PORT LANDS ACCELERATION INITIATIVE

Appendix 2
Port Lands Business Plan

Photo of Cherry Beach Sports Fields courtesy of Waterfront Toronto

TORONTO

WATERFRONToronto

Toronto and Region Conservation for The Living City

APPENDIX 2

SUMMARY OF BUSINESS PLAN

- FINANCIAL AND OTHER CONSIDERATIONS FOR ADVANCING DEVELOPMENT IN THE PORT LANDS

City of Toronto Staff with Assistance from N. Barry Lyon and Company

TORONTO PORT LANDS BUSINESS PLAN: FINANCIAL AND OTHER CONSIDERATIONS FOR ADVANCING DEVELOPMENT IN THE PORT LANDS

Table of Contents

1.0 Executive Summary

This business plan summarizes the work of the Port Lands Acceleration Initiative (PLAI) and uses the outcomes to suggest a pathway forward to realizing the vision of creating a new waterfront community on the City's eastern flank that will support new neighbourhoods, employment and tourism opportunities while at the same time resolving long-standing environmental and infrastructure issues associated with the Don River and the development history of the area. The project is massive constituting lands greater than all of the City's downtown. However, the opportunity is also extremely large.

The work of the PLAI has helped to significantly reduce the cost of infrastructure while at the same time maintaining the integrity of earlier planning work. With a vision and approach for the Port Lands confirmed, the business plan suggests that the focus of the work now shift and focus most pragmatically on Cousin's Quay, Polson's Quay and the Film Studio District (precincts E1, E3, and F respectively).

The 30 year financial pro forma of C&W still identifies funding issues. The work must now move forward to create more certainty with more accurate cost projections and assessment of funding sources including area-specific development charges

This report emphasizes the need to develop the details of both planning approvals and infrastructure design and costs, work to be shared by the City, Waterfront Toronto, TRCA and, importantly the stakeholders within theses precincts. The land owners' involvement at this stage is crucial in our view. Their participation will help maximize efficiencies in development and infrastructure. Engaging the land owners early in the design of infrastructure will also be critical in exploring opportunities for funding contributions as well as articulating the details of development objectives.

As this information comes forward, the City will be in a position to continually assess risks and opportunities prior to committing to any major expenditures.

2.0 Introduction

The Toronto Port Lands were created by the Toronto Harbour Commission in anticipation of shipping related industrial development which emerged in the form of heavy bulk storage for fuel and oil, sugar, salt and specialized project cargo facilities. However, the impact of freight containerization shifted the majority of transshipment, and supporting industries, to large ports with direct access to the Atlantic and Pacific oceans. While still forming an important link in the regional transportation system, land needs for shipping related uses declined. As the oil refineries and transshipment depots have departed, much of the Port Lands has become underutilized or vacant. At the same time, the City has recognized that to accommodate its future growth in the most sustainable manner possible, it must make efficient use of its land resources. The Port Lands' proximity to the City's downtown core and waterfront/riverfront location make it an important resource to accommodate new opportunities for commerce, job creation and residential community building.

While there has been some new investment in the Port Lands, most notably, the Pinewood Studio complex, until recently new investment has been deterred due to issues such as:

- the need for clarity in addressing the requirements for flood protection to implement new developments;
- a lack of a common vision for the nature of development in the Port Lands;
- developing an understanding of infrastructure funding requirements including roads, bridges, transit and utilities; and,
- environmental and geotechnical issues associated with the properties.

These challenges have been faced and overcome in the City before. For example, it was a decade ago that the West Don Lands sat mostly vacant, facing similar issues of flood risk, poor ground conditions, environmental impairment and inadequate infrastructure. Now it is being revitalized and will soon serve as the home of the Athletes' Village for the 2015 Pan Am/Parapan Games. This follows on the 25-year redevelopment of the Railway Lands into Cityplace and the development of the core of the central waterfront which commenced about 40 years ago.

The business plan that follows summarizes and builds on the work of the Council directed Port Lands Acceleration Initiative (PLAI)) to address these issues as the basis of a strategy to accelerate the process of reinvestment in the area.

3.0 The Opportunity

If Toronto is to continue to grow as projected in the Official Plan, large development lands that can add very significantly to the stock of residential and employment uses near the downtown are needed. The Port Lands provides an 880 acre opportunity to build a new waterfront district that:

- Allows for the extension and enhancement of the waterfront for both public uses and enjoyment as well as private investment that will create new jobs;

- Creates large, highly attractive, parcels that could compete for major office or institutional developments;

- Provides the opportunity to create exciting mixed-use environment that will support vibrant new communities for thousands of future citizens;

- Addresses long standing environmental issues associated with the Don River; and,

- Continues to serve its original function as a commercial port and as a service centre to the City's core areas.

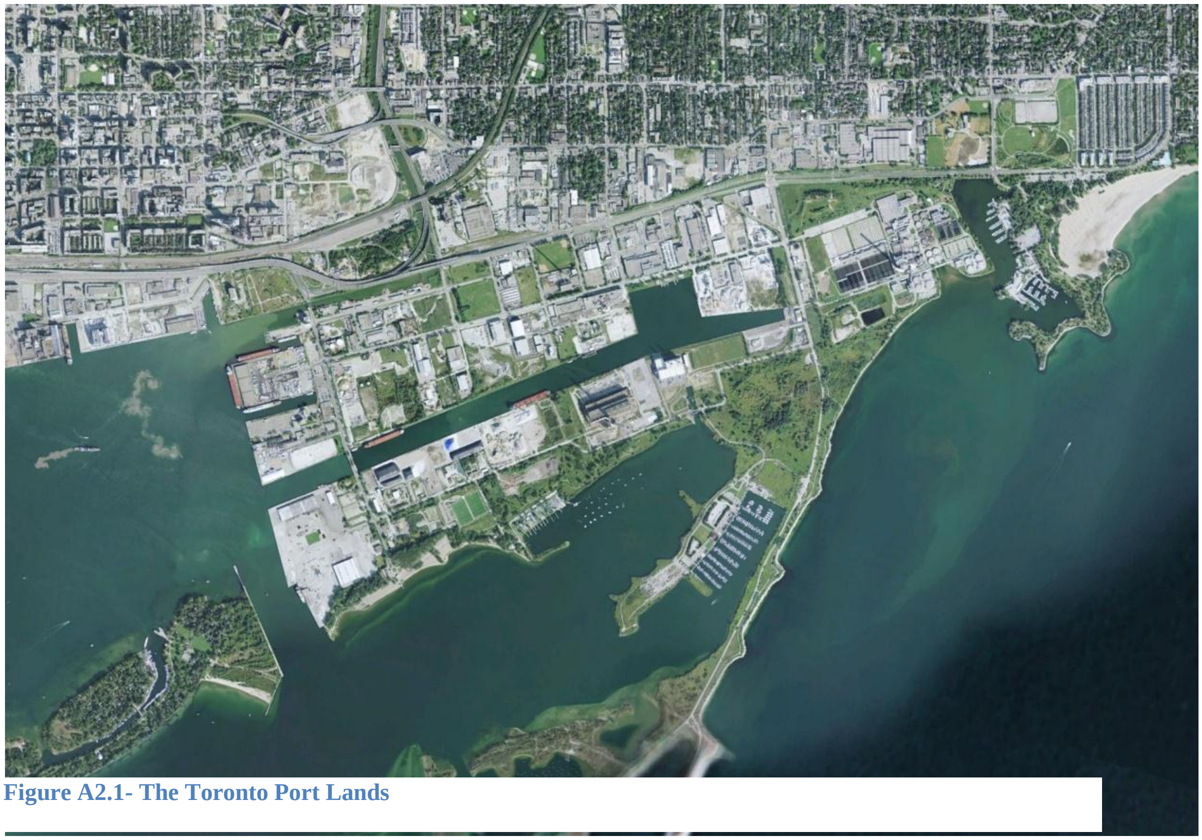

Figure A2.1- The Toronto Port Lands

There are very compelling strengths to build on that are now beginning to outweigh the challenges. The Port Lands are near the centre of a very strong regional market – one of the economically strongest in North America, a market fuelled by in-migration and a robust, diverse economic base. Development has moved progressively outward from the core of the City adding new life to long stagnant areas. Construction is well underway for the West Don Lands and is being advanced for many areas of the East Bayfront. The Port Lands proximity to the core and its relationship to the waterfront make it a tremendous opportunity to allow for the continued east ward renewal. However, there is still additional work that must be undertaken to prepare the Port Lands for development from both an infrastructure and planning viewpoint and to ensure these lands can be made available for the market as soon as possible as development pressure has now reached this area.

On this latter point, if development planning does not begin immediately, market opportunities to build the City as envisioned in the Official Plan will likely be foregone or delayed as development would go elsewhere or not happen within the City.

This report outlines a business plan to initiate faster development in the Port Lands. The Business Plan is structured as follows:

- A summary of conceptual development model and phasing ;
- The market rationale that should support this development;
- A overview of the issues associated with infrastructure;
- A review of the C&W financial model and funding option analysis, incorporating aspects of the peer reviews;
- An examination of key threats, risks; and,
- Recommended next steps.

This plan pulls together the results from significant new research undertaken for this Initiative (each element of which is much more fully described in other Appendices and these should be consulted for detailed information:

- Infrastructure Costing Analyses by Waterfront Toronto with contributions from Aecom Construction and Materials Ltd and Hanscomb Consultants (Appendix 8)
- Analyses of flood protection phasing options by the Toronto Region Conservation Authority and Aecom (Appendix 9)
- Analyses of land development options by planningAlliance (Appendix 10 and 11)
- Port Lands Market Demand Forecast by Cushman & Wakefield (Appendix 6)
- Market Sounding by PricewaterhouseCoopers (Appendix 5)
- Financing research undertaken by Scotia Capital (Appendix 7)

- Analysis of Development Charges by Watson and Associates Economists (Appendix 6)

- Development Modelling Analyses (including revenue projection) by Cushman & Wakefield (Appendix 6) using their own market demand forecasts and cost and location assumptions supplied by the staff project team.

- Peer Review analyses undertaken by Hemson Consultants (including special development charges analyses) and N Barry Lyon Consultants (Appendices 3 and 4)

- Feedback received from Land Owners and Tenants in the port lands through the consultation processes (Appendix 12)

- Feedback received from other stakeholders and the public through the consultation process (Appendix 12)

4.0 The Development Concept

The Port Land Acceleration Initiative team has now further refined the development concept for the Port Lands that allows flood protection measures to proceed in a phased manner and which reduces originally forecast capital costs. This phasing is also based on the existing pattern and availability of lands for redevelopment and the logical and most cost effective extension of infrastructure. The plan also provides for a generous system of public parks and open spaces and a Bus Rapid Transit (BRT) System that evolves into a higher order LRT (Light Rail Transit) system as demand warrants.

The plan is also built around significant new open spaces, some of which serve a dual purpose for flood protection as well as public benefits. These new public spaces should also have a significant bearing on market demand and land values. Access to and views of parks and trail systems are valued highly in both commercial and residential development markets. These new features should help support above average market demand and land values for development throughout the build out of the development concept.

Importantly, the development concept recognizes the role of the Port of Toronto. The Port currently provides an important service to the City and regional economy. Several major industries are dependent on its services. The concept therefore recognizes the need to protect land and dockwall resources for its future needs.

The development concept has been devised around the implementation of phased flood protection infrastructure. Within each phase of infrastructure, progressive amounts of land become available for a broad range of development opportunities. Within each of the three development phases of flood protection infrastructure development there are a number of precincts that have been established. These precincts are illustrated on the following diagram.

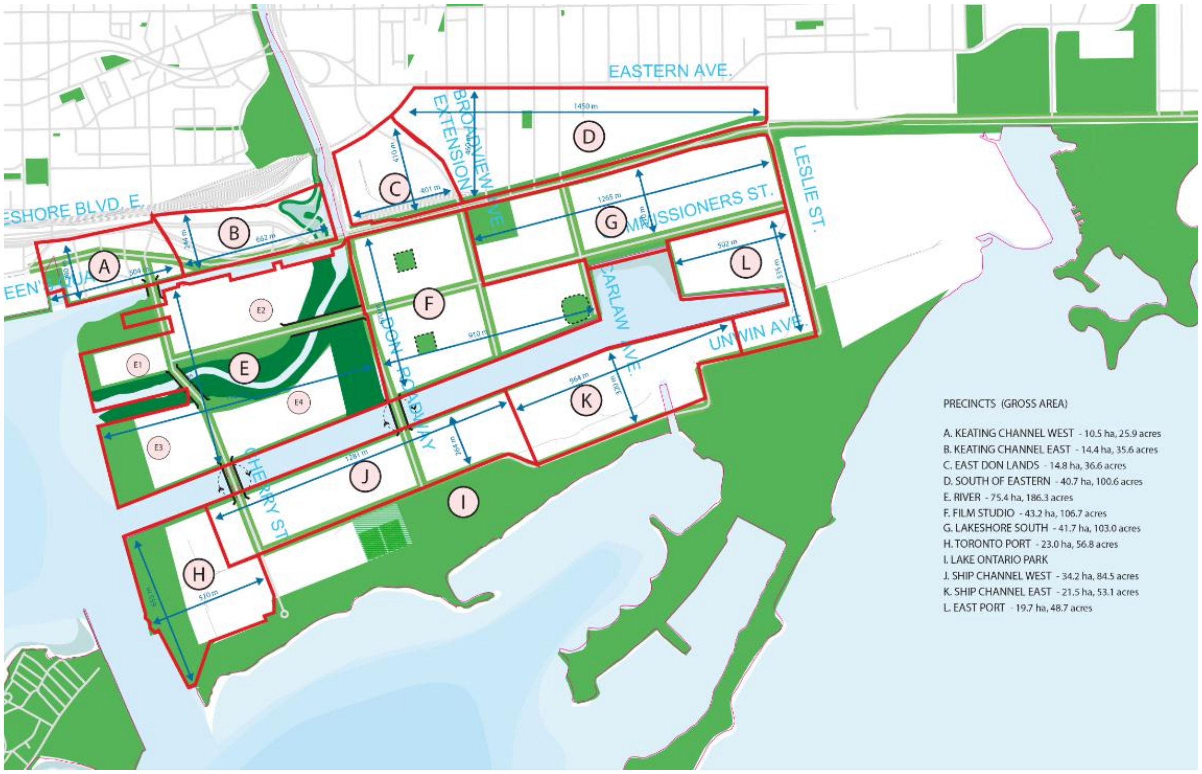

Figure A2. 1 Port Land Precincts and Major Roads and Open Spaces

Phase One of the flood protection works would allow for development in Precincts E1 (Cousins Quay) and E3 (Polson Quay). Phase Two would allow the Film Studio District (F) to proceed with a full range of land use as well as the other areas east of the Don Roadway and north of the ship channel. Phase Three would allow the development of the riverside precincts of E2 and E4. It is also possible, subject to servicing, that the adaptive reuse of the former Hearn Generating Station could occur in an early phase of the Port Lands development (Precinct K), partly because it is outside the flood plain.

Planning for areas adjacent to the Port Lands, West Keating (A), 480 Lakeshore (B) and the South of Eastern Area (C and D) should be co-ordinated as these areas will also benefit from infrastructure improvements (flood protection, sediment management areas, transit, etc.)

Current uses that dominate in a number of the precincts to the east and south (especially in G, L and J) are required for the City to function and must be accommodated. Likewise the largest precinct (I) is already mostly a green space and natural heritage area that will continue to evolve to form Lake Ontario Park.

The following provides brief summaries of each of the three initial phases of the Development Concept.

4.1 Phase One

Phase One provides for the creation of a spillway extending south from the Don River terminus at the Keating Channel to the Ship Channel. This, along with increases in grade west of Cherry St, would provide suitable flood protection that would allow for the redevelopment of the valuable lands to the west of Cherry Street. These lands are composed of Polson Quay (12.6 hectares – 31.1 acres) – a mix of private ownerships and City owned land that is under long-term lease and Cousins Quay (12.02 hectares – 29.7 acres), which is wholly owned by the City.

These parcels of land offer some of the most interesting views of the Toronto Waterfront and are likely to be some of the most valuable lands in the Port Lands. The development concept calls for intensive mixed-use development of the site with significant open space at the waters` edge. The estimate of developable density for these two parcels is 7.8M square feet. To facilitate this development several key pieces of infrastructure have been planned which include the realignment of Cherry Street westerly.

Figure A2. 32 Phase One of Flood Protection

4.2 Phase Two

Phase Two involves the raising of the Don Roadway from the Ship Channel to Lakeshore Blvd., the extension of the flood protection north to the CN Tracks, the widening of the river channel between Lakeshore Blvd and the elevated CN tracks, removal of some infrastructure over the river, widening of Lakeshore Blvd and railway spur bridges and the construction of the sediment management area. These flood protection measures allow for the redevelopment of extensive lands east of the Don Roadway and south of Eastern Avenue. Significant private ownership exists in this area and much of the land owned by the City is either under long-term lease or is subject to long-term lease options. There are some significant current operations in this precinct, especially Pinewoods Studio. This studio is a development that was initiated by the City as a catalytic project to reinvigorate the economy of the area and to help boost a major economic sector in Toronto. It is important to note that expansion of the film studio type uses may be permitted within the existing zoning and special policy area requirements that apply to the area.

Both Pinewood Studios and Rose Corporation, who share development interest in portions of these lands with the City, have already developed significant plans for the area.

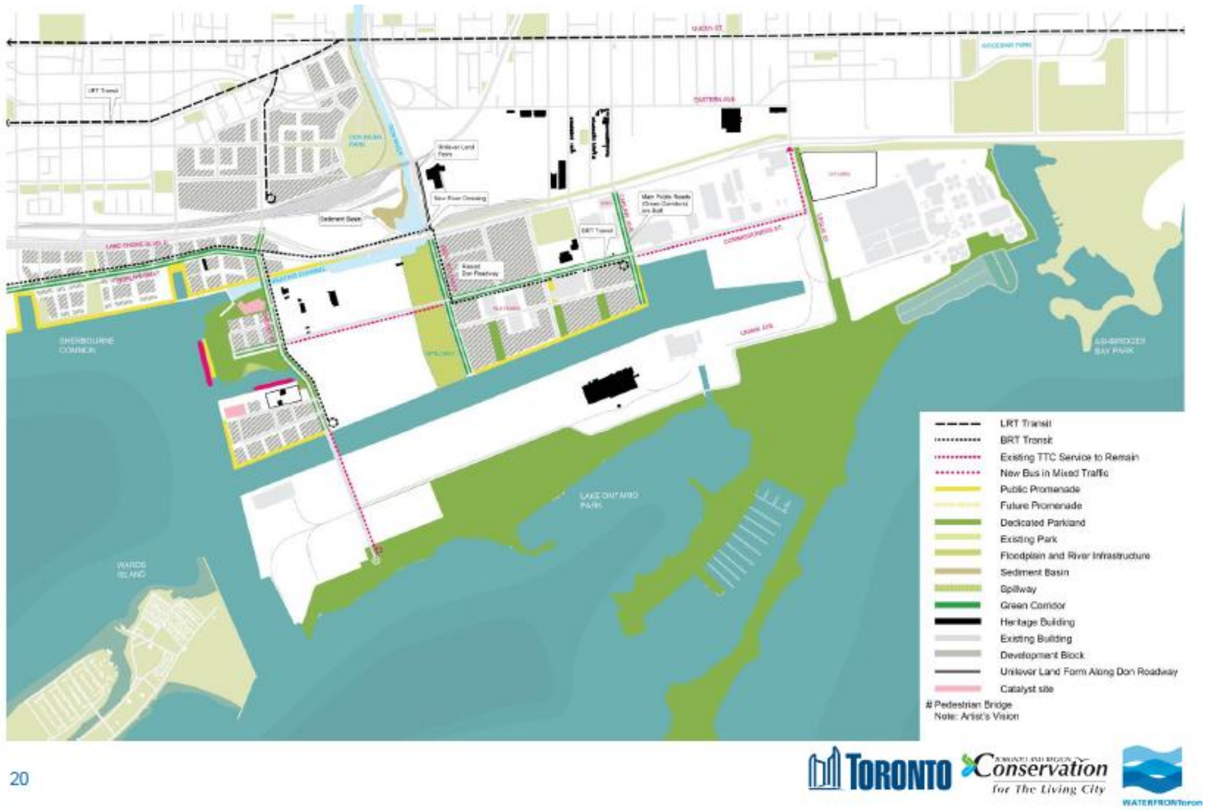

Figure A2. 4 Phase Two of Flood Protection

4.3 Phase Three

Phase Three involves the refinement of the spillway, construction of the new river and valley from the Keating Channel to the Polson Quay Slip, installation of the weirs up and downstream from the Lakeshore Blvd bridge, armouring of the Keating Channel and increasing grades of development sites which would release the lands remaining west of the Don Roadway for development. Additional activities related to the DMNP would also need to be done involving naturalization of various segments of Polson Quay when appropriate. The development in this area would benefit strongly from the real estate investments made to the east and west, which could have a significant “up lift” in land value and market interest. The river realignment will also create significant new opportunities for river and park views as well as access to an extensive trail system. These features will create a truly unique land offering and add significant value to lands which are primarily owned by the City.

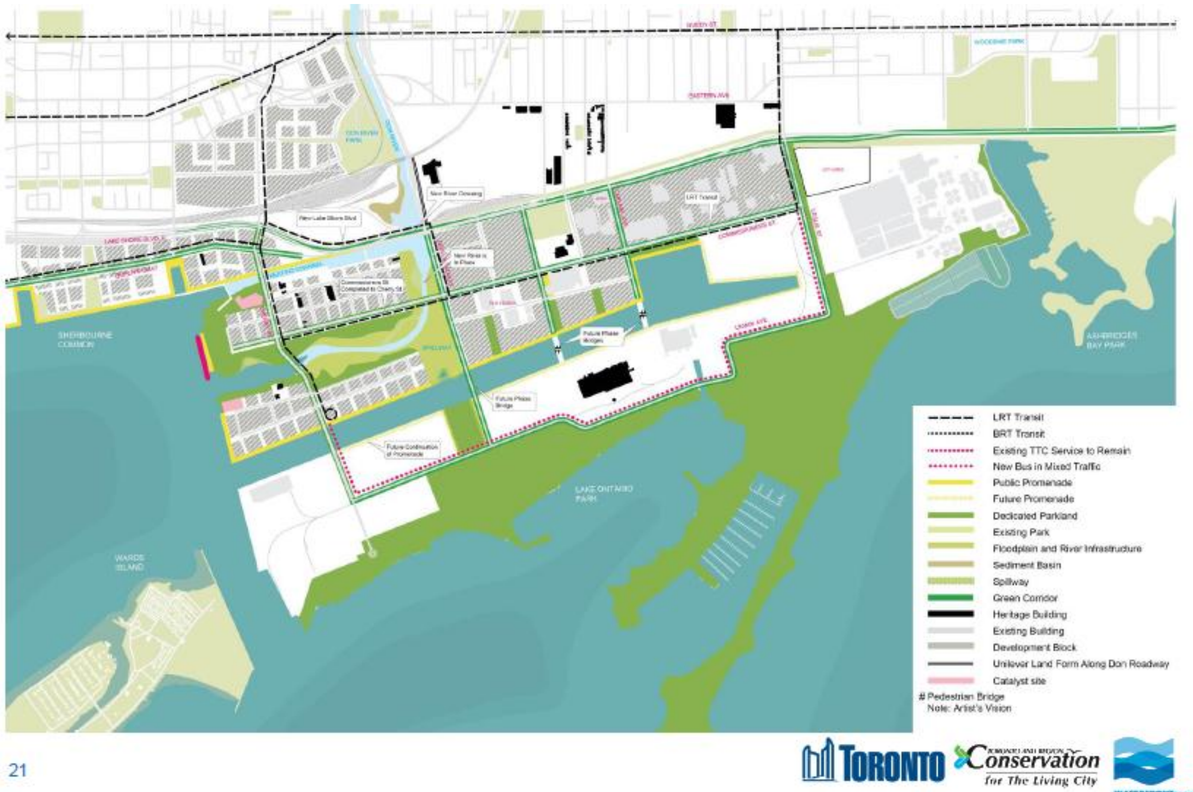

Figure A2. 5 Phase Three of Flood Protection

5.0 The Market Demand for the Port Lands

With an understanding of the development concept Cushman and Wakefield (C&W) undertook a review of the likely demand for employment, residential, retail and other uses that might be attracted to the Port Lands. Their methodology included taking into consideration development patterns in other large areas of Toronto, the likely size of the regional growth rates (Greater Toronto Area scale) and how much of this demand the Port Lands could garner.

This analysis was used to refine the phasing discussed in Section 4 but also used to project revenues, infrastructure requirements and assess financial viability issues discussed later in this business plan.

5.1 Industrial

In C&W's view, industrial uses, while currently and historically a major user of the Port lands, are not expected to be a significant source of employment growth in the area. C&W included Port related uses in this view. This was supported by PwC's interviews. Some other stakeholders, including the Toronto Port Authority (TPA), who were consulted cautioned that with global warming (the possibility of a year-round St. Lawrence Seaway), higher energy prices and the containerization of commodities, water transport may become more important. Given that the Port Lands is a very large area, there is the ability to 'bank' land now in case such a future unfolds. There is no other area within the City's extensive waterfront that could handle commercial shipping so reserving lands now for such a possibility seems prudent.

5.2 Office

According to C&W office demand in the Port Lands was seen as ancillary to the core demand for office towers. That is, these uses will not displace the demand for Triple A office space in the core but will compete more with the 905 and other areas where ”A” and “AA” type offices typically locate. However, these users may choose the Port Lands for “back office” functions that might otherwise flow to the 905. This being said, PwC's interviewees were cautious about the immediate opportunity for office commercial development.

The Port Lands is already the home to studio office space that tie in directly to the film and other creative industries in the area. We expect that office/workshop, live-work, incubators and other forms of office beyond Class A will develop in the Port Lands over time.

It is also important to note that office demand, especially from large users, can be difficult to accurately forecast and it's a good strategy to have lands available for head office, government or other institutions that would compete well in a regional site selection process. The Port Lands waterfront location, along with the advantages of downtown core and highway access would offer a highly prestigious location for these types of uses provided suitable sites are development ready.

5.3 Residential

As permitted and envisaged in the Official Plan, C&W and PwC see significant demand for residential use in the Port Lands. There is no residential development at present in the Port Lands. The introduction of this use would have a positive and dramatic impact on the urban nature of the Port Lands by populating and animating the area all day, every day. Many other port areas in the world have successfully inter-mixed all the uses envisaged here – including Toronto's own central waterfront.

5.4 Retail

There are two elements to retail demand – one is for retail to serve the newly arrived office and residential users and the other recognizes that significant pent up demand exists to serve the 'region' of the south-east areas of the City (east of the downtown and north into the former municipality of East York and further east into the closer areas of Scarborough). If an urban destination centre is to be considered, significant policy and design issues arise to fit within the community and locational context of the Port Lands. This would require an urban format that is an integral component to a mixed-use development (not a traditional big box format and not with large surface parking). C&W see a strong demand for retail as does PwC, especially if at a scale to attract other parts of south-east Toronto to the Port Lands.

5.5 Other Uses

C&W projected a modest amount of hotel use to serve the new businesses (eg film studios) and residents. The project team also reviewed the possibility of other catalytic uses that are difficult to forecast but could have an impact if they were to occur. Given the large areas of under-utilized land, the Port Lands might be the only place that some of these uses could locate in Toronto. These uses include:

- A campus or campuses for university/community college/research centre/hospital complex
- A world expo or Olympics site
- A large-scale cultural or entertainment attraction

Some of these uses require very significant public sector funding while other uses could be undertaken by the private sector. The project team, based on the information gathered to date, decided that none of the above uses should be factored into a business plan because of their significant uncertainty; either because of community concerns or because there is no way to predict the decision-making of outside authorities. Experience elsewhere has shown that large, under-developed areas can indeed become important development centres when such catalytic uses are located there.

5.6 C&W 30-Year Market Demand Forecast

The following table (Figure A2.6) shows the full range of future demand estimates from conservative through moderate to aggressive as compiled by C&W for use in the 30-year financial model for the project. Based on development capacities determined by planningAlliance, this demand can be accommodated on Precincts E1, E3, and F (phases 1 & 2). Using their judgment and that of the Steering Committee, it was decided to use the Moderate Scenario for the main cash flow analyses. Several land owners pointed out that they felt, based on their experience, that these estimates were low, especially for residential. Certainly the real estate transactions (sale of areas in and close to the Port Lands) would indicate that greater development may be possible, either in greater numbers and/or faster than envisaged (as demonstrated by the recent sales of the UniLever site and the Cascades site).

Figure A2.6 – C & W 30-Year Market Demand Forecast (Phases 1 & 2)				
Land Use	Conservative Demand	Moderate Demand	Aggressive Demand	Approximate Land Value* ($2012/sf GFA)
Office	2.7 million sf	4.5 million sf	6.2 million sf	11.00
Residential	8,700 units	9,700 units	10,700	34.00
Retail	1.4 million sf	1.4 million sf	1.4 million sf	60.00
Hotel	375 rooms	450 rooms	575 rooms	21.00

'* - *adjusted downward to reflect impact of area-specific development charges*

To put these development numbers into context, they are comparable to the following sizes of development in other areas of Toronto:

- Residential: a little larger than the number of units in Liberty Village
- Office: a little over half the size of North York Centre (7.2M square feet)
- Retail: about the same size as the retail uses in Scarborough Town Centre (1.3M square feet)

After accommodating the market demand as projected by C&W, and excluding areas that are expected to continue with their current uses, there is still a considerable amount of land available for future development. In rough orders of magnitude there will still be about an equal amount of land north of the ship channel that could be redeveloped after absorbing the C&W estimated added uses and the same again south of the Ship Channel if the current outdoor storage uses could be compressed in their land usage (more if they were not needed).

6.0 Infrastructure Estimates

In order for any significant redevelopment to occur in the Port Lands there are some very large infrastructure improvements needed. The main elements of these costs by flood protection phase are summarized in Figure A2.7. These costs include flood protection to remove the restrictions imposed due to flood threat; transit to enable businesses and residents to move in and out of the area; new water distribution and wastewater collection systems, dock walls, roads and bridges to replace those that are too old or too inadequate for a different type of development load; costs to deal with soil contamination encountered during infrastructure construction.

Figure A2.7 - Estimates of Infrastructure Costs Required to Accommodate Full Build Out North of Ship Channel ($2012 millions)

	Phases in C&W 30-Year Financial Model		Post-30-Year Phases			
Phase ->	1	2	3	4 & 5	Remainder	Total
	Cousins & Polson's Quay	Film Studio Precinct	Lower Don Lands	River Mouth Naturalization	Balance of Port Lands North of Ship Channel	
Flood Protection	65	114	262	15	0	456
Major Infrastructure	267	226	178	0	72	743
Transit Infrastructure	26	82	70	0	20	198
Local Infrastructure	89	194	200	0	20	503
Total Investment	**447**	**616**	**710**	**15**	**112**	**1,900**

Of these overall costs, the local infrastructure costs of $503M, which include streets and services to a specific development, are typically borne by the developer of the land.

It is also important to note these costs have been based on limited site investigations and very preliminary design. Given the magnitude of the estimate, it is a key point in this business plan that a full review and risk assessment of the costing of the initial stages of infrastructure development should move forward.

The more specific costing worksheet shown in Appendix 7 displays the estimated costs of the wide range of infrastructure items and includes an indicative allocation according to the chart above.

7.0 Funding and Financing Options

As the Port Lands project moves forward, a process of more detailed design will give greater certainty to the costs, the form of development and revenues. Concurrent with this process a better understanding of the magnitude of costs and how these costs would be shared will be developed. For example, local infrastructure, as noted in the chart, would typically be the responsibility of the developer. It is also possible that other components, such as Major Infrastructure and Flood Protection, may also be shared with private interests. This Section highlights the potential sources of funding the City may wish to explore in more detail during this process. Recognizing the need to fund large amounts of infrastructure in advance of development, this section also discuss financing options that should also be explored.

7.1 Funding Options

There is a wide variety of potential funding sources to pay for infrastructure improvements in the Port Lands. The following sections briefly describe the ones that have been used elsewhere in the City or in the Province. Many of these sources were not identified by the Project Team to be used by C&W in their analyses pending further review and discussions with relevant parties.

7.1.1 Land Sales

Because the City, either directly or through Toronto Port Lands Company (TPLC), its wholly-owned agency, owns three-quarters of the developable land in the Port Lands, proceeds from the sale or lease of this property could help pay for needed infrastructure. Not all the land under public ownership is available for sale since the City uses some for its own purposes such as for works yards. Also, the City has already leased or provided options to lease for significant lengths of time (40-99 years) for about a third of its TPLC holdings. The map in Figure A2.8 indicates the land ownership and leases in the Port Lands. Use of this source represents a very significant investment by the City. Other governments own property in the Port Lands but these are mostly occupied by active uses or are under long-term lease (Hearn Plant). This means that, at this time, the land holdings of other orders of government are not available as a revenue source.

Therefore, for this analysis, only TPLC land was considered available for sale/lease to help pay for infrastructure.

.

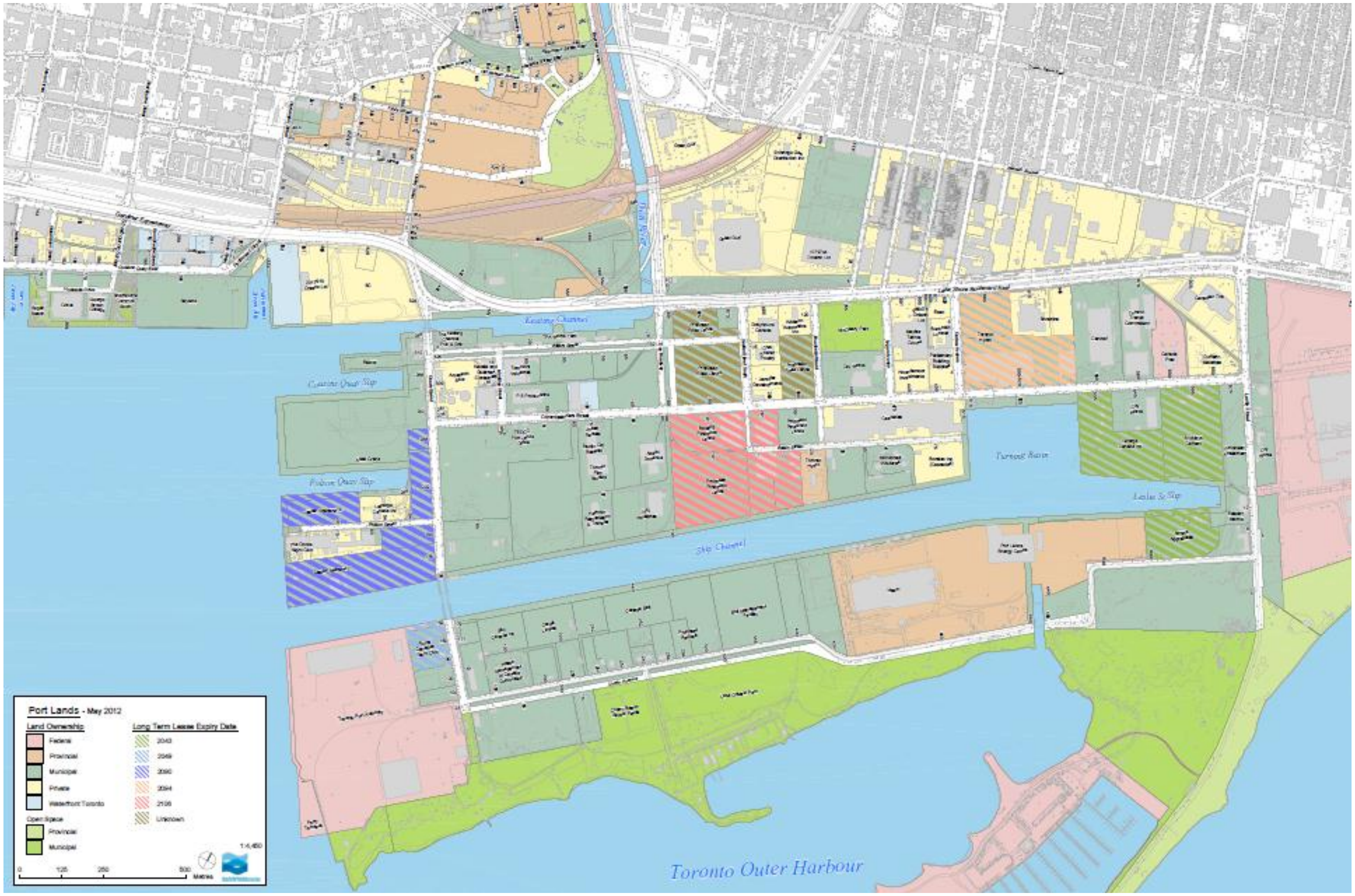

Figure 3 Land Tenure

Land leased by the City for greater than 20 years or where there are options to lease land for a long period does impinge on the ability of the City to realize value to convert into support for infrastructure funding. In some cases the lease options, if exercised, require some up-front expenditures on the part of the City. There also may be costs to either buy-out or terminate the leases, in order to facilitate development on freehold land. For these reason, a conservative estimate has been made that discounts proceeds by 50% from what would be anticipated if the City had full control of the land.

7.1.2 Development Charges

These are fees imposed by the City of Toronto to defray the cost of capital projects which are required in order to meet the increased needs for service arising from development. The Development Charges Act sets out the rules for applying these charges. In Toronto, the charges are collected when building permits are issued.

Currently, the City has a single Development Charges By-Law that applies these charges uniformly across the City. However, the Development Charges Act also provides municipalities in Ontario with the ability to create multiple Development Charge By-Laws that apply to specific areas within a municipality. Area-specific By-Laws are frequently used in other municipalities in Ontario to recover the eligible capital costs for major "greenfield" developments.

In carrying out its analysis, C&W, and its development charge sub-consultant, Watson & Associates Economists, were directed to assume that the area-specific approach would be applied in the Port Lands.

However, as part of its Peer Review, Hemson forecast the potential development charge revenues that could be raised using an alternative "Hybrid" approach. Under this approach, the eligible costs for the specialized flood protection works would be recovered through an area-specific charge applied to the area currently exposed to flooding risk and the remaining eligible costs would be recovered through the City-wide Development Charges By-Law. Further work is needed to assess whether one or the other or a hybrid approach should be used.

7.1.3 Local Improvement Charges

The municipality does have the authority to levy a special charge on all benefitting land owners when certain types of infrastructure are built in an area (LICs and Section 391). This is a tax on existing property owners irrespective of whether development occurs on any particular property. For instance, removing properties from a flood risk could be seen as benefitting all properties. It may be possible to include some adjacent geographic areas in the imposition of area-specific development charges since they will benefit from some of the improvements. Impacts on land values inside and outside the port and would need to be assessed. The imposition of a LIC, Section 391 is rare in Toronto. C&W have not used this source in their analyses. .

7.1.4 Section 37 of the Planning Act

Section 37 of the Planning Act allows the City to collect funding for community projects in exchange for additional density beyond what is prescribed in the City's zoning by-law. This funding approach has been widely used in the City for a variety of purposes but would only be available as developments applications are made and is not a sustainable source of revenue.

7.1.5 Water and Sewer Rates

The City's capital and operating budgets for water supply and sewage treatment are paid for out of the rates charged for the services. It may be possible to fund some portion of the required flood protection infrastructure cost through these budgets because this infrastructure benefits the existing community beyond the boundaries of the Port Lands. However, using this approach means that these flood protection projects must compete with all the other demands for water/and sewer projects across the City. Given the existing pressures on the City water and wastewater budget, C&W was directed not to use this source of funding in their pro forma analyses.

7.1.6 Future Property Taxes

It is often argued that a given development is good for the City since it will increase assessment and therefore increase future property tax revenues. However, for the purposes of this plan, it has been assumed that these future incremental tax revenues will not result in a windfall that can be monetized and applied towards the initial capital costs of the Port Lands infrastructure (such an approach is usually referred to as Tax Increment Financing). As an entirely new community will be built in the Port Lands, it has been assumed that the future incremental taxes will be required to fund the provision of ongoing municipal services to this community.

7.1.7 Capital Cost Allowances (Triple P approach)

In some public works situations, a private developer of a public infrastructure (say a bridge or hospital) will pay for the construction, charge for its use and be able to write off depreciation (capital cost allowance) against income it receives for the use of that piece of infrastructure (tolls on a bridge or fees for a hospital bed). In some cases, these write-offs are accelerated (happen faster than the actual depreciation). In effect, profit is shielded from corporate income taxes. If some of the Port Lands infrastructure could be put in place with a revenue stream and with such write-offs, then effectively what would be happening is that foregone corporate income taxes would be partly paying for local infrastructure. This would be a very different approach for the City and is not proposed here

7.1.8 Developer Joint Venture

The City could, since it owns the land, leverage that ownership to take a stake in the development of the property itself – to share in the profit. This profit then could be reinvested in Port Lands infrastructure improvements. Build Toronto is sharing in the profits of some of its co-development projects, with the view to providing a higher dividend to the City than a simple land sale. There are obviously business risks associated with such an approach but it may be warranted for particularly attractive sites where the risks could be mitigated.

7.1.9 Philanthropic Contributions

While large scale philanthropy for public infrastructure is unusual in Canada, there may be situations where it could apply in the Port Lands - for instance, for public space and public realm improvements. This would be similar to the situation for Millennium Park (and other notable parks in the US) where philanthropic contributions built aspects of the iconic park in Chicago. Initially, all park infrastructure costs in the Port Lands are assumed to be paid by local government and the normal park dedications or payments-in-lieu required from developers.

7.1.10 Public Sector Contributions

For the City of Toronto, the most usual situation is for the City to decide, in its capital budget process, what infrastructure to build. In some cases, such as for the waterfront, transit or in times of stimulus spending, other governments may contribute as well. Traditionally, the developer is not asked to directly pay for infrastructure costs outside their property line. In the case of the Central Waterfront, all three governments (local, provincial and federal) agreed to contribute significant funds from their general accounts to help defray major infrastructure costs in that area.

The approach taken by this Business Plan is first to determine all other funding sources and strategies and only then, if there are costs still not covered, to consider using general revenues of the City, and potentially the Provincial and Federal governments. Pending more detailed work, it is possible that no such general account public sources will be needed as a funding source although there may well be a need to use public sources to finance some of the upfront costs with an expectation that the costs will be re-imbursed.

One exception to this may be that some of the infrastructure needed to deal with watershed management issues associated with the Don River, such as sediment management, would most appropriately be dealt with by the Toronto Region Conservation Authority under arrangements not yet established. However, the TRCA has advised that it currently does not have the financial capacity available to contribute towards funding the cost of this infrastructure. Additional funding could potentially be raised if a funding agreement can be reached with the TRCA's member municipalities or with the Province. This source was not used by C&W.

7.2 Financing Options

Financing is required when revenues lag behind the expected timing of expenses as is the case for the Port Lands. There are a number of ways this can be accomplished. In practice, such large scale developments most often use a mix of approaches. The following is a summary of these techniques.

7.2.1 Public Financing

Governments could determine that it is in the public interest to stimulate development in the Port Lands and make a commitment to pay for all or part of the needed infrastructure out of current capital budget(s) funded, in the City's case, by such sources as current property tax revenues and other taxation sources such as land transfer taxes. This commitment could just be by the local government or, as is the case with Waterfront Toronto, a mix of governments. Whether one or more governments are involved, they would likely have to borrow the funds through their normal processes in which their flexibility to do so may or may not be impacted by their current levels of debt.

Given the financial situation of all three levels of governments, it is highly unlikely that all infrastructure costs will be paid by one or more of the governments from their current capital budgets.

7.2.2 Front Ending Agreements

Front-ending agreements by which the developer (or a group of developers) finances some or all of the cost of the infrastructure are common in Ontario especially where expensive external infrastructure is required and developer interest is strong. Arrangements are made to repay the developer or developers as future developments take place. This is often done in the context of development charges by which the developer/group of developers prepays their Development Charges (DC's) gets credits against future DCs and repayment of any prepayments that are in excess of their DC credits. The motivation for the land-owners is to get the infrastructure built when government financing is constrained in order for the developers to get a return on their property investment. Recent interviews with existing property owners indicate a willingness to consider such an approach.

However, from the developers' perspective, the ability to participate in a front ending agreement can only be determined when:

- a more accurate cost estimate of infrastructure requirements, based on detailed design, has been developed; and,

- they have certainty in the form of development that could be approved.

7.2.3 Tax Increment Financing (TIF)

TIF is a public financing technique used by local government jurisdictions (primarily in the United States) to fund infrastructure initiatives and economic development in designated geographic areas. TIF makes use of the future increase in tax revenue resulting from the construction of new infrastructure to fund the initial cost of that infrastructure. It is assumed that the new infrastructure will result in new tax revenue by spurring new development as well as by increasing the value of existing properties. Since in Ontario there are two portions to the property tax (City and Provincial), TIF could potentially include both sources.

TIF can be used to generate up-front project funding by transferring the right to future incremental tax revenues to the purchasers of TIF bonds. However, Scotiabank has advised that in order to attract debt investors in the Canadian debt capital market, non-recourse debt (debt backed only by the incremental City property tax revenues generated in the project area) would likely have to be rated by the bond rating agencies as investment grade. In general, rating agencies expect investment grade debt repayment to be based on proven sources of revenue rather than speculative revenue such as projected increases in property values. The ability to raise non-recourse debt, particularly in the early years of the Project, will therefore be limited by the greenfield nature of the project as debt investors will not typically accept the "ramp-up risk"

City staff have recommended against the incorporation of TIF in the financial model because of its limited ability to raise funds on a non-recourse basis and also because the future incremental tax revenues generated in this area will be needed to provide ongoing municipal services to the significant new community that will be created there.

7.2.4 User Financed Systems

If the infrastructure can generate income in the future then the initial capital expenditure can be funded against future revenues. Depending on the certainty of the future revenue streams, this could require some form of a government guarantee. Unless the City were to turn over some of the local infrastructure in the area to a public-private partnership or to a private concern, for construction and operation on some type of a fee basis (such as a toll bridge or privately-run water supply, etc) then this approach is not applicable. This seems highly unlikely.

The City could also create and fund some type of reserve that would then be repaid through future sales of land; in effect, borrow against the sale of City-owned land.

However the financing is done, there is some significant risk if some or all of the financing is tied to future revenues (land sales, DCs and/or property taxes). Given many of the challenges, this risk is likely to be seen as very significant. Thus, turning to private third-party finance sector debt sources could be very costly and would significantly constrain the amount that could be financed. Scotia Capital examined the difference between recourse and non-recourse funding. They found that when raising funds on a non-recourse basis (no government guarantee) it reduced the amount of funds that could be raised by almost 80%. The financing of the Port Lands project, at least at the outset, is very likely going to require government involvement, even with the participation of the land-owners who wish to develop their properties. This means that there will be a mix of financing approaches used which will add some complexity to the revitalization efforts. The amounts of financing assistance cannot be determined without some initial negotiations with land-owners and lease-holders

The amounts and terms cannot be determined at this stage. Significant planning and negotiating will be needed.

7.3 Summary of Funding Sources

Based on the review of funding and financing sources, this Business Plan recommends exploring the following funding opportunities in concert with the development of more detail development plans and cost estimates:

Funding Sources:

- Lands sales and leasing of lands owned by the City through TPLC
- The pool of City-wide development charges
- Rates pool derived from water and sewer charges
- Establishing a special pool of area-specific development charges
- Special sources including philanthropy and from the profits of joint or sole development of selected City site(s) in the Port Lands

Financing:

- Front ending agreements with land owners
- General capital budget of the City possibly matched by participation by the provincial and federal governments

8.0 Financial Viability

There are several methods to assess the viability of a real estate development. However, it is difficult to accurately predict the outcome of a process that could take 30 or more years as in the case of the initial phases of the Port Lands revitalization. During this period there are likely to be many events that are impossible to accurately forecast. However, C&W, understanding these limitations, developed a model that took the position that the lands would be under one ownership. It examined the costs and revenues that a master developer would likely encounter in developing Cousin's Quay, Polson Quay and the Film Studio Precincts (Phases 1 and 2) over a 30 year period based on the best intelligence available today. The results of this model are used carefully to identify development issues and indicators of viability and as a basis to assess the City's position.

When undertaking a large real estate development that unfolds over a long period of time, there are important complications that arise when assigning dollar amounts to the transactions. The cost of development typically increases over time due to inflation. Demand should also drive up revenues especially as parks and other new public infrastructure is constructed. Thus, a piece of infrastructure has a higher dollar cost in the future than now and similarly a buyer will pay more dollars in the future than now. In addition, there are risks and opportunity costs when weighing whether to commit now to spend money later and to receive a return later. And finally, when evaluating a long stream of payments and receipts, the dollars have to be brought to a comparable point in time, the present. The development industry handles all of this by applying inflation factors to the estimated project costs and revenue streams, and then brings it all back to the present by applying a 'present value' calculation using a factor that reflects the opportunity cost (basically a return on investment) balanced with risk. The higher the risk, the higher the present value percentage used.

When all these calculations are made, if the present value of the revenues is equal to or higher than the present value of the costs, then assuming all the assumptions hold true over development period, the project could be feasible. In other words, the Master Developer would pay the amounts anticipated for the land, all the associated development and infrastructure costs and expect a reasonable return from the sale of the improved lands.

This analysis does not include the second stage of development where a developer might develop income from constructing and leasing or selling buildings.

Estimates of the total amounts that could be recovered from area-specific development charges were developed based on expert advice as to the rules of what is eligible. This was then divided over the expected built form to derive charge amounts. Based on advice from C&W, these amounts were then deducted from land values in the pro forma.

As summarized below, the results from the financial model were presented in two different ways:

Figure A2.9 Comparison of C&W Cash Flow Model Perspectives

Pro-Forma Component	**Master Developer Perspective for All Lands**	**City Cash Flow Perspective**
Revenues from Sale of Serviced Lands	• Assumes that all lands have been provided to master developer unencumbered by leases and ready to be serviced for redevelopment • Includes forecast revenues from the sale of all private and public lands in development precincts after necessary servicing	• Includes forecast revenues from the sale of only City and TPLC lands in development precincts • Land sales revenue forecast reduced for lands currently encumbered with long-term leases
Development Charge Revenues	• Includes forecast revenues realized from area-specific development charge revenues collected from all developers in development precincts	• Includes forecast revenues realized from area-specific development charge revenues collected from all developers in development precincts
Infrastructure Expenditures	• Includes expenditures for all major infrastructure required for servicing the development precincts and all local servicing for both public and private lands	• Includes expenditures for all major infrastructure required for servicing the development precincts and the local services required for just the City and TPLC lands
Net Result (Total Revenue minus Total Expenditures)	• The net result represents the maximum amount that a master developer could pay for all of the unimproved public and private lands (assumed to be provided to the developer unencumbered with leases) in the development precincts and still earn a 10% return on its investment	• The net result represents the maximum amount a master developer would pay for just the City's unimproved lands

The calculations under the City Cash Flow Perspective follow the same form as the Master Developer Perspective for All Lands except that the land sales revenue and local servicing costs are based on just the City lands and it is assumed that reduced land sales revenues are experienced as a result of the existing long-term leases on some of the City's lands. This scenario is more conservative because of the revenue reduction for the leased lands and also because it assumes that the increase in the value of the private lands cannot be captured to help pay for the major infrastructure (although it is assumed that building developers on private lands will pay still pay development charges). The two approaches are summarized in Figure A2.9.

Using the above-described land sales revenue forecasts, along with the development charge revenue forecast prepared for C&W by Watson & Associates Economists Ltd. (experts in the Ontario Development Charge Act), and the estimates of the infrastructure costs provided by Waterfront Toronto, C&W generated the 30-year financial model output shown below for Phases 1 and 2 using in the development scenario on Cousin's Quay, Polson's Quay and Film Studio District precincts(E1, E3 and F) for the medium development demand scenario. (also called 'Compact Scenario) .

Figure A2.10 - C&W 30-Year Scenario - Phases 1 & 2 (Medium Projections)

Pro Forma Component	Master Developer All Lands Perspective	City-Only Perspective
Land Sales Revenue	$219.0	$105.8
Development Charge Revenue	$40.2	$40.2
Major Infrastructure and Local Service Costs	($354.2)	($335.2)
Residual Value	($95.0)	($189.2)

Figure A2.10 indicates that under the Master Developer All Lands perspective, the residual value of the public lands together with the private lands is a negative amount of $95 million. This means that the C&W model forecasts that a master developer would have to be provided with the unencumbered public and private lands together with an additional contribution of $95 million in order to realize a 10% rate of return on its investment.

Under the City Cash Flow perspective, the model indicates a negative residual value $189 million for the City lands. This more negative amount is the result of the reduced land sales revenue for the City's leased lands (the Master Developer All Lands perspective does not take the lease encumbrances into account) and because the value uplift for the private lands is not included. Under this perspective, the C&W model is forecasting that a master developer would have to be provided with the City's lands (as is – with existing leases) and an additional $189 million in order to realize a 10% rate of return on its investment.

The following table (Figure A2.11) examines the City's position in more detail over the development time period. Dividing the cash flows into periods of time must be viewed with caution since the costs and revenues are not always in sync (some revenues may be received in advance of the costs being expended on infrastructure to enable the lands to come to market).

Figure A2.11 - 30-Year City Cash Flow for Phases 1 & 2 ($millions)
from Cushman & Wakefield Port Lands Financial Model

	Nominal (Inflated)				Present Value
	Cumulative Cash Flow after years				10% disc. rate
Cash Flow Element	0-10	11-20	21-30	Total	Total
Revenue from Sale of Serviced City Land	$42.4	$316.3	$108.4	$467.1	$105.8
Development Charge Revenue	$22.9	$101.8	$47.6	$172.2	$40.2
Major Infrastructure and Local Servicing Costs	($60.9)	($867.7)	($251.0)	($1,179.7)	($335.2)
Total:	$4.3	($449.6)	($95.1)	($540.4)	($189.2)

This analysis shows that on a nominal (undiscounted) basis, the project shows a positive result in the first 10 years. However development charges revenue recovered during this early period would go, in part, towards infrastructure requirements in later period.

C&W is confident in the reasonableness of its 30 year projections. Conversely, it is somewhat more difficult to accurately project revenues and costs in 5 or 10 year increments, as this will be determined by future economic and market conditions lot design and infrastructure construction timing The above analysis thereby leads C&W to broad conclusions, namely that (over 30 years) there will be a substantial deficit that will need to be funded with other sources other than land sales and development charges to allow Port Lands development to be completed.

8.1 Peer Review

The initial Council approval to undertake this study, included a requirement to do a peer review of the key consultant works. With respect to the market and financial analyses, two consultants were hired to do the review: NBLC and Hemson Consultants (Hemson). NBLC and Hemson are very familiar with the development environment in Toronto and the surrounding region and also very familiar with the City of Toronto's planning and financial systems. NBLC focused on the market and financial model using a developer lens (see Appendix 3 for their report) and Hemson focused on the Development Charge aspects in addition to the market and funding aspects (See Appendix 4 for their report). Apart from the inputs already offered in the report the following additional comments were provided.

- Both NBLC and Hemson viewed the C&W model and approach as appropriate and reasonable.

- It is NBLC's opinion that residential absorption would ramp up at a faster rate (than forecast by C&W) during the early years of the development process, and thereby that the overall 30 projection could be increased.

- NBLC felt that given the City's involvement (alternate use of funds is at a lower rate of return than a property developer) and the longer-term and more recent performances of the TSX, alternate options for investing funds are somewhat lower than what a 10% discount rate implies and they suggest 8% could be used as an alternate rate that, in effect tests the sensitivity of discount rates..

- Hemson also reviewed the C&W model. They also stated that this was an appropriate approach and that the assumptions C&W used were valid.

- Hemson also developed a revised cash flow forecast for the development charge revenues based on a "hybrid" development charge strategy. Under this strategy the costs for the specialized flood protection costs would be recovered using an area-specific charge applied to the area currently exposed to flooding risk and the remaining eligible infrastructure costs would be recovered through the city-wide development charge.

- NBLC made the recommendation that a landowners group be formed with terms of reference to engage in more detailed infrastructure design and planning. These recommendations have been detailed in the final recommendations of the report.

An amended version of the financial model was prepared that incorporated NBLC's revised forecast for the rate and value of residential land sales, a lower discount rate of 8% and the revised development charge forecast prepared by Hemson. As indicated on Figure A2.12, these changes reduce the net present value shortfall from $189 million to $118 million.

Figure A2.12 - Revised 30-Year City Cash Flow for Phases 1 & 2 ($millions)

Hybrid DC Strategy and NBLC Model Amendments

	Nominal (Inflated)					Present Value
	Cumulative Cash Flow for Years					8% disc. rate
Cash Flow Element	0-10	11-20	21-30	31-60*	Total	Total
Revenue from Sale of Serviced City Land	$67.0	$419.0	$67.6	$0.0	$553.5	$174.7
Development Charge Revenue	$76.6	$118.5	$101.8	$460.0	$756.9	$127.5
Major Infrastructure and Local Servicing Costs	($60.9)	($867.7)	($251.0)	$0.0	($1,179.7)	($420.2)
Total:	$82.6	($330.3)	($81.6)	$460.0	$130.8	($118.0)

* post-30-year recoveries of Phase 1 & Phase 2 costs from DC collected from developers in Precincts E2, E4 & G

The modifications illustrate the sensitivity of the model to small changes due to the very long development time period and the need for more detailed cost assessment of the initial infrastructure investments for the initial phases of the project.

9.0 Risks and Challenges

There are a significant number of risks associated with any massive development and especially one with all the challenges of the Port Lands. These are also the risks that developers will weigh when looking at the Port Lands. Therefore, in order to convince them to proceed, there will need to be reasonable routes put in place to help them navigate through these challenges.

- Market Weakness -The threat of market weakness is always present since development works in cycles with demand ebbing and flowing. On the other hand, the Toronto Region is in a strong competitive position on the North American and World stages and has grown significantly over the past 30 years. A lack of market demand could be a key threat to the implementation of financing strategies. The converse is also possible.

- Cost Escalation - due to factors other than inflation (inflation can be assumed to work reasonably equally on both sides of the revenue-cost equation). The other factors could be for unanticipated physical challenges, scope creep due to new visions being added, new regulatory demands/restrictions being introduced.

- Undetermined Funding Sources for Necessary Off-Site Works - Currently the C&W financial model assumes that the cost for bringing all of the necessary services to the edge of the development precincts will be funded through other means. For instance, although the C&W model includes the cost of initially building a bus rapid transit ("BRT") line through the Port Lands, and then later replacing this with an Light Rail Transit ("LRT") line, it has been assumed that the cost of bringing these lines to the edge of the Port Lands will have to be funded through another source.

- Planning Approvals – Developers will need certainty in the form of development and timing of approvals to properly assess the development feasibility of specific projects. Official Plan and zoning approvals will be required that are subject to Council approval and the input and possible appeals of the surrounding community.

- Funding Withdrawal - There will likely be a need for some type of public financing if not funding support (direct or in the form of guarantees of repayment) in addition to City land sales. If the fiscal situation of whoever provides the support deteriorates before all the infrastructure is funded, the project could be left with incomplete infrastructure.

The risk or the actual impacts of political changes, new or competing priorities, lack of commitment from government(s) over the 30 year life of the redevelopment could undermine the private sector confidence to commit to or to stay with the redevelopment project. This could especially be the case across the waterfront (such as discussions on the future of Ontario Place and Exhibition Place).The increased attention on the Port Lands and the lack of familiarity with it by the general population and the wider development community and future tenants points to a need to develop a solid marketing campaign. This should be built around a compelling vision and a clear description of the benefits (close to downtown, immersed in a natural environment setting, waterfront, great views of both downtown and the islands, etc)

10.0 Recommendations and Next Steps

The Port Lands represent a major opportunity to accommodate the future growth of the City of Toronto and at the same time enhance and protect its waterfront. The challenges before the City in redeveloping the area have been faced and overcome in the West Don Lands, the Central Waterfront and other places in the City. The opportunity in terms of new neighbourhoods, open spaces and environment restoration, and jobs is significant and over-shadows the near term technical issues.

The work of the Port Lands Acceleration Initiative has confirmed a vision that has reduced and phased the costs of the flood protection works. However, the costs are necessarily still at an order of magnitude level and a subject to detailed design.

While the financial analysis suggests a long term short fall in the project the peer review of NBLC and Hemson point to the sensitivity of various factors in the 30 year forecast. While the assumptions used in the forecast are generally appropriate, given the design and creation of new water and riverfront development sites, the project should be highly marketable and could outperform the forecasts (some stakeholders indicated this). If the market softens, a development phasing strategy within each precinct could be developed to partially mitigate these impacts, as could the development of more funding sources.

Along with more detailed costing analysis, the project needs to now consider the appropriateness of the funding strategies identified in the preceding, along with approaches that more closely link the development plans of the private sector to infrastructure requirements and phasing.

Moving forward, investment in the Port Lands will yield benefits to the City and other orders of government that will include:

- Annual property taxes (Cumulative in net present value terms are about $364 million). C&W and the study team used a simplifying assumption that future costs to service the area with community support infrastructure and operations (schools, community centres, police, fire, EMS, parks, etc) would equal the extra property taxes garnered.

- Land transfer taxes. Assuming 5.8 million square feet in E1 and E3 of residential development land transfer tax revenue to the City in 2012 dollars would be in the range of $35 to $45 million in the first 15 years.

- Other possible revenue sources. As discussed earlier, a Local Area Charge (Benefitting Area Charge), philanthropy for public realm, Section 37, sharing in proceeds of development, etc would also possibly add to the City's revenues.

In addition to the revenue flows, the following economic impacts could be expected:

- Benefits from greatly minimizing flood damage risks and the associated clean up and repair costs
- Infrastructure build out which could create thousands of years of work
- Tax receipts for the Province and for the Federal Government spun off from construction
- Work places for about 27,000 employees - 23,000 'office' jobs using more suburban allocations of space per employee (300 square feet per employee) and 4,000 retail jobs (400 sf per employee). If the C&W assumption of about 50% of office development being additive, then about 11,500 jobs are new to Toronto[1].

10.1 Next Steps

The Port Land Acceleration Initiative has provided a basis to move to the next, detailed development stage. The work has established a broad planning and development context that allows us to shift and focus on the details associated with planning, infrastructure and development forms within the Cousin's Quay, Polson Quay and Film Studio precincts (precincts E1, E3, and F respectively).

At this stage, we suggest a more active role of the land owners and long term lease holders in Precincts E1, E3, and F as they will be best equipped to link the infrastructure requirements with the development plans. Their involvement may reveal ways that savings could be accrued by linking the development of sites with flood protection.

---

[1] City of Toronto

This work will provide both the City and the development community, including potential investors and end users, greater certainty in the costs and timing for infrastructure. This is work that will pin down and refine costs and potential finding additional savings and phasing strategies thorough value engineering. It will also allow developers and investors to look at the Port Lands more realistically, allowing a better assessment of revenues streams. The following core tasks are recommended to proceed immediately

- Complete the environmental assessment processes.

- Undertake more detailed planning for Precincts E1, E3 and F.

- Create a land owners/leaseholders group to undertake the following:

  - Explore the development of a formal working structure including methodologies for cost sharing and arbitration.
  - Participate in the advancement of the Planning Act instruments necessary to provide certainty in land use, better estimates of development timing and make more accurate revenue projections.
  - Develop more detailed plans for required infrastructure from the PLAI process that will be satisfactory to the authorities.
  - With more detailed costing and better estimates of revenue and timing, participating land owners will be in a better position to discuss the possibilities of front ending contributions. This more detailed work will also allow the City to explore with greater confidence development charge revenue opportunities and approval feasibility.

- Confirm funding sources. Concurrent with the above, review the financial implications and impacts of area-specific DC's, and research other potential sources of revenues.

- Develop more detailed specific analysis of the financial impacts of the execution of City options on TPLC land.

- With the Precinct Plans in place, develop a Marketing Strategy for the Port Lands to stimulate user and investor interest

- Identify early projects that could proceed that are consistent with the longer term vision

- Work with existing users who will be displaced when the various infrastructure aspects and flood protection elements are introduced to relocate them within the port lands or elsewhere within Toronto.

- Work with all users to ensure that their interests are recognized as these development plans proceed, whether inside or outside the targeted areas.