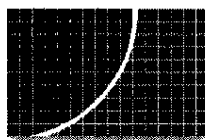
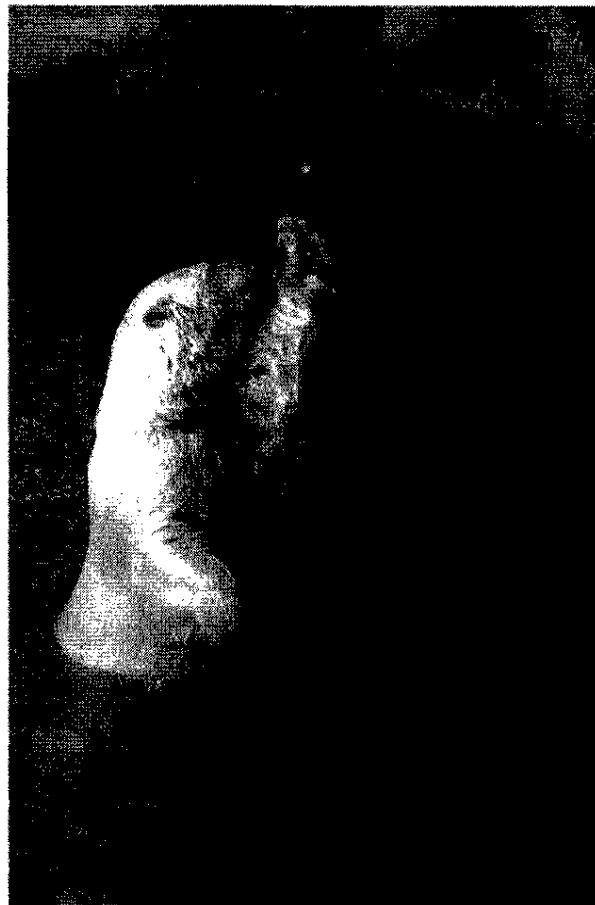


# **The Toronto Zoo—A Major Asset**

## **Economic Impact Analysis**



**The Economic Planning Group** of Canada  
Tourism Consultants

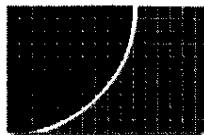
# **The Toronto Zoo—A Major Asset**

## **Economic Impact Analysis**

Submitted by

The Economic Planning Group

November 2010



**The Economic Planning Group** of Canada  
Tourism Consultants

November 22, 2010

Mr. John Tracogna  
Chief Executive Officer  
Toronto Zoo  
361 A Old Finch Avenue  
Scarborough, ON M1B 5K7

Dear Mr. Tracogna,

The Economic Planning Group is pleased to submit its report on the economic impacts of the Toronto Zoo and the other benefits it provides to Toronto and the province as a whole.

As the leading zoo in Canada and one of the major zoos in the world, the scope of its operations is substantial. It is a leading institution in wildlife conservation, scientific research, sustainable environments and public education. It is also a major attraction for both residents of Toronto and visitors to the region as well.

The economic impact of its operations on the Toronto and provincial economies, along with the additional impacts of the investments it has made in recent years are truly impressive.

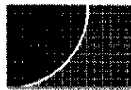
We trust you will find the report of value. We are grateful for the assistance of zoo staff in providing the necessary input data to complete our analysis.

Respectfully submitted,  
The Economic Planning Group

Gordon Phillips  
Partner

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## Executive Summary

The Toronto Zoo generates significant economic impacts in the regional economy, from its operations and its investment in capital assets. The Zoo plays important roles in conservation, education, research and in nurturing a sustainable and healthy natural environment.

### **Economic Impacts from Operations**

The operation of the Toronto Zoo in 2009 had significant impacts in the economy of the City of Toronto and in Ontario as a whole. The total impacts, including direct, indirect and induced impacts, were:

- \$39 million contribution to Toronto's Gross Domestic Product (GDP), with a \$47 million contribution to Ontario's GDP
- Over 600 jobs in Toronto and \$35 million in labour income.
- \$21.5 million in taxes to all three levels of government. \$2.8 million to municipalities, \$7.3 million to the province and \$11.5 million to the federal government.

Operational impacts are sustained annually.

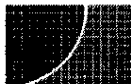
### **Economic Impacts from Capital Investment**

Over the three years from 2007 to 2009, the Toronto Zoo invested \$21.6 million. This investment created the following one-time economic impacts :

- \$15.7 million total contribution to Toronto's GDP with a \$20.9 million total contribution to Ontario's GDP.
- 208 jobs in Toronto and almost \$11.6 million in labour income.
- \$10.3 million in total taxes to all three levels of government, including \$1.1 million in municipal taxes, \$4 million in provincial taxes and \$5.2 million in federal taxes.

### **Other Important Benefits of the Toronto Zoo**

The Toronto Zoo delivers other important benefits. These benefits are in wildlife conservation, scientific research, public education and supporting sustainable environments. The Zoo is also an important attraction for residents and visitors and contributes to the quality of life of the community.



## 1. Introduction

**The Toronto Zoo is one of the largest zoos in the world.**

Situated in the heart of the Rouge Park, the Toronto Zoo has been an anchor attraction in Toronto for 36 years. With over 700 acres of land and over 5,000 animals, the Toronto Zoo ranks as one of the largest in the world.

The Zoo is a significant employer in north-east Toronto, one of several institutions in the area, including the nearby Scarborough campus of the University of Toronto. Its location is illustrated on the following page.

It has an annual operating budget of \$44 million and spent over \$21 million on capital projects between 2007 and 2009.

The Zoo had 1.46 million visitors in 2009, up 11% from 2008.

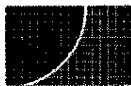
The Toronto Zoo is recognized as a leader in conservation efforts, in research and in education programs.

**This project was to undertake an economic impact analysis of the Toronto Zoo.**

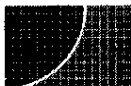
The operation of the Zoo and its investment in capital projects has significant economic impacts on the Toronto region and Ontario as a whole. This study was commissioned to quantify these impacts, including direct, indirect and induced impacts, based on information supplied by the Zoo and the application of an appropriate economic impact model.

The Request for Proposals asked that three types of impacts be analysed:

1. Impacts from the operation of the Toronto Zoo in 2009.
2. Impacts from capital expenditures made between 2007 and 2009.
3. Impacts associated with the additional spending of out-of-town visitors to the Zoo beyond what they spent at the Zoo itself (if feasible).



## The Toronto Zoo: Regional Location



**We were able to assess the first two types of impacts, but not the third.**

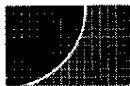
Out-of-town visitors to the Toronto Zoo spend money not only at the Zoo but also outside the zoo on things such as gas, meals, overnight accommodation and retail purchases. If the visit to the Zoo played a role in the decision to take the trip to the Toronto area, some or all of these external expenditures can be credited as being generated by the Zoo. Unfortunately, data was not available to support this analysis.

**The Ontario Ministry of Tourism and Culture's Economic Impact Model, TREIM, was used.**

Information was provided by the Toronto Zoo on their operating budget and staffing, and on the capital investment over the past three years. The data was analysed into categories to match the input requirements for the Ministry of Tourism and Culture's Tourism Regional Economic Impact Model (TREIM). The model outputs provided data on the direct, indirect and induced economic impacts for the Toronto Zoo.

**Other qualitative contributions of the Zoo to the Toronto region were also identified.**

This report also highlights the other contributions the Toronto Zoo makes to the region, drawing on research and publications and an overview of the programs and initiatives being delivered by the Zoo.





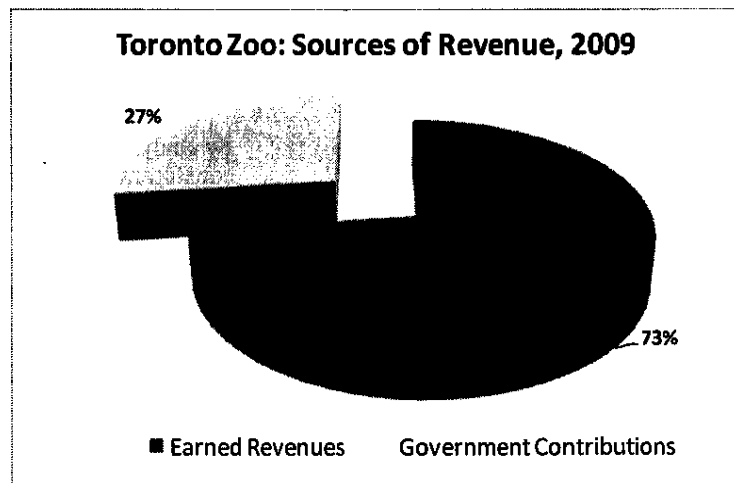
## 2. The Economic Impacts of the Toronto Zoo

### Economic Impacts from the Operation of the Toronto Zoo in 2009

**Toronto Zoo spent some \$44 million on its operations in 2009 which flowed into the Toronto and Ontario economies.**

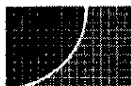
Operational impacts from operations are generally sustained over time due to continued operations year to year. However, the analysis here is for one year, 2009.

The Toronto Zoo had an operating budget of some \$44 million in 2009 and earned 73% of its revenues.



The expenditures of the Zoo are wide-ranging, including items such as animal food and care, marketing, utilities, supplies and equipment, insurance, fuel and goods purchased for resale in retail and food service outlets.

By far the most significant expenditures were those associated with the salaries, wages and benefits for 450 FTE positions (full-time job equivalents) including full-time and seasonal employees. This includes 65.5 FTE positions from employees associated with the contracted food service operations.



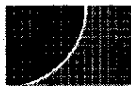
**Three types of impacts have been measured—direct, indirect and induced.**

These expenditures flow from the Zoo to employees, and to the providers of services and supplies to the Zoo creating impacts in the Toronto economy and in the Ontario economy overall. These impacts occur at three levels:

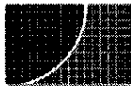
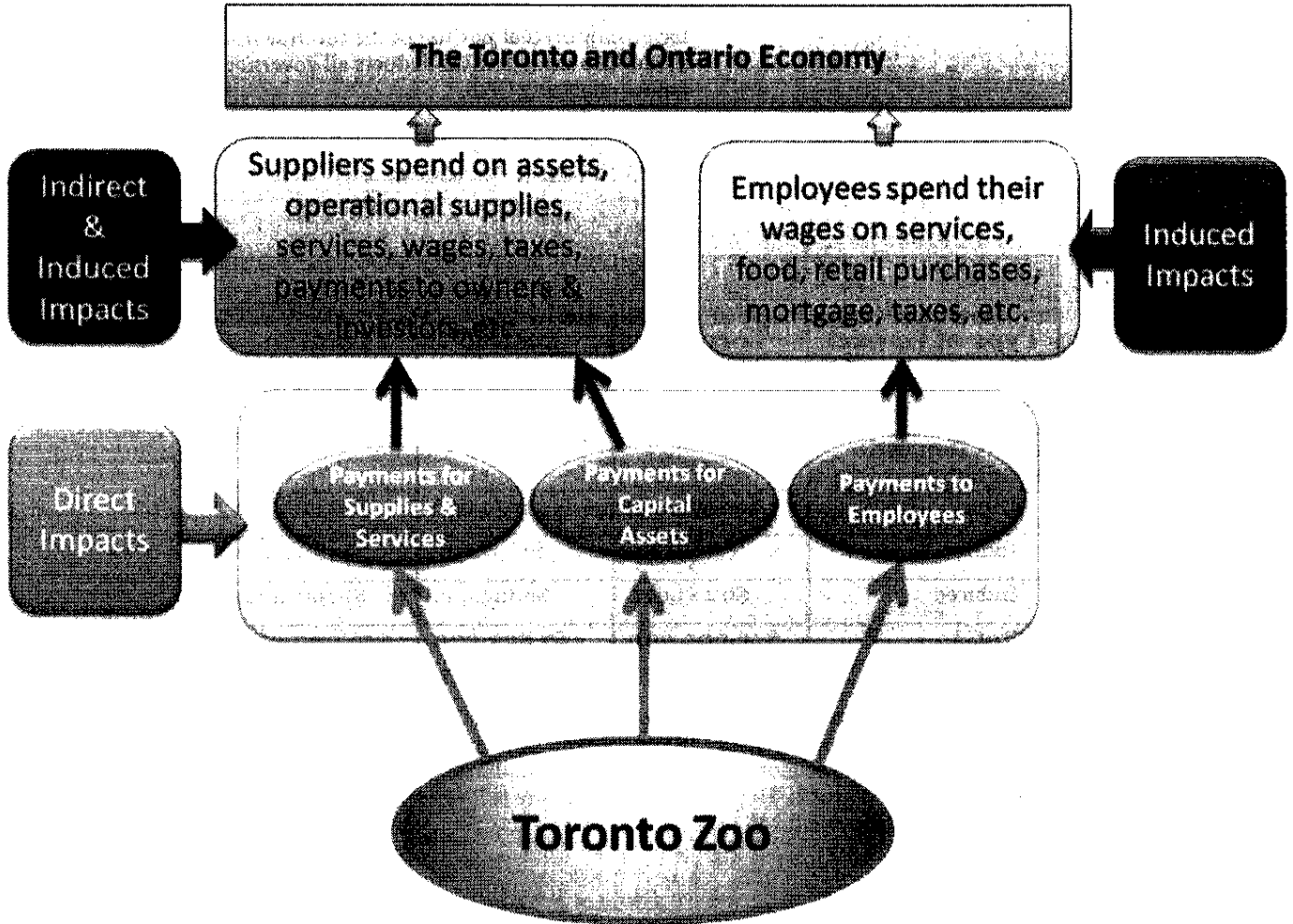
- **Direct impacts** – the spending of the Zoo
- **Indirect impacts** – resulting from the spending of the businesses and organizations that provide supplies and services to the Zoo
- **Induced impacts** – resulting from the spending of employees of the Zoo, and the spending of the employees and investors of the businesses and organizations that provide supplies and services to the Zoo.

The graphic on the following page illustrates these impacts and their linkage to the Toronto Zoo.

By analyzing the operating expenditures of the Zoo, the consultants created inputs for the Ontario Ministry of Tourism and Culture's Economic Impact Model, known as TREIM (Tourism Regional Impact Model). The outputs of this model provide data on the direct, indirect and induced economic impacts of the Zoo in Toronto and in the rest of Ontario. These are aggregate economic impacts and reflect the impact on the economy of the full operations of the Toronto Zoo in 2009.



## The Economic Impact Model



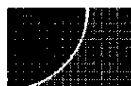
**The Toronto Zoo contributed \$39 million to Toronto's Gross Domestic Product (GDP)**

Gross Domestic Product or GDP is the value of goods and services produced within a geographic area. The Toronto Zoo contributed \$39 million in GDP to Toronto and another \$7.9 million in other parts of Ontario, giving a total \$47 million contribution to Ontario's GDP.

Table 1 provides details on the GDP impacts generated by the operation of the Zoo. Note that this analysis is based only on that portion of the revenue that is earned by the Zoo since TREIM deducts all government grants before analyzing GDP.

<b>Table 1: Gross Domestic Product (GDP) – Operation of the Toronto Zoo, 2009:</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Total Revenue (1)</b>	\$33,714,000		<b>\$33,714,000</b>
<b>Gross Domestic Product</b>			
Direct	\$26,593,000	\$634,000	\$27,227,000
Indirect	\$3,019,000	\$1,137,000	\$4,156,000
Induced	\$9,483,000	\$6,124,000	\$15,607,000
<b>Total</b>	<b>\$39,095,000</b>	<b>\$7,895,000</b>	<b>\$46,990,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding. The TREIM model deducts all government grants from the revenue prior to calculating the economic impacts since the model does not provide for the impact of government grants. Hence this revenue figure is lower than the total \$44 million in revenue reported for the Zoo.



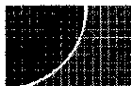
**The Toronto Zoo supports over 600 jobs (full-time job equivalents) in Toronto and labour income of \$35 million.**

The Zoo's direct contribution to Toronto's labour market is over 450 jobs (person years of employment) and \$27 million in labour income. With indirect and induced impacts added, the Zoo supports 608 jobs in Toronto and almost \$35 million in labour income. For Ontario as a whole, this increases to 709 jobs and over \$40 million in labour income.

Table 2 details the labour income and employment impacts.

<b>Table 2: Labour Income and Employment Impacts - Operation of the Toronto Zoo, 2009:</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Labour Income</b>			
Direct	\$26,809,000	\$385,000	\$27,194,000
Indirect	\$2,183,000	\$780,000	\$2,963,000
Induced	\$5,860,000	\$4,009,000	\$9,869,000
<b>Total</b>	<b>\$34,852,000</b>	<b>\$5,173,000</b>	<b>\$40,025,000</b>
<b>Employment (jobs/ full time job equivalents)</b>			
Direct	453	7	460
Indirect	48	14	62
Induced	108	80	188
<b>Total</b>	<b>608</b>	<b>101</b>	<b>709</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.



**The Toronto Zoo generates \$21.5 million in taxes in Ontario; \$2.8 million of it goes to municipalities.**

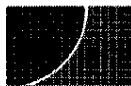
Spending by the Toronto Zoo trickles through the economy generating federal, provincial and municipal tax revenues. Federal tax revenues including personal and corporate income taxes and the GST (2009 data, prior to HST implementation), total \$11.5 million in Ontario. Provincial tax revenues, totalling \$7.3 million, include personal and corporate income taxes as well as PST, gas tax and employer health taxes.

Municipal taxes include business and personal property taxes that are collected by municipalities. While the Zoo itself does not pay municipal taxes, its operations certainly contribute indirectly to the City's property tax base and that of other municipalities in the region as well. Its employees pay these taxes, as do its suppliers, service providers and capital asset suppliers. Municipal taxes generated by the Zoo total \$2.8 million.

Table 3 details these tax impacts.

<b>Table 3: Tax Impacts - Operation of the Toronto Zoo, 2009:</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Direct Taxes</b>			
Federal	\$6,141,000	\$140,000	\$6,281,000
Provincial	\$3,634,000	\$95,000	\$3,729,000
Municipal	\$1,706,000	\$30,000	\$1,736,000
<b>Total</b>	<b>\$11,481,000</b>	<b>\$266,000</b>	<b>\$11,747,000</b>
<b>Total Taxes (includes direct taxes)</b>			
Federal	\$9,676,000	\$1,800,000	\$11,476,000
Provincial	\$6,016,000	\$1,258,000	\$7,274,000
Municipal	\$2,247,000	\$542,000	\$2,789,000
<b>Total</b>	<b>\$17,938,000</b>	<b>\$3,600,000</b>	<b>\$21,538,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.



## Economic Impacts of the Capital Expenditures by the Toronto Zoo, 2007 through 2009

**The capital expenditures of the Toronto Zoo between 2007 and 2009 generated \$15.7 million in GDP in Toronto, created 208 full-time job equivalents and \$11.6 million in labour income.**

During the period 2007 through 2009, some \$21.6 million in capital investment was made at the Toronto Zoo. This includes all capital spending, from government and external sources.

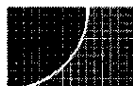
This capital investment generated one-time economic impacts in the Toronto and Ontario economies, as follows:

- \$20.9 million contribution to Ontario's Gross Domestic Product, of which \$15.7 million was in Toronto.
- \$14.9 million in labour income in Ontario, of which almost \$11.6 million was in Toronto.
- Created 272 jobs, 208 of them in Toronto.
- \$10.3 million in total taxes to all three levels of government as follows:
  - \$5.2 million in Federal taxes
  - \$4 million in Provincial taxes
  - \$1.1 million in Municipal taxes

Tables 4 through 6 provide details on the economic impacts resulting from these capital expenditures.

<b>Table 4: Gross Domestic Product - Toronto Zoo Capital Expenditures 2007 to 2009 (Total)</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Total Capital Investment</b>	\$21,616,847	0	<b>\$21,616,847</b>
<b>Gross Domestic Product (GDP)</b>			
Direct	\$10,567,000	\$135,000	\$10,702,000
Indirect	\$2,468,000	\$2,514,000	\$4,982,000
Induced	\$2,721,000	\$2,486,000	\$5,207,000
<b>Total</b>	<b>\$15,757,000</b>	<b>\$5,136,000</b>	<b>\$20,893,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.

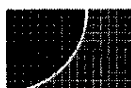


<b>Table 5: Labour Income &amp; Employment Impacts - Toronto Zoo Capital Expenditures 2007 to 2009 (Total)</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Labour Income</b>			
Direct	\$8,137,000	\$88,000	\$8,225,000
Indirect	\$1,738,000	\$1,679,000	\$3,417,000
Induced	\$1,731,000	\$1,588,000	\$3,319,000
<b>Total</b>	<b>\$11,606,000</b>	<b>\$3,355,000</b>	<b>\$14,961,000</b>
<b>Employment (jobs/full time job equivalents)</b>			
Direct	143	1	144
Indirect	32	30	62
Induced	33	33	66
<b>Total</b>	<b>208</b>	<b>64</b>	<b>272</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.

<b>Table 6: Tax Impacts - Toronto Zoo Capital Expenditures 2007 to 2009 (Total)</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Direct Taxes</b>			
Federal	\$2,449,000	\$30,000	\$2,479,000
Provincial	\$2,233,000	\$21,000	\$2,254,000
Municipal	\$908,000	-	\$908,000
<b>Total</b>	<b>\$5,590,000</b>	<b>\$51,000</b>	<b>\$5,641,000</b>
<b>Total Taxes (includes direct taxes)</b>			
Federal	\$4,014,000	\$1,146,000	\$5,160,000
Provincial	\$3,185,000	\$822,000	\$4,007,000
Municipal	\$937,000	\$176,000	\$1,113,000
<b>Total</b>	<b>\$8,136,000</b>	<b>\$2,144,000</b>	<b>\$10,280,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.





## Methodology and Definitions

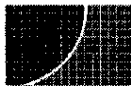
### *The Tourism Regional Economic Impact Model (TREIM)*

**The economic impacts described in this report were generated using the Tourism Regional Economic Impact Model, known as TREIM.**

Developed for the Ministry of Tourism and Culture, TREIM (Tourism Regional Economic Impact Model) can provide detailed tourism-related economic impact analysis for three types of economic activity; tourism-related capital investments, operational revenues and expenditures of enterprises, or the spending of tourists in Ontario. The user selects which of the three types of activity is to be measured, the location region of the project (Census Division, Census Metropolitan Area or Travel Region) and, based on the input data provided, the model can estimate the direct, indirect and induced economic impacts on the region selected and on the rest of the province. ***The region selected for the Toronto Zoo analysis was the Metropolitan Toronto Census Division.***

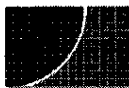
Users of the model input the data on capital investment, visitor spending or operational expenses. Data is placed in various categories of expenses as identified in the model. ***In the case of the Toronto Zoo, data on investment (capital expenditures) and operational expenses was used. Detailed operating expense and capital expenditure data provided by the Zoo was assigned to the appropriate categories within the model.***

The model is designed such that the impact year can be selected, and whether induced impacts (resulting from household spending and business investment of the enterprise's employees and investors/owners) or property taxes are to be included in the analysis. ***For the Toronto Zoo, the impact years were 2009 for operations, and 2007, 2008 and 2009 for investment. We also selected the model's option of generating induced impacts and property taxes.***



The model also gives the user several other options with respect to customization for the specific analysis being undertaken:

- Two options are available for use in measuring property tax outputs (a key part of the municipal taxes). One option measures the property tax outputs of all revenue attributed to the project; the second measures the property tax outputs of only incremental revenue. ***For the analysis of the impacts resulting from the operation of the Toronto Zoo, we selected the first option, measuring the property tax outputs of all revenue since this analysis is looking at the aggregate impact of the operation of the Zoo. For the capital investment analysis, we selected the incremental revenue option, since we are measuring only the incremental impact of the three years of recent investment on the economy.***
- The model uses a series of factors that describe the economic environment. These include Ontario Real GDP, Ontario Consumer Price Index, Ontario population change and unemployment rate, and the Government of Canada 3 month T-Bill rate. Defaults are inherent in the model but the user has the option of customizing these various rates. Since the model was developed about five years ago, the defaults do not reflect the economic environment over the past few years. ***For the Toronto Zoo analysis, we researched the appropriate rates for the three years used in our analysis and customized the economic environment data to reflect these new data.***



## Definitions

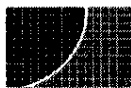
The outputs from the model are defined as follows:

- **Gross Domestic Product** – the value of goods and services produced within a region or country.
- **Direct Impact** – the impact generated by businesses or sectors that produce or provide goods and services.
- **Indirect Impact** – the impact resulting from the expansion of demand in the economy beyond that of the businesses or sectors that directly produce or provide the goods and services.
- **Induced Impact** – the impact associated with the subsequent spending of the labour income and/or profits earned in the operation/business.
- **Employment** – this refers to the number of jobs (full-time equivalents) including full-time, part-time, seasonal employment for both employed and self-employed individuals
- **Federal Tax Revenues** – includes personal income tax, corporate income tax, commodity tax (GST, gas tax, excise tax, excise duty, air tax and trading profits) and payroll deduction collected by the federal government. (Note: This analysis is for 2009, before the introduction of the HST in Ontario)
- **Provincial Tax Revenues** – includes personal income tax, corporate income tax, commodity tax (PST, gas tax, liquor gallonage tax, amusement tax and trading profits) and employer health tax that collected by Ontario provincial government.
- **Municipal Tax Revenues** – includes business and personal property taxes that are collected by municipalities. The impact measure includes the portion of total property taxes collected by a municipality that can be attributed to the project because of its contribution to the economic activity of the municipality and hence its tax base.

Note:

Economic impacts from operations are considered sustained impacts since they generally occur year by year.

Economic impacts from capital investment are considered one-time impacts in that they tend not to be special, non-recurring expenditures.



### 3. Measuring the Impacts Associated with the Spending of Out-of-Town Visitors

**We were not able to assess these impacts due to a lack of data.**

Out-of-town visitors to the Toronto Zoo spend money at the Zoo. The economic impact of the spending of these visitors at the Zoo is included with the analysis of the impacts from Zoo operations. However, these visitors spend not only at the Zoo but also outside the zoo, on things such as gas, meals, overnight accommodation and retail purchases. These expenditures are not, of course, included in the impact analysis of zoo operations.

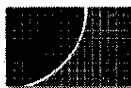
However, if the visit to the Zoo played a role in the decision to take the trip to the Toronto area, some or all of the expenditures made outside the Zoo can also be credited as being generated by the Zoo. These expenditures can then be added to the analysis and become part of the economic impacts of the Zoo.

To undertake this additional analysis, information on the role the Zoo played in generating the trip to Toronto is required. This type of information usually comes from questions asked on visitor surveys. The consultants reviewed the Zoo's available visitor survey data and concluded that the information needed to do this analysis was not being collected. We recommended, therefore that the current report look only at the impacts from operations and from capital expenditures.

**The Zoo currently undertakes visitor research but it does not provide the detailed information necessary for this analysis.**

The Zoo currently conducts an On-Site Visitor Survey each summer. Additionally, the Zoo participates in visitor research with six other Toronto attractions, through surveys conducted at four intervals during the year. These two surveys provide some information on out-of-town visitors, but not the detailed information required for an economic impact analysis.

Appendix II outlines the recommended questions and methodology, should the Zoo decide to undertake this additional analysis.



## 4. Other Beneficial Impacts of the Toronto Zoo

**The Toronto Zoo plays a leadership role in the conservation of species and ecosystems, and related research.**

The Toronto Zoo is known internationally for its conservation activities and related research. Its numerous conservation projects help protect, preserve and restore habitats. Associated research in animal and plant conservation, on maintaining biodiversity and natural ecosystems help further a body of knowledge that is essential in the stewardship of endangered species and habitats.

The Zoo's research programs, many of them conducted in partnership with public and private organizations, help the Zoo make a difference in conservation and environmental stewardship, in the protection of endangered species and in animal rescue and rehabilitation.

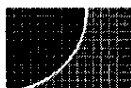
The Association of Zoos and Aquariums (AZA) in its 2008 review reported that "Toronto Zoo is an outstanding leader in cooperative conservation programs locally, provincially, nationally and internationally".

**The Zoo plays an important role in public education, leading to an enhanced appreciation of the value of wildlife and ecosystems, natural environments and sustainable living. It helps build stronger connections among people to conservation and nature.**

The Toronto Zoo delivers a wide range of education and outreach programs to inspire people to care about wildlife and protected habitats. The Zoo has a wide range of audiences – families, members, youth, seniors, community groups, teachers and educators, students, researchers, employees, volunteers and school groups.

The audiences are involved with the Zoo through on-site visits, outreach programs, participation in formal and informal education programs and workshops, in-house training programs and a wide range of other special events and programs.

An example of the Zoo's role in public education is the organized school visits, which involve approximately 150,000 participants each year.



These programs provide the Zoo's audiences with a stronger connection to nature and help reinforce their values and attitudes about ecology and the environment, about the critical importance of sustainable living and their role in the solutions that are needed.

Research conducted by the Association of Zoos and Aquariums in 2007, reports that zoos and aquariums enhance public understanding of wildlife and conservation of the places animals live. 54% of those surveyed (over 5,500 persons) commented on their elevated awareness about their own role in conservation as a direct consequence of their visit to a zoo or aquarium.

**The Zoo is a popular attraction for Toronto area residents, providing adventure and educational entertainment for families.**

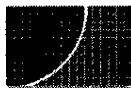
The Toronto Zoo is a popular location for families with over 60% of Zoo visitors surveyed reporting that a family outing prompted their visit. And, according to a Toronto Star-Decima survey in July/August 2006 (respondents were from the GTA area) the Zoo is the favourite attraction in the region.

The Zoo's connection to residents extends far beyond entertaining family visits to the site. The Zoo offers formal, curriculum-based education programs to over 10,000 students annually. It also offers intensive 'Zoo schools' and summer day camp programs as well as overnight experiences. Informal education activities are delivered throughout the site via "Meet the Keeper" talks, touch tables and interactive learning experiences. Education programs are delivered to underserved neighbourhoods. All of these help a largely urban population connect with the natural world and provide visitors with a deeper understanding of wildlife and their needs.

**The Zoo is an important attraction for visitors to Toronto**

The Zoo is one of Toronto's top tourism attractions, with almost 40% of its visitors coming from outside the larger Toronto area.

The trip spending of these non-resident visitors outside the Zoo itself generates additional economic impacts which have not been measured in this analysis since the data is not available to do so.



**The Zoo, through its Green Plan, exemplifies best practices in sustainable operations.**

Toronto Zoo is dedicated to providing green leadership, throughout its operations, in its facilities and programs and in educating its audiences about the importance of environmental issues, how to live sustainably and reduce their footprint.

The Zoo encourages operational practices that promote a high standard of environmental protection and hosts green events, programs and projects for staff, volunteers, visitors and the community.

Special initiatives, such as the green roof on the Australasia Pavilion, solar photovoltaic panels providing solar-generated electricity in Tundra Trek (the new polar bear habitat) and the geo-thermal heating system in the lion-tailed macaques exhibit, showcase best practices in sustainable operations and provide examples of the future of sustainable design.

**The Zoo supports the education of professionals through partnerships with various educational institutions.**

In partnership with academic and research institutions such as the University of Guelph, Ontario Veterinary College, York University and the University of Toronto, the Toronto Zoo supports learning and university programs. Teacher workshops and internship programs for teachers-in-training and researchers help nurture the next generation of educators.

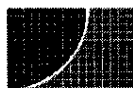
**The Zoo provides a venue for functions and events of various kinds.**

The Toronto Zoo offers unique and engaging venues for functions and events of all types including picnics, team building, meetings, family parties, weddings and conferences.

**The Zoo contributes to the quality of life of the GTA community.**

Taken together, the foregoing impacts of the Toronto Zoo contribute to the quality of life of the broader community in the region; its economy, its education, its values, its entertainment, its events and its character of Place.

88% of Toronto Zoo members (approximately 33,000 households) surveyed in 2010 agreed that zoos are important to the quality of life in a community.



# Appendix I

## Economic Impacts of Capital Expenditures, by Year

<b>Table I-1: Economic Impacts- Toronto Zoo Capital Expenditures 2007</b>			
<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Total Capital Investment</b>	\$6,433,300	0	\$6,433,300
<b>Gross Domestic Product (GDP)</b>			
Direct	\$2,955,000	\$92,000	\$3,047,000
Indirect	\$689,000	\$727,000	\$1,416,000
Induced	\$702,000	\$655,000	\$1,357,000
<b>Total</b>	<b>\$4,346,000</b>	<b>\$1,474,000</b>	<b>\$5,820,000</b>
<b>Labour Income</b>			
Direct	\$2,227,000	\$59,000	\$2,286,000
Indirect	\$481,000	\$482,000	\$963,000
Induced	\$441,000	\$417,000	\$858,000
<b>Total</b>	<b>\$3,149,000</b>	<b>\$958,000</b>	<b>\$4,107,000</b>
<b>Employment (jobs/full time job equivalents)</b>			
Direct	40	1	41
Indirect	9	9	18
Induced	9	9	18
<b>Total</b>	<b>58</b>	<b>18</b>	<b>77</b>
<b>Direct Taxes</b>			
Federal	\$668,000	\$20,000	\$688,000
Provincial	\$627,000	\$14,000	\$641,000
Municipal	\$245,000	\$200	\$245,000
<b>Total</b>	<b>\$1,540,000</b>	<b>\$34,000</b>	<b>\$1,574,000</b>
<b>Total Taxes (includes direct taxes)</b>			
Federal	\$1,079,000	\$318,000	\$1,397,000
Provincial	\$879,000	\$234,000	\$1,113,000
Municipal	\$252,000	\$42,000	\$294,000
<b>Total</b>	<b>\$2,210,000</b>	<b>\$595,000</b>	<b>\$2,805,000</b>



**Table 1-2: Economic Impacts -  
Toronto Zoo Capital Expenditures 2008**

<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Total Capital Investment</b>	\$10,314,496	0	\$10,314,496
<b>Gross Domestic Product (GDP)</b>			
Direct	\$5,204,000	\$29,000	\$5,233,000
Indirect	\$1,219,000	\$1,217,000	\$2,436,000
Induced	\$1,364,000	\$1,232,000	\$2,596,000
<b>Total</b>	<b>\$7,788,000</b>	<b>\$2,479,000</b>	<b>\$10,265,000</b>
<b>Labour Income</b>			
Direct	\$4,013,000	\$20,000	\$4,033,000
Indirect	\$855,000	\$809,000	\$1,664,000
Induced	\$865,000	\$783,000	\$1,648,000
<b>Total</b>	<b>\$5,733,000</b>	<b>\$1,612,000</b>	<b>\$7,345,000</b>
<b>Employment (jobs/full time job equivalents)</b>			
Direct	71	0	71
Indirect	16	14	30
Induced	16	16	32
<b>Total</b>	<b>103</b>	<b>30</b>	<b>133</b>
<b>Direct Taxes</b>			
Federal	\$1,203,000	\$7,000	\$1,210,000
Provincial	\$1,093,000	\$5,000	\$1,098,000
Municipal	\$451,000	-	\$451,000
<b>Total</b>	<b>\$2,747,000</b>	<b>\$12,000</b>	<b>\$2,759,000</b>
<b>Total Taxes (includes direct taxes)</b>			
Federal	\$1,982,000	\$554,000	\$2,536,000
Provincial	\$1,568,000	\$398,000	\$1,966,000
Municipal	\$466,000	\$89,000	\$555,000
<b>Total</b>	<b>\$4,016,000</b>	<b>\$1,040,000</b>	<b>\$5,057,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.

**Table I-3: Economic Impacts -  
Toronto Zoo Capital Expenditures 2009**

<b>Type of Impact</b>	<b>Toronto</b>	<b>Rest of Ontario</b>	<b>Total in Ontario</b>
<b>Total Capital Investment</b>	\$4,869,051	0	<b>\$4,869,051</b>
<b>Gross Domestic Product (GDP)</b>			
Direct	\$2,408,000	\$14,000	\$2,422,000
Indirect	\$560,000	\$570,000	\$1,130,000
Induced	\$655,000	\$599,000	\$1,254,000
<b>Total</b>	<b>\$3,623,000</b>	<b>\$1,183,000</b>	<b>\$4,806,000</b>
<b>Labour Income</b>			
Direct	\$1,897,000	\$9,000	\$1,906,000
Indirect	\$402,000	\$388,000	\$790,000
Induced	\$425,000	\$388,000	\$813,000
<b>Total</b>	<b>\$2,724,000</b>	<b>\$785,000</b>	<b>\$3,509,000</b>
<b>Employment (jobs/full time job equivalents)</b>			
Direct	32	0	32
Indirect	7	7	14
Induced	8	8	16
<b>Total</b>	<b>47</b>	<b>15</b>	<b>62</b>
<b>Direct Taxes</b>			
Federal	\$578,000	\$3,000	\$581,000
Provincial	\$513,000	\$3,000	\$515,000
Municipal	\$212,000	-	\$212,000
<b>Total</b>	<b>\$1,303,000</b>	<b>\$5,000</b>	<b>\$1,308,000</b>
<b>Total Taxes (includes direct taxes)</b>			
Federal	\$953,000	\$274,000	\$1,227,000
Provincial	\$738,000	\$190,000	\$928,000
Municipal	\$219,000	\$45,000	\$264,000
<b>Total</b>	<b>\$1,910,000</b>	<b>\$509,000</b>	<b>\$2,419,000</b>

Notes: All amounts are rounded to the nearest \$1000; totals may not add due to rounding.

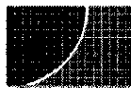
## Appendix II

# Recommended Methodology for Determining the Economic Impacts associated with the off-site spending of Out-of-Town Visitors

**Questions should be added to the Zoo's visitor survey so that this analysis can be done in the future.**

To provide the information needed to measure the economic impacts associated with the off-site spending of out-of-town visitors, the following information will need to be collected through visitor surveys:

- Did the party travel more than 40 km one-way from their home on their visit to the Zoo? (A tourist visit includes same day trips of more than 40 km one-way, so visitors from within the GTA can be tourists, and their spending can be counted as tourism expenditures)
- Did the visit to the Zoo involve an overnight stay away from home or was it a same day trip?
- To what extent did the Toronto Zoo motivate the trip to Toronto? Was it the main reason for the trip, was it a part of the reason, or did the Zoo have no influence on the trip decision?
- If the Zoo was part of the reason for the trip or if it did not influence the trip, did the visit to the Zoo cause the visitor party to spend extra time in the region than originally planned? (less than one night, one night, two nights, three nights)
- How much did the visitor party spend on their trip, other than at the Zoo itself, either in total or in key categories: accommodation, food and beverage, retail purchases, recreation & entertainment, transportation? (An alternative to getting this information from visitors is to use average spending data for visitors to the Toronto area, available through the Ministry of Tourism and Culture's Regional Tourism Profiles. However, this data is only readily available for general categories and may not represent the spending patterns of visitors to the Zoo).



Data from the survey, in combination with visitation statistics will need to be analysed to generate the following information:

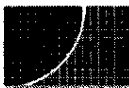
- Number of visitors on same day trips travelling more than 40 km from home.
- Number of visitors on overnight trips to Toronto.
- For each of these two groups of visitors:
  - ◊ The percentage indicating that the Zoo was:
    - ◊ The main reason for the trip
    - ◊ A partial reason for the trip
    - ◊ Not a factor in the trip destination
  - ◊ Off-site spending per party, either in total or for key categories of expenditure.
- For visitors that indicated that the visit to the zoo extended their stay in Toronto:
  - ◊ The percentage of visitors that indicated an increased stay of the different lengths of time.

This data can then be used to calculate the off-site visitor expenditures that are generated by the Toronto Zoo.

The Zoo can reasonably take credit for generating 100% of the off-site expenditures for those visitors who indicate that the Zoo was the main reason for their trip, along with, say, 50% of the expenditures for visitors who indicate that the Zoo was a partial reason for the trip. In addition, it can take credit for the increased spending associated with an increased length of stay in Toronto prompted by the visit to the Zoo. (This is called an 'attribution analysis.)

It may be necessary to increase the overall sample size to ensure that there are sufficient responses in each group (e.g. overnight visitors for whom the Zoo was the main reason for the trip; overnight visitors for whom the Zoo was a partial reason for the trip, etc.) to generate reliable spending estimates.

The Tourism Research Division of Ministry of Tourism and Culture has a publication on their website ( <http://www.tourism.gov.on.ca/english/research/resources/index.html>) that describes in detail survey procedures for the analysis of the economic impact of festivals and events. While the methodology and process described there is more complex than is required for the Toronto Zoo, it does provide some helpful suggestions and examples.



**The visitor survey time period may need to be expanded.**

The Toronto Zoo's 2009 on-site visitor survey occurred in July and August. Assuming that the survey methodology is appropriate and respondents are selected randomly throughout the time periods when the Zoo is open, these results can reasonably be applied to all visitors during this period. Care will need to be taken in analyzing expenditures from members and school groups since their trip and spending characteristics are likely to be different than those of general admission visitors.

However, visitation during this period represents only about 1/2 of total visitation to the Zoo. The trip and spending characteristics of visitors to the Zoo during the rest of the year are likely to be quite different than those of summer visitors. For the economic impact analysis of the spending of out-of-town visitors to include the impact of those visiting during the September through June period, it will be necessary to do visitor surveys at selected times during this period as well.

**The economic impacts associated with the off-site visitor spending attributed to the Toronto Zoo can then be calculated using TREIM.**

Once estimates of out-of-town visitor spending outside the zoo are developed, this data can be input to the Tourism Region Economic Impact Model (TREIM) which will calculate the economic impacts (direct, indirect and induced). These impacts can be added to those resulting from operations as part of the annual economic impacts of the Toronto Zoo.

