterfront in the United Kingdom. A once blighted and desolate car park, Kings Waterfront was transformed into a mixed-use development complex that offers office, retail, and community features. The project is predicted to create 2,200 new jobs and generate substantial revenue from visitors each year.[33]

- *Rheinauhafen – Germany:* The €650 million redevelopment of the Rheinauhafen in Germany commenced in 2002. Funding was primarily obtained from the EU's NORISC project[34] and private investors. The regeneration project is comprised of residential housing, office and community space, museums, and retail. The project is forecasted to generate 2,500 new jobs and enhance the aesthetic appearance of the

[33] "Brownfield best practices drawn from German and UK projects." *Brownfield Regeneration.* Spec. issue of *European Commission: Science for Environment Policy* 39 (2013). Web. 12 Jan. 2014.

[34] The NORISC (Network-Oriented Risk-assessment by In-Situ Screening of Contaminated sites) project is a technology development project as part of the 5th Framework Programme of the European Commission. It is a technology development tool aimed at: providing "a standard guideline in the form of a decision support software system for efficient environmental assessment of contamination profiles in urban areas"; "improving site characterization and risk assessment"; and an approach for revitalization of abandoned industrial sites. (Source: www.norisc.com/fabout/htm).

area.[35] The success of Rheinauhafen demonstrates that brownfield redevelopment, if executed correctly, can act as a vehicle for economic growth in inner-city areas that have previously been depressed.

- *Chicago Center for Green Technology (CCGT) – United States:* Years of economic decline and private divestment brought about the decay of the East Garfield Park neighborhood in Chicago. In 1997, the Department of Energy acquired the deteriorated site and, by 2002, the CCGT opened its doors to the public. Well-recognized as an "integrated model of energy efficiency and sustainable design", the CCGT retained 450 jobs, created 38 new positions with the potential for employment growth, and attracts 30,000 visitors each year.[36]

CONCLUSION

From a bird's-eye view, the Harbor View project shows high prospects for success. Finley Capital would have an opportunity to try its hand in the multifamily space, while concurrently supporting a real estate development project that promotes community enhancement, land reutilization, and environmental remediation.

Nonetheless, Thompson's mind was racing with questions, as was characteristic when any new investment opportunity knocked on his door. He sat back in his chair, contemplating the

35 "Brownfield best practices drawn from German and UK projects." *Brownfield Regeneration.* Spec. issue of *European Commission: Science for Environment Policy* 39 (2013). Web. 12 Jan. 2014.
36 De Sousa, Christopher and Lily-Ann D'Souza. "The Chicago Center for Green Technology: A Sustainable Brownfield Revitalization Best Practice." The Sustainable Brownfields Consortium. September 2012. <http://www.uic.edu/orgs/brownfields/research-results/documents/CCGT casestudy-finalforposting-9-13-12.pdf>.

countless factors that influenced the success of the Harbor View Apartments. What risk-adjusted return should Finley Capital anticipate? Was a 20% premium on rental rates unreasonable? Is it disconcerting that the site currently faces significant environmental contamination? Does this investment opportunity make sense? How should Finley move forward with this project?

Thompson knew that a full work-up was necessary. Finley had a great deal of information to sift through and evaluate. Only after a comprehensive analysis was complete could Finley Capital proceed with a composed and qualified investment decision.

PART II

PORT JEFFERSON HARBOR VIEW APARTMENTS

Analysis of a real estate development opportunity from the perspective of a **foreign** *equity investor*

As Fletcher Real Estate Company awaited an investment decision from Finley Capital, Fletcher opted to reach out to its former investment partners to gauge their outlook on and stir further interest in the Harbor View Apartments. Fletcher's first stop – Japanese Pension Investment Fund.[37]

THE FOREIGN EQUITY INVESTOR

Japanese Pension Investment Fund (JPIF) is a well-respected public pension fund headquartered in Tokyo, Japan with assets under management amounting to ¥75 trillion.[38] JPIF initially began investing in U.S. real estate ventures in 1999, and in Fletcher development projects specifically in 2002. Like most pension funds, JPIF tends to exercise long-term investment holding periods. In fact, JPIF still holds a number of its original investments within its current portfolios.

John Sato, one of the managing directors at JPIF, has enjoyed working with Fletcher on past projects. Sato acclaims the development firm has been consistently upfront and diligent, churning out high-quality commercial properties that meets both budgetary and scheduling

[37] Japanese Pension Investment Fund is a fictitious pension fund.
[38] The USDJPY exchange rate as of December 2, 2013 is 102.94 JPY per 1 USD. Source: Bloomberg. Refer to Exhibit XII.

constraints – two critical factors that can make or break a real estate project. Sato had expressed an interest in continuing to work with Fletcher on future development projects, so he was not surprised to hear from Fletcher in December of 2013 about the new multifamily Harbor View project in the pipeline.

Indeed, JPIF has been looking expand its Real Estate Portfolio, which holds ¥80 billion, and is exposed to both domestic (33.3%) and international (66.7%) real estate assets, namely real estate investment trusts and real property. Sato and his colleagues seek to target income-producing commercial properties in the United States, a market that JPIF expects to pick up speed over the next several years. Multifamily housing opportunities, in particular, are likely to remain a dominant force in the development world, further spurred on by expectations of improved rental growth.[39] With that said, and given JPIF's positive relationship with Fletcher, the Harbor View project may certainly present an optimistic opportunity for JPIF's intended real estate investment growth.

Upon reviewing the project's equity investment proposal that had been delivered by Fletcher, JPIF had to move forward with its own in-house analysis.[40] Further complicating matters, Sato expressed concerns about the potential for exchange rate volatility and adverse tax implications - considerations that are commonplace in foreign real estate investments. Sato understood that such concerns must be appropriately addressed in tandem with JPIF's traditional financial feasibility studies.

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[39] "2014 Emerging Trends in Real Estate 2014." PricewaterhouseCoopers LLP; Urban Land Institute. 2013. <http://www.pwc.com/en_US/us/asset-management/real-estate/assets/pwc-emerging-trends-in-real-estate-2014.pdf>.

[40] Assumes all financial information as presented in the Harbor View investment proposal is the same for both Finley Capital and JPIF.

CURRENCY EXPOSURE

JPIF's portfolios are denominated in Japanese yen (JPY). Investing in a U.S. multifamily development infers an influx of rental income denominated in U.S. dollars (USD). Converting USD to JPY in the open spot market exposes JPIF to potential currency fluctuations. According to market analysts, the yen is forecasted to weaken relative to the dollar over the next few years, climbing from its current level of 102.9 to 113.0 by 2016.[41] Foreign exchange volatility has the ability to considerably influence returns on investments that are left uncovered in non-domestic currency portfolios over short and medium-term holding periods.

According to the Interest Rate Parity Theorem (IRPT), the interest rate differential between two countries should equate to the difference between the forward exchange rate (F) and the spot exchange rate (S), such that

$$\frac{r_f - r_d}{1 + r_f} = \frac{F - S}{S}$$

where r_f and r_d are the foreign and domestic interest rates, respectively. The forward rate is assumed to be an unbiased predictor of the future spot rate. The following table lists the current interest rates for both the U.S. and Japan at different maturities:

Term	5-Year	10-Year	20-Year	30-Year
U.S. Government Bonds (Rate)[42]	1.43	2.81	3.58	3.86
Japanese Government Bonds (Rate)[43]	0.193	0.636	1.512	1.681

[41] Source: Bloomberg.
[42] Source: www.treasury.gov
[43] Source: www.investing.com

Thus, given the IRPT and the notion that forwards are unbiased predictors of future spot rates, the higher interest rate in the U.S. implies a strengthening of the JPY.

If JPIF should move forward with an investment in the Harbor View project, Sato wondered whether or not the firm should explore the possibility of investing in derivative instruments to cover the portfolio's additional foreign currency exposure. The fund's Real Estate Portfolio currently manages a hedge ratio of 60% of its foreign assets, using an array of derivative instruments including currency swaps, forwards, and long-dated options.

- *Currency Forwards:* Forward rates are unbiased predictors of future spot rates. The ten-year USDJPY forward bid-ask spread is currently 75.915-76.595.[44]
- *Currency Options:* JPIF may purchase put options on the JPY to offset potential currency losses should the JPY continue to depreciate against the USD. If the JPY does not depreciate, then JPIF would not exercise the put options and simply allow them to expire. A sample put option deal is displayed in Exhibit XIII.
- *Currency Swaps:* A currency swap is often considered to be a portfolio or series of currency forward contracts. Based on the ten-year USD interest rate swap curve, the implied ten-year forward rate is USD 4.245.[45] As per the ten-year JPY interest rate swap curve, the implied ten-year forward rate is JPY 2.504.[46]

Sato could certainly use currency derivatives to hedge against foreign exchange rate risk associated with the portfolio's non-domestic investments, thereby treating such instruments as a form of insurance and risk management. If Sato moves ahead with investing in the

[44] Source: Bloomberg.
[45] Source: Bloomberg. Based on the LIBOR USD three-month rate (US0003M Index).
[46] Source: Bloomberg. Based on the LIBOR JPY six-month fixing rate (JY0006M Index).

Harbor View project, should he consider investigating in additional derivative instruments to cover the newly added currency exposure so as to maintain a fixed 60% hedge ratio?

Alternatively, should Sato consider the use of derivatives as unnecessary given that JPIF pursues a long-term investment strategy? Studies have shown that over long-term horizons, the risk premium for foreign currencies is quite trivial when compared to the level of volatility sustained.[47] Over the long run, Purchasing Power Parity (PPP) tends to hold, leading to a relatively constant real exchange rate. If PPP holds precisely, then the mean reversion of real exchange rates infers that nominal currency changes should not affect JPIF's investment returns. Thus, concerns surrounding the risk of short-term currency movements are largely mitigated given the fund's natural inclination to hold investments over a relatively extended period, typically ranging from 10 to 15 years.

TAX IMPLICATIONS[48]

JPIF places heavy emphasis on tax implications associated with foreign real estate investments, which varies from one country to the next. Sato projects to hold the Harbor View investment for a period of ten years. Upon the sale of a U.S. real estate property investment (or, the unwinding of JPIF's portfolio position), the sale price is subject to the Foreign Investment In Real Property Tax Act (FIRPTA), which effectively provides the government with a means to securing the collection of income tax. When a foreign entity

[47] "Selective Hedging: A case study in currency strategy." UBS. Sept. 2011. <https://www.ccr-am.com/publications/fichier.app.php?96-Selective-Hedging>.

[48] Note: This case accounts for the FIRPTA tax as well as the gain on sale tax. No dividends will be distributed on this investment. Thus, the 30% withholding tax that the non-resident alien (JPIF) would be subject to on any dividend distribution is not applicable. For the sake of simplicity, all other tax implications may be ignored.

(JPIF) sells its stake in a real estate property, the buyer can remit 10% of the gross contract price to the U.S. Internal Revenue System (IRS) within twenty days of the sale date. If JPIF assumes the tax due upon the sale of the property exceeds the 10% FIRPTA payment, then JPIF is able to apply for a refund of the difference when filing its income tax return.

Finally, given the corporate structure of the Harbor View investment opportunity, the gain on sale is taxed at the long-term U.S. Federal capital gains tax rate of 20%.[49]

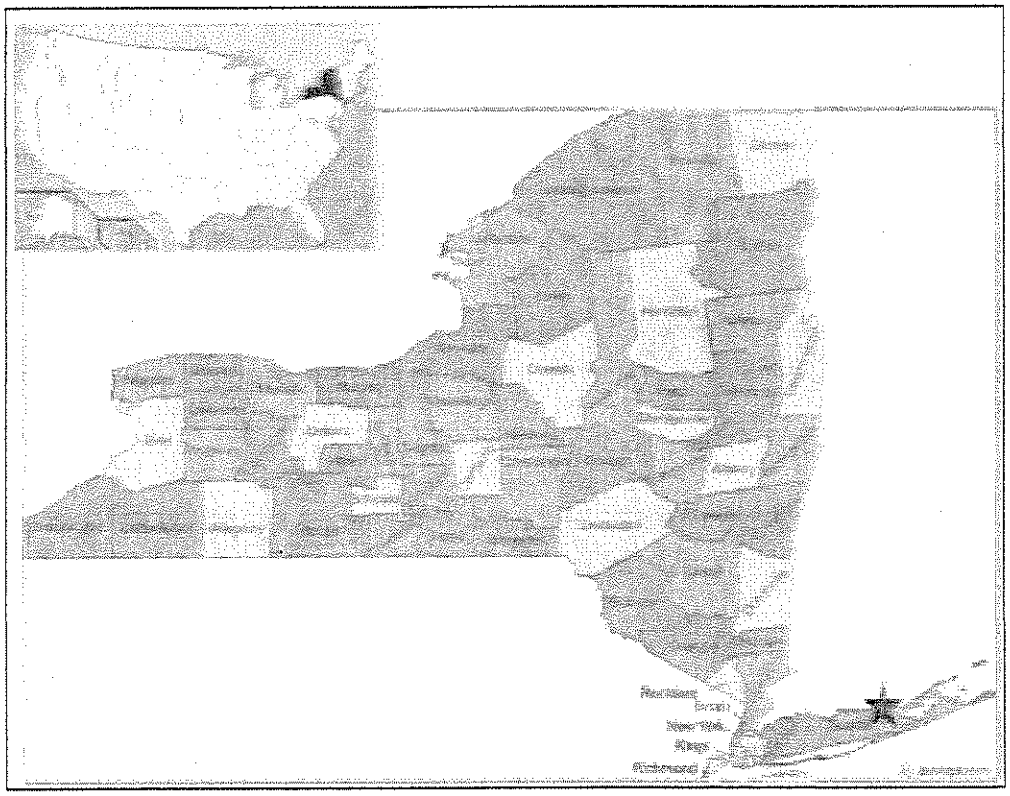
GOING FORWARD

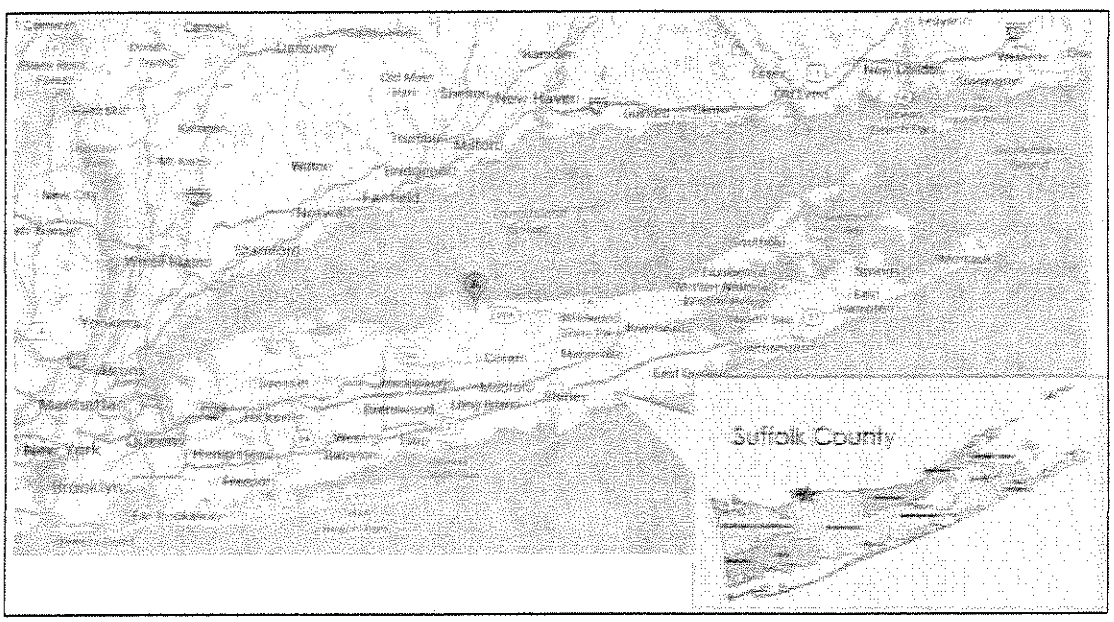
As Sato sat back to examine the specific project analytics, he wondered how he should appropriately go about managing the risks associated with foreign investments. Like any other investor, Sato had to evaluate a range of factors that may influence return on investment, including market supply and demand forces, financial feasibility, as well as the associated environmental and social implications of the project. In addition to the many questions that raced through the mind of a domestic investor, Sato also had to determine whether or not Harbor View was a viable investment option when accounting for the application of U.S. foreign investment tax regulations and the project's associated foreign currency exposure. Sato finished his cup of coffee and turned to his computer. He certainly had his work cut out for him.

[49] The capital gains tax of 20% is the tax levied on the profits that JPIF would realize when it sells the asset for a price that exceeds its initial investment ("purchase price"). Note: The capital gains tax is only activated upon realization (sale) of the asset.

APPENDIX I: Exhibits

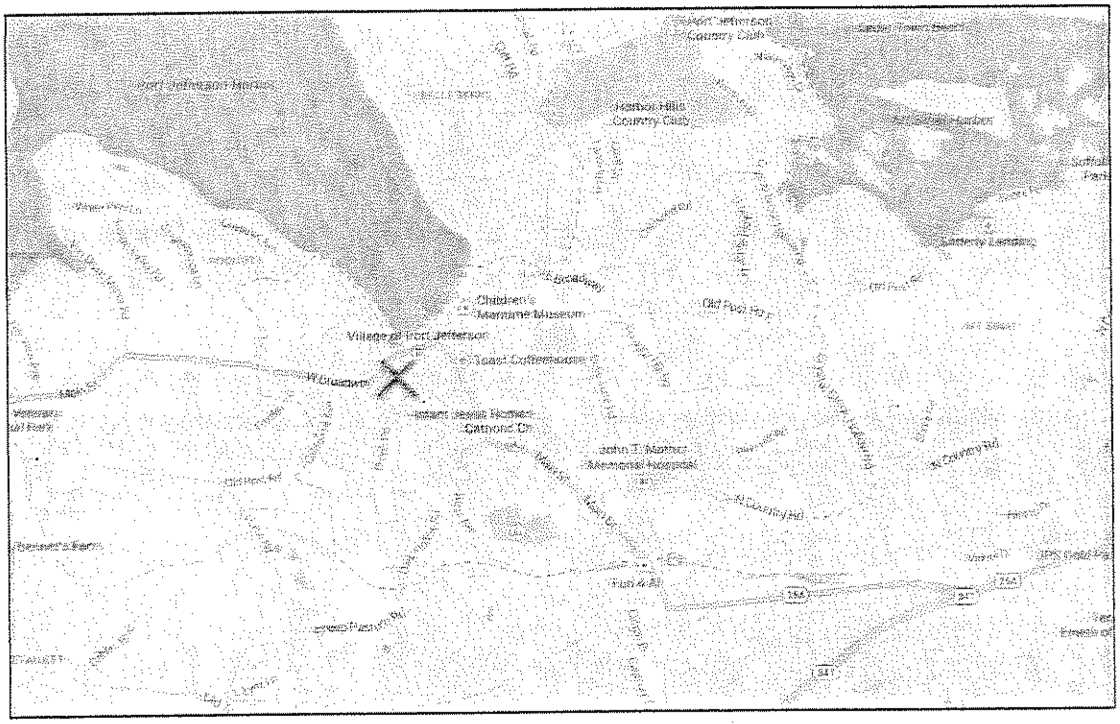
EXHIBIT I: *Site Location*





Relative Distances: Port Jefferson is…

- Roughly 60 miles from Manhattan (1 hour and 45 minutes via train)
- Approximately 50 miles from the Hamptons (1 hour via automobile)
- Roughly 15 miles from Long Island's regional Macarthur Airport
- Served by the Long Island Railroad (trips to Penn Station leave roughly every 90 minutes; trip time is 1 hour and 45 minutes)
- Served by the Bridgeport-Long Island Ferry (trips to Bridgeport, CT run hourly; sailing time to Connecticut is 1 hour and 15 minutes)
- Surrounded by three hospitals within a five-mile radius



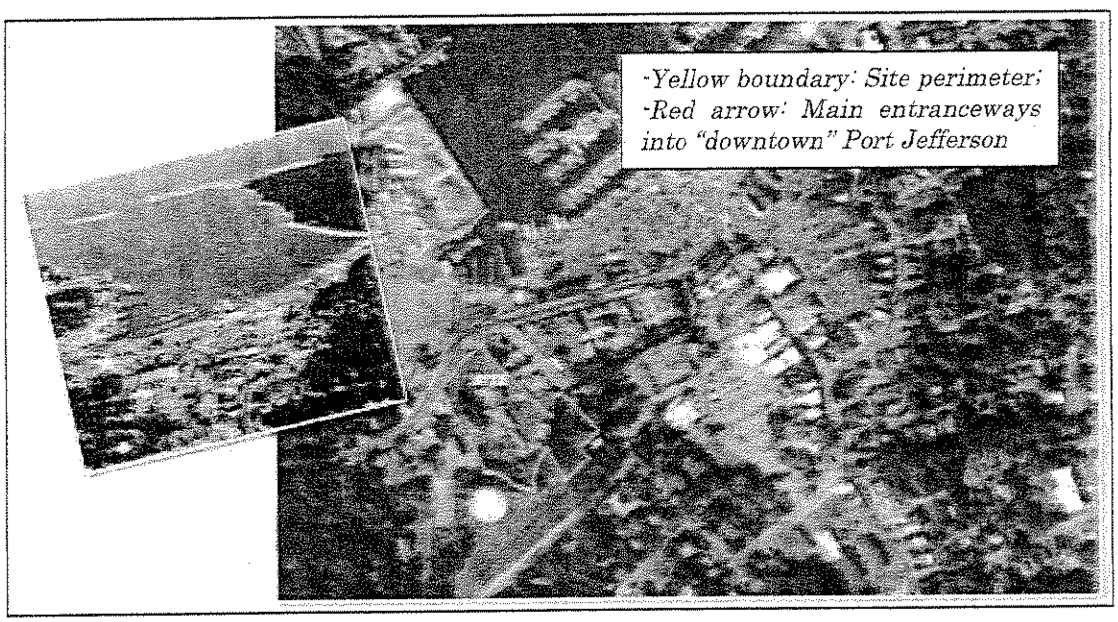


EXHIBIT II: *Sense of Surroundings*

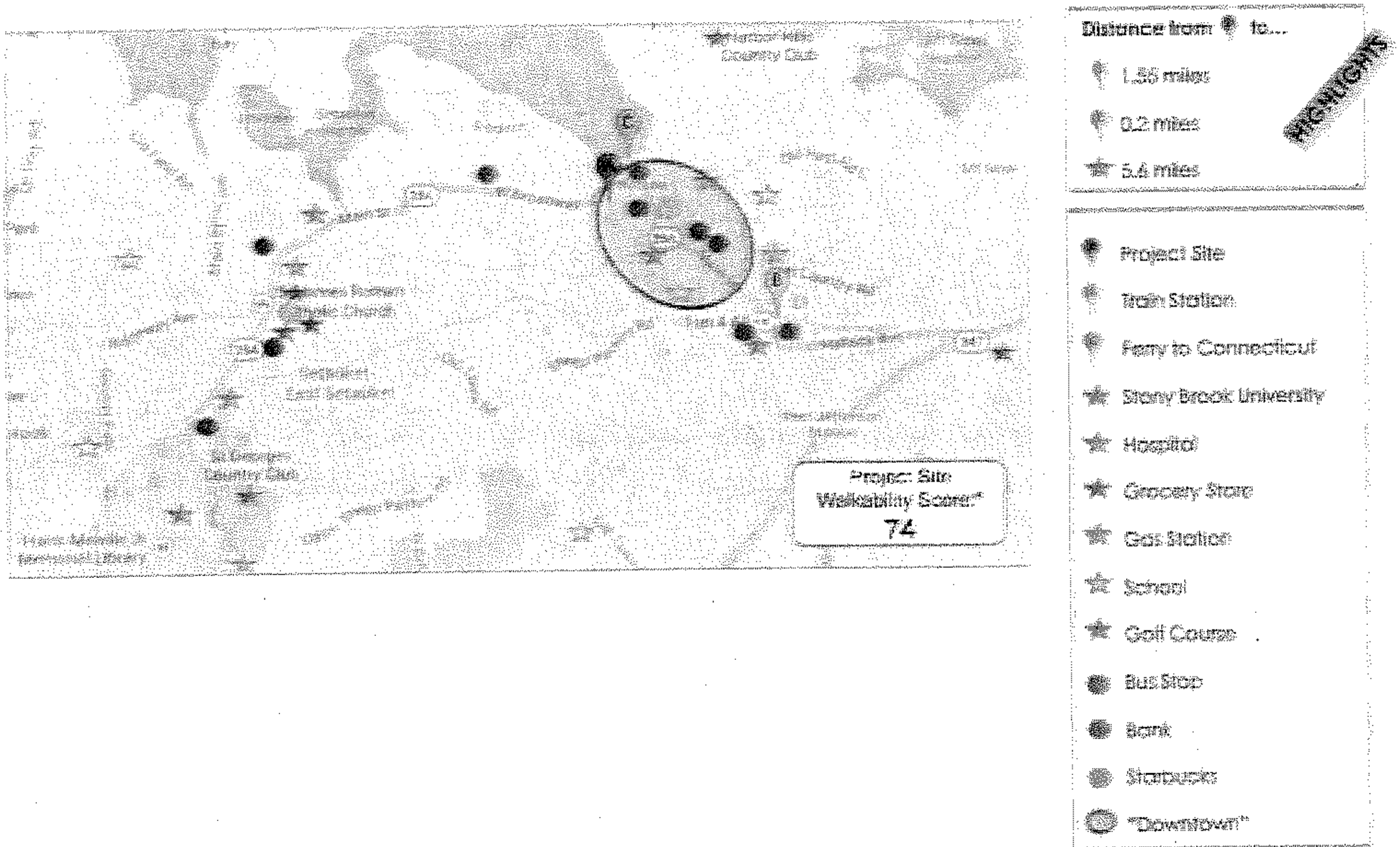


Exhibit III: *The Village of Port Jefferson*

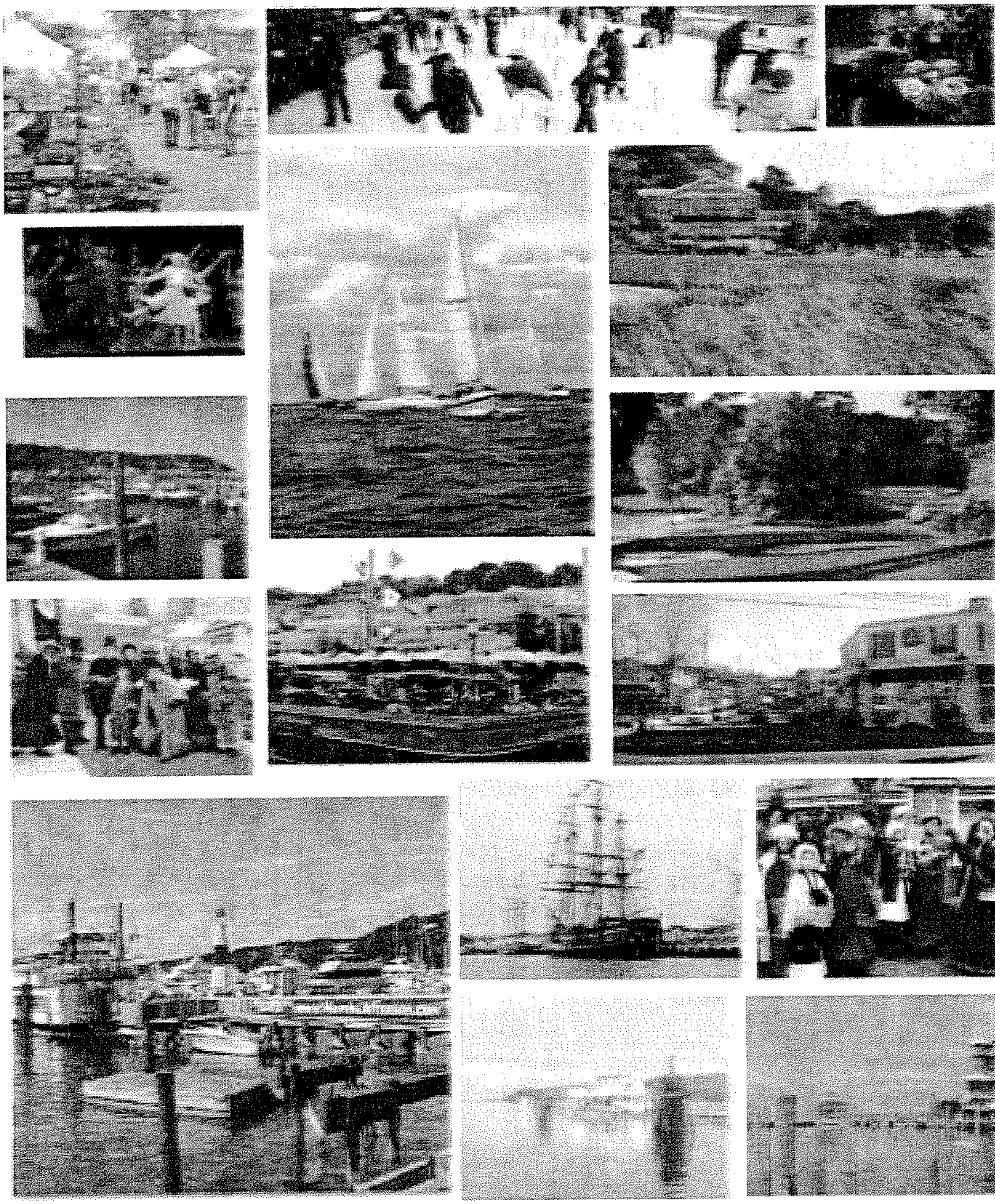
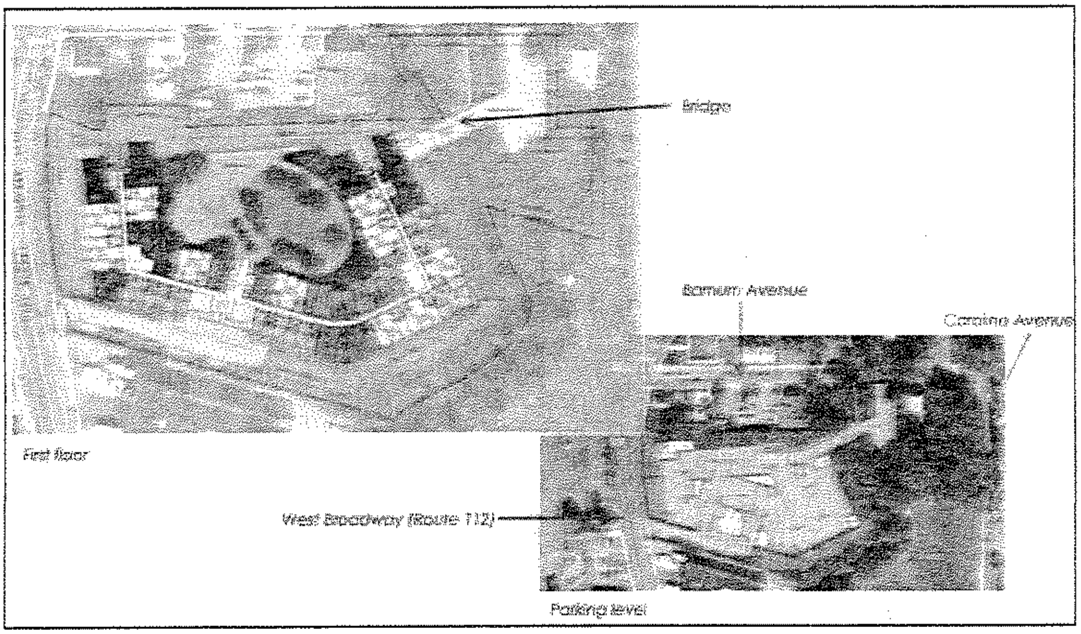
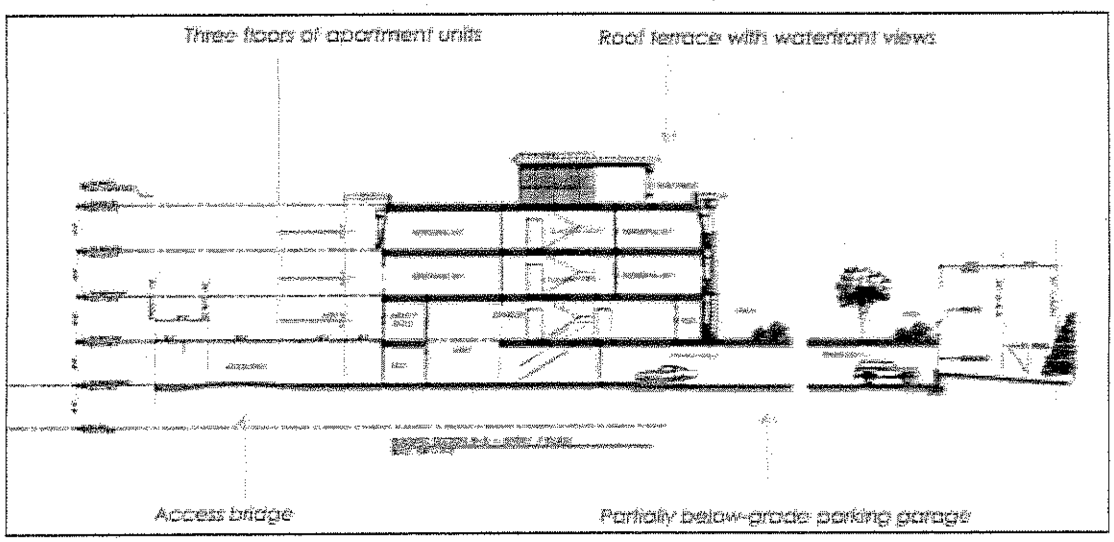
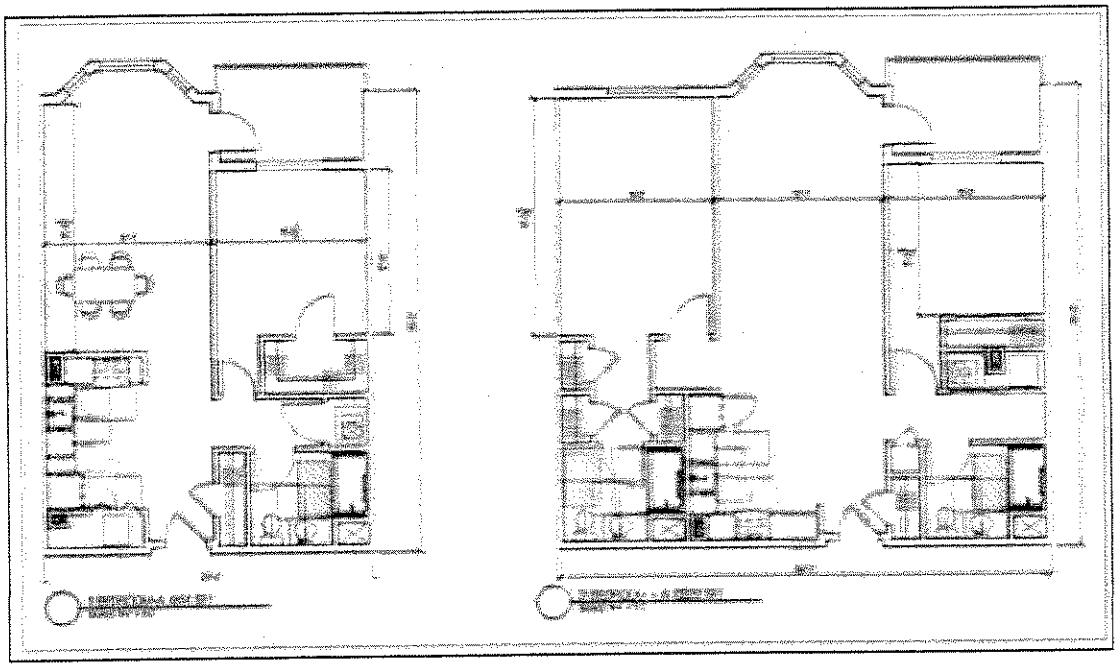
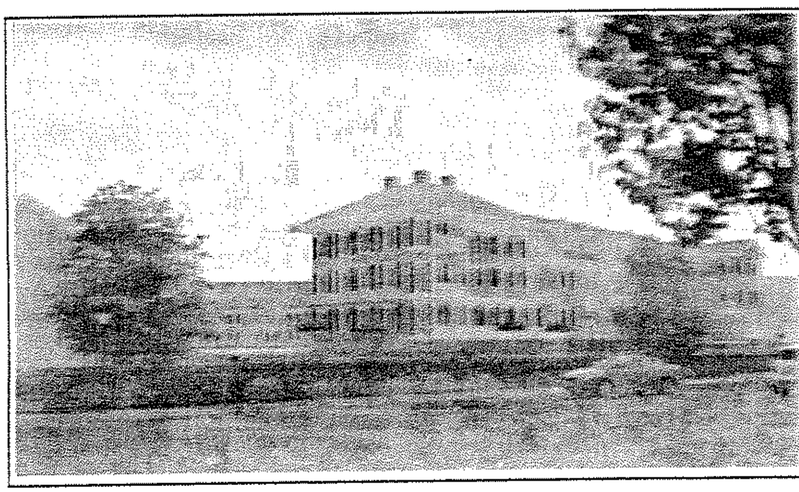


EXHIBIT IV: *Project Design*









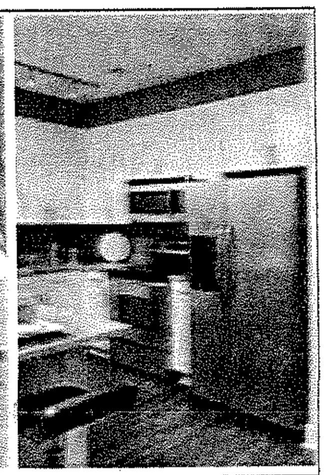
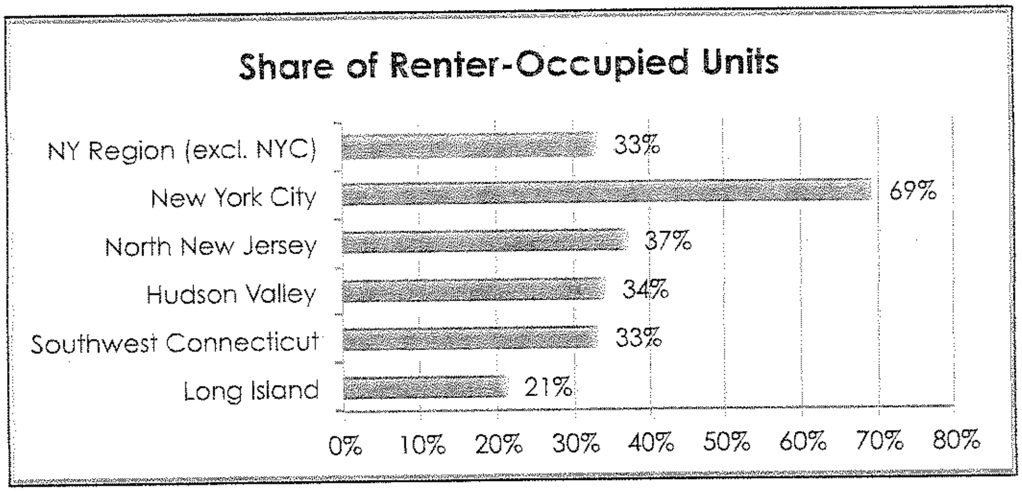


Exhibit V: *Regional Rental Statistics*



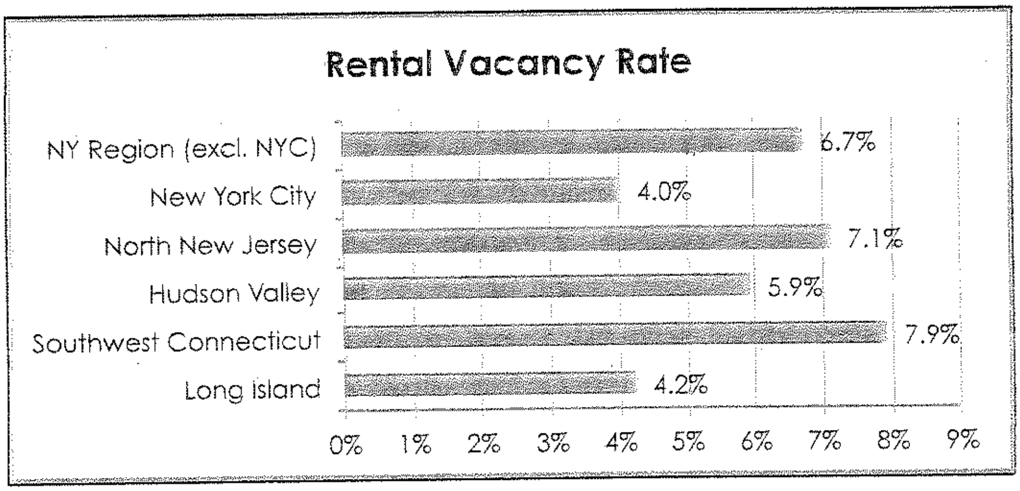
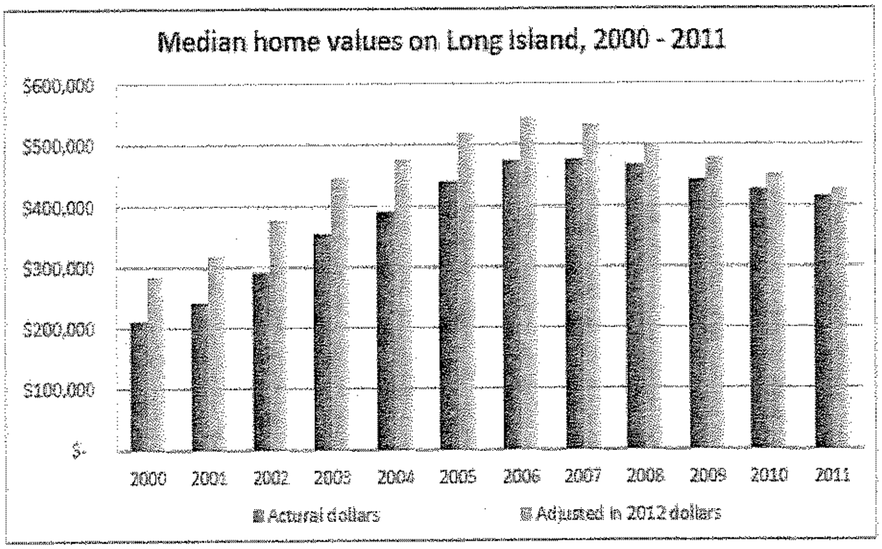


Exhibit VI: *Housing Statistics in Long Island*



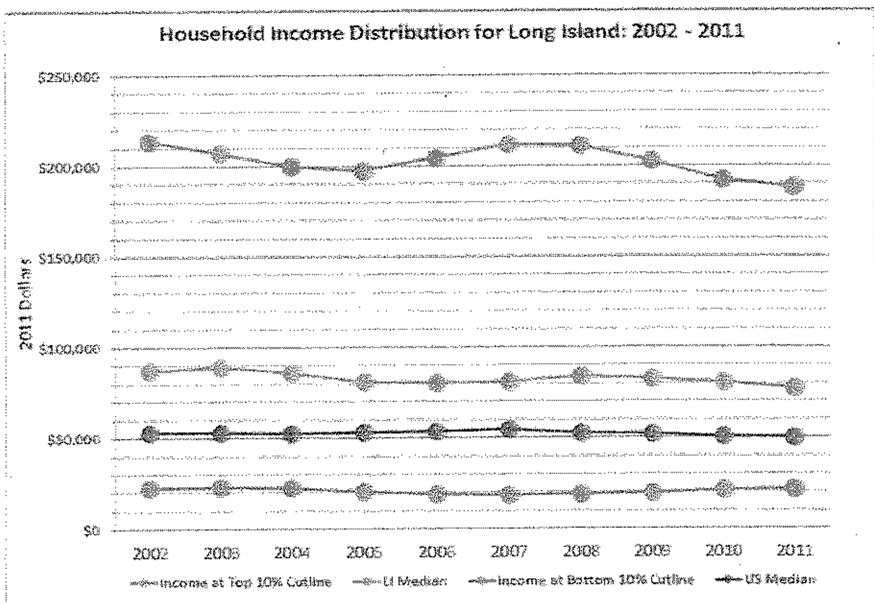
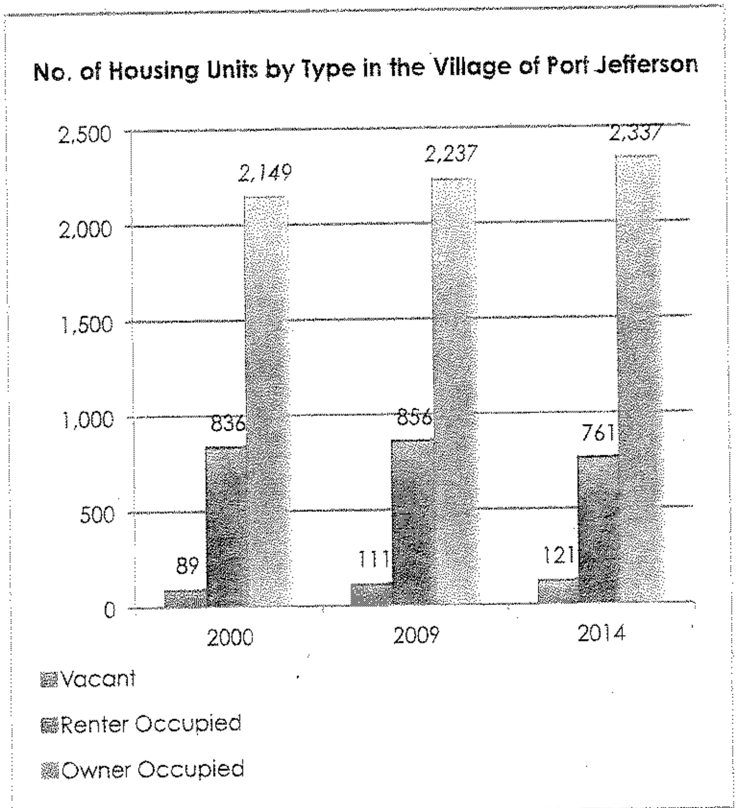
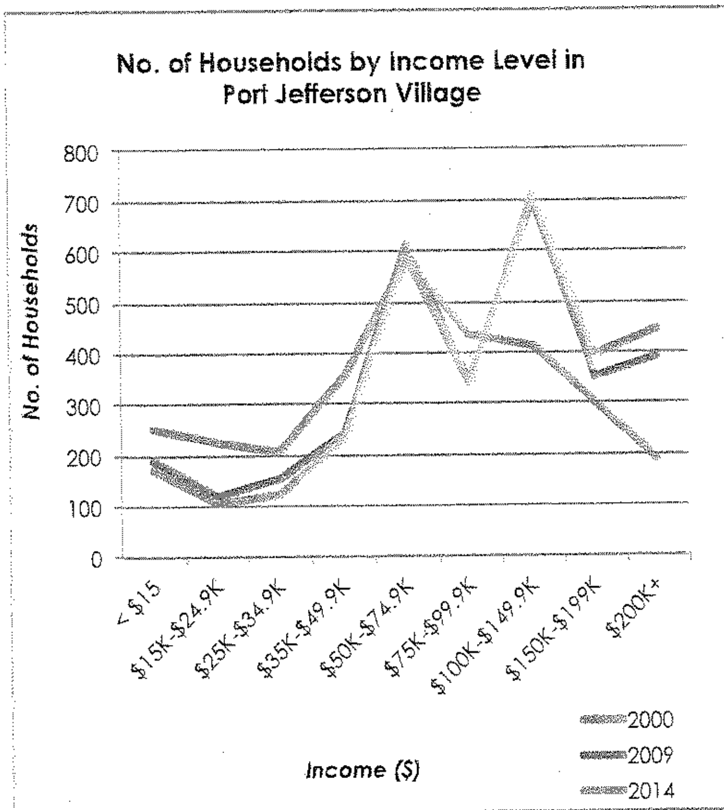


Exhibit VII: *Housing Statistics in Port Jefferson*





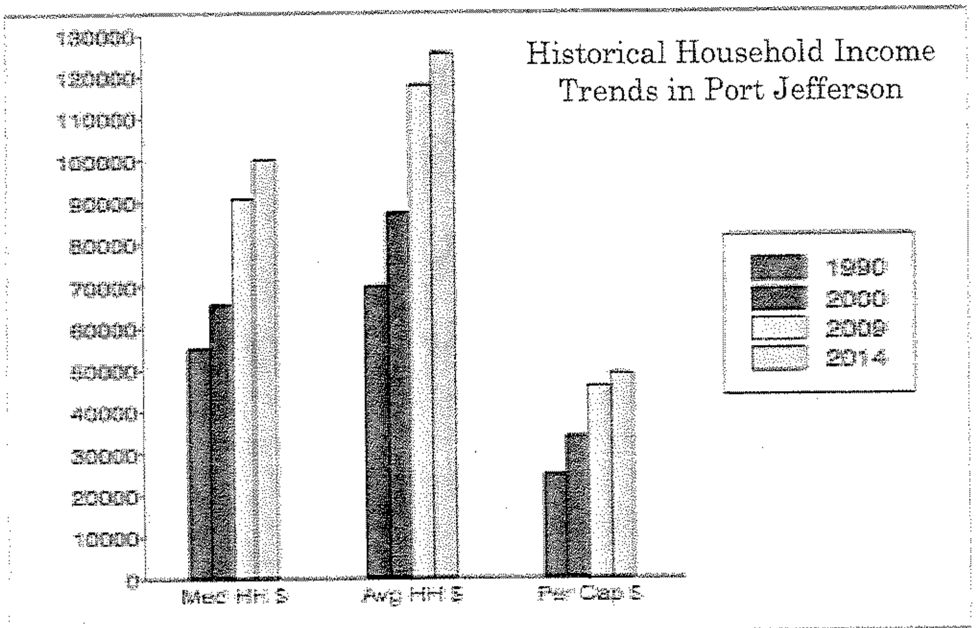


EXHIBIT VIII: *Target Audience*

Group	Age	Avg. Salary
Professional Single/Couple (no kids); Often includes roommates	25-54	$75K - $150K
Young Professionals/Families (1-2 children)	25-34	$75K - $150K
Upscale Young Professionals/Families (1-2 children)	25-34	$150K - $250K
Mature Families/Couples	35-54	$100K – $250K
Retirees; Empty Nesters	55-74	$75K+

EXHIBIT IX: *Sources & Uses*

Sources:	
Mortgage Amount (70%)	28,806,300
Equity Amount (30%)	12,374,887
Managing Member's Equity (5%)	*618,744*
Member's Equity (95%)	*11,756,143*
Total Project Funding	**41,181,187**

Uses:	
Land Price	3,900,000
Hard Costs (incl. contingency + bridge cost)	28,954,915
Soft Costs (incl. contingency)	5,049,981
Financing Costs	432,094
Developer's Fee	1,233,462
Total Development Cost	**39,570,453**
Construction Loan Interest	1,109,043
Operating Reserve	501,692
Total Project Cost	**41,181,187**

For the sake of simplicity, the following has been included in the "Sources & Uses" figures:

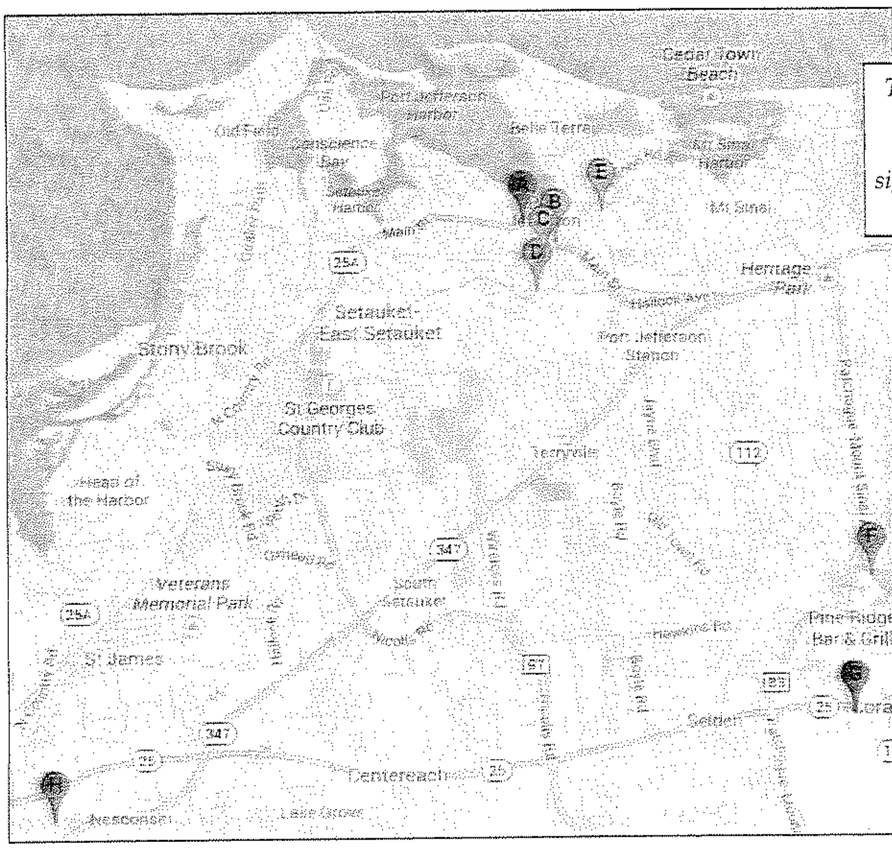
- *Developer's fee: 3% of total costs*
- *Hard cost contingency: 3% of hard costs*
- *Soft cost contingency: 3% of soft costs*
- *Guarantee fee: 1% of loan amount*
- *Loan origination fee: 0.5% of loan amount*

The developer assumes the full risk of construction completion in this analysis.
Operating Expense in the first stabilized year is estimated at $1,031,426.
Managing Member is defined as the developer; Member is defined as the equity investor.

Exhibit X: *Comparable Market Overview*

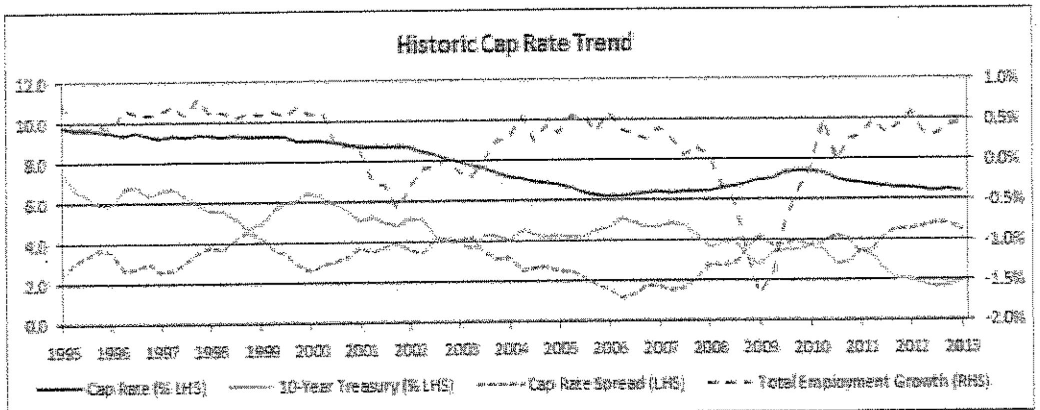
	Building	Location	Built	Avg. Rent/ SF ($)	Weight	Balcony /Patio	In-Unit W/D	Fireplace	Pool	Fitness	Club Room
A	Harbor View Project	Port Jefferson	n/a	?		X	X			X	X
B	The Barnum House	Port Jefferson	2002	1.90	2%						
C	Fairfield Falls	Port Jefferson	1964	2.12	22%		X				
D	Fairfield Landmark	Port Jefferson	2001	2.34	24%	X	X	Some			
E	Fairfield	Port Jefferson	1970	2.65	22%					X	X
F	Avalon Pines	Coram	2006	1.65	10%	X	X	Some	X	X	X
G	Avalon Charles Pond	Coram	2009	1.56	10%	X	X		X	X	X
H	Avalon Commons	Smithtown	1997	1.95	10%	X			X	X	

Source: www.apartments.com



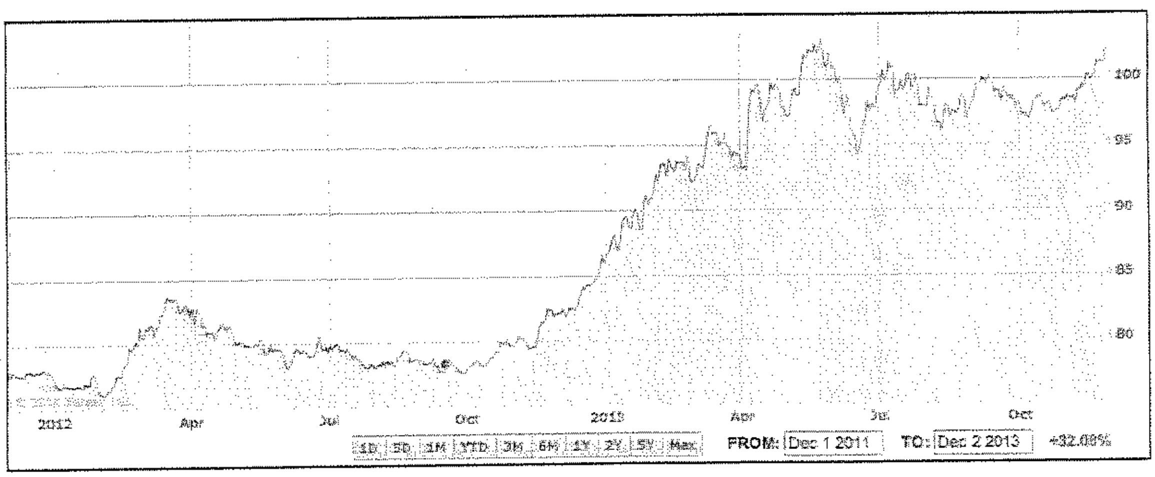
The Harbor View project (A) is capable of leading the market with its amenities package. Note: The "Weight" column signifies the weight of comparability of each property to the Harbor View Project.

Exhibit XI: *Historical Cap Rate Trend*



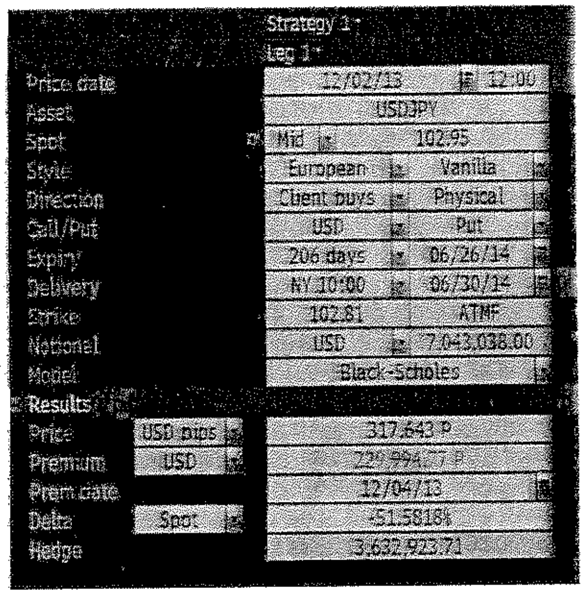
Source: Freddie Mac, RCA

Exhibit XII: *USDJPY Exchange Rate*



Source: Yahoo, Inc.

Exhibit XIII: Modeling a Put Option on USDJPY



Notional Amount: Assumes a 60% hedge of JPIF's total all-in investment of $11.7 million.
Source: Bloomberg

APPENDIX II: Project Cost Breakdown

	Purchase Price of Property (a)
+	Soft Costs & Soft Costs Contingency (b)
+	Hard Costs & Hard Costs Contingency (c)
+	Developer's Fee (d)
+	Financing Costs (e)
+	Construction Loan Interest (f)
+	Operating Reserves (g)
	Project Cost (Net Investment)

a) **Purchase Price:** Fletcher can acquire the property for $3.9 million. Assume no land carry costs.

b) **Soft Costs & Soft Cost Contingency:** The project's soft costs, on a per-unit basis, are displayed below. The Soft Cost Contingency is 3% of Soft Costs.

Soft Costs:	
Item	**Cost Per Unit***
Accounting Fees	536
Architectural/MEP - Predevelopment	1,379
Legal Fees	3,973
Bank Consultant	536
Architectural/MEP - development	7,594
Environmental Survey	1,116
Equipment and Amenities	2,232
Insurance (GL,BR & Umbrella)	4,464
Permits, Fees and Offsites	4,107
Traffic Study	366
RE Taxes During Construction	625
Recordation Fees	2,321
Security at Site	446
Civil Engineering	2,714
Survey-TOPO	116
Marketing/Advertising	2,232
Utility Connections	1,339
Other Soft Costs	1,875
CM Precon Fee	714
Operating Reserves Year 1	4,344
Geotech	491
Title Insurance	254
Total Soft Costs	43,736

c) **Hard Costs & Hard Cost Contingency:** Hard Costs include both the construction cost and the bridge cost. The construction cost of the project is estimated at $217.60 per gross square foot of the property. The bridge is projected to cost $650,000. The Hard Cost Contingency is 3% of Hard Costs.

d) **Developer's Fee:** The Developer's Fee is 3% of the Total Project Cost. It is estimated based on a preliminary Total Project Cost that is determined with all line items less the Developer's Fee.

e) **Financing Costs:** Financing Costs are composed of the Guarantee Fee and the Loan Origination Fee. The Guarantee Fee is 1% of the Loan Amount. The Loan Origination Fee is 0.5% of the Loan Amount.

f) **Construction Loan Interest:** The Construction Loan Interest can be approximated with the following formula:

	Loan Amount
x	Interest Rate on Loan
x	Construction Period (months)
x	Average Draw
	Construction Loan Interest

Notes:

- The Average Draw is the amount that is drawn down, or the amount of funds to be taken out of the construction budget. Assume an Average Draw of 60%.
- The projected construction period is 14 months.

g) **Operating Reserves:** The Operating Reserve can be estimated as:

	Construction Interest during Lease-Up
-	NOI during Lease-Up
	Operating Reserve during Lease-Up

in which

	Estimated Rent during Lease-Up
-	Estimated OPEX during Lease-Up
	NOI during Lease-Up

and

	Loan Amount
x	Interest Rate on Loan
x	Lease-Up Period (months)
	Estimated Rent during Lease-Up

Notes:

- The projected lease-up period is 8 months.

APPENDIX III: Analytical Framework

A. PRO FORMA NET OPERATING INCOME

A property generates income primarily from the collection of rent (Rental Income). A property may also receive an additional income stream (Other Income) that emanates from miscellaneous sources such as concessions and parking fees.

In projecting the potential Rental Income that will be generated on a property, it is unreasonable to assume full (100%) occupancy throughout the life of the property. For instance, rent collection issues or lease violations may put downward pressure on rental income expectations. Thus, an allowance should be made for potential vacancies, which typically hovers around 5%-10%. Such vacancy rates should be applied to the first year of stabilized occupancy. The first stabilized year is used as the base year when determining the operational performance of the property via discounted cash flow analysis. A property is typically deemed to have entered its first year of stabilized occupancy when the occupancy rate reaches 90%-95%, regardless of whether or not the occupancy rate drops below this level at a later point in time. A 90%-95% occupancy rate implies a stabilized vacancy rate of 10%-5%, respectively. This Vacancy Adjustment denotes the estimated rental income that will not be generated given the vacant units available in the stabilized property.

	Potential Gross Rental Income
+	Other Income
-	Vacancy Adjustment[1*]
	Effective Gross Income (Total Revenue)

A real estate property also demands a number of Operating Expenses, including administrative expenses, maintenance expenses, and real estate taxes.

Net Operating Income (NOI) determines the income level that the property will generate. It is independent of the developer's financing structure; thus, debt-servicing costs are excluded from the NOI calculation. Note: NOI is generally calculated as the NOI obtained in the first stabilized year of operations.

	Total Revenue
-	Total Operating Expenses
	Net Operating Income$_1$

Notes:

- The subscript number "1" denotes the first year of stabilized occupancy. Thus, "NOI$_1$" and "Vacancy Adjustment$_1$" represents the respective NOI and Vacancy Adjustment values in the project's first year of stabilized occupancy.
- NOI is also referred to as: Unlevered Cash Flow; Income to the Building; Operating Cash Flow; Free & Clear Cash Flow.

B. COMMERCIAL LOAN VALUE

There are several ways to calculate the loan value. Assume the following:

APPROACH 1) *Loan-to-Value (LTV)*

$$\boxed{\textbf{Loan Amount} = \frac{\textbf{Loan-to-Value}}{\textbf{Property Value}}}$$

in which

- Property Value is the post-completion fair market value of the project. It is sometimes referred to as the Collateral.

$$\boxed{\text{Property Value} = \frac{\text{NOI}_1}{\text{Cap Rate}}}$$

- The Overall Capitalization Rate (or simply, the Overall Cap Rate) is a rate of return on a property based on the projected income stream that the property will produce. It can be approximated by assessing the cap rates of properties with similar attributes, such as location, risk, type, and size. Note: A cap rate is not considered a reliable or all-encompassing measure of return.
- The Overall Cap Rate is also referred to as: Going-In Cap Rate; Return on Assets; Return on Cost; Cap Rate.

$$\boxed{\text{Overall Cap Rate} = \frac{\text{NOI}_1}{\text{Total Investment}}}$$

Notes:

- The underwriter will ultimately determine the LTV. The LTV for a property will be based on properties with similar attributes, such as location, risk, type, and size. Generally, higher LTV projects are considered riskier investments.

APPROACH 2) *Loan-to-Cost (LTC)*

The LTC method is a more conservative approach relative to the LTV method in that the LTC method only considers the development costs of the project, or those costs needed to build the project (Project Cost). Generally, high LTC projects are considered riskier investments.

$$\textbf{Loan Amount} = \frac{\textbf{Loan-to-Cost}}{\textbf{Project Cost}}$$

in which

	Purchase Price of Property
+	Soft Costs & Soft Costs Contingency
+	Hard Costs & Hard Costs Contingency
+	Developer's Fee
+	Financing Costs
+	Construction Loan Interest
+	Operating Reserves
	Project Cost

APPROACH 3) *Debt Service Coverage Ratio (DSCR)*

Debt Service Coverage (DSCR) is the amount of cash flow the borrower has available to meet its debt service payments (interest + principal payments on debt). Ideally, the ratio should exceed one, which infers that the property is producing sufficient revenue to cover its debt obligations. Often, the lender will demand that the borrower meet a specific DSCR, i.e. 1.25x coverage.

In this case, the Loan Amount is calculated as the present value of the maximum debt service payments discounted at the interest rate.

Loan Amount = PV(Rate, No. of Amortization Periods, -Max Debt Service Payment)

in which

$$\text{Max Debt Service Payment} = \frac{NOI_1}{DSCR}$$

Notes:

- The Loan Value is typically assumes monthly amortization for rental apartments.

CHOOSE APPROACH 1, 2, or 3) *Determining the Loan Amount*

Choose the **lowest** loan amount that was computed using the three loan approaches noted above. This value will serve as the principal loan amount. From here, determine the loan's debt service using the PMT function.

Debt Service Payment = PMT(Rate, No. of Amortization Periods, -Loan Amount)

Notes:

- The Debt Service Payment is typically derived on a monthly basis for rental apartments. To determine the Annual Debt Service Payment, simply multiply the Monthly Debt Service Payment by 12.

C. CASH FLOW AND RATES OF RETURN

Note: The following equations are applicable at the overall project level. A further breakdown analysis can be applied to determine the distinct rates of return to the developer and the investor.

NOI	=	Debt Service	+	BTCF
÷		÷		÷
Value	=	Loan Amount	+	Equity
=		=		=
Cap Rate		Loan Constant		Cash-on-Cash Return

Terminal Value (Horizon Value)

The terminal value is the projected value of the property at the end of the investment holding, or horizon, period (t). It is an important value in multi-stage discounted cash flow analysis.

$$\text{Terminal Value} = \frac{NOI_{(t+1)}}{\text{Terminal Cap Rate}}$$

in which

- $NOI_{(t+1)}$ denotes the estimated NOI in one year after the sale year (t). Thus, if you anticipate selling the investment in year 5 (five years since the first stabilized year), you would use the projected NOI value in year 6 (5+1).
  - (t+1) represents the sale year (t) plus one year. The sale year is the last year of the investment-holding period.
- Note: When calculating the terminal cap rate, you can choose to use either $NOI_{(t)}$ or

$NOI_{(t+1)}$. Using $NOI_{(t)}$ is a more conservative approach, but both methods are acceptable. Note: "t" represents time of sale, or time of disinvestment in the project.

- The Terminal Cap Rate is the rate used to project the resale, or reversion, value of the property at the end of a specified investment-holding period. In other words, it is used to capitalize the anticipated NOI so as to derive the sale price (Terminal Value) at the end of the holding period. This rate is based on forecasted values.
- As the investment-holding period lengthens, it becomes increasingly difficult to accurately estimate the Terminal Value. As such, it may be wise to incorporate a risk adjustment value to the Terminal Cap Rate.

Return on Assets (ROA) – *single period return measure*

$$\boxed{ROA = \frac{NOI_1}{\text{Total Investment}}}$$

- ROA is also referred to as: Overall Cap Rate; Going-In Cap Rate; Return on Total Assets; Return on Cost

Return on Equity (ROE) – *single period return measure*

$$\boxed{ROE = \frac{BTCF_1}{\text{Equity Investment}}}$$

in which

- The Before-Tax Cash Flow (BTCF) is a measure of the cash flow generated by an investment property after revenues have been collected and expenses have been paid, but before taxes. This measure excludes noncash deductions (i.e. depreciation). Thus, a property that demands expensive financing may portray a positive net income, but negative cash flows. Alternatively, a property with high depreciation expenses may display tax losses, but positive cash flows.
- BTCF is also referred to as: Cash Throw Off; Cash Flow After Financing.
- ROE is also referred to as: Cash-on-Cash Return (COCR); Equity Dividend/Yield

**Note: Multi-period return measures: Internal Rate of Return (IRR); Net Present Value (NPV)*

NPV is computed by discounting future cash flows at a specified hurdle rate. If the PV of the cash flows exceeds the amount invested, then NPV will be positive. If the PV of the cash flows is less than the investment, then NPV will be negative and the project should be rejected.