

Economic Impact Analysis (2001 – 2013) Toronto, Ontario



Prepared for:

Waterfront Toronto



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EXECUTIVE SUMMARY

BACKGROUND

- Formally created in 2001, Waterfront Toronto has a 25-year mandate to transform 800 hectares (2,000 acres) of brownfield lands on Toronto's waterfront into beautiful, sustainable mixed-use communities and dynamic public spaces.
- The project is one of the largest infrastructure projects in North America and one of the largest waterfront redevelopment initiatives ever undertaken in the world. However, it is not just the sheer scale of the project that makes it unique; Waterfront Toronto is delivering a leading edge city-building model that seeks to place Toronto at the forefront of global cities in the 21st Century.
- A primary objective of waterfront revitalization is to leverage the infrastructure project to deliver key economic and social benefits that enable Toronto to compete aggressively with other top tier global cities for investment, jobs and people. To do this, Waterfront Toronto brings together the most innovative approaches to sustainable development, excellence in urban design, real estate development, and advanced technology infrastructure.
- Waterfront Toronto is committed to operating in a highly transparent and accountable manner and ensuring that its investments in revitalization produce significant returns for the economies of Toronto, Ontario and Canada. As part of this mandate, Waterfront Toronto commissioned a number of Economic Impact Analyses, examining the direct, indirect and induced impacts of its investments. The original analyses, conducted by urbanMetrics inc. in 2009, focused on the impacts of Waterfront Toronto's direct investment from its inception in 2001 to March 31, 2009, as well as the impacts of future plans; including both funded and unfunded project components.
- To further assess its economic effectiveness, Waterfront Toronto has now commissioned a more extensive three-phased analysis of the economic and fiscal benefits stimulated by the organization's investment in Toronto's waterfront. The following summarizes the results of these three analyses.



PHASE 1 – RETURN ON INVESTMENT

SYNOPSIS

The first phase of this assignment focused on updating the previous economic impact work undertaken by urbanMetrics. In particular, it assessed the economic impacts of the direct spending of some \$1.26 billion by Waterfront Toronto on waterfront planning and implementation between April 2001 and March 2013.

RESEARCH FINDINGS

- Between April 2001 and March 2013, Waterfront Toronto, directly or indirectly through other public agencies, has invested over \$1.26 Billion in revitalization projects in the City of Toronto's waterfront. This represents approximately \$1.40 Billion in constant 2012 dollar terms (i.e., after adjusting for inflation).
- Waterfront Toronto's direct expenditures have generally increased over time, reflecting the advancement of projects from the conceptualization and design phases through to construction and implementation.
- Approximately 88% of Waterfront Toronto's expenditures were made in Toronto and more than 96% were made in Ontario.
- As of March 2013, the largest shares of Waterfront Toronto's expenditures were made in construction-related industries, which represented approximately 37% of their total investments. A large portion of their direct expenditures were also made in creative and knowledge-based industries, including design, engineering and environmental services (i.e., the Professional, Scientific and Technical Services sector) and in the Finance, Insurance, Real Estate and Renting and Leasing sector, which accounted for an additional 28% and 17% of total expenditures, respectively.
- Waterfront Toronto contributes funds towards projects that are not only under its own direction, but also to other public agencies for the provision of regional infrastructure projects that impact Toronto's waterfront, such as GO Transit expansions and the Union-Pearson rail link.
- Direct investment by Waterfront Toronto between 2001 and March 2013 has created:



- Approximately 16,200 full-time years of employment¹, of which approximately 71% were in the City of Toronto. The majority of the jobs created were in the Construction sector, the Finance, Insurance, Real Estate and Renting and Leasing sector, and the Professional, Scientific and Technical Services sector. Jobs in the latter category are largely related to design, engineering and environmental services with a high degree of innovation, and are in industries specifically targeted by the City and the Province as part of their economic development initiatives.
- \$3.2 Billion in total economic output to the Canadian economy. The majority of this economic growth will accrue in the City of Toronto.
- Total government revenues of approximately \$348 Million to the Federal Government, \$237 to the Provincial Government and \$36 Million to the City of Toronto.
- Although Waterfront Toronto's expenditures are significant, they are relatively small compared to the recurring benefits, such as permanent jobs, property taxes, income taxes, and tourism spending that will be experienced with the continued development of new office, residential, retail/service commercial and cultural and entertainment uses along the City's waterfront, which would not occur without these initial investments by Waterfront Toronto. The impacts of this private sector investment are provided in the third phase of this assignment.

PHASE 2 – LAND AND REAL ESTATE VALUE

SYNOPSIS

The second phase of this assignment focused on the broader economic and value impacts generated by both current and future investments by Waterfront Toronto. In addition to detailed economic analysis, it included a total of 11 detailed interviews with real estate developers and leasing professionals involved with development projects in the various waterfront precincts (i.e., East Bayfront, West Don Lands, Central Waterfront, and Lower Don Lands) and the adjoining neighbourhoods. The interviews were conducted to identify the assessment of the respondents as to the impact of Waterfront Toronto activities and investment on the market for new development in the waterfront and vicinity. This part of the assignment also involved a statistical analysis of how

¹ These employment figures represent the total *full-time, full-year* jobs generated by Waterfront Toronto's direct expenditures, as well as the indirect and induced impacts that are spread more broadly throughout the regional, provincial, and national economies. For one-time capital expenditures, such as those analyzed in this study, these employment figures represent total years of full-time employment (e.g., one job identified represents the equivalent of one person working full-time for the duration of one year).



land values in the waterfront area have changed since the inception of Waterfront Toronto and an assessment of the extent to which investments and planning by the organization have affected local land values. In particular, this part of the study involved a detailed statistical analysis of residential re-sale transactions, vacant land sales, and building permits to determine trends since 2001.

RESEARCH FINDINGS

- The interviews with representatives from the Waterfront development community revealed a number of key findings, which should be understood when interpreting the detailed real estate trend data:
 - Most of the respondents indicated that much of the eastern waterfront and the West Don Lands would not be developed or would be delayed well into the future if not for the land assembly, infrastructure development, planning and remediation efforts of Waterfront Toronto.
 - Although many suggested that no property value premiums currently exist relative to other areas of central Toronto, most anticipate that land and real estate values will increase once actual physical change has occurred. In other words, the expected returns on Waterfront Toronto's investments are yet to be fully realized in this regard.
 - Of all the different types of investments made by Waterfront Toronto, the most impactful in terms of advancing development projects in the eastern waterfront and attracting additional private sector investment were cited as being: the flood protection landform; infrastructure investment; and, parks and public spaces.
 - Several participants indicated that the master planning and comprehensive design work conducted by Waterfront
 Toronto has provided a level of certainty and reliability that would not have existed otherwise. A number of
 interview participants specifically indicated that Waterfront Toronto's branding and marketing materials were used
 to help enhance the certainty of neighbourhood creation.
 - While many participants noted that the planning process was at times arduous, as a result of Waterfront Toronto's
 planning and design requirements, most indicated that it resulted in a quality of urban design that would not have
 occurred otherwise.
 - Almost all participants identified transit as being the key priority among projects that are yet to be completed in the waterfront area. In particular, it was the opinion of most participants that investment in Light Rail Transit (LRT) infrastructure along Cherry Street and Queens Quay, as currently proposed, would represent the single most



important factor in advancing future development in the eastern waterfront. It was also suggested that this would generate the greatest impacts on land values in the area.

- Based on our review of historic changes in the number and value of building permits issued in the City of Toronto, we have determined that the value of investment both on a per permit and a per kilometre basis is higher in the broader waterfront area relative to the average for the City as a whole. Similarly, both the value and volume of construction investment has increased at a much faster rate in recent years than elsewhere in Toronto. All other things being equal, therefore, it is evident that something unique to the waterfront area has recently been stimulating investment to a greater extent than in other parts of the City.
- Our review of historic changes in property values indicates that the rate at which resale prices have increased in recent years is higher on average in the central waterfront area than elsewhere in the City. Although this was likely driven by a variety of different factors, it is our opinion that recent waterfront revitalization efforts have been one of the major contributing factors.
- Despite representing only a small portion of the total land area in the City of Toronto, the central waterfront, or 'Harbourfront' submarket, typically accounts for a much larger share of the City's total number and total value of residential condominium resale transactions (i.e., more than one tenth of the City total in both cases). Moreover, on a square footage basis, Harbourfront resale prices are generally among the highest in the entire Toronto CMA, on average.
- Given that the aforementioned changes in property values and construction activity generally began at the same time as the inception of Waterfront Toronto, it is likely that their direct investments in the City's waterfront have played an integral role in impacting local real estate values and stimulating investment in this area.
- The results of our qualitative research interviews confirm that these recent impacts are, at least in part, attributable to the direct investments made by Waterfront Toronto. In fact, the majority of the individuals that participated in our research interviews agreed that the development of the eastern waterfront would not have been possible without the initial infrastructure investments made by this organization. It can be also argued, therefore, that Waterfront Toronto is directly responsible for a large share of the economic benefits derived from recent and planned development in this area.
- Based on the trends observed in the historic real estate and building permit data, as well as our discussions with local real estate professionals, it is important to note that land and real estate values in the waterfront area are generally expected to increase once a greater amount of development has occurred in this area (i.e., once the area has had a chance to mature into



the market). As such, we note that the actual values of recent investments made by Waterfront Toronto are yet to be fully realized.

• Overall, therefore, we conclude that the direct investments made by Waterfront Toronto into the revitalization of the City's waterfront have undoubtedly impacted property values and development in and around the various waterfront districts. It is also our opinion that these investments have served to further stimulate and attract additional private sector investment throughout the broader waterfront area in recent years. Moving forward, we anticipate that similar economic benefits will be derived from the organization's future investment in the waterfront, and that the true value of these investments will become increasingly evident over time.

PHASE 3 – PRIVATE SECTOR ATTRACTION

SYNOPSIS

As discussed in phase two of the analysis – through its planning, design, and development of key infrastructure – Waterfront Toronto has played a significant role in creating economic value in the Toronto waterfront. Interviews with Toronto's development community have confirmed that if not for the planning, land assembly, remediation and infrastructure construction by Waterfront Toronto, many parts of the waterfront would continue to languish as vacant and underutilized brownfield sites. This is particularly true of the two newest neighbourhoods under development; East Bayfront and West Don Lands. Although part of longer term planning, the Lower Don Lands have also attracted development interest largely due to the visioning, as well as the preliminary planning and design work (e.g., Master Planning, Environmental Assessments, Municipal Approvals), undertaken by Waterfront Toronto to date.

In addition, in close proximity to areas where Waterfront Toronto is investing into community infrastructure are a number of neighbourhoods which are benefiting directly from investments such as: parks and open spaces; pedestrian oriented commercial areas; waterfront and riverfront access; transit; the revitalization of brownfield lands; flood protection and remediation; and other public amenities. Some 44 private real estate developments are located in these benefiting neighbourhoods. These are in addition to the public and private developments occurring within East Bayfront and West Don Lands.

Where as phase one of the analysis addressed the economic impacts related to Waterfront Toronto's direct spending on planning and infrastructure, the third phase of the analysis focused on the benefits accruing to private and public sector real estate projects both on lands controlled by Waterfront Toronto, as well as on other privately-owned lands on the waterfront and in its vicinity that have been stimulated by Waterfront Toronto's investment in infrastructure.



In particular, this part of the analysis assessed:

- Commercial and industrial employment opportunities created through development;
- The real estate value "unlocked" by Waterfront Toronto activities;
- Property taxes, development charges and other revenues generated for the City through development;
- The economic impacts of construction activity generated through development, including: value added to the City's economy; employment; labour income; and public sector revenues; and,
- The economic benefits generated by two specific Waterfront Toronto initiatives: the establishment of a district energy system to serve the East Bayfront and West Don Lands communities; and development of the waterfront as an ultra high-speed/capacity wired "intelligent community".

RESEARCH FINDINGS

Waterfront Toronto Development Projects (East Bayfront and West Don Lands)

- When fully developed, the lands controlled by Waterfront Toronto in the East Bayfront and West Don Lands precincts will yield some:
 - 10,023 residential units, including some 257 institutional residence rooms;
 - 1 million square feet of office space;
 - 937,000 square feet of institutional space; and,
 - 230,000 square feet of retail space.
- These development projects will accommodate some 5,000 additional employees within the City, of which approximately 88% will be office and institutional jobs.
- The development projects will generate \$87.5 million in Development Charge revenues to the City to assist in funding future growth related capital infrastructure.
- When fully developed, the assessed value of the development projects will amount to almost \$4.8 billion. Prior to Waterfront Toronto's involvement, these lands were largely vacated industrial sites. Many were the subject of significant environmental



liabilities that severely limited their value for development. The value "unlocked" by Waterfront Toronto in East Bayfront and West Don Lands alone represents approximately double the organization's total current budget of \$1.9 billion.

- When fully developed, annual municipal and education taxes will amount to \$51.4 million. The City's share of this annual revenue will amount to \$33.5 million.
- Construction of the East Bayfront and West Don Lands public properties will generate significant economic value; most of which will accrue within the City of Toronto. The construction projects, including direct, indirect and induced impacts, will generate:
 - \$4 billion in value added to the economy (\$2.5 billion in Toronto);
 - 43,063 years of employment (28,618 in Toronto);
 - \$2.1 billion in labour income (\$1.5 billion in Toronto); and,
 - \$1.5 billion in Tax revenue to the three levels of government.

Development Projects resulting from Waterfront Toronto activities (Short and Long Term)

- In close proximity to areas where Waterfront Toronto is investing heavily into community infrastructure, are a number of neighbourhoods which will benefit directly from these new services, including: parks and open space; pedestrian oriented commercial areas; waterfront and riverfront access; transit; the revitalization of brownfield lands; flood protection and remediation; and other public amenities. To varying degrees, these investments have stimulated development in surrounding neighbourhoods. Some 44 development sites were identified in proximity to Waterfront Toronto investments in the following waterfront precincts and adjoining neighbourhoods²:
 - East Bayfront (excluding public lands controlled by Waterfront Toronto);
 - Corus (TEDCO)
 - Central Waterfront;
 - Lower Don Lands;
 - Yonge and Queens Quay;
 - Distillery District and Corktown; and,
 - Don Valley and Lake Shore (Riverdale).

² Includes the 39 private developments identified in the Central Waterfront, Lower Don Lands and adjoining neighbourhoods; plus the 4 privately-owned development blocks in the East Bayfront and the Corus development (TEDCO).



- Combined, when fully developed these projects on privately-owned lands will yield some³:
 - 16,660 residential units;
 - 4 million square feet of office and institutional space;
 - 1.4 million square feet of retail space; and,
 - 143,000 square feet of new industrial space.
- These development projects will accommodate some 16,750 additional employees within the City, of which approximately 78% will be office and institutional jobs.
- These development projects will generate \$164 million in Development Charge revenues to the City to assist in funding future growth related capital infrastructure.
- When fully developed, the assessed value of the development projects located on privately-owned waterfront lands will amount to more than \$9.6 billion. This value, which has been bolstered to varying degrees by Waterfront Toronto's investments, represents approximately 5 times the organization's total currently budget of \$1.9 billion.
- When fully developed, combined annual municipal and education taxes will amount to \$112 million. The City's share of this annual revenue will amount to \$71.6 million.
- Like the development of East Bayfront and West Don Lands, construction of the projects on privately-owned lands in adjoining waterfront precincts and neighbourhoods will generate significant economic value; most of which will accrue to the City of Toronto. The construction projects, including direct, indirect and induced impacts, will generate:
 - \$8.9 billion in value added to the economy (\$5.6 billion in Toronto);
 - 94,841 years of employment (63,105 in Toronto);
 - \$4.7 billion in labour income (\$3.3 billion in Toronto); and,
 - \$3.4 billion in tax revenue to the three levels of government.

Combined Benefits

• Combined development in East Bayfront, West Don Lands and the adjoining neighbourhoods will accommodate some 21,700

³ Based on planning applications and information provided by developers for completed/proposed developments, as well as our estimation of the development potential of various other development sites identified in the waterfront precincts and adjoining neighbourhoods (e.g., the 4 privately-owned development blocks in the East Bayfront).



permanent jobs and generate some 138,000 years of additional employment related to construction. It will add some \$12.9 billion to the Canadian economy, with some \$4.9 billion in revenues to the three levels of government. The City and school boards will receive some \$163 million annually in additional property tax revenue and some \$252 million in development charge revenues to fund future infrastructure.

FIGURE ES-1: WATERFRONT DEVELOPMENT SUMMARY

Precinct/Neighbourhood	Square Feet Gross Floor Area (GFA)						Number of Residential Units			
	Retail	Office	Institutional	Industrial	Residential	Total GFA	Market Residential	Affordable Residential	Institutional Rooms	Total Unit
			Waterfront T	oronto Devel	opment Projects					
East Bayfront*	106,293	814,814	517,181	-	3,713,836	5,152,124	3,376	819	-	4,19
Bayside**	79,416	360,782	-	-	1,524,455	1,964,653	1,465	379	-	1,844
Dockside	14,391	437,176	517,181	-	-	968,748	-	-	-	-
George Brown College**	14,391	23,239	302,181	-	-	339,811	-	-	-	-
All other Dockside	-	413,937	215,000	-	-	628,937	-	-	-	-
Parkside (Monde Condominiums)**	12,486	16,856	-	-	510,995	540,337	516	-	-	51
Quayside	-	-	-	-	1,678,386	1,678,386	1,395	440	-	1,835
West Don Lands	127,105	195,905	419,941	-	4,835,853	5,578,804	4,320	1,251	257	5,828
River City**	4,391	-	-	-	803,944.00	808,335	999	-	-	999
Toronto Community Housing**	5,178	-	-	-	198,262.00	203,440	-	243	-	243
Pan Am Athlete's Village**	48,000	-	270,647	-	1,563,183.00	1,881,830	1,799	255	257	2,31:
Future West Don Lands	69,536	195,905	149,294	-	2,270,464.00	2,685,199	1,522	753	-	2,27
SUBTOTAL- Waterfront Toronto Development Projects	233,398	1,010,719	937,122	-	8,549,689	10,730,928	7,696	2,070	257	10,02
	Developm	ent Projects r	esulting from V	Vaterfront To	oronto activities (S	short Term)				
East Bayfront*	84,500	580,500	-	-	3,497,042	4,162,042	3,059	765	-	3,82
Corus (TEDCO)	4,500	470,500	-	-	-	475,000	-	-	-	-
All other East Bayfront (Private)	80,000	110,000	-	-	3,497,042	3,687,042	3,059	765	-	3,82
Central Waterfront	244,858	1,641,195	-	-	2,747,166	4,633,219	3,305	-	-	3,30
Lower Don Lands	97,043	186,339	-	3,541	2,075,440	2,362,363	1,995	-	-	1,99
Adjoining Neighbourhoods	437,612	171,393	5,726	130,857	2,634,960	3,380,549	2,714	-	-	2,71
Distillery District and Corktown	307,681	5,048	-	-	1,243,995	1,556,724	1,306	-	-	1,30
Don Valley and Lake Shore (Riverdale)	106,089	166,345	-	130,857	739,889	1,143,180	801	-	-	80
Yonge and Queens Quay	23,842	-	5,726	-	651,077	680,645	607	-	-	60
UBTOTAL- Short Term Development Projects***	864,013	2,579,427	5,726	134,398	10,954,608	14,538,173	11,073	765	-	11,837
	Dev	elopment Pr	ojects resulting	from Waterf	ront Toronto acti	vities (Long Tei	rm)			
Adjoining Neighbourhoods	400,000	1,350,000	-	8,500	2,480,000	4,238,500	2,822	-	-	2,82
Don Valley and Lake Shore (Riverdale)	200,000	800,000	-	-	-	1,000,000	-		-	-
Yonge and Queens Quay	200,000	550,000	-	8,500	2,480,000	3,238,500	2,822	-	-	2,822
Lower Don Lands	150,000	150,000	-	-	2,200,000	2,500,000	2,000	-	-	2,00
UBTOTAL- Long Term Development Projects***	550,000	1,500,000	-	8,500	4,680,000	6,738,500	4,822	-	-	4,822
GRAND TOTAL	1,647,411	5,090,146	942,848	142,898	24,184,297	32,007,601	23,591	2,835	257	26,683
East Bayfront Total	190,793	1,395,314	517,181	-	7,210,878	9,314,166	6,435	1,584	-	8,018
*The 6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	163,862	400,877	572,828	-	4,600,839	5,738,406	4,779	877	257	5,91
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	1,414,013	4,079,427	5,726	142,898	15,634,608	21,276,673	15,895	765	-	16,66

Source: urbanMetrics inc., based on development information obtained from Waterfront Toronto; development application statistics obtained from the City of Toronto; information provided by developers; as well as our estimation of the development potential of various other development sites identified in the waterfront precincts and adjoining neighbourhoods. Note that the Pan Am Athlete's Village portion of the West Don Lands includes 3 development blocks that are to be developed after the games (i.e., post 2015).



The Economic Impact of District Energy in the Waterfront

- Waterfront Toronto's mandate is shaped by green building practices, innovation, economic growth and design excellence. For this reason, district energy infrastructure is a key project for the organization. The current strategy is focused on the development of a distribution system (network) that will be phased in over a number of years as commercial and residential development occurs.
- Waterfront Toronto has recently entered into a public private partnership arrangement with a local district energy operator -Enwave - which is already operating a district energy system serving some 140 buildings in downtown Toronto. The agreement requires Enwave to introduce a district energy (hot water) distribution system, and ultimately cooling, using local heating sources.
- The long-term objective is to connect all of the development in the waterfront to a district energy system capable of supplying heating.
- District Energy will deliver a number of key economic impacts:
 - Increased building efficiencies which allow for more space to be allocated to revenue generation. It is estimated that district energy could add some \$89.7 to \$201.8 million in real estate value by increasing the square footage devoted to revenue-generating uses⁴;
 - The attraction of businesses that depend on a reliable and low cost source of energy;
 - A reduction in leasing costs and a more competitive market for condominium buyers and office tenants;
 - Increased development capacity in an area where electricity generation may be constrained presently or in the future;
 - Opportunities for expansion of the power grid;
 - Environmental benefits from increased energy efficiencies; and,
 - Development of new technologies that can be exported to other jurisdictions.

⁴ Based on the assumption that additional revenue-generating uses are permitted as a substitute for the floor area that would otherwise be required to house mechanical equipment (i.e., in the absence of a district energy system). Depending on the specific zoning permissions applicable to the various development sites in the waterfront area, this type of expansion of revenue-generating uses may be subject to a minor variance or similar zoning by-law amendment in some cases.



• Finally, from an economic development perspective, the ability to market its precincts as "green" communities provides Waterfront Toronto with a competitive edge over traditional business and residential locations.

The Economic Impact of the Intelligent Communities Initiative

- A key element in planning for the revitalization of Toronto's waterfront will be the creation of digitally connected communities. In order to facilitate this objective, after a competitive selection process, Waterfront Toronto has entered into a public-private partnership with a supplier (Beanfield Condoconnect Inc.) to design, install, own, and operate an intelligent, ultra-broadband, open-access communications infrastructure that will be the foundation of one of the world's most advanced "Intelligent Communities". As part of their agreement with Waterfront Toronto, Beanfield is required to ensure that their network remains among seven of the world's leading Intelligent Community networks in terms of price and performance for at least ten years. In fact, Toronto's waterfront has already been named one of the "21 Smart Communities of the Year" and has recently been selected as a semi-finalist for the 2013 Intelligent Community of the Year award by the Intelligent Community Forum (ICF).
- The ultra-broadband infrastructure resulting from this initiative is expected to serve a variety of new commercial and residential users in the communities of East Bayfront and West Don Lands, as well as parts of the Central Waterfront, Lower Don Lands and Port Lands. This network will ultimately serve some 11,800 new households and 7,900 employees in the East Bayfront and West Don Lands districts alone.
- Access to a superior communications network will be a key component in attracting talented businesses and workers to this area of the City. Targeted sectors include: film, computer animation, graphic design, digital media, and other creative, high-knowledge industries.
- Research has shown that locations with access to broadband experience greater and more rapid growth in employment, number of business establishments, and particularly the number of businesses in IT-intensive sectors;
- Property values are higher in areas where broadband is available, compared to areas without broadband. Recent studies indicate that rental rates, which serve as an approximation for property values in a given area, were nearly 7% higher in communities with access to broadband. Similarly, based on estimates by Waterfront Toronto and supported by our interviews with local real estate professionals, the premium investors are willing to pay for access to this type of ultrabroadband network is estimated at between \$1,800 and \$4,200 per unit for new residential developments. Based on this range, and a total of more than 10,000 new residential units to be developed on the lands controlled by Waterfront Toronto



in the East Bayfront and West Don Lands, the additional real estate value generated by this initiative could amount to between \$18 million and \$42 million.

- Savings from online activities involving health care services and reducing time spent commuting can have positive environmental effects.
- A comparative analysis of per capita retail sales growth in areas with municipal broadband networks analyzed against ten other communities showed that sales per capita grew almost twice as fast in the area with a municipal broadband network compared to the control group.
- Intelligent communities enable companies to be global exporters including the export of skills, knowledge and culture, which were never portable before. Individuals and local businesses can go global in search of low-cost, quality vendors and web-based tools can increase community involvement.

Private Sector Attraction Summary

In summary the investment by Waterfront Toronto has generated substantial economic benefits that will be enjoyed by the residents of Toronto, Ontario and Canada. In terms of real estate value alone, the development of East Bayfront, West Don Lands and new projects in adjoining neighbourhoods influenced by waterfront investment will unlock approximately \$14.4 billion in real estate value, which represents approximately six times the value of Waterfront Toronto's currently funded budget.

OVERALL SUMMARY

- To date Waterfront Toronto has invested some \$1.26 billion in the renewal of Toronto's waterfront. This spending has stimulated some \$1.7 billion in value added to the Canadian economy; generated some 16,200 person years of employment and produced some \$622 million in revenues for the three levels of government. These impacts relate only to the planning and construction of infrastructure by Waterfront Toronto. Significantly more economic benefits will be generated by the private sector construction that will result from these expenditures.
- Ultimately Waterfront Toronto is working with a budget of some \$1.9 billion, with the majority already committed by senior levels of government or funded through the organization's own revenues. The value of private sector construction that will occur in the East Bayfront and West Don Lands alone will represent more than twice this level. Including development in adjacent waterfront precincts and neighbourhoods, Waterfront Toronto's investment will help to stimulate over five times its value in private sector construction.



• Between 2000 and 2011, private sector investment in the waterfront, measured by the value of building permits and condominium sales prices has increased at a rate faster than that in other parts of the City. While there are many factors influencing building activity in the City, interviews with developers have concluded that the eastern waterfront, including the East Bayfront and West Don Lands, could not have been developed without the initial investment by Waterfront Toronto. As significant as the benefits to date have been, the developers also generally indicated that the ultimate impact of Waterfront Toronto's investment in terms of land value premiums will not be fully realized until much of the infrastructure and amenities are in place.



1 INTRODUCTION

1.1 BACKGROUND

Formally created in 2001, Waterfront Toronto has a 25-year mandate to transform 800 hectares (2,000 acres) of Brownfield lands on Toronto's waterfront into beautiful, sustainable mixed-use communities and dynamic public spaces.

The project is one of the largest infrastructure projects in North America and one of the largest waterfront redevelopment initiatives ever undertaken in the world. However, it is not just the sheer scale of the project that makes it unique. Waterfront Toronto is delivering a leading edge city-building model that seeks to place Toronto at the forefront of global cities in the 21st century.

A primary objective of waterfront revitalization is to leverage the infrastructure project to deliver key economic and social benefits that enable Toronto to compete aggressively with other top tier global cities for investment, jobs and people.

Waterfront Toronto is committed to operating in a highly transparent and accountable manner and ensuring that its investments in revitalization produce significant returns for the economies of Toronto, Ontario and Canada. As part of this mandate, the organization commissioned a series of Economic Impact Analyses, examining the direct, indirect and induced impacts of its investment. The original analysis, conducted by urbanMetrics inc. in 2009, focused on the impacts of Waterfront Toronto's investment from 2001 through March 31, 2009. A subsequent study focused on the impacts of future plans, including both funded and unfunded components.

To further assess its economic effectiveness, Waterfront Toronto has now commissioned a more extensive three-phased analysis of the economic and fiscal benefits stimulated by Waterfront Toronto's investment in Toronto's waterfront.

The first of these phases involved an update to the analysis previously conducted by urbanMetrics to determine the economic return on investment from 2001 to March 2013. The second phase involved an analysis of the impact of waterfront investment on real estate values, including lands controlled by Waterfront Toronto and other private lands on and in the vicinity of Toronto's waterfront. In addition to extensive data analysis, this second phase included a detailed research interview program, which has been conducted with members of the local real estate development community to assess how Waterfront Toronto's investments have influenced the value of their projects.



The third and final phase of the analysis focused on the benefits created by private and public sector real estate projects both on lands controlled by Waterfront Toronto, as well as on other lands on the waterfront or in its vicinity, which have been stimulated by Waterfront Toronto's investment in infrastructure.

The information presented herein provides a detailed overview of the scope of this project and summarizes our key research findings and conclusions.

1.2 PROJECT SCOPE

1.2.1 PHASE 1 – RETURN ON INVESTMENT

The first phase of this assignment focused on updating the previous economic impact work undertaken by urbanMetrics, which examined the direct, indirect and induced impacts of Waterfront Toronto's revitalization investments. In particular, it assessed the economic impacts of the direct spending of some \$1.26 billion by Waterfront Toronto on waterfront planning and implementation since the organization's inception in 2001 to March 2013.

Similar to the previous analyses conducted by urbanMetrics for Waterfront Toronto, this analysis involved a review of the organization's historic expenditure patterns and in particular the distribution of these expenditures by industry category, based on the 2007 North American Industrial Classification System (NAICS). Once classified, some \$1.26 billion worth of investments were analyzed using the urbanMetrics Input-Output model, which simulates the flow of Waterfront Toronto's initial expenditures through the economy. This model has been specifically designed to provide a reliable measure of the impact of the organization's expenditures on *job creation*, *incomes*, *value added to the economy* and *taxes and other government revenues*.

1.2.2 PHASE 2 – LAND AND REAL ESTATE VALUE

The second phase of this assignment focused on the broader economic and value impacts resulting from both historic and planned investments made by Waterfront Toronto. It involved a statistical analysis of how land values in the waterfront area have changed since the inception of Waterfront Toronto and an assessment of the extent to which investments and planning by the organization have affected local land values.

Specifically, this part of the study involved a total of 11 detailed research interviews with members of the local real estate and development industry, with a particular emphasis on those with recent, active and planned projects in the East Bayfront, West Don Lands and other adjoining neighbourhoods to identify their assessment as to the impact of Waterfront Toronto activities and investments on the



market for new development on and near the waterfront. This phase of the study also involved a detailed statistical analysis of residential re-sale transactions and building permits issued by the City of Toronto in the waterfront area to identify trends since 2001.

1.2.3 PHASE 3 – PRIVATE SECTOR ATTRACTION

The third and final phase of the analysis focused on the benefits created by various private and public sector real estate projects both on lands controlled by Waterfront Toronto, as well as on other lands on the waterfront and in its vicinity that have been stimulated by Waterfront Toronto's investment in infrastructure.

In particular, this part of the study involved a review and analysis of the various economic and fiscal benefits generated by the development of some 18 separate real estate development blocks on public land in East Bayfront; plus 4 additional privately-owned development blocks in the East Bayfront and the Corus building developed by Toronto Economic Development Corporation (TEDCO) ; 28 real estate blocks in West Don Lands; and 39 other developments located in the neighbourhoods surrounding the City's waterfront that have benefited from Waterfront Toronto's investments.

This analysis considered:

- Development scale and construction value;
- On-site commercial and industrial employment opportunities created by waterfront development;
- The real estate value "unlocked" by Waterfront Toronto;
- Property taxes, development charges and other revenues generated for the City through development; and,
- The economic impacts of construction activity generated through development, including: *value added to the City's economy; employment; labour income;* and *public sector revenues.*

In addition to these quantitative benefits, this part of the study also included a review of the economic benefits and value created by two specific Waterfront Toronto-lead infrastructure projects:

- Investment into the creation of *Intelligent Communities*; and,
- Investment into a *District Energy* strategy for Toronto's waterfront.



2 STUDY AREA AND WATERFRONT DEVELOPMENT PRECINCTS

Although Waterfront Toronto has invested in revitalization initiatives that span the entire length of Toronto's waterfront, which generally extends between the communities of Mimico in the west (Etobicoke) and Port Union in the east (Scarborough), the majority of the organization's investments have been focused in four geographic precincts situated near the City's core. Namely, these precincts include the East Bayfront, West Don Lands, Central Waterfront, and Lower Don Lands.

As detailed in Section 3 of this study, which provides an overview of the first phase of our analysis, nearly half (45%) of the investments made by Waterfront Toronto to date have related to projects in either the East Bayfront or West Don Lands. As such, the majority of the analyses presented herein focus on the portion of the waterfront situated to the east of Yonge Street, which includes these two precincts.

In the second and third phases of the study, however, we have also considered the economic impacts of Waterfront Toronto's investments on various adjoining neighbourhoods, including several of the communities located immediately adjacent to – or in proximity to – the four waterfront precincts identified above. Specifically, these adjoining neighbourhoods were included in order to measure the extent to which Waterfront Toronto's initial infrastructure investments have attracted additional private sector investment to the waterfront.

The following section provides a more detailed overview of the various waterfront development precincts, adjoining neighbourhoods, and broader Study Area considered in our analysis.

2.1 STUDY AREA

The Study Area considered in our analysis includes all of the lands bound by Strachan Avenue in the west; Lake Shore Boulevard/The Gardiner Expressway, Parliament Street and Queen Street in the north; Broadview Avenue, Eastern Avenue and Booth Avenue in the east; and Lake Shore Boulevard, The Keating Channel, and the water's edge (i.e., Lake Ontario) in the south. As illustrated in Figure 2-1, this area contains all four of the major waterfront development precincts (i.e., East Bayfront, West Don Lands, Central Waterfront, Lower Don Lands), as well as a number of nearby neighbourhoods such as *Corktown* and the *Distillery District*.

This Study Area represents the geographic area in which real estate values, recent construction activity, and proposed development projects have likely been influenced – at least in part – by the recent and planned investments made by Waterfront Toronto in the revitalization of the City's waterfront.

FIGURE 2-1: MAP OF STUDY AREA



SOURCE: urbanMetrics inc.



2.2 WATERFRONT DEVELOPMENT PRECINCTS

The following provides a brief overview of the character, development potential, location, and geographic extent of each of the four development precincts situated within the broader Study Area, as defined in Section 2.1.

2.2.1 EAST BAYFRONT

The East Bayfront is one of the first new neighbourhoods to be developed on Toronto's waterfront. Its proximity to downtown Toronto and location directly on Lake Ontario make it one of the world's most significant new waterfront communities. As illustrated in Figure 2-2, the 23 hectare (55 acre) East Bayfront site generally extends between Jarvis Street in the west and Parliament Street in the east; between Lake Shore Boulevard and the water's edge (i.e., Lake Ontario) to the north and south, respectively.

FIGURE 2-2: MAP OF EAST BAYFRONT



SOURCE: urbanMetrics inc., based on the major development precincts identified by Waterfront Toronto.



Waterfront Toronto has made a significant amount of investment in the East Bayfront public realm with two signature parks – Sherbourne Common and Canada's Sugar Beach – plus a kilometre-long continuous Water's Edge Promenade and Boardwalk. The organization has also brought high urban design standards to the community's main street, Queens Quay, to make it a vibrant pedestrian, transit and cyclistfriendly urban boulevard. Waterfront Toronto has also established a Precinct Plan for the area, and secured Toronto City Council approval of a zoning by-law that permits approximately 9.3 million square feet of mixed-use development (including residential uses), on lands previously zoned for industrial uses. This approved zoning by-law applies to both public and private lands in East Bayfront.

East Bayfront includes some 18 separate development blocks on publicly-owned lands and 4 additional privately-owned development blocks; plus the recently completed Corus Quay complex (i.e., the new corporate headquarters of Corus Entertainment, one of Canada's largest media and entertainment companies). This area also includes the new George Brown College Waterfront Campus, which will accommodate some 3,500 full-time students.

Future projects on publically controlled land:

- The Monde development located north of Queens Quay, just east of Sherbourne Common, which is to be developed by Great Gulf Group of Companies and designed by renowned architect Moshe Safdie. Monde is a mixed-use development featuring residential, retail, office/employment and institutional uses with impressive views of Lake Ontario.
- The Bayside development, which is comprised of 5.6 hectares (13 acres) of developable land; represents the single largest development block in the East Bayfront. Bayside will be developed by Hines, one of the world's premier real estate firms.

2.2.2 WEST DON LANDS

Largely owned by the Provincial Government, the West Don Lands occupy a unique site at the original mouth of the Don River. While the river has been channelized and the shoreline has shifted south, the essence of the site remains a low-lying river delta. The 32 hectare (80 acre) site is now being transformed from former industrial lands into a sustainable, mixed-use, pedestrian-friendly, riverside community. As illustrated in Figure 2-3, the West Don Lands generally extend from Parliament Street in the west to the Don River in the east; between King Street in the north and the rail corridor in the south.

Planning for the redevelopment of this brownfield area has been underway since the early 1980's. Development has been largely stalled by the expense of remediation and flood protection; requiring a funded agency such as Waterfront Toronto to initiate the necessary remediation and infrastructure investments. Developers in the area have agreed that Waterfront Toronto's creation of a comprehensive neighbourhood in the West Don Lands has stimulated development in the area and led to a quality of urban design that would not have occurred otherwise.



In particular, Waterfront Toronto – together with its government partners and the Toronto and Region Conservation Authority (TRCA) – have undertaken a Class Environmental Assessment Master Plan; a transit Environmental Assessment; and the Lower Don River West Remedial Flood Protection Environmental Assessment⁵. Similarly, Waterfront Toronto has also prepared a West Don Lands Precinct Plan and secured municipal approvals for lands in the area, including a plan of subdivision and rejoining for approximately 1.5 million square feet of the West Don Lands land area.

FIGURE 2-3: MAP OF WEST DON LANDS



SOURCE: urbanMetrics inc., based on Waterfront Toronto development precincts.

⁵ Environmental Assessments evaluate the potential economic, social, and natural environmental effects of a proposed project, consider alternatives, and propose mitigation measures to prevent negative impacts. Environmental assessments promote good planning and public engagement, contributing to Waterfront Toronto's ability to deliver revitalization pojrects.



Remediation and infrastructure investments in this area have made possible the acceleration of development of the West Don Lands, as evidenced by its selection as the site of the Toronto 2015 Pan American Games Athletes' Village. Originally planned to be built over 10 to 12 years in three phases; more than half of the West Don Lands will be completed for the Pan American Games in June 2015, including the Toronto Community Housing (TCH) and River City developments, as well as Underpass Park and Don River Park, which were already underway.

Waterfront Toronto is also investing in parks, open spaces and streets to create a family-focused community with public access to the riverfront. Remediation efforts are already underway and construction of the main part of the area's flood protection landform is complete. Similarly, several of the area's streets are currently under construction, while construction of Underpass Park was completed earlier this year and construction has already begun on Don River Park.

Overall, the West Don Lands will comprise some 28 separate development blocks, including a Toronto Community Housing Corporation (TCHC) complex; the area's first affordable rental housing buildings. The first private sector development in this area, River City, is being developed by Urban Capital and was designed by Saucier + Perrotte Architects and ZAS Architects. Occupancy of the first phase of the development is slated for early 2013, and River City's second phase is expected to begin construction in 2013 as well.

2.2.3 CENTRAL WATERFRONT

The Central Waterfront extends approximately 2.5 kilometres along the water's edge between Bathurst Street and Lower Jarvis Street, south of Lake Shore Boulevard and the Gardiner Expressway. Although it is the most developed of the four waterfront precincts, having experienced much development over the past few decades, it generally lacks a coherent look and feel; with private and public spaces difficult to distinguish from one another.

In order to remedy this situation, Waterfront Toronto has been comprehensively planning to transform Queens Quay into a signature waterfront boulevard in this area with a generous, tree-lined public promenade for pedestrians and cyclists. The objective of this plan will be to create a powerful, world-class identity for the central waterfront that celebrates the Canadian lakefront experience and provides the public with access to the water's edge. Construction along the 1.7 kilometre stretch of Queens Quay from west of Lower Spadina Avenue to east of Bay Street is completely rebuilding and revitalizing the area both above and below ground. When complete in early 2015, Queens Quay will be a waterfront showpiece and a must-see Toronto destination.

Similarly to the ongoing developments in the East Bayfront and West Don Lands precincts, this project required a Municipal Class Environmental Assessment, which was initiated jointly by Waterfront Toronto and the City of Toronto, in order to test alternatives and to obtain public feedback. The proposed revitalization of Queens Quay would not have been possible without the initial environmental assessment work undertaken by Waterfront Toronto.



FIGURE 2-4: MAP OF CENTRAL WATERFRONT



SOURCE: urbanMetrics inc., based on Waterfront Toronto development precincts.

Waterfront Toronto's plans for the area include:

- Creating a continuous water's edge promenade and boardwalk connected by dramatic timber footbridges;
- Encouraging lively marine activity with the installation of a series of finger piers; and,



• Connecting the entire waterfront using a consistent palette of trees, furnishings and materials such as granite paving surfaces, wood decking and benches, brushed stainless steel railings and timber and aluminum light poles.

Ongoing investments into the public realm have served to stimulate development interest in the area, which was previously criticized as poorly planned and lacking public access to the lakefront.

Among the largest future development projects identified in the Central Waterfront, 90 Harbour Street is being developed by Menkes Developments and would feature a mix of uses, including a proposed 31-storey office building and two residential towers of 70-storeys each. Similarly, Phase III of Waterpark Place by Oxford Properties at 85 Harbour Street would comprise a 30-storey office tower.

2.2.4 LOWER DON LANDS

The Lower Don Lands is a 125 hectare (308 acre) area that runs from East Bayfront (the Parliament Street Slip) east to the Don Roadway and from West Don Lands (the rail corridor) south to the Ship Channel. Longer term plans by Waterfront Toronto will transform this largely underutilized industrial area into new sustainable parks and communities. The naturalization and shifting of the mouth of the Don River is the centre piece of the plans for the Lower Don Lands, together with the transformation of the Keating Channel into a recreational water feature for the future neighbourhood. The changes to the river mouth would also provide the flood protection necessary to enable development of the immediate area and the larger Port Lands area.

Waterfront Toronto has undertaken a variety of preliminary planning and design work in the Lower Don Lands, which has allowed for the precinct to be developed as proposed. In particular, the organization recently completed a comprehensive Environmental Assessment process from which plans for the Lower Don Lands were prepared; established Precinct and Framework Plans; and secured various municipal approvals (e.g., Official Plan amendments) to permit mixed-use development on formerly industrially zoned lands.

There are currently two private development proposals in the northwestern portion of these lands in the vicinity of Lake Shore Boulevard and Cherry Street. The most prominent – commonly known as the 3-C project – is a joint venture between Cityzen Development Group, Castlepoint Realty, and Continental Ventures Realty. As currently proposed, this project would include some 340,000 square feet of office space, 60,000 square feet of retail space, and 2,000 residential units. Additional servicing is required for this project to proceed. Further east at 351 Lakeshore Boulevard East, a smaller development is proposed on the former site of the Victory Soya Mills, which would include 21,000 square feet of office space and 986 residential units.



FIGURE 2-5: MAP OF LOWER DON LANDS



SOURCE: urbanMetrics inc., based on Waterfront Toronto development precincts.



2.3 ADJOINING NEIGHBOURHOODS

In proximity to the areas where Waterfront Toronto has been investing heavily into community infrastructure are a number of neighbourhoods that will benefit directly from the various new amenities and services being established in the waterfront area, including: parks and open spaces; pedestrian oriented commercial areas; waterfront and riverfront access; transit; the revitalization of brownfield lands; flood protection and remediation; municipal servicing, as well as other public amenities. To varying degrees, these initial infrastructure investments have stimulated – and will continue to stimulate – additional private sector developments in nearby communities.

For the purposes of our analysis, we have identified three specific adjoining neighbourhoods, which account for the balance of the lands in the Study Area (i.e., those not already included in the four waterfront development precincts identified earlier in this section). They are defined as follows:

- A) Yonge and Queens Quay this area is bound by the foot of Yonge Street to the west and Lower Jarvis Street to the east; representing the portion of the Study Area situated between the Central Waterfront and East Bayfront precincts, respectively. It contains a number of relatively large waterfront properties, including the Redpath Sugar Refinery, 1 Yonge Street (i.e., the Toronto Star building), the LCBO headquarters and warehouse complex, as well as the site of the Queens Quay Loblaws supermarket. Among the most notable new developments in this area is Cityzen Development's Pier 27 project, which is located at the foot of Yonge Street at the water's edge.
- **B)** Distillery District and Corktown-- this area includes both the Distillery District and Corktown neighbourhoods, which are situated to the immediate south-west and north-west of the West Don Lands precinct, respectively. Both of these areas are similar in that they contain a large collection of historic buildings mixed with a variety of more recent, ongoing and proposed contemporary developments. Among the most notable of these recent and ongoing development projects are the Pure Spirit and Gooderham residential condominium developments in the Distillery District, and Streetcar Developments' slightly smaller infill projects in Corktown (e.g., Corktown District Lofthouses).
- **C)** Don Valley and Lake Shore (Riverdale) this neighbourhood represents the easternmost portion of the Study Area; including all of the lands to the immediate east of the Don Valley and the West Don Lands/Lower Don Lands precincts. It generally extends between Queen Street East and Eastern Avenue in the north to Lake Shore Boulevard in the south, and Booth Avenue to the east. It is currently comprised nearly exclusively by industrial properties, including the former Unilever complex at 21 Don Valley Parkway, which was recently purchased by First Gulf in order to be redeveloped for a variety of new employment uses. By contrast, the northern portion of this area contains a somewhat broader range of land uses; particularly along Queen Street East



between the Don Valley and Broadview Avenue. A number of residential infill projects have been constructed in this area over the past few years.

Figure 2-6 illustrates the location of the three adjoining neighbourhoods considered in our analysis; relative to the other waterfront development districts discussed in the previous section.

FIGURE 2-6: MAP OF ADJOINING NEIGHBOURHOODS



A) YONGE AND QUEENS QUAY B) DISTILLERY DISTRICT AND CORKTOWN C) DON VALLEY AND LAKE SHORE (RIVERDALE)

SOURCE: urbanMetrics inc.



3 PHASE 1 – RETURN ON INVESTMENT

Since the organization's inception in 2001, Waterfront Toronto has taken a leadership role in planning and implementing the revitalization of Toronto's waterfront. Between 2001 and 2013, Waterfront Toronto, directly or indirectly through other public agencies, has invested over \$1.26 billion into revitalization projects. The following examines the direct, indirect and induced impacts of the various revitalization investments made by the organization to date.

3.1 EXPENDITURE SUMMARY

Similar to the previous analyses conducted by urbanMetrics, the first step in analyzing the economic impact of Waterfront Toronto's investments has been to review the organization's historic expenditure patterns and the distribution of these expenditures by industry category. For the purposes of this analysis, industry categories were defined using the 2007 North American Industry Classification System (NAICS), as defined in Appendix A at the end of this document.

Waterfront Toronto's direct expenditures generally fall into one of two categories: those made directly by the organization and those made by others on behalf of Waterfront Toronto. An example of the latter would be the flood protection landform in the West Don Lands, which was constructed by the Ontario Realty Corporation.

In the case of expenditures made by Waterfront Toronto, which account for approximately 85% of the direct investments considered, urbanMetrics relied on detailed financial reports which provided a description of each expenditure; the nature of the project; and the location of the vendor that provided the service or material. Where expenditures were made by other agencies, financial data was not as precise, and some estimates were required in order to allocate expenditures by industry sector. These estimates were based on the type of project being considered and Waterfront Toronto's own spending patterns on similar projects.

Direct expenditure patterns have been illustrated in Figures 2-1 to 2-4. Unless indicated otherwise, all expenditures shown in these figures represent current dollar values.

Figure 3-1 summarizes total expenditures between April 1, 2001 and March 31, 2013 by fiscal year and industry classification. As shown, Waterfront Toronto invested \$1.26 billion during this period; either through direct expenditures made by the organization or through related infrastructure investments made by other public sector agencies on Waterfront Toronto projects. As indicated in Figure 3-2, this represents approximately \$1.40 billion in constant 2012 dollar terms (i.e., after adjusting for inflation).

FIGURE 3-1: TOTAL DIRECT EXPENDITURES BY YEAR & INDUSTRY CATEGORY (UNINFLATED)

INDUSTRY CATEGORY (NAICS 2007)	2001 02	2002 03	2003 04	2004 05	2005 06	2006 07	2007 08	2008 09	2009 10	2010 11	2011 12	2012 13	TOTAL
CONSTRUCTION	\$0	\$73,000	\$2,229,000	\$18,428,000	\$40,409,000	\$46,911,000	\$30,323,000	\$81,172,000	\$64,710,000	\$87,537,000	\$76,972,000	\$20,041,000	\$468,807,000
PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES	\$467,000	\$7,536,000	\$9,588,000	\$23,706,000	\$27,891,000	\$23,444,000	\$42,990,000	\$58,665,000	\$40,921,000	\$51,188,000	\$36,102,000	\$23,797,000	\$346,295,000
FINANCE, INSURANCE, REAL ESTATE AND RENTING AND LEASING	\$26,000	\$590,000	\$15,023,000	\$6,872,000	\$21,813,000	\$19,517,000	\$32,153,000	\$71,218,000	\$19,062,000	\$6,207,000	-\$6,442,000	\$24,275,000	\$210,314,000
PUBLIC ADMINISTRATION	\$164,000	\$2,905,000	\$4,298,000	-\$1,260,000	\$4,573,000	\$4,133,000	\$8,478,000	\$12,943,000	\$7,053,000	\$13,856,000	\$44,434,000	\$37,641,000	\$139,217,000
UTILITIES	\$0	\$0	\$0	\$0	\$0	\$51,000	\$41,000	\$9,778,000	\$8,584,000	\$12,102,000	\$4,030,000	\$2,742,000	\$37,328,000
EDUCATION SERVICES	\$0	\$0	\$0	\$2,000	\$2,000	\$6,000	\$38,000	\$95,000	\$48,000	\$6,000	\$18,890,000	\$5,700,000	\$24,788,000
ADMINISTRATIVE AND OTHER SUPPORT SERVICES	\$0	\$101,000	\$103,000	\$18,000	\$196,000	\$327,000	\$446,000	\$520,000	\$2,190,000	\$3,595,000	\$4,950,000	\$3,119,000	\$15,564,000
OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)	\$0	\$8,000	\$19,000	\$106,000	\$586,000	\$1,403,000	\$777,000	\$139,000	\$113,000	\$179,000	\$111,000	\$119,000	\$3,559,000
WHOLESALE TRADE	\$0	-\$15,000	\$142,000	\$111,000	\$97,000	\$412,000	\$326,000	\$1,165,000	\$164,000	\$929,000	\$76,000	\$62,000	\$3,471,000
INFORMATION AND CULTURAL INDUSTRIES	\$0	\$345,000	\$185,000	\$166,000	\$257,000	\$438,000	\$503,000	\$823,000	\$151,000	\$94,000	\$130,000	\$99,000	\$3,191,000
TRANSPORTATION AND WAREHOUSING	\$0	\$11,000	\$1,599,000	-\$1,524,000	\$67,000	\$176,000	\$1,418,000	\$71,000	\$193,000	\$196,000	\$196,000	\$73,000	\$2,477,000
MANUFACTURING	\$0	\$21,000	\$15,000	\$20,000	\$28,000	\$146,000	\$395,000	\$872,000	\$16,000	\$84,000	\$8,000	\$64,000	\$1,667,000
RETAIL TRADE	\$0	\$221,000	\$24,000	\$14,000	\$29,000	\$75,000	\$84,000	\$56,000	\$190,000	\$102,000	\$107,000	\$49,000	\$949,000
ALL OTHER INDUSTRIES ¹	\$0	\$23,000	\$37,000	\$56,000	\$120,000	\$213,000	\$363,000	\$275,000	\$166,000	\$106,000	\$84,000	\$78,000	\$1,523,000
GRAND TOTAL	\$657,000	\$11,820,000	\$33,262,000	\$46,714,000	\$96,068,000	\$97,253,000	\$118,335,000	\$237,791,000	\$143,560,000	\$176,182,000	\$179,649,000	\$117,860,000	\$1,259,150,000

SOURCE: urbanMetrics inc., based on historic expenditure information provided by Waterfront Toronto (April 2001 – March 2012). All figures rounded to the nearest \$1,000. ¹ Includes expenditures related to the Accommodation and Food Services; Arts, Entertainment and Recreation; Mining and Oil and Gas Extraction; and Crop and Animal Production industry categories.


FIGURE 3-2: TOTAL DIRECT EXPENDITURES BY FISCAL YEAR & INDUSTRY CATEGORY (INFLATED, CONSTANT 2012 \$)

INDUSTRY CATEGORY (NAICS 2007)	2001 02	2002 03	2003 04	2004 05	2005 06	2006 07	2007 08	2008 09	2009 10	2010 11	2011 12	2011 12	TOTAL
CONSTRUCTION	\$0	\$111,000	\$3,257,000	\$25,267,000	\$52,625,000	\$57,250,000	\$34,668,000	\$84,636,000	\$68,785,000	\$93,100,000	\$78,660,000	\$20,041,000	\$518,401,000
PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES	\$720,000	\$11,420,000	\$14,012,000	\$32,504,000	\$36,322,000	\$28,611,000	\$49,150,000	\$61,169,000	\$43,498,000	\$54,441,000	\$36,893,000	\$23,797,000	\$392,538,000
FINANCE, INSURANCE, REAL ESTATE AND RENTING AND LEASING	\$39,000	\$895,000	\$21,954,000	\$9,423,000	\$28,407,000	\$23,818,000	\$36,760,000	\$74,258,000	\$20,262,000	\$6,601,000	-\$6,583,000	\$24,275,000	\$240,109,000
PUBLIC ADMINISTRATION	\$253,000	\$4,402,000	\$6,281,000	-\$1,727,000	\$5,955,000	\$5,043,000	\$9,693,000	\$13,495,000	\$7,497,000	\$14,736,000	\$45,409,000	\$37,641,000	\$148,678,000
UTILITIES	\$0	\$0	\$0	\$0	\$0	\$63,000	\$47,000	\$10,196,000	\$9,125,000	\$12,871,000	\$4,118,000	\$2,742,000	\$39,161,000
EDUCATION SERVICES	\$0	\$0	\$0	\$3,000	\$3,000	\$8,000	\$44,000	\$99,000	\$51,000	\$6,000	\$19,304,000	\$5,700,000	\$25,218,000
ADMINISTRATIVE AND OTHER SUPPORT SERVICES	\$0	\$153,000	\$151,000	\$24,000	\$255,000	\$399,000	\$509,000	\$542,000	\$2,328,000	\$3,823,000	\$5,059,000	\$3,119,000	\$16,362,000
OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)	\$0	\$13,000	\$27,000	\$145,000	\$763,000	\$1,712,000	\$888,000	\$145,000	\$120,000	\$191,000	\$113,000	\$119,000	\$4,236,000
WHOLESALE TRADE	\$0	-\$22,000	\$208,000	\$152,000	\$127,000	\$503,000	\$372,000	\$1,214,000	\$175,000	\$988,000	\$78,000	\$62,000	\$3,858,000
INFORMATION AND CULTURAL INDUSTRIES	\$0	\$523,000	\$270,000	\$227,000	\$335,000	\$535,000	\$575,000	\$858,000	\$160,000	\$100,000	\$133,000	\$99,000	\$3,816,000
TRANSPORTATION AND WAREHOUSING	\$0	\$17,000	\$2,337,000	-\$2,090,000	\$87,000	\$215,000	\$1,621,000	\$74,000	\$205,000	\$208,000	\$201,000	\$73,000	\$2,949,000
MANUFACTURING	\$0	\$31,000	\$22,000	\$27,000	\$36,000	\$178,000	\$452,000	\$909,000	\$17,000	\$89,000	\$9,000	\$64,000	\$1,833,000
RETAIL TRADE	\$0	\$336,000	\$34,000	\$19,000	\$37,000	\$91,000	\$96,000	\$58,000	\$201,000	\$109,000	\$109,000	\$49,000	\$1,140,000
ALL OTHER INDUSTRIES ¹	\$0	\$35,000	\$55,000	\$77,000	\$157,000	\$261,000	\$416,000	\$287,000	\$177,000	\$113,000	\$86,000	\$78,000	\$1,739,000
GRAND TOTAL	\$1,013,000	\$17,913,000	\$48,609,000	\$64,050,000	\$125,109,000	\$118,687,000	\$135,290,000	\$247,939,000	\$152,602,000	\$187,376,000	\$183,588,000	\$117,860,000	\$1,400,037,000

SOURCE: urbanMetrics inc., based on historic expenditure information provided by Waterfront Toronto (April 2001 – March 2012). Inflation adjustments based on Statistics Canada's quarterly Construction Price Index data for Q1 2000 to Q4 2011. All figures rounded to the nearest \$1,000.

¹ Includes expenditures related to the Accommodation and Food Services; Arts, Entertainment and Recreation; Mining and Oil and Gas Extraction; and Crop and Animal Production industry categories.



As noted by these figures, expenditures have generally increased over time, reflecting the movement of projects from the conceptualization and design phases through to construction and implementation.

Figure 3-3 summarizes total expenditures by vendor location and industry classification. As shown, approximately 88% of Waterfront Toronto's expenditures were made in Toronto, and more than 96% were made in Ontario. It is also important to note that, as of March 2013, the largest shares of Waterfront Toronto's expenditures were made in construction-related industries, which represented approximately 37% of total investments. A large portion of the organization's direct expenditures were also made in creative and knowledge-based industries, including design, engineering and environmental services (i.e., the *Professional, Scientific and Technical Services* sector) and in the *Finance, Insurance, Real Estate and Renting and Leasing* sector, which accounted for an additional 28% and 17% of total expenditures, respectively.

		VENDOR (τοτοι	% of TOTAL			
INDUSTRY CATEGORY (NAICS 2007)	Toronto	Other Ontario	Other Canada	International	- TOTAL	% of TOTAL	
CONSTRUCTION	\$400,341,000	\$67,367,000	\$1,099,000	\$0	\$468,807,000	37.2%	
PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES	\$269,279,000	\$34,192,000	\$9,024,000	\$33,800,000	\$346,295,000	27.5%	
FINANCE, INSURANCE, REAL ESTATE AND RENTING AND LEASING	\$207,098,000	\$3,048,000	\$47,000	\$122,000	\$210,314,000	16.7%	
PUBLIC ADMINISTRATION	\$138,209,000	\$1,007,000	\$0	\$0	\$139,217,000	11.1%	
UTILITIES	\$37,073,000	\$175,000	\$80,000	\$0	\$37,328,000	3.0%	
EDUCATION SERVICES	\$24,741,000	\$17,000	\$1,000	\$29,000	\$24,788,000	2.0%	
ADMINISTRATIVE AND OTHER SUPPORT SERVICES	\$15,152,000	\$137,000	\$271,000	\$4,000	\$15,564,000	1.2%	
OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)	\$1,309,000	\$326,000	\$0	\$1,924,000	\$3,559,000	0.3%	
WHOLESALE TRADE	\$2,672,000	\$534,000	\$266,000	\$0	\$3,471,000	0.3%	
INFORMATION AND CULTURAL INDUSTRIES	\$2,815,000	\$200,000	\$41,000	\$136,000	\$3,191,000	0.3%	
TRANSPORTATION AND WAREHOUSING	\$2,225,000	\$177,000	\$57,000	\$18,000	\$2,477,000	0.2%	
MANUFACTURING	\$1,012,000	\$183,000	\$472,000	\$0	\$1,667,000	0.1%	
RETAIL TRADE	\$511,000	\$437,000	\$1,000	\$0	\$949,000	0.1%	
ALL OTHER INDUSTRIES ¹	\$1,187,000	\$310,000	\$23,000	\$4,000	\$1,523,000	0.1%	
GRAND TOTAL	\$1,103,623,000	\$108,109,000	\$11,381,000	\$36,036,000	\$1,259,150,000	100.0%	
% of GRAND TOTAL	87.6%	8.6%	0.9%	2.9%	100.0%		

FIGURE 3-3: TOTAL DIRECT EXPENDITURES BY INDUSTRY CATEGORY & LOCATION (VENDOR ORIGIN)

SOURCE: urbanMetrics inc., based on historic expenditure information provided by Waterfront Toronto (April 2001 – March 2012). All figures rounded to the nearest \$1,000. ¹ Includes expenditures related to the Accommodation and Food Services; Arts, Entertainment and Recreation; Mining and Oil and Gas Extraction; and Crop and Animal Production industry categories.



Figure 3-4 illustrates the distribution of Waterfront Toronto's direct expenditures by major project/precinct.

This figure highlights the fact that Waterfront Toronto contributes funds towards projects that are not only under its own direction, but also to other public agencies for the provision of regional infrastructure projects that impact Toronto's waterfront, such as GO Transit expansions and the Union-Pearson rail-link.

Overall, approximately 86% of total expenditures relate to Waterfront Toronto-directed projects, while the balance (14%) is accounted for by investments relating to other government directed initiatives.

It is also interesting to note that nearly half (45%) of all expenditures are concentrated in the East Bayfront and West Don Lands precincts, which currently account for approximately 22% and 23% of total investments made to date, respectively.

FIGURE 3-4: TOTAL DIRECT EXPENDITURES BY PROJECT/PRECINCT

PROJECT PRECINCT	TOTAL	% of TOTAL
Central Waterfront	\$149,583,000	11.9%
Corporate	\$79,162,000	6.3%
District Energy Facility	\$29,081,000	2.3%
East Bayfront ¹	\$276,684,000	22.0%
Lake Ontario Park	\$22,792,000	1.8%
Lower Don Lands	\$57,339,000	4.6%
Port Lands Area	\$8,307,000	0.7%
Suburban Parks	\$38,905,000	3.1%
Transportation	\$105,723,000	8.4%
Waterfront Wide Initiative	\$23,979,000	2.0%
West Don Lands ²	\$289,330,000	23.0%
SUBTOTAL - WATERFRONToronto Directed Projects	\$1,080,884,000	85.8%
Go Transit Expansion	\$130,000,000	10.3%
Union Pearson Link	\$25,000,000	2.0%
Harbourfront Centre Operating Funds	\$1,400,000	0.1%
Discovery Centre	\$1,000,000	0.1%
Waterfront Project Secretariat (City)	\$3,756,000	0.3%
Waterfront Project Secretariat (Federal)	\$8,292,000	0.7%
Technical Studies	\$2,100,000	0.2%
Dockwell Repairs (City)	\$1,000,000	0.1%
Canada Square	\$1,200,000	0.1%
Fort York Pedestrian Bridge	\$1,465,000	0.1%
York St Ramp Removal	\$1,999,000	0.2%
City Urban Planning Resource	\$1,054,000	0.1%
SUBTOTAL - Other Government Directed Projects	\$178,266,000	14.2%
GRAND TOTAL - All WATERFRONToronto Expenditures	\$1,259,150,000	100.0%

SOURCE: urbanMetrics inc., based on historic expenditure information provided by Waterfront Toronto (April 2001 – March 2012). All figures rounded to the nearest \$1,000.

¹ Includes Waterfront Toronto expenditures relating to the Corus Entertainment Building.

² Includes Waterfront Toronto and Ontario Realty Corporation (ORC) expenditures relating to Flood Protection Landform.

³ Includes Waterfront Toronto expenditures of approximately \$9.6 million for land holding costs relating to the properties owned by Waterfront Toronto. All other Corporate expenditures represent at total of approximately \$66.2 million.



3.2 ECONOMIC IMPACT APPROACH

The quantitative economic impacts of the direct investment by Waterfront Toronto have been estimated using a mathematical model which simulates the flow of expenditures through the economy. The model is designed to provide a reliable measure of the impact of Waterfront Toronto's expenditures on job creation, incomes, value added to the economy and taxes and other government revenues.

As illustrated on the diagram to the right, the main steps in running an economic impact model are: compiling the input spending data; assembling the data to ensure all expenses are accounted for and divided into categories to ensure that the individual economic sectors are appropriately represented; calibrating the model to the local economy using employment data; testing against expected results; and running the finalized version of the model.

The expenditure data was provided to urbanMetrics by Waterfront Toronto. Total expenditures, which amounted to approximately \$1.26 billion from April 2001 to March 2013, were derived from two sources. Direct expenditures by Waterfront Toronto were itemized in detail by Waterfront Toronto staff, and included the nature of the expenditure, vendor and vendor's origin. Expenditures made on Waterfront Toronto projects by other organizations, such as the Ontario Realty Corporation, were less detailed. In some cases, estimates had to be made with regards to the nature of each expenditure item. The data gathering stage involved several meetings with Waterfront Toronto's financial and technical staff to review expenditures and to confirm assumptions made by urbanMetrics.

The data assembly stage involved allocating each expenditure item to an industry sectors using the 2007 North American Industry Classification System (NAICS) and by vendor origin. Vendor origin was based on invoice addresses and has been classified as either:

- City of Toronto
- Other Ontario
- Other Canada
- Outside Canada





Vendor origin has been used only to determine if there was an extreme pattern of expenditures that may require making adjustments to the model. In this case, expenditure by vendor origin was considered within a normal range for similar projects and were adequately accounted for by the model. As a result, they have been used in this report for illustrative purposes only and do not affect the results produced by the model.

3.2.1 URBANMETRICS ECONOMIC IMPACT MODEL

The economic impact of Waterfront Toronto's historic investments has been measured at the national, provincial and municipal level, through the use of the urbanMetrics Input-Output model.

Our model is based on Input-Output tables produced by Statistics Canada. These tables illustrate the structure of the economy through the depiction of transactions (sales and purchases) made among and between different industry sectors of the economy.

National, Provincial and local impacts have been determined using Waterfront Toronto expenditure data related to salaries, contracted services, construction materials, professional services, equipment rentals, legal and administrative costs, and other related costs. These inputs have been analyzed using the urbanMetrics Input-Output model in order to generate value added to the economy, income, employment by sector and tax impacts.

Unlike gross output impacts, value added impacts represent the true incremental expansion to the economy. Therefore, our analysis only considers value added impacts. The model has been developed to generate the following four economic impacts:

- Value Added
- Employment
- Labour Income
- Revenues to the 3 Levels of Government





It considers the **direct impact of spending** by Waterfront Toronto, as well as the **indirect and induced impacts** that are spread more broadly across the Province and Canada.

3.2.2 ESTIMATION OF ECONOMIC IMPACTS

Estimating the economic impacts involves modelling the *direct, indirect* and *induced* impacts of Waterfront Toronto's investments, on different spatial scales. Specifically, this has involved the estimation of economic multipliers to measure the marginal impact of these expenditures on gross output (sales), value added to GDP, employment, labour income and accrued taxes and tax credits going forward.

This phase of the analysis involved two primary stages, as discussed below:

Stage 1: Data Acquisition from Waterfront Toronto

The accuracy of the economic impact modeling is dependent upon the detail of expenditure data provided by Waterfront Toronto. Most expenditures by Waterfront Toronto are made within Toronto or Ontario. However, the economic impact model used by urbanMetrics assumes that all expenditures are made within the area being modeled and as a result leakage has been built directly into the analysis. Waterfront Toronto expenditures can be classified in three ways:

- Expenditures made by Waterfront Toronto directly;
- Expenditures made by other organizations on behalf of Waterfront; and
- Expenditures made by Waterfront in the form of contributions to larger regional projects that will ultimately aid in the revitalization of the waterfront.

Economic impact multipliers have been calculated for each of these expenditure categories, on a local, provincial and national basis. The components of these multipliers are discussed below in relation to Stage 2 of the modeling process.

Stage 2: Estimation of Economic Impacts

urbanMetrics inc. developed an economic impact model based on the Canadian National Input-Output Accounts, which can be used to estimate the total impact of expenditures, on an aggregate and industry-specific basis. For the purposes of this study, the model has been calibrated to estimate economic impacts on the Toronto economy as well as on the Ontario and Canadian economies.



The basic principle of the model is the concept that each dollar of expenditure on goods and/or services purchased from a given industry sector circulates and re-circulates within the economy, thereby multiplying the effects of the original expenditure. As such, this process is referred to as the multiplier effect. An estimated multiplier for Waterfront Toronto's expenditures has three components:

- *Direct Impacts*, which represent the initial operating and/or capital investments in the waterfront. These expenditures include the purchase of labour, equipment, other infrastructure and related services;
- *Indirect effects*, which represent the subsequent purchases by suppliers required to produce the goods and services related to original Waterfront Toronto investments; and
- *Induced Impacts,* which result when workers employed in the sectors, stimulated by initial and indirect expenditures, spend portions of their incomes on consumer goods and services.

Direct, indirect and induced impacts are estimated in terms of the following measures:

- **Gross Output** a measure of total sales throughout the economy in question, as a result of an initial expenditure on goods and/or services produced by an industry.⁶
- Value Added (Gross Provincial Product) represents the net impact on the economy after eliminating the double counting that can occur when calculating gross output and lead to the calculation of inflated multipliers. This measure only considers final goods (gross sales less cost of purchased inputs). At the local level "value added" is typically smaller, than the initial expenditure, due to leakage. 7
- **Employment** total *full-time, full-year* jobs generated by direct, indirect and induced expenditures. For one-time capital expenditures, such as those being analyzed, the employment figures produced by the model represent years of full-time

⁶ For example with respect to a construction project, an initial expenditure would be made to pay for the design firm and contractor. The design team would then hire staff, purchase equipment and materials, such as computers, software, paper, etc. The construction company, would also hire labourers, pay for construction equipment and materials. The staff in turn would purchase goods and services from their wages to support their every-day living. The sum of all of these expenditures would be the gross output. This, however is not the true impact on the economy as it involves double counting (e.g. the initial expenditure, in reality covered wages and salaries, equipment, etc. of the contractors it hired).

⁷ For example, a firm building a project in one jurisdiction may purchase equipment and supplies from another. Furthermore design and construction employees may live outside of the jurisdiction in which the project is being built and thus spend their wages in other closer to their homes.



employment. For example, one job identified by the model represents the equivalent of one person working full-time for the duration of one year.

- Labour Income total value of wages, salaries and benefits received by employees associated with direct, indirect and induced expenditure.
- **Government Revenues** revenues accruing to federal, provincial and local jurisdictions as a result of direct, indirect and induced expenditures. Revenue categories include personal and corporate income tax, sales taxes (e.g. PST and GST), property taxes and other miscellaneous taxes, tariffs and fees.
- **Multipliers** are expressed by the ratio of total impacts (direct, indirect and induced) to initial expenditures. For example, the value added multiplier is calculated by dividing total value added by the initial expenditure on the bundle of goods and/or services in question. The only exception is that of the employment multiplier, where total employment is divided by direct employment in order to preserve the common units.⁸

3.3 SUMMARY OF ECONOMIC IMPACTS

The following provides a summary of the economic impacts generated by the direct investments made by Waterfront Toronto between 2001 and 2013. As detailed in Section 3.1, Waterfront Toronto invested approximately \$1.26 billion in projects intended to make the waterfront a more compelling, people-oriented place. In constant 2012 dollars (i.e., after adjusting for inflation), this investment equates to approximately \$1.40 billion.

As summarized in Figure 3-5, this investment in the economy will:

• Generate approximately **16,200 full-time years of employment**⁹, of which more than 70% were in the City of Toronto. The majority of the jobs created were in the *Construction* sector, the *Finance, Insurance, Real Estate and Renting and Leasing* sector, and

⁸ For example, the gross output multiplier on a construction \$10 million construction project can be thought of in the following manner. Some \$2 million dollars of the budget was paid to the design firm for staff wages, equipment and materials. Some \$5 million was paid the construction firm for wages, materials and equipment. Subsequently, design and construction employees paid \$1 million from their wages for food, entertainment, and other living expenses. The gross output would be \$10 + \$5 + \$2 + \$1 million, or \$17 million, or a gross output multiplier of 1.7.

⁹ These employment figures represent the total *full-time, full-year* jobs generated by Waterfront Toronto's direct expenditures, as well as the indirect and induced impacts that are spread more broadly throughout the regional, provincial, and national economies. For one-time capital expenditures, such as those analyzed in this study, these employment figures represent total years of full-time employment (e.g., one job identified represents the equivalent of one person working full-time for the duration of one year).



the *Professional, Scientific and Technical Services* sector. Jobs in the latter category are largely related to design, engineering and environmental services with a high degree of innovation, and are in industries specifically targeted by the City and the Province as part of their economic development initiatives.

- Stimulate **\$3.2 billion in total economic output** to the Canadian economy. The majority of this economic growth will accrue in the City of Toronto.
- Generate **total government revenues of approximately \$622 million**, with \$348 million to the Federal Government, \$237 million to the Provincial Government and \$36 million to the City of Toronto.

FIGURE 3-5: TOTAL ECONOMIC IMPACT SUMMARY - TORONTO, ONTARIO & CANADA (CONSTANT 2012 \$)

	TORONTO	ONTARIO	CANADA
	Total	Total	Total
Initial Expenditure	\$ 1,400,036,791	\$ 1,400,036,791	\$ 1,400,036,791
Impact: Gross Output	Total	Total	Total
Direct	\$ 1,400,036,791	\$ 1,400,036,791	\$ 1,400,036,791
Indirect and Induced	\$ 784,506,721	\$ 1,007,749,930	\$ 1,782,074,044
Total	\$ 2,184,543,512	\$ 2,407,786,721	\$ 3,182,110,834
Multiplier	1.56	1.72	2.27
Impact: Value Added	Total	Total	Total
Direct	\$ 765,713,319	\$ 765,713,319	\$ 765,713,319
Indirect and Induced	\$ 385,589,576	\$ 506,486,431	\$ 929,849,411
Total	\$ 1,151,302,894	\$ 1,272,199,750	\$ 1,695,562,730
Multiplier	0.82	0.91	1.21
Impact: Employment (Full-Time, Full-Year Employment)	Total	Total	Total
Direct	7,612	7,612	7,612
Indirect and Induced	3,815	4,905	8,557
Total	11,427	12,517	16,169
Multiplier	1.50	1.64	2.12
Impact: Labour Income	Total	Total	Total
Direct	\$ 400,850,709	\$ 400,850,709	\$ 400,850,709
Indirect and Induced	\$ 183,170,560	\$ 235,851,437	\$ 418,597,492
Total	\$ 584,021,269	\$ 636,702,146	\$ 819,448,201
Impact: Total Taxes	Total	Total	Total
Federal	\$ 261,149,656	\$ 286,345,293	\$ 347,977,333
Provincial	\$ 136,914,996	\$ 151,007,991	\$ 237,392,317
Local	\$ 29,660,282	\$ 33,222,846	\$ 36,418,103
Total	\$ 427,724,934	\$ 470,576,130	\$ 621,787,753

SOURCE: urbanMetrics inc.

Although Waterfront Toronto's expenditures are significant, they are relatively small compared to the recurring benefits, such as permanent jobs, property taxes, income taxes and tourism spending that will be experienced with the continued development of new office, residential, retail/service commercial, cultural and entertainment uses along the City's waterfront, which would not occur without these initial investments by Waterfront Toronto.



Furthermore, it is important to note that the impact of Waterfront Toronto's business activities span well beyond the quantifiable impacts considered in this section (i.e., as can be illustrated by the model). In fact, it is likely that these other benefits will be many times the size of the one-time capital impacts analyzed in this study and will ultimately dwarf those which have been estimated by the model, for the following two reasons:

- The model only captures the one-time capital expenditures, which have been made since 2001. The most significant impacts will occur once these developments are in place, creating recurring benefits from private investment and visitor expenditures to the area. For example, the capital expenditures made by Waterfront Toronto will generate not only long term capital spending by the private sector, but result in the creation of permanent jobs associated with the new businesses attracted to the water's edge. Economic benefits will be created to the extent that these jobs are new to Toronto, Ontario and Canada. Furthermore, as a tourist destination, the capital projects produced by Waterfront Toronto, will attract new visitor expenditures to the City, the Province and to Canada. These types of impacts are addressed in more detail in the second and third phases of our analysis, as presented in the following sections.
- Secondly, innovative capital expenditures, such as those made by Waterfront Toronto produce "qualitative benefits", which cannot be modelled using traditional economic impact analysis, but nonetheless produce economic value. For example, a vast amount of literature exists with regards to the economic development potential of waterfront revitalization projects. This includes academic and trade publications, in addition to a multitude of professional reports. Following a review of the relevant literature, urbanMetrics identified the main economic development impacts associated with waterfront revitalization, which were summarized in the first Economic Impact Analysis report prepared for Waterfront Toronto in 2009.



4 PHASE 2 – LAND AND REAL ESTATE VALUE

In the first phase of our analysis, we evaluated the economic impacts of some \$1.26 billion of direct investments made by Waterfront Toronto into revitalization projects in the City of Toronto's waterfront. In the second phase, we have considered some of the broader economic impacts of these initial investments as they relate to the following:

- how they have influenced the local real estate market and development community, based on the results of qualitative research interviews conducted with key members of the Toronto real estate industry;
- **changes in land and real estate values** in the waterfront area relative to other parts of the City, based on historic real estate data (e.g., residential resale prices); and,
- **changes in the volume and value of recent construction activity** in the waterfront area, based on the corresponding number and value of building permits issued by the City of Toronto since the inception of Waterfront Toronto.

It is important to note at the outset that, based on our professional experience, it is extremely difficult to definitively identify the economic impacts of specific investments occurring in a highly dynamic real estate market, such as that which exists in the Toronto core and waterfront. In particular, we note that real estate values and development activity in such markets are influenced by a wide variety of factors; including broader economic and social conditions, population growth or decline, and the level of development occurring elsewhere in the City.

Nonetheless, the information presented in the following sections attempts to provide a more detailed understanding of the specific causes of past and projected land value impacts related to the development of the City's waterfront; with a particular emphasis on those attributable to investments made by Waterfront Toronto.

As input to this discussion, we have undertaken a variety of quantitative and qualitative research, which generally corresponds to the three major topics identified above. They are summarized as follows:

1) Qualitative Research Interviews

In addition to our quantitative estimation of the various real estate value and development activity changes that have occurred over the past decade – both as a result of direct investments made by Waterfront Toronto, as well as other factors – we have conducted a series of qualitative research interviews with key members of the local real estate industry in Toronto. The primary



purpose of these interviews was to help identify the specific ways in which recent investments in the City's waterfront have influenced local real estate values and related investment decisions. The results of this research have also been used to verify our findings from the other components of our analysis, as well as to supplement our understanding of the extent to which recent land value impacts can be attributed to the direct investments made by Waterfront Toronto to date.

2) Statistical Evaluation of Historic Real Estate Information

In order to identify any land value changes that have occurred since the inception of Waterfront Toronto, we have undertaken an analysis of historic real estate values within the waterfront area between 2004 and 2012, based on detailed residential resale data obtained by urbanMetrics. For contextual purposes, we have also compared this information to broader data for the entire City of Toronto, which provides us with a baseline measure of how property values have changed elsewhere in recent years.

3) Statistical Evaluation of Historic Building Permit Information

Similarly to the analysis described above, we have reviewed historic building permit statistics obtained from the City of Toronto's Building Division in order to identify recent trends in the total annual value and total annual number of permits issued within the waterfront area, relative to the entire City of Toronto during the 2000 to 2012 time period. We have also considered this data on a land area basis (e.g., per square kilometre), as a measure of the relative intensity of recent construction investment in the waterfront area compared to elsewhere in Toronto.

4.1 QUALITATIVE RESEARCH INTERVIEWS

In order to supplement our understanding of recent changes in property values and the volume/value of construction activity in the waterfront area, as discussed in the following sections of this report, we conducted a series of qualitative research interviews with members of the local real estate industry and development community in Toronto. In particular, the feedback we received during these interviews offer us a more complete and direct understanding of the extent to which these recent changes are attributable to Waterfront Toronto's investments in the revitalization of the waterfront relative to various other contributing factors.

An overview of the scope of these research interviews, as well as a summary of the type of feedback we received during this process, is presented in the following subsections.



4.1.1 SCOPE OF INTERVIEWS

The primary purpose of the research interviews we conducted was to determine how Waterfront Toronto's investments into the revitalization of the City's waterfront have influenced or impacted the local real estate market and development community in recent years. Some of the major topics discussed during these interviews included:

- the key factors that contributed to developer's decision(s) to invest and participate in real estate development in and around the various waterfront districts;
- the specific ways in which recent waterfront revitalization initiatives have facilitated or accelerated development in this area (e.g., in terms of the *timing* and/or *value* of projects);
- the specific types of investments, programs or initiatives that have generated the greatest impacts in terms of assisting the development community advance their projects to market, including the following:
 - Master Planning & Design
 - Infrastructure Planning
 - Infrastructure Investment (Municipal)
 - Infrastructure Investment (Transit)
 - Acquiring Municipal Approvals
 - Investment in Public Realm
 - Coordinating Private Investment
 - Marketing & Community Engagement
- the use of Waterfront Toronto's research, branding and marketing materials to help communicate messages to potential buyers;
- the level of importance of establishing a unified vision for the waterfront area in terms of boosting buyer and investor confidence;
- benefits of the preliminary planning and design work conducted by Waterfront Toronto in terms of cost and time savings;
- the land value premiums that currently exist, or are likely to exist in the future, as a result of recent and planned investments in local infrastructure and other amenities of the waterfront; and,
- the identification of key projects or initiatives that are yet to be completed, as well as Waterfront Toronto's expected role in moving these forward.



A total of 18 real estate professionals were identified as potential participants in our research interviews; all of whom were contacted directly by urbanMetrics during the months of June and July (2012). Of this total, 11 individuals (61%) agreed to participate in our study, including representatives from a variety of different development firms, real estate companies, and government organizations. All of the research interviews were conducted either in-person or by phone between July 4th and July 26th, 2012.

Figure 4-1 provides a summary of the various organizations that participated in our study, as well as examples of the specific waterfront development projects that each of the representatives had been involved with at the time of the interviews (i.e., including developments that were recently completed, under construction, or proposed). For reference, this table also indicates the location of these projects, based on the waterfront development precinct or adjoining neighbourhood in which they are located.

ORGANIZATION	RELEVANT WATERFRONT DEVELOPMENT PROJECTS	PRECINCT/NEIGHBOURHOOD
The Distillery District / CityScape Development Corporation	Parliament Square Condominiums (39 Parliament Street), Pure Spirit Condominium (33 Mill Street), Gooderham Condominium, 60 Mill Street	Distillery District and Corktown
Dundee Realty Corporation	Pan Am Games Athletes Village: George Brown College student residences, YMCA facility, Canary District Condominiums	West Don Lands
Cityzen	3C Lake Shore, Pier 27	Lower Don Lands, Yonge and Queens Quay
Daniels Corporation	-	-
Osmington	1 Yonge Street (Toronto Star building)	Yonge and Queens Quay
Sotheby's International Realty	River City (Phases I and II)	West Don Lands
First Gulf Corporation	Monde, 21 Don Valley Parkway (former Unilever site)	East Bayfront, Don Valley and Lake Shore (Riverdale)
Infrastructure Ontario	LCBO Headquarters	Yonge and Queens Quay
Tridel	10 York Street	Central Waterfront
Hines	Bayside	East Bayfront
Urban Capital Property Group	River City	West Don Lands

FIGURE 4-1: SUMMARY OF QUALITATIVE RESEARCH INTERVIEWS	PARTICIPATING ORGANIZATIONS
TIGORE 4-1. SOMMART OF QUALITATIVE RESEARCH INTERVIEWS	

SOURCE: urbanMetrics inc.



4.1.2 SUMMARY OF KEY THEMES

Based on the results of the research interviews, we were able to identify a number of key themes and common responses among the interview participants. A complete summary of these themes, as well as a detailed overview of the specific type of feedback we received while conducting these interviews, is provided in Figure B-1 in Appendix B at the end of this document.

As it specifically relates to the attraction of additional private sector investment to the waterfront area, as well as the extent to which recent and future land value impacts are attributable to the direct investments made by Waterfront Toronto, our key research interview findings can generally be summarized as follows:

- Development of the eastern waterfront would not have been possible without the initial investments made by Waterfront Toronto. In fact, the organization is generally credited with "unlocking" the potential value of lands in this area. Without their presence, it is likely that lands in the eastern waterfront would have remained dormant for a long period.
- Specifically, Waterfront Toronto's recent investments in the Flood Protection Landform in the West Don Lands; the public realm (e.g., parks and open spaces); and basic municipal infrastructure, including roads and transit; have been most impactful in terms of **attracting additional private sector investment** to the waterfront. These specific investments are also expected to be the primary drivers of **future property value increases**.
- The expected property value impacts resulting from Waterfront Toronto's direct investments in the waterfront are yet to be fully realized, as a relatively limited amount of physical construction and development has occurred in the eastern waterfront to date. Once a more substantial amount of development has occurred, it is generally anticipated that **property values will increase substantially** relative to other areas of the downtown core and broader Central Toronto area.
- Moving forward, investments in transit infrastructure particularly LRT infrastructure along Queens Quay and Cherry Street, as currently proposed will be critical in helping to advance the future development of lands situated in the easternmost segments of the waterfront.

To further illustrate the above observations, the following provides a sample of some of the specific comments we received while conducting these interviews. For simplicity, they have been sorted into four separate categories, based on the following major themes:

• <u>Theme #1</u>: Making Waterfront Development Possible;

• <u>Theme #3</u>: Attracting Investment to the Waterfront; and,

• <u>Theme #2</u>: Adding Value to the Waterfront;

• <u>Theme #4</u>: Waterfront Toronto as an Organization



Theme #1: Making Waterfront Development Possible

"Waterfront Toronto has had a very significant impact in terms of accelerating development on the waterfront. These lands have been dormant for 25 years and without Waterfront Toronto, they would still be dormant." "...c

> "If not for [Waterfront Toronto], the waterfront would be a hap-hazard area with no community feel."

"...without Waterfront Toronto, we wouldn't have an over-riding vision for this area. Without consideration of the big picture, development would have been haphazard."

"Waterfront Toronto made it possible to develop on the waterfront."

"Waterfront Toronto made development more feasible, and provided context for development."

"...development was dependent on Flood Protection Landform investments made by [Waterfront Toronto]."

"In terms of the role of Waterfront Toronto, development in this area would not have happened without the organization."

> "[Waterfront Toronto's] involvement has 100% been a catalyst for development in the waterfront."

"...their presence has been critical. Without Waterfront Toronto's vision and leadership, development in this area would not have happened at all."



Theme #2: Adding Value to the Waterfront

"Waterfront Toronto is creating value by making initial investments with a long-term vision. Their vision is solid, their vision is bright."

> "The sum of individual buildings exceeds the total of their individual values. Neighborhood building adds value."

"[Waterfront Toronto] set a very high standard for design and design criteria. They set the bar high." "Waterfront Toronto has a long-term vision, which creates value."

"[Waterfront Toronto] set a very high standard for development and unlocked the value of this area to the extent that major players in the development industry want to become involved."

"Waterfront Toronto has pushed Toronto's architecture to achieve higher standards."

"Waterfront Toronto adds value to neighbourhoods."



Theme #3: Attracting Investment to the Waterfront

"[Waterfront Toronto] is attracting investment to a great location that was previously unseen and not thought about." "Waterfront Toronto b

"Waterfront Toronto provides a level of certainty and credibility to buyers."

"Waterfront Toronto has helped to create certainty in moving the vision for this area forward and building confidence amongst investors."

"Master-planned, multi-phased projects like these are more appealing to investors than stand alone projects. Purchasers are not just looking at the building itself, but rather the community as a whole and the supporting infrastructure."

Theme #4: Waterfront Toronto as an Organization

"...there has been more consultation with Waterfront Toronto. They asked for input, listened, and incorporated comments."

"...we are pioneering in this area, and rest our hats on Waterfront Toronto's plans."

"Waterfront Toronto is visionary. Without them, no-one would have taken the risks in implementing such a grand undertaking."

"Waterfront Toronto has been steadfast, particularly in creating a vision for this area."

"Waterfront Toronto is a very professional, trusting, transparent and well-run organization."



4.2 HISTORIC REAL ESTATE INFORMATION

The following section provides a detailed summary of recent changes in real estate values in the Toronto waterfront area relative to other parts of the Toronto Census Metropolitan Area (CMA), based on residential condominium resale data obtained by urbanMetrics for the period between 2004 and 2012. Given the preponderance of residential uses and development that has occurred on the waterfront and vicinity, this data was considered most reliable. There has not been sufficient activity in the non-residential sectors to provide for any credible time-series analysis.

Given that this data is limited to pre-defined real estate submarket areas, it is also important to note that the information presented in this section corresponds to the Central Waterfront or "Harbourfront" area of Toronto, which is defined as the geographic area extending from Stadium Road in the west to Yonge Street in the east; between Lake Shore Boulevard and Lake Ontario to the north and south, respectively.

4.2.1 TOTAL VALUE AND VOLUME OF RESALE TRANSACTIONS

Figure 4-1 illustrates the total value and the total number of residential condominium re-sale transactions recorded since 2004, for several pre-defined real estate districts within the Toronto CMA. These figures also include equivalent data for the aforementioned 'Harbourfront' area, which comprises part of the Central Toronto district. As shown, the total value of resale transactions within the Harbourfront area during this period was approximately \$526.6 Million, which represents 11.7% of the Central Toronto total of \$4.8 Billion. Similarly, the total number of transactions in this area was 1,626; representing approximately 12.3% of the Central Toronto total.

These are considerable shares given that the total land area contained within the Harbourfront sub-market is estimated at only 0.7 square kilometres (170 acres); whereas the total land area of the broader Central Toronto market is approximately 84.8 square kilometres (2,095 acres). As such, the Harbourfront sub-market represents a notably smaller portion (i.e., less than 1%) of the Central Toronto land area when compared to its corresponding share of the number and value of recent transactions (i.e., 12.3% and 11.7%, respectively). Similarly, it is also interesting to note that the total value/number of transactions in the Harbourfront area was generally more than half of the total value/number of transactions recorded in all of Etobicoke, Scarborough, and Mississauga; and actually exceeded that of York and East York during the indicated period.



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FIGURE 4-2: TOTAL VALUE AND NUMBER OF CONDOMINIUM RESALE TRANSACTIONS BY DISTRICT (2004 - 2012)



SOURCE: urbanMetrics inc., based on historic real estate transaction data obtained from Urbanation (2004-2012).



4.2.2 PRICE PER SQUARE FOOT (\$PSF) LEVELS

Figure 4-2 provides a comparison of recent changes in the total value of condominium resale transactions between 2004 and 2012, on a square footage basis, for the Harbourfront, City of Toronto, and the entire Toronto CMA. Based on these figures, it is evident that resale prices have increased steadily throughout the entire CMA since 2004, with only a brief slow-down experienced during the 2008/2009 period; likely as a result of the recent recession. As would generally be expected for this market, the data also indicates that average residential resale prices were consistently higher in the Harbourfront area relative to the averages for the entire City of Toronto and Toronto CMA. As of 2012, for example, the average price of condominiums in the Harbourfront was \$512 per square foot, whereas the average prices for the entire City and CMA were slightly lower at \$426 and \$395 per square foot, respectively.



FIGURE 4-3: AVERAGE PRICE PER SQUARE FOOT – HARBOURFRONT, CITY & CMA (2004 – 2012)

SOURCE: urbanMetrics inc., based on historic real estate transaction data obtained from Urbanation (2004-2012).

Given that the primary purpose of this analysis is to determine how property values have changed over time, however, it is more important to consider the rate of increase of these condominium resale prices over the indicated period. Within the Harbourfront area, for example, resale prices increased from approximately \$306 per square foot in 2004 to \$512 per square foot in 2012, representing a period growth rate of 67.3% and an average annual growth rate of 8.4%. By contrast, price per square foot levels increased at rates of only 7.8% and 7.7% per annum across the entire City and CMA, respectively.



Figure 4-3 illustrates similar information to that presented in Figure 2-2, but also includes equivalent data for each of the other major submarkets identified within the Toronto CMA (e.g., Central Toronto, East York, Etobicoke, North York, Scarborough and York). As shown, the Harbourfront area generally outperformed all of the other sub-markets on a price per square foot basis, with the exception of the Central Toronto area, which was only slightly higher during the second half of the indicated period. Furthermore, it is important to note that – in addition to the Harbourfront area – the Central Toronto area contains a number of high profile residential neighbourhoods, such as Bloor-Yorkville, the Annex, as well as various other mid-town communities, which typically boost average sale prices in this district. More importantly, however, it is interesting to note that – in addition to representing the highest resale prices overall – the rates at which these prices increased in the Harbourfront and Central Toronto area were as high, or higher, than anywhere else in the Toronto CMA.



FIGURE 4-4: AVERAGE PRICE PER SQUARE FOOT BY SUBMARKET (2004 – 2012)

SOURCE: urbanMetrics inc., based on historic real estate transaction data obtained from Urbanation (2004-2012).



4.2.3 REAL ESTATE VALUE ANALYSIS SUMMARY

Based on the information presented in this section, the following provides a summary of our key research findings relating to recent property value changes in the Harbourfront area relative to other parts of the City of Toronto and the broader Toronto CMA.

- Although the Harbourfront sub-market represents only a small portion of the total land area in Central Toronto, it generally accounts for a disproportionately high share of both the number and value of residential condominium resale transactions recorded since 2004 (i.e., 12.3% and 11.7%, respectively).
- In addition to representing the area in which condominium resale prices are historically highest in the City (i.e., on a price per square foot basis), it is evident that residential resale prices have increased at a faster rate in the Harbourfront and Central Toronto areas when compared to other parts of the Toronto CMA.

All other things being equal, therefore, it is reasonable to assume that some factor – or combination of factors – unique to the Harbourfront and downtown core have been driving property values upward in recent years. In particular, this is illustrated by the fact that residential resale prices in the Harbourfront and Central Toronto submarkets have increased at a faster rate relative to other areas of the City in recent years. One of the most notable factors contributing to this change have been the recent shift towards urban intensification and the resulting increase in demand for properties located in the core of the City. In addition, however, it is our opinion that the recent investments made by Waterfront Toronto into the revitalization of the City's waterfront – particularly those relating to the addition of new amenities in the Central Waterfront district (e.g., wave decks, public spaces, etc.) – have also played a major role in impacting property values in this area.

Moreover, it is important to note that the property value impacts likely to result from the various investments made by Waterfront Toronto to date are yet to be fully realized, as a large portion of the eastern waterfront (i.e., East Bayfront and West Don Lands) currently remains undeveloped, or has only recently entered the construction phase of development. Based on the expenditure data considered in the first phase of this study, for example, the majority of the organization's investments have been concentrated in these relatively undeveloped areas and therefore the impacts of these improvements are yet to be reflected in historic real estate data. Similarly, as discussed in the previous section of this study, the results of our qualitative research interviews generally confirm that the most significant land value increases in this area are yet to occur. Overall, therefore, we anticipate that property values will increase more substantially once all of the current and planned development projects in the waterfront are complete.



4.3 HISTORIC LAND VALUE INFORMATION

Figure 4-5 summarizes the value of vacant residential land transactions between January 2001 and May 2012 for the Waterfront Area and other parts of Central Toronto defined as the old City of Toronto. The Waterfront would include both lands controlled by Waterfront Toronto, as well as, other lands identified in Section 2.

We would caution that the values should be treated carefully, without detailed information regarding the characteristics of each site and the nature of each transaction. This is particularly true of the waterfront, where in most years the number of transactions and acreage transacted is very low.

In keeping with general market trends, there has been a very notable rise in vacant residential values over the study period, with the exception of declines in 2009/2010, likely due to the effects of the North American financial crises, but followed by a pronounced recovery.

The average value per acre in the Waterfront has increased from \$2.2 million in 2001 to some \$17.1 million in 2011 and \$18.1 million in the first part of 2012.

Waterfront values, however, have tracked consistently below those of other parts of Central Toronto since the early 2000's. In part, this is attributable to the downtown condominium market, as well as certain submarkets, where values have seen exceptional increases over the past decade. Furthermore, the density and scale of development along the Waterfront has been carefully planned to provide a livable environment, differentiating itself from the very high density development being undertaken in the downtown and other selected submarkets.

Furthermore, based on discussions with the development community, the ultimate value increase of Waterfront Toronto's investments have yet to be fully realized. As public realm development becomes more visible and the initial pioneering private developments begin to materialize over the next few years, land values in the Waterfront will likely be further bolstered.



FIGURE 4-5: VACANT RESIDENTIAL LAND VALUES, WATERFRONT AND OTHER CENTRAL TORONTO

	# of Land Transactions		Acreage		Value of Land Transactions			Value Pe			Acre	
	Waterfront	Other Central Toronto	Waterfront	Other Central Toronto	v	Vaterfront	C	Other Central Toronto	,	Naterfront	0	ther Central Toronto
2001	5	27	23.3	36.4	\$	52,200,000	\$	117,000,000	\$	2,240,000	\$	3,214,000
2002	3	39	5.2	66.6	\$	53,400,000	\$	183,000,000	\$	10,269,000	\$	2,748,000
2003	4	39	3.5	27.6	\$	17,300,000	\$	189,000,000	\$	4,943,000	\$	6,848,000
2004	2	39	15.0	45.0	\$	23,500,000	\$	219,000,000	\$	1,567,000	\$	4,867,000
2005	2	44	8.6	33.2	\$	57,100,000	\$	288,000,000	\$	6,640,000	\$	8,675,000
2006	5	35	2.2	23.7	\$	15,300,000	\$	285,000,000	\$	6,955,000	\$	12,025,000
2007	12	51	10.3	26.0	\$	59,300,000	\$	374,000,000	\$	5,757,000	\$	14,385,000
2008	4	50	8.7	24.0	\$	57,600,000	\$	469,000,000	\$	6,621,000	\$	19,542,000
2009	3	24	3.9	16.6	\$	41,600,000	\$	320,000,000	\$	10,667,000	\$	19,277,000
2010	7	53	4.6	45.6	\$	21,600,000	\$	493,000,000	\$	4,696,000	\$	10,811,000
2011	5	70	6.6	31.3	\$	112,700,000	\$	772,000,000	\$	17,076,000	\$	24,665,000
2012 (Part)	2	34	0.8	17.0	\$	14,500,000	\$	409,000,000	\$	18,125,000	\$	24,059,000



SOURCE: urbanMetrics inc., based on data compiled by RealNet Canada.

Figure 4-6 summarizes the price per buildable square foot for the vacant land transactions based on development proposals.



With respect to the Waterfront, there has been some fluctuation over time, with the 2011 rate of \$39 at approximately the average over the period, but double the rate recorded in 2001¹⁰.

As with the price per acre, the price per buildable foot in the Waterfront has generally been tracking below that of the other Central Toronto Area.

	# of Land	Transactions	Value per Buildable Area (SF)				
		Other Central		Other Central			
	Waterfront	Toronto	Waterfront	Toronto			
2001	5	27	\$21	\$37			
2002	3	39	\$48	\$43			
2003	4	39	\$41	\$61			
2004	2	39	\$39	\$48			
2005	2	44	\$37	\$34			
2006	5	35	\$32	\$62			
2007	12	51	\$34	\$62			
2008	4	50	\$27	\$52			
2009	3	24	\$23	\$62			
2010	7	53	\$57	\$47			



SOURCE: urbanMetrics inc., based on data compiled by RealNet Canada.

¹⁰ Based on data compiled by RealNet Canada (2012).



In summary, although caution should be taken with this analysis, there has clearly been a significant increase in residential land values in the Waterfront between 2001 and the present, which are well in excess of inflation. While values are still below those in other "hot" residential markets, it is likely that the true value impact of Waterfront Toronto's investment has yet to be realized.

4.4 HISTORIC BUILDING PERMIT INFORMATION

Similar to the analysis presented in the previous section, the following provides an overview of recent changes in the annual value and volume of construction activity in the City's waterfront area, relative to other parts of Toronto. The data considered in this section is based exclusively on building permit statistics obtained from the City of Toronto's Building Division for the period between 2000 and 2011; the most recent full year for which this type of data is currently available. In our opinion, this data provides an accurate representation of the actual impacts of Waterfront Toronto's recent investments because the information considered directly reflects the various development projects that have either been completed in recent years, or are currently under construction in the various waterfront districts (e.g., the Corus Quay and George Brown College developments in the East Bayfront).

Specifically, this analysis considered such variables as the total number of permits issued each year and the total construction value associated with these permits. From this information, we have also determined the average value per permit on an annual basis, as well as the average number and value of permits issued on a per unit land area basis (i.e., per square kilometre). The detailed statistics from which these figures are derived are summarized in Figures C-1, C-2 and C-3 in Appendix C at the end of this document.

The analysis presented herein focuses on building permits issued within the Study Area identified in Section 2.1, which includes all of the major waterfront development precincts (i.e., East Bayfront, West Don Lands, Lower Don Lands, and Central Waterfront), as well the various adjoining communities located in the immediate vicinity of the waterfront. For the purposes of this analysis, this Study Area represents the geographic area in which recent construction activity has likely been influenced – at least in part – by the revitalization investments made by Waterfront Toronto.

In addition to the relatively localized waterfront area, this analysis also considers similar building permit data for the Old City of Toronto and the current City of Toronto in order to provide a baseline measure of recent development activity in the City. These two areas are defined as follows:

• **City of Toronto** – represents the geographic area contained by the current municipal boundaries of the City of Toronto, generally extending between Etobicoke Creek and Highway 427 in the west; Steeles Avenue in the north; Pickering Town Line and the Rouge River in the east, and Lake Ontario in the south.



• **Old City of Toronto** – represents the central portion of the current City of Toronto, as delineated by the former municipal boundaries of the Old City of Toronto (i.e., pre-amalgamation).

4.4.1 NUMBER OF PERMITS

Based on the detailed building permit statistics summarized in Appendix C, the City of Toronto issued a total of 401,266 building permits during the period between 2000 and 2011. Of this total, an estimated 189,851 (47.3%) were issued in the Old City of Toronto and approximately 2,824 (0.7%) were issued in the Waterfront Area (i.e., the Study Area identified in Figure 2-1).

In order to gain a better understanding of how the level of building activity within each of these areas has changed over time, however, it is more important to consider the rate at which the number of permits issued each year has grown. Within the Waterfront Area, for example, a total of 206 permits were issued in 2000, whereas 335 permits were issued in 2011. This represents an overall growth rate of more than 62% for the entire period; or approximately 5.7% each year. By comparison, the number of permits issued annually increased by only 26% and 32% in the central part of the City and the broader City of Toronto during this same period, respectively.



FIGURE 4-7: PERCENTAGE CHANGE IN ANNUAL NUMBER OF PERMITS (2000 - 2011)

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).

Although these figures clearly indicate that the volume of development in the waterfront has increased at a faster rate than elsewhere in the City (i.e., relative to 2001 levels) it is important to note that they do not account for the actual value of recent construction activity; nor



the intensity of investment in the waterfront on a land area basis. These types of factors are discussed in more detail in the following sections.

4.4.2 VALUE OF PERMITS

As summarized in Appendix C, the 401,266 building permits issued in the City of Toronto between 2000 and 2011 were associated with a total construction value of more than \$56.4 Billion. Of this total, the Old City of Toronto accounted for approximately \$31.7 Billion (56.2%), while the Waterfront Area represented approximately \$1.7 Billion (3.1%). This is more than four times the Waterfront Area's corresponding share of the total number of permits issued, which suggests that investments in this area have been more substantial on a per-permit basis.

Based on the results of our analysis, the annual value of building permits increased at more than triple the City average during this period in the Waterfront Area. As summarized in Figure 4-8, for example, the total value of building permits issued increased from \$45.33 Million in 2000 to \$357.5 Million in 2011; an approximate 689% increase. On average, this represents growth of more than 62% per annum. By contrast, the annual value of construction increased at rates of only 195% and 155% in the Old City of Toronto and current City of Toronto, respectively.



FIGURE 4-8: PERCENTAGE CHANGE IN TOTAL VALUE OF PERMITS (2000 - 2011)

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



4.4.3 AVERAGE VALUE PER PERMIT

Based on the information presented in the previous two sections, it is also useful to observe trends in the average value per permit over the past decade. To do this, we simply divided the total *value* of permits issued in a given year by the corresponding *number* of permits issued that year. The results of these calculations are illustrated in Figure 4-9. As shown, the average value of permits issued in the Waterfront Area was typically much higher than the average for the entire City of Toronto during this time period. As of 2011, the average value of permits issued in the Waterfront Area was approximately \$1.07 million; more than four times higher than the current Toronto average.

FIGURE 4-9: AVERAGE VALUE PER PERMIT (2000 - 2011)



SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



As illustrated by the trend lines shown in Figure 4-9, it is also interesting to note that permit values in the Waterfront Area have generally increased at a faster rate in recent years when compared to the growth exhibited by the City as a whole. Figure 4-10 provides a detailed summary of the growth rates experienced in each of these areas between 2000 and 2011. As shown, the average value of permits issued in the waterfront in 2011 was more than 385% higher than the average value of those issued in 2000. This represents more than four times the period growth rate for the entire City of Toronto (93.5%) and nearly three times the period growth rate for the Old City of Toronto (134.5%).



FIGURE 4-10: PERCENTAGE CHANGE IN AVERAGE VALUE PER PERMIT (2000 - 2011)

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).

4.4.4 LAND AREA CONSIDERATIONS

When considering the above data on a land area basis, the substantial growth in the value and volume of building activity in the Waterfront Area is even more evident relative to other parts of the City. Based on the geographic area delineated in Figure 2-1, for example, the Waterfront Area considered in our analysis includes a total land area of approximately 3.83 square kilometres. This represents less than 3.8% and 0.7% of the total land area contained within the municipal boundaries of the former and current City of Toronto, respectively.

Using these land area estimates as inputs to our analysis, we have calculated the average *number* of permits issued per square kilometre and the average *value* of permits issued per square kilometre, for each of the three areas. The results of these calculations are summarized in Figures 4-11 and 4-12, respectively.



As shown in Figure 4-11, the average number of permits issued per square kilometre was generally lower than the corresponding average for the Old City of Toronto, yet higher than that for the entire City of Toronto. In 2011, for example, approximately 88 permits per square kilometre were issued in the Waterfront Area compared to more than 171 per square kilometre in the Old City of Toronto and exactly 57 per square kilometre in the broader City of Toronto. More importantly, however, we note that – with the exception of moderate fluctuations during the indicated period – the number of permits issued on a per square kilometre basis has generally increased steadily in the Waterfront Area in recent years. In fact, as illustrated by the dotted trend lines included in Figure 4-8, it is evident that the number of permits issued per square kilometre increased at a slightly faster rate in the Waterfront Area than either of the other two areas considered.



FIGURE 4-11: AVERAGE NUMBER OF PERMITS PER SQUARE KILOMETRE (2000 - 2011)

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



Similarly, the graph in Figure 4-12 illustrates relative changes in the average value of building permits on a per square kilometre basis for the same period (i.e., 2000 to 2011). As shown, relatively little change was experienced throughout the City on average, however the value of permits increased substantially in both the Waterfront Area and Old City of Toronto. Furthermore, although the Waterfront Area appears to have experienced somewhat greater fluctuation during this period, it also exhibited the most rapid rate of growth overall. This growth was particularly evident in recent years (i.e., 2009 and onwards); likely as a result of the movement of various waterfront projects from the conceptualization and design phases through to construction and implementation. The relative growth rates for each of these three areas are illustrated most clearly by the dotted trend lines shown in Figure 4-9.

FIGURE 4-12: AVERAGE VALUE OF PERMITS PER SQUARE KILOMETRE (2000 - 2011)



SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



4.4.5 BUILDING PERMIT SUMMARY

Overall, the information presented in this section confirms that the value and intensity of construction investment has generally been much greater in the Waterfront Area – both on a per-permit and per-kilometre basis – relative to the Old City and City averages in recent years. Similarly, it is also evident that the rate at which these types of investments are increasing is notably higher in the Waterfront Area relative to the average growth rates calculated for the entire City of Toronto.

In our opinion, the second of these two findings is most relevant to this study, as it indicates that something unique to the Waterfront Area is stimulating investment to a greater extent than in other parts of the City; particularly in recent years. As noted in the previous section of the study, this change has likely resulted from a variety of contributing factors; of which Waterfront Toronto's direct investment into revitalization projects has certainly been one.

4.5 SUMMARY OF CHANGES IN LAND AND REAL ESTATE VALUE

Based on all of the research and analyses presented in the second phase of this study, the following summarizes our key research findings.

- Despite representing only a small portion of the total land area in the City of Toronto, the central waterfront, or 'Harbourfront' submarket, typically accounts for a much larger share of the City's total number and total value of residential condominium resale transactions (i.e., more than one tenth of the City total in both cases). Moreover, on a square footage basis, Harbourfront resale prices are generally among the highest in the entire Toronto CMA, on average.
- Our review of historic changes in property values indicates that the rate at which condominium resale prices have increased in recent years is somewhat higher in the central waterfront area when compared to elsewhere in the City, on average. Although this change was likely driven by a variety of different factors, it is our opinion that recent waterfront revitalization efforts have been one of the major contributing factors.
- Based on our review of historic changes in the number and value of building permits issued in the City of Toronto, we have determined that the value of investment both on a per permit and a per kilometre basis is generally higher in the broader waterfront area relative to the average for the City as a whole. Similarly, both the value and volume of construction investment has increased at a much faster rate in recent years than elsewhere in Toronto. All other things being equal, therefore, it is evident that something unique to the waterfront area has recently been stimulating investment to a greater extent than in other parts of the City.



- Given that the aforementioned changes in property values and construction activity generally began at the same time as the inception of Waterfront Toronto, it is likely that their direct investments in the City's waterfront have played an integral role in impacting local real estate values and stimulating investment in this area.
- The results of our qualitative research interviews confirm that these recent impacts are, at least in part, attributable to the direct investments made by Waterfront Toronto. In fact, the majority of the individuals that participated in our research interviews agreed that the development of the eastern waterfront would not have been possible without the initial infrastructure investments made by the organization. It can be also argued, therefore, that Waterfront Toronto is directly responsible for a large share of the economic benefits derived from recent and planned development in this area.
- Based on the trends observed in the historic real estate and building permit data, as well as our discussions with local real estate professionals, it is important to note that land and real estate values in the waterfront area are generally expected to increase substantially once a greater amount of development has occurred in this area (i.e., once the area has had a chance to mature into the market). As such, we note that the actual values of recent investments made by Waterfront Toronto are yet to be fully realized.

Overall, therefore, it is evident that the direct investments made by Waterfront Toronto into the revitalization of the City's waterfront have undoubtedly impacted property values and investment activity in and around the various waterfront districts. Similarly, these investments have served to further stimulate and attract additional private sector investment throughout the broader waterfront area and in adjoining neighbourhoods in recent years. Moving forward, we anticipate that similar economic benefits will be derived from the organization's future investment in the waterfront, and that the full value of these investments will become increasingly evident over time.


5 PHASE 3 (A) – PRIVATE SECTOR ATTRACTION

As discussed in phase two of the analysis, through its planning, design, and development of key infrastructure, Waterfront Toronto has played a significant role in creating economic value in the Toronto waterfront. Interviews with Toronto's development community have confirmed that if not for the planning, land assembly, remediation and infrastructure construction by Waterfront Toronto, many parts of the waterfront would continue to languish as vacant and underutilized brownfield sites. This is particularly true of the two newest neighbourhoods under development; East Bayfront and West Don Lands. Although part of longer term planning, the Lower Don Lands have also attracted development interest largely for the visioning by Waterfront Toronto.

The following provides an overview of the third and final phase of our analysis, which involved a review and analysis of the various economic and fiscal benefits generated by the development of some 18 separate real estate development blocks on publicly-controlled lands in the East Bayfront precinct, plus four additional privately owned development blocks and the Corus building in the East Bayfront; 28 real estate development blocks on public lands in the West Don Lands; and 39 developments identified in the various adjoining neighbourhoods situated near the waterfront that have benefited from Waterfront Toronto's investments.

As summarized in Section 1.2, this analysis considered:

- Development scale and corresponding construction value;
- On-site commercial and industrial employment opportunities created by waterfront development;
- The real estate value "unlocked" by Waterfront Toronto;
- Property taxes, development charges and other revenues generated for the City through development; and,
- The economic impacts of construction activity generated through development, including: *value added to the City's economy; employment; labour income;* and *public sector revenues.*

Other benefits, which have not been considered in this study – but may be included in future updates – include:

- Section 37 amenities and funding, in terms of community benefits and economic contributions;
- More detailed elements of project design, such as transit linkages, publicly accessible open space, and community facilities; and,



• Environmental design elements that might not otherwise be incorporated into privately initiated developments.

5.1 DEVELOPMENT PROJECTS

For the purposes of this analysis, we have categorized all of the development projects analyzed as either *Waterfront Toronto Development Projects* (i.e., lands controlled directly by Waterfront Toronto) or as *Development Projects influenced by Waterfront Toronto activities* (i.e., all other privately-owned areas of the waterfront). The latter category was then subdivided into *Short Term* and *Long Term* projects. These projects have also been categorized by geographic location, based on the specific waterfront development precincts and adjoining neighborhoods identified in Sections 2.2 and 2.3. They include:

Waterfront Development Projects:

- East Bayfront (Part)
- West Don Lands

Development Influenced by Waterfront Toronto Activities (Short Term):

- East Bayfront (Corus Key and Privately Owned Lands)
- Central Waterfront
- Lower Don Lands
- Adjoining Neighbourhoods Selected Projects in Yonge and Queens Quay; Distillery District and Corktown; and Don Valley and Lake Shore (Riverdale)

Development Influenced by Waterfront Toronto Activities (Long Term):

- Lower Don Lands
- Adjoining Neighbourhoods Selected Projects in Yonge and Queens Quay and Don Valley and Lake Shore (Riverdale)

The individual projects influenced by Waterfront Toronto activities have been included in Appendix D, together with their rationale for inclusion. The following provides an overview of the development potential of each of these sub-sections of the broader waterfront, including examples of some of the most notable development projects.



5.1.1 WATERFRONT TORONTO DEVELOPMENT PROJECTS

5.1.1.1 EAST BAYFRONT

As outlined in Section 2.2, in total, East Bayfront includes some 18 separate development blocks on publically owned lands and 4 additional privately-owned development blocks, plus the recently completed Corus Quay complex. This area also includes the George Brown College Waterfront Campus, which is expected to accommodate approximately 3,500 full-time students.

The Waterfront Toronto development envelopes all of the lands in East Bayfront, with the exception of Corus Quay and the privately owned lands on the 4 northwest blocks. Future projects in this area include the Monde development, which is to be developed by Great Gulf Group of Companies (a mixed-use development comprising residential, retail, office/employment and institutional uses), as well as the Bayside development by Hines, which represents the single largest development in East Bayfront.

As illustrated in Figure 5-1, the development blocks located in East Bayfront can generally be grouped into one of the following five major project areas: *Parkside, Quayside, Dockside, Bayside* and the remaining *Private Lands*, which are situated in the north-west quadrant of the precinct. The Corus building, which is situated within the Dockside precinct, is a TEDCO project and has been classified as a private development.

The lands comprising East Bayfront are a remnant of Toronto's industrial past and have been under utilized for many years. Developers in the area have indicated that the new urban community under development could never have happened if not for the land assembly, coordination and planning by Waterfront Toronto. Similarly, these developers have also generally indicated that any development which might have occurred in the area in the future would have otherwise been disjointed, significantly delayed, and built to much lower urban design standards. Moreover, there would have been minimal likelihood of attracting major institutional anchor uses, such as Corus and George Brown, together with large scale office projects.







FIGURE 5-1: MAP OF EAST BAYFRONT DEVELOPMENT BLOCKS (WATERFRONT TORONTO DEVELOPMENT PROJECTS)

Source: urbanMetrics, based on images provided by Waterfront Toronto.



Overall, the development of East Bayfront and the associated economic benefits that continue to be generated by it would generally not have occurred if not for the involvement of Waterfront Toronto.

As summarized in Figure 5-4, the development of public lands in the East Bayfront (excluding private lands and Corus Quay) will ultimately contain some:

- 815,000 square feet of office space;
- 517,000 square feet of institutional space;
- 106,000 square feet of retail/service commercial space;
- 3,376 market residential units; and,
- 819 affordable residential units.

5.1.1.2 WEST DON LANDS

Similarly to the East Bayfront, the West Don Lands are nearly exclusively comprised of public lands controlled directly by Waterfront Toronto. This precinct includes approximately 28 separate development blocks, including the Pan Am Games Athletes Village, the Toronto Community Housing (TCH) complex, as well as the area's first private sector development (i.e., Urban Capital's "River City"), which is currently under construction.

Figure 5-2 illustrates the grouping of these individual development blocks by major project area, including: *River City, Toronto Community Housing*, and the *Pan Am Games Athletes Village*, which is being developed by Dundee Kilmer.



FIGURE 5-2: MAP OF WEST DON LANDS DEVELOPMENT BLOCKS



Source: Waterfront Toronto



As summarized in Figure 5-4, the West Don Lands precinct will ultimately include:

- 420,000 square feet of institutional space (i.e., George Brown College and YMCA facilities);
- 127,000 square feet of retail and service commercial space;
- 196,000 square feet of office space;
- 4,320 market-based residential units;
- 1,251 affordable residential units; and,
- 257 rooms to house George Brown College students.

5.1.2 DEVELOPMENT PROJECTS RESULTING FROM WATERFRONT TORONTO ACTIVITIES (SHORT AND LONG TERM)

In addition to the major waterfront development projects identified in the previous section, we have also analyzed a number of recent and proposed development projects situated on private lands in the Central Waterfront, Lower Don Lands, and the adjoining neighbourhoods.

Most of these privately-owned properties are located in proximity to the areas where Waterfront Toronto has invested heavily into community infrastructure and will benefit directly from the new amenities and services established in this area, including: parks and open spaces; pedestrian oriented commercial areas; waterfront and riverfront access; transit; the revitalization of brownfield lands; flood protection and remediation; and other public amenities. In fact, much of the development in the vicinity of West Don Lands could not proceed if not for the flood protection facilities constructed by Waterfront Toronto.

To varying degrees, these investments have stimulated development in nearby neighbourhoods. Specifically, some 39 separate development projects were identified on private lands in proximity to Waterfront Toronto's primary investment areas. The exact locations of these developments relative to the East Bayfront and West Don Lands have been illustrated in Figure 5-3. As shown, these projects have also been colour-coded by major land use type.

In general, these short term projects are those which have recently been constructed (as in the case of Corus Entertainment); are currently in various stages of planning; or are situated within an existing Waterfront Toronto precinct.

5.1.2.1 EAST BAYFRONT

In addition to the publically owned lands in East Bayfront, there are four blocks of privately owned lands, as well as the recently constructed Corus Entertainment building (i.e., Corus Quay).



The eventual development of the private lands in East Bayfront could ultimately yield some:

- 580,000 square feet of office space;
- 85,000 square feet of retail/service commercial space;
- 3,059 market residential units; and,
- 765 affordable residential units.

5.1.2.2 CENTRAL WATERFRONT

Five future development projects have been identified in the Central Waterfront precinct; including Menkes Developments' 90 Harbour Street development. As per the planning application, 90 Harbour Street would feature a 31-storey office building and two 70-storey residential towers containing over 1,400 units. Similarly, Phase III of Waterpark Place by Oxford at 85 Harbour Street is also to comprise a 30-storey office tower.

Based on planning applications and information provided by individual developers, the various projects identified in the Central Waterfront will results in an estimated:

- 1.6 million square feet of office space;
- 245,000 square feet of retail and service commercial space; and,
- 3,305 residential units.

5.1.2.3 LOWER DON LANDS

There are currently two major private development proposals in the north-western portion of the Lower Don Lands in the vicinity of Lake Shore Boulevard and Cherry Street. The most prominent, which is known as the 3-C Lake Shore project, is a joint venture between Cityzen Development Group, Castlepoint Realty, and Continental Ventures Realty. As currently proposed, this project would include some 340,000 square feet of office space, 60,000 square feet of retail space, and 2,000 residential units. This is the only *Long Term* project in the Lower Don Lands.

Further east of this site at 351 Lake Shore Boulevard East, a smaller development is proposed on the former site of the Victory Soya Mills. An application has been submitted for 21,000 square feet of office space and 986 residential units on this site.

In total, seven separate development projects were identified in the Lower Don Lands precinct, of which six are *Short Term* projects. Collectively, the seven development projects are expected to generate a total of:



- 336,000 square feet of office space;
- 248,000 square feet of retail/service commercial space; and,
- Approximately 4,000 new residential units.

5.1.3 ADJOINING NEIGHBOURHOODS

Some 27 separate development projects were identified in the three adjoining neighbourhoods defined in Section 2.3, including Yonge and Queens Quay;, Distillery District and Corktown; and Don Valley and Lake Shore (Riverdale). All of these development projects are located proximal to the Central Waterfront, West Don Lands and East Bayfront precincts, and will therefore benefit from the evolution of these areas into vibrant neighbourhoods, including high quality open space opportunities, community amenities and vibrant shopping districts. Many of the identified projects are relatively small to medium-sized infill developments, although there are a few exceptions.

One of the most notable developments in these neighbourhoods would occur on the former site of the Lever Brothers factory (i.e., the Unilever factor and warehouse site); situated directly across the Don River from the Lower Don Lands and in close proximity to the West Don Lands. The 28.5 acre site is to be redeveloped by First Gulf and would be strategically located at the interchange of the Don Valley Parkway, the Gardiner Expressway, and the Don River. As per preliminary plans by the developer, the project could contain more than 1,000,000 square feet of non-residential development floor area.

Some of the other major proposed and ongoing development projects in these areas include Cityzen Development's Pier 27 residential condominium development, which is situated at the foot of Yonge Street on the water's edge; as well as the Distillery District's Gooderham condominium development, which is currently under construction and represents the eastern extension of the district towards the edge of the West Don lands.

5.1.3.1 SHORT TERM PROJECTS IN ADJOINING NEIGHBOURHOODS

Projects identified as short term, within the adjoining neighbourhoods are estimated to result in some

- 171,000 square feet of office space;
- 438,000 square feet of retail/service commercial space;
- 136,000 square feet of industrial and institutional space; and,
- 2,714 residential units.



5.1.3.2 LONG TERM PROJECTS IN ADJOINING NEIGHBOURHOODS

Long term projects are those that are more speculative in nature and are in very preliminary planning stages. These include projects, such as the Lever Brothers site redevelopment, the potential redevelopment of the Toronto Star building, and the potential redevelopment of the LCBO head office site.

The estimated development of these projects would result in:

- 1,350,000 square feet of office space;
- 400,000 square feet of retail/services space;
- 8,500 square feet of industrial space; and,
- 2,822 residential units.





FIGURE 5-3: DEVELOPMENT PROJECTS RESULTING FROM WATERFRONT TORONTO ACTIVITIES (SHORT AND LONG TERM)



5.2 DEVELOPMENT SUMMARY

Figure 5-4 summarizes the development potential of the various waterfront properties identified above. The development potential of each of these properties has been established using a variety of sources, including:

- Known developments statistics, based on plans prepared by private developers and Waterfront Toronto;
- Planning applications and City of Toronto staff reports;
- An assessment of zoning and Official Plan regulations applicable to each site and surrounding areas; and,
- Assessment of surrounding land uses, development potential and transportation characteristics.

The development potential for each site within East Bayfront and West Don Lands has been confirmed through discussions with Waterfront Toronto officials. As indicated in Figure 5-4, the *Waterfront Toronto Development Projects* will ultimately yield some 10,023 residential units, 1 million square feet of office space, some 233,000 square feet of retail and service commercial space, plus approximately 940,000 square feet of institutional space (i.e., George Brown College and YMCA facilities).

Beyond these lands, the other waterfront development precincts and adjoining neighbourhoods influenced by Waterfront Toronto's investments will generate some 16,660 residential units, 1.4 million square feet of retail space, 4 million square feet of office space, and some 150,000 square feet of institutional and industrial space.

Combined, the waterfront and vicinity lands will yield almost 27,000 residential units, 1.6 million square feet of retail/service commercial space, 5.1 million square feet of office space, and 1.1 million square feet of institutional and industrial space. These figures represent the total development space contained within the Study Area identified in Section 2-1.



FIGURE 5-4: WATERFRONT DEVELOPMENT SUMMARY

		Square F	eet Gross Floor	Area (GFA)			1	Number of Residential Uni	its	
Precinct/Neighbourhood	Retail	Office	Institutional	Industrial	Residential	Total GFA	Market Residential	Affordable Residential	Institutional Rooms	Total Units
			Waterfront T	oronto Devel	opment Projects					
East Bayfront*	106,293	814,814	517,181	-	3,713,836	5,152,124	3,376	819	-	4,195
Bayside**	79,416	360,782	-	-	1,524,455	1,964,653	1,465	379	-	1,844
Dockside	14,391	437,176	517,181	-	-	968,748	-	-	-	-
George Brown College**	14,391	23,239	302,181	-	-	339,811	-	-	-	-
All other Dockside	-	413,937	215,000	-	-	628,937	-	-	-	-
Parkside (Monde Condominiums)**	12,486	16,856	-	-	510,995	540,337	516	-	-	516
Quayside	-	-	-	-	1,678,386	1,678,386	1,395	440	-	1,835
West Don Lands	127,105	195,905	419,941	-	4,835,853	5,578,804	4,320	1,251	257	5,828
River City**	4,391	-	-	-	803,944.00	808,335	999	-	-	999
Toronto Community Housing**	5,178	-	-	-	198,262.00	203,440	-	243	-	243
Pan Am Athlete's Village**	48,000	-	270,647	-	1,563,183.00	1,881,830	1,799	255	257	2,311
Future West Don Lands	69,536	195,905	149,294	-	2,270,464.00	2,685,199	1,522	753	-	2,275
SUBTOTAL- Waterfront Toronto Development Projects	233,398	1,010,719	937,122	-	8,549,689	10,730,928	7,696	2,070	257	10,023
	Developm	ent Projects r	esulting from V	Vaterfront To	oronto activities (S	Short Term)				
East Bayfront*	84,500	580,500	-	-	3,497,042	4,162,042	3,059	765	-	3,823
Corus (TEDCO)	4,500	470,500	-	-	-	475,000	-	-	-	-
All other East Bayfront (Private)	80,000	110,000	-	-	3,497,042	3,687,042	3,059	765	-	3,823
Central Waterfront	244,858	1,641,195	-	-	2,747,166	4,633,219	3,305	-	-	3,305
Lower Don Lands	97,043	186,339	-	3,541	2,075,440	2,362,363	1,995	-	-	1,995
Adjoining Neighbourhoods	437,612	171,393	5,726	130,857	2,634,960	3,380,549	2,714	-	-	2,714
Distillery District and Corktown	307,681	5,048	-	-	1,243,995	1,556,724	1,306	-	-	1,306
Don Valley and Lake Shore (Riverdale)	106,089	166,345	-	130,857	739,889	1,143,180	801	-	-	801
Yonge and Queens Quay	23,842	-	5,726	-	651,077	680,645	607	-	-	607
SUBTOTAL- Short Term Development Projects***	864,013	2,579,427	5,726	134,398	10,954,608	14,538,173	11,073	765	-	11,837
	Dev	velopment Pro	ojects resulting	from Water	ront Toronto activ	vities (Long Tei	·m)			
Adjoining Neighbourhoods	400,000	1,350,000	-	8,500	2,480,000	4,238,500	2,822	-	-	2,822
Don Valley and Lake Shore (Riverdale)	200,000	800,000	-	-	-	1,000,000	-	-	-	-
Yonge and Queens Quay	200,000	550,000	-	8,500	2,480,000	3,238,500	2,822	-	-	2,822
Lower Don Lands	150,000	150,000	-	-	2,200,000	2,500,000	2,000	-	-	2,000
SUBTOTAL- Long Term Development Projects***	550,000	1,500,000	-	8,500	4,680,000	6,738,500	4,822	-	-	4,822
GRAND TOTAL	1,647,411	5,090,146	942,848	142,898	24,184,297	32,007,601	23,591	2,835	257	26,683
*East Bayfront Total	190,793	1,395,314	517,181	-	7,210,878	9,314,166	6,435	1,584	-	8,018
**The 6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	163,862	400,877	572,828	-	4,600,839	5,738,406	4,779	877	257	5,913
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	1,414,013	4,079,427	5,726	142,898	15,634,608	21,276,673	15,895	765	-	16,660

Source: urbanMetrics inc., based on development information obtained from Waterfront Toronto; development application statistics obtained from the City of Toronto; information provided by developers; as well as our estimation of the development potential of various other development sites identified in the waterfront precincts and adjoining neighbourhoods.

Note that the Pan Am Athlete's Village portion of the West Don Lands includes 3 development blocks that are to be developed after the games (i.e., post 2015).



5.3 ON-SITE EMPLOYMENT GENERATION

Figure 5-5 summarizes the potential on-site employment generated by the development of the waterfront lands and adjoining neighbourhoods. These figures represent the total number of permanent employees that would be accommodated by the identified developments, based on typical employment densities for each of the major land uses considered (i.e., retail/service commercial, office, institutional, and industrial). As indicated, the development of these properties would accommodate a total of more than 21,700 employees. Approximately one-third of these jobs will be concentrated in the West Don Lands and East Bayfront precincts.

FIGURE 5-5: TOTAL ON-SITE EMPLOYMENT GENERATION

Precinct/Neighbourhood			yees		
	Retail	Office	Institutional	Industrial	TOTAL
Waterfront Toronto Development	Projects				
East Bayfront*	266	2,256	958	-	3,480
Bayside**	199	1,203	-	-	1,401
Dockside	36	997	958	-	1,992
George Brown College**	36	77	242	-	355
All other Dockside	-	920	717	-	1,637
Parkside (Monde Condominiums)**	31	56	-	-	87
Quayside	-	-	-	-	-
West Don Lands	318	526	662	-	1,507
River City**	174	526	332	-	1,032
Toronto Community Housing**	120	-	330	-	450
Pan Am Athlete's Village**	11	-	-	-	11
Future West Don Lands	13	-	-	-	13
SUBTOTAL- Waterfront Toronto Development Projects	583	2,783	1,621	-	4,987
Development Projects resulting from Waterfront Tor	onto activit	ies (Short T	erm)		
East Bayfront*	211	1,360	-	-	1,571
Corus (TEDCO)	11	1,046	-	-	1,057
All other East Bayfront (Private)	200	314	-	-	514
Central Waterfront	612	5,471	-	-	6,083
Lower Don Lands	243	621	-	4	868
Adjoining Neighbourhoods	1,094	571	19	164	1,848
Distillery District and Corktown	769	17	-	-	786
Don Valley and Lake Shore (Riverdale)	265	554	-	164	983
Yonge and Queens Quay	60	-	19	-	79
SUBTOTAL- Short Term Development Projects***	2,160	8,023	19	168	10,370
Development Projects resulting from Waterfront To	ronto activit	ies (Long T	erm)		
Adjoining Neighbourhoods	1,000	4,500	-	11	5,511
Don Valley and Lake Shore (Riverdale)	500	2,667	-	-	3,167
Yonge and Queens Quay	500	1,833	-	11	2,344
Lower Don Lands	375	500	-	-	875
SUBTOTAL- Long Term Development Projects***	1,375	5,000	-	11	6,386
GRAND TOTAL	4,119	15,806	1,640	178	21,742
*East Bayfront Total	477	3,616	958	-	5,051
**The 6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown	571	1,863	904		3,337
College, River City Condominiums, Bayside and Toronto Community Housing)	5/1	1,005	504		3,337
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	3,535	13,023	19	178	16,755

SOURCE: urbanMetrics inc., based on development floor area information summarized in Figure 5-4 and employment density estimates (per square foot) by type of use.



5.4 FISCAL IMPACTS OF DEVELOPMENT

The development of the waterfront precincts and the adjoining neighbourhoods will provide significant – formerly unrealized – revenues to the City of Toronto through property taxes; development charges to pay for capital growth related projects; and through permits and other revenues.

5.4.1 DEVELOPMENT CHARGE REVENUE

As a mature municipality with aging infrastructure, the City of Toronto is able to fund a much lower share of capital works though development charges that its suburban counterparts. In addition, in order to attract employment, the City has exempt industrial development and has limited development charges for commercial development to ground floor uses only. As a result, additional development charge revenue through the development of the Waterfront Toronto lands and surrounding neighbourhoods will contribute towards alleviating the burden on the property tax base.

Future development charge revenues were calculated based on the City's 2012 development charge rates and projected residential and commercial development as presented in the previous section. The current development charge rates in effect in the City of Toronto are shown in Figure 5-6.

FIGURE 5-6: CITY OF TORONTO DEVELOPMENT CHARGE RATES (AS OF FEBRUARY 2012)

Residential (per unit)	
Single detached and semi-detached dwelling	\$16,897
Multiple dwelling unit	\$13,611
Apartment unit - two bedroom and larger	\$10,841
Apartment unit - one bedroom and bachelor	\$7,164

Non-Residential (per square metre)	
Industrial uses	\$0.00
Non-ground floor Non-Residential uses	\$0.00
Ground floor Non-Residential uses	\$125.90

SOURCE: City of Toronto



Figure 5-7 summarizes the future development charge revenues generated by developments in the East Bayfront, West Don Lands and the surrounding waterfront precincts and neighbourhoods. As indicated, total development charges from full development of Waterfront Toronto development projects in East Bayfront and West Don Lands will amount to \$87 million, of which 95% will be generated by residential development. In addition, some \$164 million will be generated by developments located on private lands influenced by Waterfront Toronto's investments. In total, some \$251 million will be available from the development of the various waterfront precincts and adjoining neighbourhoods.

FIGURE 5-7: DEVELOPMENT CHARGE REVENUES

Precinct/Neighbourhood		Retail	Of	fice/Institutional	In	dustrial	Residential	Total
Waterfront Toronto Dev	elop	ment Projects						
East Bayfront*	\$	1,243,255	\$	886,100	\$	-	\$ 35,451,735	\$ 37,581,091
Bayside**	\$	928,889	\$	261,572	\$	-	\$ 15,583,552	\$ 16,774,012
Dockside	\$	168,324	\$	427,372	\$	-	\$ -	\$ 595,697
George Brown College ¹ **	\$	168,324	\$	-	\$	-	\$ -	\$ 168,324
All other Dockside	\$	-	\$	427,372	\$	-	\$ -	\$ 427,372
Parkside (Monde Condominiums)**	\$	146,042	\$	197,156	\$	-	\$ 4,360,690	\$ 4,703,889
Quayside	\$	-	\$	-	\$	-	\$ 15,507,493	15,507,493
West Don Lands	\$	1,486,682.77	\$	1,314,732.62	\$	-	\$ 47,080,242.45	\$ 49,881,658
River City**	\$	51,359	\$	-	\$	-	\$ 8,442,499	\$ 8,493,858
Toronto Community Housing**	\$	60,564	\$	-	\$	-	\$ 2,053,581	\$ 2,114,145
Pan Am Athlete's Village**	\$	561,432	\$	-	\$	-	\$ 17,358,251	\$ 17,919,683
Future West Don Lands	\$	813,327	\$	1,314,733			\$ 19,225,911	\$ 21,353,971
SUBTOTAL- Waterfront Toronto Development Projects	\$	2,729,938	\$	2,200,833	\$	-	\$ 82,531,978	\$ 87,462,748
Development Projects resulting from Wate	rfror	nt Toronto activ	vities	s (Short Term)				
East Bayfront*	\$	988,354	\$	1,731,081	\$	-	\$ 32,311,640	\$ 35,031,075
Corus (TEDCO)	\$	52,634	\$	894,782	\$	-	\$ -	\$ 947,416
All other East Bayfront (Private)	\$	935,719	\$	836,299	\$	-	\$ 32,311,640	\$ 34,083,659
Central Waterfront	\$	1,277,410	\$	-	\$	-	\$ 27,930,390	\$ 29,207,799
Lower Don Lands	\$	911,590	\$	766,699	\$	-	\$ 16,859,645	\$ 18,537,934
Adjoining Neighbourhoods	\$	5,227,541	\$	465,701	\$	-	\$ 22,935,878	\$ 28,629,121
Distillery District and Corktown	\$	3,526,769	\$	59,044	\$	-	\$ 11,036,941	\$ 14,622,753
Don Valley and Lake Shore (Riverdale)	\$	1,354,931	\$	406,657	\$	-	\$ 6,769,211	\$ 8,530,799
Yonge and Queens Quay	\$	345,842	\$	-	\$	-	\$ 5,129,727	\$ 5,475,569
SUBTOTAL- Short Term Development Projects***	\$	8,404,894	\$	2,963,481	\$	-	\$ 100,037,554	\$ 111,405,929
Development Projects resulting from Wate	erfro	nt Toronto acti	vitie		_			
Adjoining Neighbourhoods	\$	4,678,597	\$	4,093,773	\$	-	\$ 23,850,459	\$ 32,622,829
Don Valley and Lake Shore (Riverdale)	\$	2,339,299	\$	2,339,299	\$	-	\$ -	\$ 4,678,597
Yonge and Queens Quay	\$	2,339,299	\$	1,754,474	\$	-	\$ 23,850,459	\$ 27,944,232
Lower Don Lands	\$	1,754,474	\$	1,754,474	\$	-	\$ 16,901,900	\$ 20,410,848
SUBTOTAL- Long Term Development Projects***	\$	6,433,071	\$	5,848,247	\$	-	\$ 40,752,359	\$ 53,033,677
GRAND TOTAL	\$	17,567,904	\$	11,012,560	\$	-	\$ 223,321,890	\$ 251,902,354
*East Bayfront Total	\$	2,231,609	\$	2,617,181	\$	-	\$ 67,763,376	\$ 72,612,166
**6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	\$	1,916,611	\$	458,728	\$	-	\$ 47,798,573	\$ 50,173,912
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	\$	14,837,966	\$	8,811,728	\$	-	\$ 140,789,912	\$ 164,439,606

***Development Projects resulting from Waterfront Toronto activities (Short and Long Term) \$ 14,837,966 \$ 8,811,728 \$ - \$ 140,789,912 \$ 164,439,606 SOURCE: urbanMetrics inc., based on development information summarized in Figure 5-4 and 2012 City of Toronto development charge rates. 1) Buildings owned by and used for a college or university under the *Education Act* are exempt from paying Development Charges



5.4.2 ANNUAL PROPERTY TAX REVENUES

Property Tax revenues and assessed values were calculated for each property as fully developed. Future assessed values as fully developed were based on an analysis of assessed values per square foot for comparable developments in the vicinity of each waterfront precinct or adjoining neighbourhood. Future property taxes have been based on an application of 2011 tax rates by class (i.e., property type) with all exemptions removed.

Figures 5-8 to 5-10 summarize the future assessed values and property tax revenues corresponding to all of the development properties on Waterfront Toronto's lands as well as on adjoining private lands. As indicated in these figures, when fully developed, the Waterfront Toronto development projects in East Bayfront and West Don Lands will contribute some \$33.5 million annually in municipal property taxes and some \$17.9 million annually in education taxes.

New development on other private waterfront lands influenced by Waterfront Toronto's investments will contribute some \$71.6 million annually in municipal taxes and some \$40 million in education taxes. Combined, all of the new development in the waterfront area (i.e., the Study Area) will contribute some \$163 million in municipal and education taxes each year.

The present value of these additional taxes (i.e. \$163 million per year) over 10 years at full development amounts to more than \$1.17 billion.



FIGURE 5-8: ASSESSED VALUES

Precinct/Neighbourhood		Retail	Off	ice/Institutional		Industrial	Residential	Total
Waterfront Toro	nto D	Development Pro	oject	s				
East Bayfront*	\$	26,573,250	\$	332,998,750	\$	-	\$ 1,949,763,900	\$ 2,309,335,900
Bayside**	\$	19,854,000		90,195,500		-	\$ 800,338,875	910,388,375
Dockside	\$	3,597,750	\$	238,589,250	\$	-	\$ -	\$ 242,187,000
George Brown College**	\$	3,597,750	\$	81,355,000	\$	-	\$ -	\$ 84,952,750
All other Dockside	\$	-	\$	157,234,250	\$	-	\$ -	\$ 157,234,250
Parkside (Monde Condominiums)**	\$	3,121,500	\$	4,214,000	\$	-	\$ 268,272,375	\$ 275,607,875
Quayside	\$	-	\$	-	\$	-	\$ 881,152,650	 881,152,650
West Don Lands	\$	28,598,625	\$	138,565,350	\$	-	\$ 2,297,030,175	2,464,194,150
River City**	\$	987,975		-	\$	-	\$ 381,873,400	382,861,375
Toronto Community Housing**	\$	1,165,050	\$	-	\$	-	\$ 94,174,450	95,339,500
Pan Am Athlete's Village**	\$	10,800,000	\$	60,895,575	\$	-	\$ 742,511,925	814,207,500
Future West Don Lands	\$	15,645,600		77,669,775	\$	-	\$ 1,078,470,400	\$ 1,171,785,775
SUBTOTAL- Waterfront Toronto Development Projects	\$	55,171,875	\$	471,564,100	\$	-	\$ 4,246,794,075	\$ 4,773,530,050
Development Projects resulting fro	m W	aterfront Toron	to act	ivities (Short Ter	m)			
East Bayfront*	\$	21,125,000	\$	145,125,000	\$	-	\$ 1,835,947,200	\$ 2,002,197,200
Corus (TEDCO)	\$	1,125,000	\$	117,625,000	\$	-	\$ -	\$ 118,750,000
All other East Bayfront (Private)	\$	20,000,000	\$	27,500,000	\$	-	\$ 1,835,947,200	\$ 1,883,447,200
Central Waterfront	\$	61,214,554	•	492,358,484	\$	-	\$ 1,648,299,447	\$ 2,201,872,486
Lower Don Lands	\$	19,408,598	\$	37,267,825	\$	265,575	\$ 1,037,719,980	\$ 1,094,661,978
Adjoining Neighbourhoods	\$	103,502,514	\$	36,105,760		9,814,275	\$ 1,269,336,932	\$ 1,418,759,481
Distillery District and Corktown	\$	76,920,250		1,262,000		-	\$ 559,797,693	637,979,943
Don Valley and Lake Shore (Riverdale)	\$	21,217,800	\$, ,	\$	9,814,275	\$ 351,447,082	415,748,157
Yonge and Queens Quay	\$	5,364,464		1,574,760	· ·	-	\$ 358,092,157	365,031,381
SUBTOTAL- Short Term Development Projects***	\$	205,250,666	\$	710,857,069	\$	10,079,850	\$ 5,791,303,560	\$ 6,717,491,145
Development Projects resulting fro	om W	aterfront Toron	to ac	tivities (Long Ter	m)			
Adjoining Neighbourhoods	\$	85,000,000	•	311,250,000	•	637,500	\$ 1,364,000,000	1,760,887,500
Don Valley and Lake Shore (Riverdale)	\$	40,000,000		160,000,000		-	\$ -	\$ 200,000,000
Yonge and Queens Quay	\$	45,000,000		151,250,000	\$	637,500	\$ 1,364,000,000	\$ 1,560,887,500
Lower Don Lands	\$	30,000,000	\$	30,000,000	\$	-	\$ 1,100,000,000	\$ 1,160,000,000
SUBTOTAL- Long Term Development Projects***	\$	115,000,000	\$	341,250,000	\$	637,500	\$ 2,464,000,000	\$ 2,920,887,500
GRAND TOTAL	\$	375,422,541	\$	1,523,671,169	\$	10,717,350	\$ 12,502,097,635	\$ 14,411,908,695
*East Bayfront Total	\$	47,698,250	\$	478,123,750	\$	-	\$ 3,785,711,100	\$ 4,311,533,100
**6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	\$	39,526,275	\$	236,660,075	\$	-	\$ 2,287,171,025	\$ 2,563,357,375

***Development Projects resulting from Waterfront Toronto activities (Short and Long Term) \$ 320,250,666 \$ 1,052,107,069 \$ 10,717,350 \$ 8,255,303,560 \$ 9,638,378,645 SOURCE: urbanMetrics inc., based on development floor area data summarized in Figure 5-4, and estimates of assessed values (per square foot) based on comparable developments in the vicinity of each precinct/neighbourhood.



FIGURE 5-9: TOTAL ANNUAL PROPERTY TAX REVENUES (PUBLIC & PRIVATE LANDS), DETAILED SUMMARY BY PROPERTY TYPE

Due size t (Nationale state	Precinct/Neighbourhood Municipal Tay				ixes	SUBTOTAL						Education Taxes						S	UBTOTAL	~	RAND TOTAL	
Precinct/Neighbourhood		Retail	Offi	ce/Institutional		Industrial		Residential		(Municipal)		Retail	Offic	ce/Institutiona	Inc	dustrial		Residential	(E	ducation)	G	KAND TOTAL
						Waterfront T	oro	nto Development	Pro	ojects												
East Bayfront*	\$	485,157	\$	6,079,678	\$	-	\$	10,956,148	\$	17,520,984	\$	409,336	\$	5,129,539	\$	-	\$	4,503,955	\$ 3	10,042,830	\$	27,563,814
Bayside**	\$	362,482	\$	1,646,732	\$	-	\$	4,497,279	\$	6,506,492	\$	305,833	\$	1,389,379	\$	-	\$	1,848,783	\$	3,543,994	\$	10,050,486
Dockside	\$	65,685	\$	4,356,010	\$	-	\$	-	\$	4,421,695	\$	55,420	\$	3,675,248	\$	-	\$	-	\$	3,730,668	\$	8,152,363
George Brown College**	\$	65,685	\$	1,485,328	\$	-	\$	-	\$	1,551,013	\$	55,420	\$	1,253,199	\$	-	\$	-	\$	1,308,619	\$	2,859,632
All other Dockside	\$	-	\$	2,870,682	\$	-	\$	-	\$	2,870,682	\$	-	\$	2,422,049	\$	-	\$	-	\$	2,422,049	\$	5,292,731
Parkside (Monde Condominiums)**	\$	56,990	\$	76,937	\$	-	\$	1,507,481		1,641,408	\$	48,084	\$	64,913	\$	-	\$	619,709	\$	732,706	\$	2,374,114
Quayside	\$	-	\$	-	\$	-	\$	4,951,389	\$	4,951,389	\$		\$		\$	-	\$	2,035,463	\$	2,035,463	\$	6,986,851
West Don Lands	\$	522,135	\$	2,529,837	\$	-	\$	12,907,513	\$	15,959,486	\$	440,536	\$	2,134,472	\$	-	\$	5,306,140	\$	7,881,147	\$	23,840,633
River City**	\$	18,038	\$	-	\$	-	\$	2,145,830	\$	2,163,868	\$	15,219	\$	-	\$	-	\$	882,128	\$	897,346	\$	3,061,214
Toronto Community Housing**	\$	21,271	\$	-	\$	-	\$	529,187	\$	550,458	\$	17,947	\$	-	\$	-	\$	217,543	\$	235,490	\$	785,947
Pan Am Athlete's Village**	\$	197,179	\$	1,111,792	\$	-	\$	4,172,336	\$	5,481,308	\$	166,364	\$	938,040	\$	-	\$	1,715,203	\$	2,819,607	\$	8,300,915
Future West Don Lands	\$	285,647	\$	1,418,045	\$	-	\$	6,060,160	\$	7,763,853	\$	241,006	\$	1,196,431	\$	-	\$	2,491,267	\$	3,928,704	\$	11,692,557
SUBTOTAL- Waterfront Toronto Development Projects	\$	1,007,293	\$	8,609,516	\$	-	\$	23,863,662	\$	33,480,470	\$	849,872	\$	7,264,011	\$	-	\$	9,810,094	\$:	17,923,977	\$	51,404,447
				Developmen	nt Pr	rojects resulting	fro	m Waterfront Tor	ont	o activities (Sho	rt Te	erm)		·								1
East Bayfront*	\$	385,687	\$	2,649,599	\$	-	\$	10,316,588	\$	13,351,874	\$	325,411	\$	2,235,517	\$	-	\$	4,241,038	\$	6,801,966	\$	20,153,840
Corus (TEDCO)	\$	20,540	\$	2,147,522	\$	-	\$	-	\$	2,168,062	\$	17,330	\$	1,811,905	\$	-	\$	-		1,829,235	\$	3,997,296
All other East Bayfront (Private)	\$	365,147	\$	502,077	\$	-	\$	10,316,588	\$	11,183,812	\$	308,082	\$	423,612	\$	-	\$	4,241,038	\$	4,972,732	\$	16,156,544
Central Waterfront	\$	1,117,616	\$	8,989,166	\$	-	\$	9,262,154	\$	19,368,936	\$	942,954	\$	7,584,329	\$	-	\$	3,807,572	\$:	12,334,855	\$	31,703,791
Lower Don Lands	\$	354,350	\$	680,412	\$	4,834	\$	5,831,175	\$	6,870,771	\$	298,972	\$	574,077	\$	4,158	\$	2,397,133	\$	3,274,340	\$	10,145,111
Adjoining Neighbourhoods	\$	1,889,683	\$	659,196	\$	178,654	\$	7,132,681	\$	9,860,213	້ \$1	,594,361	\$	556,176	\$1	53,671	\$	2,932,168	\$	5,236,376	\$	15,096,589
Distillery District and Corktown	\$	1,404,361	\$	23,041	\$	-	\$	3,145,625	\$	4,573,027	\$1	,184,886	\$	19,440	\$	-	\$	1,293,133	\$	2,497,458	\$	7,070,485
Don Valley and Lake Shore (Riverdale)	\$	387,381	\$	607,404	\$	178,654	\$	1,974,858	\$	3,148,296	\$	326,841	\$	512,478	\$1	53,671	\$	811,843	\$	1,804,833	\$	4,953,129
Yonge and Queens Quay	\$	97,941	\$	28,751	\$	-	\$	2,012,198	\$	2,138,890	\$	82,635	\$	24,258	\$	-	\$	827,193	\$	934,085	\$	3,072,975
SUBTOTAL- Short Term Development Projects***	\$	3,747,335	\$	12,978,373	\$	183,488	\$	32,542,597	\$	49,451,794	\$3	,161,698	\$	10,950,099	\$1	57,829	\$	13,377,911	\$ 3	27,647,538	\$	77,099,331
				Developmer	nt P	roiects resulting	, fro	m Waterfront To	ront	to activities (Lon	g Te	rm)										
Adjoining Neighbourhoods	Ś	1,551,876	Ś	5,682,603	Ś	11,605	Ś	7,664,613	Ś	14,910,697	\$1	.309.347	Ś	4,794,520	Ś	9,982	Ś	3,150,840	\$	9,264,689	Ś	24,175,386
Don Valley and Lake Shore (Riverdale)	Ś	730,294		2,921,178			Ś		\$	3,651,472					ŝ	-	Ś	-	\$	3,080,816		
Yonge and Queens Quay	Ś	821,581		2,761,426		11,605	\$	7,664,613		11,259,225					\$	9,982	\$	3,150,840				17,443,098
Lower Don Lands	\$	547,721		547,721		,	\$	6,181,140		7,276,581					\$	-	\$					10,741,826
SUBTOTAL- Long Term Development Projects***	\$	2,099,596	\$	6,230,324	\$	11,605	\$	13,845,753	\$	22,187,278	\$1	,771,469	\$	5,256,642	\$	9,982	\$					34,917,212
GRAND TOTAL	Ś	6.854.224	¢	27,818,213	¢	195.093	¢	70.252.012	¢	105,119,542	\$5	783 039	¢	23 470 753	Ś 1	67 811	ċ	28,879,846	ć I	58 301 448	¢	163 420 991
*East Bayfront Total	Ś	870,844		8,729,277		200,000	Ś	21,272,736		30,872,858				1	ŝ		Ś					47,717,654
•	ş	070,044	ş	0,123,211	ş	-	ş	21,272,730	ş	30,072,858	ş	, 34,/40	ş	1,303,050	ş	-	Ş	0,/44,793	Ş.	10,044,797	ş	77,717,004
**6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	\$	721,645	\$	4,320,788	\$	-	\$	12,852,113	\$	17,894,546	\$	608,866	\$	3,645,531	\$	-	\$	5,283,365	\$	9,537,762	\$	27,432,308
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	\$	5,846,932	\$	19,208,698	\$	195,093	\$	46,388,350	\$	71,639,072	\$4	l,933,167	\$	16,206,741	\$1	67,811	\$	19,069,751	\$ 4	40,377,471	\$	112,016,543

SOURCE: urbanMetrics inc., based on 2011 City of Toronto property tax rates by class with all exemptions removed. Property tax rates applied to assessed value estimates summarized in Figure 5-8.



FIGURE 5-10: TOTAL PROPERTY TAX REVENUES (PUBLIC & PRIVATE LANDS), BASIC SUMMARY

Precinct/Neighbourhood		SUBTOTAL (Municipal)		SUBTOTAL (Education)	G	RAND TOTAL
Waterfront Toronto Development Proje	cts	(wanepar)		(Education)		
East Bayfront*	\$	17,520,984	\$	10,042,830	\$	27,563,814
Bayside**	\$	6,506,492		3,543,994		10,050,486
Dockside	\$	4,421,695	\$	3,730,668	\$	8,152,363
George Brown College**	\$	1,551,013	\$	1,308,619	\$	2,859,632
All other Dockside	\$	2,870,682	\$	2,422,049	\$	5,292,731
Parkside (Monde Condominiums)**	\$	1,641,408	\$	732,706	\$	2,374,114
Quayside	\$	4,951,389	\$	2,035,463	\$	6,986,851
West Don Lands	\$	15,959,486	\$	7,881,147	\$	23,840,633
River City**	\$	2,163,868	\$	897,346	\$	3,061,214
Toronto Community Housing**	\$	550,458	\$	235,490	\$	785,947
Pan Am Athlete's Village**	\$	5,481,308	\$	2,819,607	\$	8,300,915
Future West Don Lands	\$	7,763,853	\$	3,928,704	\$	11,692,557
SUBTOTAL- Waterfront Toronto Development Projects	\$	33,480,470	\$	17,923,977	\$	51,404,447
Development Projects resulting from Waterfront Toronto a	activ	vities (Short Terr	n)			
East Bayfront*	\$	13,351,874	\$	6,801,966	\$	20,153,840
Corus (TEDCO)	\$	2,168,062	\$	1,829,235	\$	3,997,296
All other East Bayfront (Private)	\$	11,183,812	\$	4,972,732	\$	16,156,544
Central Waterfront	\$	19,368,936	\$	12,334,855	\$	31,703,791
Lower Don Lands	\$	6,870,771	\$	3,274,340	\$	10,145,111
Adjoining Neighbourhoods	\$	9,860,213	\$	5,236,376	\$	15,096,589
Distillery District and Corktown	\$	4,573,027	\$	2,497,458	\$	7,070,485
Don Valley and Lake Shore (Riverdale)	\$	3,148,296	\$	1,804,833	\$	4,953,129
Yonge and Queens Quay	\$	2,138,890	\$	934,085	\$	3,072,975
SUBTOTAL- Short Term Development Projects***	\$	49,451,794	\$	27,647,538	\$	77,099,331
Development Projects resulting from Waterfront Toronto	acti	vities (Long Tern	n)			
Adjoining Neighbourhoods	\$	14,910,697	\$	9,264,689	\$	24,175,386
Don Valley and Lake Shore (Riverdale)	\$	3,651,472	\$	3,080,816	\$	6,732,288
Yonge and Queens Quay	\$	11,259,225	\$	6,183,873	\$	17,443,098
Lower Don Lands	\$	7,276,581		3,465,245		10,741,826
SUBTOTAL- Long Term Development Projects***	\$	22,187,278	\$	12,729,933	\$	34,917,212
GRAND TOTAL	\$	105,119,542	\$	58,301,448	\$	163,420,991
*East Bayfront Total	\$	30,872,858	\$	16,844,797	\$	47,717,654
**6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City						
Condominiums, Bayside and Toronto Community Housing)	\$	17,894,546	\$	9,537,762	\$	27,432,308
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	\$	71,639,072	\$	40,377,471	\$	112,016,543

SOURCE: urbanMetrics inc., based on 2011 City of Toronto property tax rates by class with all exemptions removed. Property tax rates applied to assessed value estimates summarized in Figure 5-8.



5.5 VALUE OF CONSTRUCTION PROJECTS

In Figure 5-11, we have summarized the construction costs related to the development of all the projects identified on both public and private Lands in the waterfront. The construction costs below include only the costs related to the construction of real estate and do not include land costs or infrastructure costs. The costs of infrastructure have been addressed in the first phase of this assignment.

Construction expenditures were estimated by urbanMetrics using three categories:

- **Construction Costs** The cost of building construction, including appropriate landscaping and parking facilities for each location and project type¹¹.
- **Soft Costs, Contingencies and Demolition** These include professional fees, interest charges, additional soils testing, marketing and tenant incentives, as applicable.
- Development Charges and Approval Fees.

Also excluded from these costs are expenditures related to tenant and resident provided furniture, fixtures and finishings; additional items subject to Section 37 agreements; land transfer taxes (as applicable); as well as any extraordinary developer-funded design and infrastructure elements.

As indicated in Figure 5-11, full build out of the public lands controlled by Waterfront Toronto (i.e., East Bayfront and West Don Lands) will involve some \$3.5 billion in construction and related investment. Including the development of private lands in the waterfront as well, investment by Waterfront Toronto will have stimulated some \$11 billion in largely private sector spending above and beyond its own infrastructure program. This level of private investment amounts to more than 10 times the infrastructure investment of Waterfront Toronto to date, and over 5 times its total funded budget.

¹¹ Construction costs were estimated using cost per square foot of gross floor area factors from the 2012 Altus Construction Cost Guide and urbanMetrics estimates based on our experience and understanding of location, density, and land uses on a project by project basis.



FIGURE 5-11: TOTAL BUILDING CONSTRUCTION COSTS BY PRECINCT/NEIGHBOURHOOD

Precinct/Neighbourhood	Buil	ding Construction		Soft Costs	DC	's and Application Fees	Total
Waterfront Toronto Deve	lopmer	nt Projects					
East Bayfront*	\$	1,294,281,600	\$	341,308,117	\$	46,976,363	\$ 1,682,566,080
Bayside**	\$	545,247,450	\$	142,606,720	\$	20,967,515	\$ 708,821,685
Dockside	\$	193,749,600	\$	57,380,259	\$	744,621	\$ 251,874,480
George Brown College ¹ **	\$	67,962,200	\$	20,178,255	\$	210,405	\$ 88,350,860
All other Dockside	\$	125,787,400	\$	37,202,005	\$	534,215	\$ 163,523,620
Parkside (Monde Condominiums)**	\$	155,795,700	\$	40,858,849	\$	5,879,861	\$ 202,534,410
Quayside	\$	399,488,850	\$	100,462,288	\$	19,384,367	\$ 519,335,505
West Don Lands	\$	1,362,970,550	\$	346,539,093	\$	62,352,072	\$ 1,771,861,715
River City**	\$	242,500,500	\$	62,132,827	\$	10,617,323	\$ 315,250,650
Toronto Community Housing**	\$	40,688,000	\$	9,563,718	\$	2,642,682	\$ 52,894,400
Pan Am Athlete's Village**	\$	404,395,750	\$	98,919,121	\$	22,399,604	\$ 525,714,475
Future West Don Lands	\$	675,386,300	\$	175,923,426	\$	26,692,464	\$ 878,002,190
SUBTOTAL- Waterfront Toronto Development Projects***	\$	2,657,252,150	\$	687,847,209	\$	109,328,436	\$ 3,454,427,795
Development Projects resulting from Water	ront To	oronto activities (S	hor	rt Term)			
East Bayfront*	\$	1,016,760,571	\$	261,239,328	\$	43,788,844	\$ 1,321,788,743
Corus (TEDCO)	\$	95,000,000	\$	27,315,730	\$	1,184,270	\$ 123,500,000
All other East Bayfront (Private)	\$	921,760,571	\$	233,923,598	\$	42,604,574	\$ 1,198,288,743
Central Waterfront	\$	1,536,077,211	\$	424,313,414	\$	36,509,749	\$ 1,996,900,374
Lower Don Lands	\$	638,882,295	\$	168,492,271	\$	23,172,418	\$ 830,546,984
Adjoining Neighbourhoods	\$	645,997,808	\$	164,857,402	\$	35,786,401	\$ 846,641,611
Distillery District and Corktown	\$	400,127,353	\$	101,759,764	\$	18,278,442	\$ 520,165,559
Don Valley and Lake Shore (Riverdale)	\$	245,870,455	\$	63,097,638	\$	10,663,499	\$ 319,631,592
Yonge and Queens Quay	\$	-	\$	-	\$	6,844,461	\$ 6,844,461
SUBTOTAL- Short Term Development Projects***	\$	3,837,717,886	\$	1,018,902,415	\$	139,257,411	\$ 4,995,877,712
Development Projects resulting from Water	front T	oronto activities (L	.onį	g Term)			
Adjoining Neighbourhoods	\$	1,258,050,000	\$	336,636,464	\$	40,778,536	\$ 1,635,465,000
Don Valley and Lake Shore (Riverdale)	\$	200,000,000	\$	54,151,753	\$	5,848,247	\$ 260,000,000
Yonge and Queens Quay	\$	1,058,050,000	\$	282,484,711	\$	34,930,289	\$ 1,375,465,000
Lower Don Lands	\$	735,000,000		194,986,440			\$ 955,500,000
SUBTOTAL- Long Term Development Projects	\$	1,993,050,000	\$	531,622,904	\$	66,292,096	\$ 2,590,965,000
GRAND TOTAL	\$	8,488,020,036	\$	2,238,372,529	\$	314,877,943	\$ 11,041,270,507
*East Bayfront Total	\$	2,311,042,171	\$	602,547,445	\$	90,765,207	\$ 3,004,354,823
**6 Projects (Pan Am Village, Monde Condominiums/Parkside, George Brown College, River City Condominiums, Bayside and Toronto Community Housing)	\$	1,456,589,600	\$	374,259,490	\$	62,717,390	\$ 1,893,566,480
***Development Projects resulting from Waterfront Toronto activities (Short and Long Term)	\$	5,830,767,886	\$	1,550,525,319	\$	205,549,507	\$ 7,586,842,712

SOURCE: urbanMetrics inc., based on development information summarized in Figure 5-4 and cost per square foot factors from 2012 Altus Construction Cost Guide.



5.6 ECONOMIC IMPACTS OF CONSTRUCTION

The quantitative economic impacts of the construction of the waterfront precincts and adjoining neighbourhood projects have been estimated using a mathematical model, which simulates the flow of expenditures through the economy. This is equivalent to the model used during the first phase of our analysis, which analyzed the economic impacts of the direct investments made by Waterfront Toronto to date. A detailed summary of the steps required to run this type of economic impact model, as well as descriptions of the resulting outputs (i.e., value added to the economy, employment generation, labour income, government revenues) has been included in Section 3.2.

Similarly to the phase one analysis described in Section 3 of this study, the main steps in running this economic impact analysis were: compiling the input spending data; assembling the data to ensure all expenses were accounted for and separated into categories to ensure that the individual economic sectors are appropriately represented; calibrating the model to the local economy using employment data; testing against expected results; and running the finalized version of the model.

The input spending data considered in this analysis (i.e., construction expenditures) were estimated by urbanMetrics as outlined in the previous section and as summarized in Figure 5-11.

The data assembly stage of this analysis involved allocating each expenditure item to a specific industry category, based on the 2007 North American Industry Classification System (NAICS). Projected direct construction expenditures were itemized by major industry sector, notably: Construction (NAICS Group 10); Professional, Scientific and Technical Services (NAICS Group 43); and Other Municipal Government Services (NAICS Group 51). However, in that we did not have access to detailed construction budgets, the allocation by industry category has been undertaken by urbanMetrics based on our understanding of each project and our experience with similar assignments.

5.6.1 URBANMETRICS ECONOMIC IMPACT MODEL

The economic impacts of construction expenditures have been measured at the national, provincial and municipal level, through the use of the urbanMetrics Input-Output model. A detailed overview of this model has been included in Section 3.2 of this study. Our model is based on Input-Output tables produced by Statistics Canada, which illustrate the structure of the economy through the depiction of transactions (sales and purchases) made among and between different industry sectors of the economy.

National, Provincial and local impacts have been determined using construction expenditure data related to salaries, contracted services, construction materials, professional services, equipment rentals, legal and administrative costs, and other related costs. These inputs have been analyzed using the urbanMetrics Input-Output model in order to generate value added to the economy, income, employment by sector and tax impacts.



Unlike gross output impacts, value added impacts represent the true incremental expansion to the economy. Therefore, our analysis only considers value added impacts. The model has been developed to generate the following four economic impacts:

- Value Added to the Economy;
- Employment;
- Labour Income; and,
- Revenues to the 3 Levels of Government.

It considers the direct impact of spending on the construction of the various waterfront projects on both public and private lands, as well as the indirect and induced impacts that are spread more broadly across the City, Province and Canada.

5.6.2 QUANTITATIVE ESTIMATION OF ECONOMIC IMPACTS

Estimating the economic impacts involves modeling the direct, indirect and induced impacts of construction expenditures, on different spatial scales. Specifically, this has involved the estimation of economic multipliers to measure the marginal impact of these expenditures on gross output (sales), value added to GDP, employment, labour income, and accrued taxes and tax credits going forward.

This phase of the project involved two stages, as discussed below.

Stage 1: Data Acquisition

The accuracy of the economic impact modeling is dependent upon the detail of expenditure data. We have used reliable unit cost factors. However, as we did not have access to detailed project budgets, we developed a distribution of expenditures by industry category based on our experience in similar assignments. The economic impact model used by urbanMetrics assumes that all expenditures are made within the area being modeled and as a result leakage has been built directly into the analysis.

Stage 2: Estimation of Economic Impacts

As described in Section 3.2 of this study, the urbanMetrics economic impact model was developed based on the Canadian National Input-Output Accounts, which can be used to estimate the total impact of expenditures on an aggregate and industry-specific basis. For the purposes of this study, the model has been calibrated to estimate economic impacts on the Toronto economy as well as on the Ontario and Canadian economies.

The basic principle of the model is the concept that each dollar of expenditure on goods and/or services purchased from a given industry sector circulates and re-circulates within the economy, thereby multiplying the effects of the original expenditure. As such, this process is



referred to as the multiplier effect. The multipliers, indicated on Figures 5-12 to 5-14, have been generated by the model for each level of geography. The multipliers have three components:

- *Direct Impacts*, which represent the initial operating and/or capital investments. These expenditures include the purchase of labour, equipment, other infrastructure and related services. The initial expenditures are made in the City of Toronto and as such, are identical at the Toronto, Ontario and national levels;
- *Indirect Impacts*, which represent the subsequent purchases by suppliers required to produce the goods and services related to the original construction expenditures; and
- *Induced Impacts,* which result when workers employed in the sectors, stimulated by initial and indirect expenditures, spend portions of their incomes on consumer goods and services.

The indirect and induced impact multipliers vary by geography depending on the extent to which goods and services are available locally. The higher the level of geography, the higher the multiplier will be reflecting the increased availability of goods and services.

Direct, indirect and induced impacts are estimated in terms of the following measures:

- **Gross Output** a measure of total sales throughout the economy in question, as a result of an initial expenditure on goods and/or services produced by an industry.¹²
- Value Added (Gross Provincial Product) represents the net impact on the economy after eliminating the double counting that can occur when calculating gross output and lead to the calculation of inflated multipliers. This measure only considers final goods (gross sales less cost of purchased inputs). At the local level "value added" is typically smaller, than the initial expenditure, due to leakage.¹³
- **Employment** total *full-time, full-year* jobs generated by direct, indirect and induced expenditures. For one-time capital expenditures, such as those being analyzed, the employment figures produced by the model represent years of full-time

¹² For example, with respect to a construction project, an initial expenditure would be made to pay for the design firm and contractor. The design team would then hire staff, purchase equipment and materials, such as computers, software, paper, and etcetera. The construction company would also hire labourers, pay for construction equipment and materials. The staff in turn would purchase goods and services from their wages to support their ever day living. The sum of all these expenditures would be the gross output. This, however, is not the true impact on the economy as it involves double counting (e.g., initial expenditure in reality covered wages and salaries, equipment, etc. of the contractors it hired).

¹³ For example, a firm building a project in one jurisdiction may purchase equipment and supplies from another. Furthermore, design and construction employees may live outside of the jurisdiction in which the project is being built and thus spend their wages in other locations closer to their homes.



employment. For example, one job identified by the model represents the equivalent of one person working full-time for the duration of one year.

- Labour Income total value of wages, salaries and benefits received by employees associated with direct, indirect and induced expenditure.
- **Government Revenues** revenues accruing to federal, provincial and local jurisdictions as a result of direct, indirect and induced expenditures. Revenue categories include personal and corporate income tax, sales taxes (e.g. PST and GST), property taxes and other miscellaneous taxes, tariffs and fees.
- **Multipliers** are expressed by the ratio of total impacts (direct, indirect and induced) to initial expenditures. For example, the value added multiplier is calculated by dividing total value added by the initial expenditure on the bundle of goods and/or services in question. The only exception is that of the employment multiplier, where total employment is divided by direct employment in order to preserve the common units.¹⁴ The multipliers relate to inflows and outflows of economic activity in a geographic area, with the highest multipliers associated with the largest geographical areas and areas with the largest amount of economic activity. Benchmarking with other jurisdictions is not altogether meaningful, although a comparison of spending in different economic sectors (e.g. construction vs. hospitality) may provide an indication of the efficiencies of various types of investment in the same jurisdiction.

¹⁴ For example, the gross output multiplier on a \$10 million construction project can be thought of in the following manner. Some \$2 million dollars of the budget was paid to the design firm for staff wages, equipment and materials. Some \$5 million was paid to the construction firm for wages, material and equipment. Subsequently, design and construction employees paid \$1 million from their wages for food, entertainment and other living expenses. The gross output would be \$10 + \$5 + \$2 + \$1 million, or \$17 million, or a gross output multiplier of 1.7.



5.6.3 SUMMARY OF QUANTITATIVE ECONOMIC IMPACTS

The following summarizes the various direct, indirect and induced impacts generated by the construction of the various development projects identified in the broader waterfront area (i.e., the Study Area).

Waterfront Toronto Development Projects (Public Lands)

Construction of the projects located on public lands controlled by Waterfront Toronto in the East Bayfront and West Don Lands will generate significant economic value; most of which will accrue to the City of Toronto. The construction projects, including direct, indirect and induced impacts, will generate:

- \$4 billion in value added to the Canadian economy;
- 43,063 person years of employment or the equivalent of approximately 1,090 permanent jobs;
- \$2.1 billion in labour income; and,
- \$1.5 billion in revenues to the three levels of government.

Development Projects resulting from Waterfront Toronto activities- Short and Long Term (Private Lands)

As noted throughout this study, the investments made by Waterfront Toronto have a reach well beyond the East Bayfront and West Don Lands. The regeneration of Toronto's eastern waterfront together with the revitalization of Queens Quay into a grand boulevard spanning both the eastern and western portions of the waterfront, has influenced other development in the area. Over \$8.1 billion has been either committed or planned in the other waterfront districts (i.e., Central Waterfront and Lower Don Lands) and the neighbourhoods adjoining East Bayfront and the West Don Lands. This level of investment will – in addition to the benefits directly attributable to Waterfront Toronto lands - generate:

- \$8.9 billion in value added to the Canadian economy;
- 94,841 person years of employment or the equivalent of approximately 2,400 permanent jobs;
- \$4.7 billion in labour income; and,
- \$3.4 billion in revenues to the three levels of government.



Combined Economic Benefits

Together, the projects in East Bayfront, West Don Lands, Central Waterfront, Lower Don Lands and the adjoining neighbourhoods will generate some:

- \$12.9 billion in value added to the Canadian economy;
- 137,904 person years of employment or the equivalent of 3,480 permanent jobs;
- \$6.8 billion in labour income; and,
- \$4.9 billion in revenues to the three levels of government.



FIGURE 5-12: SUMMARY OF ECONOMIC IMPACTS (TORONTO)

	East Bayfront	West Don Lands	SUBTOTAL- Waterfront Toronto Development Projects	East Bayfront	Central Waterfront	Lower Don Lands	Adjoining Neighbourhoods	SUBTOTAL- Short Term Development Projects	Adjoining Neighbourhoods	Lower Don Lands	SUBTOTAL- Long Term Development Projects	GRAND TOTAL	Six Neighbourhoods	Development Projects resulting from Waterfront Toronto activities (Short and Long Term)
Initial Expenditure	\$1,682,566,080	\$1,771,861,715	\$3,454,427,795	\$1,321,788,743	\$1,996,900,374	\$830,546,984	\$846,641,611	\$ 4,995,877,712	\$1,635,465,000	\$955,500,000	\$ 2,590,965,000	\$ 11,041,270,507	\$1,893,566,480	\$ 7,586,842,712
Gross Output														
Direct	\$ 1,682,566,080	\$ 1,771,861,715	\$ 3,454,427,795	\$ 1,321,788,743	\$ 1,996,900,374	\$ 830,546,984	\$ 846,641,611	\$ 4,995,877,712	\$ 1,635,465,000	\$ 955,500,000	\$ 2,590,965,000	\$ 11,041,270,507	\$ 1,893,566,480	\$ 7,586,842,712
Indirect and Induced	\$ 897,481,143	\$ 941,769,315	\$ 1,839,250,458	\$ 703,256,199	\$ 1,070,139,257	\$ 443,018,112	\$ 449,194,536	\$ 2,665,608,105	\$ 873,624,159	\$ 509,965,772	\$ 1,383,589,931	\$ 5,888,448,493	\$ 1,007,473,417	\$ 4,049,198,035
Total			\$ 5,293,678,253	\$ 2,025,044,942	\$ 3,067,039,632		\$ 1,295,836,147		\$ 2,509,089,159		1 - 7- 7- 7- 7- 7	\$ 16,929,719,001	\$ 2,901,039,897	\$ 11,636,040,748
Multiplier	1.53	1.53		1.53	1.54	1.53	1.53		1.53	1.53			1.53	
Value Added														
Direct	\$ 806,530,093	\$ 851,006,386	\$ 1,657,536,479	\$ 634,487,249	\$ 954,706,024	\$ 398,116,688	\$ 408,327,011	\$ 2,395,636,972	\$ 783,318,366	\$ 457,863,322	\$ 1,241,181,687	\$ 5,294,355,138	\$ 908,951,194	\$ 3,636,818,660
Indirect and Induced	\$ 434,186,629	\$ 456,233,065	\$ 890,419,695	\$ 340,555,448	\$ 516,788,883	\$ 214,324,111	\$ 217,705,892	\$ 1,289,374,333	\$ 422,409,812	\$ 246,657,015	\$ 669,066,827	\$ 2,848,860,856	\$ 487,873,552	\$ 1,958,441,161
			\$ 2,547,956,173	,. ,	\$ 1,471,494,907	, .,	\$ 626,032,902		\$ 1,205,728,178		\$ 1,910,248,515	\$ 8,143,215,994	1 /	\$ 5,595,259,821
Multiplier	0.74	0.74		0.74	0.74	0.74	0.74		0.74	0.74			0.74	
Employment (Full-Time	e, Full-Year Emplo	oyment)												
Direct	9,092	9,505	18,596	7,105	10,893	4,488	4,546	27,032	8,863	5,169	14,032	59,661	10,179	41,065
Indirect and Induced	4,886	5,136	10,022	3,833	5,815	2,412	2,450	14,510	4,754	2,776	7,529	32,062	5,491	22,040
Total	13,978	14,640	28,618	10,938	16,708	6,900	6,996	41,543	13,617	7,945	21,562	91,723	15,670	63,105
Multiplier	1.54	1.54		1.54	1.53	1.54	1.54		1.54	1.54			1.54	
Labour Income														
Direct	\$ 504,228,372	\$ 530,619,281	\$ 1,034,847,654	\$ 395,914,031	\$ 598,978,749	\$ 248,897,283	\$ 254,004,603	\$ 1,497,794,666	\$ 490,253,082	\$ 286,375,850	\$ 776,628,932	\$ 3,309,271,251	\$ 567,178,421	\$ 2,274,423,597
Indirect and Induced	\$ 217,503,440	\$ 228,521,284	\$ 446,024,724	\$ 170,585,405	\$ 258,921,724	\$ 107,364,535	\$ 108,985,211	\$ 645,856,875	\$ 211,613,837	\$ 123,563,862	\$ 335,177,699	\$ 1,427,059,298	\$ 244,377,582	\$ 981,034,574
Total	\$ 721,731,812	\$ 759,140,566	\$ 1,480,872,378	\$ 566,499,436	\$ 857,900,473	\$ 356,261,818	\$ 362,989,814	\$ 2,143,651,541	\$ 701,866,919	\$ 409,939,712	\$ 1,111,806,631	\$ 4,736,330,549	\$ 811,556,003	\$ 3,255,458,171
Total Taxes														
Federal	\$ 306,480,099	\$ 322,196,471	\$ 628,676,570	\$ 240,471,016	\$ 364,556,055	\$ 151,285,155	\$ 153,957,441	\$ 910,269,666	\$ 298,108,650	\$ 174,094,287	\$ 472,202,937	\$ 2,011,149,173	\$ 344,494,248	\$ 1,382,472,603
Provincial	\$ 152,031,396	\$ 159,846,893	\$ 311,878,289	\$ 119,297,482	\$ 180,811,526	\$ 75,045,936	\$ 76,342,471	\$ 451,497,415	\$ 147,871,373	\$ 86,358,832	\$ 234,230,205	\$ 997,605,910	\$ 170,903,306	\$ 685,727,620
Local	\$ 28,073,199	\$ 29,550,933	\$ 57,624,133	\$ 22,047,229	\$ 33,335,925	\$ 13,857,486	\$ 14,094,479	\$ 83,335,120	\$ 27,291,931	\$ 15,943,378	\$ 43,235,309	\$ 184,194,562	\$ 31,584,406	\$ 126,570,429
Total	\$ 486,584,695	\$ 511,594,298	\$ 998,178,992	\$ 381,815,727	\$ 578,703,505	\$ 240,188,578	\$ 244,394,391	\$ 1,445,102,201	\$ 473,271,955	\$ 276,396,497	\$ 749,668,452	\$ 3,192,949,645	\$ 546,981,960	\$ 2,194,770,653



FIGURE 5-13: SUMMARY OF ECONOMIC IMPACTS (ONTARIO)

	East Bayfront	West Don Lands	SUBTOTAL- Waterfront Toronto Development Projects	East Bayfront	Central Waterfront	Lower Don Lands	Adjoining Neighbourhoods	SUBTOTAL- Short Term Development Projects	Adioining	Lower Don Lands	SUBTOTAL- Long Term Development Projects	GRAND TOTAL	Six Neighbourhoods	Development Projects resulting from Waterfront Toronto activities (Short and Long Term)
Initial Expenditure	\$ 1,682,566,080	\$ 1,771,861,715	\$ 3,454,427,795	\$ 1,321,788,743	\$ 1,996,900,374	\$ 830,546,984	\$ 846,641,611	\$ 4,995,877,712	\$ 1,635,465,000	\$ 955,500,000	\$ 2,590,965,000	\$ 11,041,270,507	\$ 1,893,566,480	\$ 7,586,842,712
Gross Output														
Direct	\$1,682,566,080	1 / / / -	\$ 3,454,427,795	\$1,321,788,743	\$1,996,900,374	1 / /		\$ 4,995,877,712	1 ,,,	1 , ,	\$ 2,590,965,000	1 11 1 11 11	1 / / /	\$ 7,586,842,712
Indirect and Induced	\$1,201,129,622		\$ 2,462,585,060	\$941,754,776	1 / / / -			\$ 3,567,072,358	\$1,168,801,729	1,	, ,	\$ 7,880,868,588		\$ 5,418,283,529
Total	\$2,883,695,702	1-777	\$ 5,917,012,855	\$2,263,543,518	\$3,427,530,718		1 / -/ -/-	\$ 8,562,950,071	\$2,804,266,729		\$ 4,442,176,171	\$ 18,922,139,096		\$ 13,005,126,241
Multiplier	1.71	1.71		1.71	1.72	1.71	1.71		1.71	1.71			1.71	
Value Added														
Direct	\$806,530,093	1	\$ 1,657,536,479	\$634,487,249	\$954,706,024	1	1 / - / -	\$ 2,395,636,972	\$783,318,366	1 - //-	. , , . ,	\$ 5,294,355,138	\$908,951,194	
Indirect and Induced	\$592,406,132		\$ 1,215,227,440	\$464,834,340	\$704,608,739			\$ 1,759,140,212	\$576,210,849	1 , ,	\$ 912,720,509		\$665,912,883	
Total	\$1,398,936,225		\$ 2,872,763,918	\$1,099,321,589	\$1,659,314,763	1		\$ 4,154,777,184	\$1,359,529,215		\$ 2,153,902,197	\$ 9,181,443,299	\$1,574,864,077	\$ 6,308,679,381
Multiplier	0.83	0.83		0.83	0.83	0.83	0.83		0.83	0.83			0.83	
Employment (Full-Time	e, Full-Year Emplo	oyment)												
Direct	9,092	9,505	18,596	7,105	10,893	4,488	4,546	27,032	8,863	5,169	14,032	59,661	10,179	41,065
Indirect and Induced	6,440	6,772	13,212	5,054	7,659	3,179	3,232	19,124	6,264	3,658	9,922	42,258	7,240	29,046
Total	15,532	16,277	31,808	12,159	18,552	7,667	7,778	46,156		8,827	23,955	101,920	17,419	70,111
Multiplier	1.71	1.71		1.71	1.70	1.71	1.71		1.71	1.71			1.71	
Labour Income														
Direct	\$504,228,372	\$530,619,281	\$ 1,034,847,654	\$395,914,031	\$598,978,749	\$248,897,283	\$254,004,603	\$ 1,497,794,666	\$490,253,082	\$286,375,850	\$ 776,628,932	\$ 3,309,271,251	\$567,178,421	\$ 2,274,423,597
Indirect and Induced	\$286,395,814	\$301,047,658	\$ 587,443,472	\$224,693,952	\$340,717,612	\$141,371,164	\$143,618,771	\$ 850,401,499	\$278,586,078	\$162,688,647	\$ 441,274,725	\$ 1,879,119,696	\$321,892,361	\$ 1,291,676,223
Total	\$790,624,187	\$831,666,940	\$ 1,622,291,126	\$620,607,983	\$939,696,361	\$390,268,447	\$397,623,373	\$ 2,348,196,164	\$768,839,160	\$449,064,497	\$ 1,217,903,656	\$ 5,188,390,947	\$889,070,782	\$ 3,566,099,821
Total Taxes														
Federal	\$339,474,301	\$356,931,292	\$ 696,405,594	\$266,385,003	\$403,729,744	\$167,571,741	\$170,545,266	\$ 1,008,231,753	\$330,183,175	\$192,832,061	\$ 523,015,236	\$ 2,227,652,582	\$381,618,086	\$ 1,531,246,989
Provincial	\$170,387,186	\$179,170,687	\$ 349,557,873	\$133,714,116	\$202,605,715	\$84,106,715	\$85,572,308	\$ 505,998,853	\$165,715,653	\$96,783,322	\$ 262,498,976	\$ 1,118,055,703	\$191,556,276	\$ 768,497,829
Local	\$32,641,620	\$34,359,983	\$ 67,001,603	\$25,635,111	\$38,760,533	\$16,112,549	\$16,392,552	\$ 96,900,746	\$31,733,157	\$18,537,869			\$36,724,331	\$ 147,171,772
Total	\$542,503,108	\$570,461,962	\$ 1,112,965,070	\$425,734,230	\$645,095,992	\$267,791,005	\$272,510,125	\$ 1,611,131,352	\$527,631,985	\$308,153,253	\$ 835,785,237	\$ 3,559,881,660	\$609,898,693	\$ 2,446,916,590



FIGURE 5-14: SUMMARY OF ECONOMIC IMPACTS (CANADA)

	East Bayfront	West Don Lands	SUBTOTAL- Waterfront Toronto Development Projects	East Bayfront	Central Waterfront	Lower Don Lands	Adjoining Neighbourhoods	SUBTOTAL- Short Term Development Projects	Adjoining Neighbourhoods	Lower Don Lands	SUBTOTAL- Long Term Development Projects	GRAND TOTAL	Six	Development Projects resulting from Waterfront Toronto activities (Short and Long Term)
Initial Expenditure	\$1,682,566,080	\$1,771,861,715	\$ 3,454,427,795	\$1,321,788,743	\$1,996,900,374	\$830,546,984	\$846,641,611	\$ 4,995,877,712	\$1,635,465,000	\$955,500,000	\$ 2,590,965,000	\$ 11,041,270,507	\$1,893,566,480	\$ 7,586,842,712
Gross Output														
Direct	\$1,682,566,080	, ,,	\$ 3,454,427,795	\$1,321,788,743	\$1,996,900,374	1 / / /	1 / - / -	\$ 4,995,877,712	\$1,635,465,000	1 , ,	\$ 2,590,965,000		1 /	\$ 7,586,842,712
Indirect and Induced	\$2,258,673,134		\$ 4,632,915,237	\$1,772,067,546	\$2,687,059,639	1 7 77		\$ 6,706,963,562	\$2,197,075,029	1 ///	\$ 3,480,124,674			\$ 10,187,088,236
Total	\$3,941,239,214		\$ 8,087,343,032	\$3,093,856,289	\$4,683,960,014	1 // -/		\$ 11,702,841,275	\$3,832,540,029		\$ 6,071,089,674	\$ 25,861,273,981		\$ 17,773,930,949
Multiplier	2.34	2.34		2.34	2.35	2.34	2.34		2.34	2.34			2.34	
Value Added														
Direct	\$806,530,093		\$ 1,657,536,479	\$634,487,249	\$954,706,024			\$ 2,395,636,972	\$783,318,366					\$ 3,636,818,660
Indirect and Induced	\$1,163,045,173		\$ 2,386,303,106	\$912,856,239	\$1,382,580,864		1 / / /	\$ 3,453,459,417	\$1,131,060,179	1	\$ 1,791,669,792	1 1 1 1 1 1 1	1 / / . / / /	\$ 5,245,129,208
Total	\$1,969,575,266		\$ 4,043,839,585	\$1,547,343,488	\$2,337,286,888	\$972,220,038	1 7 - 7	\$ 5,849,096,389	\$1,914,378,545		\$ 3,032,851,479	\$ 12,925,787,453		\$ 8,881,947,868
Multiplier	1.17	1.17		1.17	1.17	1.17	1.17		1.17	1.17			1.17	
Employment (Full-Time	e, Full-Year Emplo	yment)												
Direct	9,092	9,505	18,596	7,105	10,893	4,488	4,546	27,032	8,863	5,169	14,032	59,661	10,179	41,065
Indirect and Induced	11,924	12,542	24,466	9,359	14,175	5,886	5,987	35,407	11,596	6,773	18,369	78,243	13,408	53,776
Total	21,016	22,047	43,063	16,465	25,068	10,374	10,533	62,440	20,460	11,942	32,402	137,904	23,587	94,841
Multiplier	2.31	2.32		2.32	2.30	2.31	2.32		2.31	2.31			2.32	
Labour Income														
Direct	\$504,228,372	\$530,619,281	\$ 1,034,847,654	\$395,914,031	\$598,978,749	\$248,897,283	\$254,004,603	\$ 1,497,794,666	\$490,253,082	\$286,375,850	\$ 776,628,932	\$ 3,309,271,251	\$567,178,421	\$ 2,274,423,597
Indirect and Induced	\$535,203,199	\$562,850,221	\$ 1,098,053,420	\$420,039,969	\$636,319,430	\$264,187,536	\$268,580,414	\$ 1,589,127,348	\$520,507,779	\$304,000,935	\$ 824,508,714	\$ 3,511,689,483	\$601,741,136	\$ 2,413,636,063
Total	\$1,039,431,572	\$1,093,469,502	\$ 2,132,901,074	\$815,954,000	\$1,235,298,178	\$513,084,819	\$522,585,017	\$ 3,086,922,014	\$1,010,760,861	\$590,376,785	\$ 1,601,137,646	\$ 6,820,960,734	\$1,168,919,557	\$ 4,688,059,660
Total Taxes														
Federal	\$424,170,926	\$446,058,819	\$ 870,229,745	\$332,886,673	\$504,344,913	\$209,379,704	\$213,072,048	\$ 1,259,683,338	\$412,533,109	\$240,935,584	\$ 653,468,693	\$ 2,783,381,775	\$476,887,035	\$ 1,913,152,030
Provincial	\$282,121,770	\$296,730,825	\$ 578,852,595	\$221,434,713	\$335,370,200	\$139,261,185	\$141,718,621	\$ 837,784,719	\$274,361,924	\$160,244,870	\$ 434,606,794	\$ 1,851,244,108	\$317,223,050	\$ 1,272,391,513
Local	\$39,242,162	\$41,301,004		\$30,815,111	\$46,608,843	\$19,370,715	\$19,711,594	\$ 116,506,264	\$38,152,646	\$22,287,089	\$ 60,439,735	\$ 257,489,165	\$44,145,099	\$ 176,945,999
Total	\$745,534,857	\$784,090,648	\$ 1,529,625,506	\$585,136,498	\$886,323,955	\$368,011,604	\$374,502,263	\$ 2,213,974,320	\$725,047,679	\$423,467,543	\$ 1,148,515,222	\$ 4,892,115,048	\$838,255,185	\$ 3,362,489,542



6 PHASE 3 (B) – ECONOMIC BENEFITS OF KEY INFRASTRUCTURE INVESTMENTS

As part of our mandate, we have been asked to address the economic benefits attributable to two key pieces of infrastructure to be introduced to the waterfront by Waterfront Toronto. In the following two subsections of the study, we will discuss the economic impacts of the *District Energy* and *Intelligent Communities* initiatives on the waterfront.

6.1 ECONOMIC BENEFITS OF DISTRICT ENERGY

Waterfront Toronto's mandate is shaped by green building practices, innovation, economic growth and design excellence. For this reason, district energy infrastructure is a key project for the organization. The strategy is focused on the development of a distribution system (network) that will be phased in over a number of years as commercial and residential development occurs.

District Energy is the provision of a system to generate and distributes thermal energy (heating and/or cooling) at the community scale. Infrastructure involves localized energy generation and a thermal grid for distribution through a network of buried insulated pipes. District energy is considered a feasible infrastructure strategy for communities of medium and high density mixed use, often also with commercial, institutional and industrial uses.

Waterfront Toronto has recently entered into a public-private partnership arrangement with a local district energy operator - Enwave which is already operating a district energy system serving some 140 buildings in downtown Toronto. The agreement requires Enwave to introduce a district energy heating (hot water) distribution system, and ultimately cooling, using local heating sources such as the nearby Redpath Sugar Refinery. Cogeneration plant produces power to feed into the hydro grid as well as heating. The excess or wasted heat from such a facility can be used as a source for district energy in the waterfront neighbourhoods.

The long-term objective is to connect all of the development in the waterfront to a district energy system capable of supplying heating and cooling. In order to meet the longer term demand for district energy (heating and cooling), the existing arrangement with Enwave will explore the use of thermo holding tanks, in East Bayfront, for hot water and cold lake water. The water would be further heated or chilled by a district energy plant using low cost overnight hydro as a fuel source.

One of the principal benefits of district energy is its increased efficiency over traditional systems and the resulting cost savings to building owners and tenants. However, in this exercise, we have been asked to address the broader economic impacts to the community and the City resulting from the development of district energy infrastructure in the City.



In summary, economic impacts are derived from a variety of sources:

- Increased building efficiencies which allow for more space to be allocated to revenue generation;
- The attraction of businesses that depend on a reliable and low cost source of energy;
- A reduction in leasing costs and a more competitive market for condominium buyers and office tenants;
- Increased development capacity in an area where electricity generation may be constrained presently or in the future;
- Opportunities for multiple energy sources allows for risk pooling for supply and price;
- Economic and environmental benefits from lower energy intensity and increased energy efficiencies; and,
- Development of new technologies that can be exported to other jurisdictions.

6.1.1 INCREASED BUILDING EFFICIENCIES

Using heat exchangers eliminates the need for expensive mechanical equipment, such as boilers, furnaces, hot water heaters, chillers, air conditioning units, together with related auxiliary systems. Furthermore, internal energy transfer stations occupy only about 20% of the space of traditional heating and cooling equipment. This results in much greater building efficiency, reducing costs and freeing up additional space for revenue generating activities.

Typically the mechanical rooms of office buildings and high-rise condominiums occupy between 4% and 9% of the total gross building area, with the lower end of the range associated with the largest buildings. Approximately 50% of this space is occupied by heating, cooling and water heating equipment.

Based on these ratios, the introduction of district energy throughout the waterfront would increase building efficiency by between 1.6% and 3.6%.

As discussed above, the amount of development proposed within the East Bayfront and West Don Lands precincts amounts to:

- 12,000,000 square feet of gross residential space;
- 937,000 square feet of institutional space;



- 1,591,000 square feet of office space; and,
- 318,000 square feet of retail space.

Assuming a conservative 1.6% increase in building efficiency and prevailing waterfront real estate market values¹⁵, the introduction of district energy would result in an additional \$89.7 million in real estate value, not including the added value due to lower energy, heating and cooling costs. At 3.6%, the added value amounts to \$201.8 million¹⁶.

6.1.2 ATTRACTION OF BUSINESSES DEPENDENT ON RELIABLE OR LOW COST POWER

Reduced capital and operating costs, coupled with minimized price fluctuations and increased reliability make district energy a popular alternative for some businesses. For example, one of the reasons cited for the development of the IBM software lab in Markham employing some 3,000 persons, was the ability to connect into the Markham District Energy system, which was constructed to supply low cost and sustainable power to Markham Centre. A significant advantage of the system was the added security and reliability required by IBM to support the 24 hour operations of the lab. The ability to offer district energy will make the waterfront more attractive to a range of businesses and institutional activities, particularly those depending on uninterrupted power, such as security firms, data centres, health centres, technology labs, and others.

6.1.3 MORE COMPETITIVE REAL ESTATE MARKET

Depending on the systems used, district energy will result in a significant reduction in both capital and operating costs related to heating and cooling. This in turn, provides office building owners the ability to offer lower common area charges to their tenants, which translates into higher building values. Similarly, reduced energy costs also increase the value of residential condominiums compared with areas relying on traditional energy, heating and cooling systems.

¹⁵ Estimated at \$420 per square foot for residential, \$200 per square foot for office and retail, and \$175 per square foot for institutional.

¹⁶ Based on the assumption that additional revenue-generating uses are permitted as a substitute for the floor area that would otherwise be required to house mechanical equipment (i.e., in the absence of a district energy system). Depending on the specific zoning permissions applicable to the various development sites in the waterfront area, this type of expansion of revenue-generating uses may be subject to a minor variance or similar zoning by-law amendment in some cases.



6.1.4 INCREASED DEVELOPMENT CAPACITY

A study by the University of Toronto¹⁷ analyzed the economic benefits of district energy under the assumption that the supply of energy was constrained. The rationale for this assumption is that the electrical transmission grid in central Toronto is challenged by the difficulty of transmission expansion in a dense urban environment and the rapid growth in electrical demand from new real estate and increased individual electricity demand. While the assumption of a constrained power supply is presently hypothetical, at some point in the future, there will likely be a requirement for additional generation capacity (likely nuclear) and a major new transmission line to the Port Lands, which would have to cross through existing residential neighbourhoods. This solution would require a very high financial and political cost and involve a lead time of up to ten years. According to the study, district energy may be the only feasible alternative to serving new development in the core without eventually reaching a supply constraint.

Based on the data compiled in the University of Toronto Study, the development planned for East Bayfront and the West Don Lands would require some 35.3 MW of power (peak demand). Assuming the constrained supply hypothesis, either now or in the future, the ability to provide district energy and avoid the need to generate additional power would result in:

- 52,999 years of direct, indirect and induced jobs resulting from construction;
- \$2.9 billion in direct, indirect and induced wages relating to construction;
- 6,557 on-site full-time equivalent jobs earning some \$393 million in annual wages;
- Annual property taxes (combined municipal and education) of some \$71.6 million; and,
- \$119.7 million in municipal and education development charges (mostly from residential development).

6.1.5 EXPANSION OF THE POWER GRID

District energy systems, such as proposed for the waterfront, have the ability to expand the capacity of the power grid in a number of ways:

¹⁷ The Power to Grow: The Economic and Fiscal Benefits of Urban Development Facilitated by Local Generation, District Energy and Conservation in an Electrically Constrained Scenario.



• Through energy efficiencies that capture a significantly larger amount of energy than traditional systems;

In addition, the introduction of conservation and demand management programs to ensure that new buildings are constructed to high standards of energy efficiency, in conjunction with district energy solutions will also reduce peak energy consumption.

In providing necessary power grid capacity, such programs enable new development to occur together with the associated economic and fiscal benefits.

Assuming a constrained power supply either existing or in the future, the University of Toronto study estimates that the expansion of the grid in Central Toronto by only 1 MW of peak capacity would:

- Add 745 years of direct and indirect employment associated with construction, together with \$32.8 million in wages;
- Accommodate 295 permanent jobs with \$19.8 million in wages;
- Generate \$4.9 million in Provincial and Federal income taxes;
- Generate \$1.5 million in annual municipal and education property taxes; and,
- Generate some \$3.0 million in one-time municipal and education development charges.

6.1.6 ENVIRONMENTAL BENEFITS

Depending on the technologies, district energy systems will, to varying degrees:

- Reduce overall energy consumption and during peak demand periods;
- Reduce sulphur dioxide and particulate emissions associated with traditional heating systems;
- Reduce carbon dioxide emissions associated with traditional heating systems;
- Reduce chlorofluorocarbon (CFC) refrigerants used in traditional cooling systems, which have been associated with the depletion of the ozone layer.


Enwave, for example reports that its current Toronto's operations reduce electricity demand by 61 MW and has reduced carbon dioxide emissions by some 79,000 tonnes per year, together with reducing or eliminating refrigerants and sulphur dioxides.

Although environmentally sustainable energy solutions are critical to the survival of the planet, it would be an extremely complex exercise to isolate the incremental effect of a single district energy system on the environment and on the broader economy. However, some qualitative, theoretical and psychological attributes of these environmental benefits will lead to economic advantages in Toronto's waterfront.

From an economic perspective, these environmental benefits free up capacity for additional development and activities that ultimately may be crowded out due to the cumulative environmental impacts of urbanization. Assuming other factors, such as traffic, shadowing, etc. do not play a limiting role, greater intensification can be built into communities tied to a district energy system because environmental constraints will be reduced.

From a corporate perspective, with many companies either on a voluntary basis or by mandate, seeking to reduce their environmental footprint, the ability to connect to a district energy system represents an attractive a low cost alternative to achieving their environmental goals.

Although, not documented, some homebuyers will be motivated by a desire to minimize their impact on the environment, resulting in premiums on residential land values, which surpass those already generated through reduced energy costs.

Finally, from a municipal economic development perspective, the ability to market its precincts as "green" communities provides Waterfront Toronto with a competitive edge over traditional business and residential locations.

6.1.7 AN EXPORTABLE TECHNOLOGY

District energy is still in the early to early-middle stages of technology adoption, requiring highly specialized expertise, skills, and solutions that are not currently available in most jurisdictions. While many communities, have to varying degrees, developed or acquired district energy solutions, the market is still wide open for both new customers and upgraded technologies used by existing customers.

Enwave, for example, is a company that has developed new technologies with varied applications in multiple jurisdictions. The technologies which are introduced in Toronto's waterfront can be transported to other jurisdictions across Canada and the world and will also allow Waterfront Toronto to become globally recognized as a leader in district energy solutions and an educational resource for other energy users. Since the investment has been made in distribution piping and waterfront buildings include net metering infrastructure, new energy and solar thermal projects are possible and more attractive to develop.



In summary, the district energy solutions initiated by Waterfront Toronto will produce both quantifiable and qualitative economic benefits. These benefits will not only enhance the marketability of the waterfront, but will stimulate job growth, generate revenues for all three levels of government, and promote Waterfront Toronto as a leader in urban environmental technologies.

6.2 ECONOMIC BENEFITS OF INTELLIGENT COMMUNITIES

A key element in planning for the revitalization of Toronto's waterfront will be the creation of digitally connected communities. In order to facilitate this objective, after a competitive selection process, Waterfront Toronto has entered into a public-private partnership with a supplier (Beanfield Condoconnect Inc.) to design, install, own, and operate an intelligent, ultra-broadband, open-access communications infrastructure that will be the foundation of one of the world's most advanced "Intelligent Communities". In fact, as part of their agreement with Waterfront Toronto, Beanfield is required to ensure that their network remains among seven of the world's leading Intelligent Community networks in terms of price and performance for at least ten years¹⁸.

The ultra-broadband infrastructure resulting from this initiative is expected to serve a variety of new commercial and residential users in the communities of East Bayfront and West Don Lands, as well as parts of the Central Waterfront, Lower Don Lands and Port Lands. Based on information provided by Waterfront Toronto, as well as our own development estimates, this network will ultimately serve more than 10,000 new households and 6,000 employees in the East Bayfront and West Don Lands precincts alone.

In that targeted economic development sectors for the waterfront include: film, computer animation, graphic design, digital media, and other creative, high-knowledge industries; access to a superior communications network will be a key component in attracting talented businesses and workers to this area of the City.

The intended strategy for this initiative is for the broadband supplier (Beanfield) to provide an open-access, ultra broadband infrastructure featuring non-preferential wholesale pricing arrangements with other telecommunications firms, as well as suppliers of content and services. Beanfield will offer a core set of competitive services to tenants, ensuring affordable access to global communication.

¹⁸ Based on information provided by Waterfront Toronto and Beanfield Condoconnect Inc.



6.2.1 CONCEPT OF INTELLIGENT COMMUNITIES

Intelligent Communities – often confused with the terms "wired communities', "broadband communities", or "digital communities" – are focused on the technological, social and economic benefits produced by being connected to a broadband system, including the rapid movement of large amounts of data and communications within the community and to external communities. However, Intelligent Communities also look into the creation of a robust knowledge workforce, marketing and advocacy, as well as the creation of a culture of innovation. It is also important to recognize that broadband does not act on the economy in isolation, but rather as a complement to other technologies. In this way, Intelligent Communities breed a culture of innovation, which causes communities to develop creative solutions to keep up not only with global shifts, but also with the needs of their residents. For example, new e-retail and e-procurement strategies put pressure on banks and financial institutions to develop secure and reliable methods for sending funds electronically.

The Intelligent Community Forum (ICF), which rates communities on their excellence in creating economic opportunities in the broadband economy, identifies specific benefits offered within Intelligent Communities:

- Improved health care and reduction of health care costs through online and phone services connected to health providers, both locally and globally;
- Superior residential connections for knowledge workers and technology consultants facilitating increased productivity, flexible work arrangements and remote employment;
- Increased access to employment skills training and an enhanced labour force through improved access to educational opportunities via distance education programs;
- Increased labour force productivity; and,
- Improvements in quality of life, for example by enabling more participation in community and civic activities, making a locale more attractive to potential residents.

6.2.2 BROADER ECONOMIC IMPACTS OF INTELLIGENT COMMUNITIES

Intelligent Communities also generate broader benefits throughout regional and national economies, including employment growth, increases in Gross Domestic Product (GDP) and growth in the average GDP per capita. Impacts of such magnitude have been forecast by Albert (2008) and by Crandall and Jackson (2001), whose study – *The \$500 Billion Opportunity: the Potential Economic Benefits of Widespread Diffusion of Broadband Internet Access* – developed economic projections relating to the expansion of broadband in the United



States. Specifically, Crandall concludes that the universal adoption of broadband internet connections by U.S. households could generate economic benefits in the range of \$200 billion to \$400 billion per year¹⁹. Similarly, other studies estimated the creation of 1.2 million jobs in the U.S. and that <u>failure</u> to improve broadband access could reduce U.S. productivity growth by up to 1% a year²⁰.

In the context of the European economy, similar projections of the potential economic impacts of broadband development in the European Union have been studied by Fornefeld, Delaunay and Elixmann (2008). Their study – *The Impact of Broadband on Growth and Productivity* – emphasizes the importance of remaining at the forefront of worldwide broadband development, which they estimate could contribute to the creation of 345,000 to 2,112,000 jobs and between €636 billion and €1080 billion of economy activity in the European Union between 2006 and 2015^{21} .

At the most basic economic level, the implementation of large scale Intelligent Communities can stimulate economic activity and reduce structural and frictional unemployment by improving the efficiency of the labour market. For example, the aforementioned study by Fornefeld, Delaunay and Elixmann also suggests that business establishments adopting broadband-based processes experience improvements in labour productivity of approximately 5% in the manufacturing sector and 10% in the services sector on average²².

6.2.3 LOCAL ECONOMIC BENEFITS OF INTELLIGENT COMMUNITIES

While the aforementioned benefits apply to regional and national economies at large, local benefits such as those specifically generated by the Waterfront Toronto initiative will be equally significant. For example:

- In comparing similar communities, locations with access to broadband experience greater and more rapid growth in employment, number of business establishments, and particularly the number of businesses in IT-intensive sectors²³.
- Property values tend to be higher in areas where broadband is available, compared to areas without broadband. Recent studies indicate that rental rates, which serve as an approximation for property values in a given area, were nearly 7% higher in

¹⁹ Crandall, R. W. & Jackson, C. L. (2001). The \$500 Billion Opportunity: The Potential Economic Benefit of Widespread Diffusion of Broadband Internet Access. Retrieved 20th June, 2012 from http://www.att.com/public affairs/broadband_policy/BrookingsStudy.pdf.

²⁰ Based on information retrieved from <u>http://www.intelligentcommunity.org</u> on 19th February, 2010.

²¹ Fornefeld, Delaunay & Elixmann (2008). *The Impact of Broadband on Growth and Productivity*. Study prepared on behalf of the European Commission. Retrieved 20th June, 2012 from http://ec.europa.eu/information-society/eeurope/i2010/docs/benchmarking/broadband-impact 2008.pdf.

²² Ibid.

²³ Gillett, S. E. et al. (2006). *Measuring Broadband's Economic Impact*. Report prepared for the U.S. Department of Commerce, Economic Development Administration. Retrieved 21st June 2012 from http://cfp.mit.edu/publications/CFP Papers/Measuring bb econ impact-final.pdf.



communities with access to broadband²⁴. Similarly, based on estimates from Waterfront Toronto and supported by our interviews with local real estate professionals, the premium investors are willing to pay for access to this type of ultra-broadband network is estimated at between \$1,800 and \$4,200 per unit for new residential developments. Based on this range, and a total of more than 10,000 new residential units to be developed on the lands controlled by Waterfront Toronto in the East Bayfront and West Don Lands in coming years, the additional real estate value generated by this initiative could amount to between \$18 million and \$42 million.

- In the service sector particularly finance, insurance, real estate and educational service-based industries an expanded broadband capacity leads to an increase in the number of jobs and an increase in GDP. In the context of the U.S., Crandall estimated that an increase of 1.0% in a state's broadband penetration would yield a corresponding increase in employment of approximately 0.2% to 0.3% per year; representing approximately 300,000 jobs nationally.
- Savings from online activities involving health care services and less time spent commuting can reduce environmental pollution and increase online transactions.
- A comparative analysis of per capita retail sales growth in areas with municipal broadband networks analyzed against ten other communities showed that sales per capita grew almost twice as fast in the area with a municipal broadband network compared to the control group²⁵
- Intelligent communities enable companies to be global exporters including the export of skills, knowledge and culture, which were never portable before. Individuals and local businesses can go global in search of low-cost, quality vendors and web-based tools can increase community involvement.

6.2.4 SUMMARY

In conclusion, the economic benefits generated by Intelligent Communities are tangible and quantifiable. Within the Waterfront Toronto context, the introduction of a comprehensive ultra-broadband infrastructure will elevate the attractiveness of future neighbourhoods for both business and residential investors. As an Intelligent Community, Toronto's waterfront will also have the ability to tap into a global market, enabling it to compete for businesses and employment talent from well beyond the Greater Toronto Area.

²⁴ Ibid.

²⁵ Ford, G. S. & Koutsky, T. M. (2005). Broadband and Economic Development: A Municipal Case Study from Florida. Applied Economic Studies (April 2005). Retrieved from http://www.designnine.com/library/docs/other-papers/BroadbandFactFiction.pdf.



Specific benefits of the system for the waterfront community could include:

- tele-health services for residents which would be directly connected to new community wellness centres and Toronto's world class hospitals;
- Increased virtual access for schools and businesses to global experts and thought leaders; and,
- Enhanced virtual collaboration opportunities for businesses, research institutions and schools.

It is also important to note that property value increase associated with broadband infrastructure will enable some or all of the costs of providing the broadband infrastructure to be borne by the private sector; either as an upfront amenity fee charged to tenants or building unit purchasers, or as a recurring charge similar to other utilities. As a result, the role of Waterfront Toronto in this initiative has generally been one of coordination and facilitation, without having to provide significant upfront capital costs. Consequently, this ultra-broadband infrastructure initiative has the potential to be one of the highest returns on public investment of any waterfront project.



APPENDIX A – NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 2007

The following appendix provides a brief overview of the NAICS 2007 classification system and the two-digit level industry classifications considered in this report, as described by Statistics Canada.

FIGURE A-1: NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), DESCRIPTION

The North American Industry Classification System (NAICS) is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis of the three economies. NAICS is based on supply-side or production-oriented principles, to ensure that industrial data, classified to NAICS, are suitable for the analysis of production-related issues such as industrial performance.

FIGURE A-2: NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), INDUSTRY CLASSIFICATIONS

11. Agriculture, Forestry, Fishing and Hunting

This sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, harvesting fish and other animals from their natural habitats and providing related support activities.

Establishments primarily engaged in agricultural research or that supply veterinary services are not included in this sector.

21. Mining, Quarrying, and Oil and Gas Extraction

This sector comprises establishments primarily engaged in extracting naturally occurring minerals. These can be solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operations, milling (for example, crushing, screening, washing, or flotation) and other preparation customarily done at the mine site, or as a part of mining activity. Establishments engaged in exploration for minerals, development of mineral properties and mining operations are included in this sector. Establishments performing similar activities, on a contract or fee basis, are also included.



22. Utilities

This sector comprises establishments primarily engaged in operating electric, gas and water utilities. These establishments generate, transmit, control and distribute electric power; distribute natural gas; treat and distribute water; operate sewer systems and sewage treatment facilities; and provide related services, generally through a permanent infrastructure of lines, pipes and treatment and processing facilities.

23. Construction

This sector comprises establishments primarily engaged in constructing, repairing and renovating buildings and engineering works, and in subdividing and developing land. These establishments may operate on their own account or under contract to other establishments or property owners. They may produce complete projects or just parts of projects. Establishments often subcontract some or all of the work involved in a project, or work together in joint ventures. Establishments may produce new construction, or undertake repairs and renovations to existing structures.

31-33. Manufacturing

This sector comprises establishments primarily engaged in the physical or chemical transformation of materials or substances into new products. These products may be finished, in the sense that they are ready to be used or consumed, or semi-finished, in the sense of becoming a raw material for an establishment to use in further manufacturing. Related activities, such as the assembly of the component parts of manufactured goods; the blending of materials; and the finishing of manufactured products by dyeing, heat-treating, plating and similar operations are also treated as manufacturing activities. Manufacturing establishments are known by a variety of trade designations, such as plants, factories or mills.

41. Wholesale Trade

This sector comprises establishments primarily engaged in wholesaling merchandise and providing related logistics, marketing and support services. The wholesaling process is generally an intermediate step in the distribution of merchandise; many wholesalers are therefore organized to sell merchandise in large quantities to retailers, and business and institutional clients. However, some wholesalers, in particular those that supply non-consumer capital goods, sell merchandise in single units to final users.



44-45. Retail Trade

The retail trade sector comprises establishments primarily engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

48-49. Transportation and Warehousing

This sector comprises establishments primarily engaged in transporting passengers and goods, warehousing and storing goods, and providing services to these establishments. The modes of transportation are road (trucking, transit and ground passenger), rail, water, air and pipeline. These are further subdivided according to the way in which businesses in each mode organize their establishments. National post office and courier establishments, which also transport goods, are included in this sector. Warehousing and storage establishments are subdivided according to the type of service and facility that is operated.

51. Information and Cultural Industries

This sector comprises establishments primarily engaged in producing and distributing (except by wholesale and retail methods) information and cultural products. Establishments providing the means to transmit or distribute these products or providing access to equipment and expertise for processing data are also included.

52. Finance and Insurance

This sector comprises establishments primarily engaged in financial transactions (that is, transactions involving the creation, liquidation, or change in ownership of financial assets) or in facilitating financial transactions.

53. Real Estate and Rental and Leasing

This sector comprises establishments primarily engaged in renting, leasing or otherwise allowing the use of tangible or intangible assets. Establishments primarily engaged in managing real estate for others; selling, renting and/or buying of real estate for others; and appraising real estate, are also included.

54. Professional, Scientific and Technical Services

This sector comprises establishments primarily engaged in activities in which human capital is the major input. These establishments make available the knowledge and skills of their employees, often on an assignment basis. The individual industries of this sector are defined on the basis of the particular expertise and training of the service provider.



55. Management of Companies and Enterprises

This sector comprises establishments primarily engaged in managing companies and enterprises and/or holding the securities or financial assets of companies and enterprises, for the purpose of owning a controlling interest in them and/or influencing their management decisions. They may undertake the function of management, or they may entrust the function of financial management to portfolio managers.

56. Administrative and Support, Waste Management and Remediation Services

This sector comprises two different types of establishments: those primarily engaged in activities that support the day-to-day operations of other organizations; and those primarily engaged in waste management activities.

61. Educational Services

This sector comprises establishments primarily engaged in providing instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities and training centres. These establishments may be privately owned and operated, either for profit or not, or they may be publicly owned and operated. They may also offer food and accommodation services to their students.

62. Health Care and Social Assistance

This sector comprises establishments primarily engaged in providing health care by diagnosis and treatment, providing residential care for medical and social reasons, and providing social assistance, such as counselling, welfare, child protection, community housing and food services, vocational rehabilitation and child care, to those requiring such assistance.

71. Arts, Entertainment and Recreation

This sector comprises establishments primarily engaged in operating facilities or providing services to meet the cultural, entertainment and recreational interests of their patrons. These establishments produce, promote or participate in live performances, events or exhibits intended for public viewing; provide the artistic, creative and technical skills necessary for the production of artistic products and live performances; preserve and exhibit objects and sites of historical, cultural or educational interest; and operate facilities or provide services that enable patrons to participate in sports or recreational activities or pursue amusement, hobbies and leisure-time interests.



72. Accommodation and Food Services

This sector comprises establishments primarily engaged in providing short-term lodging and complementary services to travellers, vacationers and others, in facilities such as hotels, motor hotels, resorts, motels, casino hotels, bed and breakfast accommodation, housekeeping cottages and cabins, recreational vehicle parks and campgrounds, hunting and fishing camps, and various types of recreational and adventure camps. This sector also comprises establishments primarily engaged in preparing meals, snacks and beverages, to customer order, for immediate consumption on and off the premises.

81. Other Services (except Public Administration)

This sector comprises establishments, not classified to any other sector, primarily engaged in repairing, or performing general or routine maintenance, on motor vehicles, machinery, equipment and other products to ensure that they work efficiently; providing personal care services, funeral services, laundry services and other services to individuals, such as pet care services and photo finishing services; organizing and promoting religious activities; supporting various causes through grant-making, advocating (promoting) various social and political causes, and promoting and defending the interests of their members. Private households are also included.

91. Public Administration

This sector comprises establishments primarily engaged in activities of a governmental nature, that is, the enactment and judicial interpretation of laws and their pursuant regulations, and the administration of programs based on them. Legislative activities, taxation, national defence, public order and safety, immigration services, foreign affairs and international assistance, and the administration of government programs are activities that are purely governmental in nature.



APPENDIX B – QUALITATIVE RESEARCH INTERVIEW SUMMARY

The following appendix provides a detailed overview of the feedback we received while conducting a series of qualitative research interviews with local real estate professionals involved in the development of Toronto's waterfront.

Based on the results of these research interviews, we were able to identify a number of key themes and common responses among the interview participants. The table in Figure B-1 summarizes some of the most notable of these themes and is generally organized by major discussion topics, as outlined in Section 4.1 of this study.

FIGURE B-1: SUMMARY OF KEY THEMESE, QUALITATIVE RESEARCH INTERVIEWS

DISCUSSION TOPIC	KEY THEMES & COMMON RESPONSES				
Investment Decisions & Contributing Factors	 The majority of interview participants indicated that decisions to invest in the City's waterfront – particularly in areas east of Yonge Street – were primarily driven by the fact that this area represented an emerging opportunity for new development and urban regeneration, with a significant potential for future growth. Many participants also identified the location of the eastern waterfront as a main factor in attracting investment; especially in terms of its proximity to the downtown core and to Lake Ontario. 				
Impact of Specific Investments	 Of all the different types of investments made by Waterfront Toronto, the following were generally thought to have been most impactful in terms of advancing development projects in the eastern waterfront and attracting additional private sector investment: <u>Flood Protection Landform</u> – most interview participants indicated that the development of the eastern waterfront area would not have been possible without Waterfront Toronto's investments in the remediation and flood protection of lands in the West Don Lands. <u>Infrastructure Planning/Investment</u> – generally seen as a prerequisite for development in the waterfront, many interview participants indicated that recent and planned investments in basic infrastructure (e.g., road network, transit, etc.) was critical in the attraction of potential new residents and investors to the area. 				



	 <u>Parks & Public Spaces</u> – investments in the various new amenities of the eastern waterfront, including the recently completed Sugar Beach and Sherbourne Common Park, were also commonly identified as a key contributor in attracting further private sector investment to the area, as well helping to advance recent/proposed development
Research, Branding & Marketing Materials	 Projects once they reached market. Most of the representatives of development and real estate firms involved with the marketing of projects to potential investors/buyers indicated that they used Waterfront Toronto's research and branding information to supplement their own promotional materials. This suggests that the presence and involvement of Waterfront Toronto has helped to instill some level of confidence among potential buyers that would not otherwise exist.
	 Similarly, many of the interview participants specifically indicated that Waterfront Toronto's branding and marketing materials were used to help portray an image of certainty and credibility in the development of the waterfront.
Importance of Unified Vision for Waterfront Development	 Several participants indicated that the master planning and comprehensive design work conducted by Waterfront Toronto has provided a level of certainty and reliability that would not have existed otherwise. In particular, investments of this type were thought to add value by guaranteeing the establishment of complete communities.
	 It was also frequently suggested that having a unified vision for the waterfront area has been a key selling point to residential and commercial investors; largely as a result of the positive investor perception created by the level of certainty provided by the master plans.
Benefits of Preliminary Planning & Design Work	 As it relates to the various preliminary planning and design work conducted by Waterfront Toronto, interview respondents were somewhat divided in their opinions as to whether such investments have helped or hindered the pace of development in the waterfront.
	 Overall, most shared the opinion that there was significant value added in setting the context for development, as well as assembling the land required for development and obtaining the required municipal approvals for zoning, building heights, and development densities.
	 At the same time, however, some participants indicated that the planning and approvals



	process became overly cumbersome in the event that even minor amendments to existing policies were required.
Land Value Premiums	 A common opinion among the interview participants was that Waterfront Toronto's recent investments have not necessarily increased property values directly, but rather made it possible for development in this area to occur at all. In fact, many participants credited Waterfront Toronto with "unlocking" the potential value of land in this area, as well increasing absorption rates.
	 Furthermore, although many suggested that no property value premiums currently exist relative to other areas of central Toronto, most anticipate that land and real estate values will increase substantially once a greater amount of development has occurred in this area (i.e., once actual physical change has occurred). In other words, the expected returns on Waterfront Toronto's investments are yet to be fully realized in this regard.
	 As it relates to specific areas of investment, most participants indicated that the organization's recent investments in transit and the public realm (e.g., parks and open spaces) are likely to have the greatest impact on property values in the coming years.
Future Projects & Initiatives Required	 Almost every single interview participant identified Transit as being the key priority among projects that are yet to be completed in the waterfront area. In particular, it was the opinion of most participants that investment in Light Rail Transit (LRT) infrastructure along Cherry Street and Queens Quay, as currently proposed, would represent the single most important factor in advancing future development in the eastern waterfront. It was also suggested that this would generate the greatest impacts on land values in the area.
	 A number of participants also suggested that providing access to the existing underground PATH system in downtown Toronto (i.e., extending east of the Redpath sugar refinery) would significantly increase land values in the coming years. In particular, this would be of greatest importance in attracting additional office commercial development to the area.
Other Topics & Comments	 Although not directly related to any of the discussion topics identified above, it is also important to note that several interview participants emphasized that the vacant lands in waterfront would have been left dormant for much longer without the presence of Waterfront Toronto, who have helped to accelerate the development of the eastern waterfront overall.



	-	Some participants also added that the development of this area would not have been
		possible without the vision and leadership of an organization like Waterfront Toronto.

SOURCE: urbanMetrics inc., based on the results of research interviews conducted with Toronto real estate professionals between July 4th and July 26th, 2012.



APPENDIX C - HISTORIC BUILDING PERMIT STATISTICS (BACKGROUND DATA)

FIGURE C-1: HISTORIC BUILDING PERMIT INFORMATION, WATERFRONT AREA (2000 – 2011)

WATERFRONT AREA

1

YEAR	TOTAL BUILDING PERMITS ISSUED (#)	TOTAL CONS VALUE (TRUCTION \$ Millions)	AVERAGE VALUE PER PERMIT (\$)	LAND AREA (sq km)	AVERAGE PERMITS PER SQ KM	AVERAGE VALUE PER SQ KM (\$ Millions)
2000	206	\$	45.33	\$ 220,026.75	3.83	53.8	\$ 11.83
2001	153	\$	19.16	\$ 125,256.93	3.83	39.9	\$ 5.00
2002	120	\$	162.57	\$1,354,722.13	3.83	31.3	\$ 42.44
2003	153	\$	106.18	\$ 693,986.27	3.83	39.9	\$ 27.72
2004	206	\$	70.62	\$ 342,820.39	3.83	53.8	\$ 18.44
2005	253	\$	120.70	\$ 477,071.54	3.83	66.0	\$ 31.51
2006	306	\$	53.58	\$ 175,081.85	3.83	79.9	\$ 13.99
2007	302	\$	151.53	\$ 501,754.31	3.83	78.8	\$ 39.56
2008	252	\$	54.49	\$ 216,226.19	3.83	65.8	\$ 14.23
2009	229	\$	430.36	\$1,879,302.95	3.83	59.8	\$ 112.35
2010	309	\$	160.11	\$ 518,150.36	3.83	80.7	\$ 41.80
2011	335	\$	357.50	\$1,067,157.24	3.83	87.5	\$ 93.33
TOTAL	2,824	\$	1,732.12	\$ 613,355.82	3.83	737.3	\$ 452.20

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



FIGURE C-2: HISTORIC BUILDING PERMIT INFORMATION, OLD CITY OF TORONTO (2000 – 2011)

OLD CITY OF TORONTO

1

YEAR	TOTAL BUILDING PERMITS ISSUED (#)	TOTAL CONSTRUCTION VALUE (\$ Millions)		LAND AREA (sq km)	BULDING PERMITS PER SQ KM	VALUE OF PERMITS PER SQ KM (\$ Millions)	
2000	13,880	\$ 1,522.72	\$ 109,706.35	101.82	136.3	\$ 14.95	
2001	13,168	\$ 1,641.66	\$ 124,670.34	101.82	129.3	\$ 16.12	
2002	17,011	\$ 1,624.97	\$ 95,524.55	101.82	167.1	\$ 15.96	
2003	15,157	\$ 1,873.79	\$ 123,625.27	101.82	148.9	\$ 18.40	
2004	17,140	\$ 2,153.59	\$ 125,647.06	101.82	168.3	\$ 21.15	
2005	15,344	\$ 2,842.14	\$ 185,227.86	101.82	150.7	\$ 27.91	
2006	16,179	\$ 1,956.43	\$ 120,924.34	101.82	158.9	\$ 19.21	
2007	16,016	\$ 2,372.35	\$ 148,124.02	101.82	157.3	\$ 23.30	
2008	16,952	\$ 3,911.03	\$ 230,712.07	101.82	166.5	\$ 38.41	
2009	14,114	\$ 3,257.39	\$ 230,791.49	101.82	138.6	\$ 31.99	
2010	17,420	\$ 4,100.51	\$ 235,390.84	101.82	171.1	\$ 40.27	
2011	17,470	\$ 4,494.50	\$ 257,269.76	101.82	171.6	\$ 44.14	
TOTAL	189,851	\$ 31,751.09	\$ 167,242.15	101.82	1,864.5	\$ 311.82	

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).

1



FIGURE C-3: HISTORIC BUILDING PERMIT INFORMATION, CITY OF TORONTO (2000 – 2011)

TOTAL CITY OF TORONTO

YEAR	TOTAL BUILDING PERMITS ISSUED (#)	TOTAL CONSTRUCT VALUE (\$ Millio	-	AGE VALUE PERMIT (\$)	LAND AREA (sq km)	BULDING PERMITS PER SQ KM	VALUE OF F PER SQ KM (\$ N	
2000	27,447	\$ 3,001	85 \$	109,368.87	633.73	43.3	\$	4.74
2001	28,777	\$ 2,982	30 \$	103,634.83	633.73	45.4	\$	4.71
2002	35,771	\$ 3,323	82 \$	92,919.35	633.73	56.4	\$	5.24
2003	32,473	\$ 3,824	27 \$	117,767.69	633.73	51.2	\$	6.03
2004	35,777	\$ 3,967	36 \$	110,891.38	633.73	56.5	\$	6.26
2005	33,285	\$ 4,941	04 \$	148,446.41	633.73	52.5	\$	7.80
2006	33,181	\$ 3,724	37 \$	112,243.97	633.73	52.4	\$	5.88
2007	35,659	\$ 4,403	99 \$	123,502.86	633.73	56.3	\$	6.95
2008	35,725	\$ 6,488	75 \$	181,630.60	633.73	56.4	\$	10.24
2009	28,942	\$ 5,292	16 \$	182,853.85	633.73	45.7	\$	8.35
2010	38,095	\$ 6,886	38 \$	180,768.53	633.73	60.1	\$	10.87
2011	36,134	\$ 7,646	49 \$	211,614.74	633.73	57.0	\$	12.07
TOTAL	401,266	\$ 56,482	76 \$	140,761.40	633.73	633.2	\$	89.13

SOURCE: urbanMetrics inc., based on historic building permit statistics obtained from the City of Toronto (2000-2011).



APPENDIX D – RATIONALE FOR INCLUDING DEVELOPMENT PROJECTS INFLUENCED BY WATERFRONT TORONTO ACTIVITIES

Address Surrounding Area		Justification	Project Status	Type of Development	Type of Development
130 HARBOUR ST	Central Waterfront		Application Submitted	Mixed Use	Short Term
25 LOWER SIMCOE ST	Central Waterfront	Located entirely within Waterfront Toronto Precinct/Neighbourhood, and therefore benefits	Decision on Application	Mixed Use	Short Term
50 LAKE SHORE BLVD W	Central Waterfront	from their proximity to Waterfront Toronto investments in community infrastructure,	Ready for Occupancy	Mixed Use	Short Term
5 HARBOUR ST	Central Waterfront	including new waterfront access, parks and public spaces.	Building Permit Issued	Commercial	Short Term
0 HARBOUR ST	Central Waterfront		Application Submitted	Mixed Use	Short Term
71 FRONT ST E ⁴	Distillery District and Corktown		Application Submitted	Mixed Use	Short Term
30 KING ST E ⁴	Distillery District and Corktown		Under Construction	Mixed Use	Short Term
63 QUEEN ST E	Distillery District and Corktown	Developments could not have proceeded without flood control and soil remediation (i.e.,	Construction Completed	Commercial	Short Term
03 KING ST E	Distillery District and Corktown		Application Submitted	Institutional	Short Term
45 KING ST E	Distillery District and Corktown	Flood Protection Landform). Projects also benefit from their proximity to Waterfront Toronto	Under Construction	Commercial	Short Term
10 KING ST E	Distillery District and Corktown	investments in community infrastructure, including new waterfront and riverfront access,	Under Construction	Mixed Use	Short Term
49 KING ST E	Distillery District and Corktown	parks and public spaces; particularly those in the West Don Lands.	Construction Completed	Mixed Use	Short Term
EASTERN AVE	Distillery District and Corktown		Under Construction	Mixed Use	Short Term
7 EASTERN AVE	Distillery District and Corktown		Application Submitted	Commercial	Short Term
51 LAKE SHORE BLVD E	Lower Don Lands		Application Submitted	Mixed Use	Short Term
90 CHERRY ST	Lower Don Lands	Located entirely, within Waterfront Taronto President/Neighbourhood, and therefore herefits	Decision on Application	Mixed Use	Short Term
90 CHERRY ST	Lower Don Lands	Located entirely within Waterfront Toronto Precinct/Neighbourhood, and therefore benefits	Under Construction	Mixed Use	Short Term
90 CHERRY ST	Lower Don Lands	from their proximity to Waterfront Toronto investments in community infrastructure, including new waterfront and riverfront access, parks and public spaces; including those in	Proposed	Mixed Use	Short Term
AKE SHORE BLVD E ²	Lower Don Lands	the Fast Bayfront and West Don Lands.	Announced	Mixed Use	Long Term
50 CHERRY ST	Lower Don Lands		Decision on Application	Other	Short Term
09 CHERRY ST	Lower Don Lands		Application Submitted	Mixed Use	Short Term
40 BROADVIEW AVE	Don Valley and Lake Shore (Riverdale)		Building Permit Application	Residential	Short Term
0 SUNLIGHT PARK RD	Don Valley and Lake Shore (Riverdale)		Construction Completed	Commercial	Short Term
1 BROADVIEW AVE	Don Valley and Lake Shore (Riverdale)		Decision on Application	Commercial	Short Term
56 EASTERN AVE	Don Valley and Lake Shore (Riverdale)		Construction Completed	Industrial	Short Term
61 EASTERN AVE	Don Valley and Lake Shore (Riverdale)		Under Construction	Commercial	Short Term
59 EASTERN AVE	Don Valley and Lake Shore (Riverdale)	Projects proximal to West Don Lands, and therefore benefit from nearby Waterfront Toronto	Application Submitted	Mixed Use	Short Term
62 EASTERN AVE	Don Valley and Lake Shore (Riverdale)	investments in community infrastructure, including new waterfront and riverfront access,	Application Submitted	Mixed Use	Short Term
25 QUEEN ST E	Don Valley and Lake Shore (Riverdale)	parks and public spaces; particluarly in the West Don Lands.	Ready for Occupancy	Mixed Use	Short Term
30 QUEEN ST E	Don Valley and Lake Shore (Riverdale)	parks and public spaces, particidarly in the west bon Lands.	Under Construction	Mixed Use	Short Term
77 QUEEN ST E	Don Valley and Lake Shore (Riverdale)		Construction Completed	Commercial	Short Term
92 QUEEN ST E	Don Valley and Lake Shore (Riverdale)		Construction Completed	Mixed Use	Short Term
47-749 QUEEN ST E	Don Valley and Lake Shore (Riverdale)		Construction Completed	Mixed Use	Short Term
0 BROADVIEW AVE	Don Valley and Lake Shore (Riverdale)		Under Construction	Mixed Use	Short Term
1 DON VALLEY PKWY	Don Valley and Lake Shore (Riverdale)		Announced	Mixed Use	Long Term
YONGE ST ³	Yonge and Queens Quay	The creation of a major urban activity centre in the East Bayfront which has expanded the	Announced	Mixed Use	Long Term
5 QUEENS QUAY E	Yonge and Queens Quay	concept of the neighbourhood beyond the direct area of investment. Projects also benefit	Decision on Application	Mixed Use	Short Term
5 LAKE SHORE BLVD E ^{1,3}	Yonge and Queens Quay	from their proximity to Waterfront Toronto investments in community infrastructure,	Speculative	Mixed Use	Long Term
5 QUEENS QUAY E	Yonge and Queens Quay	including new waterfront access, parks and public spaces; particularly those in the East	Speculative	Industrial	Long Term

TOTAL ALL

SOURCE: urbanMetrics inc., based on City of Toronto development application statistics, information obtained during research interview process and other research conducted by urbanMetrics.

1) Development is tentative

2) Address unknown at current time.

3) As information related to development is currently unknown, the figures represent urbanMetrics estimate

4) Developments located immediately adjacent to study area boundary