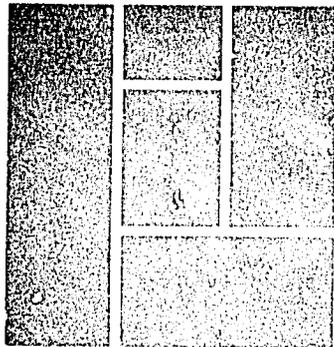


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**THE URBAN
INSTITUTE**

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Project Report

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**FINANCIAL FEASIBILITY ANALYSIS
DOWNTOWN KINGSTON
WATERFRONT DEVELOPMENT**

by

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FINANCIAL FEASIBILITY ANALYSIS DOWNTOWN KINGSTON WATERFRONT DEVELOPMENT

Introduction

In late 1992, a number of Jamaican government and private sector organizations commissioned a plan for the redevelopment of downtown Kingston. The resulting document--the Kingston Vision 2020 Plan--creates for the first time an overarching framework for downtown community and economic revitalization. It proposes a number of development concepts intended to launch a regeneration of real estate markets in downtown generally, and the Waterfront in particular. As such, the Plan provides an extremely useful roadmap for development of more concrete development proposals, including those that contemplate use of specific development sites. Critical to the success of these proposals is the private sector's seizure of development opportunities, which in turn depends on the profitability of downtown Kingston investments. This study tests the realism of alternative concepts for Waterfront development, and by implication, downtown more generally, by:

- examining potential demand for downtown commercial, retail, and residential property;
- translating this potential demand into estimates of financial returns to private sector investors; and
- relating the lessons from other waterfront redevelopment projects to possible strategies for downtown Kingston revitalization.

The first section of this report discusses the types of development contemplated for downtown and the overall approach to differences in types. The second section examines the financial characteristics of these developments and explores alternative financial scenarios. The third section summarizes the implications from this analysis and related insights into waterfront development, elsewhere.

1. Background and Analysis Approach

The Vision 2020 plan recommends a short-term, five-year, program of high-payoff projects to demonstrate the profitability of downtown investments, spur complementary investments, and create conditions for accelerated development over the remainder of the decade. An illustrative schedule of these developments, and others currently under consideration by potential investors, is presented in Exhibit 1. The specific development programme indicated on the matrix should be regarded as illustrative of the range of uses to which various buildings and sites could be put. The Exhibit is divided into "general-use" projects, which involve straightforward design-and-build development and uncomplicated financial feasibility analyses and "special-use" projects, which depend on highly specialized, and financially risky, development concepts.

**Exhibit 1
Proposed Development Projects**

General Use Projects

Development Concepts/Projects/Sites	Proposed Occupants	Use Programme
Hannah Building Vision 2020, Phase I project Marketing Strategy--Block D	Retail, Commercial	Total Net Rentable -- 56,592 Specialty Retail -- 23,493 General Office -- 33,099
Downtown Housing Development	Housing	Condominiums -- 35,000 square feet Ground floor -- 25,000 square feet
Harbour Street Retail/Office 104-110 Harbour Street Marketing Strategy--Block A	Retail, Commercial	Total Net Rentable -- 17,294 Bank tenant -- 9,944 General office tenants -- 3,675 Specialty retail -- 3,675

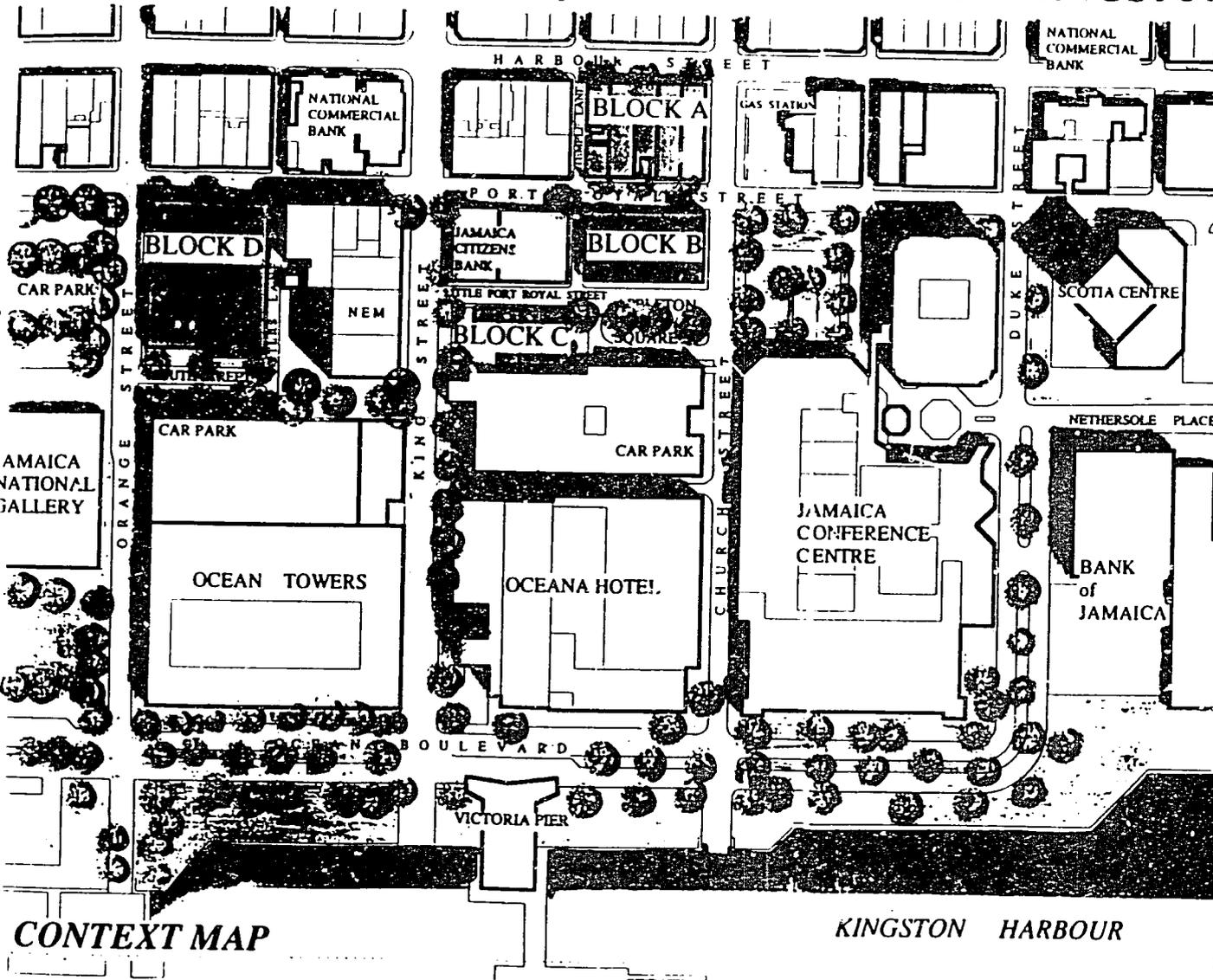
Special Use Projects

Development Project	Proposed Occupants	Use Programme
Oceana Hotel & Conference Center, Vision 2020, Phase I project	Hotel and Convention Facilities Specialty ground-floor retail/restaurants	International and Caribbean Region Conventions
World Trade Center, Vision 2020, Phase I project	Commercial Office Space	Jamaican export promotion offices Export companies Consulting offices International financial services
Wray & Nephew/Appleton Square, Vision 2020, Phase I project Marketing Strategy--Block B & C	Arts & Entertainment	Total Net Rentable -- 38,262 Restaurant/Sports Bar -- 15,488 Cinema -- 2,787 Specialty Retail -- 6,270 Art Galleries/Studios -- 13,717
Waterfront Festival Market Vision 2020, Phase II project	Entertainment & Retail	Restaurants/Bars Food Court Specialty Retail

The first column of the Exhibit indicates the name of the project and references the document (if any) that describes the project. Five of the projects can be found in the Vision 2020 plan; the plan called for phased development of projects--Phase I in the next five years, Phase II after five years. All of the Vision 2020 projects in the Exhibit, with the exception of the Festival Market, are proposed for the first phase of plan implementation. In addition, the Kingston Restoration Company commissioned a downtown marketing strategy, which specifies developmental uses for several of the Vision 2020 projects, and several others. A context map for the strategy is shown on Exhibit 2. The square footages for various uses are drawn from the marketing strategy. The financial analyses presented in the next section use several of these projects as illustrative of the financial performance of downtown property; specifically the Hannah Building, World Trade Center, and Downtown Housing Development.

MARKETING STRATEGY for the DOWNTOWN KINGSTON CORE AREA

DRAFT: July 8, 1994



BLOCK A
HARBOUR STREET
AREA
17,294 sq ft

BLOCK B
APPLETON SQUARE
24,545 sq ft

BLOCK C
LITTLE PORT ROYAL
STREET
13,717 sq ft

BLOCK D
HANNA BUILDING
70,612 sq ft

CONTEXT MAP

KINGSTON RESTORATION COMPANY

ORVILLE GREY & ASSOCIATES
 APPRAISERS, PLANNERS & INVESTMENT CONSULTANTS

MARVIN D. GOODMAN & ASSOCIATES
 architects • planners •

Those projects or sites intended for general commercial and/or residential use depend on general estimates of downtown real estate market potential to support financial feasibility analysis. Therefore, this analysis does not necessarily endorse a development program for each site, specifically, but these do constitute the most economically attractive uses. These projects are only illustrative of the types of general and special use projects slated for the Waterfront. For example, the Wray & Nephew Building may not be developed as an arts and entertainment complex, but such uses are highly desirable elsewhere in the waterfront area. Overall downtown market regeneration very much depends on the success of these anchor investments.

The development projects listed above will not go forward in a vacuum, and their attractiveness to potential investors and occupants will depend on other initiatives that are proposed or near implementation. Two complementary efforts include:

- Downtown Tax Incentive Zone--a 25 percent first-year investment tax credit, ten year exclusion of rental income from taxation, and tax-free bond authority;
- Downtown Management District--a scheme for property/business owner payments into a fund for downtown security enhancement, street clean up, and marketing and promotional activities.

The tax incentive zone will translate directly into increased returns on investment. These effects on rates of return from downtown property investments generally, and the above development projects, specifically, can be estimated based on *pro forma* analysis of individual, or representative, development deals. Effects of Downtown Management District creation will be less straightforward to estimate; the analysis in the next section will specify rental rate increases that would be necessary to trigger private sector investment. Local observers can judge whether downtown security and environmental enhancement projects are likely to produce rental increases of the needed magnitude. For example, will efforts to improve security and the physical attractiveness of downtown mean that a reduced differential between New Kingston and downtown property rental rates will be possible while ensuring strong demand for downtown space?

2. Demand and Rate of Return Analysis

Two analysis questions guide the discussion to follow:

- what is the projected demand for downtown property, including anchor development projects identified in Exhibit 1; and
- given development costs, achievable rental rates, and projected property appreciation, are rates of return sufficient to attract private sector investment?

Demand Estimates

This demand analysis is divided into three parts: demand for commercial space, retail space, and housing. Analysis is based on special surveys of rental rates and recent rental appreciation for a sample

of downtown properties, and those elsewhere in the Kingston Metropolitan Area. This section is followed by an analysis of investor rates of return on these properties, given assumptions based on findings from these surveys. Both discussions are organized in question-and-answer format, corresponding to those raised in the study's research design.

Demand for Commercial Space

- (a) *What are recent absorption rates in KMA? What are potential office space demands over the next five years from private sector and government?*

Downtown commercial space demand is a function of: (1) overall increases in demand for space in the Kingston Metropolitan Area, (2) government and corporate relocations, either for the purpose of space consolidation or desire to upgrade accommodations or reduce rent levels, and (3) ability of commercial property holders in downtown to capture a portion of the overall increase, including the relocation market.

Informal surveys indicate at least some demand for space resulting from both new demand and demand from relocating tenants. Recent (1991-94) absorption rates of new Class A office space in New Kingston (and to a lesser extent, in Constant Spring/Halfway Tree), suggest approximately 75,000 square feet per annum in the KMA as a whole. Indications are that this rate represents a slackening of demand from an earlier (1987-90) period. Downtown probably captured very little of this additional demand; there has been some upgrading of commercial space by in-place occupants, but very little new space added for the commercial office space market.

We cannot separately estimate the market for relocations, but informal surveys of government and corporate property owners and occupants of commercial space indicate some promise in the relocation/upgrade market. Best estimates of the potential for government relocation from currently rented space in New Kingston to downtown amounts to 275,000 square feet. (See Appendix Table A-1.) In addition, although major corporations surveyed for this report indicated no plans to add employment (proxy for demand for additional space), several corporations indicated plans for relocation/consolidation of corporate offices in downtown. Our best estimate of the total square footage in potential demand, including demand for space already owned by these clients, is another 50,000 square feet over the next several years.

For a number of reasons, *government space consolidation* represents the best *near-term* prospect for stimulating commercial real estate markets in downtown:

- (1) The government has an incentive to relocate and consolidate; it can achieve cost savings over payments for currently-occupied space, but upgrade the quality of accommodations and support its other (tax) investments in downtown revitalization. Assuming government lease renewals in New Kingston are \$220 per square foot, total costs for the 275,000 potentially relocateable amount to \$61 million. On the assumption (detailed below) that equivalent downtown space can be rented for \$160-180 for newly rehabilitated space, total government cost savings could amount to \$11-17 million per year.

- (2) Demand on this scale can yield visible improvements quickly if government relocates into rehabilitated space (the preferred developmental option--see discussion in Section 3): 275,000 square feet translates into five developments the size of the Hannah Building site (59,592 square feet).
 - (3) GOJ can reduce the risk of private sector investment in strategically-located renovation projects by executing long-term pre-leases; potential private sector occupants may be unlikely to do so.
 - (4) Government relocation, because of direct employment and services to citizens, will yield immediate increases in pedestrian traffic and day-time retail demand, and help support "anchor" investments until private-sector demand takes hold.
 - (5) GOJ is the only potential client that can, through concentrated relocations, both build on current downtown strength as a center of some government functions (help crystallize the downtown's "sense of place") and help dispel exaggerated perceptions of downtown as crime-ridden.
- (b) *What are current net rent and operating cost differentials? Expected rental escalations in New Kingston over five-to-ten years? Expected net rental and operating cost escalations downtown?*

A best estimate of the "downtown" rent discount is 20 percent below New Kingston rents for Class A commercial space. Scotia Center 1994 net rent contracts are \$189, compared with New Kingston contracts in the \$220-250 range. (See Appendix Table A-1.) Because of the visibility and quality of the Scotia Center building, this differential probably is narrower than for less-attractively-sited space, which includes most renovated space likely to be available for development. Based on a limited number of comparisons, the discount for other types of commercial space should be approximately 30-40 percent.

This differential in terms of rent levels does not apply to rental appreciation. Although based on a small sample, downtown rental appreciation rates for the last two years exceed those in New Kingston. They were roughly comparable in the preceding two years.

Median rental appreciation between 1992-93 for a sample of six New Kingston buildings came to 21.5%, for downtown--34%. Corresponding increases for 1993-94: New Kingston--58%, downtown--117%. On an annual percentage basis from 1992-94: New Kingston--50%, downtown--70%. Too much should not be made of the downtown performance (the sample includes only two downtown properties, six New Kingston properties). Nevertheless, we can conservatively estimate that rental rate appreciation for good quality office space is at least as strong in downtown, as New Kingston.

Operating cost and operating cost escalation appear not to differ materially between New Kingston and downtown. Rental appreciation appears to be running slightly ahead of inflation, taking into account both the provisions of rental escalation clauses and increases on lease renewal.

- (c) *What is the upside potential for downtown rents assuming: (a) increased security, (b) street-scape clean-up, (c) implementation of special-use developments (i.e., what are realistic projections of the real estate market effects of anchor developments?).*

Comparatively low rents for space should be considered the downtown's primary competitive advantage, currently. Nevertheless, increases in rents relative to construction costs (discussed below) represent the only way downtown real estate investments can be made financially attractive without public sector subsidy.

In effect, the current downtown rental rate discount represents the market price applied to the negative features of downtown location relative to New Kingston. An estimate of the effects of changes in the downtown environment that would offset these negatives would be speculative in the extreme. The inventory of disadvantages, listed below, should help guide development policy for downtown: each can be offset, at least to some degree, by public and private sector action:

- **Public Safety.** The single-most important deterrent to corporate location in downtown is concern for the safety of employees, particularly if job demands require employees to remain in downtown after hours, and on weekends. There is some evidence to suggest, however, that these fears are exaggerated. Stone's survey of Ocean Towers residents, informal interviews with downtown commercial space occupants, and comparison of New Kingston and downtown crime rates indicate that safety concerns, while real, are exaggerated. Highly visible improvements in police or private security presence can make a substantial difference in prevailing public attitudes.
- **Transportation.** Travel time to downtown from the northern portions of the KMA add about 15-20 minutes to a commute that otherwise would end in New Kingston. Once downtown, parking is reputed to be difficult; certainly the number of parking facilities in New Kingston, both on-street and in parking structures, exceeds that readily available in the immediate area of King and Harbour Street. Nevertheless, there is evidence that this differential is diminishing somewhat, as traffic levels in New Kingston increase, and recent commercial construction has strained available parking capacity. Further, appropriately sited demolition and clearance downtown can remove blighted structures, provide parking over the short- and medium-term, and prepare sites for future redevelopment.
- **Urban amenities.** Compared to New Kingston, downtown contains fewer high-quality restaurants, bars, clubs, shopping facilities, and other sources of entertainment. New Kingston also is close to shopping and retail centers on Constant Spring Road. Downtown cannot compete immediately, although initial commercial space creation should support complementary retail, restaurant, and entertainment facilities.
- **Sewer backups.** The Harbour Street sewer construction is now in its fifth year. Backups and overflows along Harbour Street and side streets have become an unattractive and seemingly permanent characteristic of the downtown environment. Installation of the sewer line has left Harbour Street itself in disrepair. Once finished, the new sewer line

will remedy one of downtown's principal constraints to new development. Meanwhile, however, construction delays have become a major deterrent.

(There are of course, competitive *advantages* to downtown location, such as unique natural and historical features, which offset to some degree the disadvantages noted above, and represent assets to support future development. These will be discussed in the concluding section of this report.)

Proposed creation of the Downtown Management District in the short run may improve both the real and perceived crime rate, improve environmental quality (through landscaping, trash pick-up) and contribute to more positive public perceptions through marketing and promotional activities. How well these efforts will translate into upward pressure on rents is not at all clear, especially if commercial occupants have to pay the full cost of any services that are provided. Therefore, the next section of this report, which presents simulated rates-of-return on various kinds of downtown real estate investments, establishes a rental rate target that must be achieved to produce competitive rates of return. Local real estate professionals and potential investors can use these targets to estimate whether management improvements are likely to yield rent increases of the required magnitude. To anticipate the discussion in the next section, rental increases of 15-25 percent over current rents, even with downtown tax preferences, would be required to produce competitive rates of return. A summary of the findings of this section is shown in Exhibit 3.

Retail Space

- (a) *What are comparative rent levels and appreciation rates between downtown and New Kingston?*

Comparisons between New Kingston/Constant Spring/Kingston 6 are complicated by considerable differences in retail space quality. Upper-end rents in Constant Spring/Kingston 6 in 1994 range from \$202-250, in the same range as commercial rental rates for prime quality New Kingston space. New Kingston retail rental rates, however, range from \$110-130 per square foot. Downtown rents for both properties examined are at \$75 per square foot. Thus, downtown retail rents discounts are approximately 30-40 percent compared to New Kingston, 60-70 percent compared to high-quality retail in the Constant Spring corridor. This differential is due both to location and quality--downtown retail facilities are less-well maintained and older than comparable space uptown.

A best estimate of the "constant-quality" rental discount is approximately 20-30 percent, comparable to the commercial rent discount versus New Kingston space. Therefore, new retail space in prime downtown locations is estimated to rent for \$90-95; 85% of current New Kingston rentals, and about 25% above existing downtown space. Other new retail in renovated space should rent for about \$85. Similar to commercial rent appreciation, downtown retail rental appreciation appears to be at least as strong as New Kingston/Constant Spring appreciation, and appears to have exceeded uptown rates over the last three years.

**Exhibit 3
Potential Commercial Demand
Summary of Conclusions**

Analysis Issue	Data Collection Method	Conclusions
Recent KMA Absorption Rates	Informed estimate of New Kingston/Halfway Tree Class A Floor Space created--1985-1994.	Relatively few buildings comprise the total Class A space created. Vision 2020 reported 100-150,000 square feet per annum in New Kingston, but 75,000 square feet is best estimate of Class A space for 1989-1994. New Halfway Tree Class A space is minimal.
KMA Demand Projection	Survey of Commercial Owner/Managers.	Relatively slack private sector Class A commercial space demand. Government is likeliest taker of downtown office space marketing: current New Kingston leased space amounts to 276,000 square feet. If renewed now at current rental: \$60.7 million. Would add about 900 employees to downtown. Smaller corporate relocations/expansions could add 50,000 square feet, 150 employees.
Current Rent Differentials	Commercial Owner/Managers Survey	Estimated downtown prime space rental at 80 percent of New Kingston rents; \$190 v. \$240. New downtown Class A probably could command \$215 given new construction/prime location.
Expected Upper Kingston and Downtown 5,10 year rent escalation	Commercial Owner/Manager surveys; for analysis purposes, assume rents track inflation.	Downtown rental escalation at least as strong as historic New Kingston performance, and may exceed New K. rates over the last two years.
Upside Potential for Downtown Rents	See "performance adjustments" in next section.	Management District and other demand generators (special events, promotions) etc. must produce 15-25 percent escalations in rents, which coupled with tax preferences, will generate return rates competitive with alternative investments.

- (b) *What is the upside potential for retail rents in downtown? How will rents/sales volumes be affected by increases in downtown employment and housing? Creation of a downtown management district?*

Just as commercial potential is difficult to estimate, so too is retail rental appreciation and potential demand. The analyses to be presented in the next section will assume that retail rental escalation to achieve target return rates will track commercial rental escalation; i.e., retail rent levels will not be separately estimated.

Potential demand for retail space will be affected by increases in downtown employment and housing. Estimates of potential additions to downtown employment in the near term, discussed in the preceding section, amount to about 1,050 employees. This amounts to about a 10 percent increase over total estimated office and government employment in downtown (10,391 in 1990),¹

¹ See Kingsley, Peterson, and Telgarsky, *Inner Kingston Development Project, Final Report* December 1991.

or about a 5 percent increase in total downtown employment. (This estimate assumes that total employment change in downtown has been flat from 1991-1994). However, addition of 1,050 employees, if development were concentrated in the immediate Waterfront area could provide a substantial localized boost to retail sales. Also, this increase would be concentrated at the middle and upper income end of the downtown market.

Potential demand from new housing units could increase effective demand, as well. On a per-person basis, residential demand for retail services, given comparative travel costs to uptown retailers and after-hours presence downtown, doubtless exceeds that of day-time employees. Based on development parcels available for upper-end residential unit construction, estimated potential for near-term is 100-150 residential units.

Exhibit 4
Potential Retail Space Demand
Summary of Conclusions

Analysis Issue	Data Collection Method	Conclusions
Current Rent Differentials	Retail Owner/Manager Survey	Rent differentials and escalation similar to commercial property rates; 20 percent discount for premium (waterfront, special-use) retail space, 30-40 percent for other Class A retail.
New Kingston and Downtown Rental Escalation	Retail Owner/Manager Survey Gray Report	Assume rental will track inflation.
Upside Potential for Downtown Retail Space Rents	Downtown residential/transient population projections (below) New Kingston comparables	Additional employment demand estimated 1,100 employees with government/corporate relocations in near term. Potential residential construction 100-150 units.

Housing

- (a) *What is potential demand at various unit purchase levels for moderate- to upper-income purchasers? How do these compare to other KMA home purchase alternatives?*

The Stone survey reported surprisingly strong interest in downtown housing among prospective middle- and upper-income purchasers, but significant concerns about crime and traffic problems.² The survey also showed significant differences in the perception of safety issues between current downtown residents and those from elsewhere in the KMA. Stone's estimates of potential interest

²See Port Royale Demand Survey, the Stone Team, prepared for Kingston Restoration Company, July 1993.

are probably affected by the relatively low cost figures quoted (about two-thirds of those for recent Ocean Towers sales, after inflation adjustment).

Limited number of sales comparisons shows per-square-foot Ocean Towers sales somewhat below prevailing sales rates elsewhere in the Kingston KMA, except for larger units--at the high end of the market. For example, recent unit sales at Ocean Towers run at approximately \$3,000 per square foot, almost identical to the \$3,051 average for a number of New Kingston residential complexes. (See Appendix table A-4.) These per square foot estimates will vary by unit size--per square foot price assumptions for each unit size will be outlined in the next section.

These sales prices per square foot roughly correspond to a per-square-foot rental rate of \$270--slightly above the rental rates for prime New Kingston property, but much in excess of the commercial rental rate in downtown. The effect the commercial-residential rent differential has on project rates of investment return also will be discussed in the next section. Finally, appreciation rates for recent sales appear to match those elsewhere in the KMA.

Special Use Projects

- (a) *What is the expected demand for space in special-use, or anchor, development projects?*

The category of "special-use" projects listed on Exhibit 1 included several projects that rely on very specific uses with no tested market. (Indeed, the market for general use projects already discussed is untested.) Among these developments are: (a) the Oceana Hotel and Convention Center, (b) a new World Trade Center with export promotion offices, export companies, international financial services and consular offices, in a newly constructed waterfront office tower, (c) Wray and Nephew building development (Appleton Square), a high-quality renovation project that would anchor creation of downtown entertainment district, and (d) a Waterfront Festival Market to include specialty retail, restaurants and bars, and a food court, similar to many developments in the United States.

Because demand for these facilities is uncertain, their development poses extraordinary risk. Results from initial inquiries to determine interest in the spaces available in the Wray & Nephew development suggest potential market strength, with expressed interest from local retailers/restaurateurs and international retail chains.³ These initial results suggest, but by no means demonstrate, the potential attractiveness of the Wray & Nephew development. Among all of those projects listed above, and for reasons discussed below, the Wray & Nephew project represents the best near-term prospect for development, though it, too, has been under discussion for several years without attracting investment commitments.

³ Based on contacts with potential clients, see *Market Concept: Redevelopment of Parts of Downtown Kingston*, for Kingston Restoration Company, Ltd., October, 1993.

Exhibit 5
Estimates of Potential Housing Demand
Summary of Conclusions

Analysis Issue	Data Collection Method	Conclusions
Sales cost comparisons	Survey of Comparables (Ocean Towers, New Kingston?) Residential Property Managers	Ocean Tower sales from residential property managers survey shows competitive downtown sales figures.
Expected appreciation rates	Trend analysis of Ocean Towers sales and KMA from Residential Managers survey	Recent appreciation appears to match uptown figures. Assume that future escalation will track inflation.
Upside Potential of Sales Prices & Appreciation	Stone, Residential Managers Survey	Market strength demonstrated by Ocean Towers, with support from Stone survey, but question depth of market--O.Towers has unique status. Issue of strength for residential demand in renovated structures.
Rate of Return Comparison	Pro-forma Analysis.	Residential returns show superior performance compared with commercial property. (See following section.)

The World Trade Centre is attractive in concept, but faces real difficulties. While a new office tower on the Scotia Centre model probably could lease up at rents as much as 15 percent higher than those in the Scotia Centre, rents at this level would not generate competitive investment returns, even assuming GOJ tax credits. (See discussion in the next section.) The single-purpose character of the development and the prestige associated with occupancy could command rents higher than these, in theory. However, the prime occupants--Jamaican trading companies and financial institutions--already are well-established at other downtown and New Kingston locations, and often own the property they occupy.

The Oceana Hotel and Convention Centre long has suffered from under-utilization. The Law of the Sea Conference will generate some demand, but insufficient to make either the Centre or the hotel financially viable without substantial subsidy. Appropriate marketing of the Convention Centre could yield additional attendance, but probably not on the scale needed without supporting investments in downtown commercial and retail facilities. (This will be discussed further, below.)

Finally, the Waterfront Festival Market concept has proven extremely successful in several U.S. cities, but not in all cases where it has been tried. Successful developments in all cases have relied on strong regional and national tourist demand, which in the Kingston case is unlikely to be strong, and on supporting investments, which in Kingston have not yet been made.

- (b) *What factors will constrain/promote demand for various types of special use facility? What factors are critical to building demand for special use projects, including the role of project sequencing, tourist and convention promotional efforts, supporting real estate investments, and other factors?*

Because demand for special use development projects facilities is untested, these are extremely high-risk projects. Development sequencing and the financing of individual deals should be oriented toward minimization of risk. However, each of the projects listed depends on different kinds of demand and require different levels of investment. The Wray & Nephew project and the Festival Marketplace project heavily depend on demand for retail services. The Convention Centre and Oceana Hotel development will depend on largely Caribbean region and international demand. The World Trade Centre will rely heavily on efforts to build general demand for commercial space, as well as the specifically intended use. Despite these differences, some general conclusions concerning project sequencing and overall downtown developmental priorities are possible.

Both the Wray & Nephew Building and the Festival Marketplace depend on pedestrian traffic and attendant retail demand. International experience with Festival Markets suggests that projects of this kind heavily rely on "export" markets--suburban destination shoppers, out-of-city tourism, and even international tourism, but strongly supported by the regional market. Further, most developments are supported by reasonably strong local commercial development. In the Kingston case, there is little prospect for near-term capture of tourist and convention market. Therefore, both retail "special use" facilities must rely on indigenous demand in the near term, and likely will be especially dependent on physical improvements and increases in pedestrian traffic in the Waterfront area.

This dependence on locally-generated demand has important implications for development sequencing. The smaller scale of the Wray & Nephew Building, and its mix of uses intended to attract an after-hours clientele, and some weekend (especially evening uses) suggests that this should constitute the anchor investment for retail/entertainment district creation. Its success will be an important test of the potential local demand for the Festival Marketplace, and will form part of the overall development package needed to attract convention business. In turn, the Wray & Nephew development must be supported by commercial and residential development to generate potential demand from day-time workers and full-time residents. This implies that initial tax subsidies through the downtown incentive scheme should support government relocation into renovated facilities and new residential construction (supporting existing Ocean Towers residential base) to create this demand. These physical improvements must be supported by highly visible improvements to security and environmental quality (e.g., trash removal). Downtown management district and promotional/market improvements are probably necessary to begin the shift of KMA resident perceptions.

There are few signs that Kingston is at all well-positioned to tap convention, hotel, and tourism markets without significant investments in physical development and urban public services. Nevertheless, these are medium-term developmental assets that should be preserved. Efforts should begin in the near term to market the convention centre, on the expectation that other

supporting investments will be made. Further, adaptive reuse plans for the Oceana Hotel should clearly indicate that conversion for general commercial tenants or government usage is temporary. Little in the way of new convention business can be expected until the appropriate support packages have been assembled. That is, blight must be removed through selective demolition and strategic renovations, security must be visibly enhanced, additional entertainment facilities must be created, and the regional assets of the area likely to be attractive to the business traveller must be linked together in a "business tourist" package (e.g., golf courses, weekend get-a-ways, and other attractions).

Not all of the supporting investments need cost a large amount of money. The Business Management District can use its subscriber payments to support retail district marketing and promotion. The GOJ with the assistance of UDC and KRC can organize waterfront festivals and other downtown events to attract visitors to downtown in sufficient numbers, on off-hours, and in relative safety. The importance of these special promotional events will be discussed in the next section.

Finally, risk minimization almost certainly will require government participation in risk sharing arrangements. The tax preference scheme, as will be shown in the next section, will produce improvements in return rates, but these will not be enough to generate sustained private sector investment unless premium rents, approaching New Kingston rates, can be charged. With the appropriate development package, facilities such as the World Trade Center and Wray & Nephew Building may well be able to command these rents. However, government participation in private sector development deals probably will be necessary to shield private investors from large losses. If however, the downtown market does show the expected strength, government's subsidy can be recouped through equity positions in downtown projects.

**Exhibit 6
Special-Use Development Projects
Summary of Conclusions**

Analysis Issues	Data Collection/Analysis Method	Conclusions
Estimates of Potential Demand	Effective demand for W&N--Gray Follow-up contacts with potential anchor tenants International Waterfront Comparisons	Festival Market is highly speculative and will rely primarily on local demand and local retailers, given typically small stall space and competing demand for major retail chains. Wray & Nephew is best current project given inquiries to date. World Trade Center would rely primarily on relocation of existing corporate clients--development should proceed only based on firm pre-lease commitments.
Factors Affecting Demand	Corporate Interviews International Waterfront Comparisons	Synergy among development projects a vital, but not quantifiable, element in special-use developments. Must be led by special cultural/recreational events, and significant retail/commercial investments to build potential demand, overcome negative downtown perceptions.
Development cost issues, effect of ancillary developments	Corporate interviews Waterfront comparisons UDC officials/documents Quantity Surveyor estimate	UDC almost certainly will have to accept participation in risk-sharing financial agreements with private sector developers, driven primarily by uncertainties in potential markets. Further, new construction on fill lands drives costs up 10 percent; may require land write-down to offset increases, possibly recouped through equity participations.

Potential Investor Response

The analysis above has established prevailing downtown rents and rent discounts in relation to New Kingston property. Given development costs, rents, and expected property appreciation, what are realistic estimates of return rates on downtown property? Are these sufficient to induce sustained investor interest in downtown real estate development?

This analysis relies primarily on comparative rates of return analysis, with baseline and sensitivity analysis to accommodate future developments in rental and investment tax rates. Discussed below are three development scenarios for four types of development that correspond to some generic uses of downtown space, and for comparison purposes, a new office tower in New Kingston. In several cases, this analysis uses specific development proposals as a basis for construction cost estimates. In the matrix to follow, the base case will consist of development scenarios that reflect best estimates of development costs and achievable rent levels, and projections of future property appreciation, interest rate behavior, etc. The analysis listed last on the matrix describes sensitivity analyses of return rates under altered assumptions of rent levels, appreciation rates, and return rates.

1. What are estimated rates of (current and future) return from downtown real estate investments, currently? How will these change with: upward pressure on rents? implementation of special-use development projects? implementation of downtown tax preferences and management schemes?

Three development scenarios for each type of development are presented in the accompanying table. (Complete pro-formas are attached in Appendix B.). Where appropriate, leverage ratios are adjusted to solve for the highest internal rates of return under each scenario; the resulting ratios are discussed in the text.

Base Case: Rental escalation at 30 percent per annum and no tax preferences. This is the current environment facing potential investors in downtown real estate.

Scenario 1: The base case with exclusion of rental income from taxation, and a 25 percent first-year investment tax credit;

Scenario 2: The base case with exclusion of rental income, a 25 percent investment tax credit, and an assumed rental rate sufficient to yield target return rates. This latter represents an estimate of the amount of additional rent that must be generated through policy changes to increase effective demand for downtown space.

Each of four development types is presented; these cover most of the development choices faced by potential downtown investors: (a) new construction of Class A commercial space, similar in design and location to the Scotia Center building, (b) rehabilitation of commercial space for commercial and retail use (Hannah Building, Block D example), just off the waterfront (c) rehabilitation of Class A but less-than-premium space (95 Harbour Street example), and (d) upper-income waterfront housing development.

Land purchase, building purchase (net of estimated land cost), and rehabilitation cost assumptions are summarized on Exhibit 7. Costs and prices are shown in relation to the quality of location or the original condition of the structure. Raw land prices range from a low of \$100 per square foot for parcels bordering on low-income residential neighborhoods, to \$250 per square foot for waterfront parcels. (These estimates are based on KRC purchases/inquiries and UDC land valuations, adjusted for inflation.) Purchase price of structures range from \$250 per square foot for derelict buildings to \$1,250 per square foot for buildings in prime condition. (These are based on recent KRC purchase offers.) Finally, rehabilitation costs range from \$1,750 per square foot (inclusive of an additional 20 percent in fees) for derelict property (and assuming that exterior walls are structurally sound) to \$750 per square foot for cosmetic exterior and interior improvements and minor upgrades to building systems (based on quantity surveyor estimates).

Income assumptions are noted on Exhibit 7 as well, and are based on the rent comparisons presented in an earlier section. For the housing development scenarios, the exhibit shows a single average rate for all unit sizes of \$3,200 per square foot, based on the following schedule of estimated downtown sale prices: (a) studio--\$2,700 per square foot; (b) 1 bedroom--\$3,000, 2 bedroom--\$3,300, and 3 bedroom--\$3,800. These are based on recent Ocean Towers sales and prevailing sales prices elsewhere in the KMA.

Exhibit 8 shows estimated rates of return for each development type and investment/rental rate scenario. (Detailed *pro-formas* for each development type and scenario are contained in Appendix B.) All downtown developments in the "base case" scenario produce return rates that appear well below those obtainable from safe investments in corporate or government bonds. Light rehabilitation produces an internal rate of return of 21.6 percent, compared with 20.1 percent for substantial rehabilitation and 19.6 percent for new construction. By comparison, New Kingston new construction produces a 24.8 percent rate of return.

A special case, downtown residential construction requires a full recapture of invested equity, plus a rate of return on invested capital, after the end of the first year of unit sales. In the base case, proceeds from unit sales amount to only 92.8 percent of initial equity; a 7.2 percent loss.

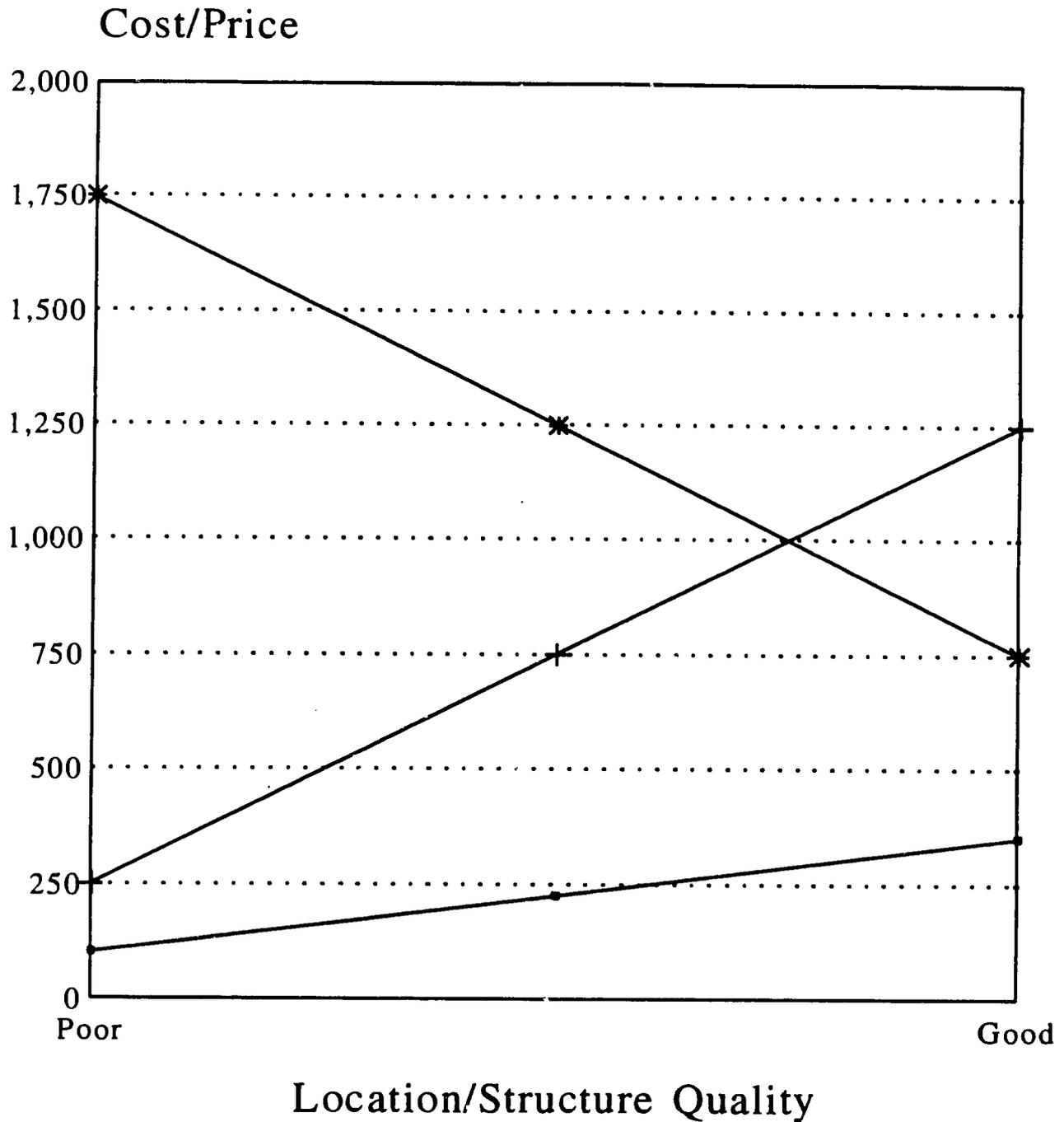
The first scenario assumes a 25 percent investment tax credit and exclusion of rental income from taxation. As expected, return rates improve, and are competitive with estimated New Kingston return rates, but remain below that obtainable for investment alternatives. Light rehabilitation internal rates of return amount to 28.1 percent in Scenario 1, with first year cash flows a substantial 29.6 percent. New residential construction shows a positive return--13.8 percent--with full cash out in year 1.

Scenario 2 adjusts base rental and annual above-inflation rental escalation to produce 40 percent internal rates of return, close to those now achievable from alternative, non-real-estate investments. All of the developments assume a 25 percent increase over base rents. Local real estate professionals can judge for themselves whether downtown management improvements, special promotional efforts, and synergies produced by concentrated developments could produce base rent increases of this magnitude. For example, the substantial rehabilitation example assumes that the Hannah Building development could command commercial rents of \$225 per square foot--slightly

EXHIBIT 7

Development Cost Assumptions

Cost/Price per Square Foot



● Raw Land by Location + Price/Condition Struct * Upgrd cost/orig qual

**Exhibit 8
Rates of Return for Selected Development Scenarios
and Rental/Tax Assumptions**

Scenario/ Assumptions	Substantial Rehabilitation	Light Rehabilitation	New Construction	Residential New Construction	New Kingston New Construction
Square Footage	56,952	5,190	135,000	135,000	135,000
Retail	23,642		25,000	25,000	25,000
Commercial	33,309	5,190	110,000		110,000
Residential				110,000	
Development Cost Per Square Foot	\$2,943	\$2,316	\$3,944	\$4,322	\$3,944
Rental/Sales Per Sq.Ft.					
Retail	\$95	\$85	\$95	\$95	\$115
Commercial	\$180	\$160	\$215		\$275
Residential				\$3,200	
Base Case					
Internal Return	20.1%	21.6%	19.6%	-7.2% *	24.8%
Year 1 Cash Return	4.4%	4.7%	4.3%		5.3%
Year 2 Cash Return	5.4%	5.8%	5.3%		6.7%
Year 7 Cash Return	18.1%	19.5%	17.6%		22.8%
Scenario 1					
Internal Return	26.5%	28.1%	25.9%	13.8% *	
Year 1 Cash Return	29.2%	29.6%	28.7%		
Year 2 Cash Return	7.0%	7.5%	6.8%		
Year 7 Cash Return	25.8%	27.9%	25.2%		
Scenario 2					
Internal Return	40.1%	40.3%	40.2%	40.2% *	
Year 1 Cash Return	30.8%	31.1%	30.0%		
Year 2 Cash Return	10.0%	10.0%	9.3%		
Year 7 Cash Return	59.6%	52.1%	53.4%		
Performance Adjustment					
Retail	\$119	\$106	\$119		
Commercial	\$225	\$200	\$269		
Residential				\$4,141	
Base Rent Increase	25.0%	0.25	25.0%	29%	
Above-inflation Increase	11.0%	9.0%	12.0%		

*note: residential return rates are percent return on equity at one-year cash out

above those now obtained in recent Scotia Bank rent contract renewals. Further, to achieve target return rates, above-inflation rent escalation of 9 to 12 percent must result from strengthening of demand for downtown commercial and retail space.

To produce a one-year 40 percent return, residential unit sales must be 29 percent above those estimated for recent Ocean Towers sales; \$4,141 per square foot versus \$3,200 square feet in Ocean Towers. Although this appears a substantial premium, these per-square foot prices have been obtained in certain luxury developments elsewhere in the KMA. (See Appendix Table A-3.)

In conclusion, residential developments would afford investors substantial immediate returns on investment under Scenario 2, and in general, rehabilitation of property performs slightly better than new construction of commercial and retail space.

The above analysis also reveals the importance of the macroeconomic and interest rate environment for real estate investment. Over the long run, rents and interest rates will tend to move in line with inflation. In the short run, however, government monetary and fiscal policy can produce high or low real rates of interest, after adjustment for expected inflation. During periods of high real interest rates, like the present, real estate development of any kind becomes difficult to finance.

A Concluding Perspective

The conclusions in this section are based on a review of urban waterfront development experience in the United States, and uses this experience to inform thinking about the future of the Kingston waterfront. First, although we tend to think most often about liabilities, downtown Kingston possesses assets on which to build. The next section presents these assets and liabilities as a prelude to the subsequent discussion. The second section summarizes the elements of international experience that are most relevant to the Kingston development prospect, and presents specific prescriptions for near-term development of the waterfront, based on the city's assets and the lessons from waterfront development elsewhere.

Summary of Assets and Liabilities

The Kingston waterfront possesses several assets that represent important developmental opportunities. These are advantages that Kingston has now, and which other cities with successful waterfront developments did not initially possess.

- A spatially well-defined waterfront district, which helps establish an identity of place, and which often is missing from other waterfront areas. Further, the area already has been cleared of inappropriate uses, such as warehouse and industrial facilities, that can deter potential investors.
- Historically and architecturally significant buildings, which resonate with the city's past as commercial port, and the waterfront's proximity to Duke Street and King Street with their historical professional and retail functions.

- Unlike many U.S. urban waterfronts before initiation of major development activities, the waterfront is not cut off from pedestrian traffic. But at the same time, the dual carriageway offers easy access to the immediate waterfront area.
- The waterfront contains a number of vacant parcels suitable for new construction *and* a substantial inventory of property suitable for relatively low-cost renovation. As will be discussed below, this allows the mix of uses shown to be important to international waterfront efforts.
- The downtown underground and drainage infrastructure is adequate, but improving, and in several respects superior to that of New Kingston. Large new investments in underground infrastructure are not needed to support new development.

However, development of the Kingston waterfront confronts obstacles that cloud, but do not obscure completely, the prospects for revitalization. Cities in the U.S. have faced similar problems successfully:

- Poor environmental quality affects long-term use of harbor as recreational site; this removes one feature advantage that other shoreline developments have (Miami Beach, Chicago, and some inland river ports--e.g., Pittsburgh). Many developments, however, have gone forward without incorporating recreational uses.
- Generally low disposable income in the region, and limited (to date) appetite for inner-city living, pose both financial and psychological obstacles to increased retail and residential demand. These can be offset by promotional campaigns and waterfront events that appeal to a spectrum of high- and middle-income people.
- Significant physical deterioration in buildings off the immediate waterfront area deters investment and provides a physical setting that feeds fears of crime. This can be remedied by judicious redevelopment and demolition, coupled with visible improvements to security; e.g., on-street presence of "beat" police.

International Experience: Lessons for Kingston Development

International experience in waterfront development offers a number of insights directly relevant to current proposals for Kingston downtown revitalization. These are summarized below.

Capitalize on waterfront heritage

Other cities have given developmental priority to preservation of existing buildings that reflect past waterfront uses. This developmental priority implies a strong emphasis on building rehabilitation, including restoration to original architectural detail (St. Louis--LaCledes Landing), renovation to return underutilized structures to productive use (countless examples), and adaptive reuse of structures originally intended for one purpose for some other purpose (Boston, Quincy Market). New construction does little

to promote links between current and historical uses, but can play a supporting role; e.g. Baltimore Harborplace.

Support or even lead physical investment with special events

Many waterfronts have benefitted in their earlier stages with special festivals and other entertainment to begin the process of popular identification with the area. Baltimore began to hold ethnic fairs and special holiday commemorations after initial clearance of unwanted structures, but before major redevelopment occurred. Other cities have hosted events on underutilized waterfront property that contributed to downtown retail demand, generally (e.g., Chicago, Milwaukee).

Encourage Mix of Uses

Encourage mix of uses--commercial, retail, recreational, residential. This mix of uses is supported by availability of structures for renovation, which combined with new construction, allows for mix of retail and high-end commercial development, encourages mix of income groups, and distributes retail demand and street population across time periods.

Take advantage of water-related uses.

Restaurants, marinas, festival markets with shoreline focus, cultural and entertainment events that are tied to the waterfront should take on developmental priority, if possible, and consistent with the need to improve environmental quality and minimize risk on high-profile projects (see below).

Minimize risk on high-profile projects.

Immediate creation of cruise-ship facilities or festival markets, without leading investments in downtown commercial, retail, and residential uses, runs the risk of high-profile failure. Rents to support high-profile uses would have to exceed those charged in New Kingston, and would require heavy reliance on destination visitors. These developments need a core of downtown employment and residences to cushion risk/provide core demand during off-peak periods (weekdays).

Use government investment to lead local market.

No U.S. waterfront development proceeded without substantial government investment in land acquisition and clearance. Particularly important was the removal of blighted structures to serve in the short run as additional parking facilities or open spaces; in the medium-term as sites for private investment. In the second stage, and in particularly high-risk developments, government investment absorbed a considerable amount of risk through participation loans, lease agreements, and other investments that paid out only if private sector rates of return targets were achieved.

Use government locational policies to achieve revitalization objectives.

The principal economic advantage of downtown, in addition to a limited number of prime development parcels is the relatively low rents compared to New Kingston, and the *potential* for

comparatively high rents in relation to development costs for rehabilitated space. In other waterfront developments, government space planning has been used to financially support renovation, and indirectly stimulate submarket regeneration through removal of blighted structures. To build on these advantages, government should accord priority to relocation of its own offices into renovated space, which will: (a) remove currently blighted structures that act as a drag on private investment, (b) demonstrate the potential attractiveness of renovated space, and (c) achieve substantially higher developmental effects with investment at multiple strategic locations, than in one large office tower.

Develop unique sites for unique uses.

A number of waterfront developments have relied on the creative reuse of highly-visible and unique structures. The Quincy Market in Boston is one example, the Jax Brewery in New Orleans is another. The Wray & Nephew Building is a similar developmental opportunity. The visibility of this development, and its potential contribution to downtown revitalization, is high. Properly developed, this development can satisfy a number of criteria for high payoff projects: (a) stimulate high pedestrian foot traffic, (b) become a destination for non-day-time use, (c) help build identification with elements of the downtown Kingston historical and cultural heritage of the waterfront.

Allocate tax credits according to developmental priorities.

If the downtown credits are rationed (rather than allotted to all investors), and they should be, government should establish clear priorities for allocating the credits with a view toward accomplishing redevelopment objectives. In short: (a) priority to highly visible locations: transportation corridors--Duke and East Streets, commercial corridor of King Street, and the area immediately adjacent the waterfront (Harbour & Port Royal from Princess to East Street), (b) priority to most-desirable uses: those that generate pedestrian traffic, and after-hours downtown demand, including residential projects; (c) those for which potential demand is most uncertain: specialty entertainment and retail and residential developments; (d) those that include attractive public spaces and other civic amenities.

Improve Environmental Quality

Many successful developments have followed removal of pollution sources and increases in water quality, particularly important to stimulate recreational use of waterfront lands.

In sum, it is worth re-emphasizing that Kingston possesses considerable assets for redevelopment, including the absence of negative features that have inhibited waterfront development elsewhere. Further, international experience suggests a set of development priorities that are readily implementable in the Jamaican context. And although tax subsidies alone do not appear sufficient to stimulate immediate private sector development, there are clear opportunities to pursue mutually reinforcing developments that can yield rental rate increases sufficient to sustain private sector investment.

Appendix A
Results of Market Surveys

This appendix contains the final report of the real estate market survey conducted for the Urban Institute by Paul Chen-Young and Associates. Preceding the surveys are three tables that summarize the results from each of the commercial, retail, and residential surveys.

TABLE 1
Commercial/Office Space

		1990	1991	1990-91	1992	1991-92	1993	1992-93	1994	1993-94	1992-94	1992-94 annual rate
New Kingston												
Building "A" 149,000 sq ft	Rent	NA	NA	NA	NA	NA	NA	NA	\$250	NA		
	Maintenance	NA	NA	NA	NA	NA	NA	NA	313	NA		
Building "B" 126,000 sq ft	Rent	\$70	\$80	14%	\$92	15%	\$195	112%	\$250	28%	172%	65%
	Maintenance	41	68	66%	136	100%	226	66%	284	26%	109%	45%
Building "C" 51,000 sq ft	Rent	\$50	\$57	14%	\$95	67%	\$109	15%	\$220	102%	132%	52%
	Maintenance	41	67	63%	135	101%	283	110%	350	24%	159%	61%
Building "D" 85,460 sq ft	Rent	\$50	\$64	28%	\$96	50%	\$133	39%	\$208 *	56%	117%	47%
	Maintenance	42	66	57%	123	86%	188	53%	263 *	40%	114%	46%
Building "E" 83,757 sq ft	Rent	\$55	\$55	0%	\$65	18%	\$80	23%	\$120	50%	85%	36%
	Maintenance	25	35	40%	90	157%	105	17%	200	90%	122%	49%
Building "F" 54,637 sq ft	Rent	\$55	\$62	13%	\$67	8%	\$73	9%	\$240 **	229%	258%	89%
	Maintenance	50	NA	-100%	NA	NA	130	NA	240 **	85%	NA	NA
Building "G" 55,500 sq ft	Rent	NA	NA	NA	\$125	NA	\$150	20%	\$240	60%	92%	39%
	Maintenance	NA	NA	NA	90	NA	140	56%	200	43%	122%	49%
New Kingston Average	Rent	40	45	10%	77	23%	106	31%	218	75%	122%	49%
	Maintenance	28	34	18%	82	64%	153	43%	264	44%	89%	38%
Half-Way Tree												
Building "H" 49,900 sq ft	Rent											
	Maintenance											
Owner-Occupied Rent and Maintenance Figures Unavailable												
Building "I" 35,444 sq ft	Rent	\$18	\$50	178%	\$60	20%	\$70	17%	\$100	43%	67%	29%
	Maintenance	\$1.20	15	1150%	25	67%	25	0%	45	80%	80%	34%
Downtown												
Scotia Centre	Rent	\$35	\$48	37%	\$57	19%	\$77	35%	\$189	145%	232%	82%
	Maintenance	43	53	23%	120	126%	184	53%	304	65%	153%	59%
Kingston Mall Block 3	Rent	\$30	\$30	0%	\$30	0%	\$40	33%	\$75	88%	150%	58%
	Maintenance	8.10	10	23%	10.52	5%	50	375%	66	32%	527%	150%

Rental and Maintenance Figures are J\$ per sq foot

*Projected Figures

**Proposed Figures

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**TABLE A-2
Shopping/Retail Space**

		1990	1991	1990-91	1992	1991-92	1993	1992-93	1994	1993-94	1992-94*	1992-94 Annual Rate
New Kingston												
Shopping Centre "A" 74,000 sq ft	Rent	\$44	\$60	36%	\$69	15%	\$79	14%	\$110	39%	59%	26%
	Maintenance	45	56	24%	63	13%	185	194%	244	32%	287%	97%
Shopping Centre "B" 36,800 sq ft	Rent	NA	NA	NA	\$85	NA	\$105	24%	\$130	24%	53%	24%
	Maintenance	NA	NA	NA	90	NA	145	61%	200	38%	122%	49%
Constant Spring Corridor												
Shopping Centre "C" 62,519 sq ft	Rent	\$51	\$55	8%	\$90	64%	\$118	31%	NA	NA	NA	NA
	Maintenance	20	28	40%	51	82%	70	37%	128	83%	151%	58%
*Shopping Centre "D"	Rent	NA	\$80	NA	\$110	38%	\$165	50%	\$202	22%	84%	36% *
	Maintenance	NA	20	NA	25	25%	30	20%	70	133%	180%	67% *
Kingston 6												
Shopping Centre "E" sq ft (NA)	Rent	NA	NA	NA	\$140	NA	\$200	43%	\$250	25%	79%	34%
	Maintenance	NA	NA	NA	44	NA	97	120%	167	72%	280%	95%
Downtown												
Kingston Mall Block 4 45,240 sq ft	Rent	\$15	\$15	0%	\$30	100%	\$50	67%	\$75	50%	150%	58%
	Maintenance	17	31	82%	64	106%	130	103%	188	45%	194%	71%
Block 2/6 40,358 sq ft	Rent	\$15	\$15	0%	\$15	0%	\$60	300%	\$75	25%	400%	124%
	Maintenance	19	19	0%	65	242%	155	138%	230	48%	254%	88%

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**TABLE A-3
Residential Properties
New Kingston**

		Size (sq ft)	1990	1991	1992	1993	1994	1993-94	Cost Per Square Foot
Residential Complex "A"	1 Bedroom	NA	\$500,000	\$650,000	\$750,000	\$950,000	\$1,100,000	16%	
	2 bedrooms	NA	900,000	1,100,000	1,300,000	1,500,000	1,750,000	17%	
Residential Complex "B"	1 Bedroom	810	\$389,000	\$490,000	\$819,000	\$1,460,000	\$2,178,000	49%	2,689
	2 bedrooms	1068	535,000	674,000	1,126,000	2,014,000	2,995,000	49%	2,804
	3 bedrooms	1327	623,000	797,000	1,330,000	2,380,000	3,539,000	49%	2,667
Residential Complex "C"	2 bed/2 bath flat	950	NA	NA	NA	NA	\$2,850,000		3,000
	2 bed/2 bath split	950	NA	NA	NA	NA	3,300,000		3,474
Residential Complex "D"	Studio	354	NA	NA	NA	NA	\$720,000		2,034
	Studio w/loft	557	NA	NA	NA	NA	1,200,000		2,154
Residential Complex "E"	Studio	350	NA	NA	NA	\$850,000	\$1,500,000	76%	4,286
	1 Bedroom	561	NA	NA	NA	950,000	2,000,000	111%	3,565
	2 bedrooms	781	NA	NA	NA	1,200,000	3,000,000	150%	3,841
Kingston 6									
Residential Complex "F"	Studio	600	NA	NA	NA	NA	\$2,100,000		3,500
	Studio w/loft	800	NA	NA	NA	NA	3,200,000		4,000
Manor Park									
Residential Complex "G"	2 bedrooms	1019	NA	NA	NA	NA	\$2,400,000		2,355
	2 bed w/basement	1195	NA	NA	NA	NA	3,600,000		3,013
	3 bedrooms	1270	NA	NA	NA	NA	3,800,000		2,992
	3 bed penthouse	2100	NA	NA	NA	NA	4,500,000		2,143
Downtown									
Ocean Towers	Studio	475	NA	NA	\$600,000	\$850,000	\$1,300,000	53%	2,737
	1 bedroom	711	NA	NA	NA	NA	NA		
	2 bedrooms	1082	NA	NA	\$1,900,000	\$1,800,000	2,000,000	11%	1,848
	2 bed/penthouse	NA	NA	NA	NA	NA	2,300,000		
	3 bed/penthouse	1402	NA	NA	NA	NA	6,000,000		4,280

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FINAL REPORT
REAL ESTATE MARKET SURVEY
FOR
THE URBAN INSTITUTE

Paul Chen-Young & Associates
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Kingston 5
Jamaica, West Indies

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Introduction

This real estate market survey is being conducted for the Urban Institute in Washington, DC, USA. The survey represents one component of the research undertaken in relation to the Urban Institute's larger evaluation of the Downtown Kingston Development Programme.

Objectives

The specific tasks of the survey are outlined as follows.

1. Ten "class A"¹ commercial office buildings are to be surveyed to gather information on net rental rates (J\$ per square foot), maintenance rates (J\$ per square foot) and occupancy rates for the period 1990 to 1994. Seven of the ten office buildings to be surveyed should represent the New Kingston area, while two should represent the Half-Way Tree area. The tenth building, the Scotia Centre in downtown Kingston has been specifically identified to be included in the survey.
2. Five Government entities including the Ministry of Public Service and the Environment and ten large corporations are to be surveyed to determine if they anticipate or plan an expansion of their work force in the Kingston Metropolitan Area within the next three to five years. If an expansion is planned, the survey should make a further inquiry as to the plans for accommodating the additional employees (i.e. if there are plans to rent or build additional space; the type of space required; the location preferred within the KMA).
3. Six retail shopping centres are to be surveyed to determine rental and maintenance rates for the period 1990 to 1994. One of the centres to be included is the Kingston Mall (downtown).
4. Six residential complexes are to be surveyed to determine the selling prices of units for the period 1990 to 1994. Along with the selling price, characteristics such as the number of bedrooms/bathrooms are also to be noted wherever possible. One of the complexes to be included is the Ocean Towers in downtown Kingston. The area (sq. ft.) of each unit is also to be noted where possible.

¹"Class A" is a classification which is used in the USA, but not in Jamaica. Two major guidelines were used to estimate a standard parallel to "Class A". The first was the location of a major Jamaican company in the building for use as head office or accommodations for an important department. Secondly, the quality of the interior space and the maintenance of the exterior was judged by the consultants to be of the highest standard in Kingston.

Commercial Office Space

The preliminary results of the survey of commercial office space are presented in *Table 1*. The names of the buildings have been withheld because one of the major property management companies requested that the information be presented without mentioning the names of their properties. As discussed earlier, one of the objectives is to gather information on ten commercial office buildings, eight of which have been completed.

New Kingston

Building "A" represents a new building in New Kingston which explains the absence of data for the period 1990-1993. This building also has retail space available for rent. The manager interviewed indicated that the rates charged for the retail space were the same as those charged for the office space. Although the building is 5% unoccupied, tenants are scheduled to move in shortly.

Building "E" is owned, managed and partly occupied by a government company. The building also houses the offices of other government and private sector entities.

Building "F" is fully occupied by an affiliate company of the owner/manager company. This may explain the low 1990-1993 rental rates and the more market level rate proposed for 1994. Maintenance rates for 1991 and 1992 were not available.

Building "G" is fairly new, having opened in 1992. It includes retail shopping space as well as office space. The information for the retail space is listed in *Table 2* under shopping centre "B".

Half-Way Tree

This area's office buildings are generally owner-occupied, which makes it difficult to get a good idea of the true market rate for the office space there. In addition there are not many "Class A" type office buildings in the area. The contact person for building "H" could not provide rental nor maintenance rates, however, he did indicate that if rental and maintenance rates were charged, they would not reflect market rates. Building "I" was the only building in the area for which we were able to obtain rental and maintenance figures. The building, however, could not be classified as "Class A" as no major companies were known to occupy space in the building and the interior space was judged to be of a lower quality than those buildings surveyed in New Kingston.

Downtown

Information on the Scotia Centre was specifically requested by the Urban Institute. The building is owned by two companies, however, information was received from only one of the companies representing 47,833 sq. ft. of the total 97,221 sq. ft. in the building. Although not specifically requested, information on the Kingston Mall's office space in Block 3 was provided. The information for Block 4 and Blocks 2/6 are listed in *Table 2*. The contact person for the Kingston Mall indicated that the rental and maintenance rates were the same for both retail and office space. Block 3, however, does not contain any retail space.

Table 1

COMMERCIAL OFFICE SPACE

New Kingston		1990	1991	1992	1993	1994	
Building "A"	Rent	NA	NA	NA	NA	J\$250	
149,000 sq. ft.	Maintenance	NA	NA	NA	NA	J\$313	
	Occupancy Rate	NA	NA	NA	NA	95%	
Building "B"	Rent	J\$70	J\$80	J\$92	J\$195	J\$250	
126,000 sq. ft.	Maintenance	J\$41	J\$68	J\$136	J\$226	J\$284	
	Occupancy Rate	98%	98%	98%	98%	98%	
Building "C"	Rent	J\$50	J\$57	J\$95	J\$109	J\$220	
51,000 sq. ft.	Maintenance	J\$41	J\$67	J\$135	J\$283	J\$350*	
	Occupancy Rate	98%	98%	98%	98%	98%	
Building "D"	Rent	J\$50	J\$64	J\$96	J\$133	J\$208*	
85,460 sq. ft.	Maintenance	J\$42	J\$66	J\$123	J\$188	J\$263*	
	Occupancy Rate	100%	100%	100%	98%	98%*	
Building "E"	Rent	J\$55	J\$55	J\$65	J\$80	J\$120	
83,757 sq. ft.	Maintenance	J\$25	J\$35	J\$90	J\$105	J\$200	
	Occupancy Rate	100%	100%	100%	100%	100%	
Building "F"	Rent	J\$55	J\$62	J\$67	J\$73	J\$240**	
54,637 sq. ft.	Maintenance	J\$50	NA	NA	J\$130	J\$240**	
	Occupancy Rate	100%	100%	100%	100%	100%	
Building "G"	Rent	NA	NA	J\$125	\$150-\$20	\$240-\$36	
55,500 sq. ft.	Maintenance	NA	NA	J\$90	J\$140	J\$200	
	Occupancy Rate	NA	NA	100%	94%	92%	
Half-Way Tree							
Building "H"	Rent	"Owner Occupied"					
49,900 sq. ft.	Maintenance	Rent & Maintenance Figures Unavailable					
	Occupancy Rate	100%	100%	100%	100%	100%	
Building "I"	Rent	J\$18	J\$50	J\$60	J\$70	J\$100	
35,444 sq. ft.	Maintenance	J\$1.20	J\$15	J\$25	J\$25	J\$45	
	Occupancy Rate	100%	100%	100%	100%	100%	
Downtown							
Scotia Centre	Rent	J\$35	J\$48	J\$57	J\$77	J\$189*	
	Maintenance	J\$43	J\$53	J\$120	J\$184	J\$304*	
	Occupancy Rate	100%	100%	100%	100%	100%	
Kingston Mail	Rent	J\$30	J\$30	J\$30	J\$40	J\$75	
Block 3	Maintenance	J\$8.10	J\$10	J\$10.52	J\$50	J\$66	
45,240 sq. ft.	Occupancy Rate	100%	100%	100%	100%	100%	
Rental & Maintenance Rates are J\$ per sq. ft.							
*Projected figures		**Proposed figures					

Real Estate Market Survey for the Urban Institute

Final Report

Paul Chen-Young & Associates

May 24, 1994

Government Entities' and Major Corporations' Prospects for Expansion

Government Entities

As stated in *Item 2* of the objectives, five Government entities were to be surveyed to find out if any had plans to expand their work force in the Kingston Metropolitan Area (KMA). We received responses from a total of seven Government bodies. None of the seven anticipates or plans an expansion of their work force in the KMA. The seven government bodies contacted for this survey were the Ministry of Public Service and the Environment, the Ministry of Construction, the National Water Commission, H.E.A.R.T./NTA, the Ministry of Education, the Ministry of Finance and the Bank of Jamaica.

The Ministry of Public Service and the Environment indicated that there were plans to consolidate its various offices (now located downtown and in New Kingston) in one building downtown. Neither the location nor the size of the proposed new building was given.

The National Water Commission also had plans to consolidate its offices. Their plan is to construct new offices on their Marescaux Road premises (just North of downtown) for their head office staff who are currently located in New Kingston.

10 Major Corporations

Three of the ten major corporations interviewed foresee an expansion of their work force in the KMA. Two of these companies, Industrial Commercial Developments (ICD) and Bank of Nova Scotia (BNS), plan or have recently begun new businesses which will be located downtown. The third, National Commercial Bank (NCB), indicates that an anticipated expansion of their administrative/operations staff may require more office space in New Kingston and downtown.

One company, Jamaica Citizens Bank, while not planning an expansion, had plans to relocate their head office from downtown to New Kingston. The reasons given were to consolidate their head office, legal department, human resources department and commercial banking office in space available in New Kingston. The remaining six (Life of Jamaica, Mutual Life, Jamaica Producers Group, Seprod, Grace Kennedy & Co. and J. Wray & Nephew) had no plans for an expansion of their work force.

Retail Shopping Space

The data collected on the six retail shopping centres is presented in *Table 2*. Information on Shopping Centres "A", "C" and "E" were provided by the managers of these complexes. Shopping Centre "D" is not owned or managed by one company. The information for Shopping Centre "D" was provided by a tenant.

The rental figures for Shopping Centre "E" cover a range because the rent charged depends on the location and size of the space. The complex is fairly new therefore data prior to 1992 was not applicable. The manager for the complex further indicated that space in the food court commanded 20%-25% more in rent. Maintenance for the food court was 100% more in 1992 and 1993 and J\$100 more per sq. ft. in 1994. The total number of square feet available for rent in this centre was not available.

The Kingston Mall consists of three Blocks: Block 3; Block 4; and Block 2/6. Block 3, however, contains no retail shopping space. Blocks 4 and 2/6 contain both office and retail space. Rental and maintenance rates are the same for both types of space. However, there exists a differential rate structure between "new", "old" and "sitting" tenants. The numbers presented reflect the highest rates listed for a given year.

Table 2

SHOPPING/RETAIL SPACE

New Kingston		1990	1991	1992	1993	1994
Shopping Centre "A"	Rent	J\$44	J\$60	J\$69	J\$79	J\$110
74,000 sq. ft.	Maintenance	J\$45	J\$56	J\$63	J\$185	J\$244
Shopping Centre "B"	Rent	NA	NA	J\$85	J\$105	J\$125-\$130
36,800 sq. ft.	Maintenance	NA	NA	J\$90	J\$145	J\$200
Constant Spring Corridor						
Shopping Centre "C"	Rent	J\$51	J\$55	J\$90	J\$118	NA
62,519sq. ft.	Maintenance	J\$20	J\$28	J\$51	J\$70	J\$128
*Shopping Centre "D"	Rent	NA	J\$80	J\$110	J\$165	J\$202
	Maintenance	NA	J\$20	J\$25	J\$30	J\$70
Kingston 6						
Shopping Centre "E"	Rent	NA	NA	J\$95-J\$140	J\$7-J\$200	J\$114-J\$250
sq. ft. (NA)	Maintenance	NA	NA	J\$44	J\$97	J\$167
Downtown						
Kingston Mall						
Block 4	Rent	J\$15	J\$15	J\$30	J\$35-\$50	J\$75
18,682 sq. ft.	Maintenance	J\$17	J\$31	J\$64	J\$130	J\$188
Block 2/6	Rent	J\$15	J\$15	J\$15	J\$35-\$60	J\$75
40,358 sq. ft.	Maintenance	J\$19	J\$19	J\$65	J\$155	J\$230

Residential Properties

The objective of this aspect of the survey was to sample sales prices of units in six different residential complexes, including the Ocean Towers located downtown. The information is presented below in *Table 3*.

Sales prices for the various types of units in the Ocean Towers over the 1990-1994 period have been difficult to obtain. Some of the prices show a range because the selling price of a unit depends on the location (i.e. floor) and the view available.

Residential Complexes "C", "D", "F" and "G" are new complexes, which explains the lack of sales price information for prior years.

RESIDENTIAL PROPERTIES							
New Kingston	Type	Size(Area)	1990	1991	1992	1993	1994
Residential Complex "A"	1 Bedroom	NA	J\$500,000	J\$650,000	J\$750,000	J\$950,000	J\$1,000,000
	2 Bedrooms	NA	J\$900,000	J\$1,100,000	J\$1,300,000	J\$1,500,000	J\$1,750,000
Residential Complex "B"	1 Bedroom	810 sq. ft.	J\$389,000	J\$490,000	J\$819,000	J\$1,460,000	J\$2,178,000
	2 Bedrooms	1088 sq. ft.	J\$535,000	J\$674,000	J\$1,126,000	J\$2,014,000	J\$2,995,000
	3 Bedrooms	1327 sq. ft.	J\$623,000	J\$797,000	J\$1,330,000	J\$2,380,000	J\$3,539,000
Residential Complex "C"	2 Bed/2 bath flat	950 sq. ft.	NA	NA	NA	NA	J\$2,850,000
	2 Bed/2 bath split	950 sq. ft.	NA	NA	NA	NA	J\$3,300,000
Residential Complex "D"	Studio	354 sq. ft.	NA	NA	NA	NA	J\$720,000
	Studio w/ Loft	557 sq. ft.	NA	NA	NA	NA	J\$1,200,000
Residential Complex "E"	Studio	350 sq. ft.	NA	NA	NA	J\$850,000	J\$1,500,000
	1 Bedroom	561 sq. ft.	NA	NA	NA	J\$950,000	J\$2,000,000
	2 Bedrooms	781 sq. ft.	NA	NA	NA	J\$1,200,000	J\$3,000,000
Kingston 6							
Residential Complex "F"	Studio	600 Sq. ft.	NA	NA	NA	NA	J\$2,100,000
	Studio w/ Loft	800 sq. ft.	NA	NA	NA	NA	J\$3,200,000
Manor Park							
Residential Complex "G"	2 Bedrooms	1019 sq. ft.	NA	NA	NA	NA	J\$2,400,000
	2 Bed w/ Basement	1195 sq. ft.	NA	NA	NA	NA	J\$3,800,000
	3 Bedrooms	1270 sq. ft.	NA	NA	NA	NA	J\$3,800,000
	3 Bed Penthouse	2100 sq. ft.	NA	NA	NA	NA	J\$4,500,000
Downtown							
Ocean Towers	Studio	475 sq. ft.	NA	NA	J\$600,000	J\$850,000	J\$1,300,000
	1 Bedroom	711 sq. ft.	NA	NA	NA	NA	NA
	2 Bedrooms	1062 sq. ft.	NA	NA	J\$1.5M-J\$1.9M	J\$1.5M-J\$1.8M	J\$2,000,000
	2 Bed/Penthouse	NA	NA	NA	NA	NA	J\$2,300,000
	3 Bed/Penthouse	1402 sq. ft.	NA	NA	NA	NA	J\$6,000,000

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Appendix B Pro-forma Analysis of Development Scenarios

Contained in this appendix are the results of *pro-forma* analyses prepared by the Urban Institute based on information from the market surveys in Appendix A and a construction cost report prepared by Mr. Maurice Stoppi in May 1994 for selected development properties. The first page of the appendix shows the summary of development costs for selected properties--the "block" letters in the first column correspond to the block identifiers in the Marketing Strategy report, reproduced as Exhibit 2 in the main text of this report.

Each development scenario is shown on two pages; the first outlines the assumptions on which the financial calculations are based. (The second shows seven-year financial flows.) The following describes the nature of the assumptions made under various categories.

- Building Size*** Gross building and lot size, net (rentable) square footage, and the allocation of space among retail, commercial, or residential uses. Where net rentable square footage is not known (i.e., there is no programme of use specified in various planning documents), 90% of gross building square footage is assumed.
- Acquisition*** \$ Where known (or estimated based on purchase offers in hand), total acquisition costs are specified, and apportioned across land and structure costs to allow subsequent depreciation of structures; i.e., the basis for depreciation is the purchase price of the building plus improvements. Where purchase prices are not known, acquisition costs are estimated based on the assumptions shown in Exhibit 7 regarding structure quality and site location.
- Improvement*** \$ Rehabilitation or new construction costs per square foot are estimated based on the range of improvement costs shown on Exhibit 7, which in turn are based on per-square foot estimates shown on the summary table included in this appendix. New construction costs are based on UDC estimates for Bojex site construction, adjusted for inflation, and confirmed by interviews with local experts. Where inflation due to labor and materials cost escalation are not included in the original estimate (of May 1994), these are estimated at 30 percent per year. This panel also shows the construction period assumed for various types of improvements; ranging from 6 months for rehabilitation; 18 months for major new construction.
- Total Costs*** Total development costs include acquisition and renovation/construction costs and construction period interest expenses. The panel also shows leverage assumptions throughout construction; i.e., the amounts financed through cash equity versus borrowed funds. The finance rate is assumed to be 10 percent above inflation, or 40 percent at current (July 1994) corporate borrowing rates (on the assumption that development will be financed by corporate developers). Finance charges are calculated based on assumed construction draws at three month intervals. Given these high borrowing rates, however, and for purposes of this analysis, we concluded after initial *pro-forma* analyses that only all-cash construction financing made economic sense.

- Permanent Finance* This panel shows the amounts of total development costs financed from equity versus debt. Two alternative debt-finance scenarios were constructed--the first to show borrowing at the corporate bond rate (40%) and another to show borrowing at interest free rates (30%) on the expectation that the proposed tax incentive scheme will provide for interest-free income on issued bonds. On the base case and scenarios one and two (initial runs), no leverage is assumed given the high rates of borrowing. However, once rents are adjusted to yield competitive rates of return, these same adjustments confer a small advantage to leveraging.
- Taxes* This panel shows assumptions regarding depreciation allowances and taxation of income from rents and a proposed investment tax credit. For all scenarios, annual depreciation is 2.5 percent, or straight-line over 40 years. For the base case, interest income is taxed at the top marginal rate of 33 percent, with no investment tax credit. For other scenarios, a first-year 25 percent investment tax credit is assumed, as is exclusion of rental income from taxation. In those scenarios where financial leverage becomes possible, taxation of rental income is assumed to allow capture of tax benefits in the early years of project operation.
- Rents* Rental rates are assumed based on the rent differentials discussed in the second section of the report. The panel shows the weighted average of rents charged for various types of use based on the square footage allocated to those uses. Rents are escalated from the initial May 1994 assumptions based on the length of the construction period. Vacancy and collection losses are assumed at 5 percent per year, the industry standard, although both New Kingston and downtown occupancy rates appear to average 98 percent or better. Operating expenses are shown to be \$0 in all cases, due to prevailing triple-net leases. Operating income is assumed to track inflation, and is shown at 30 percent per year.
- Sales* Gain on sale is calculated based on a 9 percent capitalization rate, sales fees at 4 percent and a capital gains tax rate of 33 percent.
- Performance* In all cases, initial analysis showed that even with tax credits and rental income exclusion, internal rates of return do not approach the target 40 percent level. To estimate the potential effects of increases in initial rental rates from efforts to stimulate demand for waterfront space, a base rent inflator of 25 percent was applied. In addition, on the expectation that these efforts would yield above-inflation appreciation in rents, a rent escalator above the assumed 30 percent inflation rate was calculated, solving for a 40 percent internal rate of return. This escalator is the "real" annual increase in rents over the period.

THE URBAN INSTITUTE

REHABILITATION OF VARIOUS PROPERTIES - DOWNTOWN KINGSTON

SUMMARY OF PRELIMINARY CONSTRUCTION COST AT MAY, 1994

LOCK	GROSS FLOOR AREA Sq.Ft.	NET FLOOR AREA Sq.Ft.	REHAB. COST OF BUILDER'S WORK JAS	REHAB. OF ELECTRICAL INSTALLATION JAS	REHAB. COST OF AIR-CONDITIONING INSTALLATION JAS	LANDSCAPING JAS	CONTRACTOR'S SITE OVERHEADS JAS	CONTINGENCY SUM JAS	TOTAL CONSTRUCTION REHAB. COST JAS	CONSTRUCTION REHAB. COST PER GROSS SQ.FT.
A	29,040	24,922	20,867,000.00	6,915,000.00	7,022,000.00	524,000.00	4,416,000.00	3,974,000.00	43,718,000.00	1,505.44
B	30,720	27,648	22,865,900.00	6,144,000.00	5,376,000.00	743,000.00	4,391,000.00	3,952,000.00	43,471,900.00	1,415.10
C	15,744	14,592	7,173,000.00	3,000,000.00	3,000,000.00	240,000.00	1,677,000.00	1,509,000.00	16,599,000.00	1,054.31
D	70,612	56,952	40,581,000.00	15,826,000.00	13,006,000.00	650,000.00	8,758,000.00	7,882,000.00	86,703,000.00	1,227.88
TOTAL	146,116	124,114	91,486,900.00	31,885,000.00	28,404,000.00	2,157,000.00	19,242,000.00	17,317,000.00	190,491,900.00	* 1,303.70

Fittings, Furnishing and other Tenants' requirements are not included in the above estimates. Also excluded are Land Cost, Professional Fees, Legal Fees and Finance Charges.

**Average Cost per Sq.Ft.*

M. J. STOPPI, F.R.I.C.S., F.C.I.Arb.

Project Pro-formas: Hannan Building Substantial Rehabilitation

- Building Size* Assumes development program of ground retail and first and second floor commercial.
- Acquisition \$* Acquisition cost based on in-hand purchase offer to Kingston Restoration Company, Ltd. Land cost assumed at \$250 per square foot, leaving net building value of \$793 per square foot.
- Improvement \$* Substantial rehabilitation assumed given the buildings overall good condition; estimated improvement cost per square foot is \$1,473 (construction costs plus 20 percent fees)--see assumptions graphically displayed on Exhibit 7 in text.
- Taxes* Scenarios 1 and 2 assume no taxation of rental income and 25% investment tax credit.
- Rents* Rental rates are pegged at retail rents of \$95 per square foot and commercial rates of \$180. See discussion of rental assumptions in Section 2 of main text.
- Sales* Gain on sale is calculated based on a 9 percent capitalization rate, sales fees at 4 percent and a capital gains tax rate of 33 percent.
- Results* Scenario 2 solves for a 40 percent return rate, which requires an assumed real (above-inflation) rate of rental increase of 11 percent per year. Sensitivity analysis assuming different leveraging ratios produced modest increases over 40 percent, but at the cost of initial early-year cash losses.

Proforma Analysis Input Variables
Hannah Building
Substantial Rehabilitation—Base Case
(\$ thousands)

Building Size

Lot size (sf)	30,262	gross floor space / 2.333
Gross floorspace (sf)	70,612	
Retail (sf)	23,642	
Commercial (sf)	33,309	
Net floorspace (sf)	56,952	

Acquisition Costs

Total value psf	\$0.900
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.783
Acquisition costs	\$63,551

Improvement costs

Rehabilitation psf	\$1.473	stoppi * (fees @ 20%)
Initial cost estimate	\$104,044	
Construction period (months)	6	
Construction annual inflation @ (adjusted every 6 months)	30%	
Inflated construction costs	\$104,044	

Total development costs

Development costs (net construction financing)	\$167,594	
Leverage rate	0%	
Equity investment	\$167,594	
Financed investment	\$0	
Construction finance annual rate @ (accrued every 3 months)	25%	@ corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$167,594	

Permanent financing (construction loan interest financed)

Equity investment	\$167,594	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Environment

Annual depreciation rate @	2.5%	against initial value net land plus inflated improvements
Investment tax credit @	0%	against initial value net land plus inflated improvements
Rental income tax rate @	33%	
Transfer tax rate @	7.5%	

Rental information

Current (May '94) rate psf	\$0.144	Weighted Average of Commercial @ \$0.180 sf and Retail @ \$0.100 sf.
Escalated (September '94) rate	\$0.198	current rate * inflation @ 30%
Gross rented income	\$9,434	net floorspace * rate psf
Vacancy & collection loss rate @	5%	
Effective gross income	\$8,963	
Operating expenses	\$0	
Net operating income year 1	\$8,963	
Net operating income inflated @	30%	
Additional performance inflator @	0%	

Sales information

Capitalization rate	9%
Sales fees @	4%

After-Tax Cash Flow, Seven-Year Investment Period
Hannah Building
Substantial Rehabilitation—Base Case
(\$ thousands)

	Year	1	2	3	4	5	6	7
a.	Net operating income	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
b.	Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c.	Cash flow before tax	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
	Percent return on equity	5.3%	7.0%	9.0%	11.7%	15.3%	19.9%	25.8%
d.	Net operating income	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
e.	Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f.	Less depreciation expense	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001
g.	Taxable income (loss)	\$4,962	\$7,651	\$11,146	\$15,690	\$21,598	\$29,277	\$39,260
	Tax rate	0.33	0.33	0.33	0.33	0.33	0.33	0.33
h.	(Devt. cost tax relief)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i.	Taxes or (tax savings)	\$1,637	\$2,525	\$3,678	\$5,178	\$7,127	\$9,661	\$12,956
	Cash flow before tax (c)	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
	Plus tax savings or (less taxes) (i)	(\$1,637)	(\$2,525)	(\$3,678)	(\$5,178)	(\$7,127)	(\$9,661)	(\$12,956)
j.	Cash flow after tax	\$7,325	\$9,127	\$11,469	\$14,513	\$18,471	\$23,618	\$30,305
	Percent return on equity	4.4%	5.4%	6.8%	8.7%	11.0%	14.1%	18.1%
k.	Cash on sale EOY 7	\$125,400						
	Internal rate of return	20.12%						

basepi.wk1

Proforma Analysis Input Variables
Hannah Building
Substantial Rehabilitation--Scenario 1
(\$ thousands)

Building Size

Lot size (sf)	30,262	gross floor space / 2.333
Gross floorspace (sf)	70,612	
Retail (sf)	23,642	
Commercial (sf)	33,309	
Net floorspace (sf)	56,952	

Acquisition Costs

Total value psf	\$0.900
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.783
Acquisition costs	\$63,551

Improvement costs

Rehabilitation psf	\$1.473	stoppi * (fees @ 20%)
Initial cost estimate	\$104,044	
Construction period (months)	6	
Construction annual inflation @ (adjusted every 6 months)	30%	
Inflated construction costs	\$104,044	

Total development costs

Development costs (net construction financing)	\$167,584	
Leverage rate	0%	
Equity investment	\$167,584	
Financed investment	\$0	
Construction finance annual rate @ (accrued every 3 months)	25%	@ corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$167,584	

Permanent financing (construction loan interest financed)

Equity investment	\$167,584	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate @	2.5%	against initial value net land plus inflated improvements
Investment tax credit @	25%	against initial value net land plus inflated improvements
Rental income tax rate @	0%	
Transfer tax rate @	7.5%	

Rental information

Current (May '94) rate psf	\$0.144	Weighted Average of Commercial @ \$0.180 sf and Retail @ \$0.100 sf.
Escalated (September '94) rate	\$0.166	
Gross rented income	\$3,434	current rate * inflation @ 30%
Vacancy & collection loss rate @	5%	net floorspace * rate psf
Effective gross income	\$8,963	
Operating expenses	\$0	
Net operating income year 1	\$8,963	
Net operating income inflated @	30%	
Additional performance inflator @	0%	

Sales information

Capitalization rate	9%
Sales fees @	4%

After-Tax Cash Flow, Seven-Year Investment Period
Hannah Building
Substantial Rehabilitation—Scenario 1
(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
Percent return on equity	5.3%	7.0%	9.0%	11.7%	15.3%	19.9%	25.8%
d. Net operating income	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001
g. Taxable income (loss)	\$4,962	\$7,651	\$11,146	\$15,690	\$21,598	\$29,277	\$39,260
Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h. (Dev't. cost tax relief)	(\$40,007)						
i. Taxes or (tax savings)	(\$40,007)	\$0	\$0	\$0	\$0	\$0	\$0
Cash flow before tax (c)	\$8,963	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
Plus tax savings or (less taxes) (i)	\$40,007	\$0	\$0	\$0	\$0	\$0	\$0
j. Cash flow after tax	\$48,970	\$11,651	\$15,147	\$19,691	\$25,598	\$33,278	\$43,261
Percent return on equity	29.2%	7.0%	9.0%	11.7%	15.3%	19.9%	25.8%
k. Cash on sale EOY 7	\$425,400						
Internal rate of return	26.50%						

basepi.wk1

Proforma Analysis Input Variables
Hannah Building
Substantial Rehabilitation--Scenario 2
(\$ thousands)

Building Size

Lot size (sf)	30,262	gross floor space / 2.333
Gross floorspace (sf)	70,612	
Retail (sf)	23,642	
Commercial (sf)	33,309	
Net floorspace (sf)	56,952	

Acquisition Costs

Total value psf	\$0.900
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.793
Acquisition costs	\$63,551

Improvement costs

Rehabilitation psf	\$1.473	stoppi * (fees @ 20%)
Initial cost estimate	\$104,044	
Construction period (months)	6	
Construction annual inflation @ (adjusted every 6 months)	30%	
Inflated construction costs	\$104,044	

Total development costs

Development costs (net construction financing)	\$167,594	
Leverage rate	0%	
Equity investment	\$167,594	
Financed investment	\$0	
Construction finance annual rate @ (accrued every 3 months)	25%	@ corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$167,594	

Permanent financing (construction loan interest financed)

Equity investment	\$167,594	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate @	2.5%	against initial value net land plus inflated improvements
Investment tax credit @	25%	against initial value net land plus inflated improvements
Rental income tax rate @	0%	
Transfer tax rate @	7.5%	

Rental information

Current (May '94) rate psf	\$0.144	Weighted Average of Commercial @ \$0.180 sf and Retail @ \$0.100 sf.
Escalated (September '94) rate	\$0.166	current rate * inflation @ 30%
Gross rented income	\$9,434	net floorspace * rate psf
Vacancy & collection loss rate @	5%	
Effective gross income	\$8,963	
Operating expenses	\$0	
Net operating income year 1	\$8,963	
Net operating income inflated @	30%	
Additional performance inflator--base rent @	25%	
Additional performance inflator--above-inflation escalator @	11%	

Sales information

Capitalization rate	9%
Sales fees @	4%

After-Tax Cash Flow, Seven-Year Investment Period
Hannah Building
Substantial Rehabilitation—Scenario 2
(\$ thousands)

	Year	1	2	3	4	5	6	7
a.	Net operating income	\$11,203	\$15,797 **	\$22,273 **	\$31,405 **	\$44,282 **	\$62,437 **	\$88,036
b.	Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c.	Cash flow before tax	\$11,203	\$15,797	\$22,273	\$31,405	\$44,282	\$62,437	\$88,036
	Percent return on equity	6.7%	9.4%	13.3%	18.7%	26.4%	37.3%	52.5%
d.	Net operating income	\$11,203	\$15,797	\$22,273	\$31,405	\$44,282	\$62,437	\$88,036
e.	Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f.	Less depreciation expense	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001	\$4,001
g.	Taxable income (loss)	\$7,203	\$11,796	\$18,273	\$27,405	\$40,281	\$58,436	\$84,036
	Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h.	(Devt. cost tax relief)	(\$40,007)						
i.	Taxes or (tax savings)	(\$40,007)	\$0	\$0	\$0	\$0	\$0	\$0
	Cash flow before tax (c)	\$11,203	\$15,797	\$22,273	\$31,405	\$44,282	\$62,437	\$88,036
	Plus tax savings or (less taxes) (i)	\$40,007	\$0	\$0	\$0	\$0	\$0	\$0
j.	Cash flow after tax	\$51,211	\$15,797	\$22,273	\$31,405	\$44,282	\$62,437	\$88,036
	Percent return on equity	30.6%	9.4%	13.3%	18.7%	26.4%	37.3%	52.5%
k.	Cash on sale EOY 7	\$865,690						
	Internal rate of return	40.06%						

Project *Pro-formas*: 95 Harbour Street Light Rehabilitation

- Building Size* Assumes development program of ground floor retail and first floor commercial.
- Acquisition \$* Acquisition cost based on in-hand purchase offer to Kingston Restoration Company, Ltd. Land cost assumed at \$200 per square foot, leaving net building value of \$1,050 per square foot.
- Improvement \$* Light rehabilitation assumed given the buildings overall good condition; estimated improvement cost per square foot is \$900 (construction costs plus 20 percent fees)--see assumptions graphically displayed on Exhibit 7 in text.
- Taxes* Scenarios 1 and 2 assume no taxation of rental income and 25% investment tax credit.
- Rents* Rental rates are assumed at a May 1994 retail rental rate of \$85 and a commercial rent of \$160. See discussion of rent range assumptions in Section 2 of main text.
- Sales* Gain on sale is calculated based on a 9 percent capitalization rate, sales fees at 4 percent and a capital gains tax rate of 33 percent.
- Results* Scenario 2 solves for a 40 percent return rate, which requires an assumed real (above-inflation) rate of rental increase of 9 percent per year. Sensitivity analysis assuming different leveraging ratios produced modest increases over 40 percent, but at the cost of initial early-year cash losses.

Proforma Analysis Input Variables

95 Harbour Street

Light Rehabilitation--Base Case

(\$ thousands)

Building Size

Lot size (sf)	2,790	gross floor space * .5
Gross floorspace (sf)	5,580	
Retail (sf)	2,595	
Commercial (sf)	2,595	
Net floorspace (sf)	5,190	

Acquisition Costs

Total value psf	\$1.254
Land value psf	\$0.200
Value net land psf (for depreciation & tax purposes)	\$1.154
Acquisition costs	\$6,997

Improvement costs

Rehabilitation psf	\$0.900
Initial cost estimate	\$5,022
Construction period (months)	6
Construction annual inflation Ⓢ (adjusted every 6 months)	30%
Inflated construction costs	\$5,022

Total development costs

Development costs (net construction financing)	\$12,019	
Leverage rate	0%	
Equity investment	\$12,019	
Financed investment	\$0	
Construction finance annual rate Ⓢ (accrued every 3 months)	40%	Ⓢ corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$12,019	

Permanent financing (construction loan interest financed)

Equity investment	\$12,019	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate Ⓢ	2.5%	against initial value net land plus inflated improvements
Investment tax credit Ⓢ	0%	against initial value net land plus inflated improvements
Rental income tax rate Ⓢ	33%	
Transfer tax rate Ⓢ	7.5%	

Rental information

Current (May '94) rate psf	\$0.123	Weighted Average of Commercial Ⓢ ¹⁶⁰ \$0.190/sf and Retail Ⓢ ⁸⁵ \$0.190/sf.
Escalated (September '94) rate	\$0.141	
Gross rented income	\$731	current rate * inflation Ⓢ 30%
Vacancy & collection loss rate Ⓢ	5%	net floorspace * rate psf
Effective gross income	\$695	
Operating expenses	\$0	
Net operating income year 1	\$695	
Net operating income inflated Ⓢ	30%	
Additional performance inflator--base rent Ⓢ	0%	
Additional performance inflator--above-inflation escalator Ⓢ	0%	

Sales information

Capitalization rate	9%
Sales fees Ⓢ	4%

After-Tax Cash Flow, Seven-Year Investment Period

95 Harbour Street

Light Rehabilitation—Base Case

(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$695	\$903 **	\$1,174 **	\$1,526 **	\$1,984 **	\$2,579 **	\$3,353
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
Percent return on equity	5.8%	7.5%	9.8%	12.7%	16.5%	21.5%	27.9%
d. Net operating income	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$287	\$287	\$287	\$287	\$287	\$287	\$287
g. Taxable income (loss)	\$408	\$616	\$887	\$1,239	\$1,697	\$2,292	\$3,066
Tax rate	0.33	0.33	0.33	0.33	0.33	0.33	0.33
h. (Devt. cost tax relief)	\$0						
i. Taxes or (tax savings)	\$135	\$203	\$293	\$409	\$560	\$756	\$1,012
Cash flow before tax (c)	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
Plus tax savings or (less taxes) (i)	(\$135)	(\$203)	(\$293)	(\$409)	(\$560)	(\$756)	(\$1,012)
j. Cash flow after tax	\$560	\$700	\$881	\$1,117	\$1,424	\$1,822	\$2,341
Percent return on equity	4.7%	5.8%	7.3%	9.3%	11.8%	15.2%	19.5%
k. Cash on sale EOY 7	\$32,967						
Internal rate of return	21.6%						

basepi.wk1

Proforma Analysis Input Variables**95 Harbour Street****Light Rehabilitation--Scenario 1**

(\$ thousands)

Building Size

Lot size (sf)	2,790	gross floor space * .5
Gross floorspace (sf)	5,580	
Retail (sf)	2,595	
Commercial (sf)	2,595	
Net floorspace (sf)	5,190	

Acquisition Costs

Total value psf	\$1.254
Land value psf	\$0.200
Value net land psf (for depreciation & tax purposes)	\$1.154
Acquisition costs	\$6,997

Improvement costs

Rehabilitation psf	\$0.900
Initial cost estimate	\$5,022
Construction period (months)	6
Construction annual inflation \odot (adjusted every 6 months)	30%
Inflated construction costs	\$5,022

Total development costs

Development costs (net construction financing)	\$12,019
Leverage rate	0%
Equity investment	\$12,019
Financed investment	\$0
Construction finance annual rate \odot (accrued every 3 months)	40% \odot corporate bond rate
Construction finance interest expense	\$0
Total development costs (including construction finance)	\$12,019

Permanent financing (construction loan interest financed)

Equity investment	\$12,019
Financed investment	\$0
Leverage rate (calculated)	0%
Annual interest rate	30% .66 * market rate
Tax-free bond annual simple interest expense	\$0

Tax environment

Annual depreciation rate \odot	2.5%	against initial value net land plus inflated improvements
Investment tax credit \odot	25%	against initial value net land plus inflated improvements
Rental income tax rate \odot	0%	
Transfer tax rate \odot	7.5%	

Rental information

Current (May '94) rate psf	\$0.123	Weighted Average of Commercial \odot \$0.180 sf and Retail \odot \$0.100 sf.
Escalated (September '94) rate	\$0.141	current rate * inflation \odot 30%
Gross rented income	\$731	net floorspace * rate psf
Vacancy & collection loss rate \odot	5%	
Effective gross income	\$695	
Operating expenses	\$0	
Net operating income year 1	\$695	
Net operating income inflated \odot	30%	
Additional performance inflator--base rent \odot	0%	
Additional performance inflator--above-inflation escalator \odot	0%	

Sales information

Capitalization rate	9%
Sales fees \odot	4%

After-Tax Cash Flow, Seven-Year Investment Period

95 Harbour Street

Light Rehabilitation—Base Case

(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$695	\$903 **	\$1,174 **	\$1,526 **	\$1,984 **	\$2,579 **	\$3,353
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
Percent return on equity	5.8%	7.5%	9.8%	12.7%	16.5%	21.5%	27.9%
d. Net operating income	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$287	\$287	\$287	\$287	\$287	\$287	\$287
g. Taxable income (loss)	\$408	\$616	\$887	\$1,239	\$1,697	\$2,292	\$3,066
Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h. (Devt. cost tax relief)	(\$2,865)						
i. Taxes or (tax savings)	(\$2,865)	\$0	\$0	\$0	\$0	\$0	\$0
Cash flow before tax (c)	\$695	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
Plus tax savings or (less taxes) (i)	\$2,865	\$0	\$0	\$0	\$0	\$0	\$0
j. Cash flow after tax	\$3,560	\$903	\$1,174	\$1,526	\$1,984	\$2,579	\$3,353
Percent return on equity	29.6%	7.5%	9.8%	12.7%	16.5%	21.5%	27.9%
k. Cash on sale EOY 7	\$32,967						
Internal rate of return	28.1%						

basepi.wk1

Proforma Analysis Input Variables
95 Harbour Street
Light Rehabilitation--Scenario 2
(\$ thousands)

Building Size

Lot size (sf)	2,790	gross floor space * .5
Gross floorspace (sf)	5,580	
Retail (sf)	2,595	
Commercial (sf)	2,595	
Net floorspace (sf)	5,190	

Acquisition Costs

Total value psf	\$1.254
Land value psf	\$0.200
Value net land psf (for depreciation & tax purposes)	\$1.154
Acquisition costs	\$6,997

Improvement costs

Rehabilitation psf	\$0.900
Initial cost estimate	\$5,022
Construction period (months)	6
Construction annual inflation Ⓢ (adjusted every 6 months)	30%
Inflated construction costs	\$5,022

Total development costs

Development costs (net construction financing)	\$12,019
Leverage rate	0%
Equity investment	\$12,019
Financed investment	\$0
Construction finance annual rate Ⓢ (accrued every 3 months)	40% Ⓢ corporate bond rate
Construction finance interest expense	\$0
Total development costs (including construction finance)	\$12,019

Permanent financing (construction loan interest financed)

Equity investment	\$12,019
Financed investment	\$0
Leverage rate (calculated)	0%
Annual interest rate	30% Ⓢ .66 * market rate
Tax-free bond annual simple interest expense	\$0

Tax environment

Annual depreciation rate Ⓢ	2.5%	against initial value net land plus inflated improvements
Investment tax credit Ⓢ	25%	against initial value net land plus inflated improvements
Rental income tax rate Ⓢ	0%	
Transfer tax rate Ⓢ	7.5%	

Rental information

Current (May '94) rate psf	\$0.123	Weighted Average of Commercial Ⓢ \$0.180 sf and Retail Ⓢ \$0.100 sf.
Escalated (September '94) rate	\$0.141	current rate * inflation Ⓢ 30%
Gross rented income	\$731	net floorspace * rate psf
Vacancy & collection loss rate Ⓢ	5%	
Effective gross income	\$695	
Operating expenses	\$0	
Net operating income year 1	\$695	
Net operating income inflated Ⓢ	30%	
Additional performance inflator--base rent Ⓢ	25%	
Additional performance inflator--above-inflation escalator Ⓢ	9%	

Sales information

Capitalization rate	9%
Sales fees Ⓢ	4%

After-Tax Cash Flow, Seven-Year Investment Period

95 Harbour Street

Light Rehabilitation—Base Case

(\$ thousands)

	Year	1	2	3	4	5	6	7
a.	Net operating income	\$868	\$1,207 **	\$1,678 **	\$2,332 **	\$3,241 **	\$4,505 **	\$6,262
b.	Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c.	Cash flow before tax	\$868	\$1,207	\$1,678	\$2,332	\$3,241	\$4,505	\$6,262
	Percent return on equity	7.2%	10.0%	14.0%	19.4%	27.0%	37.5%	52.1%
d.	Net operating income	\$868	\$1,207	\$1,678	\$2,332	\$3,241	\$4,505	\$6,262
e.	Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f.	Less depreciation expense	\$287	\$287	\$287	\$287	\$287	\$287	\$287
g.	Taxable income (loss)	\$582	\$920	\$1,391	\$2,045	\$2,955	\$4,219	\$5,976
	Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h.	(Devt. cost tax relief)	(\$2,865)						
i.	Taxes or (tax savings)	(\$2,865)	\$0	\$0	\$0	\$0	\$0	\$0
	Cash flow before tax (c)	\$868	\$1,207	\$1,678	\$2,332	\$3,241	\$4,505	\$6,262
	Plus tax savings or (less taxes) (i)	\$2,865	\$0	\$0	\$0	\$0	\$0	\$0
j.	Cash flow after tax	\$3,734	\$1,207	\$1,678	\$2,332	\$3,241	\$4,505	\$6,262
	Percent return on equity	31.1%	10.0%	14.0%	19.4%	27.0%	37.5%	52.1%
k.	Cash on sale EOY 7	\$61,578						
	Internal rate of return	40.3%						

basepi.wk1

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Project *Pro-formas*: New Construction--Commercial

- Building Size* Assumes development program of ground retail (15,000 square feet) and remaining floors commercial.
- Acquisition \$* Acquisition cost assumed at maximum \$250 per square foot.
- Improvement \$* New construction costs per square foot estimated at \$3,300 (including fees) based on UDC cost estimates for Bojex site and as confirmed by local experts.
- Taxes* Scenarios 1 and 2 assume no taxation of rental income and 25% investment tax credit.
- Rents* Rental rates are pegged at prime retail rents of \$95 per square foot and commercial rates of \$215. See discussion of rental assumptions in Section 2 of main text.
- Sales* Gain on sale is calculated based on a 9 percent capitalization rate, sales fees at 4 percent and a capital gains tax rate of 33 percent.
- Results* Scenario 2 solves for a 40 percent return rate, which requires an assumed real (above-inflation) rate of rental increase of 12 percent per year. Sensitivity analysis assuming different leveraging ratios produced modest increases over 40 percent, but at the cost of initial early-year cash losses.

Proforma Analysis Input Variables
Downtown Commercial
New Construction--Base Case
(\$ thousands)

Building Size

Lot size (sf)	57,000	lot # 8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Commercial (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Total value psf	\$0.250
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.000
Acquisition costs	\$37,500

Improvement costs

Rehabilitation psf	\$3.300
Initial cost estimate	\$495,000
Construction period (months)	18
Construction annual inflation (1 year)	30%
Inflated construction costs	\$579,150

Total development costs

Development costs (net construction financing)	\$616,650
Leverage rate	0%
Equity investment:	\$616,650
Financed investment	\$0
Construction finance annual rate (accrued every 3 months)	40% corporate bond rate
Construction finance interest expense	\$0
Total development costs (including construction finance)	\$616,650

Permanent financing (construction loan interest financed)

Equity investment	\$616,650
Financed investment	\$0
Leverage rate (calculated)	0%
Annual interest rate	30% .66 * market rate
Tax-free bond annual simple interest expense	\$0

Tax environment

Annual depreciation rate	2.5%	against initial value net land plus inflated improvements
Investment tax credit	0%	against initial value net land plus inflated improvements
Rental income tax rate	33%	
Transfer tax rate	7.5%	

Rental information

Current (May '94) rate psf	\$0.193	Weighted Average of Commercial @ \$0.215 sf and Retail @ \$0.095 sf.
Escalated (September '95) rate	\$0.251	current rate * inflation @ 30%
Gross rented income	\$33,833	net floorspace * rate psf
Vacancy & collection loss rate	5%	
Effective gross income	\$32,141	
Operating expenses	\$0	
Net operating income year 1	\$32,141	
Net operating income inflated	30%	
Additional performance inflator--base rent	0%	
Additional performance inflator--above-inflation escalator	0%	

Sales information

Capitalization rate	9%
Sales fees	4%

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After-Tax Cash Flow, Seven-Year Investment Period
Downtown Commercial
New Construction—Base Case
(\$ thousands)

	Year	1	2	3	4	5	6	7
a.	Net operating income	\$32,141	\$41,783 **	\$54,318 **	\$70,614 **	\$91,798 **	\$119,337 **	\$155,138
b.	Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c.	Cash flow before tax	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
	Percent return on equity	5.2%	6.8%	8.8%	11.5%	14.9%	19.4%	25.2%
d.	Net operating income	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
e.	Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f.	Less depreciation expense	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479
g.	Taxable income (loss)	\$17,662	\$27,304	\$39,839	\$56,135	\$77,319	\$101,858	\$140,659
	Tax rate	0.33	0.33	0.33	0.33	0.33	0.33	0.33
h.	(Devt. cost tax relief)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
i.	Taxes or (tax savings)	\$5,829	\$9,010	\$13,147	\$18,524	\$25,515	\$34,603	\$46,418
	Cash flow before tax (c)	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
	Plus tax savings or (less taxes) (i)	(\$5,829)	(\$9,010)	(\$13,147)	(\$18,524)	(\$25,515)	(\$34,603)	(\$46,418)
j.	Cash flow after tax	\$26,312	\$32,773	\$41,171	\$52,089	\$66,282	\$84,734	\$108,720
	Percent return on equity	4.3%	5.3%	6.7%	8.4%	10.7%	13.7%	17.6%
k.	Cash on sale EOY 7	\$1,525,522						
	Internal rate of return	19.6%						

base: i.wk1

Proforma Analysis Input Variables
Downtown Commercial
New Construction-Scenario 1
(\$ thousands)

Building Size

Lot size (sf)	57,000	lot # 8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Commercial (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Total value psf	\$0.250
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.000
Acquisition costs	\$37,500

Improvement costs

Rehabilitation psf	\$3.300
Initial cost estimate	\$495,000
Construction period (months)	18
Construction annual inflation (1 year)	30%
Inflated construction costs	\$579,150

Total development costs

Development costs (net construction financing)	\$616,650	
Leverage rate	0%	
Equity investment	\$616,650	
Financed investment	\$0	
Construction finance annual rate (accrued every 3 months)	40%	corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$616,650	

Permanent financing (construction loan interest financed)

Equity investment	\$616,650	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate	2.5%	against initial value net land plus inflated improvements
Investment tax credit	25%	against initial value net land plus inflated improvements
Rental income tax rate	0%	
Transfer tax rate	7.5%	

Rental information

Current (May '94) rate psf	\$0.193	Weighted Average of Commercial @ \$0.215 sf and Retail @ \$0.095 sf
Escalated (September '95) rate	\$0.251	current rate * inflation @ 30%
Gross rented income	\$33,833	net floorspace * rate psf
Vacancy & collection loss rate	5%	
Effective gross income	\$32,141	
Operating expenses	\$0	
Net operating income year 1	\$32,141	
Net operating income inflated	30%	
Additional performance inflator--base rent	0%	
Additional performance inflator--above-inflation escalator	0%	

Sales information

Capitalization rate	9%
Sales fees	4%

After-Tax Cash Flow, Seven-Year Investment Period
Downtown Commercial
New Construction—Scenario 1
(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$32,141	\$41,783 **	\$54,318 **	\$70,614 **	\$91,798 **	\$119,337 **	\$155,138
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
Percent return on equity	5.2%	6.8%	8.8%	11.5%	14.9%	19.4%	25.2%
d. Net operating income	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479
g. Taxable income (loss)	\$17,662	\$27,304	\$39,839	\$56,135	\$77,319	\$104,858	\$140,659
Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h. (Devt. cost tax relief)	(\$144,788)						
i. Taxes or (tax savings)	(\$144,788)	\$0	\$0	\$0	\$0	\$0	\$0
Cash flow before tax (c)	\$32,141	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
Plus tax savings or (less taxes) (i)	\$144,788	\$0	\$0	\$0	\$0	\$0	\$0
j. Cash flow after tax	\$176,928	\$41,783	\$54,318	\$70,614	\$91,798	\$119,337	\$155,138
Percent return on equity	28.7%	6.8%	8.8%	11.5%	14.9%	19.4%	25.2%
k. Cash on sale EOY 7	\$1,525,522						
Internal rate of return	25.9%						

basepi.wk1

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Proforma Analysis Input Variables

Downtown Commercial

New Construction—Scenario 2

(\$ thousands)

Building Size

Lot size (sf)	57,000	lot # 8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Commercial (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Total value psf	\$0.250
Land value psf	\$0.250
Value net land psf (for depreciation & tax purposes)	\$0.000
Acquisition costs	\$37,500

Improvement costs

Rehabilitation psf	\$3.300
Initial cost estimate	\$495,000
Construction period (months)	18
Construction annual inflation (1 year)	30%
Inflated construction costs	\$579,150

Total development costs

Development costs (net construction financing)	\$616,650
Leverage rate	0%
Equity investment	\$616,650
Financed investment	\$0
Construction finance annual rate (accrued every 3 months)	40% corporate bond rate
Construction finance interest expense	\$0
Total development costs (including construction finance)	\$616,650

Permanent financing (construction loan interest financed)

Equity investment	\$616,650
Financed investment	\$0
Leverage rate (calculated)	0%
Annual interest rate	30% .66 * market rate
Tax-free bond annual simple interest expense	\$0

Tax environment

Annual depreciation rate	2.3%	against initial value net land plus inflated improvements
Investment tax credit	25%	against initial value net land plus inflated improvements
Rental income tax rate	0%	
Transfer tax rate	7.5%	

Rental information

Current (May '94) rate psf	\$0.193	Weighted Average of Commercial \$0.215 sf and Retail \$0.095 sf.
Escalated (September '95) rate	\$0.251	current rate * inflation 30%
Gross rented income	\$33,833	net floorspace * rate psf
Vacancy & collection loss rate	5%	
Effective gross income	\$32,141	
Operating expenses	\$0	
Net operating income year 1	\$32,141	
Net operating income inflated	30%	
Additional performance inflator--base rent	25%	
Additional performance inflator--above-inflation escalator	12%	

Sales information

Capitalization rate	9%
Sales fees	4%

After-Tax Cash Flow, Seven-Year Investment Period
Downtown Commercial
New Construction—Scenario 2
(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$40,176	\$57,050 **	\$81,011 **	\$115,036 **	\$163,351 **	\$231,958 **	\$329,380
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$40,176	\$57,050	\$81,011	\$115,036	\$163,351	\$231,958	\$329,380
Percent return on equity	6.5%	9.3%	13.1%	18.7%	26.5%	37.6%	53.4%
d. Net operating income	\$40,176	\$57,050	\$81,011	\$115,036	\$163,351	\$231,958	\$329,380
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479	\$14,479
g. Taxable income (loss)	\$25,697	\$42,571	\$66,532	\$100,557	\$148,872	\$217,479	\$314,902
Tax rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h. (Devt. cost tax relief)	(\$144,788)						
i. Taxes or (tax savings)	(\$144,788)	\$0	\$0	\$0	\$0	\$0	\$0
Cash flow before tax (c)	\$40,176	\$57,050	\$81,011	\$115,036	\$163,351	\$231,958	\$329,380
Plus tax savings or (less taxes) (i)	\$144,788	\$0	\$0	\$0	\$0	\$0	\$0
j. Cash flow after tax	\$184,964	\$57,050	\$81,011	\$115,036	\$163,351	\$231,958	\$329,380
Percent return on equity	30.0%	9.3%	13.1%	18.7%	26.5%	37.6%	53.4%
k. Cash on sale EOY 7	\$3,238,907						
Internal rate of return	40.2%						

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Project *Pro-formas*: New Construction--Residential

- Building Size* Assumes development program of ground retail (15,000 square feet) and remaining floors residential.
- Acquisition \$* Acquisition cost assumed at maximum \$250 per square foot.
- Improvement \$* New construction costs per square foot estimated at \$3,795 (including fees) based on UDC cost estimates for Bojex site and as confirmed by local experts, and with an assumed 15 percent increase in residential construction costs over commercial construction.
- Taxes* Scenarios 1 and 2 assume no taxation of rental income and 25% investment tax credit.
- Sales* Rental rates are pegged at prime retail rents of \$95 per square foot; residential sales according to schedule presented in Section 2 of main text, but averaged at (May 1994) sales price of \$3,200 per square foot.
- Results* Scenario 2 solves initially for a 40 percent return rate, and requires a performance adjustment of 29 percent on initial sales prices. It should be noted, however, that this return rate represents a one-year return.

Proforma Analysis Input Variables**Downtown Residential****New Construction—Base case**

(\$ thousands)

Building Size

Parcel (sf)	57,000	lot #8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Residential (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Vacant land psf	\$0.250	
Acquisition costs	\$14,250	

Improvement costs

New construction psf	\$3.795	2.5 (base) * 1.1 (downtown inflator) * 1.2 (fees) * 1.15 (resid. inflator)
Initial cost estimate	\$568,250	
Construction period (months)	18	
Construction annual inflation \odot (adjusted every 6 months)	30%	
Inflated construction costs	\$658,907	

Total development costs

Development costs (net construction financing)	\$673,157	
Leverage rate	0%	
Equity investment	\$673,157	
Financed investment	\$0	
Construction finance annual rate \odot (accrued every 3 months)	40%	\odot corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$673,157	

Permanent financing (construction loan interest financed)

Equity investment	\$673,157	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate \odot	0.0%	against inflated construction costs
Investment tax credit \odot	0%	against inflated construction costs
Capital gains tax rate \odot	33%	
Transfer tax rate \odot	4.0%	

Sales per Quarter

Current (May '94) rate psf		
Retail	\$0.095	
Residential	\$3.200	
Escalated rate \odot 18 months		
Retail	\$0.144	current rate * inflation \odot 30%
Residential	\$4.867	current rate * inflation \odot 30%
Gross sales income per quarter		
Retail (rents)	\$593,750	net floorspace * rate psf
Residential	\$133,837,000	net floorspace * rate psf (Assuming total sales in 1 yr)
Operating expenses	\$0	
Net Sales prorated by quarter		
Retail	\$593,750	
Residential	\$133,837,000	
Net Sales income inflated per quarter \odot	8%	30% Annual Inflation
Performance Inflation	0.0%	
Sales information		
Sales fees \odot	4%	

After-Tax Cash Flow, Two-Year Investment Period

Downtown Residential

New Construction—Base case

(\$ thousands)

	Quarter	Close	1	2	3	4	Total Balance
a.	Income- Total		\$134,431	\$144,513	\$155,352	\$167,003	
	Retail Rents		\$594	\$638	\$686	\$738	
	Residential		\$133,837	\$143,875	\$154,665	\$166,265	
b.	Less debt service		\$0	\$0	\$0	\$0	
c.	Cash flow before tax		\$134,431	\$144,513	\$155,352	\$167,003	
	Percent return on equity		20.0%	21.5%	23.1%	24.8%	
d.	Net operating income		\$134,431	\$144,513	\$155,352	\$167,003	
e.	Less interest expense		\$0	\$0	\$0	\$0	
f.	Less depreciation expense		\$0	\$0	\$0	\$0	
g.	Cash Outflow @ close	\$673,157					
	Total Development Costs	\$673,157					
	Sales Expense		\$5,377	\$5,781	\$6,214	\$6,680	
h.	Cumulative cash flow		(\$538,726)	(\$394,213)	(\$238,862)	(\$71,859)	(\$48,145)
	Tax rate						
i.	(Devt. cost tax relief)		\$0				
j.	Taxes or (tax savings) Paid Annually		\$0			(\$23,713)	
l.	Period cash flow after tax	(\$673,157)	\$134,431	\$144,513	\$155,352	\$190,716	
	Percent return on equity		20.0%	21.5%	23.1%	28.3%	
m.	Return on Equity		-7.15%				

Proforma Analysis Input Variables**Downtown Residential****New Construction-Scenario 1**

(\$ thousands)

Building Size

Parcel (sf)	57,000	lot #8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Residential (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Vacant land psf	\$0.250
Acquisition costs	\$14,250

Improvement costs

New construction psf	\$3,795	2.5 (base) * 1.1 (downtown inflator) * 1.2 (fees) * 1.15 (resid. inflator)
Initial cost estimate	\$569,250	
Construction period (months)	18	
Construction annual inflation ^(P) (adjusted every 6 months)	30%	
Inflated construction costs	\$658,907	

Total development costs

Development costs (net construction financing)	\$673,157	
Leverage rate	0%	
Equity investment	\$673,157	
Financed investment	\$0	
Construction finance annual rate ^(C) (accrued every 3 months)	40%	^(C) corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$673,157	

Permanent financing (construction loan interest financed)

Equity investment	\$673,157	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate ^(D)	0.0%	against inflated construction costs
Investment tax credit ^(E)	25%	against inflated construction costs
Capital gains tax rate ^(F)	0%	
Transfer tax rate ^(G)	4.0%	

Sales per Quarter

Current (May '94) rate psf		
Retail	\$0.095	
Residential	\$3.200	
Escalated rate ^(H) 18 months		
Retail	\$0.144	current rate * inflation ^(I) 30%
Residential	\$4.867	current rate * inflation ^(I) 30%
Gross sales income per quarter		
Retail (rents)	\$593,750	net floorspace * rate psf
Residential	\$133,837,000	net floorspace * rate psf (Assuming total sales in 1 yr)
Operating expenses	\$0	
Net Sales prorated by quarter		
Retail	\$593,750	
Residential	\$133,837,000	
Net Sales income inflated per quarter ^(J)	8%	30% Annual Inflation

Performance InflationSales information

Sales fees ^(K)	4%
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After-Tax Cash Flow, Two-Year Investment Period
Downtown Residential
New Construction-Scenario 1
(\$ thousands)

	Quarter	Close	1	2	3	4	Total Balance
a.	Income- Total		\$134,431	\$144,513	\$155,352	\$167,003	
	Retail Rents		\$594	\$638	\$686	\$738	
	Residential		\$133,837	\$143,875	\$154,665	\$166,265	
b.	Less debt service		\$0	\$0	\$0	\$0	
c.	Cash flow before tax		\$134,431	\$144,513	\$155,352	\$167,003	
	Percent return on equity		20.0%	21.5%	23.1%	24.8%	
d.	Net operating income		\$134,431	\$144,513	\$155,352	\$167,003	
e.	Less interest expense		\$0	\$0	\$0	\$0	
f.	Less depreciation expense		\$0	\$0	\$0	\$0	
g.	Cash Outflow @ close	\$673,157					
	Total Development Costs	\$673,157					
	Sales Expense		\$5,377	\$5,781	\$6,214	\$6,680	
h.	Cumulative cash flow		(\$373,999)	(\$229,486)	(\$74,135)	\$92,868	\$92,868
	Tax rate						
i.	(Devt. cost tax relief)		(\$164,727)				
j.	Taxes or (tax savings) Paid Annually		(\$164,727)			\$0	
l.	Period cash flow after tax	(\$673,157)	\$299,157	\$144,513	\$155,352	\$167,003	
	Percent return on equity		44.4%	21.5%	23.1%	24.8%	
m.	Return on Equity		13.80%				

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Proforma Analysis Input Variables
Downtown Residential
New Construction-Scenario 2
(\$ thousands)

Building Size

Parcel (sf)	57,000	lot #8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Residential (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Vacant land psf	\$0.250
Acquisition costs	\$14,250

Improvement costs

New construction psf	\$3.795	2.5 (base) * 1.1 (downtown inflator) * 1.2 (fees) * 1.15 (resid. inflator)
Initial cost estimate	\$569,250	
Construction period (months)	18	
Construction annual inflation (adjusted every 6 months)	30%	
Inflated construction costs	\$658,907	

Total development costs

Development costs (net construction financing)	\$673,157	
Leverage rate	0%	
Equ. investment	\$673,157	
Financed investment	\$0	
Construction finance annual rate (accrued every 3 months)	40%	corporate bond rate
Construction finance interest expense	\$0	
Total development costs (including construction finance)	\$673,157	

Permanent financing (construction loan interest financed)

Equity investment	\$673,157	
Financed investment	\$0	
Leverage rate (calculated)	0%	
Annual interest rate	30%	.66 * market rate
Tax-free bond annual simple interest expense	\$0	

Tax environment

Annual depreciation rate	0.0%	against inflated construction costs
Investment tax credit	25%	against inflated construction costs
Capital gains tax rate	0%	
Transfer tax rate	4.0%	

Sales per Quarter

Current (May '94) rate psf		
Retail	\$0.095	
Residential	\$3.200	
Escalated rate (18 months)		
Retail	\$0.144	current rate * inflation (30%)
Residential	\$4.867	current rate * inflation (30%)
Gross sales income per quarter		
Retail (rents)	\$593,750	net floorspace * rate psf
Residential	\$133,837,000	net floorspace * rate psf (Assuming total sales in 1 yr)
Operating expenses	\$0	
Net Sales prorated by quarter		
Retail	\$593,750	
Residential	\$133,837,000	
Net Sales income inflated per quarter	8%	30% Annual Inflation
Performance Inflation	29.4%	
Sales information		
Sales fees	4%	

After-Tax Cash Flow, Two-Year Investment Period
Downtown Residential
New Construction-Scenario 2
(\$ thousands)

	Quarter	Close	1	2	3	4	Total Balance
a.	Income- Total		\$173,953	\$187,000	\$201,025	\$216,102	
	Retail Rents		\$768	\$826	\$888	\$954	
	Residential		\$173,185	\$186,174	\$200,137	\$215,147	
b.	Less debt service		\$0	\$0	\$0	\$0	
c.	Cash flow before tax		\$173,953	\$187,000	\$201,025	\$216,102	
	Percent return on equity		25.8%	27.8%	29.9%	32.1%	
d.	Net operating income		\$173,953	\$187,000	\$201,025	\$216,102	
e.	Less interest expense		\$0	\$0	\$0	\$0	
f.	Less depreciation expense		\$0	\$0	\$0	\$0	
g.	Cash Outflow @ close	\$673,157					
	Total Development Costs	\$673,157					
	Sales Expense		\$6,958	\$7,480	\$8,041	\$8,644	
h.	Cumulative cash flow		(\$334,477)	(\$147,477)	\$53,548	\$269,650	\$269,650
	Tax rate						
i.	(Devl. cost tax relief)		(\$164,727)				
j.	Taxes or (tax savings) Paid Annually		(\$164,727)			\$0	
l.	Period cash flow after tax	(\$673,157)	\$338,680	\$187,000	\$201,025	\$216,102	
	Percent return on equity		50.3%	27.8%	29.9%	32.1%	
m.	Return on Equity		40.06%				

**Project *Pro-forma*: New Construction--Commercial
New Kingston Comparison**

- Building Size* Assumes development program of ground retail (15,000 square feet) and remaining floors commercial.
- Acquisition \$* Acquisition cost assumed at \$550 per square foot.
- Improvement \$* New construction costs per square foot estimated at \$3,000 (including fees) based on UDC cost estimates for Bojex site and as confirmed by local experts, but with discount of 10 percent to account for increased construction cost due to pilings on waterfront parcels.
- Taxes* Assumes 33 percent capital gains rate and tax on interest income.
- Rents* Rental rates are pegged at prime retail rents of \$215 per square foot and commercial rates of \$250. See discussion of rental assumptions in Section 2 of main text. In addition, base rent was escalated 10% to account for quality differential for new construction.
- Sales* Gain on sale is calculated based on a 9 percent capitalization rate, sales fees at 4 percent and a capital gains tax rate of 33 percent.

Proforma Analysis Input Variables

**New Kingston Commercial
New Construction—Base Case
(\$ thousands)**

Building Size

Lot size (sf)	57,000	lot # 8
Gross floorspace (sf)	150,000	
Retail (sf)	25,000	
Commercial (sf)	110,000	
Net floorspace (sf)	135,000	90% of gross

Acquisition Costs

Total value psf	\$0.550
Land value psf	\$0.350
Value net land psf (for depreciation & tax purposes)	\$0.000
Acquisition costs	\$82,500

Improvement costs

Rehabilitation psf	\$3,000
Initial cost estimate	\$450,000
Construction period (months)	18
Construction annual inflation (1 year)	30%
Inflated construction costs	\$526,500

Total development costs

Development costs (net construction financing)	\$609,000
Leverage rate	0%
Equity investment	\$609,000
Financed investment	\$0
Construction finance annual rate (accrued every 3 months)	40%
Construction finance interest expense	\$0
Total development costs (including construction finance)	\$609,000

Permanent financing (construction loan interest financed)

Equity investment	\$609,000
Financed investment	\$0
Leverage rate (calculated)	0%
Annual interest rate	40% .66 * market rate
Tax-free bond annual simple interest expense	\$0

Tax environment

Annual depreciation rate	2.5%	against initial value net land plus inflated improvements
Investment tax credit	0%	against initial value net land plus inflated improvements
Rental income tax rate	33%	
Transfer tax rate	7.5%	

Rental information

Current (May '94) rate psf	\$0.227	Weighted Average of Commercial \$0.250 sf and Retail \$0.125 sf.
Escalated (September '95) rate	\$0.295	current rate * inflation 30%
Gross rented income	\$39,813	net floorspace * rate psf
Vacancy & collection loss rate	5%	
Effective gross income	\$37,822	
Operating expenses	\$0	
Net operating income year 1	\$37,822	
Net operating income inflated	30%	
Additional performance inflator—base rent	10%	
Additional performance inflator—above-inflation escalator	0%	

Sales information

Capitalization rate	9%
Sales fees	4%

After-Tax Cash Flow, Seven-Year Investment Period
New Kingston Commercial
New Construction—Base Case
(\$ thousands)

Year	1	2	3	4	5	6	7
a. Net operating income	\$41,604	\$54,085 **	\$70,311 **	\$91,404 **	\$118,825 **	\$154,473 **	\$200,815
b. Less debt service	\$0	\$0	\$0	\$0	\$0	\$0	\$0
c. Cash flow before tax	\$41,604	\$54,085	\$70,311	\$91,404	\$118,825	\$154,473	\$200,815
Percent return on equity	6.8%	8.9%	11.5%	15.0%	19.5%	25.4%	33.0%
d. Net operating income	\$41,604	\$54,085	\$70,311	\$91,404	\$118,825	\$154,473	\$200,815
e. Less interest expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0
f. Less depreciation expense	\$13,163	\$13,163	\$13,163	\$13,163	\$13,163	\$13,163	\$13,163
g. Taxable income (loss)	\$28,442	\$40,923	\$57,148	\$78,242	\$105,663	\$141,310	\$187,652
Tax rate	0.33	0.33	0.33	0.33	0.33	0.33	0.33
h. (Devt. cost tax relief)	\$0						
i. Taxes or (tax savings)	\$9,386	\$13,505	\$18,859	\$25,820	\$34,869	\$46,632	\$61,925
Cash flow before tax (c)	\$41,604	\$54,085	\$70,311	\$91,404	\$118,825	\$154,473	\$200,815
Plus tax savings or (less taxes) (i)	(\$9,386)	(\$13,505)	(\$18,859)	(\$25,820)	(\$34,869)	(\$46,632)	(\$61,925)
j. Cash flow after tax	\$32,218	\$40,581	\$51,452	\$65,584	\$83,957	\$107,841	\$138,890
Percent return on equity	5.3%	6.7%	8.4%	10.8%	13.8%	17.7%	22.8%
k. Cash on sale EOY 7	\$1,974,679						
Internal rate of return	24.8%						

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