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Draft Report

Toronto Waterfront Revitalization Corporation

Economic Impact of Gardiner Expressway Alterations

October 14, 2004

October 14, 2004

Mr. Marc H. Hewitt
Vice President Planning
Toronto Waterfront Revitalization Corporation
207 Queen's Quay West, Suite 822
Toronto, ON M5J 1A7

Dear Mr. Hewitt:

Re: *Economic Impact of Gardiner Expressway Alterations*

Please find enclosed a draft copy of our Report assessing the economic impact associated with the removal of the Gardiner Expressway east of Spadina Avenue.

This report is based on our cumulative analysis and presents quantitative and qualitative estimates of a potential range of economic impacts which could arise as a result of removing the Gardiner Expressway east of Spadina Avenue, and replacing it with a "Great Street" / "Grand Boulevard". The conclusions and estimates of economic impact presented herein are based, in part, on an analysis of comparable projects as well as on information provided to us by the City of Toronto, TWRC and the various consultants retained by it, including Marshall Macklin Monaghan.

We appreciate having had the opportunity to work on this interesting and important assignment on your behalf. Should you have any questions, or require any clarification on our Report, please do not hesitate to contact me directly at 416.601.5958. We look forward to receiving your comments on this document.

Yours very truly,

DELOITTE & TOUCHE LLP



Ronald P. Bidulka
Firm Director

Enclosure

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1.0 Introduction

1.1 Background

Toronto Waterfront Revitalization Corporation (“TWRC”) has completed substantial due diligence and research on ways and opportunities for enhancing the Toronto waterfront, and in this regard examined various options for reducing or removing the negative aspects associated with the Gardiner Expressway while still providing a transportation network that is both positive and supportive to a revitalized waterfront neighbourhood next to a major downtown business centre. Four options were examined by TWRC and its various consultants, with these options including:

- ❑ “Do Nothing”, which effectively constitutes a base case or status quo scenario (i.e., it maintains the existing capacities and physical conditions of the Gardiner Expressway, and further assumes that new “city building” initiatives on the waterfront can be accommodated in an area abutting an elevated highway structure);
- ❑ “Transformation”, which maintains the elevated structure in-situ and transforms the physical and functional conditions around it to create a new corridor of public space along a revitalized waterfront;
- ❑ “Replacement”, which seeks to replace the existing elevated structure with surface roads and tunnels in a way that maintains and if possible enhances traffic performance; and
- ❑ “The Great Street Approach” which maintains the existing elevated Gardiner Expressway west of Spadina Avenue, while to the east, the elevated structure is replaced with ten lanes of two-way traffic through an at-grade boulevard. A second variation of the approach includes replacing the elevated section of the Gardiner Expressway west of Spadina Avenue with a tunnel, while a third variation is the complete removal of the elevated sections of the Gardiner Expressway between Jameson Avenue and the Don Valley Parkway, and replacing it a continuous eight-lane boulevard Lake Shore Drive (with traffic from the remaining at grade section of the Gardiner Expressway exiting to Front Street at Dufferin Street).

TWRC Management, having reviewed the various technical reports prepared on these options, have recommended that the “Great Street” be pursued (i.e., replacing the elevated section of the Gardiner Expressway east of Spadina Avenue with a ten-lane at-grade boulevard).

As a final step in understanding the opportunities associated with implementing the Great Street, TWRC retained Deloitte & Touche LLP (“Deloitte”) to provide a high level assessment of the economic impacts associated with removing a significant portion of the Gardiner Expressway. The purpose of this review is to:

- ❑ Quantify the range and nature of economic impacts which the removal of a significant portion of the Gardiner Expressway could impart; and
- ❑ Provide an opinion on the range of other impacts, including those from a real estate development perspective, which the project could impart.

1.2 Methodology

In completing this assignment, we firstly met with TWRC Management to obtain an understanding of the project, and in particular with respect to the proposed Great Street Approach. We then completed the following work steps:

- ❑ we obtained and reviewed background information and materials to better understand the nature of the project, including anticipated costs and timing;

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- we then utilized information pertaining to project costs to identify estimates of construction, spending and tax related impact;
- we held discussions with the City of Toronto to determine the potential fiscal impact to the City associated with the removal and replacement of a portion of the Gardiner Expressway; and
- we identified and researched various “comparable” projects in other cities to ascertain the impacts which the removal of elevated expressways had in their respective jurisdictions.

The research and analysis was then utilized to form the basis of our opinions and assessments of potential economic impact.

1.3 Report Structure

Excluding this introductory section, this Report is divided into the following four sections:

- Section 2.0 describes the alteration of the Gardiner Expressway into the proposed Great Street;
- Section 3.0 describes the construction, spending and tax impacts which the project could impart, including the direct fiscal impacts to the City of Toronto;
- Section 4.0 summarizes the range of development and real estate related impacts which the Project could impact; and
- Section 5.0 presents the main conclusions / findings resulting from this review.

1.4 Use of this Report

Each of the financial or other scenarios produced in conjunction with this Report may contain hypotheses and assumptions which are based on a set of economic conditions or anticipated courses of action that are reasonable and appropriate in Deloitte’s judgement, are consistent with the purpose of the projections, but which may not materialize as set out herein. The hypotheses represent plausible circumstances, but need not be, and may not be fully supported.

Since future events are not subject to precise projections, some assumptions will not materialize in the exact form presented in our analysis. In addition, other unanticipated events and circumstances may occur which could influence the future outcome and performance of the Project. Therefore, the results achieved in future operating periods will vary from the analysis of prospective market and financial conditions as set out herein. While there is no recourse to predicting these matters with certainty apart from informed and reasoned judgements, it must be stated that future events will lead to variations in Project performance which will materially alter Project results.

Deloitte does not warrant that actual results achieved during the Projection Period will be the same, in whole or in part, as those shown in the Projection. The Projection is based on hypotheses and there is significant risk that actual results will vary, perhaps materially, from the results projected.

Other limitations are set out in Appendix A.

2.0 Project Description

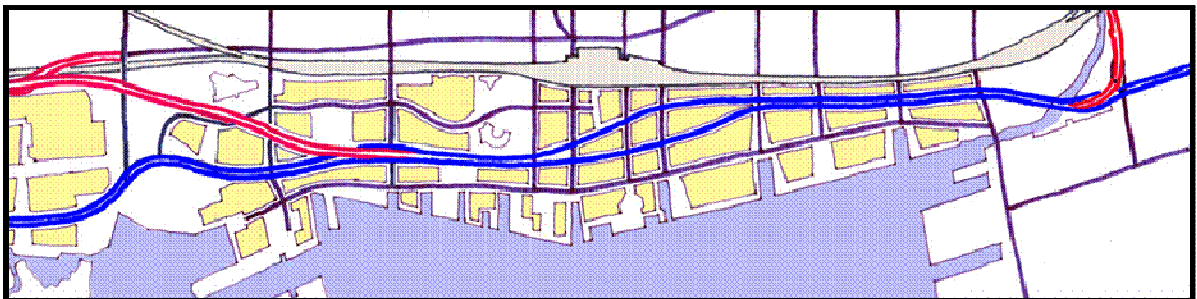
2.1 Project Description

In February 2003, TWRC committed to complete studies which examined the future of the Gardiner Expressway – Lake Shore Boulevard corridor in order that TWRC could recommend to governments a future course of action. The research culminated in the preparation of “Technical Briefing” in June 2004, which identified and evaluated four possible solutions to replace or modify the Gardiner Expressway to facilitate a revitalized waterfront. The recommended solution, described as the “Great Street” is premised on the removal of the existing elevated section of the Gardiner Expressway between Spadina Avenue in the west and the Don Valley Parkway in the east, and its replacement with a ten-lane at-grade boulevard (see Figure 1, following).

From the west, east-bound traffic would be diverted either onto the proposed Front Street Extension (from Bathurst Street to approximately Dufferin Street), or would flow down a ramp at Spadina Avenue and on to the new ten-lane at-grade Lake Shore Drive. This Great Street would have a centre median to approximately Simcoe Street, where after it would split into two five-lane roads each travelling one-way between Simcoe Street and Jarvis Street. East of Jarvis Street, the two one-way five-lane roads would merge into a single ten-lane boulevard with centre median until it crosses the Don River and joins into the northbound Don Valley Parkway.

An anticipated benefit to the proposed alterations of the Gardiner Expressway is the “creation” of previously developably-constrained land which could allow for the development of upwards of 2.0 million square feet of mixed-use space.

Figure 1
Preferred Approach - The Great Street (Variation 1)



Source: Toronto Waterfront Revitalization Corporation

2.2 Project Timing and Cost

The cost of this initiative is estimated at some \$492 million and is projected to take six to seven years to complete, with construction commencing in approximately 2009 while completion is projected by 2016. Initiatives needed to be completed prior to construction commencing include:

- ❑ the completion of an environmental assessment, which assumed to take three to four years to complete (by 2008);
- ❑ the completion of the Front Street Extension which is projected to be completed by 2009 (not included within the estimated \$492 million cost of the Great Street);
- ❑ improvements to the Richmond / Adelaide Street exist from the southbound Don Valley Parkway (by 2009); and
- ❑ the signing of various pre-build contracts (by 2010).

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In completing the project, it is estimated that proposed improvements / modifications would be completed within four distinct phases:

- ❑ The advanced activities would be completed first, consisting of the Front Street Extension, improvements to the Richmond – Adelaide Street interchange on the Don Valley Parkway, the completion of a new section of Lake Shore Boulevard between Yonge and Jarvis Streets, an extension to Queens Quay Boulevard to Cherry Street and the completion of new ramps from Lake Shore Boulevard to the Don Valley Parkway.
- ❑ Some \$100 million would be expended over two years demolishing the Gardiner Expressway between Simcoe and Jarvis Streets, as well as completing widenings and / or alterations to various on and off ramps (at Spadina, Jarvis, etc.);
- ❑ Some \$106 million would be expended over two years demolishing the Gardiner Expressway between Spadina Avenue and Simcoe Street, as well as completing widenings and / or alterations to various on and off ramps (at Spadina, Jarvis, etc.) and the construction of new transition ramps east of Spadina Avenue; and
- ❑ Some \$240 million would be expended over three years demolishing the Gardiner Expressway between Jarvis Street and the Don Valley Parkway, as well as completing improvements to the various on and off ramps (at Spadina, to / from the Don Valley Parkway, etc.).

The anticipated costs and scheduling associated with the Great Street is summarized in Table 1, following.

Table 1
Project Costs / Timing Associated Preferred Approach

Project Component	Duration	Total Cost
Central	2 years	\$100 million
Transition	2 years	\$106 million
Eastern	3 years	\$240 million
Richmond / Adelaide - Don Valley Parkway	1 - 2 years	\$46 million
Front Street Extension	4 years	not included
Total	7 years	\$492 million

Source: Toronto Waterfront Revitalization Corporation

During the anticipated construction period (2009 through approximately 2016), it is envisioned that a certain amount of disruption will occur principally because during this time frame the road system will accommodate less traffic. Based on estimates provided to TWRC, it is projected that during the construction period, the road network will only be able to accommodate some 80% to 90% of the traffic flow originating from the west, while from the east it is projected that almost 100% of the traffic flow could be accommodated. According to these projections, it is concluded that while this level of service will be reduced, it will continue to be "reasonable". To mitigate against these constraints during construction, it is envisioned that a number of measures will be implemented including scheduling road / lane closures for off-peak times, utilizing pre-built systems, rerouting traffic to parallel routes (including Bremner Boulevard, Front Street and Queens Quay), among others.

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2.3 Summary

With a total project cost in the range of \$492 million (\$2004) expended over a six to seven year period, the proposed alterations to the Gardiner Expressway (removal of the elevated structures between Spadina Avenue in the west and the Don Valley Parkway in the east and its replacement with a ten-lane at-grade boulevard), is envisioned to cause only minor disruption during construction, with much of this disruption able to be mitigated. Once completed, the new "Great Street" through the downtown waterfront area of Toronto is concluded to allow the City to realize numerous substantial benefits with only minor changes to average trip times into the core. Among these benefits are:

- the ability to more effectively master plan the waterfront, from Yonge Street to Cherry Street, and link it more successfully from a "place-making" and "pedestrian access" perspective to the downtown core;
- generate positive economic impacts in terms of spending, job creation and taxes during the construction of the improvements;
- allow the City to reap direct operational fiscal savings; and
- facilitate various resultant spin-off benefits, particularly from a land development and property tax perspective, as has been the case in other jurisdictions which have similarly removed elevated expressways through their downtown cores.

These latter three benefits are discussed subsequently in the following sections of this Report.

3.0 Economic Impacts of Construction

3.1 Introduction

The purpose of economic impact analysis is to quantify changes to the economy as a result of a development or undertaking. Generally, key areas of economic impact include:

- **Direct Impact**, which consists of the total expenditures on goods and services, including wages and salaries, for the construction of a proposed development and for ongoing operations;
- **Indirect Impact**, which refers to the various interactions with other businesses which supply the necessary materials and services, which then lead to indirect demand for goods and services from other industries;
- **Induced Demand**, which refers to the impact of personal expenditures by people who have been paid wages and salaries for the construction of the facility and for the production of goods and services; and
- **Associated Impacts**, which are essentially spin-off impacts (for example, off-site spending by visitors to a specific facility).

The analysis contained herein provides a high level indication of the likely level of economic impact associated with the proposed transformation of the Gardiner Expressway between Spadina Avenue and the Don Valley Parkway into a "Great Street". In completing this aspect of the assignment, economic impact models created for similar infrastructure and major real estate redevelopment projected were utilized, with these models relying on information provided by TWRC to quantify the impact associated with the project's construction. Our analysis therefore provides an indication of the potential economic impact at a high level, with this analysis providing an indication of the expected magnitude of direct, indirect and induced impacts that would be associated with the project. We are not able to provide sound estimates of associated impacts at this level of analysis.

It should also be noted that the economic impact estimates cited in this Report relate to the national economy. No model is yet available to identify what part of the impact will benefit Ontario (or Toronto) and what part will constitute inter-provincial leakage. However, given that a large portion of the direct impact will consist of wages and salaries, an assumption can be made that most of the direct impact will benefit Ontario, and by extension, Toronto. In terms of the indirect and induced impacts, inter-provincial leakages are thought to be more substantial. For the purpose of this analysis, assumptions regarding the level of economic impact that could be attributed to the Ontario and Toronto economy have similarly been made.

We have organized our discussion related to potential economic impacts into findings regarding (i) spending impacts, (ii) employment impacts, and (iii) tax impacts during the construction of the proposed improvements (Section 3.2, following). Estimates associated with the net fiscal impact which the City of Toronto could potentially realize are also discussed (Section 3.3, following).

3.2 Impacts During Construction

3.2.1 Background

As noted within Section 2.2, above, the proposed alterations to the Gardiner Expressway will require the expenditure of some \$492 million over a six to seven year period. This level of expenditure is generally assumed to give rise to three main types of economic impact:

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- **Spending Impacts** which represent the anticipated aggregate value of goods and services generated in the local economy to support and sustain an activity or the operations of an activity;
- **Employment Impacts** which represent the anticipated number of jobs created (measured in terms of full-time job equivalents, or “person years of employment”), generated as a result of an activity; and
- **Tax Impacts** which identify the projected tax impacts (federal and provincial) which could arise from the construction of the project. Property tax impacts are assumed to be \$0 from this public infrastructure project; spin off impacts resulting the anticipated creation of additional developable land and other associated impacts are discussed in Section 4.0.

3.2.2 Spending Impacts

As noted previously, the estimated construction expenditure associated with the planned alterations to the Gardiner Expressway are in the range of \$492 million, with this amount to be spread over an approximate six to seven year period extending from 2009 to 2016. Based on information provided by TWRC, this amount is projected to be cash flowed as illustrated in Table 2, following.

Table 2
Estimated Cash Flow of Construction Expenditures

Project Component	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
Central		\$50 million	\$50 million						\$100 million
Transition				\$53 million	\$53 million				\$106 million
Eastern						\$80 million	\$80 million	\$80 million	\$240 million
Richmond / Adelaide - Don Valley Parkway	\$46 million								\$46 million
TOTAL	\$46 million	\$50 million	\$50 million	\$53 million	\$53 million	\$80 million	\$80 million	\$80 million	\$492 million

Source: Toronto Waterfront Revitalization Corporation

The construction spending multiplier is estimated by Statistics Canada to be approximately 1.51 (rounded). Using this multiplier, the direct spending on construction associated with the planned alterations to the Gardiner Expressway is expected to generate some \$250 million in indirect spending; induced spending is estimated at a further \$210.0 million. In aggregate, the total spending associated with the planned alterations to the Gardiner Expressway impact is estimated at some \$952 million over its anticipated six to seven year construction period (Table 3, following).

Table 3
Estimated Spending Impact Associated with Construction

NATURE OF IMPACT	AMOUNT
Direct Construction Expenditures	\$ 492.0 million
Indirect Impact	\$ 249.8 million
Induced Impact	\$ 210.3 million
Total Impact Attributable to Construction	\$ 952.2 million
Estimated Local Share	
@ 65%	\$ 618.9 million
@ 80%	\$ 761.7 million

Assuming that the local area's / Ontario's share of the overall economic impact associated with construction of the planned alterations to the Gardiner Expressway is equal to approximately 65% to 80% of the total estimated impact, some \$620 million to \$760 million would accrue within the Greater Toronto Area / Ontario.

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3.2.3 Employment Impacts

In addition to the impact on spending, the construction of the planned alterations to the Gardiner Expressway is concluded to have a positive impact on employment. Temporary employment for construction workers and project management is projected to occur over the six to seven year construction period. The incomes paid to these employees is also assumed to generate additional spending which in turn is projected to generate additional jobs (for example, in the retail trade and service sectors). Like direct spending, temporary employment will also stimulate additional indirect employment through a multiplier process. The multipliers used to determine the indirect employment were based on a detailed input-output analysis of various industry sectors by Statistics Canada, and it is expected that all labour income will flow to Greater Toronto / Southern Ontario residents.

The temporary employment that is likely to be created over the course of construction was estimated by extracting the labour component of the construction expenditures. For a construction project of this nature it is estimated that approximately 45% of the project's total estimated cost is comprised of labour costs, or some \$220.4 million. The average annual construction salary is assumed to be approximately \$50,000 per year based on average wage and salary information published by Statistics Canada. Dividing the total estimated allocation of project capital costs for labour (\$220.4 million) by the estimated average annual salary, and accounting for employee benefits, the total estimated direct employment impact over the six to seven year construction period is estimated to be some 3,630 person years of employment.

The temporary construction jobs have also had multiplier effects. Statistics Canada estimates an indirect construction employment multiplier for Ontario of "1.49" and provides an estimate for induced impact. Using these estimates, the number of indirect and induced jobs created by the ripple effects of annual construction employment is estimated to be an additional 1,790 and 2,650 person years of employment, respectively. These indirect or secondary jobs are projected to last only as long as the primary jobs that propagated them.

Total employment from the planned alterations to the Gardiner Expressway over the estimated six to seven year construction period are therefore estimated at 8,070 full time equivalent ("FTE") jobs / person years of employment (Figure 4, following). On an average annual basis, the corresponding figure is approximately 1,000 FTE's per year.

Table 4
Estimated Employment Impact Associated with Construction

EMPLOYMENT IMPACT	NUMBER OF JOBS
Direct	3,630
Indirect	1,790
Induced	2,650
TOTAL	8,070

3.2.4 Tax Revenue Impact

In addition to the above noted impacts related to the physical improvements to the Gardiner Expressway and the amount of employment it may be able to generate, it is also anticipated that there may be fiscal revenue impacts for different levels of government. At this level of analysis, we have confined this to an assessment of income taxes associated with the salaries of construction workers and the direct and indirect employment spawned by the project. Estimates of sales tax revenue (both PST and GST) attributable to direct construction expenditures have been excluded, assuming that such taxes would not be levied against this public infrastructure project (treated as input tax credits); estimates of sales tax revenue attributable due to indirect and induced spending have been estimated.

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Based on the estimated 3,630 direct person years of employment as well as the additional 4,440 indirect and induced person years of employment the Project is estimated to generate, some \$59.8 million in direct federal income tax and an additional \$23.7 million in provincial income tax is projected to be generated. In addition, Section 3.2.2 identified some \$460.1 million in indirect and induced spending being generated from the \$492 million total construction expenditures. Should this level of indirect and induced spending occur, and should all of this spending give rise to GST and PST obligations, some \$32.2 million in GST revenue would accrue to the federal government, while some \$36.8 million in PST revenue would accrue to the provincial government.

In total, it is projected that through the expenditure of some \$492 million to modify the Gardiner Expressway and create the "Great Street", the project would generate some \$92.0 million in tax revenue for the federal government and some \$60.5 million in tax revenue for the provincial government (Table 5, following).

**Table 5
Estimated Tax Impact Associated with Construction**

TAX REVENUE IMPACTS	AMOUNT
Federal	\$ 59.8 million
Provincial	\$ 23.7 million
Total	\$ 83.5 million
PST	\$ 36.8 million
GST	\$ 32.2 million
Total	\$ 69.0 million
Federal Total	\$ 92.0 million
Provincial Total	\$ 60.5 million

3.2.5 Summary

The physical construction of the Great Street, consisting of the physical removal of the elevated section of the Gardiner Expressway between Spadina Avenue in the west and the Don Valley Parkway in the east and its replacement with a ten-lane at-grade boulevard, is projected to give rise to some \$952.2 million in total spending (direct, indirect and induced) of which some \$620 million to \$760 million could be envisioned to occur locally / regionally. In addition, the project is projected to spawn almost 8,100 person years of employment of which more than 3,600 would be directly associated with the project. Finally, both the federal and provincial governments are projected to realize direct tax revenue from this infrastructure project, with the provincial government projected to realize more than \$60 million and the federal government more than \$90 million. These impacts are projected to occur over the assumed six to seven year construction period.

**Table 6
Summary of Impacts Associated with Construction**

LOCAL	PROVINCIAL	FEDERAL
Total spending Impact of \$952.2 million, of which some \$618.9 million to \$761.7 million will occur locally / regionally	PST revenue of \$36.8 million	GST revenue of \$32.2 million
Total employment of 8,070 person years of employment, including 3,630 direct jobs	Income Tax revenue of \$23.7 million	Income Tax revenue of \$59.8 million

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3.3 Municipal Fiscal Impact

In completing the proposed alterations to the Gardiner Expressway, it is noted that the City of Toronto (the "City") is currently responsible for the physical maintenance and upkeep of this expressway. Over that past number of years, the City has allocated and expended considerable amounts of money to ensure the structural integrity of the elevated roadway and for regular preventative maintenance and general rehabilitation.

As we understand it, the City will have expended, since approximately 1986, some \$121.4 million repairing and rehabilitating the elevated sections of the Gardiner Expressway by year end 2003 (an average of over \$6.7 million per year). Since 1999, the City is believed to have expended some \$41.6 million or approximately \$10.4 million per year. Over the next 12 years, it is reported in TWRC's June 2004 Technical Briefing Report, that the City plans to spend an additional \$153 million on the elevated section of the Gardiner Expressway (\$12.75 million per year), with much of this expenditure allocated to the rehabilitation of the main roadway deck. These estimates have been confirmed by the City of Toronto.

Based on discussions with the City, we also understand that the section of elevated roadway east of Spadina Avenue generally accounts for approximately two-thirds of the total elevated roadway area. Assuming that this ratio similarly holds for rehabilitation / repair expenditures made to the roadway (i.e., that the area east of Spadina would account for approximately two-thirds of the total expenditures), it follows then that by completing the proposed alterations to the Gardiner Expressway east of Spadina Avenue, the City would not be required to expend approximately \$102 million.

In addition, we also understand from the City of Toronto that it allocates some \$2.7 million to \$3.0 million in general maintenance per year to both the elevated section of the Gardiner Expressway (approximately \$1.2 million to \$1.5 million per year) and Lake Shore Boulevard (\$1.5 million per year). Under the "Great Street" scenario, it is estimated, in consultation with City staff, that this total annual maintenance budget would decline to between \$1.5 million to \$1.8 million. As a result, and in addition to the City foregoing the need to expend over \$100 million on major maintenance and rehabilitation, it is estimated that the City would also annually reduce its operating budget by approximately \$1.2 million should the proposed alterations to the Gardiner Expressway be realized. Over a 20 year period, and assuming cost inflation of approximately 3.0% per year, the total annual operating savings to the City of Toronto are estimated to be approximately \$32.2 million.

On a combined basis, the proposed removal of the elevated section of the Gardiner Expressway between Spadina Avenue in the west and the Don Valley Parkway in the east, and its replacement with a ten-lane at-grade boulevard, is projected to allow the City to forego committing almost \$120 million to the elevated sections of the Gardiner Expressway, allowing it to utilize these capital and operating dollars for other purposes.

3.4 Summary

The proposed removal of the elevated section of the Gardiner Expressway between Spadina Avenue and the Don Valley Parkway, and its replacement with a ten-lane at-grade boulevard is concluded to spawn a number of positive economic impacts, including:

- generating over \$950 million in total spending impacts with some \$610 million to \$720 million occurring locally / regionally;
- generating almost 8,100 person years of employment of which more than 3,600 would be directly associated with the project;
- allow the provincial government to realize more than \$60 million and the federal government more than \$90 million in direct tax revenue; and
- allow the City of Toronto to forego committing almost \$120 million to the elevated sections of the Gardiner Expressway in capital and operating expenditures.

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Excluded from the above is, however, any additional impacts which may accrue to the City of Toronto, including the ability of the new Great Street to free up valuable and currently under-utilized land for development and the effects which the removal of the elevated roadway may have on property taxes. These potential impacts are discussed in Section 4.0, following.

Table 7
Summary of Impacts Associated with Construction and Operation

LOCAL	PROVINCIAL	FEDERAL
Total spending Impact of \$952.2 million, of which some \$618.9 million to \$761.7 million will occur locally / regionally	PST revenue of \$36.8 million	GST revenue of \$32.2 million
Total employment of 8,070 person years of employment, including 3,630 direct jobs	Income Tax revenue of \$23.7 million	Income Tax revenue of \$59.8 million
Forego the requirement of committing up to \$102 million between 2004 and 2015 on the major maintenance / rehabilitation of the Gardiner Expressway		
Forego the requirement of committing some \$1.2 million per year on the day-to-day maintenance of the Gardiner Expressway (approximately \$32.2 million over a 20-year period)		

4.0 Spin-Off Impacts

4.1 Introduction

Over the past number of years, a number of jurisdictions around the world have critically examined their aging elevated transportation infrastructure and sought to identify, like Toronto, solutions to revitalize and / or replace them with systems that help redefine their environments. Included among the jurisdictions which have sought to replace elevated inner-city transportation infrastructure are:

- ❑ New York City (West Side Highway / Miller Highway);
- ❑ San Francisco (Embarcadero Freeway);
- ❑ Boston (Central Artery / Rose Kennedy Greenway);
- ❑ Milwaukee (Park East Corridor); and
- ❑ Barcelona, Spain (Ronda del Litoral / Moll de la Fusta).

Internet searches and / or telephone discussions with officials associated with these projects were completed to obtain qualitative and in some limited instances quantitative information describing the real estate / development impacts which these projects have given rise to. The information gleaned from these sources, provided valuable input into the development of opinions regarding the range of possible benefits which could be realized in Toronto with the removal of the Gardiner Expressway east of Spadina Avenue.

4.2 Comparable Examples

4.2.1 *West Side Highway / Miller Elevated Highway Project, New York*

Completed in 1945, this 7.2 kilometre elevated expressway extended between 72nd Street and the Brooklyn-Battery Park Tunnel on the west side of Manhattan. Originally designed to allow unimpeded overhead access by automobile traffic while facilitating surface truck movement between the piers along the Hudson River to its west and the factories and warehouses to its east, the Miller Elevated Highway was considered to be well suited to its purpose and location. However, the deterioration and obsolescence of the West Side Highway was recognized as early as 1957.

Since this time, a number of studies have been commissioned to examine the options for reconstructing and / or improving this roadway, and in 1966 a recommendation was made to consider the replacement of the West Side Highway, arguing that such a highway renewal project "coupled with new land uses would provide an unparalleled opportunity for civic improvement". However, because of municipal fiscal constraints and the costs associated with materially altering the highway, sections of this elevated expressway continue to exist today.

As a result of the collapse of a section of highway in 1973, a section of former elevated expressway has been transformed into an at-grade boulevard. Originally, only a small section of the elevated roadway was closed to traffic; demolition of the elevated roadway south of 57th Street did not commence until 1977 and was completed in approximately 1989. In 1993, some US\$380 million was approved to facilitate the construction of an urban boulevard south of 57th Street, with these improvements, dubbed the "Lessway" being completed in August 2001.

Concurrently with the formulation of this initiative, the West Side Task Force was created to develop a land use plan for both the waterfront and the highway. Entitled "A Vision for the West Side Waterfront" the Panel's report became the blueprint for the future. Included as the centrepiece of this plan (in addition to the at-grade boulevard modelled after Park Avenue) was the establishment of a 550 acre public park, designed to bring people back to the waterfront.

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Since the opening of the urban boulevard in 2001, the area has realized substantial interest from a real estate and development perspective. For example, it is noted that new development has taken place and property values have increased substantially. However, based on conversations with officials at the New York City Department of City Planning, the New York City Economic Development Corporation, the Hudson River Park Trust and with an official involved in the redevelopment of the Hudson Rail Yards (transforming a former rail yard into a mixed-used development including office, commercial, residential and a convention centre / sports stadium), it is concluded to be exceedingly difficult to attribute this increased interest in property or increases in property value to the creation of the urban boulevard. Like Toronto, there exists strong demand for appropriately located residential units, and over the recent past, there has been increased interest across lower Manhattan for properties which have the potential to be redeveloped into higher density residential. While some officials speculate that the area abutting the West Side Highway urban boulevard is significantly more attractive today, its increased allure is more the result of general market trends favouring waterfront locations (highly sought after from a residential perspective), and the creation of the Hudson River Park.

4.2.2 Embarcadero Freeway, San Francisco

Proposed around 1951, the two mile long, double-decked Embarcadero Freeway (part of State Highway 480), was to have formed part of a wider network of freeways in and around San Francisco and was intended to serve as a link between the Bay Bridge and the Golden Gate Bridge, and became a main link bringing commuters into and out of Downtown San Francisco. Considered a blight to the community, blocking the views of San Francisco Bay from ground level, the Freeway opened in 1959. The intent to connect it with the wide area transportation network was rejected by state legislators in 1966 and in 1968, and the San Francisco Board of Supervisors voted to stop building the freeway. Plans to demolish the Freeway were unveiled as early as 1973, and were finally approved in 1985, although no action was immediately taken.

The Freeway sustained damage as a result of an earthquake in 1989 and was later condemned (it is interesting to note that some sources indicate that the Freeway sustained very little earthquake damage, but because of the public opposition to its existence, this was used as a convenient excuse to approve the demolition of the Freeway). The decision to demolish the Freeway, which carried 70,000 vehicles per day prior to the 1989 earthquake, was made in 1990 and demolition occurred between 1991 and 1993 at a cost of some US\$700 million.

The Embarcadero Freeway was then replaced with a new six-lane at-grade boulevard and new transit capacity was added. As a condition of removal, the California State Government required that the City of San Francisco create a Port Commission to manage the abutting San Francisco waterfront area.

Prior to the dismantling of the expressway, the area surrounding it consisted of derelict buildings and development was reported to be at a standstill. The removal of the elevated Embarcadero Freeway is widely considered to have facilitated the entire renewal of the Downtown Waterfront District ("DWD"), with this seven mile stretch of waterfront promenade now featuring plazas, walks, parks and public pier access. Major developments that have taken place which are viewed as being made possible with the removal of the Freeway include:

- ❑ the complete renovation of the 1898 Ferry Building (the centrepiece of the DWD), with new ferry docks and commercial space;
- ❑ a planned 200-room Joie de Vivre Hotel adjacent to the Ferry Terminal;
- ❑ a 450,000 square foot hotel planned for the corner of Broadway and Embarcadero; and
- ❑ the Waterfront Pavillion Project, which will include a cultural facility and the permanent home of the historic 1915 Panama-Pacific organ.

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Removal of the expressway is also reported to have facilitated the redevelopment of the Rincon Hill neighbourhood. Previously this area, which is located adjacent to the financial district, was hemmed in on three sides by freeways. The removal of the freeway opened the area up for development and a number of commercial, mixed-use and residential development and rezoning applications were soon submitted. There are a reported 20 development projects which the City's planning department have or are currently considering for this area of the city. In addition, the Rincon Hill area has benefited from an influx of multi-media technology businesses (within a sub-area of Rincon Hill nicknamed "Multimedia Gulch"). In addition, live-work spaces have been built in the Rincon Hill area. Reported community benefits include the creation of more than 1,500 residential units in two projects alone, generating more than US\$11 million in new property tax revenue for the City of San Francisco.

Finally, it has been reported that property values near the site of the former freeway have increased by more than 40%; some reports have even indicated a property value increase of some 300%.

4.2.3 Central Artery / Rose Kennedy Greenway, Boston

Known throughout Boston and the United States as the "Big Dig", the City of Boston in conjunction with the Massachusetts Turnpike Authority and State of Massachusetts have committed some US\$14.6 billion to bury Interstate 93 Centre Artery through downtown Boston. The Central Artery opened in 1959 and carried some 75,000 vehicles per day. Since that time, the roadway has become highly congested and carries more than 200,000 vehicles per day. In 1982, a plan was approved to replace the then existing elevated expressway with an eight to ten-lane underground expressway. Construction of the Central Artery / Tunnel project began in 1991 and will be completed in early 2005 at a cost significantly in excess of original estimates.

The replacement of Boston's transportation system has paved the way for remaking the downtown area. With the demolition of portions of the old elevated artery through the downtown core, vistas to Boston Harbour and across Christopher Columbus Park were opened up. In addition, neighbourhoods which were previously physically separated by structures have been reunited. The removal of the elevated expressway has also "created" some 27 acres of now developable property, lands which are to be used for parks and gardens (the Rose Kennedy Greenway) as well as commercial development. The foregoing is in addition to some 40 acres of new parks in and around downtown Boston that will be created, along with some 100 acres of property at Spectacle Island in Boston Harbour, where the project has transformed an abandoned dump into a park.

Real estate experts have predicted that property values in residential and condominium projects in the shadow of the old artery could increase by as much as 40%, and the area in and around the Big Dig have begun to lure developers, investors and speculators in anticipation of such value increases. Among the projects which have taken place to date are:

- ❑ a speculative 500,000 square foot office building has been developed on lands abutting the 27 acre greenway on one side and facing the harbour on the other;
- ❑ a number of vacant / underused commercial buildings are being converted into upscale condominiums;
- ❑ a US\$300 million complex consisting of office space, a 330-room hotel and 50 condominium lofts is proposed to be developed on Russia Wharf, beside Boston Harbour;
- ❑ a separate 336,000 square foot mixed-use expansion to an existing building on Russia Wharf;
- ❑ a 1.0 million square foot office tower;
- ❑ the redevelopment of numerous older commercial buildings into upscale condominiums; and
- ❑ the redevelopment of an older industrial building into a 375,000 square foot mixed-use project containing offices and condominiums.

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The completion of the project is also assumed to result in the creation of 13 significant development parcels, with an estimated value of some US\$185.5 million. It is the intention of the Massachusetts Turnpike Authority ("MTA") to sell a portion of these parcels to third party developers to assist in financing a portion of the project. As we understand it, the MTA is also considering the sale of air rights over the turnpike tunnels; however, potential revenues which may be available to the MTA are considered to be too speculative to attempt to quantify (subject to lengthy public approvals process and cannot be transferred with "as of right" development rights).

The creation of the above noted public spaces and parks is also concluded to have a substantial positive impact, with Tufts University professors indicating this value to be approximately US\$1.0 billion. Arguing that the value real estate depends on location, Tufts' researchers have concluded that numerous downtown locations will be dramatically improved when construction is completed (and when the former elevated expressway is buried and replaced with greenspace). This research found that the further one's property is from a highway, the more valuable it will be (all else being equal); similarly this research concludes that closer one's property is to a park, the more valuable it will be (again, all else being equal). As a result, and after examining the statistical relationship between assessed values for more than 16,000 condominium and their distances to the closest open spaces and major highways, Tufts University researchers conclude that the value of removing the highway on residential property values is in the range of US\$0.75 billion, while the creation of the proposed parks is in the range of an additional US\$0.25 million (this study concluded that if one could pick up their property and move it twice as close to the nearest park, the value of that property would increase by 6%; if one could pick up their property and move it twice as far from the nearest highway, the value of that property would increase by 5%).

4.2.4 The Park East Corridor, Milwaukee

The Park East Corridor was built in the 1970's as part of a planned initiative to encircle downtown Milwaukee with freeways. However because of increased opposition, the project was never completed. Commencing in 2001, the elevated Park East Spur is to be removed and replaced with a new surface roadway. The removal of this section of highway is estimated to release a minimum of 26 acres of land for redevelopment, comprised of 23 acres of property previously located under and an additional three acres immediately adjacent to the spur. It is further estimated that the total investment potential of these lands is in the range of US\$250 million.

Even prior to the removal of this elevated roadway, significant development interest has been demonstrated, including the construction of the Milwaukee School of Engineering (identified as the first redevelopment project on property once blighted by the Park East Freeway). Plans have also been prepared for the completion of the proposed Pabst City, a US\$300 million mixed-use development, a US\$100 million redevelopment of a former tannery, a proposed US\$40 million condominium tower, and a plan to build a US\$5 million, 110-room hotel. Much of the cleared land will be located next to the Milwaukee River, creating more than 1,300 feet of riverfront property for development, further adding to the allure of the project.

4.2.5 Ronda del Litoral / Moll de la Fusta, Barcelona

Ronda del Litoral is the coastal section of Barcelona's ring road system, and was constructed in the mid 1980's. Prior to this time, a 14-lane highway separated the city from the wharf area. Beginning as one of the first of many urban transformation projects completed prior to the staging of the 1992 Summer Olympic Games, the project consists of a multi-layered road (Moll de la Fusta) which functions as both a long waterfront promenade lined by restaurants and terraces, and a system of walkways and streets that manages the circulation of pedestrians and vehicles within separate layers.

The project was developed in conjunction with the renovation of an adjacent seaside working class neighbourhood and the conversion of the Porto Vell (The Old Port) from an active port to a public space. The old port area has been completely revitalized over the past 15 years, transformed from a grimy working seaport into a thriving recreational, commercial and entertainment centre. The area includes a large shopping area and Europe's largest aquarium.

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4.2.6 Summary

Over the past number of years, a number of jurisdictions around the world have critically examined their aging elevated transportation infrastructure and sought to identify, like Toronto, solutions to revitalize and / or replace them with systems that help redefine their environments. A review of the experiences which some of these jurisdictions have had with respect to their projects has revealed the following:

- ❑ the removal of elevated expressways has, in general, served to positively impact the local areas in which they existed;
- ❑ in all cases, the removal of the elevated expressway has created development lands which were previously constrained or unable to be developed (including lands located directly beneath the elevated expressway);
- ❑ in addition, the removal of the elevated expressway and its replacement with an at-grade boulevard / promenade has served as a catalyst for the creation of public green space;
- ❑ in some instances, it has also directly facilitated the redevelopment of abutting or nearby properties to higher and better uses, and in some instances spawned speculative development by investors / entrepreneurs; and
- ❑ in other instances, it has served to positively impact property values.

While the effects which these transportation improvements projects have had on their surrounding environments, particularly from a development and real estate perspective, has been positive, it is important to note that in some cases, like New York, the effect which the removal of a section of the elevated highway has had on influencing development cannot readily be separated from general economic and market conditions. In this regard, and while many of the individuals contacted as part of this review pointed to "location" as one of the key drivers in positively influencing development and property value increases (all else being equal, a development parcel benefiting from a superior location will return a higher value and will be more highly sought after compared to property located in an inferior location), it must also be noted that market timing will also play a fundamental role in influencing these two factors. "Timing", as it applies in this instance, relates to the ability to capitalize on an opportunity to obtain its full revenue and development potential (i.e., a suitably located development parcel sold into a strong real estate market will yield a higher value compared to if it were to be sold into a weaker real estate market). As such, general market demand for product, whether commercial, industrial or residential, will influence the development attractiveness of a particular site.

4.3 Potential Real Estate Impacts

In order to appropriately evaluate the range of potential real estate and development impacts which could occur with the removal of the elevated section of the Gardiner Expressway between Spadina Avenue and the Don Valley Parkway, and its replacement with a ten-lane at-grade boulevard, it is important to firstly place the area in context of its current market environment.

The central waterfront area is of Toronto a mixed-use community improved with a range of residential, commercial, recreational and public uses including the Island Ferry Docks, tour boats, the Waterfront Trail, numerous hotels, retail stores, office buildings and condominium towers / developments. The residential nature of this community, principally stretching from Strachan Avenue in the west to Yonge Street in the east, south of the Gardiner Expressway, has expanded substantially in recent years with the construction of numerous high-rise condominium towers. This area is substantially developed, with exception of the area located north of the Gardiner Expressway and south of the rail lands, between Bathurst Street and Yonge Street, which is currently under development.

The area east of Yong Street (and south of the rail line embankment) is principally more industrial in nature, with a mix of industrial, infrastructure and commercial applications including recycling plants, a sugar refinery, a distribution warehouse, grocery store, film studios, and others. A significant amount of land in the area is vacant and underutilized.

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As noted, the central waterfront area has realized substantial interest from condominium developers. While the majority of this development has occurred west of York Street and south of Harbour Street, new projects have recently commenced construction at Yonge Street, both south and north the Gardiner Expressway, and abutting the York / Bay Street exit ramp from the east-bound Gardiner Expressway.

According to Canada Mortgage and Housing Corporation ("CMHC"), the central area of Toronto (comprising the old cities of Toronto and York, and East York) currently contain approximately 50,400 condominium apartments, an amount which has grown by more than 30% since 2001. CMHC predict that the number of condominium units being developed should continue at a brisk pace over the next 12 to 24 months. Within the waterfront area of Toronto (principally between Bathurst Street and Yonge Street, south of the railway embankment), some 21 projects containing 6,346 condominium units exist, housing an estimated 10,000 people. In addition, some eight new projects are currently under various stages of development; when completed these projects will add an additional 3,355 units and approximately 5,000 residents to the area¹.

In discussion with the developers and sales associates of these projects, it was stated that the presence of the Gardiner Expressway has not necessarily impacted the marketing of their units or their interest in the area as a location for future real estate investment. Rather, both segments of the residential market (investors / developers and sales) view the area as offering unprecedented lake views and city views as well as being in walking distance to both the central core and to waterfront amenities. Such contacts also felt that the development of lands in and around the waterfront have followed a logical progression (emanating from the waterfront north, then east and west). While the presence of the Gardiner Expressway is generally concluded to impact somewhat on buyers actions (it is important to note that marketing initiatives do not specifically mention the Gardiner), most indicated that the "window of opportunity" for waterfront condominiums exists now and each are opting to pursue it further (i.e., from land acquisition, to marketing and development). Many also noted that it may be only a matter of time until lands east of Yonge Street are developed.

Should the Gardiner Expressway be taken down and replaced by an at-grade boulevard, we understand that some 2.0 million square feet of development potential may be created, principally in areas previously encumbered by the elevated expressway (both beneath and to the north of the existing roadway). In addition, the removal of the elevated structures will likely assist in facilitating the redevelopment of the lands south of Lake Shore Boulevard, to the water's edge. Based on the experiences of San Francisco, Milwaukee and Boston, it is likely that these areas will become increasingly sought after and may attract the speculative interest (and therefore investment) by developers / investors at an earlier juncture than it left purely to market forces.

Should the foregoing occur, and should the entire area ultimately be improved to a higher and better use (for example, a mixed-use community of residential, commercial, office and public spaces), more than 100 acres of property could be likely be affected (the area east of Yonge Street, south of the railway embankment to approximately Cherry Street).

4.4 Potential Property Tax Impacts

As has been reported in Boston, Milwaukee and San Francisco, property values in the vicinity of former elevated expressways have realized dramatic increases. In Boston, for example, residential property values in areas near the former Central Artery are estimated to have increased by as much as 40%, while in San Francisco, values are similarly reported to have increased by 40%. Property values in areas abutting the former section of the elevated West Side Highway in New York are similarly concluded to have increased, however in this instance, such increases are concluded to have been more the result of general market trends.

¹ Source: N. Barry Lyon Consultants Limited.

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The impact which the removal of the Gardiner Expressway could likely have on property values in Toronto is concluded to be more similar to that experienced in New York than in Boston, Milwaukee or San Francisco, given:

- ❑ in Toronto, there exists numerous examples of residential developments located next to a major expressway, with these lands having been sold at values reflecting their location next to the City's CBD and waterfront; and
- ❑ the pricing of property has historically reflected its intended use (based on the pure residual value of the finished product less the cost of construction and profit).

The foregoing therefore alludes to the probability that if land value appreciation was to occur as a result of the removal of the Gardiner Expressway, it is likely that any effect would be more muted, as opposed to the realization of average property value increases in the 40% or more range. In determining the possible impact in Toronto, consideration has been given to the study completed by researchers at Tufts University who concluded that if one could pick up their property and move it twice as far from the nearest highway, the value of that property would increase by 5%. As a result, and assuming that Toronto exhibits similar traits to those examined by Boston-area researchers, if the Gardiner Expressway was to be removed it follows that property values in the area south of the railway embankment would increase by an average rate of 5% almost immediately.

Assuming then that the area bounded between Yonge Street and Spadina Avenue, and south of the railway embankment measures some 120 acres in total land area, and has a total value of roughly \$1.1 billion (assuming 7 FSI and a land value of \$30 per square foot), the total property taxes attributable to this area would then approximately \$27.7 million (assuming a blended 2.5% tax rate). Assuming that the removal of the Gardiner would support a 5% increase in the market value of these properties, it follows then that the total increase in property taxes would approximate \$1.4 million per year (constant dollars).

Assuming as well that the area bounded between Yonge Street and Cherry Street, and south of the railway embankment measures some 100 acres in total land area, and has a total value of roughly \$0.9 billion (again assuming 7 FSI and a land value of \$30 per square foot), the total property taxes attributable to this area would then approximately \$23.1 million (assuming a blended 2.5% tax rate). Assuming that the removal of the Gardiner would support a 5% increase in the market value of these properties, it follows then that the total increase in property taxes would approximate \$1.2 million per year (constant dollars).

In total, the estimated annual increase in property tax revenue attributable to the removal of the Gardiner Expressway is estimated to be approximately \$2.5 million (assuming the removal of the Gardiner results in an across the board increase of 5%). Over a 20-year period, and assuming inflation of approximately 3.0% per year, the total increase in property values is projected to be approximately \$68.0 million.

4.5 Summary and Conclusions

This section of the Report has presented an evaluation of the potential spin off impacts, and in particular, those relating to real estate development and property tax, which could arise if the Gardiner Expressway was removed and replaced with a 10-lane at-grade boulevard between Spadina Avenue and the Don Valley Parkway. In particular, this review noted the following:

- ❑ Over the past number of years, a number of jurisdictions around the world have critically examined their aging elevated transportation infrastructure and sought to identify, like Toronto, solutions to revitalize and / or replace them with systems that help redefine their environments. This review revealed the following:
 - the removal of elevated expressways has, in general, served to positively impact the local areas in which they existed;

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- in all cases, the removal of the elevated expressway has created development lands which were previously constrained or unable to be developed (including lands located directly beneath the elevated expressway);
 - in addition, the removal of the elevated expressway and its replacement with an at-grade boulevard / promenade has served as a catalyst for the creation of public green space;
 - in some instances, it has also directly facilitated the redevelopment of abutting or nearby properties to higher and better uses, and in some instances spawned speculative development by investors / entrepreneurs;
 - in other instances, it has served to positively impact property values; and
 - market demand for product, whether commercial, industrial or residential, will directly influence the development attractiveness of a particular site.
- The central waterfront area of Toronto has been experiencing substantial development activity. While the areas east of Yonge Street have, to date, been remained idle from a development perspective, individuals currently pursuing development projects in the area west of Yonge Street believe it is only a matter of time until the lands east of Yonge Street are under active development.
 - The removal of the Gardiner Expressway is expected to create some 2.0 million square feet of development potential (north of Lake Shore Boulevard, between Yonge Street and approximately Parliament Street).
 - The removal of the elevated structures is also concluded to assist in facilitating the potential redevelopment of the lands south of Lake Shore Boulevard, similar to the experiences of Boston, Milwaukee and San Francisco. Should this occur, as much as 100 acres of property could ultimately be improved to higher and better uses.
 - It is estimated that the removal of the Gardiner Expressway could cause property values in the area between Spadina Avenue and the Don Valley Parkway to increase by 5%. Assuming an average property tax rate of 2.5%, it follows that the City of Toronto could stand to realize an additional \$2.5 million per year. Over a 20-year period, and assuming inflation of approximately 3.0% per year, the total increase in property values is projected to be approximately \$68.0 million.

5.0 Summary and Findings

5.1 Report Summary

The purpose of this report has been to evaluate the economic impacts associated with removing a significant portion of the Gardiner Expressway, and in particular, to:

- Quantify the range and nature of economic impacts which the removal of a significant portion of the Gardiner Expressway could impart; and
- Provide an opinion on the range of other impacts, including those from a real estate development perspective, which the project could impart.

In completing this review a number of work steps were undertaken, including:

- reviewing background information and materials to better understand the nature of the project, including anticipated costs and timing;
- estimating the construction, spending and tax related impacts of the proposed removal of the elevated Gardiner Expressway between Spadina Avenue and the Don Valley Parkway;
- determining the potential fiscal impact to the City of Toronto associated with the removal and replacement of a portion of the Gardiner Expressway; and
- identifying and researching various comparable projects in other cities to ascertain the impacts which the removal of elevated expressways had in their respective jurisdictions.

The project involves the removal of the elevated section of the Gardiner Expressway between Spadina Avenue in the west and the Don Valley Parkway in the east, and replacing it with a ten-lane at-grade boulevard. The project, described as the "Great Street", is projected to cost some \$492 million to complete, with construction occurring between 2009 and 2016. Once completed, the new "Great Street" through the downtown waterfront area of Toronto is concluded to allow the City to realize numerous substantial benefits with only minor changes to average trip times into the core. Among these benefits are:

- the ability to more effectively master plan the waterfront, from Yonge Street to Cherry Street, and link it more successfully from a "place-making" and "pedestrian access" perspective to the downtown core;
- generate positive economic impacts in terms of spending, job creation and taxes during the construction of the improvements;
- allow the City to reap direct operational fiscal savings; and
- facilitate various resultant spin-off benefits, particularly from a land development and property tax perspective, as has been the case in other jurisdictions which have similarly removed elevated expressways through their downtown cores.

The major conclusions and findings associated with these latter three benefits are discussed subsequently, in Section 5.2.

5.2 Conclusions and Findings

The proposed removal of the elevated section of the Gardiner Expressway between Spadina Avenue and the Don Valley Parkway, and its replacement with a ten-lane at-grade boulevard is concluded to spawn a number of positive economic impacts, including:

- generating over \$950 million in total spending impacts with some \$610 million to \$720 million occurring locally / regionally;

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- generating almost 8,100 person years of employment of which more than 3,600 would be directly associated with the project;
- allow the provincial government projected to realize more than \$60 million and the federal government more than \$90 million in direct tax revenue; and
- allow the City of Toronto to forego committing almost \$120 million to the elevated sections of the Gardiner Expressway in capital and operating expenditures.

With respect to potential spin off impacts, and in particular, those relating to real estate development and property tax, this review noted the following:

- Over the past number of years, a number of jurisdictions around the world have critically examined their aging elevated transportation infrastructure and sought to identify, like Toronto, solutions to revitalize and / or replace them with systems that help redefine their environments. This review revealed the following:
 - the removal of elevated expressways has, in general, served to positively impact the local areas in which they existed;
 - in all cases, the removal of the elevated expressway has created development lands which were previously constrained or unable to be developed (including lands located directly beneath the elevated expressway);
 - in addition, the removal of the elevated expressway and its replacement with an at-grade boulevard / promenade has served as a catalyst for the creation of public green space;
 - in some instances, it has also directly facilitated the redevelopment of abutting or nearby properties to higher and better uses, and in some instances spawned speculative development by investors / entrepreneurs;
 - in other instances, it has served to positively impact property values; and
 - market demand for product, whether commercial, industrial or residential, will directly influence the development attractiveness of a particular site.
- The central waterfront area of Toronto has been experiencing substantial development activity. While the areas east of Yonge Street have, to date, been remained idle from a development perspective, individuals currently pursuing development projects in the area west of Yonge Street believe it is only a matter of time until the lands east of Yonge Street are under active development.
- The removal of the Gardiner Expressway is expected to create some 2.0 million square feet of development potential (north of Lake Shore Boulevard, between Yonge Street and approximately Parliament Street).
- The removal of the elevated structures is also concluded to assist in facilitating the potential redevelopment of the lands south of Lake Shore Boulevard, similar to the experiences of Boston, Milwaukee and San Francisco. Should this occur, as much as 100 acres of property could ultimately be improved to higher and better uses.
- It is estimated that the removal of the Gardiner Expressway could cause property values in the area between Spadina Avenue and the Don Valley Parkway to increase by 5%. Assuming an average property tax rate of 2.5%, it follows that the City of Toronto could stand to realize an additional \$2.5 million per year. Over a 20-year period, and assuming inflation of approximately 3.0% per year, the total increase in property values is projected to be approximately \$68.0 million.

The above noted conclusions and findings are summarized in Table 8 on the following page.

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Table 8
Summary of Impacts Associated with the Removal of the Gardiner Expressway East of Spadina Avenue

LOCAL	PROVINCIAL	FEDERAL
Total spending Impact of \$952.2 million, of which some \$618.9 million to \$761.7 million will occur locally / regionally	PST revenue of \$36.8 million	GST revenue of \$32.2 million
Total employment of 8,070 person years of employment, including 3,630 direct jobs	Income Tax revenue of \$23.7 million	Income Tax revenue of \$59.8 million
Forego the requirement of committing up to \$102 million between 2004 and 2015 on the major maintenance / rehabilitation of the Gardiner Expressway		
Forego the requirement of committing some \$1.2 million per year on the day-to-day maintenance of the Gardiner Expressway (approximately \$32.2 million over a 20-year period)		
Ability to create 2.0 million square feet of new development potential		
Potential for redevelopment of the area south of the railway embankment and east of Yonge Street to occur at an earlier juncture		
Potential for some 100 acres of property between Yonge and Cherry Streets, south of the railway embankment, to be improved to a higher and better use		
Potential to generate an additional \$2.5 million per years in property taxes (approximately \$68.0 million over a 20 year period)		

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Appendix A

General Assumptions and Limiting Conditions

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GENERAL ASSUMPTIONS AND LIMITING CONDITIONS

1. Financial scenarios, if any, produced in conjunction with this Report contain hypotheses and assumptions which are based on a set of economic conditions or anticipated courses of action that may be reasonable and appropriate in Deloitte & Touche's judgement, are consistent with the purpose of the projections, but which may not materialize as set out therein. The hypotheses represent plausible circumstances, but need not be, and may not be fully supported.

Since future events are not subject to precise projections, some assumptions will not materialize in the exact form presented by our analysis. In addition, other unanticipated events and circumstances may occur which could influence the future outcome and performance of the Project. Therefore, the results achieved in future operating periods will vary from the analysis of prospective market and financial conditions as set out herein. While there is no recourse to predicting these matters with certainty apart from informed and reasoned judgements, it must be stated that future events may lead to variations in Project performance which may materially alter Project results. Deloitte & Touche does not warrant that actual results achieved during the Projection Period will be the same, in whole or in part, as those shown in the Projection. The Projection is based on hypotheses and there is significant risk that actual results will vary, perhaps materially, from the results projected.

2. Responsible ownership and competent property management are assumed.
3. Information furnished by others, including TWRC, Marshall Macklin Monaghan, the City of Toronto, upon which all or portions of this Report are based, is believed to be reliable, and has not been verified in all cases. No warranty is given as to the accuracy of such information.
4. Our report and work product cannot be included, or referred to, in any prospectus, securities and exchange commission filing or other public document.
5. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, provincial, or national government or private entity or organization have been, or can readily be obtained, or renewed for any use on which the estimates provided in this report are based.
6. No investigation has been made of, and no responsibility is assumed for, the legal description or for legal matters including title or encumbrances. The areas in question are assumed to be free and clear of liens, easements, encroachments and other encumbrances unless otherwise stated.
7. Full compliance with all applicable federal, provincial and local zoning, use, occupancy, environmental, and similar laws and regulations is assumed, unless otherwise stated.
8. No responsibility is taken for changes in market conditions and no obligation is assumed to revise this report to reflect events or conditions which occur subsequent to the effective date of this report.
9. Areas and dimensions of the property were obtained from sources believed to be reliable. Maps or sketches, if included in this report, are only to assist the reader in visualizing the property and no responsibility is assumed for their accuracy. No independent surveys were conducted.
10. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that affect value. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.

TORONTO WATERFRONT REVITALIZATION CORPORATION

ECONOMIC IMPACT OF GARDINER EXPRESSWAY ALTERATIONS

GENERAL ASSUMPTIONS AND LIMITING CONDITIONS

11. No soil analysis or geological studies were ordered or made in conjunction with this report, nor was an investigation made of any water, oil, gas, coal, or other subsurface mineral and use rights or conditions.
12. Neither Deloitte & Touche nor any individuals signing or associated with this report shall be required by reason of this report to give further consultation, to provide testimony or appear in court or other legal proceedings, unless specific arrangements thereof have been made.
13. This report has been made only for the purpose stated and shall not be used for any other purpose. Neither this report nor any portions thereof (including without limitation any conclusions as to value, the identity of Deloitte & Touche or any individuals signing or associated with this report, or the professional associations or organizations with which they are affiliated) shall be disseminated to third parties by any means without the prior written consent and approval of Deloitte & Touche.
14. We have not been engaged nor are qualified to detect the existence of hazardous material which may or may not be present on or near the property. The presence of potentially hazardous substances such as asbestos, urea-formaldehyde foam insulation, industrial wastes, etc. may affect the value of the property. The estimates presented herein are predicated on the assumption that there is no such material on, in, or near the property that would cause a loss in value. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required to discover them. The client should retain an expert in this field if further information is desired.
15. We have not audited or otherwise verified the capital cost estimates associated with this Project.

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