


**RESEARCH UPDATE:**  
ECONOMIC IMPACTS OF PORT LANDS DEVELOPMENT  
TORONTO, ONTARIO  
PREPARED FOR WATERFRONT TORONTO



June 20, 2016



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# Executive Summary

## BACKGROUND

- In 2014, Waterfront Toronto retained urbanMetrics inc. (“urbanMetrics”) to complete an economic impact analysis, which evaluated various economic benefits likely to be generated by the corporation’s planned investment program over the next ten years (i.e., the Waterfront Toronto 2.0 plan). As much of the future capital spending in the Waterfront Toronto 2.0 plan relates specifically to unlocking the significant development potential of the Port Lands area, one of the components of this previous study was an evaluation of the potential economic impacts generated by future construction activity in the area over the long-term planning horizon.
- In light of more recent development data that are now available and guided by suggestions from a recent peer review of our 2014 study by PricewaterhouseCoopers (“PwC”), urbanMetrics has been asked to update our analysis of the economic benefits associated with the Waterfront Toronto 2.0 investment program.
- This study is intended to provide a high level review and update as to the potential economic impacts that could ultimately be generated by new construction in the Port Lands between 2015 and 2042.

## RESEARCH FINDINGS

- Although Waterfront Toronto’s recent and planned investments span the entire length of Toronto’s waterfront, the majority of the corporation’s future investments will continue to be focused in a number of geographic precincts situated near the City’s core, including those targeted at unlocking the significant development potential of the Port Lands.
- Based on development forecasts obtained directly from Waterfront Toronto, the Port Lands are expected to be comprised—at least in part—by some 13.6 million square feet of development floor area north of the Ship Channel, including a range of new residential, office, and retail/service commercial uses. These primarily private sector development projects will be made possible by the significant direct investment by Waterfront Toronto in planning and infrastructure as part of the Waterfront Toronto 2.0 plan; particularly those investments relating specifically to flood protection and other enabling infrastructure in this area.
- The full build-out of the Port Lands is expected to involve some **\$4.3 billion in construction and related investments**. This level of private investment amounts to more than double the infrastructure investment included in the Waterfront Toronto 2.0 plan.

- Future construction activity in the Lower Don Lands/Port Lands is ultimately expected to generate:
  - **±\$8.3 billion in gross output** to the Canadian economy;
  - **±\$4.0 billion in value added** to the Canadian economy;
  - **±41,100 person years of employment**;
  - **±\$2.7 billion in labour income**; and,
  - **±\$1.5 billion in revenues** to the three levels of government.
- These economic benefits will not be realized without the initial direct investments in flood protection and other enabling infrastructure being made by Waterfront Toronto, estimated at some \$1.08 billion.
- In addition to the broader construction related impacts highlighted above, this **\$1.08 billion of direct investment** by Waterfront Toronto in flood protection and enabling infrastructure is expected to generate:
  - **±\$2.2 billion in gross output** to the Canadian economy;
  - **±\$1.1 billion in value added** to the Canadian economy;
  - **±10,800 person years of employment**;
  - **±\$724 million in labour income**; and,
  - **±\$373 million in revenues** to the three levels of government.
- The results of our updated analysis are generally similar and directly comparable to the economic impacts highlighted in our previous 2014 report. In particular, any variation between these two analyses are relatively insignificant, in our opinion, and primarily related to the various updated statistics and other data inputs considered in this latest research update (e.g., Statistics Canada input-output multiplier tables, personal and corporate tax rate information, employment data, input spending information, construction cost factors, etc.).<sup>1</sup>

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<sup>1</sup> We note that the multiplier values in our previous 2014 report may differ slightly from those summarized herein; particularly for the “value added” impacts shown. While the actual dollar amounts are similar, some of the previous multipliers were calculated as a function of the total initial investment/expenditure, rather than the direct impacts shown for that particular variable. This is a matter of representation only and does not have any direct impact on the actual results of our previous or updated analyses.

# 1 Introduction

## 1.1 BACKGROUND

In 2014, Waterfront Toronto retained urbanMetrics inc. (“urbanMetrics”) to complete an economic impact analysis, which evaluated various economic benefits to be generated by the corporation’s planned investment program over the next ten years (i.e., the Waterfront Toronto 2.0 plan). This study represented the latest in a series of assessments of the direct, indirect and induced impacts of Waterfront Toronto’s revitalization investment. As much of the future capital spending in the Waterfront Toronto 2.0 plan relates specifically to unlocking the significant development potential of the Port Lands area—specifically through flood protection and enabling infrastructure—this previous study also evaluated the potential economic impacts generated by future construction activity in the area over a longer-term planning horizon.

Since our last report was completed, Waterfront Toronto has been asked, as part of their Port Lands Due Diligence exercise, to undertake a peer review of urbanMetrics’ 2014 study. The peer review consultant ultimately selected by Waterfront Toronto—PricewaterhouseCoopers (“PwC”)—has now completed their review and has prepared a final report, dated October 2015. Although PwC generally found the methodology and assumptions adopted by urbanMetrics in the 2014 study to be reasonable, they also provided some recommendations and identified a number of areas in which the analysis could potentially be improved, in their opinion. In light of more recent expenditure and development data that are now available, and guided by suggestions from this recent peer review, urbanMetrics has been asked to update our analysis of the economic benefits associated with the Waterfront Toronto 2.0 investment program.

In particular, Waterfront Toronto’s ongoing investments in planning and infrastructure are expected to continue to stimulate additional public and private sector development in and in the vicinity of the waterfront area. The following document is primarily intended to provide an update as to the potential economic impacts that could ultimately be generated by new construction in the Port Lands between 2015 and 2042. An update as to the potential economic benefits derived from the related direct investments being made by Waterfront Toronto in flood protection and enabling infrastructure has also been included in this research update. The information presented herein provides an overview of the scope of this research update and summarizes our key research findings and conclusions.

## 1.2 PROJECT SCOPE

Whereas the first component of our 2014 analysis addressed the economic impacts related to Waterfront Toronto’s direct spending on planning and infrastructure throughout the broader waterfront area, this updated analysis focuses primarily on the economic benefits that could be generated by the construction activity stimulated specifically in the Port Lands, which will be made possible by Waterfront Toronto’s initial investments in flood protection and other enabling infrastructure (i.e., per Section 5 of our 2014 report).

This evaluation is also similar to the analysis presented in Section 5 (Phase 3 – Private Sector Attraction) of our April 26, 2013 report, which assessed the economic impacts generated through the construction of various private and public sector real estate projects on lands under Waterfront Toronto’s mandate, as well as on other privately-owned lands along the waterfront and in its vicinity.

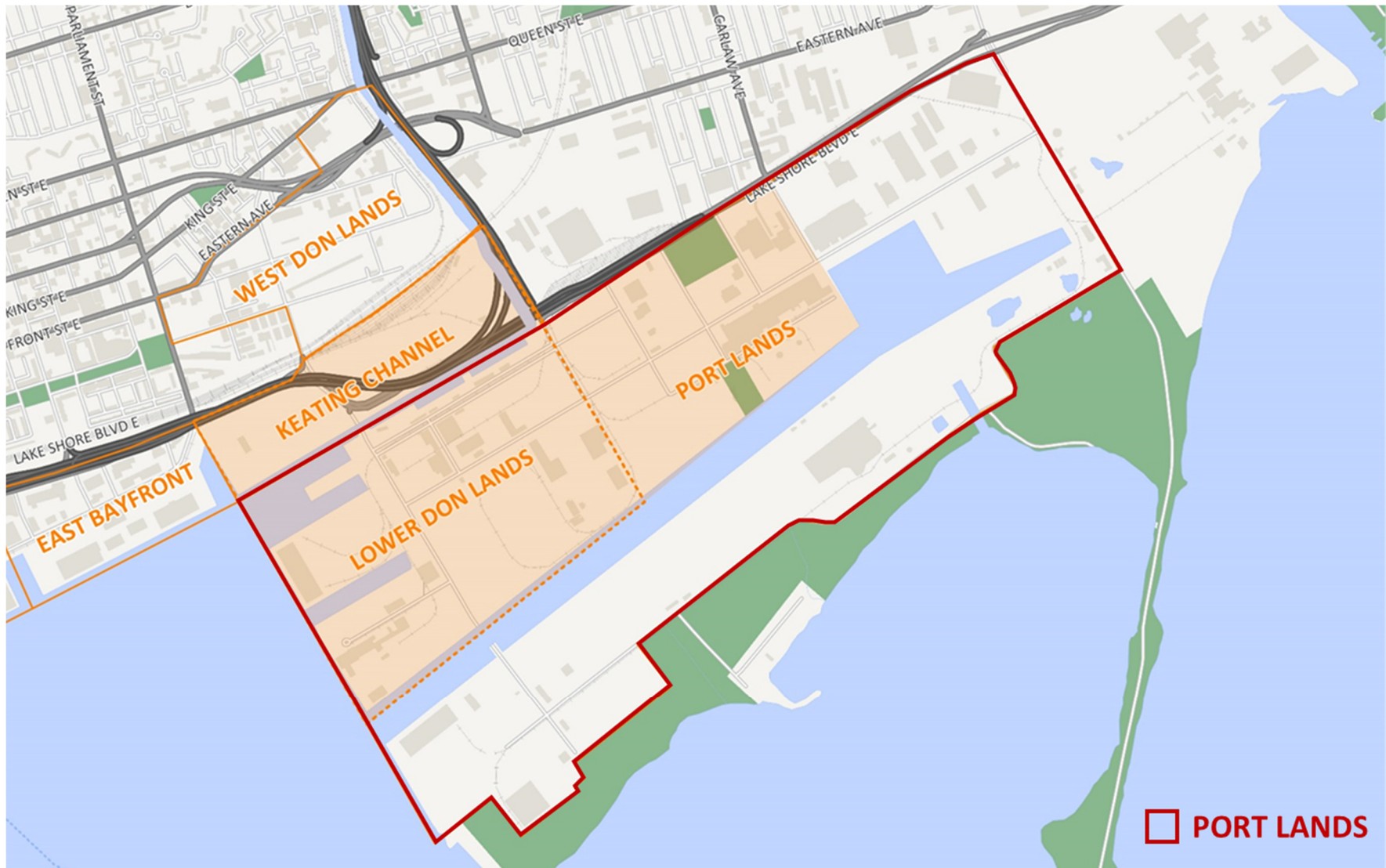
### 1.3 PORT LANDS AND SURROUNDING PRECINCTS

Waterfront Toronto's historic and planned investments in revitalization initiatives 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 Waterfront Toronto's investments are focused in a number of geographic precincts situated near the City's core, including those targeted at unlocking the significant development potential of the Port Lands.

For reference, the following provides a brief overview of the location and geographic extent of the Port Lands area considered in our analysis, including the portion that is comprised by the Lower Don Lands area. Figure 1-1 illustrates the geographic extent of this area, including the Keating Channel component, as well as the broader Lower Don Lands and Port Lands areas. It is important to note at the outset, however, that the future development information for the Port Lands provided by Waterfront Toronto and considered in our analysis focuses primarily on the lands situated north of the Ship Channel, which represents the first stage of development in this area.

- 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 **Keating Channel** precinct represents the northern portion of the broader Lower Don Lands area, generally extending between the Parliament Street Slip to the west, the rail corridor to the north, the Don River to the east and the Keating Channel to the south. As illustrated in Figure 1-1, although the Keating Channel precinct comprises part of the broader Lower Don lands area, it is located north of the Port Lands.
- The changes to the mouth of the Don River would also provide the flood protection necessary to enable development of the immediate area and the broader **Port Lands** area. The 350 hectare (865 acre) Port Lands area represents a major component of the remaining undeveloped lands located in the eastern waterfront, extending south of the Keating Channel/Lake Shore Boulevard, between the Toronto Inner Harbour and Leslie Street/Ashbridges Bay in the west and east, respectively.

Figure 1-1: Map of Keating Channel and Lower Don Lands / Port Lands Precincts



SOURCE: urbanMetrics inc., based on the major development precincts identified by Waterfront Toronto. Note that the exact boundaries of these precincts have changed slightly since our previous reports were prepared.



## 2 Economic Impact Approach

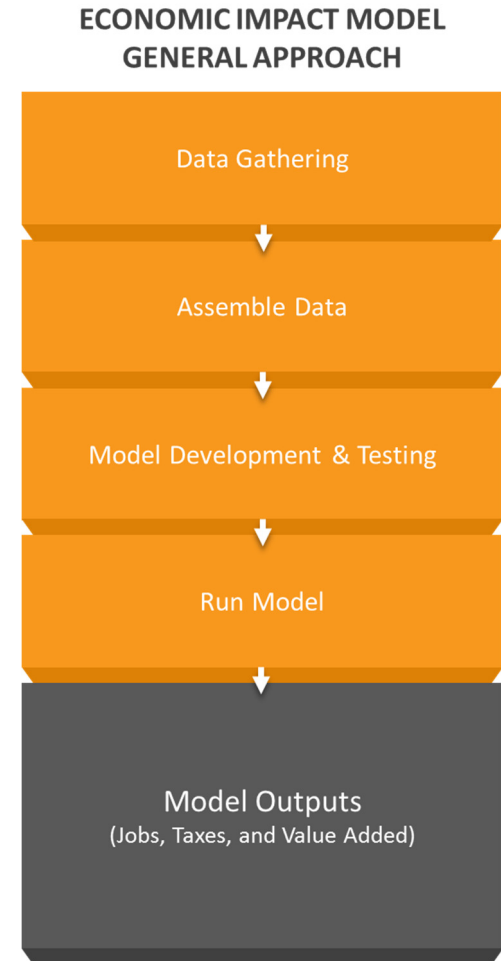
The quantitative economic impacts of future construction in the Port Lands—which would not be possible without the initial infrastructure proposed by Waterfront Toronto—have been estimated using a mathematical model, which simulates the flow of expenditures through the economy. This model is equivalent to that used during the first component of our research update, which analyzed the economic impacts of direct investments Waterfront Toronto plans to make between 2015 and 2023 and is designed to provide a reliable measure of the impact of construction related 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 input spending data considered in this analysis (i.e., construction-related expenditures) were estimated by urbanMetrics, as outlined in the following section of this study and as summarized in Figure 2-1. The data assembly stage of this analysis involved allocating each expenditure item to specific industry categories, based on the 2007 North American Industry Classification System (NAICS). In particular, projected direct construction expenditures were itemized by major industry category, including Construction (NAICS Group 10)—which represent the “hard” cost component of the expenditures—and Professional, Scientific and Technical Services (NAICS Group 43), which represent the “soft” cost component of the development expenditures. 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.

### 2.1 ECONOMIC IMPACT MODEL

The economic impacts of future construction investment in the Port Lands have been measured at the national, provincial and local/regional levels, through the use of the Statistics Canada Interprovincial Input-Output model.



This model is based on the latest available 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. The most recent input-output tables have been used in this research update, based on 2010 data.

National, Provincial and regional/local impacts have been determined using Waterfront Toronto development forecasts for the Port Lands as well as our own estimates of the related construction costs. These inputs have been analyzed using the Statistics Canada Input-Output model in order to generate value added to the economy, income, employment by sector and tax impacts.

The model has been developed to generate the following economic impacts:

- **Gross Output;**
- **Value Added;**
- **Employment;**
- **Labour Income;** and,
- **Revenues to the Three Levels of Government.**

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

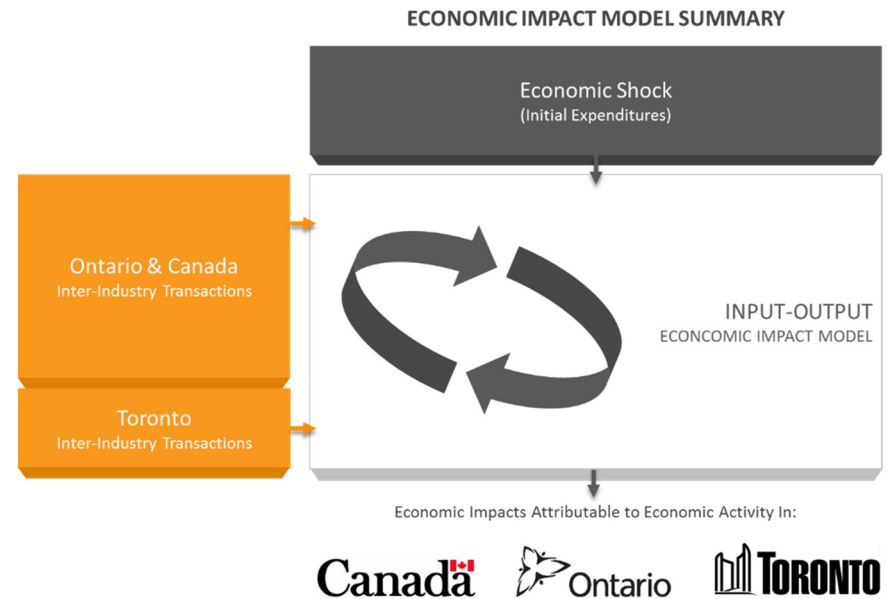
## 2.2 QUANTITATIVE ESTIMATION OF ECONOMIC IMPACTS

Estimating the economic impacts involves modelling the direct, indirect and induced impacts of future construction investment in the Port Lands, on different spatial scales. Specifically, this has involved the application 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 relating to future development activity in the Port Lands will likely be made within Toronto or Ontario. However, the economic impact model used by



urbanMetrics for this analysis assumes that all expenditures are made within the area being modelled and, as a result, leakage has been built directly into the analysis.

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. has utilized the Statistics Canada input-output economic impact model for this research update, which is based on the Canadian National Input-Output Accounts for 2010. These accounts 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 and Greater Toronto Area economies, as well as at the Ontario and Canadian levels.

The basic principle of this type of 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<sup>2</sup>.

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<sup>2</sup> 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 everyday 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).

- **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<sup>3</sup>.
- **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 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<sup>4</sup>.

### 2.3 LOCALIZED IMPACTS

In Canada, Statistics Canada calculates input-output accounts at the national, provincial levels only. The economic impacts for the Greater Toronto Area and the City of Toronto were calculated by applying “location quotients” to the economic impact results generated for the Province of Ontario. Location quotients represent the share of employment in each industry sector relative to the Province as a whole. This is the most common and accepted methodology for determining localized impacts when industry and commodity data is not available.

The logic to using location quotients to estimate localized impacts is that the relative share of employment within a given industry should be similar to the share of a purchase within that industry that could be sourced locally. The principal issue with this approach is that when it is applied to a municipality within a much larger urban area, there is the potential for significant cross purchasing between municipalities, regardless of the employment composition. With regards to the model used for Waterfront Toronto, this is less of a concern for the GTA than with the City. However, even at the City level, this would be limited due to the overall size of Toronto.

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<sup>3</sup> 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.

<sup>4</sup> For example, the gross output multiplier on a \$10 million construction project can be thought of in the following manor. Some \$2 million 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, 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.

Based on the results of the economic impact analysis summarized in Section 4 and 5 of this report, it is evident that a significant portion of the regional (Greater Toronto Area) impacts will be concentrated within the City of Toronto. This is primarily a function of the magnitude and diversity of the City of Toronto employment base relative to the region and Province; particularly as it relates to the Professional, Scientific and Technical Services and Construction industry sectors, where the majority of any development and infrastructure investment relating to the Port Lands will be focused. We do recognize, however, that the City of Toronto and broader Greater Toronto Area labour markets are highly integrated, and as such it is possible that the City of Toronto share of regional impacts could be slightly lower than shown in our analysis.

## 2.4 OTHER CONSIDERATIONS

- **Discount Rate** – As part of the peer review of our previous economic impact study, PwC noted that a discount rate could be incorporated in this type analysis to account for the fact that many of the investments associated with the future build-out of the Port Lands will be realized over a relatively long planning horizon. In particular, recognizing the long-term nature of the development of the Port Lands, there are certain risks and opportunity costs associated with these investments, as would be inherent to any redevelopment precinct of this magnitude. Consequently, PwC suggested that a discount rate of some 1.5% to 4.0% could be considered to specifically reflect the following factors: (a) the cost of government debt; (b) whether the proposed investment crowds out investment that would otherwise have occurred; and (c) risks that circumstances will change such that the forecasted benefits would not materialize.

Based on our considerable and long-term experience with this type of economic analysis, we certainly recognize and appreciate the problems associated with making broad and generalized assumptions about future conditions, including the possible limitations identified in the PwC peer review report. Undoubtedly, deviations from historic and current trends will take place in the future, which could influence the validity of our research findings. However, some basic assumptions are required regarding the possible extent of such deviations. Similar to our previous economic impact analyses, this research update does not include the application of a discount rate.

A discount rate is most typically applied to an income stream to represent the time-value of money, whereby both expenditures and revenues made in the future are discounted to reflect their diminishing value as time progresses.

In the case of an economic impact analysis, the economic impacts are a direct result of the initial expenditures. For example, a multiplier will not change simply because the scale of an investment is reduced or increased (assuming the proportion spent within each industry category remains the same). For this reason, the discount rate would have to be applied to the capital expenditures, which would result in lower overall expenditures in the future. By showing undiscounted expenditures, it is our opinion that we are more accurately reflecting the true costs to Waterfront Toronto and private developers, and therefore, better reflecting the true economic impacts.

- **Labour Supply Impacts** – PwC also notes in their peer review that the type of standard input-output economic impact model considered in our analyses do not necessarily “capture potential short-term supply and demand imbalances that the contemplated expenditures may cause in the labour market”. In particular, PwC suggests that—recognizing the significant amount of construction and other related employment generated during the forecast period—the development of the Port Lands could contribute directly to—or at least exacerbate—local shortages in some construction trades, thereby leading to cost inflation and delays.

In our opinion, however, and as acknowledged by PwC, the number of construction related jobs generated each year through development of the Port Lands will represent a very small share of the total available supply of construction employees in Toronto at any given time throughout the forecast period considered in our analysis. This issue would most likely be attributed to a large scale construction concentrated over a short period of time, such as the construction around an Olympic Games. As such, it is our opinion that the significant investments and corresponding construction activity in the Port Lands will not, in and of itself, cause any meaningful supply and demand imbalances in the local economies of Toronto or the broader Greater Toronto Area. As such, we have not made any adjustments to our analysis to account for these risks and have generally assumed that a reasonable amount of economic stability will prevail in these areas.

- **Additional Investments Required** – Although a significant amount of the direct investment planned by Waterfront Toronto is focused on unlocking the significant development potential of the Port Lands, it is important to note that some additional investment—above and beyond that considered in this analysis—will be required to fully realize the future development of this area. For example, based on information provided by Waterfront Toronto, we understand that a total of approximately \$100 million will be required for additional infrastructure related investments within the Port Lands before the area can ultimately be developed (e.g., investment in local transit, storm water management, as well as various other local infrastructure components such as local roads, etc.). These additional investments have not been included in the Waterfront Toronto 2.0 plan and similarly have not been considered in our construction cost estimates provided in Section 3 of this report.
- **Alternative Location for Development** – It should be noted that the analysis presented in this report assumes that the significant amount of new development forecast for the Port Lands would not be possible without the initial investment in planning and infrastructure by Waterfront Toronto, particularly as it relates to flood protection. Although a portion of this future development could potentially locate elsewhere in the City/Region in the absence of such investment, we note that the Port Lands represent a particularly unique opportunity in terms of their proximity to the City’s downtown core, access to new waterfront and other community amenities, as well as with respect to the magnitude of land available for redevelopment at a single location. As such, it is our opinion that a significant portion of the benefits associated with the development forecast in the Port Lands area can be directly attributed to the investments included as part of the Waterfront Toronto 2.0 plan. In the absence of these investments, any opportunities for a similar level of development in other parts of the City would likely be limited by comparison.

### 3 Development Forecasts and Construction Costs

In Figure 3-1, we have summarized the construction costs related to the future development of the Port Lands, based on long-term development projections provided by Waterfront Toronto as well as our own estimates. The construction costs below include only the costs related to the construction of real estate and do not include land costs or infrastructure costs.

Construction expenditures have been estimated by urbanMetrics in two main categories:

- **“Hard” Construction Costs** – the cost of building construction, including appropriate landscaping and parking facilities for each location and project type<sup>5</sup>.
- **“Soft” Construction Costs** – These include professional fees, interest charges, additional soils, testing, marketing and tenant incentives, as applicable. Based on the specific industry sub-categories identified in the Statistics Canada model, we have also included any expenditures related to development charges and municipal approval fees in this cost component.

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. These types of additional expenditures are unique to individual buildings/properties and largely differentiated from the primary building construction investments considered in this analysis.

As indicated in Figure 3-1, future development activity in the Port Lands will involve some \$4.3 billion in construction and related investments. This level of private investment amounts to more than double the infrastructure investment included in the Waterfront Toronto 2.0 plan.

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<sup>5</sup> Construction costs were estimated using cost per square foot factors from the 2016 Altus Construction Cost Guide and urbanMetrics estimates, based on our experience and understanding of location, density, and land uses.

**Figure 3-1: Port Lands Construction Costs by Major Land Use**

TYPE	FLOOR AREA	CONSTRUCTION COSTS**		TOTAL
		Hard Costs	Soft Costs	
Residential*	10,055,460	\$ 2,312,755,828	\$ 991,181,069	\$ 3,303,936,897
Office	2,462,804	\$ 517,188,889	\$ 221,652,381	\$ 738,841,269
Retail	1,054,949	\$ 189,890,880	\$ 81,381,806	\$ 271,272,686
<b>TOTAL</b>	<b>13,573,214</b>	<b>\$ 3,019,835,597</b>	<b>\$ 1,294,215,256</b>	<b>\$ 4,314,050,853</b>

SOURCE: urbanMetrics inc., based on development forecasts data provided by Waterfront Toronto (Fall 2015).

\*Residential floor area estimated based on a total of 10,244 units at an average size of 800 square feet per unit, plus additional common space equal to 18.5% of the total building floor area.

\*\*Building construction costs estimated based on cost per square foot factors from the 2016 Altus Construction Cost Guide, as well as urbanMetrics estimates. It has generally been assumed that “hard” building construction costs will account for approximately 70% of the total construction expenditures, while the balance of 30% will be accounted for by “soft” costs.



## 4 Summary of Economic Impacts – Port Lands Development

The following summarizes the various direct, indirect and induced impacts generated by future construction activity in the Port Lands area, which would not occur without the ongoing flood protection and other enabling infrastructure investments by Waterfront Toronto.

As summarized in Figure 4-1, this construction activity will generate:

- **±\$8.3 billion in gross output** to the Canadian economy;
- **±\$4.0 billion in value added** to the Canadian economy;
- **±41,100 person years of employment**;
- **±\$2.7 billion in labour income**; and,
- **±\$1.5 billion in revenues** to the three levels of government.

Figure 4-1: Summary of Economic Impacts – Port Lands Construction Activity

	TORONTO	GTA	ONTARIO	CANADA
<b>Initial Expenditure</b>	\$ 4,314,050,853	\$ 4,314,050,853	\$ 4,314,050,853	\$ 4,314,050,853
<b>Impact: Gross Output</b>				
<i>Direct</i>	\$ 4,064,027,014	\$ 4,064,027,014	\$ 4,064,026,937	\$ 4,064,026,937
<i>Indirect</i>	\$ 1,472,160,649	\$ 1,866,361,185	\$ 2,097,070,847	\$ 2,670,623,067
<i>Induced</i>	\$ 1,028,318,938	\$ 1,126,507,567	\$ 1,201,360,430	\$ 1,539,389,530
<b>Total</b>	\$ 6,564,506,601	\$ 7,056,895,765	\$ 7,362,458,215	\$ 8,274,039,534
<i>Multiplier</i>	1.62	1.74	1.81	2.04
<b>Impact: Value Added</b>				
<i>Direct</i>	\$ 1,799,481,448	\$ 1,799,481,448	\$ 1,799,481,448	\$ 1,799,481,448
<i>Indirect</i>	\$ 789,211,382	\$ 965,565,386	\$ 1,054,346,543	\$ 1,317,621,471
<i>Induced</i>	\$ 633,521,758	\$ 677,471,776	\$ 712,310,577	\$ 892,365,937
<b>Total</b>	\$ 3,222,214,588	\$ 3,442,518,610	\$ 3,566,138,568	\$ 4,009,468,856
<i>Multiplier</i>	1.79	1.91	1.98	2.23
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>				
<i>Direct</i>	20,191	20,191	20,191	20,191
<i>Indirect</i>	7,955	9,868	10,916	13,332
<i>Induced</i>	4,977	5,470	5,943	7,546
<b>Total</b>	<b>33,123</b>	<b>35,528</b>	<b>37,049</b>	<b>41,069</b>
<i>Multiplier</i>	1.64	1.76	1.83	2.03
<b>Impact: Labour Income</b>				
<i>Direct</i>	\$ 1,407,176,606	\$ 1,407,176,606	\$ 1,407,176,606	\$ 1,407,176,606
<i>Indirect</i>	\$ 518,341,163	\$ 642,512,679	\$ 711,974,602	\$ 865,720,327
<i>Induced</i>	\$ 285,027,238	\$ 313,230,485	\$ 341,917,246	\$ 430,497,168
<b>Total</b>	\$ 2,210,545,007	\$ 2,362,919,771	\$ 2,461,068,454	\$ 2,703,394,102
<b>Impact: Total Taxes</b>				
<i>Federal</i>	\$ 531,286,526	\$ 569,123,150	\$ 617,528,433	\$ 679,545,601
<i>Provincial</i>	\$ 468,659,330	\$ 501,652,484	\$ 560,774,202	\$ 616,252,302
<i>Local</i>	\$ 168,015,859	\$ 179,584,815	\$ 209,041,485	\$ 220,522,197
<b>Total</b>	\$ 1,167,961,715	\$ 1,250,360,449	\$ 1,387,344,121	\$ 1,516,320,100

SOURCE: urbanMetrics, based on the Statistics Canada Input-Output Economic Impact Model.

## 5 Summary of Economic Impacts – Direct Investment

In addition to the construction-related impacts summarized in the previous section of this report, a range of related economic benefits will also be derived from the initial investments made by Waterfront Toronto in flood protection and other enabling infrastructure. These impacts are exclusive from those summarized in Section 4 and have been estimated using an equivalent approach and economic impact model as outlined in Section 2 of this report. For this portion of our analysis, we have also relied on planned investment information obtained directly from Waterfront Toronto<sup>6</sup>.

As summarized in Figure 5-1, the \$1.08 billion in direct Flood Protection investment by Waterfront Toronto will generate:

- **±\$2.2 billion in gross output** to the Canadian economy;
- **±\$1.1 billion in value added** to the Canadian economy;
- **±10,800 person years of employment**;
- **±\$724 million in labour income**; and,
- **±\$373 million in revenues** to the three levels of government.

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<sup>6</sup> Total direct investment in flood protection and other enabling infrastructure estimated at some \$1.08 billion, based on budget information obtained directly from Waterfront Toronto. The majority of this investment will be concentrated in the Construction industry, as well as the Professional, Scientific and Technical Services industry sectors.

Figure 5-1: Summary of Economic Impacts – Direct Investment by Waterfront Toronto in Flood Protection and Enabling Infrastructure

	TORONTO	GTA	ONTARIO	CANADA
<b>Initial Expenditure</b>	<b>\$ 1,080,000,000</b>	<b>\$ 1,080,000,000</b>	<b>\$ 1,080,000,000</b>	<b>\$ 1,080,000,000</b>
<b>Impact: Gross Output</b>				
<i>Direct</i>	\$ 1,081,852,278	\$ 1,081,852,278	\$ 1,022,540,480	\$ 1,029,483,208
<i>Indirect</i>	\$ 315,654,435	\$ 397,800,008	\$ 535,946,085	\$ 648,267,023
<i>Induced</i>	\$ 331,575,949	\$ 363,167,734	\$ 387,242,526	\$ 485,054,722
<b>Total</b>	<b>\$ 1,729,082,663</b>	<b>\$ 1,842,820,020</b>	<b>\$ 1,945,729,090</b>	<b>\$ 2,162,804,953</b>
<i>Multiplier</i>	1.60	1.70	1.90	2.10
<b>Impact: Value Added</b>				
<i>Direct</i>	\$ 509,664,080	\$ 509,664,080	\$ 509,664,080	\$ 513,889,069
<i>Indirect</i>	\$ 211,222,957	\$ 244,929,410	\$ 281,882,396	\$ 336,772,223
<i>Induced</i>	\$ 204,434,125	\$ 218,588,311	\$ 229,812,776	\$ 281,166,649
<b>Total</b>	<b>\$ 925,321,162</b>	<b>\$ 973,181,801</b>	<b>\$ 1,021,359,253</b>	<b>\$ 1,131,827,941</b>
<i>Multiplier</i>	1.82	1.91	2.00	2.20
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>				
<i>Direct</i>	5,382	5,382	5,382	5,418
<i>Indirect</i>	1,988	2,302	2,608	2,193
<i>Induced</i>	1,605	1,764	1,916	3,217
<b>Total</b>	<b>8,975</b>	<b>9,447</b>	<b>9,906</b>	<b>10,829</b>
<i>Multiplier</i>	1.67	1.76	1.84	2.00
<b>Impact: Labour Income</b>				
<i>Direct</i>	\$ 369,888,681	\$ 369,888,681	\$ 369,619,265	\$ 372,676,043
<i>Indirect</i>	\$ 166,858,841	\$ 193,166,303	\$ 186,829,706	\$ 216,075,661
<i>Induced</i>	\$ 76,882,353	\$ 84,483,097	\$ 110,201,799	\$ 135,664,833
<b>Total</b>	<b>\$ 613,629,875</b>	<b>\$ 647,538,081</b>	<b>\$ 666,650,770</b>	<b>\$ 724,416,537</b>
<b>Impact: Total Taxes</b>				
<i>Federal</i>	\$ 141,458,881	\$ 148,862,222	\$ 159,597,937	\$ 174,932,442
<i>Provincial</i>	\$ 125,202,003	\$ 131,731,695	\$ 145,898,282	\$ 159,395,396
<i>Local</i>	\$ 29,705,285	\$ 31,242,458	\$ 36,238,050	\$ 38,930,280
<b>Total</b>	<b>\$ 296,366,169</b>	<b>\$ 311,836,375</b>	<b>\$ 341,734,269</b>	<b>\$ 373,258,119</b>

SOURCE: urbanMetrics, based on the Statistics Canada Input-Output Economic Impact Model.

## 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 as described by Statistics Canada.

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.

### **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: Detailed Economic Impact Summary Tables

The following appendix contains a series of tables that provide a more detailed summary of the economic impacts likely to be generated by the future development of the Port Lands. These detailed economic impact tables served as the basis for the summary table included in Section 3 of this report, and include the following:

- Summary of Economic Impacts by Land Use Type (Toronto);
- Summary of Economic Impacts by Land Use Type (Greater Toronto Area);
- Summary of Economic Impacts by Land Use Type (Ontario); and,
- Summary of Economic Impacts by Land Use Type (Canada).

**Figure B-1: Summary of Economic Impacts by Land Use Type (Toronto)**

	Residential	Non-Residential	TOTAL
<b>Initial Expenditure</b>	<b>\$ 3,303,936,897</b>	<b>\$ 1,010,113,956</b>	<b>\$ 4,314,050,853</b>
<b>Impact: Gross Output</b>			
<i>Direct</i>	\$ 3,064,642,509	\$ 999,384,505	\$ 4,064,027,014
<i>Indirect</i>	\$ 1,117,162,308	\$ 354,998,342	\$ 1,472,160,649
<i>Induced</i>	\$ 734,856,916	\$ 293,462,022	\$ 1,028,318,938
<b>Total</b>	<b>\$ 4,916,661,733</b>	<b>\$ 1,647,844,868</b>	<b>\$ 6,564,506,601</b>
<i>Multiplier</i>	1.60	1.65	1.62
<b>Impact: Value Added</b>			
<i>Direct</i>	\$ 1,327,304,873	\$ 472,176,576	\$ 1,799,481,448
<i>Indirect</i>	\$ 589,104,690	\$ 200,106,692	\$ 789,211,382
<i>Induced</i>	\$ 452,595,906	\$ 180,925,851	\$ 633,521,758
<b>Total</b>	<b>\$ 2,369,005,469</b>	<b>\$ 853,209,119</b>	<b>\$ 3,222,214,588</b>
<i>Multiplier</i>	1.78	1.81	1.79
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>			
<i>Direct</i>	14,478	5,713	20,191
<i>Indirect</i>	6,020	1,935	7,955
<i>Induced</i>	3,557	1,421	4,977
<b>Total</b>	<b>24,054</b>	<b>9,069</b>	<b>33,123</b>
<i>Multiplier</i>	1.66	1.59	1.64
<b>Impact: Labour Income</b>			
<i>Direct</i>	\$ 1,016,295,126	\$ 390,881,480	\$ 1,407,176,606
<i>Indirect</i>	\$ 386,454,484	\$ 131,886,679	\$ 518,341,163
<i>Induced</i>	\$ 203,596,087	\$ 81,431,151	\$ 285,027,238
<b>Total</b>	<b>\$ 1,606,345,697</b>	<b>\$ 604,199,311</b>	<b>\$ 2,210,545,007</b>
<b>Impact: Total Taxes</b>			
<i>Federal</i>	\$ 409,799,410	\$ 121,487,116	\$ 531,286,526
<i>Provincial</i>	\$ 357,239,667	\$ 111,419,663	\$ 468,659,330
<i>Local</i>	\$ 128,460,717	\$ 39,555,142	\$ 168,015,859
<b>Total</b>	<b>\$ 895,499,794</b>	<b>\$ 272,461,921</b>	<b>\$ 1,167,961,715</b>

SOURCE: urbanMetrics inc.

Figure B-2: Summary of Economic Impacts by Land Use Type (Greater Toronto Area)

	Residential	Non-Residential	TOTAL
<b>Initial Expenditure</b>	<b>\$ 3,303,936,897</b>	<b>\$ 1,010,113,956</b>	<b>\$ 4,314,050,853</b>
<b>Impact: Gross Output</b>			
<i>Direct</i>	\$ 3,064,642,509	\$ 999,384,505	\$ 4,064,027,014
<i>Indirect</i>	\$ 1,427,931,144	\$ 438,430,041	\$ 1,866,361,185
<i>Induced</i>	\$ 805,075,428	\$ 321,432,139	\$ 1,126,507,567
<b>Total</b>	<b>\$ 5,297,649,081</b>	<b>\$ 1,759,246,685</b>	<b>\$ 7,056,895,765</b>
<i>Multiplier</i>	1.73	1.76	1.74
<b>Impact: Value Added</b>			
<i>Direct</i>	\$ 1,327,304,873	\$ 472,176,576	\$ 1,799,481,448
<i>Indirect</i>	\$ 728,734,796	\$ 236,830,590	\$ 965,565,386
<i>Induced</i>	\$ 484,015,222	\$ 193,456,554	\$ 677,471,776
<b>Total</b>	<b>\$ 2,540,054,891</b>	<b>\$ 902,463,719</b>	<b>\$ 3,442,518,610</b>
<i>Multiplier</i>	1.91	1.91	1.91
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>			
<i>Direct</i>	14,478	5,713	20,191
<i>Indirect</i>	7,578	2,290	9,868
<i>Induced</i>	3,909	1,561	5,470
<b>Total</b>	<b>25,965</b>	<b>9,564</b>	<b>35,528</b>
<i>Multiplier</i>	1.79	1.67	1.76
<b>Impact: Labour Income</b>			
<i>Direct</i>	\$ 1,016,295,126	\$ 390,881,480	\$ 1,407,176,606
<i>Indirect</i>	\$ 486,467,107	\$ 156,045,572	\$ 642,512,679
<i>Induced</i>	\$ 223,747,058	\$ 89,483,428	\$ 313,230,485
<b>Total</b>	<b>\$ 1,726,509,291</b>	<b>\$ 636,410,480</b>	<b>\$ 2,362,919,771</b>
<b>Impact: Total Taxes</b>			
<i>Federal</i>	\$ 440,899,276	\$ 128,223,874	\$ 569,123,150
<i>Provincial</i>	\$ 383,972,571	\$ 117,679,913	\$ 501,652,484
<i>Local</i>	\$ 137,748,501	\$ 41,836,314	\$ 179,584,815
<b>Total</b>	<b>\$ 962,620,348</b>	<b>\$ 287,740,101</b>	<b>\$ 1,250,360,449</b>

SOURCE: urbanMetrics inc.

Figure B-3: Summary of Economic Impacts by Land Use Type (Ontario)

	Residential	Non-Residential	TOTAL
<b>Initial Expenditure</b>	<b>\$ 3,303,936,897</b>	<b>\$ 1,010,113,956</b>	<b>\$ 4,314,050,853</b>
<b>Impact: Gross Output</b>			
<i>Direct</i>	\$ 3,064,642,433	\$ 999,384,505	\$ 4,064,026,937
<i>Indirect</i>	\$ 1,617,943,634	\$ 479,127,214	\$ 2,097,070,847
<i>Induced</i>	\$ 858,609,745.50	\$ 342,750,685	\$ 1,201,360,430
<b>Total</b>	<b>\$ 5,541,195,812</b>	<b>\$ 1,821,262,403</b>	<b>\$ 7,362,458,215</b>
<i>Multiplier</i>	1.81	1.82	1.81
<b>Impact: Value Added</b>			
<i>Direct</i>	\$ 1,327,304,873	\$ 472,176,576	\$ 1,799,481,448
<i>Indirect</i>	\$ 801,615,643	\$ 252,730,900	\$ 1,054,346,543
<i>Induced</i>	\$ 508,916,472	\$ 203,394,105	\$ 712,310,577
<b>Total</b>	<b>\$ 2,637,836,988</b>	<b>\$ 928,301,581</b>	<b>\$ 3,566,138,568</b>
<i>Multiplier</i>	1.99	1.97	1.98
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>			
<i>Direct</i>	14,478	5,713	20,191
<i>Indirect</i>	8,478	2,438	10,916
<i>Induced</i>	4,247	1,696	5,943
<b>Total</b>	<b>27,202</b>	<b>9,847</b>	<b>37,049</b>
<i>Multiplier</i>	1.88	1.72	1.83
<b>Impact: Labour Income</b>			
<i>Direct</i>	\$ 1,016,295,126	\$ 390,881,480	\$ 1,407,176,606
<i>Indirect</i>	\$ 545,060,864	\$ 166,913,738	\$ 711,974,602
<i>Induced</i>	\$ 244,376,383	\$ 97,540,863	\$ 341,917,246
<b>Total</b>	<b>\$ 1,805,732,373</b>	<b>\$ 655,336,081</b>	<b>\$ 2,461,068,454</b>
<b>Impact: Total Taxes</b>			
<i>Federal</i>	\$ 483,311,364	\$ 134,217,069	\$ 617,528,433
<i>Provincial</i>	\$ 433,185,200	\$ 127,589,002	\$ 560,774,202
<i>Local</i>	\$ 161,582,198	\$ 47,459,287	\$ 209,041,485
<b>Total</b>	<b>\$ 1,078,078,762</b>	<b>\$ 309,265,359</b>	<b>\$ 1,387,344,121</b>

SOURCE: urbanMetrics inc.

Figure B-4: Summary of Economic Impacts by Land Use Type (Canada)

	Residential	Non-Residential	TOTAL
<b>Initial Expenditure</b>	<b>\$ 3,303,936,897</b>	<b>\$ 1,010,113,956</b>	<b>\$ 4,314,050,853</b>
<b>Impact: Gross Output</b>			
<i>Direct</i>	\$ 3,064,642,433	\$ 999,384,505	\$ 4,064,026,937
<i>Indirect</i>	\$ 2,083,665,431	\$ 586,957,636	\$ 2,670,623,067
<i>Induced</i>	\$ 1,109,565,087	\$ 429,824,443	\$ 1,539,389,530
<b>Total</b>	<b>\$ 6,257,872,950</b>	<b>\$ 2,016,166,584</b>	<b>\$ 8,274,039,534</b>
<i>Multiplier</i>	2.04	2.02	2.04
<b>Impact: Value Added</b>			
<i>Direct</i>	\$ 1,327,304,873	\$ 472,176,576	\$ 1,799,481,448
<i>Indirect</i>	\$ 1,013,386,528	\$ 304,234,943	\$ 1,317,621,471
<i>Induced</i>	\$ 643,252,599	\$ 249,113,338	\$ 892,365,937
<b>Total</b>	<b>\$ 2,983,943,999</b>	<b>\$ 1,025,524,857</b>	<b>\$ 4,009,468,856</b>
<i>Multiplier</i>	2.25	2.17	2.23
<b>Impact: Employment (Full-Time, Full-Year Employment)</b>			
<i>Direct</i>	14,478	5,713	20,191
<i>Indirect</i>	10,436	2,897	13,332
<i>Induced</i>	5,442	2,103	7,546
<b>Total</b>	<b>30,356</b>	<b>10,713</b>	<b>41,069</b>
<i>Multiplier</i>	2.10	1.88	2.03
<b>Impact: Labour Income</b>			
<i>Direct</i>	\$ 1,016,295,126	\$ 390,881,480	\$ 1,407,176,606
<i>Indirect</i>	\$ 669,047,234	\$ 196,673,093	\$ 865,720,327
<i>Induced</i>	\$ 310,261,667	\$ 120,235,501	\$ 430,497,168
<b>Total</b>	<b>\$ 1,995,604,027</b>	<b>\$ 707,790,075</b>	<b>\$ 2,703,394,102</b>
<b>Impact: Total Taxes</b>			
<i>Federal</i>	\$ 531,735,018	\$ 147,810,583	\$ 679,545,601
<i>Provincial</i>	\$ 476,575,140	\$ 139,677,162	\$ 616,252,302
<i>Local</i>	\$ 170,582,249	\$ 49,939,949	\$ 220,522,197
<b>Total</b>	<b>\$ 1,178,892,407</b>	<b>\$ 337,427,694</b>	<b>\$ 1,516,320,100</b>

SOURCE: urbanMetrics inc.