

Inspiration Port Credit Background Report

FEBRUARY 7, 2013

Stoss





Background Report February 7, 2013

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EXECUTIVE SUMMARY

Executive Summary

Inspiration Port Credit will plan for two large, waterfront sites

Inspiration Port Credit (IPC) is about envisioning a bright, new future for the Port Credit waterfront with a focus on two specific sites while embracing the important history and achievements of Port Credit. These two sites; the Port Credit Harbour Marina, owned by Canada Lands Company, (CLC) and the Imperial Oil Limited (IOL) lands to the west present tremendous opportunity for the creation of a model, sustainable creative community on the waterfront. Although the City of Mississauga (City) does not own either of these two sites, it is of great importance to the City to ensure that the future redevelopment of the sites will best enhance the Village. IPC was therefore initiated by the City. It is meant to be a process of deep connection with the community, research into historic, existing and potential future conditions. It has already and will continue to involve close coordination and discussion with both IOL and CLC and will balance their interests and desires with the needs of the community.

CLC is currently developing a master plan for the Port Credit Harbour Marina site. Their plan, One Port Street, is scheduled for completion in 2013. Imperial Oil Limited likewise is thinking about their property. The former Texaco refinery site has sat vacant for more than 25 years, but this fall, Imperial Oil announced they were beginning an environmental site assessment. An environmental site assessment will establish current contamination levels on the site. This process is required before a contaminated site can be redeveloped to a more sensitive land use like commercial, residential, or park land. The environmental site assessment will take approximately one year to complete and indicates that Imperial Oil Limited is thinking seriously about a productive future for their site.

Given the work underway at both sites, now is an appropriate and important time for the City of Mississauga to undertake Inspiration Port Credit and provide a framework to map the future.



IPC will plan for two sites while considering their larger local, city, and regional context

Source: Stoss, 2012

Inspiration Port Credit is about enhancing the area and creating a “model sustainable creative community on the waterfront.”

Primary Objectives

The IPC project’s primary objective is to establish a comprehensive strategic Master Plan and implementation plan to guide the future of IOL’s former refinery site and CLC’s Port Credit Harbour Marina (PCHM). These sites are critical elements in the City of Mississauga’s transformative action to realize a model sustainable creative community on the waterfront. The Master Plan will work towards achieving the Port Credit vision in the draft Port Credit Local Area Plan for these sites, blending the needs of the community with the needs of the owners of the land. The targeted end result is to successfully weave together the various City, public and private Port Credit initiatives to foster sustainable partnerships between the City, landowners, community partners and stakeholders.

Connections are Key

The primary focus is on the two specific sites, but the plan must also consider how these sites relate to the project’s “area of influence,” the larger Port Credit community.

Connections between the sites and the study area are important to consider. How can these sites improve the larger community? What are the infrastructure and transportation links required between these sites and Port Credit? What are the City and community priorities for these sites? City and regional links will be key as well. The plan for the sites should help distinguish Port Credit’s place as a vibrant waterfront destination within the City of Mississauga, the Greater Toronto area, and beyond.

Balancing many factors + building on work and outreach already completed

Inspiration Port Credit (IPC) is visionary, and creative, but it will also be grounded in economic and environmental realities to ensure that the final plan can be implemented. IPC will build upon the extensive planning and outreach work that has occurred in Port Credit and Mississauga over the past decade. Over the past four months, the Inspiration Port Credit team has been reviewing existing planning documents; mapping and analyzing



IPC will build on planning and consultation work to-date and include additional public outreach

economic, environmental, and other data; talking with City and approval agency staff, landowners and other stakeholders; and learning from the Port Credit community. All of this information will be used in the creation of options for the future of the IOL lands, the City and community priorities related to the CLC site, area of influence, along with a peer review of the CLC One Port Street master plan.

Purpose of this document

This document provides a comprehensive summary of the research, analysis, and community input that has been done to date. It begins with an embrace of the 5 Strategic Pillars for Change set out by the City of Mississauga Strategic Plan (2009). With these as a foundation, and framed by the research, analysis, and community input, it lays out key considerations and opportunities that will impact the future planning for the two sites.

These considerations and opportunities are depicted in the following pages and are organized into the following 6 categories for discussion in the report:

- Land Use + Urban Design
- Environment + Parks
- Harbour + Shoreline
- Mobility
- Utilities + Infrastructure
- Economy

Through each of these lenses the future of the sites is evaluated and important questions asked such as; what types of development can spur sustainable economic growth and remain sensitive to the existing character of Port Credit? How can we ensure water quality and an enhanced shoreline? What might the future of transportation in Port Credit be? And how might we combine marina operations with other uses?

Next Steps

These key considerations and opportunities will guide the development of alternatives in the next phase of the project and help advance the vision of Port Credit as a “model sustainable creative community on the waterfront.”

Specifically, the next phase of the project will test three Master Plan options with the stakeholders and public through various engagement opportunities including a community meeting in March.

The Master Plan options will set out various scenarios for land uses, built form, street and multi-modal transportation networks, park and trails systems within the village context. Three options will be generated to fully explore, test exciting, leading edge possible futures for the study area and implications for the area of influence. The Master Plan options will be refined to one option for the purposes of reporting back to the stakeholders and public prior to taking the recommended option to the Planning and Development Committee (PDC), along with the implementation guide and action plan. It is anticipated that the recommended option will be presented to PDC before the summer of 2013 for consideration for approval.



I. INTRODUCTION + CONTEXT

I. Introduction + Context

A. Introduction

1. What will be the outcome of IPC?

Inspiration Port Credit (IPC) will create a Comprehensive Strategic Master Plan for the Imperial Oil Limited (IOL) Lands, the City and community priorities for the CLC site, area of influence, and provide peer review of the master plan currently under development for the Port Credit Harbour Marina site (owned by the Canada Lands Company Limited - CLC), and create an implementation Action Plan. The Master Plan will refine the Port Credit vision from the draft Port Credit Local Area Plan, blending the needs and goals of the community with the needs and goals of the owners and landowners. It is important to note that at this time, any master plan for IOL may be conceptual in nature until further information on contaminants is obtained that help to specify possible uses.

2. Study Objectives

Inspiration Port Credit lays out a number of objectives for the study of these two sites.

- Develop a Comprehensive Strategic Master Plan and Implementation Plan to guide the redevelopment of the IOL and CLC lands as strategic waterfront sites
- Understand the impact of the redevelopment of these sites on the overall area and City assets and operations

- Weave together the various Port Credit initiatives and unite stakeholders towards achieving the vision for Port Credit
- Foster sustainable partnerships between the City, landowners and stakeholders

3. Study Process and Project Milestones

The study involves a four stage process that is being undertaken between September 2012 and June 2013. The stages of the process are:

- Stage 1: Reconnect – develop engagement strategy
- Stage 2: Synthesize – analyze and understand existing conditions
- Stage 3: Test – develop and test three alternative conceptual plans
- Stage 4: Define – refine preferred option and develop implementation strategy

B. Previous studies

1. Integration with other projects

IPC will build from and integrate recent and/or ongoing initiatives in the Port Credit area. These include such initiatives as the new Mississauga Official Plan, the draft Port Credit Local Area Plan, the Hurontario Light Rapid Transit (LRT) project, the Credit River Parks Strategy and the Natural Heritage



Project Timeline

Systems Strategy among other important initiatives. The diagram below provides the comprehensive list of initiatives for integration and consideration in IPC.

2. Port Credit District Policy Review

The City has been working on a new Official Plan (OP), which was adopted by Council in September of 2010 and partially approved by the Ontario Municipal Board in November 2012 except for some site specific appeals. The new OP consists of a principal document and a series of local area plans, including the Port Credit Local Area Plan (LAP). The local area plans contain policies and schedules that address specific circumstances and exceptions particular to each local area.

IPC builds from the extensive community engagement that the City of Mississauga led for the Lakeview and Port Credit District Policies Review and the draft Port Credit Local Area Plan, released in January 2012. The City has undertaken a number of studies aimed at better

defining the future of Port Credit. This work began in 2007 with the District Policies Review Public Engagement Process, which included stakeholder interviews, visioning sessions, place making workshops, youth outreach exercises and an open house.

One of the key events that formed part of the consultation process was the Port Credit Place Making workshop, held on February 2008. During this event, workshop participants developed a conceptual plan for the IOL site that indicated a mixed-use, medium density development incorporating a university or college campus. The plan included a centralized green space that would link Lakeshore Road to the shoreline. A 1/3, 1/3, 1/3 approach was noted for the distribution of park, institutional and mixed-use areas. For the CLC PCHM, Workshop participants saw the PCHM, Port Street and the No Frills site working together as a complete waterfront district. This area would provide a pedestrian focus to the village that



**Initiatives Affecting the
Port Credit Area**

Source: City of Mississauga

would be set away from the heavy vehicular traffic on Lakeshore Road. A mix of uses was suggested including employment, office, commercial and tourism.

The results of the visioning and place making process were summarized in the “Lakeview and Port Credit District Policy Review and Public Engagement Process” (Directions Report), October 28, 2008. This report includes policy recommendations that informed the preparation of the draft Port Credit Local Area Plan.

3. CLC Master Plan (One Port Street)

In the spring 2012 Canada Lands Company initiated a master planning process for the Port Credit Harbour Marina lands called “One Port Street”. CLC intends to implement the Local Area Plan by further studying the site and consulting with stakeholders and the community.

The CLC’s master planning process has included a series of community and stakeholder meetings, the presentation of the elements of the Master Plan and its consultation with the community, City and

Agencies and the preparation of the Master Plan document.

The CLC Master Plan will be peer reviewed by the Inspiration Port Credit consulting team. CLC intends that their Master Plan will inform the resulting site specific policies for the Port Credit Local Area Plan. The diagram below shows the One Port Street Master Plan Framework and the interrelationship among the Port Credit Local Area Plan, Inspiration Port Credit and One Port Street.

C. Need for Current Study

City Council has long recognized the importance of the city’s waterfront through a series of reports and investments over the past 30 years. On November 26, 2008, Council approved Recommendation PDC-0082-2008 to receive the report titled “Waterfront as a Premier Destination: Update and Action Plan” from the Commissioner of Planning and Building. This report documented the significant events across the city’s waterfront highlighting the need for clear and decisive



Source: Canada Lands Company. 2012. www.oneportstreet.com

One Port Street Master Plan Framework

action to protect for the future of the city's waterfront, specifically in regards to the former IOL refinery lands in Port Credit, the Port Credit Harbour Marina site (PCHM) and the OPG site in Lakeview.

Subsequently the preparation of the Port Credit Local Area Plan within the context of the new Official Plan was initiated. The draft Port Credit Local Area plan identifies the need for a comprehensive Master Plan for the former Imperial Oil Limited refinery lands and the Port Credit Harbour Marina Lands in Port Credit to guide the current land use planning and future redevelopment of these lands and area. It is intended that Inspiration Port Credit will establish the appropriate comprehensive Master Plan for the CLC site and provide strategic Master Plan options for the IOL site.

Inspiration Port Credit's mandate is to translate the LAP 'Vision' for Port Credit as an urban waterfront village, as it affects Imperial Oil Limited's and Canada Lands Company's properties. IPC will generate an appropriate Comprehensive Strategic Master Plan and an Implementation Action Plan to guide the future of these and related lands.

Port Credit already contains many of the attributes that make a complete community and the LAP supports the protection and enhancement of these attributes, including:

- a range of housing options with a mixture of housing forms and densities;
- cultural resources such as heritage buildings and landscapes; and,
- opportunities for people to engage in community life.

Inspiration Port Credit is needed to take these attributes and apply them in a master planning exercise that will help manage the redevelopment of the subject sites while maximizing the strategic value of the properties as prime waterfront locations.

D. Study Area Boundaries

The main study area consists of the Imperial Oil Limited's lands and Port Credit Harbour Marina site. The estimated cumulative land area of the IOL and CLC lands is 42 ha (103 ac) with an impressive 1.3 km (approximate) of Lake Ontario shoreline extending over 26% of Port Credit's waterfront. These sites present a tremendous opportunity for the city's waterfront.

E. Port Credit Context

**Study Area
Boundaries**



The Port Credit area has a long history of occupation, with the first settlers being native people, both Iroquoian and Algonkian-speaking peoples that were attracted to the Credit River Valley thousand of years ago. A group of Ojibwa, known as the Mississaugas, left the north shore of Lake Ontario and settled around the mouth of the Credit River in the early 1700s.

The first European settlers arrived in the 1720s from France and established a trading post at the mouth of the Credit River, starting a long nautical history that is evidenced today with the iconic Port Credit Lighthouse. Following the French occupation, the British arrived, negotiated land treaties and started their control of the region. By mid 1800's, the Mississaugas land base had shrunk significantly and they relocated to the New Credit reserve near Brantford, Ontario.

The first grid pattern was established by the government in the early to mid-1800s and is still evident today. Port Credit went through

major commercial expansion and economic growth in the mid-1800's, becoming a thriving harbour community, which ended abruptly with a significant fire referred to as "the great fire of 1855". As a result of the great fire, commerce was diverted from the Village and a period of decline started. However, the stonehooking trade, which involved large vessels raising shale from the bottom of Lake Ontario, kept the port operational late into the 19th Century.

Port Credit's economy was also revived with the addition of the St. Lawrence Starch Company and Port Credit Brickyard, and in 1914 it was formally incorporated as a village. Port Credit underwent infrastructure improvements in the early 20th Century, acquiring Town status in 1961. It was amalgamated into the City of Mississauga in 1974.

The Old Port Credit Village, bordering the east side of the Imperial Oil Lands, was designated as a Heritage Conservation District in 2005. Port Credit is one of the most well-preserved villages in the City of Mississauga.



**Port Credit,
1949**

Source: City of Mississauga, Mississauga Library System, <http://www.mississauga.ca/ecity/popup/largeImageView.jsp?imageId=14000036n&index=579>

Port Credit became known in the 1800's for its stonehooking trade, a practice in which local unique craftsmen commonly referred to as a "stonehookers" searched the waters and shores of Lake Ontario collecting stones for use in local building trades. The Port Credit Harbour reached its peak between 1880 through to 1900 with the introduction of stonehooking. Stonehookers retrieved shale from the bottom of Lake Ontario, which was one of the primary building materials for construction in Toronto at the time. The stonehooking trade lasted until approximately 1910, and was essentially phased out with the advent of inland quarries. At the peak of the trade in 1881, 23 stonehooking vessels operated out of Port Credit Harbour.

Today, Port Credit has an approximate population of 12,000 and is a vibrant mixed-use lakefront community with mainly commercial uses along Lakeshore Road that attract tourists and locals with its shops and restaurants. The residential areas, from single-detached dwellings to residential towers, span both east and west of the Credit River and along Lake Ontario. The community is well connected to the regional transit system, including the GO Transit rail line, and will benefit from future construction of the Hurontario Light Rapid Transit (LRT) and Port Credit GO Mobility Hub.

Port Credit is also very popular for large festivals and events, such as the Paint the

Town in Red - Canada Day Celebration, the Mississauga Waterfront Festival, the Southside Shuffle Blues & Jazz Festival, the Great Ontario Salmon Derby, Port Credit In-Water Boat Show, the Mississauga Marathon and the Mississauga Buskerfest. The waterfront area provides public access for recreational and commercial activities for both motorized and non-motorized boats. It is a great attraction for residents and visitors alike and provides recreational opportunities along the multi-use trails, the Waterfront Trail and other park attractions.

F. The Two Sites

1. Imperial Oil Limited Lands

The Imperial Oil Limited (IOL) land area is approximately 36 hectares (88 acres) and is bordered by Lake Ontario to the south, Mississauga Road South to the east, Lakeshore Road West to the north and a residential neighbourhood, fronting Pine Avenue South/ Maple Avenue South, to the west. In addition, the IOL lands are bordered by the J.C. Saddington Park to the east. The Waterfront Trail crosses the southern area of the site, through the IOL permission to the City through a license.

The IOL site was part of a larger area which was divided into three properties; the

Port Credit, 1978



Source: City of Mississauga, Mississauga Library System, http://www.mississauga.ca/portal/residents/allhistoricimages?paf_gear_id=13400033&imageId=3800114n&index=0&returnUrl=%2Fportal%2Fresidents%2Fallhistoricimages

Port Credit, 2012



Source: CLC Master Plan

IOL and CLC Sites and Urban Context



Source: Bing Maps (aerial underlay)

north property, the south property and the marketing area. The south property is the only undeveloped land within the former Imperial Oil Land boundaries and the subject of Inspiration Port Credit.

Historical Use

The area known as the Imperial Oil lands was the original site of a brick factory, extracting clay on site for the production of bricks between 1870 and 1932. A local business man, L.B. Loyd, purchased the site in 1932, and built a small refinery on the shore of Lake Ontario, using the existing clay pits as crude oil storage. In 1935, the Goodrich Oil Company purchased the small refinery and constructed the largest independent oil refinery in Canada.

In 1957, Texaco Canada Ltd., then known as McColl-Frontenac Inc., acquired the refinery, and in 1961, Texaco entered the petrochemical market turning the site into a petrochemical production centre. The peak production period occurred from 1961 through to the mid-1970's. The refinery processed approximately 50,000 barrels of crude oil each day into gasoline, jet fuel and heating oil: twenty-four products in all were produced on site. The refinery operations shutdown in

1978, and in 1985, petrochemical operations at the site ceased and the dismantling of the production facilities was initiated. Site clean-up and environmental monitoring was conducted from 1985 through to 1989 by Texaco, and in 1989, Imperial Oil Ltd. purchased Texaco and took over clean-up of the site. The only section of the site that is still in use is the gas station at the south west corner of Lakeshore Road and Mississauga Road.

By the end of 1996, the major construction and clean-up activities were completed. Currently, the only infrastructure remaining, visible from aerial photography, are the old access roads, the shale pit quarry, the water treatment ponds and the existing Petro Canada station located at the north east corner of the property.

2. Canada Lands Company Lands (Port Credit Harbour Marina)

Located at the mouth of the Credit River at 1 Port Street, the Port Credit Harbour Marina is the largest deep water marina in the region and encompasses an area of approximately 22.25 hectares (55 acres) of water lot and 7.76

Port Credit Waterfront: 1976



Source: City of Mississauga

Imperial Oil Limited (IOL) Lands, 2012



Source: Dillon, 2012

hectares (19 acres) of tableland . Additionally, the site has a frontage of approximately 295 metres along Port Street and a depth of approximately 400 metres on land and has a shoreline of approximately 700 metres, measured on land at the dockside walls and not including the breakwaters.

The Port Credit Harbour Marina is bordered by Lake Ontario to the south, Helene Street South and the break wall extending into Lake Ontario to the east, Port Street East to the north, and J.J. Plaus Park as well as the break wall extending into Lake Ontario to the west.

Historical Use

The Port Credit Harbour Marina site has been recognized by the community as “intrinsic to Port Credit’s extensive history as a working Port”. The wharf and marine structure were built by the Federal Government in the mid 1950’s to accommodate industrial vessels. In the early 1960’s, Canada Steamship Lines began leasing the harbour lands as a container terminal.

A decade later, the federal marine operations ended as large-vessel traffic ceased in the Port Credit harbour; consequently, the container terminal was converted for recreational boating purposes in 1974.

In early 2011, the Canada Lands Company acquired Port Credit Harbour Marina from the Department of Fisheries and Oceans (DFO).

Currently, the Port Credit Harbour Marina is under lease to Centre City Capital Ltd to 2023. The Port Credit Harbour Marina includes a wharf shed, an operating marina with slippage accommodations for approximately 800 boats up to 65 feet in length, and a 3-storey office building.

It also comprises of ancillary uses, including outdoor and indoor boat storage; a gas dock; boat repair and painting facilities; surface parking; a retail store selling nautical items for ships and boats; and, a bar/restaurant with patio. Some of the marina uses are contained within the wharf shed. The office building occupants include Centre City Capital Ltd, Fidalia Networks, and Mississauga Life. The marine service facility is operated by Bristol Marine.

Port Credit’s signature structure since 1974, the Ridgeway freighter, makes up the southern most part of the Port Credit Harbour Marina. It was loaded with stone, with cabins and stacks still in place, and sunk perpendicular to the eastern break walls southern tip. The Ridgeway freighter now acts as a breakwater structure, which along with the eastern and western break walls, protects the Port Credit Harbour Marina and the approximately 800 recreational boats from waves, minimizing the wake and potential erosion hazard.

Port Credit Harbour Marina



Source: Stoss, 2012

Port Credit Harbour Marina



Source: Stoss, 2012

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II. LAND USE + URBAN DESIGN

II. Land Use + Urban Design

A. Introduction

The Imperial Oil Limited and the Canada Lands Company have sites in a prime waterfront location within the Port Credit District, which is a well established district with a “village -feel”. According to the City’s Strategic Action Plan, “Mississauga’s waterfront is a hidden jewel, and one of our city’s greatest assets. This strategic location has limitless potential for creative development and re-development”. This area has experienced some revitalization in the recent decades, with the re-development of the Saint Lawrence Starch, investments in public facilities (e.g. public library, arena, parks), improvements in the parks, open space system and improvements to the public realm along Lakeshore Road. Proposed projects, such as the on-going Hurontario-Main Light Rapid Transit (LRT) study, which proposes LRT along Port Street, the improvements of the Port Credit GO Station as a “Mobility Hub” and the proposed improvements to the West Harbour Parks, among other projects, will bring a new wave of revitalization and investments to the area.

There are many opportunities for the subject sites to take advantage of the area attributes and proposed major infrastructure investments and develop sustainable and complete communities. Inspiration Port

Credit also brings opportunities to the whole area, with the creation of vibrant neighbourhoods that complete the urban fabric while complementing the “village” character. However, development will also face many challenges.

This section discusses the policy framework for Inspiration Port Credit and the existing conditions in the area of influence. As part of the existing conditions the following topics are being addressed: land ownership patterns; existing land use and built form; streetscape; cultural and natural heritage resources; community services; demographics; and, sustainability. The gaps, opportunities and issues to consider are discussed at the end of this section.

B. Land Use Planning and Urban Design Policy Framework

1. Overview

This section addresses the policy framework for land use planning, urban design, sustainable development, cultural heritage and other City-led initiatives as they relate to Inspiration Port Credit. The Ontario Planning Act requires that Official Plans

Port Credit is a diverse, walkable waterfront community



Source: Photos this page Stoss, 2012

and planning exercises be consistent with Provincial policies. The Provincial policy context is presented through a discussion of the Provincial Policy Statement, the Growth Plan for the Greater Golden Horseshoe and the Conservation Authorities Act directions on land uses. The regional policy context is addressed with a discussion of the Regional Official Plan. Finally, the local policy context includes a discussion of the City of Mississauga Strategic Plan, Official Plan, draft Port Credit Local Area Plan, Zoning By-law, Older Adult Plan, Youth Plan, Cultural Master Plan, Old Port Credit Village Heritage Conservation District Plan, Mississauga Living Green Master Plan, Going Green Mississauga/ Green Development Standards, Future Directions reports, Natural Heritage and Urban Forest Strategy, and Waterfront Parks Strategy.

2. Provincial Policy Statement

The 2005 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The PPS has a vision for strong, livable and sustainable communities in Ontario; its policies are geared toward wisely managing change and promoting efficient land use development patterns. The PPS requires that land use patterns be based on a range of uses and opportunities

for intensification and redevelopment; accommodate an appropriate range of mixed uses, housing forms and densities; promote the vitality of the established communities; conserve significant cultural and built heritage resources; and, make efficient use of infrastructure and public service facilities, among other directions. The Official Plan is an important vehicle for implementing the PPS.

3. Growth Plan for the Greater Golden Horseshoe

The Places to Grow Growth Plan for the Greater Golden Horseshoe 2006 (Places to Grow) provides a framework for implementing the Province's vision for building stronger, prosperous communities by managing growth to 2031. The City of Mississauga and thus Inspiration Port Credit fits within the legislative context of Places to Grow, which envisions Mississauga as an area with compact settlement and development patterns that are capable of providing diverse opportunities to work, live and participate in community life. Places to Grow directs the municipalities to address intensification, infill and brownfield development as a starting point for the long term planning of growth.

Key directions in Places to Grow that apply to Inspiration Port Credit are as follows:

Port Credit Harbour



Source: Draft Port Credit Built Form Guide

- Develop vibrant and complete communities with a mix of land uses, a range and mix of employment and housing types, high quality open space and easy access to local stores and services
- Develop compact, transit supportive, pedestrian-friendly urban environments;
- Include strategies and policies to phase-in and achieve intensification
- Maintain an adequate supply of lands for a variety of appropriate employment uses (including industrial, commercial and institutional uses)
- Optimize the use of existing and new infrastructure to support efficient growth and ensure that the needed infrastructure is in place to support intensification; and
- Protect and conserve natural and cultural heritage resources

Places to Grow directs a significant portion of new growth to intensification areas and directs municipalities to designate intensification corridors to accommodate local services, including recreational, cultural and entertainment uses. Intensification areas, including the Port Credit Community Node, and brownfield sites such as the Imperial Oil Lands and underutilized sites such as the Canada Lands Company, will play an important role in supporting the achievement of the intensification policies and the vision for developing compact, vibrant and complete communities. Places to Grow provides population and employment forecasts for all upper and single tier municipalities that will be used for planning and managing growth in the Golden Horseshoe.

4. Conservation Authorities Act

The Development, Interference with Wetlands & Alterations to Shorelines and Watercourses Regulation, made under the Conservation Authorities Act, affects what and where a Conservation Authority (CA) can regulate.

The CA's have a Memoranda of Understanding with their partner municipalities to ensure that the principles of the PPS are followed and that no adverse effects to significant natural features will result from development applications approved under the Planning Act regulation. The Credit Valley Conservation has jurisdiction within the Inspiration Port Credit study area. The infrastructure section offers an overview of CVC's stormwater management criteria and planning and design guide that are to be followed during the development of the sites.

5. Region of Peel Official Plan

The Region of Peel Official Plan (ROP) provides long-term directions for managing growth and development in the Region, which comprises the Cities of Mississauga and Brampton and the Town of Caledon. The four primary goals of the ROP (March 2012 – Working Draft Office Consolidation) are to create a healthy and sustainable regional community; enhance the environment; recognize the importance of a vibrant economy; and, support balanced growth and development. Furthermore, the ROP's goal for the regional structure is to provide a diversity of healthy and complete communities, offering a wide range and mix of housing, employment, and recreational and cultural activities. These communities will be served and connected by a multi-modal transportation system and provide an efficient use of land, services, finances and infrastructure, while respecting the natural environment, resources and the characteristics of the existing communities (Policy 5.1.2).

Regarding brownfield redevelopment, the ROP requires that contaminated sites will be cleaned up as necessary prior to any activity on the site associated with the proposed use (Policy 5.1.3.3).

Regional Structure, Growth Management and Intensification

The Port Credit area is identified within the Urban System in the ROP. The Plan intends to achieve sustainable development within the Urban System; to establish healthy complete urban communities that are well-designed, transit-oriented, accommodate people of all stages of life, have an appropriate mix of housing and a good range of jobs. The Plan also intends to achieve intensified and compact form; to provide a mix of land uses in appropriate areas that efficiently uses the land, services, infrastructure and public finances and that offers high quality open space. Intensification has to be accomplished while taking into account the characteristics of existing communities and services. In addition, the ROP aims to achieve an urban structure, form and densities that are pedestrian-friendly and transit-supportive (Policies 5.3.1.2 to 5.3.1.5 and 5.5.1.6).

It is policy of the ROP to optimize the use of the existing land supply of the Region by directing significant growth through intensification within the built-up areas (Policy 5.5.1.1). The ROP directs area municipalities to identify intensification areas such as urban growth centres, intensification corridors, urban nodes, major transit station areas and other intensification areas to support a mix of land uses where appropriate and to ensure development of a viable transit system (Policy 5.5.3.2.7). It also encourages area municipalities to establish policies that promote the redevelopment and reuse of brownfield sites.

Environment

The Credit River is designated as a River Valley Connection outside the Greenbelt Area (Schedule D4). River valley connections, which extend from the Greenbelt to Lake Ontario, are considered as external linkages of the Greenbelt's Natural Systems. The ROP intends to promote planning and design that ensures the connections are maintained and/

or enhanced. In addition, ROP encourages stewardship, remediation and appropriate park and trail initiatives that help to enhance the ecological features functions (Policy 2.2.10.4.29).

Housing

The ROP also aims to provide for an appropriate range and mix of housing types, densities, sizes and tenure to meet the projected requirements and housing needs of the Region; to foster the availability of housing for all income groups and to achieve minimum new housing unit targets for the Region by tenure, including affordable housing (Policy 5.8.1).

Resources

The ROP aims to support local area municipalities in their provision of passive recreational opportunities and the promotion of tourism opportunities (Policy 3.5.1). It also supports the initiatives of the Waterfront Regeneration Trust, including the Lake Ontario Waterfront Trail improvements and expansions.

Energy

Sustainability and energy conservation, efficiency and diversity are included in the policy directions of the ROP. The plan aims to promote energy conservation and sustainable development; promote energy efficient urban and building designs, water efficiency and facilitate alternative modes of transportation; and promote the use of renewable energy systems, smart power grid and provide a diversity of reliable energy sources.

6. City of Mississauga Strategic Plan (2009)

The 2009 Mississauga's Strategic Plan, Our Future Mississauga, set up the basis for Inspiration Port Credit. The Strategic Plan established the Prosper Pillar, as one of the five Strategic Pillars for Change and

City of Mississauga Strategic Plan Pillars



MOVE

Developing a transit oriented city.

IPC offers opportunities to direct growth to promote transit, including integrating with Light Rail Transit (LRT) initiative, as well as cycling and pedestrianism



BELONG

Ensuring youth, older adults and new immigrants thrive.

IPC offers opportunities to support “aging in place” as this goal translates to the built form, pedestrian network and mix of uses



CONNECT

Completing our neighbourhoods.

IPC offers opportunities to nurture villages, build vibrant communities, create great spaces to meet “complete community” needs within the multi-faceted nature of Port Credit



PROSPER

Cultivating creative and innovative business.

IPC offers opportunities to attract innovative business, create partnerships for innovation, to assist in the shaping of the resultant employment policies as well as advance the “Cultural Node” project



GREEN

Living green.

IPC offers opportunities to conserve, enhance and connect natural heritage terrestrial and aquatic environments

Strategic Goal

Develop Environmental Responsibility – to contribute to environmental responsibility by reducing private automobile use and developing compact mixed-use development.

Build a Reliable and Convenient System – to make transit a faster and more affordable alternative to the automobile, one that is frequent, clean, safe, reliable and convenient, with a transit stop within walking distance of every home and an intricate web of higher order transit.

Ensure Affordability and Accessibility – to provide a range of affordable and accessible housing, transit and service options.

Attract Post-Secondary Institutions – to be an internationally recognized centre of higher learning, with a range of post-secondary educational opportunities.

Nurture Diverse Cultures – to provide more cultural exchange, understanding and opportunity for small-scale entrepreneurialism.

Develop Walkable, Connected Neighbourhoods – to develop compact, mixed-use neighbourhoods that will give residents the ability to engage safely in all aspects of their everyday lives, within walking distance and easy access. Evaluate all development and infrastructure projects against a test of “pedestrian-first.”

Build Vibrant Communities – to link urban areas and neighbourhoods that offer commercial, social, artistic, cultural, civic and recreational experiences accessible to all.

Create Great Public Spaces – to provide opportunities for everyone to enjoy great parks, plazas and unique natural environments.

Nurture “villages” – to promote “village” main streets as destinations, not simply places to pass through.

Attract Innovative Business – to be a dynamic, urban environment that is the preferred location for innovative, creative and knowledge-based businesses and emerging industries.

Create Partnerships for Innovation – to leverage opportunities with colleges, universities, centres of excellence, research institutions and cultural institutions to foster innovation.

Conserve, Enhance and Connect Natural Environments – to be responsible stewards of the land by conserving, enhancing and connecting natural environments.

Promote a Green Culture – to lead a change in behaviours to support a more responsible and sustainable approach to the environment, that will minimize our impact on the environment and contribute to reversing climate change.

Strategic Action

Visionary Action: We will make Mississauga less car-dependent by doubling current transit ridership, and matching the increase in active modes of transportation.

- Provide “complete streets” that balance land uses and forms.
- Improve the transportation network for pedestrians, cyclists and automobiles.
- Encourage walking by establishing maximum block sizes.
- Accommodate needs of cyclists

Visionary Action: We will attract five new post-secondary educational institutions.

- Create “cool places” to attract youth and young adults.
- Encourage multicultural festivals and events

Visionary Action: We will collaborate with our residents to drive bold moves to complete our neighbourhoods.

- Design streets around the idea of “pedestrian first.”
- Capitalize on the Credit River to foster all-season activities.
- Give communities a “heart” by building identifiable main streets.
- Build an international landmark on the waterfront.
- Create more bike-friendly facilities.
- Recognize and revitalize our historical villages
- Develop vibrant cultural districts
- Beautify our villages

Visionary Action: We will create a model sustainable creative community on the waterfront.

- Cultivate and nurture the business environment.
- Showcase innovative development and partnerships.

Visionary Action: We will transform Mississauga into a “net-zero” carbon city to become a leader in green initiatives by reducing greenhouse gas emissions in our city.

- Plant one million trees in Mississauga.
- Pro-actively acquire and/or enhance land along the waterfront and in natural areas for recreational and ecological value.

identified the following visionary action applicable to Port Credit: “We will create a model sustainable creative community on the waterfront”. Further, IPC takes direction from all five Strategic Pillars goals and strategic actions.

7. City of Mississauga Official Plan

The City of Mississauga has a new Official Plan (OP) which was partially approved by the Ontario Municipal Board in November 2012. The Mississauga Official Plan consists of a principal document and a series of local area plans. There are some instances where the policies and schedules of the principal document do not address all circumstances particular to Port Credit. In these cases, the draft Port Credit Local Area Plan elaborates on or provides exceptions to the policies or schedules of the principal document. The vision articulated in Mississauga Official Plan is contingent on an understanding of the city as a complex, urban place where sometimes conflicting considerations must be effectively balanced so that the city can move forward with planning approaches that align with larger city building objectives.

The new Mississauga Official Plan is based on an urban system comprised of the following components (see map at right):

- **Green System** - consists of an interconnected open space network that includes the Credit River and the Lake Ontario Shoreline. These are key features that contribute to the environmental, social and economic health of the community.
- **City Structure** - recognizes that various areas of the city perform different functions and will play a unique role in accommodating development. Port Credit includes a Community Node and Neighbourhoods. The Community Node is intended to represent the focus for the surrounding neighbourhoods and is an intensification area; whereas

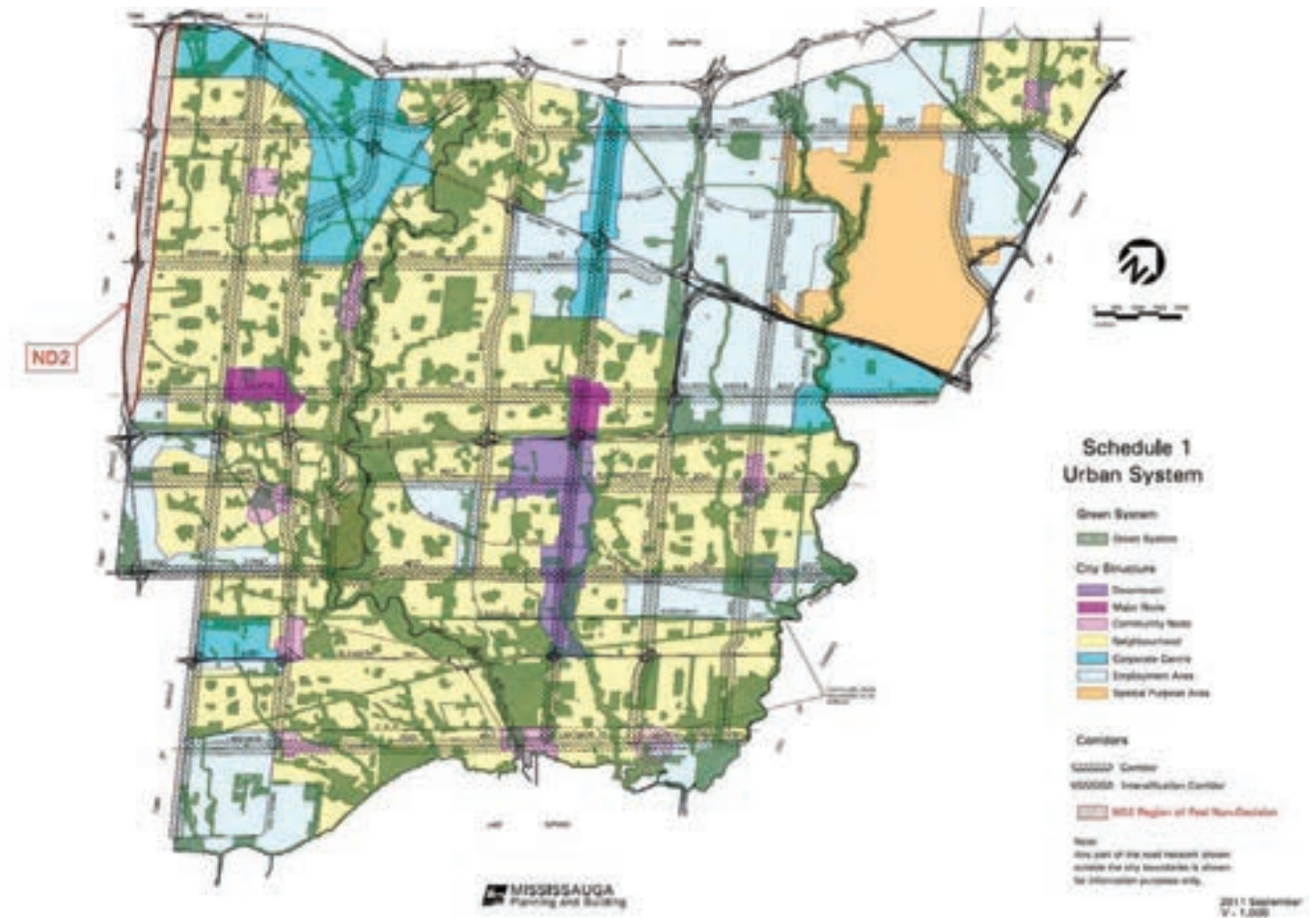
Neighbourhoods are intended to be stable although some change is anticipated.

- **Corridors** – recognize the role played by the City’s arterial roads and include both Hurontario Street and Lakeshore Road. These corridors play an important role moving vehicular traffic through the city as well as connecting Port Credit to the surrounding communities. Corridors are also important elements of the public realm, as they are locations where people experience the city on a day-to-day basis. Development along Corridors is intended to be compact, mixed use and transit-friendly and appropriate to the context of the surrounding neighbourhoods.

In the Mississauga OP, the CLC lands are designated Mixed Use with the breakwaters designated Greenbelt. The majority of the IOL lands are designated To Be Determined, with the southern portion of the lands designated Public Open Space and the shoreline designated Greenbelt. In addition, the north east corner of the site, which is occupied by a gas station, is designated Motor Vehicle Commercial. The area surrounding the shoreline for the two sites has a Natural Hazards overlay.

Although the Official Plan does not propose land uses within the IOL lands as it is unclear as to the level of remediation required, potential future uses should be compatible with the surrounding lands and should not take away from the existing focal point at the Port Credit Harbour. According to policy 19.4.3, when medium and high density residential uses are proposed in proximity to lower density developments, measures such as increased setback; sensitive building location; transportation and design; and landscaping, may be required to ensure compatibility with the lower density designations.

The Official Plan has a specific policy that speaks of compatible land within a development application. Section 19.4.3 indicates that development applications will address, among other matters, “the compatibility of the proposed development

2011 Mississauga Official Plan Schedule 1 Urban System

Source: Mississauga Official Plan Schedule 1 – Urban System (2011)

to existing or planned land uses and forms, including the transition in height, density, and built form”. As IPC is setting the stage for future development applications, the issue of compatibility will be considered and addressed during the development and selection of options.

The CLC site has been designated as Mixed Use within the Community Node Character Area and is associated with the Harbour Mixed Use precincts. The Official Plan states that development within the Community Node will provide a mix of population and employment densities with a targeted density of 100-200 residents and jobs/ gross hectare. The general height requirements for Community Nodes throughout the City is between 3-6 storeys on the northern most lands and 3 on the remainder. However, Character Area specific policies (such as the Port Credit Local Area Plan) may establish alternative heights. The population to employment ratio target is set to between 2:1 to 1:2 residents per jobs.

Community Nodes are intended to be developed as mixed use centres for surrounding neighbourhoods with a concentration of community facilities, retail, cultural, heritage and entertainment uses, schools, parks, open space as well as a diverse housing stock that meets housing needs of population of different incomes and

ages. These nodes will be served by frequent transit service with city-wide connections and will be developed to support and encourage active transportation. Development in the Community Nodes will complement the existing character of adjacent stable neighbourhoods and historical areas and will achieve a high quality urban design environment.

The IOL lands are located within a Neighbourhood Character Area. The Official Plan states that Mississauga’s neighbourhoods are not appropriate areas for significant intensification. This does not mean that they will remain static or that new development must imitate previous development patterns, but rather that when development does occur it should be sensitive to the neighbourhoods existing and planned character. Height limits are a minimum of 2 storeys along corridors and a maximum of 4 storeys, although character area policies may establish alternative heights. Given the size of the IOL lands there are greater opportunities to accommodate intensification than typically found elsewhere in the City; however, when considering development options it is important to recognize the City’s urban hierarchy and that the site is located within a Neighbourhood Character Area.

The Official Plan Open Space policies recognize the Lake Ontario Waterfront

Special Focus:

Land Use Compatibility - Ontario Ministry of Environment D-6 Guidelines

Further to the Official Plan policies, the Ontario Ministry of Environment (MOE) D-6 Series Guidelines for land use compatibility between industrial facilities and sensitive land uses (e.g. residential and recreational uses) are to be considered when developing the land use concepts.

The D-6 Guideline is intended to assist in determining compatible mixed land uses and compatible intensification of land uses. It contains minimum separation distances between the industrial use and the sensitive land use from 20 meters to 300 meters, depending on the classification of the industrial use.

This is particularly important in the case of the CLC lands, should the boat repair operations or another industrial type use be proposed as a permanent use.

as a vibrant area of lake-dependent and lake-enhanced activities and reinforce the importance of natural habitat areas. Under 3.8.2.5 The Public Open Space network will be designed to allow access for all, including those with disabilities, to a variety of complementary activities through interconnections of pathways, a multi-use recreational trail, and the Public Open Space network; and, to provide a safe and accessible environment through development of clear sight-lines, openness, visible entrances, and facilities for local events.

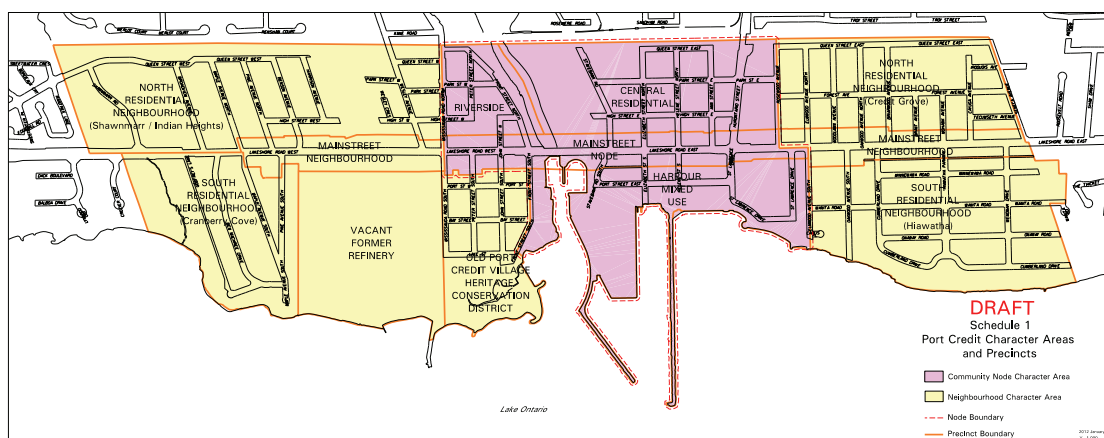
8. Draft Port Credit Local Area Plan

Over the last five years, the City has undergone a number of studies aimed at better defining the future of Port Credit. This work began with the District Policies Review Public Engagement Process. Through this process the City worked with the community of Port Credit to establish a future vision and direction for this waterfront planning district. The Lakeview and Port Credit District Policies Review and Public Engagement Process: Directions Report (2008) documented the culmination of this work. The Port Credit Local Area Plan (LAP), draft January 2012, is one of a series of local area plans.

This draft LAP provides policies for lands included as part of the Port Credit District and includes lands identified as Community Node and Neighbourhood. The CLC site is located within the Community Node, while the Imperial Oil lands are within the Neighbourhood Node.

The draft LAP establishes a vision for Port Credit as an urban waterfront village with a mixture of land uses, a variety of densities, compact pedestrian and cycling friendly, transit supportive urban forms, a significant public realm, public access to the waterfront and development that incorporates high quality built form. The vision also intends to preserve and enhance elements such as the main street village character along portions of Lakeshore Road, heritage buildings, community facilities, stable residential neighbourhoods, open space, parks and marina functions along the waterfront. Inspiration Port Credit will translate the vision identified in the draft Port Credit Local Area Plan, and offers opportunities to:

- Enhance Port Credit's established urban village character
- Support a distinct waterfront with public access, protected views, and active uses
- Create well connected parks and open space and enhanced public realm



Port Credit Character Areas and Precincts

Source: Port Credit Local Area Plan (Draft), 2012

- Enhance the natural environment through sustainable development design
- Realize potential of the Community Node and Lakeshore Road with appropriate intensification that balances growth with character
- Promote a complete community that has access to a range of opportunities for transportation, housing, employment, culture, etc.

The draft LAP directs intensification to the Community Node, along Lakeshore Road (east and west), brownfield sites (IOL site) and away from stable neighbourhoods. Intensification will address matters such as:

- contribution to a complete community
- providing employment opportunities
- sensitivity to existing and planned context and contribution to the village mainstreet character
- respecting heritage
- protecting views and access to the waterfront.

General Policies

IOL lands are located in the Western Port Credit Neighbourhood precinct while CLC lands are located in the Community Node Character Area. Further, the Imperial Oil Limited lands are located within the Vacant Former Refinery and Mainstreet Precincts

(see map below). This site has the opportunity to create a vibrant area of interest that can enhance the existing community and offer increased public access to the waterfront. The Mainstreet Precinct (along Lakeshore Road) is intended to contain a mixture of uses and street-related commercial uses with closely spaced storefronts to encourage and foster an active pedestrian street. LAP general policies specific for IOL lands (under Vacant Former Refinery) require that building heights of a new development will provide for appropriate transition to the adjacent neighbourhoods; will provide for a public road to maximize public access to and along the Lake Ontario Waterfront; and, will provide for a landscaped buffer between the Precinct and the adjacent neighbourhood to the west (Policies 10.3.3.1 to 10.3.3.3)."

The CLC lands (Port Credit Harbour Marina) are located within the Community Node and included within the Harbour Mixed Use character area. Key LAP policies as they pertain to the Community Node and Harbour Mixed Use and affect the CLC lands include (Policies 10.2.1 and 10.2.4):

- Scale of development will reflect the node's role in the urban hierarchy
- Buildings over six stories will maintain distance separations that provide protection of view corridors, among other elements

Land Use Map



Source: Port Credit Local Area Plan (Draft), 2012

- New development will provide for landscaped areas
- Streetscape will address setbacks and side yards, minimize vehicular access points and create an attractive public realm.
- Scale of development will be supportive of an urban waterfront village theme
- Development will provide for public access and additional public lands along the waterfront
- Development will maintain existing view corridors to Lake Ontario.

Draft Local Area Plan Designations

The Draft LAP designates the IOL lands primarily as Special Waterfront with a Public Open Space and Greenbelt designation to the south. In addition, a Motor Vehicle Commercial designation on the portion located at the north-east corner (currently an existing gas station). The CLC lands are designated as Mixed Use with breakwaters designated Greenbelt. Natural Hazards are identified along the Lake Ontario Shoreline for both sites. The land use map on the following page shows the LAP Land Use designations.

Minimum and Maximum Height

The draft LAP identifies the following minimum and maximum heights as they apply to the two sites:

- IOL: 1 to 3 storeys except for Lakeshore Road which has a 2 to 4 storey height limit. Maximum heights are subject to the completion of a comprehensive master plan that will determine appropriate development including building heights
- CLC: 2 to 3 storeys, (3 storeys in the node, 4 stories out of the node) except the northern portion which has a maximum of 6 storeys fronting Port Street, stepping down to 3 storeys towards the waterfront. Maximum heights are subject to the completion of a comprehensive master plan that will determine appropriate development including building heights

Special Site Policies

The IOL lands are identified as Special Site 3 and the CLC site is identified as the Special Site 8. Both special site policies require that a comprehensive master plan be prepared to the City's satisfaction that will address

Zoning Map



Source: City of Mississauga

among other matters, land use, built form and transportation. In addition, the Master Plan will:

- have regard for other City plans, policies and reports (e.g. Directions Report)
- include provision of significant public parklands and access along the waterfront including the waterfront trail
- preserve and enhance views to Lake Ontario
- examine unique opportunities to take advantage of site's size and location on the waterfront
- continue the mainstreet mixed use function along Lakeshore Road West (IOL lands)
- consider the built form around the future terminus of the LRT (CLC lands)
- provide opportunities to accommodate employment uses

Built Form Guide

The Built Form Guide, Draft January 2012, (the Guide) is an appendix to the Draft Port Credit Local Area Plan. Although the Built Form Guide does not form part of the draft Port Credit Local Area Plan, development in the IOL and CLC lands should be guided by this document. The Guide is to be used during the review of development applications, and requires that all land use blocks and built form shall, among other requirements:

- protect views to the Credit River and Lake Ontario;
- contain place-making opportunities;
- provide continuous waterfront access;
- preserve cultural heritage resources (historic marine use);
- follow planned building heights;
- contain appropriate building separation distances and street setbacks;
- provide ground floor commercial fronting onto public streets; and
- provide an appropriate pedestrian realm and streetscape.

9. Zoning By-law

The majority of the IOL lands are zoned D (Development), which recognizes that the lands are not yet developed and the zoning does not permit any new buildings or structures. The northeastern corner of the IOL lands is zoned C5 (Motor Vehicle Commercial) which permits the existing service station.

The majority of the CLC site is zoned C4-18 (Mainstreet Commercial – exception 18), which permits a mixture of uses including: residential, retail, service, office, overnight accommodation, entertainment/recreation, college/university, parking, existing boat repair, sales, service and storage.

The IOL shoreline and the CLC break walls are zoned G1 (Greenbelt-Natural Hazard) which allows for a limited range of uses including flood control, stormwater management, erosion management, natural protection area, natural heritage features and areas conservation. Also permitted as accessory to certain uses are trails, passive recreation and parking areas. In addition lands along both the IOL and CLC shoreline are subject to the Greenbelt overlay, which includes the provision that the construction of any building or structure or addition to an existing building or structure shall require the approval of the City and Credit Valley Conservation. The approval shall require environmental studies that address issues such as geotechnical, flood, erosion, and slope stability.

10. Older Adult Plan

In 2008 the City of Mississauga released the Older Adult Plan. This plan provides guidance for making strategic decisions related to the needs and priorities of the older adult population aged 55 years and over living in

Mississauga. The plan was generated based on the knowledge that there is a significant demographic shift occurring with the aging population. It is projected that in a 20 years timeframe, from 2008 to 2028, the proportion of the population 55 years of age and over will increase approximately 20% to 38%.

The Port Credit District was not identified as a priority area in the Plan, as it currently has a low number of older adults (2,745 older adults as of 2006 Census). However, the outcome of IPC and the ultimate development might influence the type of demographic that chooses to live on the sites (e.g. if the proposed development includes senior housing). The recommendations of the Older Adult Plan for Port Credit might need to be revised to reflect anticipated changes in demographic patterns for the District.

11. Youth Plan

The City of Mississauga is committed to being a “youth-friendly” city: “making the City’s policies, programs, services and facilities more inclusive and responsive to the needs and interests of youth.” The Youth Plan, adopted in 2009, was developed to address the needs and engagement of those between the ages of 12 and 24. The youth plan vision states “Mississauga is a youth and young adult friendly city that is respectful, inclusive, and forward-thinking; a city where youth are meaningfully engaged and thrive as equal members of the community.” The themes that arise in the plan that are to be a main focus for the city are transportation needs for youth (the need to provide transit options to the car-dependent communities), accessibility and awareness of programs available (in relation to location and cost), increasing the diversity of youth participation in community planning and decision-making, getting youth involved in social responsibility initiatives, and enhancing partnerships between youth and adults in the community. IPC will consider these themes when developing the

concept options, particularly the opportunities of engaging youth in the decision making process.

12. Culture Master Plan

Mississauga is committed to becoming a culturally significant Canadian city. The Culture Division at the City is tasked with implementing the Mississauga Culture Master Plan published in 2009. The Culture Master Plan is focused on developing and maintaining the cultural vitality of Mississauga. It recommends key actions related to financial stability, increasing organizational capacity, strengthening cultural infrastructure in neighbourhoods, strengthening the flow and access of information regarding cultural resources and activities, and leveraging public works and private sector development. The Plan envisions a future where Mississauga’s neighbourhoods and communities live with culture.

According to the Plan’s findings, the main concentration of designated heritage properties in Mississauga, with 170 properties, are located in two heritage conservation districts: Meadowvale Village and Old Port Credit Village. In addition, there are several cultural landscapes in those districts.

The Culture Master Plan identified Port Credit as one of the three cultural nodes in the City. These nodes (which correspond to nodes in the Growth Management Strategy) display the most distinctive concentration of cultural resources in Mississauga. One of the recommendations of this Plan was to create a cultural node pilot project to test the use of planning tools (e.g. Community Improvement Plan, Form-Based Zoning), incentives, supports and partnerships to support cultural resources and activities in the specific communities, including Port Credit. It also recommended creating an “artful public realm” across the City. IPC will consider the importance of Port Credit as a cultural node when developing the concept options.

13. Old Port Credit Village Heritage Conservation District Plan

Old Port Credit Village, located south of Lakeshore Road East on the west side of the Credit River and just east of the Imperial Oil Lands, is a heritage conservation district in the City of Mississauga. The planning area also includes Marina Park and J.C. Saddington Park. The Old Port Credit Village Heritage Conservation District Plan was developed to guide physical change over time so as to contribute to, and not distract from, the district's historical character. The plan identified forty-two buildings in the district as being of historic interest, ranging from institutional landmarks to vernacular dwellings. The plan is focused on protecting the neighbourhood's low-density residential land use and architectural and urban form pattern that have survived from historical times. The plan contains conservation and preservation policies for the district, an implementation strategy, guiding principles for the conservation of buildings of historic interest and design guidelines for additions, new construction and landscape conservation.

One of the objectives of the plan is the protection of the long views to Lake Ontario and to the Credit River and to maintain and enhance the public access to the Lake and the River. It also intends to maintain the existing street grid and enhance boulevards with wide grass, street planting and other streetscape

improvements. IPC will be mindful of the heritage value of the Old Port Credit Village District as well as the preservation policies in the plan. Any future development in the Imperial Oil Limited site, particularly on the west side of Mississauga Road South, will be required to respect the character of the District. When reviewing development applications on the Imperial Oil Limited site the City will take into consideration the Plan's principle stating that any new built form abutting Mississauga Road South will not have more than two storeys.

14. Mississauga Living Green Master Plan

The Living Green Master Plan is the first environmental Master Plan for the City of Mississauga. It was approved by Council in January 2012 and provides the support for the City to be a leader on the environment. The plan sets out actions to achieve environmental objectives of the City based on the Strategic Plan. The actions are grouped into three categories: Actions to Set an Example (the City leadership to be green), Actions to Encourage Others (get others going green), and Actions to Compel Others (regulate and oversee). The plan includes six priorities for the City: Build on Environmental Success, Create an Environment Office, Raise Public Awareness, Collect Baseline Data, Understand Mississauga's Energy Future, and Build Partnerships and Collaborations.

Heritage Conservation District



Source: <http://www.historicplaces.ca/en/rep-reg/image-image.aspx?id=15169>



Source: Google Maps, Streetview

15. Going Green Mississauga/ Green Development Strategy and Standards

The City of Mississauga strongly encourages development applicants to incorporate green sustainable elements into proposed buildings, site works, construction methods and long term maintenance programs. As such, in 2010 City Council adopted the Green Development Strategy and developed the 2012 Stage One Green Development Standards (GDS). The Strategy focuses on achieving sustainability and environmental responsibility in new development in Mississauga. The City asks development applicants to incorporate, where appropriate, the Stage One Standard Requirements. It also request applicants to pursue LEED-NC credits required to achieve Silver certification.

The Green Development Standard provides guidance related to the use of Low Impact Development measures for stormwater retention; landscaping and the use of soft landscape material; pedestrian and cycling comfort; exterior building design; and LEED-NC Requirements. IPC will apply the high standards of sustainability and green living principles already established in the City's planning framework. The Green Development Standards will inform future development options for IPC. Additional information on the requirements for stormwater management is included in the Infrastructure Section.

16. Future Directions (2009)

The City's Future Directions 2009, Library, Recreation, Parks and Natural Areas Master Plan provides the City with a plan for the right services and programs, in the right places, now and in the future. The plan is actually broken down into three separate but related plans: a Library Master Plan, a Recreation Master Plan, and a Parks and Natural Areas Master Plan. The plans are based on a 5 year immediate needs approach as well as a 25 year outlook approach for meeting the needs of the future. Each master plan addresses key issues facing the City including population growth, intensification, demographics, service delivery, residents needs and preferences, and environmental sustainability. The changes taking place in the city are addressed in the plans with an eye for continuing to provide the services, programs and social infrastructure of a great city while balancing the cost and delivery of these assets.

Each plan has recommendations that are key to the Port Credit district:

- Library Master Plan: recommendation #11 states the there is an oversupply in terms of library square footage in the southern branches of Lakeview, Port Credit and Lorne Park. This means that improvements should be on functionality of existing sites only.
- Recreation Master Plan: older adult programs are not identified as a priority in Port Credit due to the lower number of older adults in the area.

Special Focus:

What is LEED?

LEED (Leadership in Energy and Environmental Design) is an internationally accepted third-party certification program and benchmark for the design, construction and operation of high performance green buildings. LEED provides building owners and operators with the tools they need to have an immediate impact on their buildings' performance. It promotes a holistic approach to sustainability by considering performance in sustainable site development, water efficiency, energy efficiency, materials selection, and indoor environmental quality regarding human and environmental health.

Source: City of Mississauga. 2012. Green Development Strategy

- Parks and Natural Areas Master Plan: continuation of winter clearing of the Waterfront Trail through Port Credit in order to support physical activity in the winter.

17. Waterfront Parks Strategy

The Mississauga Waterfront Parks Strategy is a long-term plan to manage the future of the City's Waterfront Parks. As the key properties being assessed through Inspiration Port Credit are located along the waterfront and adjacent to waterfront parks, the goals and principles in the Waterfront Park Strategies will be considered in the development of the master plan concepts. Key goals and strategies relevant to IPC are referenced in Section III. Environment + Parks (B. Policy Framework).

18. Other Relevant Strategies

The Natural Heritage and Urban Forest Strategy and Lake Ontario's Integrated Shoreline Strategy (LOISS), which are also relevant to IPC and are focused on the natural heritage and the parks system, are referenced in Section III. Environment + Parks.

C. Land Ownership Patterns

The City of Mississauga owns most of the lands occupied by parks, open spaces and community and recreational facilities in Port Credit. The City has a license from IOL for the use of lands for the extension of the waterfront trail. The City leases the J.C. Saddington Park from Credit Valley Conservation. The city is subleasing the "pier" which is the extension of J.J. Plaus Park from City Centre Capital Limited and licensing a small portion of the waterlot at the bottom of Helene St from City Centre Capital Limited, forming part of the walkway at St. Lawrence Park. The map to the right shows the property mapping for the Inspiration Port Credit study area.

D. Existing Land Use and Built Form

1. Overview

Port Credit is a well established waterfront district with a "village feel", defined by a grid street pattern, with short walkable blocks, and a main street (Lakeshore Road) serving as the spine for most activities. The area contains a diversity of uses, including residential, commercial, industrial, and recreational and community facilities. Most of Lakeshore Road (east and west) has a mainstreet character, with mixed-use commercial and residential uses. Lakeshore Road is bordered by lay-by parking, sidewalks, and street furniture. Lakeshore Road has been identified as a Corridor with potential for intensification in the Official Plan. In addition to the business area along Lakeshore Road, there is a small-scale industrial and commercial area south of the Canadian National Railway tracks. The map on the following page summarizes Port Credit's land use and built form character.

This district has a diversity of built form, including single/semi-detached dwellings, townhouses, mid-rise buildings, and high rise buildings. The neighbourhoods east and west of the Port Credit Community Node are characterized by mainly low-density residential uses and tree-lined streets designed in grid patterns. There is high density area centrally located on the Port Credit Community Node, particularly near the GO transit station. There is medium and high density along Lakeshore Road (east and west) and around the harbour area. The existing density in the Community Node is 115 residents and jobs/ha (gross) and the targeted density for this node (as per the City's OP) is 100-200 residents and jobs/ gross hectare.

Although the historic development has been primarily residential, the area requires additional employment in order to ensure a balanced land use pattern. Mixed use areas have been designated along most of the Mainstreet (Lakeshore Road East and West), Hurontario Street and Harbour Mixed

Use area (where the CLC site is located). According to the Draft Port Credit Local Area Plan, the current population to employment ratio of 3.2:1 does not meet the target range for the Port Credit Community Node of 2:1 (i.e. two residents per job). As such, additional employment is required to provide more opportunities to live and work in the community. The two sites are required to address the appropriate range and amount of employment uses.

As referenced in Section 2 (Context), the Imperial Oil Limited Lands are currently vacant, with the exception of a gas station located on the north-east corner of the site and the Imperial Oil Waterfront Trail located along the Lake Ontario Shoreline. The Canada Lands Company site is currently used for a marina (Port Credit Harbour Marina) and ancillary uses, including outdoor and indoor boat storage; a gas dock; boat repair and painting facilities; surface parking; boat sales and leasing; a retail store selling nautical items for ships and boats; and, a bar/restaurant with patio. Some of the marina uses are contained within the wharf shed. New developments are required to respect the character of neighbouring residential areas.

2.. Cultural and Heritage Resources

Port Credit is very rich in cultural and heritage resources. The Old Port Credit Village Heritage Conservation District is located between the sites and immediately east of the IOL lands. There are cultural landscapes associated with the Credit River, Port Credit Pier Scenic View and Mississauga Road Scenic Route. The Ridgetown freighter, located at the end of the eastern breakwater on the Port Credit Harbour Marina, has been a signature structure of the Credit River Harbour since 1974 and now is listed as a heritage resource. Further, the Cultural Master Plan identified over 90 cultural spaces, facilities and organizations. The area has dozens of heritage buildings and art galleries as well as being the base for numerous community, arts and faith based organizations. In addition, there are several dance schools, a music academy and an elementary school that takes a creative approach to education (Montessori School). The map on the following page shows the cultural resources in Port Credit.

Lakeshore Road, Port Credit Memorial Park, and other parks are frequently used for festivals and cultural events that attract City and Region-wide visitors, including the Canada Day Celebrations, Busker Festival, the

Land Ownership



Source: City of Mississauga



Diversity of Built Form



Source: Dillon, 2012



Source: Port Credit Built Form Guide, 2008



Source: Stoss, 2012

Southside Shuffle Blues and Jazz Festival, and the Waterfront Festival, which are very well attended. It is estimated that in 2008 about 40,000 people attended the Port Credit Canada Day Parade; about 54,000 people attended the Mississauga Waterfront Festival; and about 75,000 attended the Southside Shuffle Blues Jazz Festival.

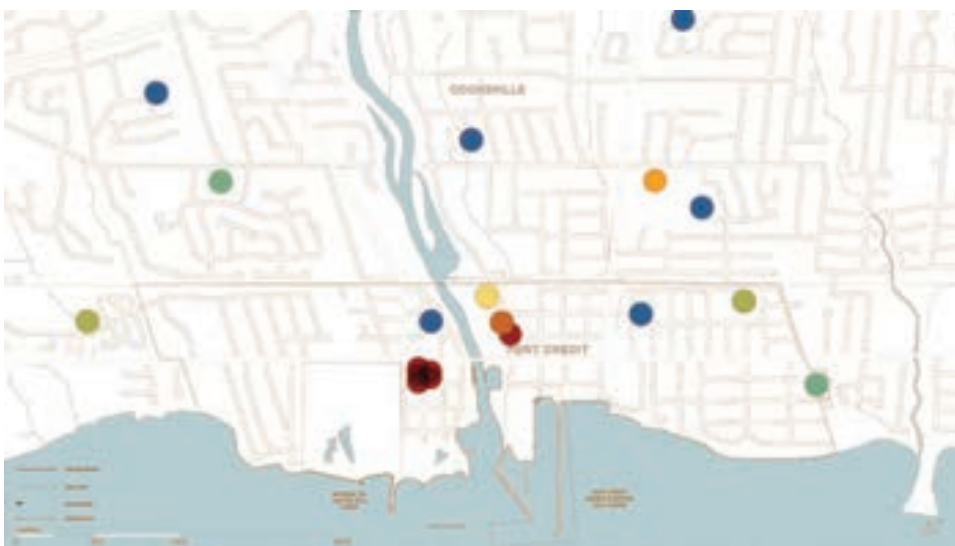
According to the Cultural Master Plan, the 2007 Employment Survey indicated that there is some concentration of creative enterprises in Port Credit. This sector comprises computer system design, graphic design services, advertising, public relations and related services. More than half of these companies in Mississauga have less than 9 employees, with the largest concentration of firms with less than 4 employees.

The importance of Port Credit as a cultural node will be considered while developing the concepts for IPC. Similarly, the impacts of the potential development on the cultural and heritage resources of the area, and in particular on the Old Port Credit Village Heritage Conservation District, will be explored as part of the evaluation of the options. Further, implications of the conservation and preservation policies contained in the Old Port Credit Village

Heritage Conservation District Plan will be also assessed as part of the evaluation of the options.

3. Streetscape

Streetscapes play a vital part in experiencing a neighbourhood. They serve a number of differing purposes from the movement of goods and services, providing municipal services, allowing for access and being places of varied social interaction. The Inspiration Port Credit (IPC) study area is made up of a variety of street typologies, which provide a number of unique opportunities for the community and for the design solutions of the IOL lands and CLC site. Lakeshore Road East and West is one of the most iconic streetscapes that identify with Port Credit. It is a commercial and cultural spine that is the main east/west access into the community. Lakeshore Road has also adapted over time and has taken on two sharply different roles surrounding the study area. East of the Credit River, Lakeshore Road has developed very much as “Downtown Main Street”, similar to traditional main street found throughout southern Ontario. Much of the street is made intimate with its continuous street wall made



Data source: Cultural Master Plan, 2009; Map by Stoss

Cultural Resources

- design arts
- electronic arts
- heritage
- performing arts
- visual arts
- other
- ▲ community groups
- ▲ places of religious assembly
- cultural/religious organizations
- lakeshore node boundary

up of at-grade commercial uses. With on-street parking, wide sidewalks, street trees, and furnishings, Lakeshore Road East has a strong community character that attracts people to Port Credit year round. Building on this strong cultural attraction, a temporary installation to the street was built this summer to convert on-street parking stalls into an expanded pedestrian realm. This allowed for business to spill out into the sidewalk and offer additional space for people to take in the sights and sounds of the streetscape.

Lakeshore Road, west of the Credit River currently functions as more of a major arterial road leading into the Port Credit Village. This stretch is a four lane road that is flanked by some commercial development, highrise towers and institutional buildings. The IOL lands also run adjacent to the south side of Lakeshore Road West for a considerable length. Opportunities exist to see this section of Lakeshore Road West, until the Credit River Bridge, become more of “Downtown Main Street” and thereby expanding the cultural node of Port Credit further west. The development of the IOL lands can help to foster such changes.

Mississauga Road North is a major north south connection to the Village of Port Credit. It is also a uniquely designated Scenic Route, which is set in a topographically rich

landscape with architecturally diverse estate homes and large mature trees. The character of Mississauga Road North of Lakeshore Road will remain as a Scenic Route. Mississauga Road South, from Lakeshore Road to J.C. Saddington Park is an unusually wide residential street that runs adjacent to the IOL lands. The right-of-way on Mississauga Road South can be repurposed as a more urban streetscape, allowing for comfortable local vehicular, pedestrian and cycling activity, with reduced conflict. Repurposing of Mississauga Road South would help to accommodate added volumes of pedestrians and cyclists as a result of future development of the IOL.

Port Street East constitutes a very important connection to the CLC site, the central waterfront parks and the existing harbour. Currently Port Street East is a relatively quiet road servicing residential and service functions. Its access to the PCHM uses as well as loading zones for commercial building fronting Lakeshore Road East makes Port Street East function partly as a service road. Despite this present day analysis, the proposed Hurontario LRT will be aligned along Port Street East. This will change the nature of Port Street as rapid transit corridor. In addition, there are opportunities to make Port Street a “Complete Street” with the incorporation of multi-modal transportation.



**Port Credit
Heritage
Structures
and Cultural
Landscapes**

This streetscape typology could be designed to harbour pedestrians, cyclists, vehicular users, and transit goers in a comfortable inviting urban environment which also makes up a critical part of the overall public realm experience. With clear connections to Lakeshore Road “Main Street” typology and the Lake Ontario shoreline, Port Street East could become a powerful connective streetscape mixing infrastructure with open space.

The study area is also connected to a series of minor roads, largely serving the adjacent residential land uses in Port Credit. Historically these streetscapes are relatively simple, with a standard sidewalk on both side, and a wide asphalt road surface, offering on-street parking and two way traffic flow. Through the growth of active transportation and the development of the mobility hub around the Port Credit GO station, there are opportunities to improve the streetscape treatment of these minor roads to encourage more pedestrian and cycling activity.

4. Community Services

The Port Credit area contains a wide array of community services, including several schools, a library, an arena, a swimming pool, and several places of worship and meeting spaces. However, the nearest community

centres are located outside the area of influence (Huron Park Community Centre and Carmen Corbasson Community Centre). The map below shows the location of the community services in Port Credit.

Places of Worship

- St. Andrews Memorial Presbyterian Church
- Trinity Anglican Church
- St. Mary Star of the Sea
- Freedom Centre International
- First United Church
- Mississauga Masonic Temple
- Clarke Memorial Hall

Schools

- Riverside Public Elementary School (JK – Grade 8)
- Forest Avenue Public Elementary School (JK – Grade 6)
- St. James Catholic Elementary School (JK – Grade 6)
- Mentor College. Private School (JK - Grade 12)

Although Port Credit District appears to have an extensive network of community services and places of worship, the need for additional services will need to be explored as IPC development plan and population projections unfold.



Data source: Port Credit Heritage Mapping by City of Mississauga; Map by Stoss

Community Services



E. Demographics

Mississauga's growth projections indicate that Port Credit District will have a population of 13,690 people in 2031, adding 1,890 people from 2011. Existing and potential population and employment figures are as follows: (Projections from the 2010 Mississauga Growth Forecast, 2008-2031 Summary. Population, Housing, Employment Forecast by Planning District)

- Population (2011): 11,840
- Population (2031): 13,690
- Employment (2011): 3,450
- Employment (2031): 4,010

The City has also projected the housing unit count in Port Credit to go from 5,700 in 2011 to 6,610 in 2031, an increase of 910 units. Existing projections will change based on new development applications. The implication of Inspiration Port Credit and the proposed concepts on the population, housing and employment forecasts will be studied as part of the master planning exercise.

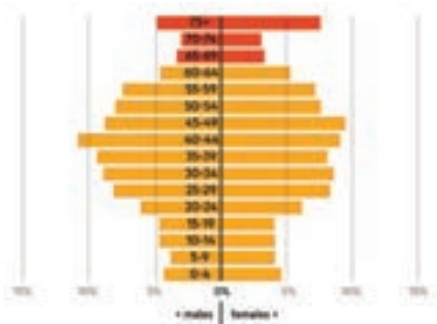
Although the Port Credit District has low number of older adults (2,745 older adults as of 2006 Census), its population is forecasted to age. As referenced in the Older Adult Plan, it is projected that in a

20 year timeframe, from 2008 to 2028, the proportion of the City's population 55 years of age and over will increase approximately 20% to 38%. The graphs on the opposite page show the significant increase in percentage of residents over 65 from 2006 to 2031. This shift in population implies that different types of services will be needed in the Port Credit area in the future. In general aging population requires more access to transit, health care and support facilities with easy access. Aging population also benefits of living in mixed-use, walkable and compact neighbourhoods that offer diversity of housing. As people age they often consider downsizing to smaller dwellings or condos, and prefer to live within the same general community.

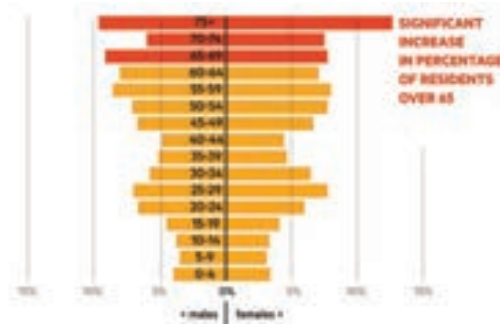
Housing affordability is another issue to consider when addressing the aging population. In Mississauga, 19% of adults over 75 years of age are considered low income and 35% of those 85 years or older live alone. According to Mississauga's Older Adult Plan, it is projected however, that when baby boomers reach the senior years, they will be more stable financially, will be in better overall health, and will desire higher quality services and programs that the current older generation.

The needs of an aging population, changes in demographics and housing affordability will form part of the considerations when drafting Inspiration Port Credit development concepts.

Port Credit Age Distribution: 2006



Port Credit Age Distribution: 2031



Data Source: Port Credit Local Area Plan; Diagrams by Stoss

F. Sustainability

As referred in the policy framework section above, “Green” is one of the pillars of the Mississauga Strategic Plan, which anticipates a more sustainable future for Mississauga. Inspiration Port Credit will study the opportunities for sustainable development, which will strive to minimize the impact on the environment and incorporate sustainable development practices in accordance with the City’s Green Development Strategy, Green Development Standards and the Living Green Master Plan and with the CVC’s guidelines for stormwater management and low impact development (CVC guidelines are discussed in the Infrastructure section). Sustainability could be accomplished through the use of innovative design approaches for buildings, landscaping and stormwater management. It also can be achieved through neighbourhood and built form design.

Inspiration Port Credit could use this opportunity to develop using more sustainable development and land use patterns, achieving a compact urban form with a greater mix of land uses and access to transit. IPC has the opportunity to help Port Credit to become a “complete community”, in which residents have the ability to walk and cycle to retail, services, recreation, entertainment and employment opportunities and are offered

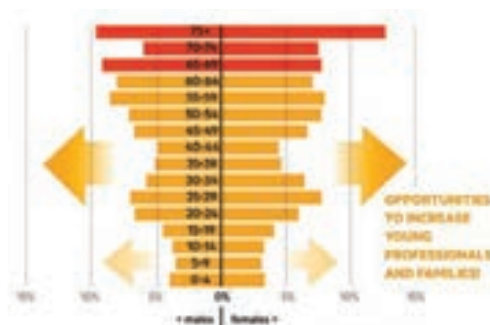
diversity in both housing and built forms. In complete communities, every day needs, including transit, are fulfilled within a 5 to 10 minutes walk from most of the residences and employment locations.

G. Special Focus: Inspiration Lakeview

Inspiration Lakeview: A Vision is a plan for the redevelopment of the 100 hectare brownfield site on OPG’s former Lakeview Generation Station lands and the adjacent employment lands. The plan was developed during a three day charrette in December 2010. This large site lies just 5 km to the northeast of the IOL and CLC sites. Understanding the relationship between these large waterfront sites is important for the IPC process to ensure that the future redevelopment of the sites complements one another and Port Credit as a whole.

For certain kinds of land uses (like an urban campus), there may be demand for only one within Port Credit; therefore, it is important to keep Lakeview’s vision in mind when planning for the two IPC sites, while ensuring the planned site for each use is the most appropriate location to best enhance Port Credit.

Increase diversity of population



Data Source: Port Credit Local Area Plan; Diagrams by Stoss

Create development that supports current + attracts new residents



Source: Stoss, 2012

1. Overview

The product of a three-day charette, the vision based around four key areas: BLUE (water); GREEN (parks, recreation, stormwater); CULTURE (arts); and URBAN (form, transportation). The various forms of sustainability (economic, environmental) are present in each of these four areas and are a theme throughout. The vision proposes to leverage each of these in its proposed redevelopment plan.

The water is the asset that distinguishes the site and the proposed changes are intended to enhance economics, recreation, and the environment, as well as an overall connection to the lake. Open space on the site is also intended to foster recreation and improve stormwater treatment while enhancing the nearby cultural and economic centers. Some of the proposed, distinguishing facilities/features are proposed on the site's open spaces.

The urban form is intended to be varied in all regards: housing type, building height, street design, etc, with a focus on a few main corridors based around either transportation or commercial/retail.

Proposed Land Uses

Culture

- Art & Culture Island
 - small galleries + artisan workshop
 - theaters
 - markets
 - shops + restaurants
 - public squares
 - re-use leftover industrial slab for programming, including festivals and temporary international exhibitions
- Public art installations throughout site

Parks + Recreation

- Green Recreation Corridor
 - Open concept multi-use amphitheater
 - field sports
 - ice rink (winter)
 - concerts + special events
- Planetarium
- Artificial hill for recreation (with historical connection)
- Connection to Waterfront Trail

Residential And Commercial

- Institutional Campus
- Employment Area, create Green Employment/Innovation Zone
- Mixed-Use Residential, with varied housing types (all stages of life, 2-12+ storeys)

Eight Core Principles

- Link the City and the Water
- Open the Site with a Wealth of accessible Public Spaces
- Create a Green, Sustainable, Innovative, Model New Community
- Create a Vibrant Community
- Connect in Multiple Ways: Transit, Walking, Cycling and the Car
- Create a Destination to Draw Local, Regional and International Visitors
- Commemorate History While Creating a New Legacy
- Balance Public and Private Investment to be Economically Viable and Sustainable

Inspiration Lakeview: Big Moves



Blue



Green



Culture



Urban

Source: Inspiration Lakeview: A Vision (2011)

H. Gaps, Opportunities and Issues to Consider

1. Gaps in Existing Information

- Visual assessment of the IOL lands was not completed as the team was not able to enter the site.
- The Draft Port Credit Local Area Plan policies as referred to in this background report may change as the input from agency, stakeholder and public consultation is incorporated. The final Port Credit Local Area Plan policies might need to be reviewed, if available prior to completion of IPC.

2. Opportunities and Issues to Consider

- There many opportunities to enhance Port Credit's established urban waterfront village character and contribute to achieving the City of Mississauga's strategic vision and goals as set in the five "Strategic Pillars for Change". There are also a number of issues that need to be considered when developing the concept options for Inspiration Port Credit. A summary of potential opportunities and issues to consider for the IOL and the CLC sites is included in the following table.

Improve waterfront access, views, and park network



Source: Stoss, 2012

Create new kinds of sustainable, transit-oriented development



Source: Stoss, 2012

Capitalize on lake



Source: Stoss, 2012

CLC + IOL Site Opportunities and Issues: Land Use + Urban Design

Potential

Enhancement

Opportunity

Issues to Consider

Creation of compact, transit-oriented communities

- Create a transit-oriented development that is walkable, compact, and diverse
- Provide for multi-mode connections

- Transportation/connections constraints in the area, particularly on Lakeshore Road, will need to be addressed as more population will increase the demand on the road system
- Types of roads to be provided (e.g. public and/or private roadways) and east-west linkages to adjacent neighbourhoods (IOL lands)
- Relationship to future LRT terminus (CLC site) and the right-of-way requirements of the LRT

Enhance the existing natural and cultural heritage and parks and open spaces

- Enhance views and connections to the waterfront
- Foster arts and culture and respect the cultural heritage
- Enhance the park and open space network and natural environment

- Development must be sensitive to the Old Port Credit Village Heritage Conservation District and transition to the adjacent stable residential neighbourhoods (IOL lands)
- Need to provide appropriate buffers and transition to adjacent stable, mature neighbourhood and heritage district on either side of the IOL lands
- Greenbelt and Natural Hazard designations along shoreline are required by policies to be maintained as public green spaces
- Hazard Lands must be considered in regards to the appropriate use of land
- Need to provide significant parkland within the development sites, particularly within the IOL lands, may be a constraint for the development

CLC + IOL Site Opportunities and Issues: Land Use + Urban Design

Potential

Enhancement

Opportunity

Issues to Consider

Improve opportunities for mix-uses and for a wide demographic spectrum

- Provide mixed-uses, including places to live, work, and play
- Provide for a range of housing options and tenures and for community facilities
- that respond to the needs of the aging population
- Support aging population / attract young families and other new residents.
- Create jobs on the cultural/creative, education, office, retail and service sectors, and attract innovative businesses to help meeting the employment targets
- Attract retail commercial activities that are lake-dependent or waterfront oriented
- Appropriate type, amount and location of land uses (e.g. how are employment uses incorporated into developments) and land use compatibility (e.g. are there issues between boat launch, boat repair operation and future residential or public access to the waterfront?).
- Achieve the residential/employment requirements for the community node (e.g. 2:1 target vs. 3.2:1 existing).
- Maintaining marina function on the CLC site will be a challenge given the available space and the potential for incompatible land uses.

Creation of vibrant and complete communities

- Create vibrant communities with year-round activity
- Maintain and enhance the village mainstreet feel
- Create placemaking opportunities on Lakeshore Road (mainstreet), LRT Station and other transit locations
- Development in the two sites needs to fit into and complement the broader City-wide policies, plans, and urban structure
- Appropriate heights, density, and built form given the existing and planned context and the importance of maintaining/enhancing views and providing access to the lake

Create sustainable neighbourhoods

- Develop with high standards of urban design and sustainability, including the use of Green Development Standard and LEED certification
- Achieve sustainable development at the neighbourhood and building level
- Development in the two sites needs to incorporate the City and CVC guidelines and standards for green development.
- Requirement of high standards of sustainable development may constitute an disincentive for development

References: Land Use + Urban Design

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III. ENVIRONMENT + PARKS

III. Environment + Parks

A. Introduction

Although Port Credit is an urban area, its location along the shores of Lake Ontario and the Credit River provide a strong natural context for the community. The Credit River, situated between the two key Inspiration Port Credit redevelopment sites, is considered a warm-water fish habitat and a migratory route for cold-water species. The Credit River's valley lands are an important ecological corridor for the City of Mississauga. Both the Lake Ontario and the Credit River provide important ecological functions, including fish habitat. Habitat for fish is critical as Port Credit is considered an important fishing port. In addition, the shoreline provides ecological functions and habitat.

Within the Inspiration Port Credit study area there is an extensive parks, open space and trail system along the Lake Ontario waterfront and the Credit River. As well, Port Credit is an area of recreational and cultural significance. IPC has significant opportunities to provide additional public park lands, access to the waterfront, and improved connections to the Waterfront Trail and adjacent parks.

Addressing potential soil contamination will be key to the successful development of the two key Inspiration Port Credit sites. The Imperial Oil Limited lands are the former

location of an oil refinery; consequently, the levels of contamination and the costs of remediation will have a significant impact on the development and its feasibility. Development options in the Canada Lands Company site are less likely to be hindered by contamination as the expected levels of contaminants are lower.

B. Policy Framework

Inspiration Port Credit will closely follow the guiding principles and policy directions from the Mississauga Strategic Plan, Official Plan, Port Credit Local Area Plan and other relevant plans.

1. City of Mississauga Strategic Plan (2009)

The City of Mississauga Strategic Plan (2009) identifies the environment as one of the five strategic pillars for change: GREEN – Promote a Green Culture. Specific to Inspiration Port Credit, the Strategic Plan includes the goal “to lead a change in behaviours to support a more responsible and sustainable approach to the environment that will minimize our impact on the environment and contribute to reversing climate change”.

The Action Plan for implementing the

Robust waterfront park and trail network already exists in Port Credit



Source: Stoss, 2012



Source: Stoss, 2012



Source: Stoss, 2012

Strategic Plan specifically directs the City to “Pro-actively acquire and/or enhance lands along the waterfront and in natural areas for recreational and ecological value” and to “Plant one million trees in Mississauga”. Inspiration Port Credit has the opportunity to advance these strategic goals and actions.

2. Mississauga Official Plan (2011)

The new City of Mississauga Official Plan (as adopted in 2011) has the vision of a city that is beautiful and sustainable and that protects its natural and cultural heritage resources, particularly the Lake Ontario waterfront and the Credit River. The key guiding principles of the Official Plan related to the environment include to “promote development decisions that support the sustainability of our natural heritage system and enhance the quality of life for our present and future generations” and to “protect, enhance and where possible restore distinct natural features, areas and linkages, including their ecological functions, particularly those associated with the Lake Ontario waterfront and the city’s river and valley corridor system”. The Environment section of the Official Plan contains policies related to: living green, the green system, urban forests, water, air quality, brownfield sites, waste management, and noise. Specific Key policies that are relevant to Inspiration Port Credit are discussed.

Living Green

Official Plan policies directs to protect, enhance and restore the Natural Areas System and ensure land use compatibility and requires that development proposals include the use of best management practices, encourages the use of green technologies and design to assist in minimizing the impacts of development on the environment (Policies 6.1.1, 6.2.7, 6.2.8 and 6.2.12).

Lake Ontario Shoreline

The Official Plan contains policies addressing development and site alterations along Lake Ontario shoreline, which will be evaluated in the context of their potential impact on the shoreline or watershed management area. Development or site alteration will not be permitted within Hazard Lands adjacent to the Lake Ontario shoreline unless the requirements of the conservation authority and the policies of the City are met. In addition, the City might require that development proposals incorporate and/or restore natural features, areas and linkages along the Lake Ontario shoreline. Further, as a condition of development approval, lands adjacent to this shoreline may be placed in public ownership for their long term protection (Policies 6.3.2.4.2, 6.3.2.4.4, 6.3.2.4.5 and 6.3.2.4.6).



Source: Stoss, 2012



Source: Stoss, 2012

Parks and Open Spaces

The Official Plan indicates that “Public parkland will be designed to allow access for a variety of complementary activities through interconnections of pathways, a multi-use recreational trail and the public parkland network; and to provide a safe and accessible environment through development of clear sight-lines, openness and visible entrances that can be achieved by maximizing street frontages where possible.” (Policy 6.3.3.3). In addition, parks should be located as centrally as possible within a residential area and be accessible for residents within 800 m of their dwelling. The minimum parkland provision (city-wide) is 1.2 ha per 1,000 population. The Official Plan recognizes the Lake Ontario Waterfront as an area full of activities that are lake-dependent and lake-enhanced (Policies 6.3.3.5, 6.3.3.6 and 6.3.3.19).

Brownfield Sites

The Official Plan indicates that development approval or approval of amendments to the Plan for known or potentially contaminated sites will be deferred until studies assessing the potential for contamination have been undertaken. If the site assessment confirms contamination, a remedial action plan according to the relevant regulations and standards will be required. The implementation of this action plan will be needed as a condition for development approval (Policies 6.7.1c and 6.7.1d).

3. Draft Port Credit Local Area Plan

The Port Credit draft Local Area Plan (LAP) makes recommendations on how Port Credit will support Mississauga Strategic Plan’s goals regarding living green. The goal of the LAP is to promote conservation, restoration and enhancement of the natural environment. Key policies from the Draft Port Credit Area Plan (draft January 2012) related to parks and open spaces and, natural environment and contamination that frame relevant to Inspiration Port Credit are as follows:

- The protection, preservation and restoration of existing natural systems will be a priority within the waterfront parks system. The Official Plan encourages the enhancement and restoration of the Credit River as a biologically productive and diverse ecosystem (Policies 7.1.2 and 7.1.3).
- Improvements to the urban forest of Port Credit are encouraged (Policy 7.2.1).
- The LAP directs development to minimize the impact on the environment and incorporate sustainable development practices (Policy 7.3.2).
- Parks planning will contribute with the Vision of an urban waterfront village (Policy 8.4.1).
- The City supports the continuation and improvement of water dependant activities such as marinas, facilities that support recreational boating and sport fishing (Policy 8.5.1).
- The City will ensure that uses in proximity to the waterfront will provide for public access, where appropriate (Policy 8.5.2).
- In addition, specific policies for the Imperial Oil Limited lands (Site 3) and the Canadian Lands Company site (site 8) require that a comprehensive master plan will be prepared to the City’s Satisfaction that will “determine contamination of the site” (policies 13.1.3.3 (a) and 13.1.8.3 (a))

4. Waterfront Parks Strategy, 2008

As referenced in the Land Use and Urban Design Section B. 17, the City’s Waterfront Parks Strategy provide directions for the management of the waterfront parks. Key goals of the plan relevant to IPC include:

- Better integration and connectivity between parks
- Improved connections to the
- Introduction of sustainable park elements
- Improved relationship between the parks and the existing natural systems

The Key Strategies include

- Improve the park system connectivity, identity, sustainability and shoreline
- Promote sustainable best practices
- Encourage active transportation, including transit, pedestrian and recreational access to the parks
- Develop a hierarchy of signage
- Use distinctive landscaping and trail hierarchy to assist in improving the park system and connections
- Promote passive land based recreational uses
- Consider education and seasonal use when designing and programming the parks activities
- Provide for more naturalization of the park system

Figure below shows the overall Parks System Recommendations for the parks within the Inspiration Port Credit study area.

5. Natural Heritage and Urban Forest Strategy

The City of Mississauga initiated a Natural Heritage & Urban Forest Strategy (NH&UFS) in April 2012 and is expected to be completed by December 2013. The purpose of this project is to develop a strategy to guide City programs and activities for the protection, enhancement, restoration and expansion of natural areas and the urban forest across Mississauga.

Although there are no natural areas or urban forest identified within the IOL and CLC sites in the Official Plan Schedule 3 Natural System, the areas along the Lake Ontario Shoreline are identified as Natural Hazard. In addition, lands located adjacent to the Credit River, north of Lake Shore Road West, are identified as Natural Areas. Consequently, the recommendations and implementation tool from the HH&UFS study might affect future policies for the IOL lands and CLC site.

Overall Parks System Recommendations

Source: Mississauga Waterfront Parks Strategy 2008

Waterfront Parks Strategy: Vision Statement

- Embrace the spirit of the lake and the river at the point where land and water unites.
- Identify the place where the natural and urban environments connect with locations for rest and relaxation for all.
- Educate with the knowledge gained from experiencing the Waterfront Parks and demonstrate how to lead by example.
- Connect the physical, natural, cultural and emotional elements of the parks to the community, the environment and to the passage of time.

6. Lake Ontario's Integrated Shoreline Strategy (LOISS)

The Lake Ontario Integrated Shoreline Strategy (LOISS) is ongoing study established by Credit Valley Conservation (CVC), along with a steering committee of municipal and agency partners to analyze the current conditions along the Lake Ontario shoreline. The purpose of LOISS is to provide clear guidance on the steps needed to be taken by the local, regional, and provincial government and local community to protect and enhance the shoreline ecosystem for the future, while also meeting and improving the existing needs of the natural environment. The study will include a specific focus on opportunities for the protection and restoration of natural ecosystems along the shoreline. LOISS will help to further inform updates of the Waterfront Parks Strategy as well as specific future parkland redevelopment projects.

The LOISS study area encompasses the IOL and CLC sites. LOISS provides an important regional context for IPC and many of the goals, objectives and policies of the Port Credit Local Area Plan, as well as the City of Mississauga Official Plan and the Waterfront Parks Strategy are similar to the goals and objectives of LOISS.

7. Port Credit Harbour West Parks Environmental Assessment

Port Credit Memorial Park (West), Marina Park and J.C. Saddington Park, known as the Port Credit Harbour West Parks, are located on the west side of the Credit River (east of the IOL site) and were identified in the Waterfront Parks Strategy as priority parks. The strategy developed concept designs for these parks as a starting point for future detailed design. The City of Mississauga is currently undertaking Engineering Studies and an Environmental Assessment for the Port Credit Harbour West Parks. This study will assess the shoreline, natural heritage and infrastructure needs of the parks to inform the concept design and

planning of the park redevelopment. The map on the following page shows the large block concept plan developed for the West Harbour Parks.

Preliminary proposed improvements for the parks include:

- an underpass under Lakeshore Road on the west bank of the Credit River;
- separation of the motorized and non-motorized boat launch and relocation of the non-motorized boat launch further south in Marina Park;
- a waterside boardwalk around the Rivergate easement (to provide continuous trail along the waterfront);
- naturalize areas around the pond in J.C. Saddington Park
- shoreline improvements throughout including a cobble beach along the J.C. Saddington Park shoreline;
- streetscape improvements; and,
- flexible open space in Marina Park that can provide parking for boating activities and be used when appropriate as multi-use civic space.

C. Local + Regional Hydrology

A watershed is a drainage basin or an area of land that drains into a stream, river, lake or ocean. Port Credit is located within the Credit River watershed. Covering about 860 square kilometres, this watershed contains some of the most diverse landscapes in southern Ontario and is situated within one of the most-densely populated regions of Canada. The watershed is under the jurisdiction of Credit Valley Conservation, institution that has been working since 1954 to protect its natural environment. The Credit River runs for almost 90 km and meanders southwest from the headwaters in Orangeville, Erin and Mono. It runs through nine municipalities

before draining into Lake Ontario at Port Credit. The watershed contains a tremendous diversity of habitats and wildlife due to two important geologic structures it passes through, the Niagara Escarpment and the Oak ridges Moraine. In addition to these features, the area is defined by Carolinian Forest or deciduous broad leaf tree habitat made up predominantly of Ash, Birch, Chestnut, Hickory, Oak and Walnut. The map on the previous page shows the Credit River Watershed boundaries.

The Credit River Watershed is further divided into 22 subwatershed to reflect major tributaries, major sections of the river, and groups of smaller watersheds that drain directly into Lake Ontario. Inspiration Port Credit study area is located within the Norval to Port Credit subwatershed.

The Credit River discharges into Lake Ontario, part of the Great Lakes System, one of the world's most important lake systems,

containing nearly 20 percent of the Earth's fresh surface water. In the 1970s the lakes were found to be highly polluted and measures to clean them up were put in place including reduction of toxic chemical dumping and upgrading of sewage treatment. While these efforts were fairly effective, increased population growth and invasive species are having an impact on the lakes today. Current issues the lake faces today are: climate change, chemicals (flame retardants, pharmaceuticals, and agricultural runoff), algae, and artificial water level controls. The Golden Horseshoe Area of Lake Ontario is considered a priority area for management due to rapid growth. Water infrastructure and greenbelt protection are an important part of current planning processes for Lake Ontario.

Regional Open Space Network



Source: Stoss, 2012

D. Parks and Open Space Systems

1. Overview

Port Credit District has an extensive system of waterfront parks and trails, including the St. Lawrence Park, J.J. Plaus Park, Port Credit Memorial Park, Marina Park, J.C. Saddington Park, the Imperial Oil Trails Extension and the Ben Machree Park, which are located in the adjacency of the two sites. These parks represent areas of recreational and cultural significance. The maps below and on the opposite page show Port Credit Waterfront Trail system and Waterfront Parks, respectively.

One of the key features of the IOL lands and CLC site is that both are waterfront properties with immediate access to the Lake Ontario and adjacent to the City’s waterfront parks. The IOL lands already have public access to the waterfront, through the IOL Waterfront Trail located along the Lake Ontario shoreline in a strip of land that the City leases from the company. This trail connects J.C. Saddington Park and Ben

Machree Park. Conversely, there is no public access to the waterfront through the CLC site. In order to capitalize its prime waterfront location, CLC has indicated that one of the priorities for the future development of the site will be to provide access to the waterfront and to extend the Waterfront Trail along the shoreline to connect J.J. Plaus and St. Lawrence waterfront parks.

The map on the following page shows the diversity of recreational activities that take place on the parks, open spaces and trails located within the IPC study area. In addition, it showcases the diversity of water recreation activities along the Lake Ontario shoreline and Credit River harbour.

Port Credit harbour is used for recreational boating, canoeing, rowing and fishing. Marina Park is mainly used for recreational boating launch and public riverfront access. Charter boats occupy several timber docks at the north end of the site, and public boat launch ramps for both motorized and non-motorized boats are located immediately south of these docks. Fishing is an important activity that takes place in this park and it is the location of the



Port Credit Waterfront Parks

Source: Stoss, 2012

Port Credit: Recreation Activities



Source: Stoss, 2012

swimming	swimming
water parking	water parking
local storage	local storage
fishing / ice skating	fishing / ice skating
school events	school events
sports like kick ball or top roller	sports like kick ball or top roller
basketball	basketball
sailing	sailing
picnicking	picnicking
beer fest	beer fest
performing arts	performing arts

Port Credit Harbour West Parks Large Block Concept Plan



Source: Dillon Consulting Limited, Port Credit Harbour
West Parks Environmental Assessment Public Information
Centre #2



Source: Stoss, 2012



Source: Stoss, 2012



Source: Dillon, 2012

very popular Salmon Derby. This park draws a lot of tourists for its boat charter facilities. Port Credit Memorial West, which is fairly narrow, is used relatively passively throughout the year and is a key viewing area for activities on the river, such as the regattas, rowing and boating. The Mississauga Canoe and Don Rowing Clubs lease facilities at the north end of the park and use the site adjacent to the buildings for boat storage and kayaking, canoeing and rowing functions. In addition, J.C. Saddington Park and J.J. Plaus Park are used for off-shore fishing.

3. Trails System

Port Credit has a thriving pedestrian environment and an extensive trail system. The Waterfront Trail is the premier active transportation and leisure route running along the Lake Ontario shoreline through Mississauga connecting into Oakville to the west and Toronto to the east. It is part of a provincially-significant trail stretching 740 km virtually continuous along the shores of Lake Ontario and St. Lawrence River. The section through Mississauga is also part of the Trans-Canada Trail system. This multi-use trail accommodates cycling and pedestrian

movements along the waterfront separated from vehicular traffic. Between St. Lawrence Park and J.C. Saddington Park the trail continues as a signed route on local streets. The map below shows the location of the existing Waterfront Trail in Port Credit. The Mississauga Cycling Master Plan includes a strategy to expand and improve the trail system in Port Credit (see Mobility, Section V).

E. Site Environmental Conditions

1. Existing Conditions

Contamination is typically dealt with on a site specific basis. Through discussions with the City of Mississauga's Environmental Services, Transportation and Infrastructure Planning team members, it has been determined that while there are some previously identified contaminated sites in and around the study area, these have been dealt with under the applicable environmental regime (e.g. former gas stations, parks etc) and thus the focus for this study is the IOL and CLC lands.

Trails System in Port Credit



Source: Mississauga Waterfront Parks Strategy, 2008

The IOL lands were first utilized as a brick factory extracting clay on site for the production of bricks between 1870 and 1932. In 1932, a small refinery was built along the shores of Lake Ontario, and in 1935, the Goodrich Oil Company constructed the largest independent oil refinery in Canada. Texaco Canada Ltd. purchased the refinery in 1957 and entered the petrochemical market in 1961, peaking in its production from 1961 through to the 1970's. The refinery operations shutdown in 1978, and the petrochemical operations in 1985. In 1989, Imperial Oil Ltd. purchased Texaco and took over clean-up of the site.

As the site of a former refinery, the IOL lands have potential for contamination issues on some areas and have complex regulatory requirements as well as challenging site conditions that limit the range of solutions that are possible. The exact levels and extent of contamination are unknown at this time and IOL has initiated a detailed site assessment program to confirm and

delineate contamination levels in accordance with the Ontario Ministry of Environment (MOE) process. It is assumed that the results of the assessment will be available after the completion of Inspiration Port Credit; consequently, the detailed site assessment information will not form part of this study. However, the results of IPC will inform IOL's process.

While site conditions are not yet fully known historical information would suggest that petroleum products (oils), and possibly fuel additives (e.g. MTBE, Lead) and other associated contaminants are present. Varying levels of contamination are anticipated to be ultimately dealt with via remediation and/or risk management, as appropriate.

Previous environment reports for the CLC Lands (Port Credit Harbour Marina) identified some contaminants within the surface layers from mixed fill materials used to construct the piers and chemicals for boat repairs and refuelling used during historic marina operations. The contamination present on the Canada Lands Company site (Marina) is

Oil Refinery in Operation, 1976



Source: City of Mississauga

Preliminary Understanding of the Environmental Site Conditions



* approximate locations of former uses; information based upon historic aerial imagery and reports
sources: CLC One Port Credit background sheets, MMM Group Environmental Information Sheet, Golder Associates (1986 + 1990)

LEGEND

■ **Development options less likely to be hindered by contamination.**

■ **Medium level contamination or other issues may impact development costs / options.**

■ **Development may be limited by high remediation costs.**

1. Relatively low contamination levels indicated (metals, PAHs, hydrocarbons).
2. Approximate location of former bulk storage. May be some medium-level contamination. Contamination levels likely to be higher if sludge/refining wastes were landformed in this area. Development is less likely to be hindered by remediation costs.
3. Approximate location of former water treatment area / open space. Contamination levels likely to be low and unlikely to limit development options.
4. Approximate locations of former parking and administration buildings. Likely low contamination levels. Development is less likely to be hindered by contamination.
5. Infilled former dock. Likely to contain some level of contamination. Development options may be limited by fill composition and/or contamination (ie. Might be structurally unsound).
6. Approximate location of former refinery with likely high contamination levels. Development may be limited by high remediation costs.
7. Area where free phase product could be present from former leak at adjacent gas station.
8. Former bulk storage area. May be some medium level contamination. Development is less likely to be hindered by remediation costs.
9. Impacted sediments in former shale pit. Remediation / risk management may be required to facilitate future use.

reportedly fairly minor and associated with fill material that was probably used to form the property to make it fit for its current use (e.g. grading/levelling). Contaminants are reportedly metals and polycyclic aromatic hydrocarbons.

The site sediments in the PCHM are largely uncontaminated and no contaminants were observed in the groundwater.

2. Regulatory Regime - Ontario Regulation 153/04 “the brownfield regulation”

The intent of this regulation is to control the redevelopment of potentially contaminated sites for re-use. The regulation requires that Record of Site Condition (RSC) be obtained from the MOE when a site is to be redeveloped to a more sensitive land use (e.g. industrial to residential). A RSC may also be required to obtain planning approvals, or as part of a contract negotiation on the sale of a property.

In 2011, the regulation was amended with, typically, stricter site condition standards that need to be met for soil, groundwater and sediment contamination levels on sites going through the RSC process. These standards are intended to be protective of human health and the environment at 95% or more of sites in the Province of Ontario. The amendment also specified how the site assessment process, comprising Phase 1 Environmental Site Assessment (desk based historical review), Phase 2 Environmental Site Assessment (intrusive investigation and testing), Remediation (clean-up) and Risk Assessment/ Risk Management was to be carried out so that the Ministry of Environment could see some harmonization in the site assessment process, regardless of the company involved in completing the assessment.

3. What Would Remediation For These Sites Entail?

Remediation of the sites will depend very much upon the economics of the development,

development plans and requirements to protect existing and future users and the environment. Therefore, the ultimate plan cannot be determined until all the site investigation data is available and development plans have been prepared. The Imperial Oil lands may require a combination of source removal (soil and/or groundwater) or in-situ treatment to get the “hot-spots” of contamination to acceptable levels. The acceptable levels may be the generic site condition standards and/or risk-based numbers.

Ultimately, what must be achieved is to prevent existing and future users of the sites from coming into contact with unacceptable contamination levels and this is where the development options are integral to the deciding the most practical solution for the land, economically, socially and technically. For example:

- if underground parking is required, removal of soil/groundwater will be required (removing contamination);
- if areas of parkland area included, landscaping may provide a suitable cap (a barrier to contamination);
- if larger areas of surface parking are needed, this could comprise a “hard” cap (a barrier to contamination);
- if commercial/institutional areas are proposed, longer-term in-situ remediation might be an option (reducing contaminant concentrations).

4. Remediation/Risk Management Options and Cost Implications

Three clean-up options that could be applied as part of the remediation/ risk management of the IOL lands and CLC site include:

Generic Removal

On larger sites such as these and, particularly ones located in an urban core, the costs of removing the soil and groundwater impacts

from site are likely to be relatively high. The cost for this clean-up option is based primarily on the amount of material to be removed (for the IOL lands a depth of approximately 3 m to bedrock was assumed), trucking to landfill and replacing it with clean soil.

In-Situ Remediation

This process is typically used on site where the remediation can occur over a longer period of time. The techniques involved vary depending upon the contamination types, practical limitations and timelines involved. Examples of in-situ remediation could include bioremediation, chemical oxidation, soil washing, and phytoremediation. There are different types of in-situ remediation that may be applicable at the IOL lands or CLC site. The cost of in-situ remediation can still be significant but, it does have the added advantage of limiting truck traffic on city streets and potentially being able to be incorporated into the development plan so it can continue to run unnoticed after development occurs.

The basic premise of in-situ remediation is that the technology involved physically, biologically or chemically treats the contamination present and reduces it to acceptable concentrations. There may be waste product (e.g. oily wastewater) that still needs to be removed from site for disposal/re/use.

Risk Management Based Clean-up

Risk based clean up involves the development and implementation of site-specific clean-up

targets rather than Ministry of Environment (MOE) generic standards that are intended to be applicable to 95% of properties in Ontario. Information about the site is used to develop remediation goals that are more applicable to the contaminant types, locations and development goals.

A risk assessment is completed to calculate the required “safe” levels of contamination that may remain, and be managed, on site. The results of the risk assessment may include a combination of remediation and/or risk management.

The risk management options typically comprise the installation of a barrier above the contamination on site that prevents human health or ecological exposure to the contaminants. This barrier may be a “hard” cap (e.g. roads, parking lots, basements) that is placed in the appropriate position over the contamination as part of the development planning. “Soft” caps comprise clean soil that typically forms part of the site landscaping/parkland. Again, these caps prevent contact with the impacted soil/groundwater and enable improvement of the aesthetic appeal of a site.

Comparison of Clean-up Costs

The costs of clean-up will be a key variable for the development of the IOL lands and, to a lesser extent, for the CLC site. The costs estimated in the table below show the relative difference between clean up options and are provided for reference only. It should be noted that these costs are based on site specific assumptions and thus are only applicable to this project.

Approximate Cost Comparisons	
Remediation Method	Cost per m2
Generic Removal	\$ 150
In-situ	\$ 100
Risk Management – Hard Cap	\$ 40
Risk Management – Soft Cap	\$ 50

Source: Dillon

F. Natural Heritage Conditions

1. Natural Heritage Setting

The areas encompassing the Imperial Oil Limited lands and the Canada Lands Company site (CLC or Port Credit Harbour Marina) have had their natural landscapes significantly altered by human activities and commercial development. As a result, the presence of native flora and fauna in both their terrestrial and aquatic form and functions, have been extensively reduced within a fragmented natural landscape. These areas have been disconnected from surrounding natural environment linkages.

2. Historic Context

In the 1800's, Port Credit became known for its stonehooking trade, a practice in which local unique craftsmen known as a "stonehookers" searched the waters and shores of Lake Ontario for stones as local building supplies. From 1880 through to 1900, the popularity of Port Credit Harbour peaked thanks to the introduction of stonehooking. At the time, materials gathered by stonehookers represented the primary building materials for Toronto. With the advent of inland quarries, stonehooking was phased out by 1910. A total of 23 stonehooking vessels operated out of the Port Credit Harbour during the peak of the stonehooking days.

3. Ecological Land Classification

A review of available background materials revealed that natural heritage information pertaining specifically to the IOL lands and CLC site is nominal. As such secondary source information from adjacent lands, specifically J.C. Saddington Park and J. J. Plaus Park, were relied on to determine the natural heritage character of these sites. The Imperial Oil Lands and the Port Credit Harbour

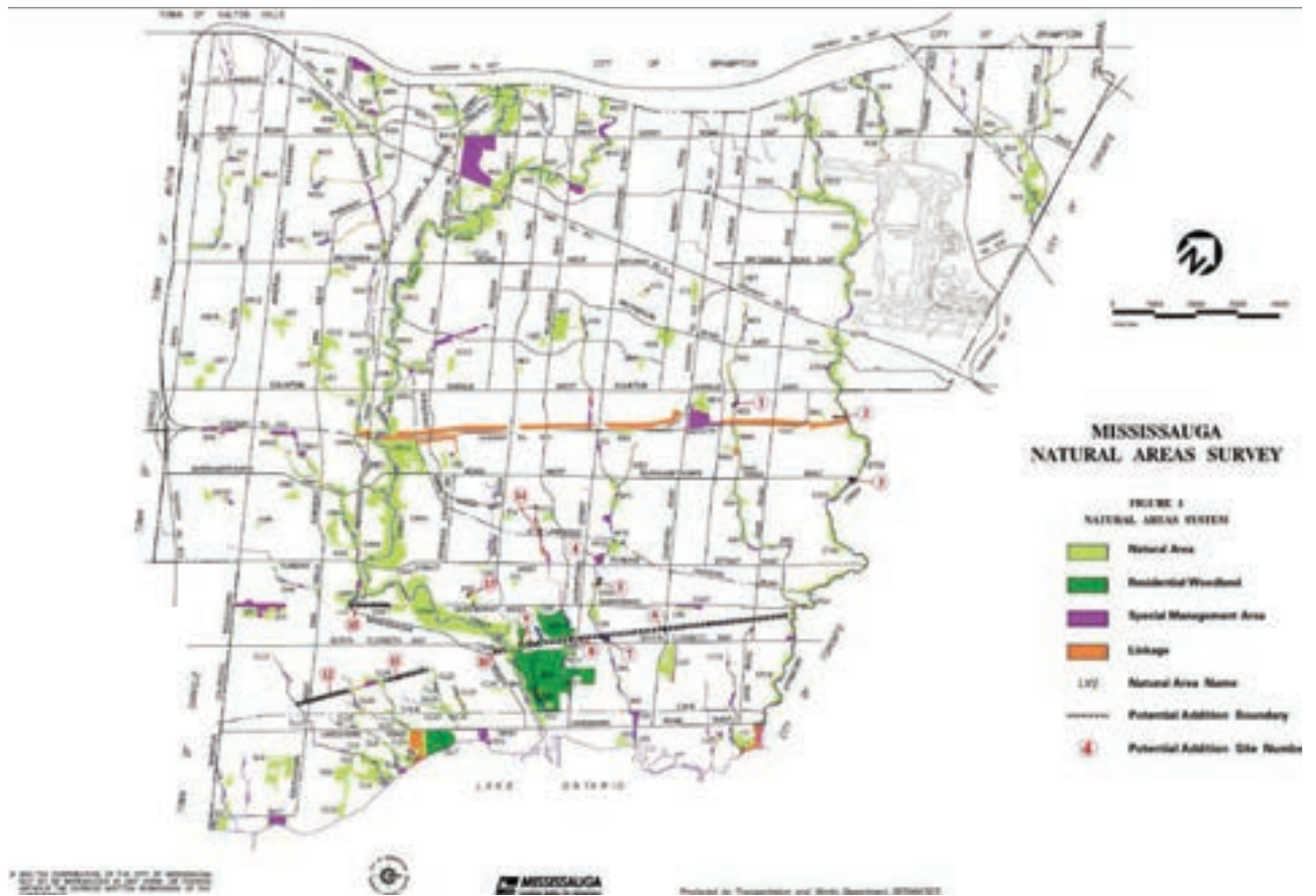
Marina have a combined cumulative land area of approximately 42 hectares (103 acres). Combined, both sites extend over 1.3km (26% of Port Credits waterfront) of Lake Ontario shoreline. An Ecological Land Classification (ELC) of the Lake Ontario Shoreline was completed in 2009 (CVC 2009a) which included the Imperial Oil Lands. The following communities were identified within both study areas:

- Mineral Cultural Savannah Ecosite – This ELC ecosite is the dominant community with the Imperial Oil Lands consisting of flat grasslands and scattered tree growth.
- Open Aquatic – Located in the south west portion of the Imperial Oil Limited lands, this ecosite represents two open water features associated with what is believed to be the shale pit quarry furthest east, and the water treatment pond furthest west. With respect to the Port Credit Harbour Marina, besides the tableland area, the open water is associated with the marina basin; embayment feature.
- Hardened Shoreline - Primarily the western and eastern boundary limits of the Port Credit Harbour Marina, extending into Lake Ontario, these features serve as break walls protecting the marina from wakes and potential erosion.

4. Wildlife

The City of Mississauga completed a Natural Areas Survey including breeding bird surveys, amphibian surveys and vegetation surveys as outlined in their 2011 report update. No surveys were completed in any of the west parks directly adjacent to the Imperial Oil Lands or Port Credit Harbour West study areas and thus information on wildlife on these properties is not available. Given the naturalized regeneration characteristics and the limited impact from human activity, it can be assumed that the IOL lands have the ability to attract wildlife such as birds, insects and urban mammals (e.g., squirrels, rabbits and raccoons). The map on page 79 shows the

Natural Areas Survey



Source: City Of Mississauga Natural Areas Survey 2009 Update

Changes in the shoreline in Port Credit: 1954 to 2012



Data Source: Aerial photos from City of Mississauga; Map by Stoss

Changes in Land Use and Shoreline



1954



1966



1985

Source: City of Mississauga

Changes in Land Use and Shoreline

1989



2002



2012



Source: City of Mississauga

natural areas and other features in the City of Mississauga as per the results of the 2009 Update Natural Areas Survey.

Insects

Migrant Butterflies and Arthropod Surveys were completed in the fall of 2009 at J.C. Saddington Park (CVC 2009b). All species observed were common except for Monarch (*Danaus plexippus*). It can be assumed that many of the species observed in and around J.C. Saddington Park, given its proximity, could also pertain to the Imperial Oil Lands.

Birds - Waterfowl

Winter Bird Surveys were completed in 2008 – 2009 throughout J.C. Saddington Park (CVC 2009c). Large numbers of Waterfowl were observed, representing 62.3% of all bird sightings. All species are considered common except for a single Horned Grebe (*Podiceps auritus*).

Additional waterfowl surveys were completed in 2012 along the mouth of the Credit River, the near shore areas of Lake Ontario, and the pond within J.C. Saddington Park. Combined, 1163 individual waterfowl representing 17 species were observed consistently within the mouth of the Credit River and the near shore areas of Lake Ontario. Smaller concentrations of primarily dabbling

ducks and geese were observed using the pond within J.C. Saddington Park.

A fall migration survey was also completed in 2012. Species observed during the fall migration assessment utilized the same habitats as the spring surveys. Over 316 individual waterfowl, representing 7 species were observed in the Credit River, the near shores of Lake Ontario and the pond within J.C. Saddington Park. A greater proportion of waterfowl species was present during the spring 2012 surveys than the 2012 fall migration surveys.

These observations are consistent with those reported in the CVC's Winter Bird Survey. The majority of species observed are considered Secure or Apparently Secure (meaning that are not vulnerable or at risk) within Ontario with exception of; Canvasback (*Aythya valisineria*), which is considered critically imperiled for breeding; Long-tailed Duck (*Clangula hyemalis*), which is considered vulnerable; Red-necked Grebe (*Podiceps grisegena*), which is considered vulnerable; and Great Black-backed Gull (*Larus marinus*), which is considered imperiled. Consistent with the 2008-2009 CVC Winter Bird Survey results, a single Horned Grebe was also observed which is considered special concern under the provincial Endangered Species Act, 2007.



The Ridgetown is an attractive resting location for many kinds of birds.

Source: Stoss, 2012



The Credit River is an important Bird Area

Source: Dillon 2012

Given the proximity of the waterfowl surveys, it can be assumed that many of the species observed have the potential to be present within the Imperial Oil Lands and the Port Credit Harbour Marina.

It can be assumed that many of the species observed during the Winter Bird Surveys completed in 2008-2009 and 2012, given their proximity, could also pertain to the Imperial Oil Lands and Port Credit Harbour Marina.

To put into context, the mouth of the Credit River has been identified as part of the Globally Significant West End of Lake Ontario Important Bird Area (IBA) which extends from Port Credit to the mouth of the Niagara River. This area is defined by the impressive congregations of waterfowl which have gathered annually since 1990, primarily in late winter and early spring. Flocks of mainly diving ducks can number in thousands, sometimes tens of thousands (Birdlife International 2012).

Based on the guidelines determined by the Ministry of Natural Resources Significant Wildlife Technical Guide (2000) and Draft Eco-Region Criteria (2012) and the Globally Significant West end of Lake Ontario IBA, the Imperial Oil Lands and the Port Credit Harbour Marina are adjacent to a significant aquatic Waterfowl Stopover and Staging Area.

Birds - Breeding Birds

A single breeding bird survey was completed in June 2012 along the areas encompassing J.C. Saddington Park. A total of 29 species of birds were observed during breeding bird surveys. Breeding bird surveys revealed breeding evidence (mainly singing males) for multiple passerine species. Most common species encountered showing breeding evidence included American Robin (*Turdus migratorius*), Canada Goose (*Branta Canadensis*), European Starling (*Stumus vulgaris*), Mallard (*Anas platyrhynchos*) and Red-winged Blackbird (*Agelaius phoeniceus*). These species were typically scattered throughout the surrounding areas. Given the proximity of the breeding bird survey, it can be assumed that many of the bird species observed have the potential to be present within the Imperial Oil Limited Lands.

The majority of species observed are considered secure or apparently secure (meaning that are not vulnerable or at risk) in Ontario with the exception of Barn Swallow (*Hirundo rustica*) which is considered threatened under the provincial Endangered Species Act, 2007 and the Caspian Tern which is considered Vulnerable.



Imperial Oil Limited Site, 2008 . Flat grass and scattered tree growth.

Source: City of Mississauga



Source: City of Mississauga

Fisheries

Aquatic habitat within the study area can be characterized as marina basin and nearshore habitat type. Subcategories of this habitat include open coast, embayment and wetland and rivermouth. These features were outlined in Appendix G of the LOISS Background Review and Data Gap Analysis Report (Clayton 2011). The Lake Ontario shoreline along the Imperial Oil Lands, south of the waterfront trail, can be described as open coast. These areas are defined as unprotected shorelines that are directly subjected to the thermal conditions, wave action, sediment transport and other functions of the main part of Lake Ontario. Fish communities within these areas are generally transitory with less diversity and productivity than other areas. Substrates within these areas are generally sands, rip-rap or cobbles with beach, armourstone or other retaining walls characterizing shoreline types. The marina basin associated with the Port Credit Harbour Marina serves as a protected area or resting area for fish species, protecting themselves and their habitat from wave action.

The Credit River at Lake Ontario can be described as rivermouth habitat. This habitat is a mixing zone where a flowing river mixes with the static water of Lake Ontario. Substrates found here are generally finer sands and silts that have been carried as bedload by the river and deposited into the delta. Habitat alteration, periodic dredging and the presence of Carp have contributed to the absence of aquatic vegetation beyond very tolerant species.

According to the background fish sampling records provided by DFO and CVC, a wide range of fish species utilize the mouth of the Credit River and offshore areas of Lake Ontario near the study area. All species observed are considered Secure, Apparently secure or not applicable (non-native) in Ontario except for Greater Redhorse which is considered vulnerable. These surveys

represent a species presence in the general study area and are not indicative of specific habitat utilization of the discussed features.

As mentioned in the Parks and Open Space section, 3E, Port Credit harbour is an important destination for commercial fishing, sport fishing, salmon derbies and off-shore fishing.

Species at Risk

A species at risk screening was completed for the IOL and CLC study areas using NHIC's Biodiversity Explorer and DFO/Conservation Ontario's Aquatic Species at Risk Mapping 2012 in addition to the background resources discussed within this report. Based on this information and discussions with the MNR, a determination of the potential for species at risk to occur within the two sites was determined.

In addition, Monarchs were observed in J.C. Saddington Park during butterfly surveys in 2009, completed as part of other projects. This species has the potential to occur in minimal numbers within the Imperial Oil Limited lands given its proximity to where it was observed in relation to the J.C. Saddington Park. This species is listed as Special Concern but does not have protection under the prohibitions of the Endangered Species Act, 2007.

Winter bird surveys (2008-2009) and a waterfowl survey (2012) completed in J.C. Saddington Park and Port Credit Harbour area observed a single Horned Grebe. Similar to Monarchs, this species has no formal protection under the Endangered Species Act, 2007. Given the proximity this siting to the Imperial Oil Lands, it is reasonable to expect that these species have the potential to occur within the IOL lands and the adjacent southern Lake Ontario shoreline. Individuals observed in 2012 were followed to determine if they were nesting within area. No breeding behaviour or nesting locations were observed.

In addition, CVC has confirmed that a colony of the Common Tern and Barn Swallows has been found in the study area. The Barn Swallow is considered a Species At Risk and their habitat is protected by the Ministry of Natural Resources. Additional studies should be conducted as part of any development in order to confirm these findings and to determine the course of action to protect this species.

G. Gaps, Opportunities and Issues to Consider

1. Gaps in Existing Information

Environmental Site Conditions

- Environmental conditions and development options are limited to assumptions made based upon the MMM Group environmental summary document.
- Gaps exist on the IOL lands as no environmental site assessment has been completed at the site for a number of years and, certainly not to the current regulatory standards. Until the updated environmental site assessment information is completed and available for consideration, environmental conditions and development options are limited to assumptions made based upon the historic (outdated) information.

Natural Heritage – Terrestrial

- The provided information in terms of species abundance is not site specific as it was adapted from previous adjacent surveys conducted for the Port Credit West Parks report,
- There should be a site visit for both sites in order to investigate species abundance as well as potential species at Risk locations/abundance.
- In order to provide more site specific

information, following surveys should be undertaken to better identify significant wildlife habitat (particularly related to the IOL): Breeding Bird Surveys, amphibian surveys, butterfly and odonate surveys, floristic analysis, waterfowl surveys (previous waterfowl surveys were conducted for the Port Credit West Parks EA report, however, annual variations in terms of species abundance can be expected (e.g. winter of 2011-2012 was milder than average).

- Species at Risk related surveys targeting preliminary identified species could be conducted to confirm species presence.

Natural Heritage – Aquatic

- The majority of aquatic related gaps are associated with the CLC site, however, the shoreline of the IOL should also been considered in future studies.
- Species at Risk surveys are needed to confirm presence/use of Snapping Turtle, Northern Map Turtle, Lake Sturgeon and Shortnose Cisco.
- Nearshore fish abundance surveys in spring and/or fall (electrofishing at the Port Credit Harbour Marina could provide species list/abundance within the marina). Currently there is no information pertaining fish abundance within the CLC site waterlot.
- Spawning locations - surveys to confirm the presence/use of marina for rearing are warranted.
- In general there is not enough fish information/sample associated with both sites. In addition, none of the sites fall with areas assessed during the 2011 Mississauga Natural Areas Survey.

2. Opportunities and Issues to Consider

Development of the IOL and CLC sites provides many opportunities to enhance the parks and open space systems and presents

an unique opportunity to extend the trail system in Port Credit. Particularly, there is potential to extend the Waterfront Trail along the shoreline of the CLC lands, connecting the existing trails on J.J. Plaus Park and St. Lawrence Park. However, there are issues to consider while developing the Master Plan options.

Regarding the environmental site conditions, the extent, characteristics and level of contamination at the former Imperial Oil refinery is unknown, while the contamination present on the Canada Lands Company property is reportedly fairly minor.

Finally, the IOL site represents a large track of green space and this site provides the best opportunity for improving wildlife habitat, species diversity and natural connectivity. There are opportunities for improvement the natural environment associated with these lands. Although, opportunities for naturalization in the CLC site are more limited as the land area has been modified for human use, there are opportunities for vegetating areas and for connectivity with the adjacent parks.

A summary of potential opportunities and issues to consider for the IOL lands and the CLC sites is included in the following table:

BirdLife International. Important Bird Areas. West End of Lake Ontario (ON022). <http://www.bsc-eoc.org/iba/site.jsp?siteID=ON152&lang=EN>. Accessed August 2012.

CLC + IOL Site Opportunities and Issues: Environment

Potential

Enhancement

Opportunity

Issues to Consider

Enhance Port Credit as a recreation node (both land and water recreation)

- Provide opportunities and spaces for waterfront events and festivals - year round destination.
- Maintain/enhance Credit River/ harbour as a central community/ tourism destination.
- Support Port Credit as a regional tourism destination as there is a potential ability to connect rapid transit to waterfront – makes great access for people.

- The idea of providing public access and turning the Ridgetown into a view platform has been raised. It is noted that there are significant issues of liability and cost associated with this suggestion.

Create new parkland while enhancing the waterfront, offering public access, active uses, and protecting views

- Provide for public parklands and access to the waterfront and improved connections with the existing network. Size of IOL property provides opportunity for significant park/open space.

- Magnitude and cost for remediation of IOL lands and the affordability for parks and open spaces.

Establish new/ improved connections to the trail system

- Connect St. Lawrence Park and J.J. Plaus Park through an extension of the Waterfront Trail. This will provide a new waterfront experience as there has been no public access to the CLC site.
- Potential for extending the boardwalk along the western breakwater as well as the eastern breakwater on the CLC site. Use of breakwaters as public walking and look out space.
- Improve Waterfront Trail and park space along IOL waterfront and provide a greater naturalized area. Also, opportunity for trails on the IOL lands to connect back up to Lakeshore Road.

- Need to balance between marina functions and desire for open space / trail system on CLC lands.
- Improvements to Waterfront Trail along the IOL site will need to consider the terms of the license agreement between the City and Imperial Oil Limited.

Improvements to water/marine recreation

- Opportunity for public boat launch at CLC or the IOL site considering the Waterfront Parks Strategy recommendations.
- Develop the optimal long term location for large boat (recreational) docking at IOL pier and CLC basin.

- Feasibility of the location of a large boat docking at IOL pier and CLC basin.

Create buffer zones between IOL site and adjacent neighbourhoods

- Room to have parkland separate new development on IOL from established residential areas to the east and west.

- Costs associated with extensive parkland may be a detriment to future development.

CLC + IOL Site Opportunities and Issues: Environment

Potential

Enhancement

Opportunity

Issues to Consider

Re-develop the IOL site (brownfield) and the CLC site following the Local Area Plan Vision for Port Credit and appropriate environmental regulations

- Historical site uses suggest that areas of IOL and CLC sites have different contamination issues (types and concentrations).
- Contamination levels in CLC lands are reportedly fairly minor and the sediments in the marina basin are largely uncontaminated. No contaminants were observed in the groundwater.
- The type of contaminants (hydrocarbons) on IOL lands tend to diminish in concentration over time due to natural processes such as biodegradation and dispersion.
- IOL has initiated a process to test all areas of the site to confirm and delineate contamination levels in accordance with the Ontario Ministry of Environment process.
- May be opportunity to use targeted remediation rather than full removal of contaminants across the whole site (if a risk based clean-up is considered)
- Key cost factor will be the amount of soil that needs to be removed/ treated in the IOL site
- Soil removal depends on the depth to bedrock and decisions on whether to use targeted remediation or removal/treatment of all contaminated material. For the IOL site the soil volume requiring removal using the generic clean-up option could total 830,000 m³ or about 415,000 tonnes. If the all soils are removed on the entire 30Ha IOL site (assuming the depth to bedrock is about 3m) the clean-up cost could exceed \$42 million dollars
- Existing vegetation may be removed for site assessment on the IOL site

Enhance the natural heritage connectivity

- Potential for natural heritage connectivity between J. J. Plaus Park and St. Lawrence Park through additional plantings of native shrubs and trees to create a green corridor along the CLC site
- Potential to enhance natural heritage connectivity between B. Machree Park to the west of the IOL site, and J.C. Saddington to the east of the IOL site, at minimum, along the northern boundary of the Waterfront Trail
- Establish a variety of native vegetation along the shoreline to facilitate a functional corridor expansion between B. Machree Park and J.C. Saddington Park and create a buffer from recreational activities
- Shoreline alterations as part of the IOL site re-development might trigger a re-assessment of the site conditions

CLC + IOL Site Opportunities and Issues: Environment

Potential

Enhancement

Opportunity

Issues to Consider

Enhance the natural environment through sustainable development design

- Use sustainable development and green infrastructure practices to minimize impact on the environment.
- Use of Low Impact Development (LID) for stormwater management to minimize the effects of the development on the development.
- General opportunity to promote natural vegetation within both sites and minimize impervious pavement
- Incorporate vegetated parking dividers/ curbs within the greater parking lot.

- Implication of stormwater run-off on Lake Ontario and Credit River and impacts on water quality

Create new naturalized areas

- Vegetate areas of the CLC site breakwater with hydrophilic species for improved naturalization (i.e., willow species).
- Where possible, in underutilized marine areas at the CLC site, incorporate floating green spaces promoting fish/ bird habitat and aesthetics.
- Potential for naturalized areas and a trail system within the IOL property which would promote wildlife viewing opportunities for local Port Credit residents.
- Goose management plan to deter presence from adjoining parks.
- Partner with the CVC to establish tree planting opportunities on both sites to increase the treed area with native species.
- Investigate the ecological value of the removal of the pier at the CLC site. If the removal is not feasible, there are potential benefits of vegetating the breakwater with hydrophilic species for improved naturalization

- Vegetating the break walls at the CLC site with hydrophilic species would be prone to wave action
- Space is limited on CLC lands for naturalization.
- Implications of new development on the natural environment (Green System), particularly on the Lake Ontario shoreline
- Potential high levels of contamination in some areas of the IOL and magnitude and cost of cleanup associated with this site
- Consider the protection of potential existing wildlife and manage light pollution and noise
- Potential human-wildlife conflicts caused by the creation of naturalized areas and a trail system within the IOL site and in both existing and potential road network in new development

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IV. HARBOUR + SHORELINE

IV. Harbour + Shoreline

A. Introduction

Shorelines are among the most valuable, yet fragile, community resources. Therefore, development along a shoreline requires a comprehensive understanding of the coastal processes that will influence the various components of a redevelopment approach. Waves, currents, winds, water quality, flooding potential, storm events, and sediment transport should be understood such that potential planning and development are technically feasible and do not result in negative impacts to adjacent shorelines or the natural environment. This is complicated by the fact that redevelopment must also consider potential public and private uses, water-oriented uses, industrial uses, and conservation areas in the planning process. The existing conditions of the CLC and IOL shorelines are presented herein. Specifically, this section identifies the existing harbour and shoreline conditions that are currently known, possible shortcomings in that knowledge base, and possible opportunities and constraints for coastal redevelopment options. Depending on the development options that are identified, specific coastal analysis or assessments may

need to be completed. These assessments can be determined once the development options have been fully vetted and identified.

B. Policy Framework

Inspiration Port Credit will closely follow the guiding principles and policy directions from the ROP, OP, the Credit Valley Conservation Watershed Planning and Regulation Policies, The Draft Port Credit Local Area Plan, and other relevant policies.

1. Region of Peel Official Plan

Both natural and human-made hazards are found along the shorelines of Lake Ontario and within its ravine, valley, river, and stream corridors. These hazards pose a threat to both human life and risk of damage to property. Under the ROP, area municipalities are to issue policies consistent with those outlined in the plan. Under Section 2.4 for Natural and Human-made Hazards, the Official Plan includes three major objectives:

Port Credit Harbour Marina



Source: Stoss, 2012



Source: Information compiled by Woods Hole based primarily upon Shoreplan's analysis for CLC site; graphics developed by Stoss

- Identify flood plains, hazardous lands, hazardous sites, known human made hazards and lands that are regulated under the Conservation Authorities Act
- Identify permitted uses and minimum setback standards; and
- Regulate land uses within and adjacent to floodplains, hazardous lands, hazardous sites, human-made hazards, and lands that are regulated under the Conservation Authorities Act

These objectives are intended to reduce or eliminate the risk to human life and property associated with shoreline areas of Lake Ontario, erosion and/or slope instability, flooding due to development and site alterations, and other natural hazards and human-made hazards resulting from new development and site alterations.

2. 2011 Mississauga Official Plan

In keeping with the City of Mississauga strategic vision of promoting a green culture for the city, the OP implements a series of measures for development and site alteration. First, development and site alterations will be evaluated for their overall impact on the coastal processes and habitat. Development and site alteration will generally not be permitted within Hazardous Lands adjacent

to the Lake Ontario shoreline and its riverine corridors due to flooding and erosion risks unless it satisfies the appropriate conservation authority and policies of the City. These lands may also be designated as Greenbelt in order to protect life and property, preserve and enhance the natural features, and maintain ecological functions. Where development and site alterations are permitted, they will integrate the protection of life and property, preservation and/or restoration of natural features, and maintain or enhance ecological functions and coastal processes, as appropriate.

3. Credit Valley Conservation

The Credit Valley Conservation (CVC) Watershed Planning and Regulation Policies (2010) manage natural hazards by reviewing Planning Act applications, permit applications pursuant to Ontario Regulation 160/06 and other relevant legislation. Natural hazard management involves a risk management approach by planning for naturally occurring processes such as flood hazards, erosion hazards, dynamic beach hazards, and other hazardous land. While risk can never be eliminated with this approach, appropriate risk exposure thresholds (Provincial standards) are established for the community. These risks include the potential for loss of

Port Credit Harbour Marina



Source: Stoss, 2012



Overview of Harbour and Shoreline features and infrastructure: Imperial Oil Limited (IOL) and Canada Land Company (CLC) sites



Source: Photo from Bing Maps. Dec. 2012

life, property damage, social disruption, and environmental impacts. The CVC outlines four main components to reducing risk:

- Prevention of new development located within areas subject to potential loss of life and property damage from natural hazards
- Protection of existing development from natural hazards through implementation of structural and non-structural mitigation measures
- Emergency Response and Recovery Measures to evacuate residents and prepare mitigation measures through flood forecasting and warning systems, including disaster relief;
- Co-ordination between natural hazard management and planning and development related activities to ensure decision makers are well informed

4. Draft Port Credit Local Area Plan

The Port Credit Draft Local Area Plan makes recommendations on how Port Credit will support the 2011 Mississauga Plan's goals pertaining to their waterfront. This includes promoting both commercial and recreational use and public access in the context of their Living Green initiative.

C. Port Credit Harbour Marina Site

1. Overview

The PCHM includes the following:

- in the water: a sheltered harbour area with approximately 1,000 boat slips
- on land: a warehouse/terminal building with offices, a retail store, restaurant, and exterior boat storage facilities

The CLC site includes five major coastal engineering structures: the west breakwater, east breakwater, Ridgetown, western jetty (or curved training wall) along the Credit River, and the wharf walls surrounding the Port Credit Harbour Marina facilities.

Additional coastal facilities include a service dock and associated coastal protection components on the northern shore just east of the warehouse/terminal building, and a launch ramp on the northern shore just west of the warehouse/terminal building. CLC's consultant team assumes that the north shore area to the east of the warehouse and service dock would be reconstructed as part of any redevelopment.

2. Coastal Processes

Conditions

The 100-year still water flood level for Port Credit is 75.8m geodetic datum (MNR, 1989). 20-year return period deep water waves were calculated for two specific directions (Shoreplan, August 2012). Waves from the east were estimated with a 5.2m significant wave

West Breakwater



East Breakwater



Jetty



Source: Stoss, 2012

height and a peak period of 9.8s. Waves from the southwest were estimated with a 3.5m significant wave height and a peak period of 7.2s. Transmitted wave heights in the marina were estimated to be 0.1 to 1.2 meters for conditions with a 100-year water level and 20-year wave height.

3. Marina and Harbour Area

Introduction

Port Credit is the largest and deepest (natural) operating marina on Lake Ontario. Multiple boats from across Canada and US use the marina. The marina is especially busy during Marina Shows in August. The main operation of the marina is based on two loading and unloading docks. The southwest dock serves smaller boats; the northeast dock serves for long and large boats. Most of the boaters prefer storing their boats closest possible to loading dock -to minimize transportation distance and costs associated with it - transportation arrangement is most difficult with larger boats.

Some people keep their boats in the marina (in water) - heated throughout the winter (with outside bubbler - plastic wrap + interior heater running 24/7), but in most cases in-water is not a preferred storage option for boats. There are few boats in the marina that are also occupied throughout the winter.

Conditions

The harbour area consists of approximately 29 acres of water area (118,500 square meters). Approximately 1,000 boat slips are available in the marina in its current configuration. Shallow waters in the surrounding area limit vessel access to many areas outside the marina (ie. Credit River or east or west shores of Lake Ontario). Depths in turning basins within marina are estimated to be 7m. Changing lake water levels will likely result in access issues (shallow areas). Declining lake levels are expected to increase the regional importance of this marina.

High boat density has implications for safety. The longest dock extending from the marina exceeds the maximum available hose length for fire fighting. Currently, fire hazards on boats and boats slips is a significant problem.

4. East and West Breakwater

Conditions

Constructed in 1962, the West Breakwater consists of randomly placed armour units ranging from 3 to 8 tonnes. It has a single primary layer design structure with rip rap underlayer. The breakwater measures approximately 320 meters (m) in length, and has an average crest height of 76 m (geodetic

The Ridgetown



Source: Stoss, 2012

Jetty / Training Wall



datum) and a crest width that ranges from 3.5 to 5 m. The structure is approximately 50 years old and CLC's team estimates it is at end of design life. The CLC team also estimates that the breakwall will be overtopped during larger wave events and higher lake levels, allowing wave transmission into the harbour.

The East Breakwater was constructed in 1958 and extended in 1961, shortly before the construction of the West Breakwater. Like the East Breakwater, the West Breakwater is assumed to be near the end of its design life. The East Breakwater is about 700 meters long and consists of two distinctly different sections. The landward section (395m) is comprised of more well placed primary armor units, while the seaward section (290m) is more randomly placed. The average crest height is 75.9m (seaward) to 76.1m (landward) with a crest width of 3 to 6 m. The CLC team has found that the East Breakwater may be under designed.

It is likely that the structure will be overtopped and allow wave transmission into the harbour during larger wave events and higher lake levels. The probability of damage

to the crest of structure is considered to be relatively high, especially to the South.

5. The Ridgetown

Conditions

The Ridgetown was installed in 1978 to act as a southern breakwater. Measuring approximately 173m in length and 17m wide, the Ridgetown was placed on 2" (50mm) diameter crushed stone and filled with 8300 tons of stone. The deck of the ship is approximately 3m above the water level on the lakeside. Stone scour protection was installed on the port and starboard sides of the ship. The CLC team has recommended minor repairs to the steel plates on the harbor side of the ship.

Currently, the ship's decks have become an attractive stopping and perching location for fowl. The heavy bird usage has created unpleasant odors, and would be a factor discouraging public access. In addition, potential safety concerns would limit ability to provide public access to the Ridgetown.

6. Credit River Jetty/Training Wall

Conditions

The Credit River Jetty / Training wall was

Marina Wharf Wall



Source: Stoss, 2012

constructed between 1961 and 1962. It extends approximately 123m from the seaward end of J.J. Plaus Park and measures approximately 8.2 m in width. Public access to training walls is provided via J.J. Plaus Park. The Jetty/Training wall could experience wave overtopping during extreme conditions, but significant wave transmission unlikely. The elevation of the concrete cap, residing above the steel sheet pile is 76.8m. CLC finds that the structure is generally in good condition and will continue to function. Steel sheet pile wall is estimated to have more than 50 years of service life remaining.

7. Marina's Wharf Walls

Conditions

The Wharf Walls of the marina were constructed in 1955-56, and extended in 1961-62. They have a filled, solid wharf structure, and the deck elevation ranges between 76.2 to 76.5m. CLC finds that the wharf walls are in good condition and are expected to continue to function for another 50 years. In certain scenarios (high lake levels with storm waves), the wharf walls will be overtopped and result in upland flooding on the wharf.

D. Imperial Oil Limited (IOL) Lands



IOL Shoreline

Source: Stoss, 2012

1. Overview

There is limited information regarding the Imperial Oil Limited (IOL) lands, specifically related to the coastal region. The site contains approximately 900 meters of shoreline of a variety of types, including stacked rocks, rip-rap, natural beach. Unlike the CLC site which grew over time due to significant land-fill processes, the IOL shoreline has remained fairly consistent over the past century. One exception is an inlet to the west of the jetty which originally allowed boats to pull into the channel and dock. This inlet was filled in incrementally between 1954 and 1989.

2. Coastal Processes

Conditions

Little information regarding site-specific coastal processes is available for the IOL lands; however, it is assumed conditions would be similar to the CLC site.

The 100-year still water flood level for Port Credit is 75.8m geodetic datum (MNR, 1989). 20-year return period deep water waves were calculated for two specific directions (Shoreplan, August 2012).

Waves from the east were estimated with a 5.2m significant wave height and a peak period of 9.8s. Waves from the southwest were estimated with a 3.5m significant wave height

and a peak period of 7.2s.

3. Marine Structures – Jetty + Groyne

Conditions

The jetty protrudes approximately 170 m into Lake Ontario. It consists of a rubble mound structure with paved walkway off waterfront trail. A gated entrance to the jetty exists at landward end of walkway. The structure appears to have larger stacked armor units on outside of structure with a rip-rap core and no structural crest protection. It is assumed that this structure would likely be overtopped during higher lake levels combined with storm events.

The groyne is a much shorter protrusion into Lake Ontario. It is approximately 27 m long, and appears to be mix construction of stacked rocks and a concrete cap.

4. Shoreline + Waterfront Trail

Approximately 485 meters of shoreline lie from the eastern Jetty to western edge of property. For the first 180 meters (heading west from the eastern Jetty to the groyne), the shoreline consists of dumped rocks and rip rap protection (not a standard revetment design), with some areas of natural beach.

West of the groyne, the shoreline is

stabilized with a more consistent, but loosely placed, sloped rock revetment for approximately 80 meters. There is a dual culvert outfall (possibly stormwater outfall) that is located just west of this revetment. West of the outfall, the shoreline structure transitions to a vertical seawall comprised of stacked armor units. This structure is approximately 5-6 armour units in height and consists of placed units. This structure extends over the last 225 meters of the shoreline (western end of the site). As such, the shoreline consists of roughly 3 primary sections:

- Approximately 180 meters of dumped rocks and rip rap protection with some areas of natural beach
- Approximately 80 meters of a rock revetment
- Approximately 225 meters of a vertical seawall constructed from individual armor units

Constructed in 2005, the Waterfront Trail runs parallel to the shoreline across the entire property. The trail setback ranges from approximately 8-30m from the shoreline.

E. Gaps, Opportunities and Issues to Consider

Jetty



Jetty



Groyne



Source: Stoss, 2012

1. Gaps in Existing Information: CLC Site

The gaps in understanding of the existing coastal processes in and around the marina are critical elements that may need to be understood for future coastal engineering design depending on the preferred development options. For example, if modifications of the marina layout or boat slip configuration were considered, understanding the circulation (water quality), sediment transport (shoaling and dredging requirements), and wave attenuation (harbour resonance) would be required. Or if full public access is considered to the jetties, a better understanding of the wave distribution would be required. General coastal processes information can be found in the CVC Shoreplan Hazard Lands Study, Waterfront Parks Strategy and LOISS, however, further site specific studies will likely be required based on the type of future development considered for the site.

Coastal processes

- Circulation, hydrodynamics, and sediment transport pathways and quantities in the marina and in the vicinity of the Credit River are not known
- 20-year return period wave heights were estimated out of two approach directions, and it is likely that monochromatic wave conditions were assumed. The

distribution of wave heights, directions, and sea states could be better understood. Few details are provided on the set-up and implementation of the wave transformation model (CMS-Wave) used for wave uprush allowance

Marina + harbour

- A detailed bathymetric survey (depths) within the Marina area was not available. Due to the sheltered nature of the marina, potential water quality concerns may be feasible. There is no information on circulation in the harbour, hydrodynamic (currents) in the area, and/or water quality observations. No wave attenuation studies have been completed that evaluate the wave conditions expected in the Marina during various storm conditions

East and West Breakwalls

- The adequacy of the coastal engineering structure should be more thoroughly evaluated, especially considering the structure is near the end of its service life. The breakwater should be assessed in relation to the site-specific coastal processes to determine structural response to various storm conditions. For example, armor sizing adequacy, material adequacy, wave breaking forces, wave uplift forces, should be assessed to

IOL Shoreline + Waterfront Trail



Source: City of Mississauga, 2012



Source: Stoss, 2012

determine damage level associated with return period storm levels

- The wave overtopping and transmission assumes that the breakwater structures remain intact and experience no significant damage. However, overtopping and transmission should also be calculated for a damaged breakwater, especially if the adequacy assessment of the breakwater (as described above) indicates that potential crest damage, slumping, or damage may occur. The seaward portion of the east breakwater, which had a higher potential for crest damage, should explicitly be evaluated
- Wave overtopping and transmission calculations assumed a 100-year still water elevation and a 20-year wave height per MNR technical guides for wave uprush allowance; however, this design level may not be adequate for calculation of structural stability at the breakwater. A wider range of conditions should be evaluated. This also would allow for calculations of the percentage of time that the marina may be out of service or experience unsuitable conditions. From a development and planning perspective, specific design levels (e.g., elevations of walls if allowing public access) may also be required based on a wider range of expected conditions

Credit River training wall + jetty

- Wave overtopping and transmission calculations assumed a 100-year still water elevation and a 20-year wave height per MNR technical guides for wave uprush allowance; however, this design level may not be adequate for calculation of structural stability at the breakwater. A wider range of conditions should be evaluated. This also would allow for calculations of the percentage of time that the marina may be out of service or experience unsuitable conditions. From a development and planning perspective, specific design levels (e.g., elevations of

walls if allowing public access) may also be required based on a wider range of expected conditions

Marina Wharf walls

- Wave overtopping and transmission calculations assumed a 100-year still water elevation and a 20-year wave height per MNR technical guides for wave uprush allowance; however, this design level may not be adequate for calculation of structural stability at the breakwater. A wider range of conditions should be evaluated. This also would allow for calculations of the percentage of time that the marina may be out of service or experience unsuitable conditions. From a development and planning perspective, specific design levels (e.g., elevations of walls if allowing public access) may also be required based on a wider range of expected conditions

Ridgetown

- Inspection of the structural stability of the Ridgetown was comprehensive, however, continued monitoring should be conducted
- At this time no information has been found regarding the reason for the placement of the Ridgetown. A wave study would be required to confirm the need of the Ridgetown for marina operations and docking safety. This would require a wave modeling study to assess the wave conditions within the marina with and without the Ridgetown in place

2. Gaps in Existing Information: IOL Site

Coastal processes

- Survey of beachfront and nearshore areas not available
- Historic shoreline change unknown
- Potential for coastal flooding unknown
- Site specific wave, water level, storm events, and sediment transport processes for IOL shoreline not available

Jetty + Groyne

- No assessment of coastal structure integrity or adequacy has been conducted for either structure
- Interactions with wave and coastal processes have not been determined for either structure (e.g., wave overtopping, wave forces, etc.)

Waterfront Trail

- Assessment of anthropogenic features along shoreline has not been completed

3. Opportunities and Issues to Consider

A summary of potential opportunities and constraints for the IOL and CLC sites is included in the tables on the following page.

CLC Site Opportunities: Marina + Coastal Perspective

Potential Enhancement	Opportunity	Constraints
PCHM Reconfiguration and Boat Slip Diversification	<ul style="list-style-type: none"> Conceptual layouts for potential slip modifications, improved draft depths, and slip diversification allowing for a greater range of vessel types and sizes. Optimized layout in attempt to reduce density, improve safety, and maintain or improve capacity 	<ul style="list-style-type: none"> Limited space due to existing water depths Existing depths limit vessel diversity
Public Access and Recreational Opportunities on Eastern or Western Breakwater	<ul style="list-style-type: none"> Potential to open western breakwater for public access and recreational activities (e.g., observation stations, fishing access locations, etc.). Also enhance breakwater to add safety components 	<ul style="list-style-type: none"> Existing overtopping potential of western breakwater Requires improvement of western breakwater to allow access Safety concerns associated with allowing public access on coastal structure The Eastern Breakwater will require more significant upgrades than the Western to allow for public access
Additional Marina Access Points	<ul style="list-style-type: none"> Potential to enhance marina usage and improve water quality and circulation within marina by adding a secondary access point, possibly through a point in the eastern breakwater Re-utilization of armor units extracted from new access point to increase crest elevation of selected 	<ul style="list-style-type: none"> Potential for undesired wave attenuation in harbour area would need to be evaluated
Public Launch Ramp	<ul style="list-style-type: none"> Provide additional or replacement public launch ramp 	<ul style="list-style-type: none"> Public will accept removal of launch ramps at marina park if public launch ramps are provided at CLC
Improved Recreational Opportunities at J.J. Plaus Park Seawall and Training wall	<ul style="list-style-type: none"> Add railing, wall parapets, or other components to edges of training wall to enhance both safety and aesthetics of training wall. Additional recreational activity opportunities (e.g., fishing access, observation points) and enhancements (seating improvements, etc.). 	<ul style="list-style-type: none"> Minor constraints from a marine perspective

IOL Site Opportunities: Marina + Coastal Perspective

Potential Enhancement	Opportunity	Constraints
Waterfront Trail Enhancement	<ul style="list-style-type: none"> Enhanced recreational activities opportunities and public assets (sitting areas) along waterfront trail 	<ul style="list-style-type: none"> Potential coastal flooding levels unknown If landward development/improvements are considered, adequacy and stability of coastal engineering structures will need to be further evaluated
Improved Recreational Opportunities and Access to Jetty	<ul style="list-style-type: none"> Improved public access and recreational activities (e.g., fishing pier, etc.) to IOL jetty. May include structural enhancements as well 	<ul style="list-style-type: none"> Unknown structural stability of jetty Potential wave overtopping of jetty Safety concerns associated with allowing public additional public access on coastal structure
Enhanced Shoreline with Potential Development of Pocket Beach Between Groyne and Jetty	<ul style="list-style-type: none"> Improved shoreline and waterfront access along IOL shoreline. Possible inclusion of a pocket beach for recreational usage between existing coastal structures that would also provide added shoreline protection for upland soil exposure through potential erosion 	<ul style="list-style-type: none"> Improved understanding of shoreline processes

References: Harbour + Shoreline

A majority of the existing conditions information is available from the following:

Conditions Report for Marine Structures, Port Credit Harbour Marina (Shoreplan, October 2012)

Natural Hazards Assessment, Port Credit Marina (Shoreplan, August 2012)

MNR, 1989. Great Lakes Flood Levels and Water Related Hazards. Unpublished report prepared by Conservation Authorities and Water Management Branch, Ontario Ministry of Natural Resources, February, 1989.

← Hurontario St
St. Lawrence Dr →

V. MOBILITY

V. Mobility

A. Introduction

In order for IPC to result in a plan that attracts people to live, work and play all year round, there must first be an understanding of the current transportation system, infrastructure, and policies that are in use today, as well as the planned improvements to come in the near future. The existing condition and the planned condition of transportation and infrastructure in the area of influence will assist in understanding the opportunities and constraints influencing development of the IOL lands and CLC site.

B. Policy Framework

1. The Big Move

The Big Move (Metrolinx's Regional Transportation Plan) aims to achieve a transportation system for the Greater Toronto and Hamilton Area (GTHA) that is effective, integrated and multi-modal. The vision for the plan states that

"In 25 years, the GTHA will have an integrated transportation system that enhances our quality of life, our environment and our prosperity".

Transportation choice becomes a key part of this plan and should be reflected in the Vision for Port Credit. Choice over single occupant vehicle travel means providing a system that focuses on comfort and convenience, is integrated with land use and the surrounding community and is multi-modal.

The Hurontario LRT is a key part of the Big Move investment strategy and will form a spine along Hurontario and within Port Credit; connecting people to the City and the broader Region. Similarly, a plan for a Waterfront West Rapid Transit Project along Lakeshore Road east of Port Credit is identified in the 15 year investment strategy. This will have a long-term impact on how the community evolves and mobility choices.

2. Region of Peel (ROP) Official Plan

The policies in the Region of Peel Official Plan intend to promote increased sustainability of the transportation system in the Region and support the integration of transportation planning, transportation investment and land use planning. The ROP identifies Lakeshore Road and Hurontario Street as Major Roads. The Major Roads provide for inter- and intra-municipal travel and for connections to other regions/municipalities and the Provincial Freeway Network. Major Roads have a

How do we accommodate a range of modes of transportation?



Source: Dillon, 2012



Source: Port Credit Local Area Plan

medium to high volume of traffic and connect significant activity nodes. In addition, the ROP identifies Hurontario Street as “Other Rapid Transit Corridor”, while the Port Credit GO Station is identified as a Mobility Hub Gateway.

In addition, the regional Plan promotes active transportation and supports the development of a complete, safe and integrated bicycle and pedestrian network (Policies 5.9.10.1.2, 5.9.10.2.3).

3. Strategic Plan (2009)

Two of the five strategic pillars for change identified in the City of Mississauga Strategic Plan relate specifically to transportation and mobility: MOVE – developing a transit oriented city and CONNECT – completing our neighbourhoods. These strategic pillars are a cornerstone for achievement in the transportation and mobility plans for Inspiration Port Credit.

4. Mississauga Official Plan (2011)

The 2011 Mississauga Official Plan (OP) contains directions for the development of a multi-modal transportation network that reduces dependence on non-renewable resources. The multi-modal network includes

road, transit, cycling and pedestrian facilities, which will encourage a shift towards more sustainable transportation such as active transportation and transit (Policy 8.1.1). The transportation priorities in the OP include creating a finer grain road pattern in the city and providing access to transit within walking distance of where people live and work, and to/from major destinations. All of these are important elements to be considered for the IOL and CLC sites as part of Inspiration Port Credit.

There are a number of key policies in the OP that apply to the IOL and CLC sites. The OP requires development applications to include area-wide or site specific studies to identify the necessary transportation improvements, to minimize land use and transportation conflicts and to guarantee that the development is not premature regarding the existing transportation infrastructure (Policy 8.1.16).

It is the intention of the OP to create a fine-grained road system, particularly in the intensification areas, which will increase the number of intersections and connectivity throughout the city (Policy 8.2.2.3 and 8.2.2.4). The OP indicates that future addition to the road network should be public roads (Policy 8.2.2.7).



Source: Stoss, 2012



Source: Stoss, 2012

The OP requires proponents of new developments to demonstrate how pedestrian and cycling needs have been addressed (Policy 8.2.4.3). It is also a requirement to provide sidewalks or multi-use trails on all new roads and in the vicinity of transit stops. The provision of pedestrian connections, amenities and multi-use trails will be a City priority in intensification areas (Policies 8.2.4.5, 8.2.4.6, 8.2.4.7 and 8.2.4.8).

In addition, within intensification areas, the City will consider reducing minimum parking requirements; establishing maximum parking requirements to encourage the use of transit; requiring a portion of parking to be underground, where feasible; and coordinating parking initiatives with transportation demand management programs (Policy 8.4.7a, b, c, and f).

4. Draft Port Credit Local Area Plan

The draft Port Credit Local Area Plan makes recommendations on how Port Credit will support the 2011 Mississauga Plan's goal of a Multi-Modal City. These policies form the context around which Inspiration Port Credit is being planned. Key policies relevant to the study IPC are as follows:

- The proposed LRT station on Port Street East has potential for placemaking

opportunities and locations for public art. The city might require development applications to incorporate placemaking elements into their design (Policy 9.1.3).

- Lakeshore Road, including the Credit River Bridge will not be built in excess of four lanes, excluding turning lanes, space for bus bays, parking and cycling. Lakeshore Road will be planned to accommodate all modes of transportation, when feasible (Policies 9.1.4 and 9.1.5).
- The City will give special consideration to the provision of additional public roads to continue the existing fine-grained street network and the provision of public access to the shoreline when reviewing development applications (Policies 9.1.7 and 9.1.8).
- The draft Port Credit Local Area Plan also includes considerations for reduced parking requirements (Policy 9.2.1) and encourages Transportation Demand Management measures (Policy 9.2.3).

5. Mississauga Cycling Master Plan (2010)

The Cycling Master Plan establishes a 20-year strategy to enhance cycling opportunities in the City for recreation, fitness and daily transportation needs. The plan emphasizes fostering a culture where cycling is an

Waterfront Trail can be congested in summer months, and bicycle lanes are currently limited



Source: Stoss, 2012



Source: Stoss, 2012



Source: Stoss, 2012

everyday activity; building an integrated on-road and off-road cycling network and adopting a 'safety first' approach for cycling.

These three goals need to form a component of decisions made within Port Credit, which is traditionally been viewed as an important component of Mississauga's cycling network. Additional information regarding the Cycling Master Plan's recommendations for Port Credit are included in subsection G.

C. Existing Conditions: Pedestrians and Cyclists

The Port Credit District has an important pedestrian and cyclist network, particularly as the Waterfront Trail traverses the area mostly along the Lake Ontario shore. The Waterfront Trail runs from Oakville to Toronto, mostly as a paved path within the Waterfront parks. Between Elmwood Avenue and Cumberland Drive, the trail continues as a signed route on local streets.

The pedestrian network also includes sidewalks on Port Street, Helene St, Elizabeth St, Stavebank Road South, and St. Lawrence Drive to connect the CLC site to Lakeshore Road East. A portion of Port Street, adjacent to the CLC site, has a paved path. Sidewalks are also located on both sides of Lakeshore Road West, Hurontario St, and most local streets in the area. Although the area is well-connected for pedestrian circulation, there are varying streetscapes, especially along Lakeshore Road. Improving the streetscape and pedestrian realm, along with improvements to road crossings for pedestrians along Lakeshore Road are needed.

In addition to the Waterfront Trail, the cycling network also includes a paved boulevard trail on east side of Hurontario St north of rail tracks and on south side of Port St across the CLC site. Some additional

on-road bike routes are located in mixed traffic. There is no dedicated/ separated commuter cycling route (not a recreational trail) and there is no continuous bicycle trails that connect the IOL and CLC sites to the GO Station. In addition, the gap through CLC lands in dedicated east-west Waterfront Trail needs to be addressed to meet OP policy objectives.

D. Existing Conditions: Roads

The Queen Elizabeth Way (QEW) provides inter-regional Freeway connection to GTHA – access to/from study area via Mississauga Road and Hurontario Street – QEW experiences significant congestion during AM Peak and PM Peak periods. In addition, Lakeshore Road (E-W), Hurontario Street (N-S), and Mississauga Road (N-S) are primary arterial roads providing intra-regional capacity.

Key constraints for the Port Credit District are Credit River (south of the QEW, the QEW and Lakeshore Road are the only crossings of the Credit River locally), GO rail line (only Hurontario Street and Mississauga Road have grade-separated crossings locally) and QEW (interchanges provided at Hurontario Street and Mississauga Road crosses locally). Localized congestion occurs at the Port Credit GO Station during peak periods, particularly during the afternoon peaks with train arrivals. In addition, there is limited connectivity for all modes through the IOL, limiting the connection between the Old Port Credit Village and Cranberry Cove neighbourhoods.

The QEW congestion during peak hours, extreme weather and emergencies increases the use of the Lakeshore Road as an east-west connection. Lakeshore Road and Hurontario Street currently present peak hour congestion points, which will rise with further development.

E. Existing Conditions: Transit

Regional Transit

The Port Credit GO Station is located approximately 650m from CLC site and approximately 1,100m from Imperial Oil site. The station is a major destination within the study area. The high density surrounding the station facilitates a high percent of people walking to access GO services. There is also a high percentage of passengers that transfer to the GO Station via MiWay (above the average of other stations in Mississauga).

The Lakeshore West GO line provides two-way service between Hamilton and Toronto 7 days per week. The GO Station serves as a major interchange for MiWay buses and GO Bus vehicles.

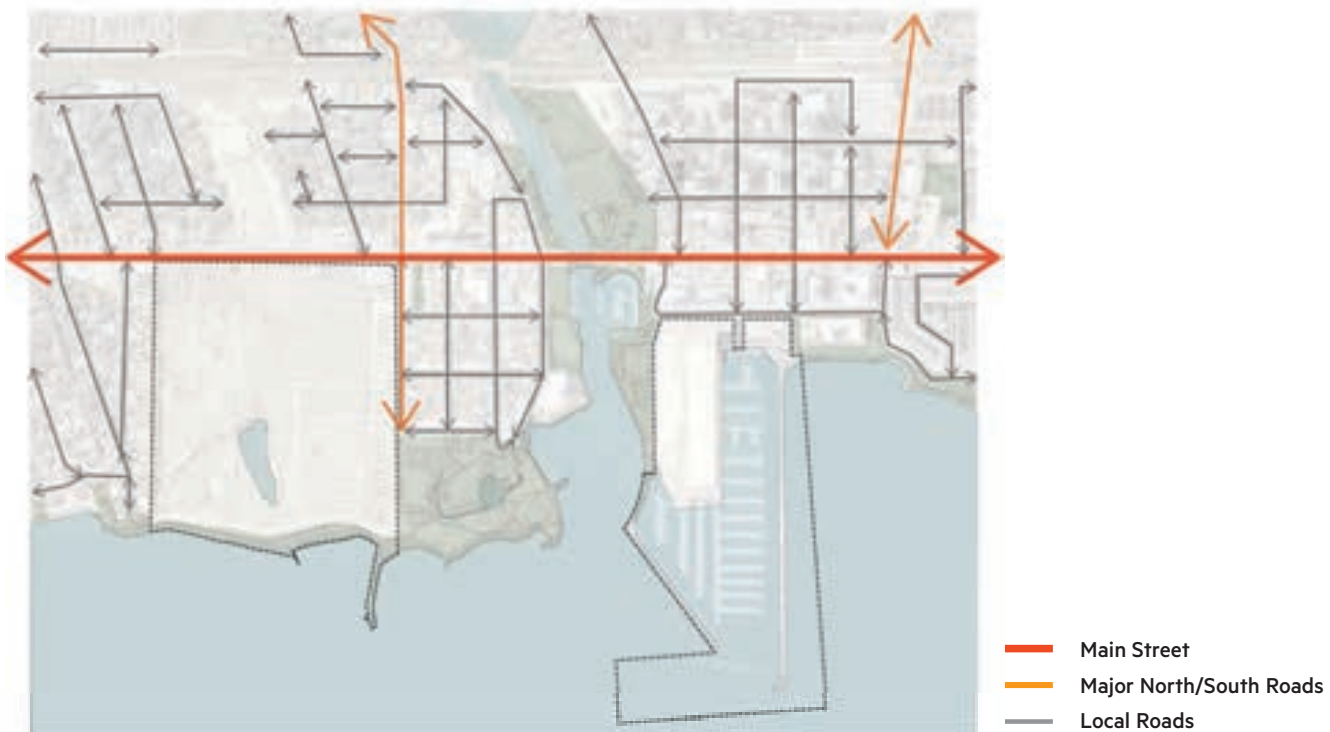
Rapid Transit

There are no Rapid Transit facilities currently in place with the exception of the GO Rail service. Express Intra-regional service is available on Hurontario Street to Mississauga City Centre and to Brampton Shoppers World Local Transit. The area has limited high order (dedicated rapid transit) connections to other Mississauga or Peel destinations.

Local Transit

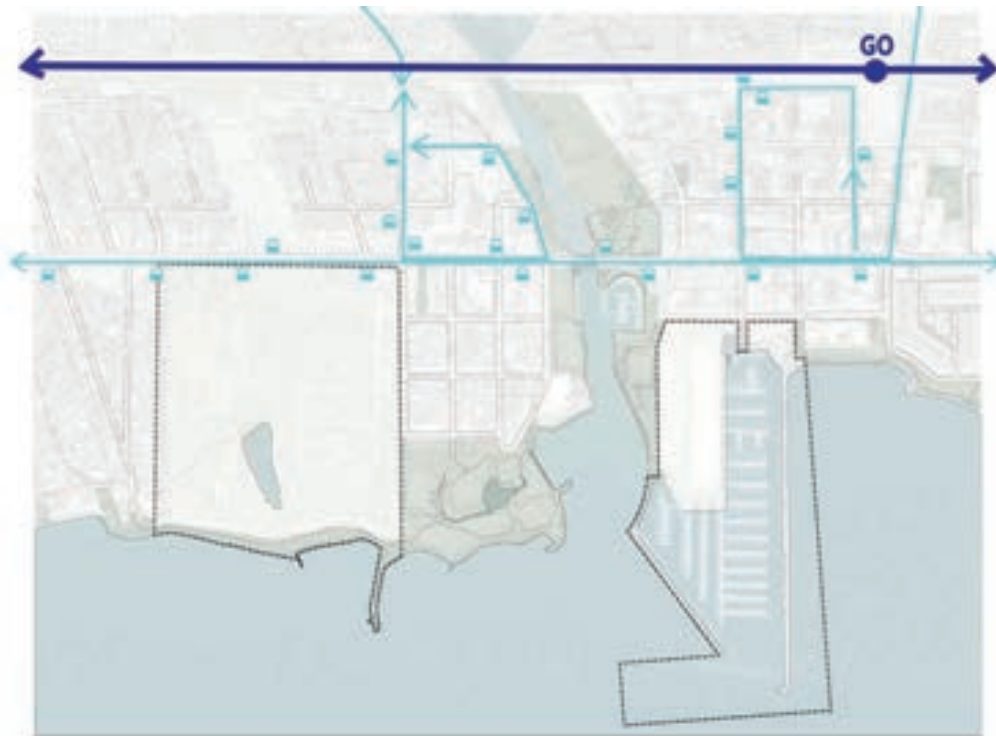
The area is well serviced with local transit. There is a number of local transit MiWay routes that serve Port Credit. Connections to Port Credit GO Station, Clarkson GO Station, Square One central bus transit terminal, Hwy 407 Park and Ride Lot, and Long Branch GO/TTC Station are available. However, there is no local transit connection to Kipling Subway Station (Toronto Transit).

Existing Road Network



Source: Stoss + Dillon, 2012

Existing Local Transit Connectivity

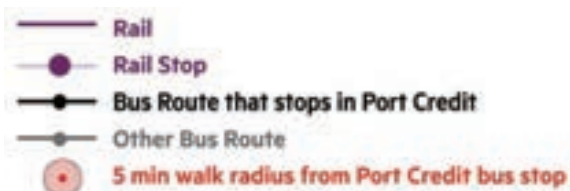


Source: Stoss + Dillon, 2012

Existing City Transit Connectivity



Source: Stoss + Dillon, 2012



F. Existing Conditions: Mode Share

Travel patterns and the type of transportation mode currently being employed by users in the area are illustrated through mode shares. Currently the vast majority of travel is done in automobile. However, given the high density surrounding the GO Station, there is also a higher than average volume of GO passengers walking to or taking MiWay to the station during the AM peak period. Since the station is only 650 m from the CLC lands, the potential exists to encourage walking/cycling trips to/from the GO Station provided accessible routes are provided. The Imperial Oil Limited lands may be too far from the GO Station to encourage walking and local transit and cycling are the more realistic sustainable options to discourage use private automobiles. The map on page 117 shows the mode share for AM Peak Period travellers heading inbound to the Port Credit GO Station.

G. Planned Conditions for Transportation Infrastructure, including pedestrian, bicycling, transit, and automobile facilities

1. Impacts of Plans on Future Mobility

Recent plans for transportation improvements in the area of influence for the project focus on transit. The planned conditions in Port Credit that will affect the mobility and transportation options for the IOL and CLC sites include transforming the Port Credit GO Station into a Regional Mobility Hub, developing Light Rapid Transit on Hurontario Street, implementing a Higher Order Transit on Lakeshore Road, and expanding/connecting the cycling network in Mississauga.

2. Port Credit Mobility Hub (PCMH)

Metrolinx Big Move identifies the Port Credit GO Station as a Gateway Mobility Hub, acting as a major transit station area associated with an urban growth centre. The Port Credit Mobility Hub (PCMH) study issued by Metrolinx identifies development targets and patterns required to support the Mobility Hub designation. The PCMH requires the implementation of:

- Light rapid transit (LRT) on Hurontario Street
- Higher Order Transit on Lakeshore Road
- Improvements to pedestrian and cycling networks to enhance local connection and access.

The primary study area for Inspiration Port Credit is outside the immediate zone of influence of the PCMH planning area. However, the PCMH will have a major influence on the IOL and CLC sites and improving the cycling, pedestrian and local transit connections to the PCMH will be important to achieve the sustainability objectives of the Port Credit area (see Section II: Land Use).

3. Hurontario Street Light Rapid Transit

Plans for an Light Rapid Transit (LRT) facility extending from the Brampton GO Station to Port Street, at the north edge of the CLC site, will greatly influence development in the study area. In Port Credit, the facility is proposed to end at Port Street and Elizabeth Street. This will provide direct access to the CLC site, and is within 650 m of the IOL lands. Although funding has not yet been allocated to constructing this LRT line, plans have progressed for the future of this line.

The LRT line is proposed to run along Hurontario Street to Port Street and head west of Hurontario Street to Elizabeth Street. The plans include dedicated LRT lanes along the entire length of the corridor. The boulevard cycling facility on Hurontario Street will be maintained, unless the road is reconstructed

Future Regional Transit Mobility



Source: Stoss + Dillon, 2012



and an opportunity to develop on-road facility is presented. The preliminary design for the corridor is illustrated on the previous page.

With the implementation of LRT, the person carrying capacity of the Hurontario Street corridor will increase by 2,000 to 2,300 persons/hour per direction. This is an increase of approximately 80% over existing levels. Key intersections on Hurontario Street are expected to continue to operate above capacity, even with the LRT facility in place. As the City works on the design and plan for the LRT alignment, options for the location of the LRT station at Port Street and Elizabeth Street are being considered.

Options for station location are being explored in regard to opportunities and constraints related to the long term development and use of the area. Potential alternative locations include siting the station along Stavebank Road South, adjacent to the CLC site. This option provides opportunities for incorporating the LRT station into the parklands, integrating it with the public realm, and would provide a closer access to the waterfront. It would also give the opportunity for creating a great destination space with a high level of urban design and streetscape (e.g. the LRT station could be integrated with the public space and the future development on the CLC site). This option might require the relocation of the current parking lot at J.J. Plaus Park and the elimination of some of the trees. The loss of trees could be compensated if portions of the current parking are converted into parklands. The needed parking space could be addressed as part of the CLC site development. IPC will explore this option with the CLC master planning team, the landowner, the City and the LRT design team.

Extending the LRT line to the IOL site is another opportunity to consider. This option will provide opportunity for creating a compact, transit oriented community with reduced parking standards and will provide enhanced access to the site and potential new public spaces and parkland. In addition,

this option would address potential growth in traffic on the IOL site and its effects on an already congested Lakeshore Road. IPC will also explore this option with the landowner, the City and the LRT design team.

4. Lakeshore Road Higher Order Transit

The Big Move by Metrolinx contains a project in the 15 Year Plan referred to as the Waterfront West Rapid Transit Project. The Waterfront West line is proposed to run from Port Credit GO Station to Union Station in Toronto. This will increase the person-carrying capacity of Lakeshore Road. The project does not have funding yet but is part of Metrolinx' 15 year plan and is identified in the City's Official Plan.

5. Mississauga Cycling Master Plan, 2010

The 2010 Mississauga Cycling Plan outlines a strategy to develop over 900 kilometres of on and off-road cycling routes in the city over the next 20 years including the existing network. Cycling demand in Port Credit is among the highest in the City due to its active transportation friendly environment and its location along the Waterfront Trail. As such, addressing cycling demands to, and within, a major destination like Port Credit is a priority initiative.

Some important elements of the Cycling Plan include:

- Lakeshore Road proposed as a Primary On Road Cycling Route. Hurontario Street identified as a Special Study Area, pending the Hurontario Main LRT Study
- Assessment of the Hurontario corridor has identified that connection from Lakeshore Road to the QEW is possible due to existing boulevard facilities and lower traffic volumes south of Minoela Road. Cycling facilities along Hurontario Street will be determined in conjunction with the Hurontario-Main LRT Study
- Assessment of the Lakeshore Road corridors has determined that a wide

Port Credit Planned Mobility



Source: Stoss + Dillon, 2012

	Go Rail		Bus Stops
	LRT		Bike Routes
	Bus		Pedestrian Routes
	Waterfront Trail		Primary Vehicular Routes
	Proposed Primary on-road routes		LRT
	Proposed Secondary Bicycle routes		
	Existing on-road shared use lane		
	Existing off-road multi-use trail		

curb lane with sharrows (painted on-road cycling arrows to indicate shared auto and cycling lanes) is the near term preferred application through the areas with a narrow right of way – from Broadview Avenue to Greaves Avenue

- Long term Lakeshore Road functional plan proposes on-street bicycle lanes throughout the corridor, this could be made possible by an assumption that on-street parking (on one side of the road) through Port Credit may ultimately be removed and may be replaced with off-street parking lots / garages
- Major improvements in the continuity of the Waterfront Trail including a portion west of Front Street leading past the Imperial Oil Lands

6. Parking Availability

The Canada Lands Company is currently undertaking a study and preparation of a plan for the CLC site included in Inspiration Port Credit. The CLC study includes some parking considerations. In addition, the City of Mississauga is working on a parking study that will influence parking in the entire project area. This study has not yet been released. Once it is available, it will be considered in the Inspiration Port Credit plans. It is anticipated that with growth in Port Credit, parking demand will increase in the area and more parking may be required in the long term. Changes to existing parking along Hurontario Street and Lakeshore Road due to the implementation of rapid transit as well as on-road bicycle facilities may also increase demand for parking elsewhere in the area. There may be opportunities to consolidate some of the future parking needs of Port Credit in the IOL lands or CLC site. These opportunities are to be explored in the plans for IPC.

During Summer 2012, the City of Mississauga implemented a pilot project named “Port Credit Cultural Node”, a

community/City initiative in which restaurants along Lakeshore Road in Port Credit built outdoor decks onto the sidewalks and the street parking located on their frontage. According to the City of Mississauga staff and comments received during the public events, this experiment was very well received by the business owners involved, the public and other stakeholders, as these decks helped to extend the public realm and walkable space onto the road.

H. Gaps, Opportunities and Issues to Consider

1. Gaps in Existing Information

- The Parking Study currently being conducted by the City has yet to be released. The results of the study, if available during the course of IPC project, will need to be incorporated into the development concept
- Detailed transportation surveys have not been conducted. Secondary information and observations have been used for this background report. Detailed transportation studies will need to be completed as part of the development application process following the Official Plan requirements
- The LRT study is still underway and final recommendations have not been released. The final design and configuration of the LRT terminus station is Port Street will need to be incorporated into any future development application for the CLC site

2. Opportunities and Issues to Consider

Based on the study of existing and planned transportation conditions, a number of opportunities and issues need to be considered for the development of the CLC and IOL sites. These opportunities and issues are summarized in the following table.

CLC + IOL Site Opportunities and Issues: Mobility

Potential

Enhancement

Opportunity

Issues to Consider

Create communities that have an efficient road network and are well connected

- Opportunity for visitors to access the Port Credit Waterfront and the CLC site via rapid transit
- Create a fine grid road pattern in new developments
- Additional Credit River crossing for pedestrians/cycling or LRT or vehicle as part of strategy to improve mobility
- Connectivity under Lakeshore Road at the Credit River, on the west side, could be done through a Parks Master Plan

- Congested roadways during peak hours (arterials and collectors)
- Limited north-south road crossings of Credit River, GO Rail line and QEW for all modes of transportation

Enhance multi-modal transportation connectivity along Lakeshore Road

- Balance Lakeshore Road's dual function as community main street with its important role in east-west connectivity
- Alternative parking considerations may provide opportunities for active transportation on Lakeshore Road

- Lakeshore Road is the only east-west road that crosses the Credit River south of the QEW, and maintaining it as a four lane roadway during peak travel times is a transportation priority. Vehicular access/connectivity is important to the economic vitality of the area

Create communities that is pedestrian and cycling friendly

- Improved active transportation along the waterfront as well as the potential waterfront trail expansion along the CLC site will help facilitate improved mobility to the study area
- Provide facilities (travel and parking) for commuter cycling
- Enhancement of pedestrian and cycling experience along Lakeshore Road and up to the GO station

- Gap in dedicated east-west pedestrian and cycling trail along the waterfront
- Continuous cycling connections (east-west and north-south) throughout the study area are limited

Develop Port Street as a complete street

- Role of Port Street as a multi-modal transportation corridor (Transit, auto, active transportation, public realm) needs to be considered as a primary design feature in the plan

- Potential LRT design along Port Street needs to reflect complete street objectives

CLC + IOL Site Opportunities and Issues: Mobility

Potential

Enhancement

Opportunity

Issues to Consider

Create communities that are transit supportive and take advantage of current and future transit investments

- Light Rapid Transit (LRT) provides opportunities for connections, access and supporting the waterfront and Port Credit as a destination. It also provides an opportunity to shape the development of the CLC and IOL sites, creating a focal point for the city
- The Port Credit GO Station is identified as a mobility hub, which will influence mobility in the study area
- CLC Site is within walking distance to the proposed LRT station which provides opportunity for the encouragement of a transit oriented community with higher density and minimal parking requirements
- LRT can be integrated with the public realm at CLC lands
- Considering expanding LRT to IOL site to maximize the benefits of this significant public investment and service a larger population
- Minimal transit in place (IOL site) and limited connections to transit facilities
- The planned terminus of the LRT will not address potential growth in traffic on the IOL site and alternatives will need to be found to improve mobility connections to this site, particularly given the east-west roadway constraints identified above
- Terminus LRT station across the CLC site will require additional Right of Way from the site and will have implications on the configuration of the CLC site.
- Loss of waterfront parkland for LRT accommodation

Implement Transit Demand Management

- Traffic Demand Management (TDM) (e.g. car share, BIXI bikes or parking share) will be a key area of focus to provide sustainable mobility
- Public education campaign might be needed to promote the benefits of TDM and to get residents, businesses and employees engaged

Create opportunities for marine transportation

- The potential to consider marine transportation has been raised in the community in the past and is an opportunity to be explored
- Issues of cost and demand will need to be explored. Feasibility of marine transportation is unknown

Provide improved and efficient parking opportunities

- Opportunity to consider parking consolidation in both CLC site and IOL lands as the community has indicated that there is not enough convenient parking
- A parking strategy will need to be carefully developed for the Port Credit District based on the findings of the City's Parking Study

References: Mobility

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VI. UTILITIES + INFRASTRUCTURE

VI. Utilities + Infrastructure

A. Introduction

Redevelopment within an urban setting requires municipal infrastructure to operate efficiently and effectively. Undersized sewers and watermain not only pose an inconvenience to local users but also present potential issues in the form of flooding which can lead to human health issues as well as property and environmental damage. One must examine the potential municipal infrastructure constraints and planned upgrades as initial input to development decisions. Further assessment of opportunities and costs also needs to be completed once development options are identified. Based on input from City of Mississauga and Region of Peel staff, this section documents probable issues and opportunities related to municipal infrastructure.

B. Policy Framework

1. Region of Peel Official Plan

The Region is responsible for the supply and distribution of water, the collection and disposal of sanitary sewage and waste management collection and disposal. New development requiring additional or new water supply and/or sanitary sewer services must finalize a Servicing Agreement with the Region prior proceeding with development, confirming the responsibility for, and ability to provide, appropriate facilities for water supply and sewage disposal.

2. City of Mississauga Official Plan

The new 2011 Mississauga Official Plan aims to direct growth to key locations to support and utilize existing and planned transit and other infrastructure investments. In particular the OP requires that existing and planned infrastructure is sufficient to support

any proposed development. Development proposals that exceed existing and planned engineering services, transit services and community infrastructure may be refused (Policies 5.1.9 and 5.5.12). The City's OP contains a suite of policies regarding water conservation and stormwater management., including:

- The City will require that development proposals use stormwater best management practices and that implement water conservation measures (Policies 6.2.7, 6.5.1.2, 6.5.1.3, 6.5.2.1 and 6.5.2.2).
- Drainage and stormwater management facilities design and location will respect the Natural Area System and will include naturalization and will be installed for the safety of residents and to protect infrastructure and properties. These facilities must conform to City standards, policies and guidelines and should be developed and implemented in consultation with the CVC and Provincial Government (Policies 6.5.2.3, 6.5.2.4, 6.5.2.5, 6.5.2.6 and 6.5.2.7).
- Drainage and stormwater management facilities design will enhance the natural and visual landscape and provide recreational opportunities, when possible (Policy 6.5.2.8).

3. Credit Valley Conservation

The Credit Valley Conservation (CVC) has developed a series of stormwater management guidelines and criteria aimed to improve the stormwater management practices within the CVC coverage area. The CVC's Stormwater Management Criteria (August 2012) and the Low Impact Development Stormwater Management Planning and Design Guide (2010) are tools to help developers, consultants, municipalities and landowners understand and implement sustainable stormwater planning and practices in the CVC watersheds. It is recommended that

development proponents consult with CVC and municipal staff to confirm the criteria and approaches to be used. The Stormwater Management Criteria recognizes that the use of “Low Impact Development (LID) can mitigate the impacts of increased runoff volume and stormwater pollution ... by managing stormwater as close to its source as possible.”

In order to achieve the CVC Stormwater Management criteria with LID, the following conditions must be met:

- The local municipality must endorse the use of Low Impact Development - Stormwater Management practices.
- Designs are undertaken in accordance with the recommendations of the LID Guide
- For rainwater harvesting and green roof systems, calculations of runoff reduction must consider winter operation.
- For infiltration practices, the depth to water table, existing soil infiltration rates, and proximity to vulnerable groundwater resources must be considered as part of the planning and design processes.
- Pre-treatment for infiltration facilities (e.g. via oil grit separators, filter strip, forebay,

etc.) may also be required depending on the source of water to be infiltrated.

- Overflow or underdrain mechanisms must be provided to ensure that infiltration, attenuation, and storage systems do not put properties and structures at risk due to backups and flooding.

4. Going Green Mississauga/ Green Development Standards

The Green Development Standard (GDS) indicates that “all site plan applications will be required, where appropriate, to incorporate technologies that maximize the natural infiltration and retention of stormwater through site development.” GDS requires the use of LID technologies to retain stormwater on site as well as the use of “Stormwater Best Management Practices” that can include implementation on public lands, subject to agreement with the City. LID measures can include bio-retention, rainwater harvesting, permeable pavement, grass and dry swales and green roofs.

The Standard also includes guidelines for landscaping and the use of soft landscape

Existing Sewer Information: Area Contributing to Sewer Flows within the Lakeshore Road West System



Source: Region of Peel, Lakeview and Port Credit Sanitary Sewer Improvements Class Environmental Assessment

material. Further, the GDS also indicate to follow CVC/TRCA Sustainable Technologies for the Low Impact Development Stormwater Management Planning and Design for other measures not included in the GDS.

C. Existing Conditions

1. Wastewater

As confirmed by the Region of Peel's Wastewater Program Planning Department, wastewater (sanitary) servicing for both the IOL lands and CLC site would be directed to the Lakeshore Road West wastewater system (375mm diameter) and ultimately the Lakeview Water Treatment Plant. Capacity of this system is to be verified by the Region of Peel based on the proposed site's demand. Currently, the Region is updating their Wastewater Master Plan to reflect projected sanitary sewer system needs to the year 2031. A pumping station, Beechwood Pumping Station, will be built in the next year.

Sanitary flows, from the areas south of Lakeshore Road West, are conveyed to the Front Street Pumping Station and then conveyed ultimately to the Beach Street Sewage Pumping Station. Currently, the Port Street Pumping Station has capacity issues; however, the Beach Street Sewage Pumping Station, which receives the final loads, has capacity issues. Therefore, the Region will not approve any new development serviced by the Beach Street Pumping Station until the Beechwood Sewage Pumping Station is constructed (expected in 2014 or 2015). This pumping station is currently being designed and once completed is expected to have capacity for the projected population to the year 2031 (based on Growth projections and the provincial "Places to Grow" as allocated in the City Official Plan). Any future

development in the IOL lands and CLC site implies an increase in population and employment will require the Region of Peel's approval, as the Region will need to make sure that there is enough wastewater servicing.

2. Potable Water

Potable water (watermain) supply for the CLC and IOL lands will be supplied from the Lakeview Water Treatment Plant through the Lakeshore Road West watermain system. The current watermain on Lakeshore Road West measures 300mm in diameter. The Region of Peel's Water Program Planning Department has confirmed that the Region has plans for a new watermain to be constructed in 2016 along Lakeshore Road West from Wesley Ave (across from the current Esso gas station at the IOL lands) to Enola Avenue east of the IOCL lands study area bit fronting the CLC site.

The Region of Peel has also confirmed that no new watermain construction is scheduled fronting the IOL lands but that the system can be upgraded should the site demands warrant it. The map on page 129 provides existing water system information as well as highlighting scheduled new and replacement watermain work.

3. Storm Sewer System and Stormwater Management

Stormwater from all local roads in Port Credit is collected and conveyed to Lake Ontario via storm sewers. The City of Mississauga Transportation and Works Department confirmed that there would be no capacity in the storm sewer systems within the roadways surrounding the IOL site. Thus, stormwater from the development will need to be managed on-site. There is currently a 120 mm diameter storm sewer system located within the IOL property.

This system once served as an outlet

Existing Water System



Source: Region of Peel Public Works Department

to the Imperial Oil Limited lands, located on the north side of Lakeshore Road West (redeveloped as big box retail) but is now inactive. This existing system drains into a pond within the IOL property. It is assumed this system will need to be removed to accommodate the proposed development scenario due to its mis-aligned location and that a new system including a new outfall will need to be constructed which will direct stormwater flows to Lake Ontario.

Stormwater minor system flows can be collected internally and discharged, post quality treatment, to Lake Ontario. Quantity control is not required; UV treatment (to eliminate E.Coli) is also not required. An overland flow route will need to be established through the IOL and CLC developments to ensure major storm flows are directed away from developed properties and into Lake Ontario.

The Transportation and Works Department of the City of Mississauga confirmed that the City is currently updating their Stormwater Management Guidelines to reflect those stipulated within the Credit Valley Conservation Stormwater Management Criteria (August 2012). For quality control, the City encourages Low Impact Development measures and they are currently in use within the City (see below examples being implemented in the Lakeview District). These measures can include one of, a combination of, or all of the following:

- Permeable Pavement
- Bio-retention Swales
- Dry Swales
- Rainwater Harvesting
- Infiltration Trenches
- Green Roofs

D. Gaps, Opportunities and Issues to Consider

The following opportunities and issues have been identified for the development of the IOL lands and CLC site:

1. Gaps in Existing Information

- The Region of Peel advised the team that they can only identify any servicing deficiencies once IPC provide them with expected demands and flow rates, which are both generated by total population. Therefore, this lack of feedback from the Region represents a gap in information which can be rectified once the development concepts have been completed.

2. Opportunities and Issues to Consider

- A number of opportunities and issues need to be considered for the development of the CLC and IOL sites. These opportunities and issues are summarized in the following table:

CLC + IOL Site Opportunities and Issues: Utilities + Infrastructure

Potential Enhancement	Opportunity	Issues to Consider
Enhance the natural environment through the use of sustainable infrastructure	<ul style="list-style-type: none"> • Use Low Impact Development (LID) Measures to address run-off quality and quantity; LID measures can include: Permeable Pavement, Bio-retention Swales, Dry Swales, Rainwater Harvesting, Infiltration Trenches, Green Roofs • Provide an improved network for better connectivity for cars, cyclists and pedestrians 	<ul style="list-style-type: none"> • An overland flow route will need to be established throughout the developments to ensure major storm flows are directed away from properties and into Lake Ontario
Efficient use of the existing and planned infrastructure	<ul style="list-style-type: none"> • Use water consumption reduction strategies • Coordinate IPC recommendations with the Region's on-going update of the Wasterwater Master Plan. • Updates to the water supply system can be made if needed by the development 	<ul style="list-style-type: none"> • Development must be coordinated with regional infrastructure updates for water and wastewater

References: Utilities + Infrastructure

City of Mississauga. 2011. Mississauga Official Plan.

City of Mississauga. 2012. Green Development Standards – Going Green Mississauga

Credit Valley Conservation and Toronto and Region Conservation Authority. 2010. Low Impact Development Stormwater Management Planning and Design Guide

Credit Valley Conservation Authority. August 2012. Stormwater Management Criteria.

Region of Peel. 2007. Lakeview and Port Credit Sanitary Sewer Improvements Class Environmental Assessment Public Information Centre #2 Display Boards

Region of Peel Water Program Planning Department. 2012. Personal correspondence

Region of Peel's Wastewater Program Planning Department. 2012. Personal correspondence

Region of Peel. 2012. Official Plan Working Draft Office Consolidation.



VII. ECONOMY

VII. Economy

A. Summary

This chapter is intended to provide an economic and real estate market context from which to consider potential redevelopment scenarios for two large-scale development sites known as the Imperial Oil Limited (IOL) lands and the Port Credit Harbour Marina site owned by Canada Lands Corporation (CLC), in the Port Credit area of the City of Mississauga, Ontario.

Within the past several years, the City of Mississauga has commissioned reports, studies and strategic plans of considerable breadth and depth to help further its mandate to grow the City’s economy, plan for smart and orderly growth, and enhance the quality of life for residents, workers, students, and visitors. Data and findings were culled from the recent economic development strategy and urban planning reports’ most relevant to strategies to promote the continued economic growth of Port Credit.

The City of Mississauga has seen enormous growth in population within the past several decades. A steady, albeit somewhat less rapid, growth trend is projected to continue both for the City and the Greater Toronto Area (GTA). This population growth to date has been coupled with impressive gains in the size of the City’s labor force and jobs in

Mississauga. The City’s strategic assets fueling this growth include its location within the GTA (the third largest central business district in North America), Pearson International Airport (Canada’s busiest) within City borders, excellent highway access connecting the City to vast markets in the U.S. and Canada, world-class academic institutions, a highly educated and diverse workforce, pro-business leadership in municipal government, and quality of life in the City’s diverse neighborhoods.

In the report “Facts + Findings: Background for the Development of Mississauga’s Economic Development Strategy”, economic advisors Millier Dickinson Blais, Inc. cite the City’s “pronounced economic, cultural and demographic shifts” within the past decade, and highlight its projected continued growth and that of the GTA and province (see table below).

Existing urban growth boundaries in the GTA are putting development pressure on the GTA to become more urban to accommodate projected growth. In that context, the City of Mississauga has become a maturing city in as much as there are limited additional areas within City boundaries remaining for greenfield development to accommodate its share of projected demand growth for housing and employment centers. The City is thus wisely preparing for the densification of its existing

Historical and Forecasted Population Growth, 1991 to 2031			
	Mississauga	Greater Toronto Area	Ontario
2009	730,000	--	13,062,000
2011	738,000	5,800,000	13,335,000
2021	775,000	6,530,000	15,038,000
2031	812,000	7,180,000	16,906,000
% Change, 2011 to 2031	+ 10%	+ 24%	+ 27

Source: *Facts and Findings: Background for the Development of Mississauga’s Economic Development Strategy*,” Millier Dickinson Blais, June 2010

neighborhoods with an emphasis on leveraging transit access, encouraging vertical mixed-use development, enhancing quality of life amenities, while spurring local job creation.

Port Credit is the historic center of the City's scenic Lake Ontario waterfront. Although it is a relatively compact and low- to medium-density area, its access to commuter rail (under 30 minutes by train to downtown Toronto), network of parks and trails along the Lake and Credit River, quality housing choices located close to amenities and services, and plentiful restaurants make it an attractive regional destination and a residential community of choice for an increasingly affluent, diverse and urbane professional workforce. Its housing prices are currently among the most expensive in the City, and its urban village waterfront lifestyle within easy reach of Downtown Toronto position Port Credit well to compete for residents, workers and visitors.

The City has identified the need to increase local employment opportunities in the Port Credit area. The City's Planning and Development Committee report, "Draft Port Credit Local Area Plan", dated February 7, 2012, cites the particular need to increase employment growth in the Port Credit Area Community Node and notes that "the Community Node's current population to employment ratio is 3:2 to 1 exceeds the minimum target of 2:1. As such, additional employment is required.

Large commercial and industrial business growth will continue to concentrate in areas to the north of Port Credit, closer to Pearson airport and network of expressways, for reasons of logistical advantage and because land patterns, zoning and industry clusters elsewhere in the City can accommodate such uses in a way that the more peripheral village-like community of Port Credit cannot and should not accommodate.

The City's economic development strategy identifies several key factors that represent opportunities for growth in Port Credit :

- Projected sustained population growth in the City, driven largely by a steady influx of immigrants into the GTA
- Increased employment growth within the City particularly in health care, service-based, information and communication technologies, manufacturing and knowledge-based industries and professional services
- The City remains a significant importer of workers from outside the City in several growth sectors
- Academic institutions continue to broaden program offerings and expand physical campuses in vibrant urban centers where students and faculty want to locate
- An aging population citywide includes "empty-nesters" and others who are expected to downsize from single-family homes to condominiums, rental apartments or townhouses, particularly in a transit-oriented, amenitized and walkable waterfront community setting.

B. Introduction

The City of Mississauga has established a goal of promoting redevelopment of the two subject large-scale but underutilized lakefront properties in Port Credit into mixed-use, regional visitor destinations that create jobs while also providing quality housing choices, world-class public parks and open spaces, and local residential and business support services.

The stakeholders recognize the unique value of the site's location in the City's central Lake Ontario waterfront, the walkable village-like character of the Port Credit district, and the natural features of the Credit River valley. The attractiveness of these redevelopment areas has been enhanced with more than \$27 million of recent City capital investment in new and upgraded public parks and recreational facilities along the Port Credit lakefront and riverfront areas.

C. Policy Framework

1. Mississauga Economic Development Strategy 2010:

The City's economic development strategy seeks to better leverage its economic, academic and cultural assets to enhance productivity and innovation throughout the City, and to respond to the demands of the globally competitive knowledge economy.

The IPC sites can play an important role in enhancing the quality of life attributes of Port Credit and the City by providing new, well-planned and designed civic waterfront places, greater housing choices within a walkable village setting, and expanded transit mobility. Cities that successfully compete to attract and develop workforce talent and knowledge-based company investments will be those that can provide a quality of life that balances the amenities and services of urban living with easy and enjoyable access to the region's natural environment.

Other strategic objectives that are relevant to the future economic growth in and around the IPC sites include: ensuring that the City maintains a supportive business environment to promote small business and entrepreneurial growth; creating a "compelling global brand" that highlights the City's appealing quality of place; local assets such as the lakefront and riverfront; and the strengths of the City's business community, its support services and infrastructure. These actions would also build upon the success in establishing a diverse and talented workforce, and seek to attract new business investment, access to capital and talented workers.

In addition, the strategy seeks to strengthen Mississauga's culture of innovation, attract additional post-secondary institutions, and collaborate regionally on sustainability and smart growth initiatives.

Draft Port Credit Area Plan

The draft Port Credit Local Area Plan makes clear that additional employment opportunities are needed within the Community Node.

The Plan notes that the Community Node's current population to employment ratio of 3.2 to 1 exceeds the maximum target of 2:1. Multiple sites adjacent to planned enhanced transit, the lakefront, and/or with relatively large footprints are flagged as potential commercial development sites for new office, retail, maritime, educational, tourism, culture and other job-generating uses. An emphasis is placed on encouraging creative enterprises to locate in Port Credit.

The Mississauga Strategic Plan (2009)

The Strategic Plan established five "pillars for change," all of which inform the economic development framework for Port Credit. The five principles are as follows:

- Direct growth and density to the Community Node and areas within or in close proximity to higher order transit
- Provide a range of housing options by protecting lower density stable neighbourhoods and accommodating higher density forms in the Community Node and along corridors
- Provide for a mixture of uses in the Community Node and enhance Lakeshore Road as a Main Street destination area that serves as a focus for the community
- Cultivating opportunities for innovative and creative business enterprises to locate in Port Credit, capitalizing on existing Community Node's expansive water views, waterfront park and cultural attributes to increase local area employment
- Promoting responsible stewardship through conservation, restoration and enhancement of the natural environment. In addition to the environmental sustainability of this principle, there is the consideration of the proven role that

such place-specific and environmental protection measures can play in real estate value creation for adjacent properties in the Node. Further, such measures reinforce the uniqueness and special qualities of place along the Port Credit waterfront, and thereby enhance Port Credit's position as a competitive community of choice to live, work and visit.

D. Highlights from Key Previous Studies

This section summarizes data and findings from completed plans and studies that provide a framework for this market assessment.

1. An Economic Snapshot of Mississauga

Excerpts from "Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010:

- The City of Mississauga has experienced rapid population growth in the last few decades – a trend that has not abated through 2009, and has outpaced that of the surrounding region and province.
- Mississauga's 2009 population is estimated at 727,102, making it the sixth-largest city in Canada. Its population is estimated to have grown 8.8% between 2006 and 2009. This growth has necessarily been accompanied by massive increases in commercial, residential and retail development and infrastructure provision in recent years.
- Much like the rest of the province, Mississauga's population is aging. The proportion of the population over the age of 45 rose from 31.7% in 2001 to 35.5% in 2006, and the City's Growth Management Strategy forecasts that 40% of Mississauga's population will be over the age of 55 by 2031. Though the City is also slightly younger than surrounding jurisdictions, this still suggests that plans must be made to better accommodate and service an aged population while also developing workforce and skill-replacement strategies to address potential labour force skill shortages in the coming years.
- Mississauga is one of the most diverse communities in Canada; 52.7% of its population is foreign born as of 2006. This is being increasingly driven by persons of visible minority status, which grew by 32.5% between 2001 and 2006 populations based largely on increases in the South Asian, Chinese, Black, Filipino, Arab, and Southeast Asian communities. Immigrants are expected to comprise an increasing percentage of population and labour force growth moving forward. As such, a key consideration for Mississauga is the provision of effective programs to ensure the effective integration of new immigrants into the local economy, particularly those with professional qualifications and advanced education. This will have significant impacts on the future competitiveness and prosperity of the Mississauga economy.
- Mississauga's residents have high rates of educational attainment, outperforming the GTA and Ontario. In 67.2% of Mississauga's population had some form of post-secondary education, while those with a university certificate, diploma or degree accounted for 41.0% of the population. Degrees were concentrated in business, management and public administration and architecture, engineering and related technologies fields.
- The average household income in Mississauga, \$88,162, sits between those of Ontario and the GTA, which suggests relatively even purchasing power and income distribution throughout the region.
- Mississauga's labour force grew by 10.2% between 2006 and 2009, adding more persons than the entire period between 2001 and 2006. The highest proportion of its

labour force is employed in manufacturing, retail trade, and professional, scientific and technical services. The industries showing the greatest growth between 2006 and 2009 were health care and social assistance, construction, arts, entertainment and recreation, real estate rental and leasing, and finance and insurance.

- The unemployment rate in Mississauga has increased to 8.5% in 2009 from 5.3% in 2001; however, it still performs better than the provincial unemployment rate, which stood at 9.0% in 2009.
- By both absolute numbers and percentage growth between 2001 and 2009, the employment composition in Mississauga is driven by four main occupational categories: business, finance and administration occupations (95,140 in 2009); sales and service occupations (91,068 in 2009); trades, transport and equipment operators and related occupations (53,720 in 2009), and management occupations (41,140 in 2006, 45,058 in 2009). These patterns largely mirror the educational composition of the labour force and the industrial composition of the economy, as well as broader shifts towards service-based work throughout the provincial economy.
- In total there are 181,175 residents who both live and work in the City, amounting to 51.8% of the employed labour force. Mississauga exports more workers to Toronto, than any other area, accounting for 24.3% of the Mississauga workforce. These exported jobs are primarily in construction, health care and social assistance, finance and insurance, arts, entertainment and recreation, and public administration. Yet the City of Mississauga still has 31,480 more jobs than persons in its resident labour force, importing jobs from Toronto and surrounding jurisdictions in wholesale trade, transportation and warehousing

and manufacturing. Mississauga should work towards restoring a greater work-live balance, specifically by attracting more employment opportunities for workers in those high-value sectors that commute to work outside of the city.

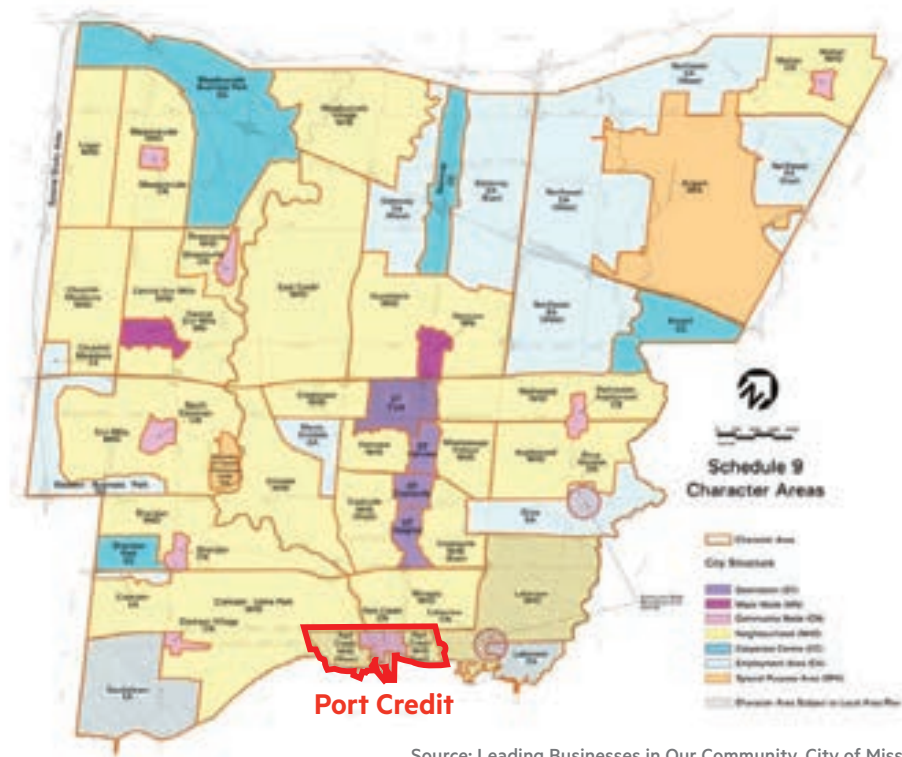
- Workers employed in creative occupations comprised 35.2% of the City's workforce in 2009, a growth of 14.5% from 2001. This is largely on par with the province as a whole. The creative occupations with the highest rates of growth between 2001 and 2009 were judges, lawyers, psychologists, social workers, ministers of religion and policy and program officers, followed by professional arts and culture occupations, and teachers and professors.
- Though creative occupations are achieving greater importance with the rise of knowledge-based industries and professional services in advanced regional economies, their estimated growth rate in the City between 2001 and 2009 (14.5%) lagged that of both service-based (23.7%) and manufacturing related (15.1%) occupations.

2. Port Credit Submarket

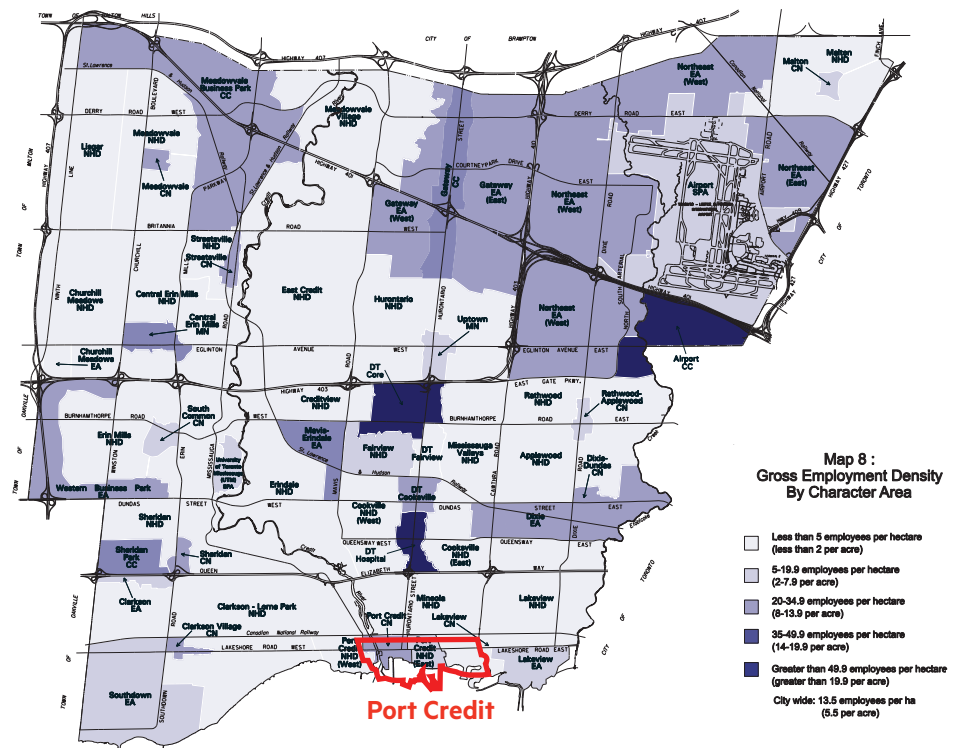
The drivers of demand for new development on the sites are based upon an analysis of regional assets, real estate and economic trends, and site-specific attributes. Overall strengths include:

- Unique waterfront orientation, including public parks and trails along Lake Ontario and the Credit River.
- Major transportation assets, including road, commuter rail and international air transport networks.
- An educated and diverse regional employment base.
- The flexibility to accommodate a range of uses that want proximity to a high quality-of-life urban environment.

City of Mississauga: Geographic Districts and Character Areas



City of Mississauga: Employment Density by Character Area



For both the IOL land and CLC site, scale is clearly an asset. The large, IOL brownfield site with frontage along Lake Ontario offers a flexible range of development parcel sizes and configurations. The City of Mississauga has recently constructed a number of waterfront park improvements along the lakefront edge of the IOL site and elsewhere along the district's waterfront.

These new public open spaces have created unique recreational amenities that are a part of the citywide destination attraction. As pre-development public investments, they have undoubtedly enhanced the overall real estate value of the adjacent development sites and their environs.

Opportunities for new stronger vehicular and pedestrian connections between both the IOL lands and CLC site and the surrounding neighborhoods will positively affect the marketability of the sites and enhance the experience within this burgeoning and increasingly public waterfront district in Port Credit. These attributes, enhanced by distinct urban design, open spaces, riverfront, and sustainable elements, lay a strong foundation for supporting the overall goal of enhancing Port Credit's role as a regional visitor destination, and a community of choice within the Greater Toronto Area (GTA) for working, studying and living.

At the same time, development of the sites faces challenges. These include:

- Potentially high site improvement costs at IOL to remove or otherwise remediate remaining contaminated soils and groundwater, and install an entirely new network of infrastructure to support new development.
- IOL site's extraordinary land costs need to be offset by the revenues from onsite real estate development. This may result in proposed development heights and densities beyond the levels for which there is community consensus.

- Balancing the demand for new residential units in Port Credit with the public policy goal to preserve existing and spur new local area jobs.

Land use planning studies such as the draft Port Credit Local Area Plan (2012 draft) and the Inspiration Port Credit initiative have not established public policy objectives for future growth in Port Credit that may influence permissible uses, building bulk and heights, modes and routes of transportation and the public realm. These include the following:

- Unlocking the value of Port Credit's unique urban waterfront village character to create economic growth, including quality jobs and increased support services for locals
- Enhance the role of Port Credit as a regional destination for leisure and tourism visitation
- Improving access and mobility around the region, particularly through LRT investment
- Providing greater public access to the lakefront and riverfront, in part by expanding public parklands and creating new trailways and bikeways
- Enlarging the footprint of academic institutions in and around Port Credit with a focus on creative occupations, applied research, technology, innovation and other projected regional growth sectors
- Promoting neighborhood sustainability and livability
- Ensuring the efficient provision of public services by supporting the repositioning of underutilized lands and promoting sustainable new communities on former brownfield sites
- Preserve unique natural and cultural assets.

While the diagrams on page 143 from the Downtown21 Master Plan refer to downtown Mississauga, they help to illustrate the future potential role that Port Credit can play in the

City and regional economy. This planning analysis highlights the relative strengths and weaknesses of Port Credit's relationship to the City's economic nodes, critical transit and transportation networks, and unique natural systems and features.

Among wards in Mississauga, Port Credit will not likely serve as a major corporate headquarters location (where proximity to an established business hub and Pearson International Airport would be a critical site selection factor). However, Port Credit is well situated to capture smaller scale professional service businesses that benefit from the mix of regional and neighborhood-oriented shops, restaurants and entertainment, extensive open space amenities, educational resources, and a range of quality housing choices.

Increased transit options and less dependency on private car trips to live and work comfortably in Port Credit will help to attract more young professionals and empty nesters to live there. Port Credit is also well positioned to enhance its identity as a destination waterfront that offers the best qualities of urban living and at the same time provide an immediate connection with nature along the district's expansive public lakefront and riverfront.

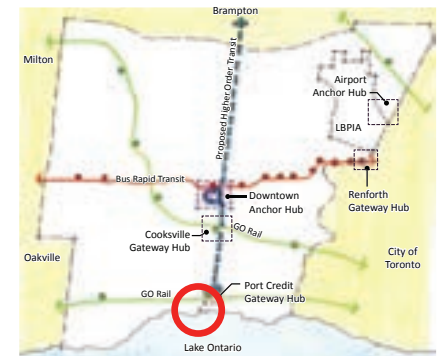
The region supports a diverse employment base. Location quotients compare the distribution of employment in one geographic area with the national average distribution. When the ratio exceeds one, it means that the region has a greater concentration of employment in the particular industry, which indicates that it is a base industry. As illustrated in the following charts, Mississauga has strong base employment in wholesale trade, transportation and warehousing, management of companies and enterprises, and finance and insurance.

City of Mississauga: Downtown21 Master Plan

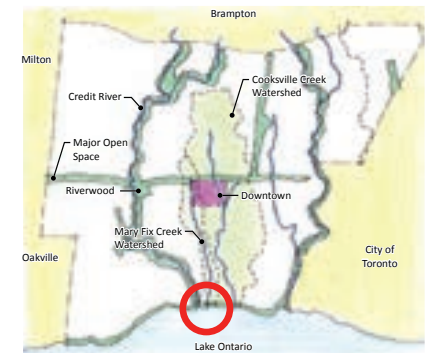
City Growth



Transit



Natural Environment



Source: City of Mississauga: Downtown21 Master Plan



E. Real Estate Industry Sector Analysis

The following section provides additional data from an analysis of individual market sectors.

1. Office

Port Credit's location a considerable distance from the City's established corporate business locations and airport strongly suggest that Port Credit will not likely serve as a major corporate headquarters location. However, Port Credit is well situated to capture smaller scale professional service businesses that benefit from the mix of regional and neighborhood-oriented shops, restaurants and entertainment, extensive open space amenities, educational resources, and a range of quality housing choices.

Future new real estate development in Port Credit can capture market demand for smaller commercial office space (typically located on a second or third floor of a mixed-use mid- to high-rise building) serving creative occupations such as architects, engineers, lawyers, accountants who do not need to be in the central business district of Downtown Toronto or even City Centre, but see value in the option of locating their small business in compact, mixed-use, transit-connected waterfront downtown environment, where they may also choose to live.

2. Industrial

Mississauga has been a regional leader in capturing growth of industrial employment across a broad range of business categories. These uses tend to cluster in designated employment districts in the northerly half of the City, more proximate to Pearson International Airport and the network of regional arterial roadways.

For purposes of this assessment, it is assumed that the scale of future industrial use on the IOL and CLC sites will be very limited. At both IOL and CLC locations, there may be potential for future industrial arts or other high-performance standard fabrication activities associated with creative occupations. From a highest and best use perspective of future real estate development scenarios at these sites, industrial is among the least likely uses to provide reasonable return on investment, given the high land costs of these sites that need to be offset by project revenues, the relatively low achievable rents from industrial sector tenants, as well as the "opportunity cost" of not maximizing the locational value of these sites situated within an established residential community on the Lake Ontario waterfront.

3. Residential

Residential development companies are pursuing new construction projects in the Port Credit market to meet demand from young professional couples and singles, empty nesters, and others for whom the Lakefront, walkable mixed-use community and quick access to Downtown Toronto via GO train are the major draw. The most comparable recent newly constructed residential developments have been the roughly 800 units built by the FRAM Building Group, which included a range of housing options (townhouses, mid- and high-rise condominiums) for which there was a strongly positive private market response. FRAM's most recent development in Port Credit, North Shore, a 22-storey luxury condominium development along the Lakefront was 92% sold pre-construction start. Interestingly, some 80 percent of purchasers of FRAM residences come from within a 5km radius of Port Credit, and are typically a suburban resident commuting for work to Downtown Toronto or a recent empty nester.

FRAM is planning a second residential high-rise at Ann Street. Centre City Capital Ltd. is developing a luxury condominium at Elizabeth Street and Lakeshore Road East. And another firm is in the pre-development phase for a new residential condominium tower along Hurontario Street. Among the real estate developers contacted who are active in the Port Credit and Mississauga markets, all expressed a strong interest in the development opportunities at the IOL lands and CLC site, and their potential for positive impact on long-term property value in Port Credit.

Condominium sales prices among FRAM's townhouse, mid-rise and high-rise buildings in Port Credit are in the range \$500-550 per square foot (PSF) for mid- and high-rise units. Average unit size of townhouses is 2,500 square feet, with units ranging in size from 1,300 to 6,300 square feet. Average mid- and high-rise condo units are 1,100 square feet, compared with average unit sizes of approximately 650 square feet at Absolute World condos at Mississauga's City Centre, and downtown Toronto market condo average size of approximately 630 square feet.

Existing residential rental apartment rents in the Port Credit fall generally into two categories: older multi-family rental apartment buildings where rental rates are subject to rent control regulations, and more recently constructed, investor-owned condominium units that are re-rented without regulatory restriction. The older regulated rental units rent on average for approximately \$1.00 per square foot per month, or \$1,000/ month for a 1,000 square foot unit. Condominium unit rental rates average approximately \$2.50 per square foot per month, or \$2,500/ month for a 1,000 square foot unit.

4. Retail

Mississauga is a host to Square One Shopping Centre, one of the largest shopping malls in Canada, with over 1.6 million square feet of retail space and more than 360 stores. The Centre is anchored by Bay, Sears, Wal-Mart, and in spring 2013, Target department stores, as well as Empire Theatres. On average, the mall serves over 24 million customers each year. Square One is located adjacent to the interchange of Highway 403 and Hurontario Street, about 5 miles from Port Credit.

While Square One is certainly a great economic asset for the City, like other mega regional malls, it siphons away retail customer spending from traditional downtown retail corridors such as along Lakeshore Road in Port Credit. To that end, it is unlikely that there is sufficient additional retail demand in or near Port Credit to support an additional location in Port Credit of the national chain retail stores already located within Square One.

Given that citywide perspective on the retail marketplace, the Port Credit BIA and developer and property owners focus on attracting and retaining retail merchants that provide quality goods and services for which there is unmet local, and to a lesser extent regional, demand. The commercial retail mix in Port Credit today consists of numerous food and beverage establishments that cater to customers from Port Credit, elsewhere within Mississauga and beyond, as well as small

format neighborhood goods and services. Retail rents range broadly between \$15 and 40 per square foot net depending upon location and quality of space. Retail vacancy rates historically have ranged between 2-4%.

F. Gaps, Opportunities and Issues to Consider

The following opportunities and issues have been identified for the development of the IOL and CLC lands:

1. Gaps in Existing Information

- The economic analysis contained in this report is intended to provide an economic and real estate market context within which to consider redevelopment scenarios. The data and findings contained herein were culled from the City’s Economic Development Strategy and relevant urban planning reports. The current input merely provides a framework for a subsequent market assessment; supported by some market data and is not intended to be a full economic and fiscal net benefit analysis
- More data on the existing inventory and vacancy of commercial office and retail space would be helpful in considering future development

2. Opportunities and Issues to Consider

- A number of opportunities and issues need to be considered for the development of the CLC and IOL sites. Some of these opportunities and issues are summarized in the following table.

CLC + IOL Site Opportunities and Issues: Economy

Potential

Enhancement

Opportunity

Issues to Consider

Create long-term economic stability + economically sustainable development

- Attract creative industries to Port Credit and build on the history of live-work-make lifestyles in the region
- Increase tourism + leisure related industries along waterfront
- Implement mixed-use development

- Need to balance commercial, recreational and residential uses, particularly on CLC site where marine usage meets other types of usage
- Increasing population will continue to have high demand for quality jobs
- Long term growth projections for GTA suggest development pressures for Port Credit. These warrant a planning and development framework that guides future growth

Increase educational opportunities

- Develop an academic campus in Port Credit

- Location and type of campus needs to be considered in relation to regional development

Create affordable housing options

- Create diverse housing types in new development in Port Credit and the IOL and CLC sites in particular

- Any new development on IOL lands must be appropriate based on evaluation of levels of contamination
- Densification may impact neighborhood character; all development needs to be sensitive to existing conditions

Special Focus: Marina Economy

1. Introduction

James Lima Planning + Development has reviewed the memo from CLC consultant N. Barry Lyon Consultants Limited (NBLC) regarding “One Port Street – Operations / Market and Economic Notes” dated November 2012 for CLC regarding their lands. It describes current year-round activities and configurations of use as they exist today at the Port Credit Harbour Marina Site (PCHM) / CLC site and suggests ways in which CLC’s redevelopment plans may impose change based on economic and real estate considerations.

2. Implications for Real Estate Development Values

Regarding boat hauling and storage facilities, one example of a compact destination waterfront that attracts visitors and locals to water-oriented restaurants, bars, and shops is the harbor at Newport RI. None of its central dock and marina areas include TravelLift or similar equipment that haul boats in and out of the water. Boat storage and hauling is limited to more peripheral locations within the harbor, allowing for safer public use of the central waterfront for recreation, leisure and entertainment. As a result, this area is an important economic engine for the City of Newport, attracting international, national and local repeat visitors with considerable discretionary spending potential. As can be expected at the PCHM’s property fronting

along Lake Ontario, land values at the center of Newport Harbor have been consistently among the highest in the City, attributable to the achievable revenues from destination uses that cater to its many visitors year-round.

One further note on value creation associated with adjacency to marina and boating facilities: There are many examples of increased assessed real property values directly attributable to their proximity to and view of publicly accessible and attractively designed waterfronts, to marina and boating facilities, and the expansive views across the waterways themselves. Whether or not such proximate marina facilities and/or public waterfronts provide for surface car parking on-site is likely irrelevant to the consideration of real estate values upland from such waterfront amenities. Winter boat storage would not be considered a real estate value-creating adjacent use given that it results in large blocks of inactive land areas for many months at a time and the densely packed covered vessels tend to block views out to the waterfront from upland areas.

The memo highlights that the boating season, while an essential part of this community’s history and sense of place, is a relatively short one. The challenge will be finding the right balance between accommodating this seasonal in-demand water-oriented leisure activity (and the other uses that it attracts) and a new more densely configured mix of uses that unlocks more of the intrinsic value of Port Credit’s premier central waterfront land.

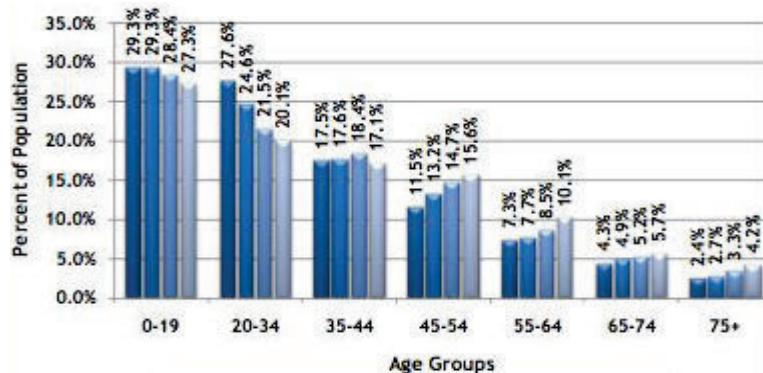
3. Implications for marina employment

Marina operations (docks, fuel dock, boater services, and amenities upland) generate relatively few jobs. Boat yards (including indoor/outdoor boat repair, maintenance, and storage) generate more jobs than marina operations, but are still low job generators, tend to consume large amounts of real estate per worker, and have low economic output per worker as compared to many other industrial sector activities.

That said, consideration should be given to unique locational attributes of the IPC sites to accommodate maritime-related industrial and creative economic activity and job generation. These may include woodworking, metalworking, fibreglass and other composite fabrication, sailmaking, upholstery, and mechanical repairs to marine vessel engines and equipment. At present, the Port Credit Harbour Marina accommodates a number of independent businesses that provide important maritime oriented jobs. Preservation of these current uses that reflect and continue historic uses should be taken into consideration in any future development. Redevelopment options should explore how upper floor commercial office or residential can be accommodated alongside these uses.

The concept of a manufacturing and design center, focused in part on maritime-related products and services, housed in one or more shared facilities and under single not-for-profit management, could generate new creative community jobs and economic activity that are synergistic with the broader revitalization goals and objectives for the IPC waterfront.

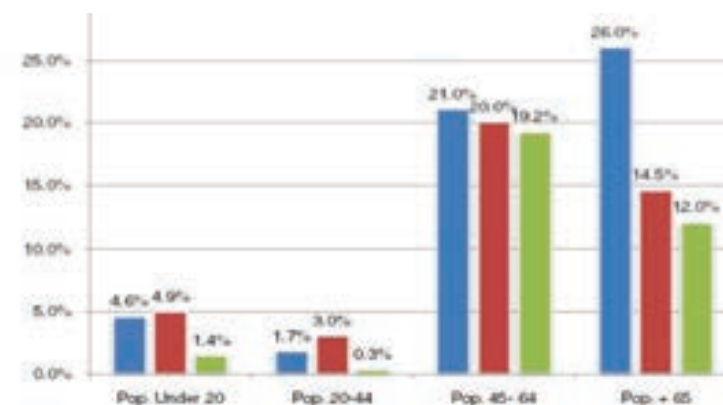
Demographic Overview



Source: Statistics Canada Census, 1991, 1996, 2001, and 2006

Source: Housing Choices, City of Mississauga, Planning and Building Office, 2011

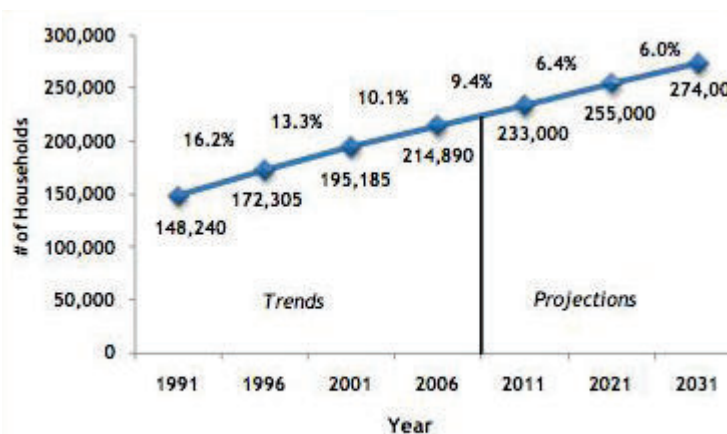
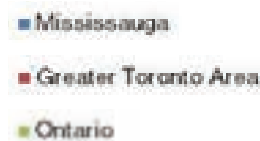
Trends in Age Distribution: Mississauga, 1991 - 2006



Source: Statistics Canada Census of Population: 2001, 2006

Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

Population Growth by Age Group, 2001 to 2005



Source: Statistics Canada Census, 1991-2006; City of Mississauga, Growth Forecasts Housing, Jul 2010

Source: Housing Choices, City of Mississauga, Planning and Building Department, 2011

Actual and Projected Number of Households, Mississauga, 1991 - 2006

Comparative Household Income (private households), 2005

Mississauga's average household income is substantially above the Ontario province average, and slightly lower than the GTA average.

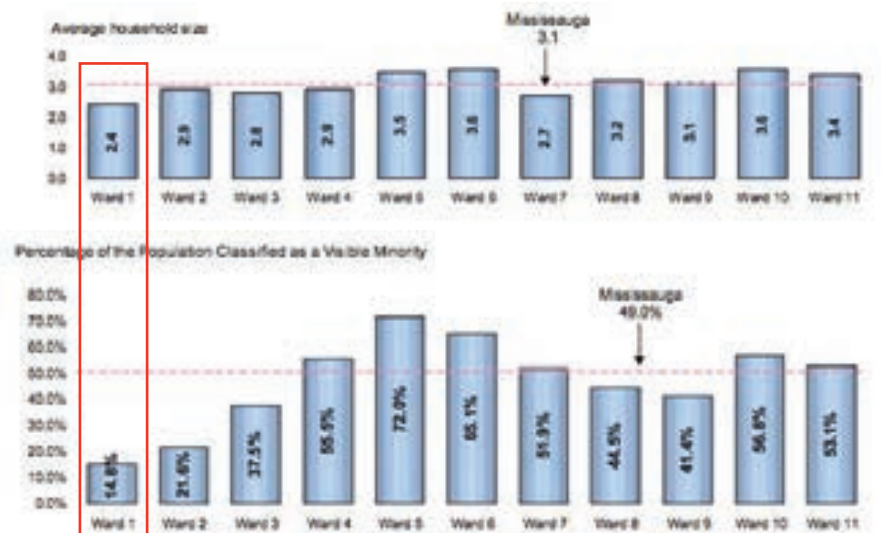
Household Income	2005		
	Mississauga	Greater Toronto Area	Ontario
Under \$10,000	3.9%	5.0%	4.4%
\$10,000 to \$19,999	5.3%	8.1%	8.8%
\$20,000 to \$29,999	6.7%	8.4%	9.0%
\$30,000 to \$39,999	8.3%	9.2%	9.8%
\$40,000 to \$49,999	8.4%	8.7%	9.2%
\$50,000 to \$59,999	8.3%	8.0%	8.5%
\$60,000 to \$69,999	8.0%	7.4%	7.8%
\$70,000 to \$79,999	7.5%	6.9%	7.1%
\$80,000 to \$89,999	6.6%	6.0%	6.2%
\$90,000 to \$99,999	6.3%	5.2%	5.2%
\$100,000 and over	30.6%	27.0%	24.0%
Average household income \$	88,162	89,480	66,836

Source: Statistics Canada, Census of Population, 2006

Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

Average Household Size

Percentage of the Population Classified as a Visible Minority



Port Credit is
within Ward 1

Source: 2006 Census Results: Ward Comparisons, City of Mississauga, Planning and Building Department, September 2009

Labour Force Characteristics

	2006	2007	2008	2009	2010
Population	702,300	707,000	728,000	730,000	734,000
Total Employment	405,990	416,300	427,165	422,590	418,990
Employment Ratio (1)	0.58	0.59	0.59	0.58	0.57
Participating Resident Labour Force (2)	364,050	392,160	401,050	405,255	411,590
Labour Import (Export) (3)	41,940	49,800	55,000	56,240	46,090

Source: City of Mississauga, Planning & Building Department, 2006-2010 Employment Profiles
Notes: (1) Total employment divided by the total population
(2) Resident labour force multiplied by the participation rate of 68.6% from the Labour Force Survey
(3) Total employment positions minus the employed labour force

Total Employment and
Resident Labour Force
City of Mississauga

City of Mississauga

Labour Force by Industry

Labour Force Change by Industry

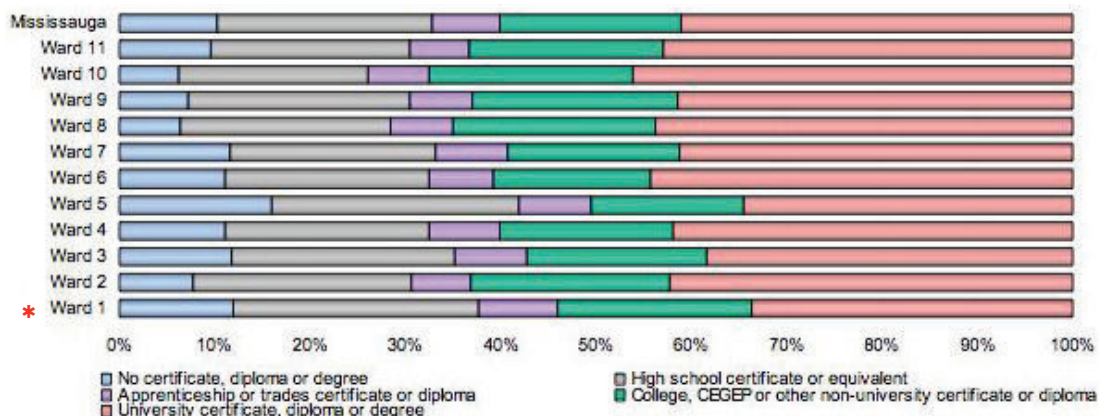
	2009		2006		2001	
	Number	% of total labour force	Number	% of total labour force	Number	% of total labour force
Total - All Industries	408,445	100.0%	352,390	100.0%	329,690	100.0%
11 Agriculture, forestry, fishing and hunting	579	0.1%	690	0.2%	590	0.2%
21 Mining and oil and gas extraction	541	0.1%	690	0.2%	310	0.1%
22 Utilities	2,264	0.6%	1,870	0.5%	1,790	0.5%
23 Construction	21,515	5.3%	17,345	4.9%	14,805	4.5%
31-33 Manufacturing	55,657	13.6%	53,505	15.2%	58,770	17.8%
41 Wholesale trade	31,008	7.6%	27,490	7.8%	26,255	8.0%
44-45 Retail trade	45,340	11.1%	38,765	11.0%	36,765	11.2%
48-49 Transportation and warehousing	30,584	7.5%	26,415	7.5%	23,485	7.1%
51 Information and cultural industries	12,001	2.9%	10,155	2.9%	10,855	3.2%
52 Finance and insurance	30,543	7.5%	25,135	7.1%	21,700	6.6%
53 Real estate and rental and leasing	9,662	2.4%	7,955	2.3%	7,595	2.3%
54 Professional, scientific and technical services	38,562	9.4%	31,785	9.0%	28,345	8.6%
55 Management of companies and enterprises	824	0.2%	695	0.2%	525	0.2%
56 Administrative and support, waste management and remediation services	20,294	5.0%	17,730	5.0%	14,560	4.4%
61 Educational services	21,581	5.3%	17,680	5.1%	15,845	4.8%
62 Health care and social assistance	32,801	8.0%	25,805	7.3%	22,595	6.9%
71 Arts, entertainment and recreation	5,906	1.4%	4,810	1.4%	4,110	1.2%
72 Accommodation and food services	21,485	5.3%	19,330	5.5%	17,220	5.2%
81 Other services (except public administration)	16,193	4.0%	14,155	4.0%	13,400	4.1%
91 Public administration	11,075	2.7%	10,225	2.9%	10,350	3.1%

	2001-2009		2006-2009	
	Number	% Increase/Decrease	Number	% Increase/Decrease
Total - All Industries	78,755	23.9%	56,055	15.9%
11 Agriculture, forestry, fishing and hunting	-11	-1.8%	-111	-16.1%
21 Mining and oil and gas extraction	231	74.5%	-109	-16.8%
22 Utilities	514	29.4%	394	21.1%
23 Construction	6,680	45.0%	4,170	24.0%
31-33 Manufacturing	-3,113	-5.3%	2,152	4.0%
41 Wholesale trade	4,753	18.1%	3,518	12.8%
44-45 Retail trade	8,575	23.3%	6,575	17.0%
48-49 Transportation and warehousing	7,119	30.3%	4,169	15.8%
51 Information and cultural industries	1,346	12.6%	1,846	18.2%
52 Finance and insurance	8,793	40.4%	5,408	21.5%
53 Real estate and rental and leasing	2,087	27.5%	1,727	21.7%
54 Professional, scientific and technical services	10,217	36.0%	6,777	21.3%
55 Management of companies and enterprises	299	56.9%	129	18.5%
56 Administrative and support, waste management and remediation services	5,724	39.3%	2,554	14.4%
61 Educational services	5,746	36.3%	3,711	20.8%
62 Health care and social assistance	10,206	45.2%	6,996	27.1%
71 Arts, entertainment and recreation	1,796	43.7%	1,096	22.8%
72 Accommodation and food services	4,275	24.8%	2,165	11.2%
81 Other services (except public administration)	2,793	20.8%	2,038	14.4%
91 Public administration	725	7.0%	650	8.3%

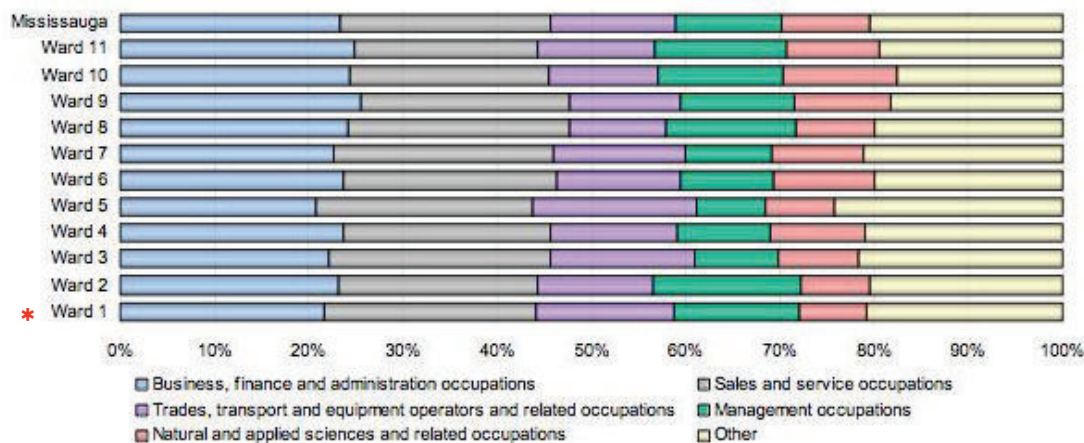
Source: Manifold Data Mining, 2009; Statistics Canada, Census of Population, 2001, 2006

Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

Education Levels for Population 25-64 years of age



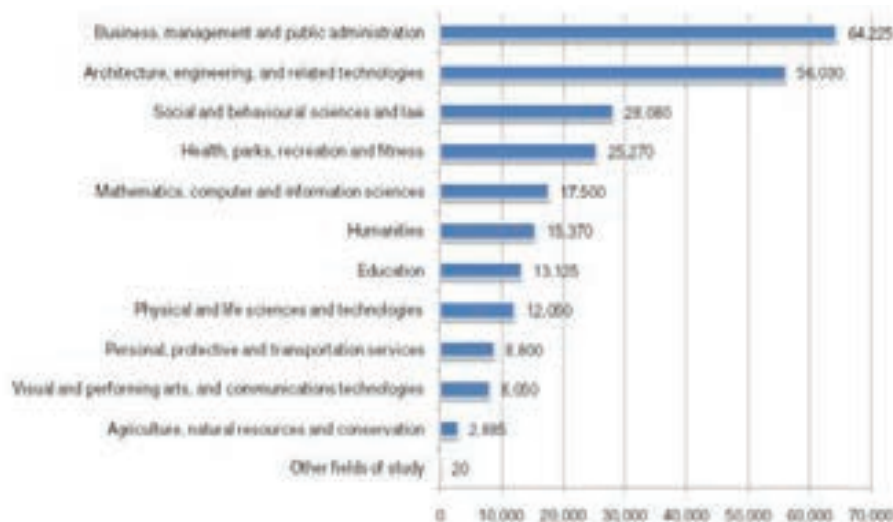
Top Five Occupations of the Labour Force



* Port Credit is
within Ward 1

Source: 2006 Census Results: Ward Comparisons, City of Mississauga, Planning and Building Department, September 2009

Educational Profile by Major Field of Study, City of Mississauga, 2006

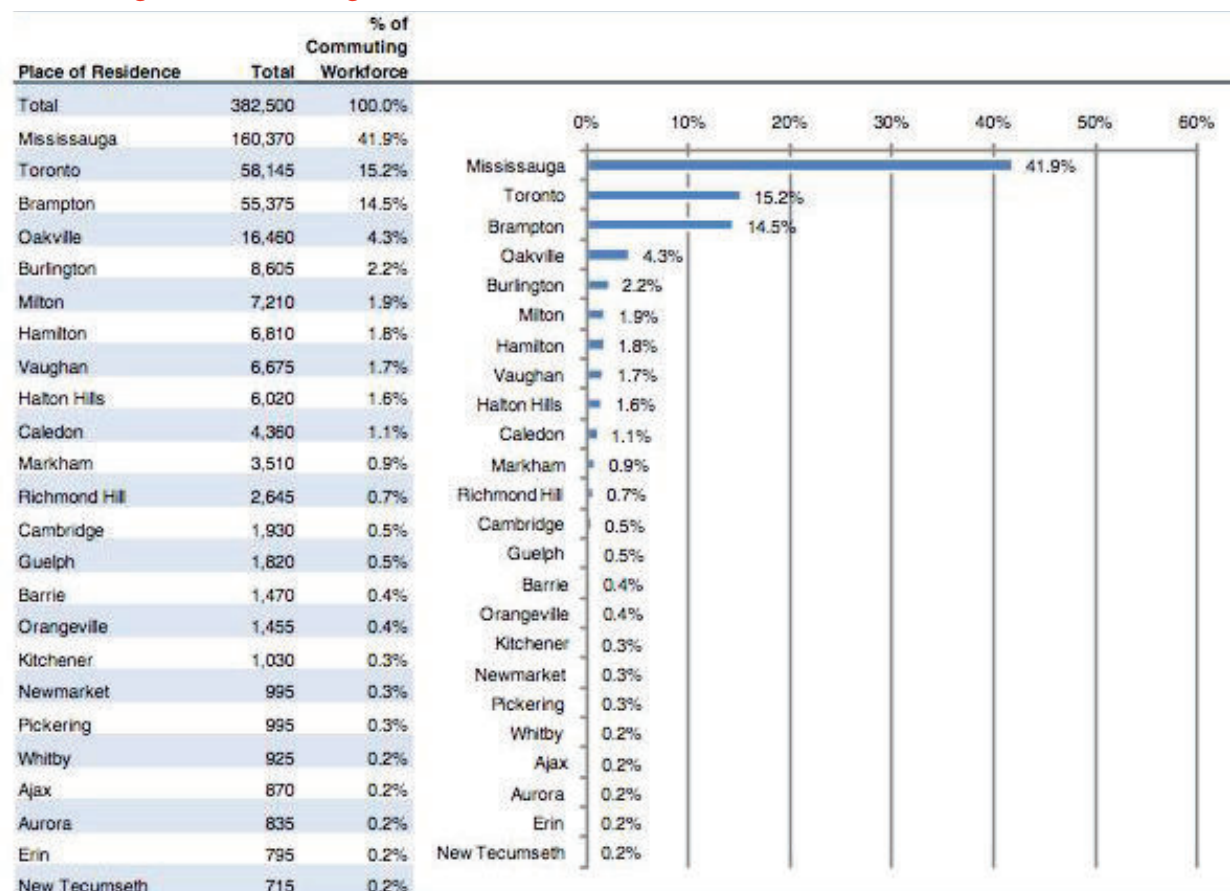


Source: Statistics Canada, Census of Population, 2006

Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

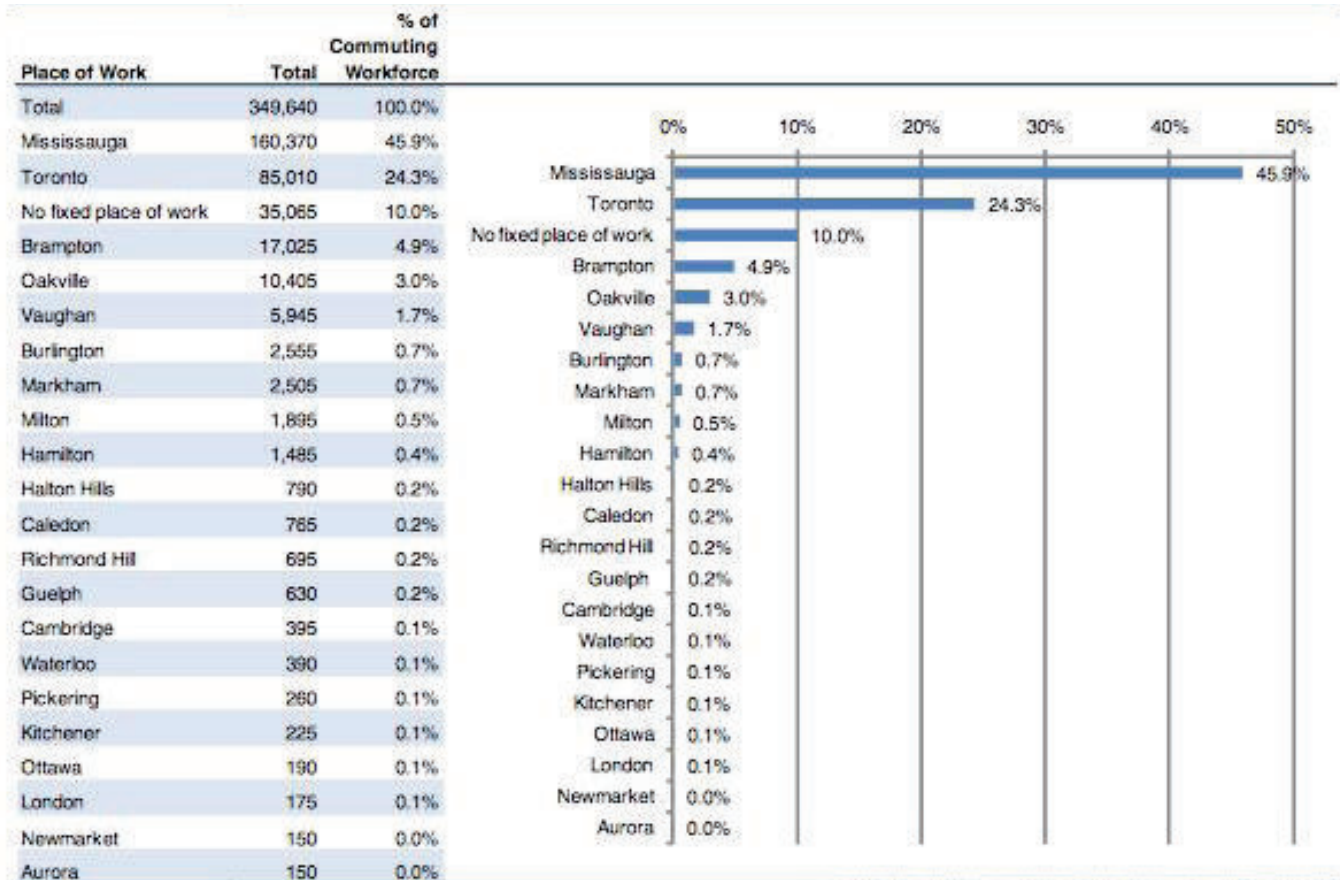
Commuting Patterns

Commuting Flows, Mississauga as a Place of Work, 2006



Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

Commuting Flows, Mississauga as a Place of Residence, 2006



Source: Facts and Findings: Background for the Development of Mississauga's Economic Development Strategy," Millier Dickinson Blais, June 2010

Housing Market Characteristics

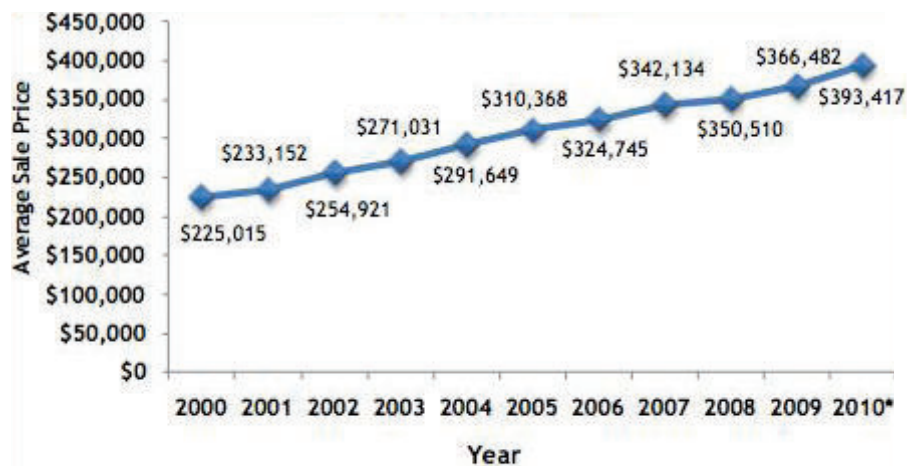
**Trends in Overall
Rents and Vacancy
Rates (Residential),
Mississauga, 2002 -
2009**



Source: CMHC Rental Market Surveys, 2002-2009

Source: Housing Choices, City of Mississauga, Planning and Building Office, 2011

**Trends in Average
Sale Price of All
Resale Units in
Mississauga, 2000
- 2010**



Source: Toronto Real Estate Board, Market Watch, December 2000-2009, & June 2010

*Note: 2010 data is year to date as of June 2010

Source: Housing Choices, City of Mississauga, Planning and Building Office, 2011

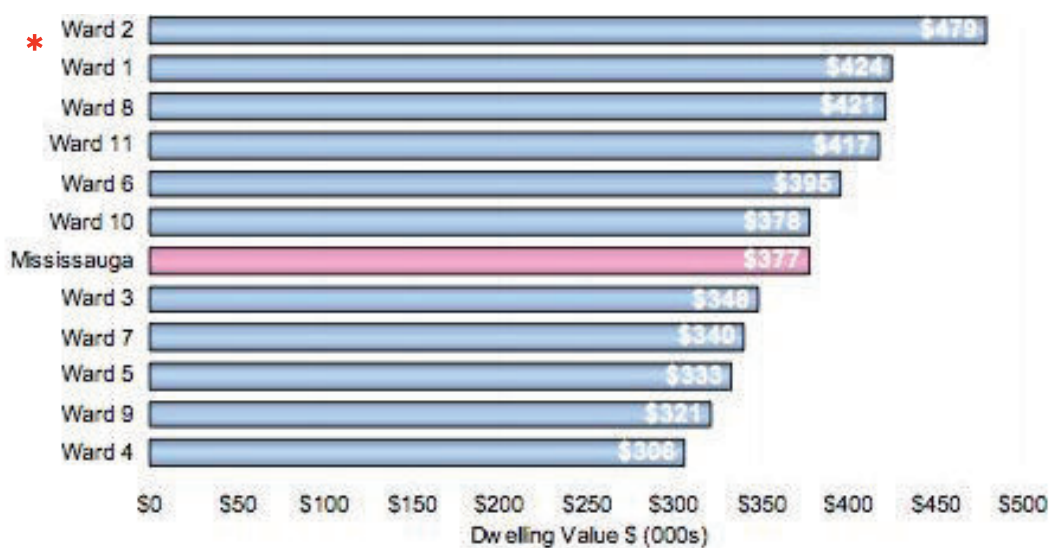
Industrial Market Profile, 3d Quarter 2012

		Change From Last Quarter			Change From Last Quarter
Inventory (SF)	153 .8 million	↑	Average Net Rental Rate (psf)	\$5.00	↓
Availability Rate	6.0%	↔	TMI (psf)	\$3.24	↓
Vacancy Rate	4.4%	↑	Realty Taxes (psf)	\$2.30	↑
Absorption 3Q 2012 (SF)	308, 856	↑	Average Sale Price (psf)	\$76.65	↓
Average Land Price (per acre)	\$827,000	↔	Average Days on Market	300	↓

Source: "Mississauga Industrial Market, 3rd Quarter 2012," CBRE Global Research and Consulting

Average Dwelling Value

* Port Credit is
within Ward 1



Source: 2006 Census Results: Ward Comparisons, City of Mississauga, Planning and Building Department, September 2009

References: Economy

- “Mississauga Economic Development Strategy: Building on Success,” Millier Dickinson Blais, June 2010
- “Facts and Findings: Background for the Development of Mississauga’s Economic Development Strategy,” Millier Dickinson Blais, June 2010
- Port Credit Local Area Plan, City of Mississauga, draft 2012
- “Canada’s Global Investment Destination: An International Marketing Strategy,” Millier Dickinson Blais, October 2011
- “A Great Place to Live,” City of Mississauga
- “Economic Indicators” report, City of Mississauga, Economic Development Office, 2011
- “Employment District Profiles,” City of Mississauga, 2010
- “Profiles, Facts and Maps,” City of Mississauga
- “Leading Businesses in Our Community,” City of Mississauga, Economic Development Office
- “Market Conditions,” City of Mississauga, Economic Development Office, 2012
- “Population, Density + Housing,” City of Mississauga, 2009
- “Housing Choices: Mississauga’s Affordable Housing Strategy and Action Plan,” City of Mississauga, Planning and Building Office, 2011
- “Talent and Employment,” City of Mississauga, Economic Development Office, 2010
- “Taxes and Assessment,” City of Mississauga, Economic Development Office, 2012
- “Transportation,” City of Mississauga, Economic Development Office, 2011
- Downtown21 Master Plan, City of Mississauga with Glatting Jackson Kercher Anglin, 2010
- “2006 Census Results: Ward Comparisons,” City of Mississauga, Planning and Building Department, September 2009
- “2006 Census Results: Ward Comparisons, Commuting to Work,” City of Mississauga, Planning and Building Department, September 2009
- “Mississauga Top Employers,” City of Mississauga, Economic Development Office, 2012
- “Mississauga Existing Land Use Stud 2010,” City of Mississauga
- “Toronto Office MarketView, 3rd Quarter 2012,” CBRE Global Research and Consulting
- “Mississauga Industrial Market, 3rd Quarter 2012,” CBRE Global Research and Consulting
- “New Business” e-newsletter, City of Mississauga, Economic Development Office, Fall 2012
- “Greater Toronto Area HOMES” magazine, Homes For Sale, Ltd., December 2012 / January 2013 issue
- “Condo Life, Greater Toronto Guide,” Homes For Sale, Ltd., December 2012 / January 2013 issue
- “4Rent.ca, Greater Toronto & Southwestern Ontario Region Guide,” Media Classified, November 17-December 1, 2012 issue



VII. PUBLIC COMMENTS

VII. Public Comments

A. Introduction

Public input is an important component of planning for the future Port Credit and the IOL lands and CLC site. A variety of public events have been held both prior to and during the initial stages of Inspiration Port Credit. This input is now being taken into consideration as options are developed for the future of these sites. These engagement sessions and the input received are summarized in the following pages. Further information and verbatim comments can be found in Appendix A.

B. Previous Public Engagement Recap

Port Credit has a strong foundation of prior outreach. Significant public input and feedback for these two sites has already been received. Inspiration Port Credit recognizes the work that has gone on before and intends to build upon it. Public outreach with Inspiration Port Credit will supplement, not replace existing feedback received.

Previous public input has included consultation as part of the 2008 Port Credit District Policy Review Directions Report, ongoing One Port Street Master Plan for the CLC site and a September 29, 2012 Culture Days Event - Inspiration café.

1. Summary of community input from the 2008 Port Credit District Policy Review + 2012 One Port Street Master Plan (CLC Lands)

Land Use, Built Form and Urban Design

- Preservation of views and creation of public access to waterfront is a must
- Low-rise is the preferred density with medium-rise the maximum. No high-rise

south of Lakeshore Road. No high-rise or medium-rise in the Marina Harbour lands. Continuous wall of tall buildings should be avoided at the waterfront

- Need affordable mixed-use housing
- Maintain marina functions and marine-related businesses on the CLC site. Adaptive re-use for the warehouse/shed to keep its port characteristics
- Intensification should include employment facilities/work space
- IOL should be open for public use (e.g. parks, institutions, cultural, education)
- CLC site should be a pedestrian precinct and a centre for restaurants, cafés, etc and a significant portion of the site should be open to the public
- Incorporate public art into the development and public realm
- Existing street pattern in adjacent neighbourhoods (grid) should be used as a basis for the development
- Continue mainstreet commercial along Lakeshore Road (IOL lands) with low-rise village scale

Transportation

- Concerns about additional traffic congestions due to more density and LRT terminus on Port Street (Port Street is currently used as an alternative route during festivals and emergencies)
- Year round active transportation network (including snow clearing) and more bike lanes are needed, particularly along Lakeshore Road. Pedestrian and cycling networks should be separated
- No above ground/grade visible parking structures
- Transit improvements will be needed to service the IOL lands

Environment, Parks and Open Spaces

- Development must be responsible to the environment
- Connections/continuation of Waterfront

- Trail and creation of significant parks and open spaces
- Development in the IOL lands should include a large park adjacent to the waterfront and current trail
- More street trees are needed (canopy effect)
- Build beaches in all the waterfront parks
- Protect and enhance existing parks, trees and gardens

Heritage

- New development should be sensitive to community character and heritage

Economic Development

- Development should include/attract local businesses and other employment uses
- Development should attract residents (local, Mississauga and Regional) and visitors year round

- More access to food stores should be included
- Support the location/expansion of creative business and artist/craftsmen uses

Contamination

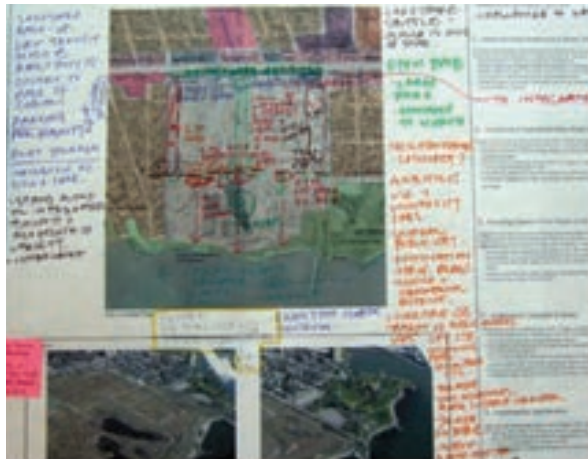
- There are concerns about contamination issues in IOL lands

2. Excerpt from 2008 Port Credit District Policy Review Section 4, Study Findings Port Credit District

Imperial Oil Lands

The Imperial Oil Lands should be redeveloped with a use other than industry, manufacturing or power generation. The Lands should be redeveloped to include a mixed-use urban waterfront village that could include a university, college or research campus. A significant portion of the site should be open to the public and provide public access to the Lake Ontario shoreline.

2008 Port Credit District Policy Review: Visioning Workshop - Tuesday, December 11, 2007



Source: Directions Report: Lakeview and Port Credit District Policies Review and Public Engagement Process, pg 179

Imperial Oil Site

Workshop participants developed a conceptual plan for the site that indicated a mixed-use, medium density development incorporating a university or college campus. The plan included a centralized green space that would link Lakeshore Road to the shoreline. A 1/3, 1/3, 1/3 approach was noted for the distribution of park, institutional and mixed-use areas.



Source: Directions Report: Lakeview and Port Credit District Policies Review and Public Engagement Process, pg 188

Port Credit Harbour Marina / Canada Lands Company (CLC) Site, Port Street, and No Frills Site

Workshop participants saw the PCHM, Port Street and the No Frills site working together as a complete waterfront district. This area would provide a pedestrian focus to the village that would be set away from the heavy vehicular traffic on Lakeshore Road. A mix of uses should be encouraged including employment, office, commercial and tourism.

- Develop policies to regulate development within waterfront properties
- Redevelopment of the site should provide needed community facilities and improve Port Credit's quality of life
- Mature and/or emerging trees and natural areas should be protected and integrated with any new development. Opportunities for restoration should be considered
- Existing street patterns within the neighbourhood to the west (Cranberry Cove) and the east (Port Credit Heritage District) should be used as a basis for redevelopment on the site
- Required parking areas should be underground or in structures to maximize the use of the land for uses other than vehicle storage
- The redeveloped site will require significant improvements to transit service. Investigate opportunities to incorporate a transit loop within the site
- The mainstreet commercial area suggested for the Lakeshore Road frontage should generally maintain a low-rise village-scale consistent with the existing mainstreet commercial built form
- Built form on the site should generally be low to medium-rise buildings with potential for taller buildings at key locations
- Significant transition areas should be incorporated to buffer existing neighbourhoods from new development
- Retain the port and marina functions as they are an integral part of the Port Credit village character
- The safety and comfort of pedestrians and cyclists should have the highest priority. Consider this area an "auto-free" zone that is well serviced by transit. Consider Port Street as a pedestrian precinct
- Permit the development of the site as a mixed-use community and tourist destination that includes needed community facilities. Development should not permit uses that have negative impacts on the environment
- A significant portion of the site should be open to the public and provide access to the Lake Ontario shoreline. The public realm should be well connected to parks, trails and circulation routes external to the site; for example, to the Waterfront Trail, JJ Plaus Park, St. Lawrence Park and the streetscape network with Port Credit. Public access all along the shore is a priority
- The design of the public realm should develop a signature look that relates to the harbour setting and the village character of the district
- Surface parking should be limited, occurring in discrete structures
- Built form along Port Street should generally reflect the existing mainstreet commercial built form
- Built form on the site should generally be low to medium-rise buildings with potential for taller buildings at key locations
- Incorporate an iconic or landmark structure in the development plan that is in keeping with the community vision
- The Post Office and the Ports Hotel are integral parts to the redevelopment of Port Street as a pedestrian precinct
- Consider the feasibility of converting Elizabeth Street, from Port Street to High Street, into a pedestrian, cycle, and transit way

Port Credit Harbour Marina and Port Street

The Port Credit Harbour Marina Lands and Port Street should be developed as a waterfront destination that permits public access to the Lake Ontario shoreline, incorporates a mix of uses and promotes Port Credit as an active and viable port.

- Develop policies to regulate development on waterfront policies. Refer to section 4.3 Waterfront for more detail

C. IPC Consultation Process

1. Overview

Inspiration Port Credit (IPC) has included multiple modes and opportunities for public input. Input received is summarized in the following pages and a complete compilation of input received to-date is available in Appendix A: Public Input.

Three major events have been held, including a Culture Days Event - Inspiration café, an evening Kick Off Meeting in early November and three-day Ideas Workshop about a month later. Over 530 people attended the IPC events in December.

2. Events

Kick-Off Event, November 1, 2012

The Kick-off Event held November 1, 2012 at Clarke Memorial Hall began with a half-hour Meet+Greet opportunity. Participants were able to meet and interact with Inspiration Port Credit consultant team members, City of Mississauga staff involved in Inspiration Port Credit and Light Rapid Transit projects, and CLC and Imperial Oil representatives.

Following the Meet + Greet, Chris Reed, founding principal of Stoss Landscape Urbanism, and architect and urban design consultant Mark Sterling of Sweeny Sterling Finlayson & Co. gave presentations showing inspirational examples of waterfront and sustainable development and open spaces. In addition, Ed Charlton from IOL spoke to the public. Question and answer time followed.

Ideas Workshop, November 29 - December 1, 2012

The Ideas Workshop was a three-day event that included a wide range of public activities. Events included:

- Water recreation focus group discussion
- Series of Walks + Talks throughout the village focused on particular topics like parks transportation and local economy
- Bus Tour of study area, including brief walking tour of Port Credit harbour marina
- Multiple drop-in times to discuss topics with consultant team members and city staff
- Lunch+Learn with presentations by Chris Reed summarizing research and economics consultant James Lima discussing economic context and opportunities

Kick-off Event

Meet + Greet and Inspirational Presentation



Source: Dillon, 2012



Source: Dillon, 2012

- Interactive stations focused on connectivity, uses and open space, and density/open space patterns

To learn more about the Ideas Workshop and feel the enthusiasm in Clarke Memorial Hall during the event, watch a brief video available on the Inspiration Port Credit website (inspirationportcredit.com).

3. New Outreach via IPC Website

In addition to these events, opportunities to give input are also available on the Inspiration Port Credit project website, inspirationportcredit.com. The website was a 24 hour 7 days a week online community meeting with opportunities for people to share their thoughts and see what others are saying. Survey questions, prioritization exercises, and discussion questions have provided a range of feedback. Activity has been very high on the site since it was launched in October.

Website use through February, 2013 has included:

- 10,378 site visits by 3917 visitors
- 2397 document downloads
- 160 registered participants
- 141 visitors have taken polls
- 518 visitors have downloaded documents

D. Public Feedback: Land Use + Urban Design

1. Overall Character

Substantial feedback from the public addressed desires for the overall character, desired land uses, and built form for Port Credit. Overall, Port Credit's waterfront location at the intersection of the Credit River and Lake Ontario was seen as its biggest asset and a crucial component of its character. Future

development on the two sites should recognize and enhance the waterfront location. Access to the water, visually, physically, and emotionally, is critical. Other assets that residents identified were Port Credit's sense of community, park and trail network, and position as a hub of cycling opportunity.

The Port Credit Harbour Marina in particular was frequently mentioned by residents as contributing to both Port Credit's character and economy. Almost all residents felt that future development should enhance the marina and support the theme of "making." This is a theme that draws on the history of Port Credit and that could include additional artisan uses.

Residents felt that future development should enhance Port Credit's vibrant, village atmosphere, and create places where people can live, work, play and relax. Port Credit is already a regional recreation destination, and there is an opportunity to build on this and create opportunities for lifestyles centered on outdoor recreation and natural resources.

The walkable character of Port Credit was frequently mentioned as an asset; future development should be pedestrian oriented and contribute to improved pedestrian realm. Residents felt there were opportunities for additional cultural uses like a museum, and additional events, concerts, performances, markets, and potentially sporting events. These uses could help enliven and enhance Port Credit's existing character and reinforce its role as a regional waterfront destination. Tourism, education, marina, and creative uses (from public art installation to creative economy jobs) were recurring themes suggested for Port Credit in general and these two sites in particular.

There was agreement that in all cases, public access to the waterfront is critical. The exact character and nature of development, especially near the waterfront sparked different opinions. Some residents see the waterfront as a significant opportunity as a premiere location for waterfront entertainment, diverse and high quality dining options, shopping – with a huge

tourism potential. Others felt the waterfront should be an “oasis” rather than a destination. These residents felt the waterfront should provide opportunities for walking, sitting, and appreciating the water’s scenic beauty, but should not be over-commercialized. Other Nov 1 comment cards reading “Maintain community atmosphere rather than a revenue generosity area” and “Maintain town feel rather than commercializing the area” spoke to this point of view.

Many residents felt that additional recreation opportunities for all ages were needed. Encouraging active lifestyles for both youth and seniors is important. Creating opportunities for interaction among different generations was suggested by many. Opportunities for water recreation were suggested as well. Winter activities were mentioned as lacking currently. There is an opportunity for additional winter activities, especially if outdoor winter activities are located immediately adjacent to warm indoor spaces. Winter along the waterfront can be especially harsh, but additional activities could help encourage year-round activity. In addition to active recreation, suggestions for more natural areas on the IOL site were mentioned.

Creating sustainable, high-quality development was a common suggestion. Sustainability could include compact, walkable development; infrastructure and utility choices; and promoting alternatives to vehicular transportation.

Residents advocated for:

- Diverse modes of transportation, including walking, bicycling, and transit
- Sustainable energy + water systems
- Green infrastructure for stormwater management
- District energy systems with a focus on small-scale wind, solar, and geothermal heating+cooling

Residents generally saw the significant opportunities for these two sites, but there were a few common concerns that redevelopment could create:

- More noise
- More traffic (cars, cruising), especially on Lakeshore Road
- More unruly behavior (More bars/clubs)
- More light pollution

In all, residents were very excited about the potential in these sites to enhance Port Credit’s existing waterfront village character.

2. Future Land Uses and Open Spaces

Feedback from residents about future land uses and open space for the two sites included several general themes:

- Create opportunities for interaction between ages
- Design for spaces and buildings that provide flexible uses
- Consider the relationship between these sites and rest of village (uses that enhance rather than compete; impact of sites on Lakeshore Road)
- Build upon history – enhance marina and marine heritage, recognize First Nation history
- Include a mixture of land uses, including residential and commercial
- Provide additional waterfront public open space

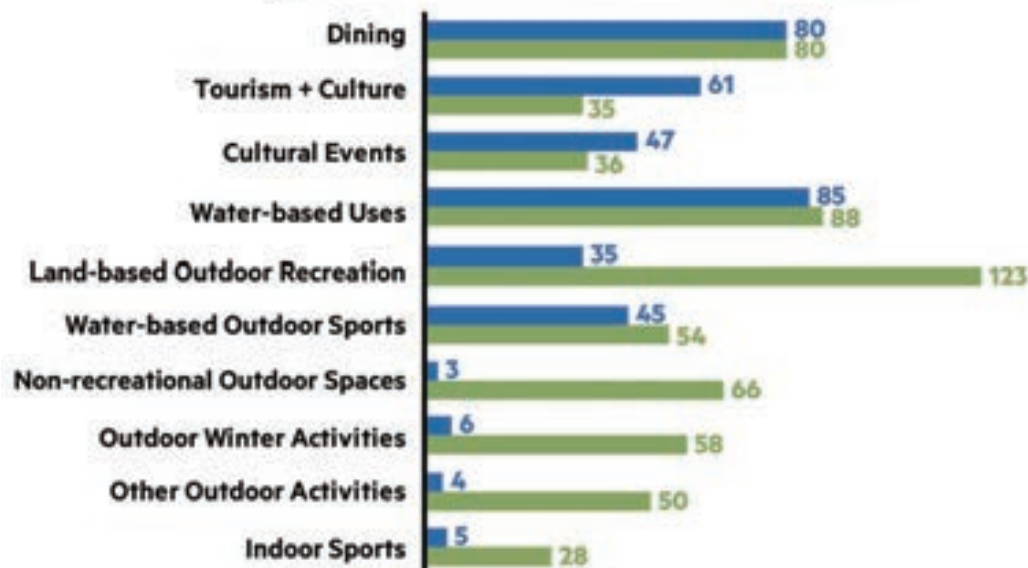
Imperial Oil Limited (IOL) Lands

IOL-specific land use and open space feedback included the following:

- Provide public uses that capitalize on waterfront + enhance public access along waterfront
- Create community spaces for year-round use (including indoor spaces for winter, which could be paired with outdoor winter space)

- Different kinds of open spaces desired: some prefer “natural”/conservation areas and possibly urban camping; others want space for active recreation (both land and water-based), but some feel sports fields are too single-use
- Retail and restaurants desired by many, with locations suggested both along waterfront and along Lakeshore Road
- Different ideas about overall character of site: Suggestions include making the site: a prime tourist destination with attractions, restaurants, and shopping; different kinds of campuses (satellite university campus, environmental studies campus for research / outdoor education center, “center” for creative/incubator). A few even suggested the site could include another marina.
- The idea of a campus on the site sparked mixed feelings. Some felt that the campus would be “too exclusive” and others wondered if it was an appropriate use for such valuable real estate; on other hand, many acknowledged that the increase in younger people in community could bring economic benefits and additional vibrancy. Proponents of a campus usually envisioned it as a small to mid-size campus, usually either satellite campus or focused on one particular topic, like marine science.
- For any large use, it was acknowledged that additional transit would likely be needed to accommodate transportation
- Opportunities to combine work, education, and knowledge creation were suggested
- Generally large-format uses were seen as inappropriate (no malls, regional sports facility, big box, or conventional hospital)
- Consider impact of uses on Lakeshore Road

Types of Uses Desired for CLC and IOL Lands



source: Public input Session. Based on number of dots placed per participant. Green = IOL/ Blue = CLC

- Consider extending LRT to the IOL site and/or provide shuttles between site and GO station.
- Provide opportunities to live, work, and play on single site

Canada Lands Company (CLC) Site

CLC-specific land use and open space feedback included the following:

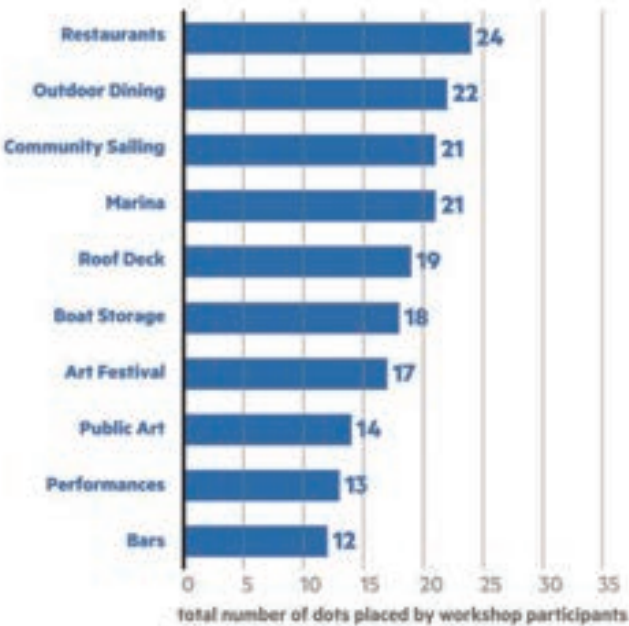
- Enhance the marina. Reinforce the importance of marina, which is the largest deep water marina in Ontario
- Consider opportunities to attract more marina users and companies
- Differences in opinion expressed about boat storage – some felt it should remain on-site and others felt it could be moved (large area needed for boat storage does not create a vibrant, active public realm); if boat storage is moved, identifying alternative, convenient locations is important
- Many saw opportunities for tourist destination with restaurants, retail, markets, entertainment (festival marketplace like Faneuil Hall in Boston or St. Lawrence Market in Toronto) but others had concern about how these kinds of uses would interact with working marina
- Relationship between public access and marine uses (especially logistics) must be considered
- Multiple suggestions for elevated viewing platform (vertical separation between public layer and working marina ground plane)
- Encourage high quality design of buildings and open space
- Create a hub for the village
- Mixed feelings about condos or other residential development – concern about privatization of waterfront and potential conflicts with working marina
- Create opportunities for public art
- Encourage creative economy / artisan uses

3. Density/Open Space Patterns

Feedback from the public regarding open space and density patterns included the following:

- Different opinions about density; some see opportunity for intensification at both sites, and others would prefer no changes or only additional park space
- Generally, desire for no taller buildings along waterfront
- More open space and park area along the waterfront
- Significant interest in large scale recreational and open field program
- Idea of adding to add marina / boat launching by the IOL site break wall well received
- Generally, interest in more density (especially commercial mixed use) along Lakeshore Road
- On other hand, suggestion of more open space and recreational facilities close to Lakeshore Road and Mississauga Road
- More access to the waterfront from Lakeshore Road suggested
- Need to consider adjacencies, especially low rise, dwelling neighborhoods to east and west of IOL site
- Many residents do not want high rise or large-scale development, preferring mostly mid-low density for the IOL site

Canada Lands Company (CLC) Site: Top 10 Uses

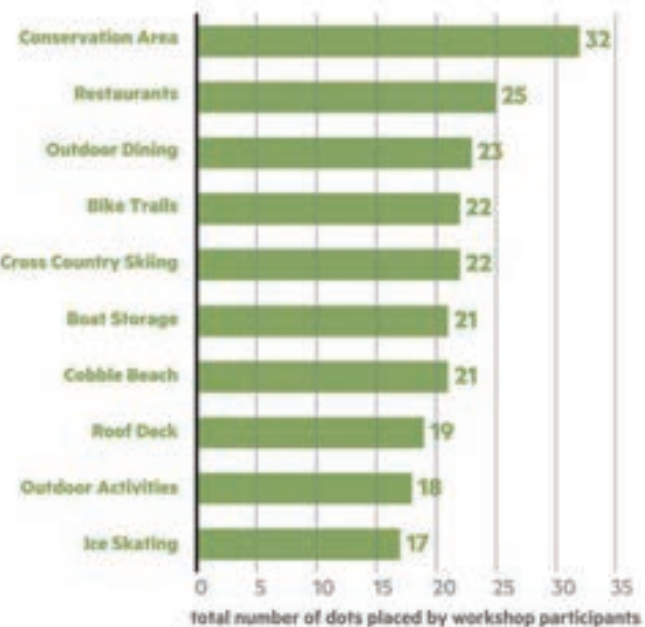


Least desired CLC:

No Votes

- Community Garden
- Botanical Garden
- University Campus
- Soccer Fields
- Snow Shoeing
- Golf Course
- Olympic Pool
- Mountain Bike Track
- Camping
- Kite Flying
- Sledding
- Formula One
- Aquarium
- Indoor Track
- Climbing Wall
- Fly Fishing
- High Rise
- Curling Rink
- Hockey Arena
- Baseball fields
- Cricket Fields
- Downhill Sledding
- Kite Boarding
- Zoo
- Speed Skating Oval
- BMX Park
- Petting Zoo
- Laser Tag
- Rodeo
- Big Box Store*
- Hospital
- Olympic Training Facility
- Bob-sledding
- Skydiving
- Regional Sports Facility
- Horse Racing
- Amusement Park
- Mall
- Plaza

Imperial Oil Limited (IOL) Lands: Top 10 Uses



Least desired IOL:

No Votes

- Floating Hotel
- Climbing Wall
- Fly Fishing
- Curling Rink
- Hockey Arena
- Large Playground
- Kite Boarding
- Science Center
- Speed Skating Oval
- Petting Zoo
- Big Box Store*
- Hospital
- Outdoor Movie
- Visitor's Center
- Ferry
- Convention Center
- Hotel
- Cruise
- Heliport*
- BMX Park
- Laser Tag
- Rodeo
- Olympic Training Facility
- Bob-sledding
- Skydiving
- Regional Sports Facility
- Horse Racing
- Amusement Park
- Mall
- Plaza

Source: Stoss. Graphs derived from input provided during public input workshops. Workshop participants placed 'dots' on items they would like to see on each of the sites.

E. Public Feedback: Environment

Parks and the environment were frequent topics of discussion. Comments included the parks system, Waterfront Trail, water access, water recreation and boating, water quality, and other environmental issues.

1. Park System + Waterfront Trail

- The waterfront park system is very important to life and heritage of Port Credit
- Waterfront views and public access are critical
- Multiple opportunities for expanding access and park space exist
- JC Saddington could be extended to west on IOL lands
- Interest in additional north/south open space connection through IOL lands that would connect Lakeshore to the waterfront
- Different viewpoints about what the character of any new park space on IOL should be
- Some felt that waterfront parks should include primarily passive recreation to quietly enjoy water's beauty; others felt natural areas would be appropriate; mentioned Port Credit lacks sports fields and similar active recreation opportunities needed to help promote healthy lifestyles
- Waterfront trail should be widened; it is currently congested during warmer months
- Consider ways to expand cycling opportunities (see additional details in Mobility chapter)
- Generally support for extending waterfront trail on CLC site, but a few mixed feelings, especially from residents who attended marina tour on Saturday morning (concerns about how waterfront trail would interact with marina uses / movement); suggestions for elevated public space that would separate public access from marina functions while providing spectacular views of water- and boat operations below!
- Opportunity to add public access to breakwaters, especially eastern breakwater on CLC site
- Suggestions included refurbishing Ridgetown and adding public access or art/lighting installation
- Idea of urban camping suggested for IOL site or even on Ridgetown (Australia and Korea have examples of this)
- Interest in making Port Credit an all-season destination
- Weather makes outdoor activities challenging in winter, but could couple outdoor spaces with nearby indoor spaces to provide convenient shelter from weather

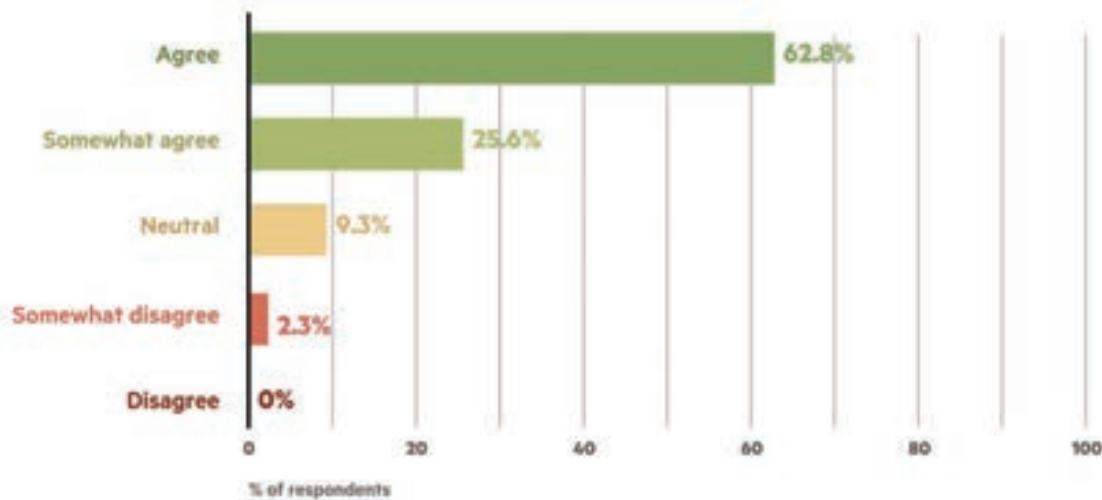
2. Water Recreation

- Water recreation including boating of many kinds are important to Port Credit
- Canoe club and rowing club would prefer public docks stay south of bridge
- Suggestion of additional launch at IOL, but it was acknowledged that this would require dredging and construction of lake islands or breakwalls to protect new marina area
- Water recreation is significant economic benefit to town – many visitors come for dragon boat racing and Salmon Derby
- Everyone on the parks walk agreed there could be some connectivity between the various marinas with regard to meeting boaters needs. ie..each marina (including Lakefront Promenade) does not have to service every type and size of boat

3. Environment

- Threatened water quality and water quantity of Credit River system and Lake Ontario is a concern
- Green infrastructure should be implemented to manage stormwater
- Create a healthy, ecologically robust waterfront
- Need to consider existing wildlife on IOL site in future plans
- Manage light pollution + noise
- Questions about what is allowed on IOL site, given historic land use as oil refinery, and how long clean-up will take

The ultimate Waterfront Trail should extend along the water's edge in the future redevelopment of the Port Credit Harbour Marina site. (43 votes)



Source: City of Mississauga, Survey Responses from Inspirationportcredit.com

F. Public Feedback: Harbour + Shoreline

The harbour and shoreline were frequently discussed. Public feedback and concerns included the following:

- need to consider the impact that declining lake levels are having and will continue to have on marinas + boating activity, both in Port Credit and throughout Lake Ontario
- the Port Credit Harbour marina is the largest deep water option in Lake Ontario - how can this be improved rather than removed
- links between marine uses and economy are significant and could be enhanced
- Consider opportunities for ferry service / marine transportation
- Consider opportunities to naturalize shoreline

- convenient boat storage is important
- river has significant traffic; - charter boats, pleasure boaters, rowers, canoers, kayakers, sea-doo
- Canoe club and rowing club would prefer public docks stay south of bridge
- consider building a training facility within or near IOL site (500m short course preferred, which would accommodate rowers, canoers, and dragon boaters)
- consider building an additional marina at IOL (would require dredging), or expand CLC site to east (build additional breakwater)

See additional, related feedback in Land Use, Economy, and Environment + Parks public feedback sections.

G. Public Feedback: Mobility

Substantial input about transportation, in all modes, was offered by the public. Comments and suggestions include the following:

- There is a need to balance multiple modes – vehicles, transit, cyclists (both commuter and recreation), and pedestrians
- Strong desire for enhanced transit service along Lakeshore Road (increase bus service or consider people-mover type system; make transit more user-friendly)
- Pedestrian experience should be a key consideration; quality of streetscape could be improved along Lakeshore Road and Port Street
- Encourage walkability through compact development and high quality streetscapes
- Safety / convenience for cyclists and pedestrians could be improved (consider safer Lakeshore crossings and dedicated space for bicyclists along Lakeshore Road, additional crossing of Credit River would add convenience)
- Enhance waterfront access for cyclists and pedestrians
- Ensure Waterfront Trail is wide enough
- Connect Lakeshore Road to Waterfront Trail through IOL
- Most in favour of LRT, but a few were concerned with impact on Port Street, but others recognize the opportunity to create distinct waterfront destination at the termination of the LRT
- The ability of the LRT to accommodate and support intensification were appreciated
- Parking structures were suggested at the GO station, on IOL and at the library; village is small and walking should be encouraged (or could be supported with shuttle system)
- It was cautioned that the timing of LRT is likely a long way off and development is likely to occur in advance – need to consider the implication of that development (which has been allowed based on assumed transit) on the community pre-LRT; mix of travel options is needed
- It was noted that rapid transit is only being discussed for the N-S direction but that Port Credit is an E-W village; need to consider E-W rapid transit options
- Opportunities for adding local roads within IOL exist
- Mixed feelings about desirability of connecting new IOL street pattern to grid in Heritage District to east
- Concerns about potential conflicts between potential Waterfront Trail extension around perimeter of CLC lands and working operations of the marina
- East/West Connections: suggestion for pedestrian and cycling connection at rail bridge; need for additional vehicular crossing of Credit River South of Lakeshore Road
- North/South Connections are important too
- Lakeshore Road: opportunities for cyclists and pedestrians could be enhanced
- Consider opportunities for ferry service / marine transportation
- On-site public transportation suggested for IOL site – something to help people move around large area like shuttle or small train/tram would be convenient
- Bicycle rental could encourage more active transportation

H. Public Feedback: Utilities + Infrastructure

The public saw opportunities for infrastructure and utilities associated with new development to be sustainable and innovative. Suggestions ranged from building-level ideas to district-scale solutions. Many different kinds of utilities

and infrastructure were discussed, including energy, water, stormwater, and waste.

The opportunity exists to use infrastructure to showcase the sustainable nature of the new development, and to create a model waterfront community. Specific suggestions for utilities and infrastructure included the following:

- Create a sustainable community with complete Low Impact Development design, LEED standardization, and closed-loop energy/water and waste systems
- Use district energy systems with a focus on small-scale wind and solar as well as geothermal heating+cooling
- Design for sophisticated efficiency in water + waste management
- Use green infrastructure to manage stormwater
- Be a leader in green technology

I. Public Feedback: Economy

Economic feedback received included the following:

- The marina's economic value to Port Credit is significant and could be enhanced/expanded
- This value will continue to increase if lake levels continue to decline; the marina is the largest deep water marina in Ontario
- The marina supports many jobs; don't lose these
- Marina / water-related uses can spin off additional economic benefits
- There are opportunities to consider ways to attract boaters to stay longer in Port Credit, eating and shopping
- New uses on the CLC site could include small-scale artisan operations that draw upon the idea of "making" that already exists on the site
- Some residents saw potential to expand shopping, dining, and "destination"

potential of Port Credit

- These new uses could enhance the existing character of Port Credit, creating a more vibrant community for existing residents while also attracting tourists
- Tourism would bring economic benefits to Port Credit
- Other residents were concerned that expanding these uses might conflict with marina operations
- Creative economy uses (small-scale offices for architects, graphic design, etc.) were seen as desirable
- Small-scale uses were generally preferred over larger uses (no interest in mall on waterfront, or significant office development)
- A few residents were in favor of a larger corporate campus on the IOL site that would include significant public access through and within it
- Otherwise, large offices were not seen as desirable or in-keeping with Port Credit's character
- An educational campus was also suggested for the IOL site, and acknowledged that this could bring economic benefit for the village



IX. NEXT STEPS

VIII. Next Steps

The next phase of the project is to test three Master Plan options with the stakeholders and public through various engagement opportunities including a community meeting in March.

The Master Plan options will set out various scenarios for land uses, built form, street and multi-modal transportation networks, park and trails systems within the village context. Three options will be generated to fully explore, test exciting, leading edge possible futures for the study area and implications for the area of influence. The Master Plan options will be refined to one option for the purposes of reporting back to the stakeholders and public prior to taking the recommended option to the Planning and Development Committee (PDC), along with the implementation guide and action plan. It is anticipated that this report will be presented to PDC before the summer of 2013.



APPENDIX A: PUBLIC INPUT

Appendix A: Public Input

“ I really enjoyed the day . . . first of all the hands-on walking and bus tour . . .”

- ***Alice Casselman, speaking about the Ideas Workshop***

“I think the City’s done an amazing job of really trying to bring people together in a nice open environment and they clearly have put a lot of effort into their research.”

- ***Rahul Mehta, speaking about the Ideas Workshop***

Snapshots of the energy and enthusiasm at the Ideas Workshop



Source: All photos provided by City of Mississauga, except for right column, 2nd from top, which is by Stoss , 2012

A. Kick-off Event November 1, 2012

The Kick-off Event held November 1, 2012 at Clarke Memorial Hall was attended by approximately 180 people and began with a half-hour Meet+Greet opportunity. Participants were able to meet and interact with Inspiration Port Credit consultant team members, City of Mississauga staff involved in Inspiration Port Credit and LRT projects, and Imperial Oil Limited and CLC representatives. Display boards presented key considerations and key opportunities as they pertain to the 5 pillars of the City of Mississauga Strategic Plan.

1. Interactive Display Board Feedback

There were a series of interactive boards prepared to obtain public feedback about the two sites and larger area of influence. One board included a large map, where participants placed dots to indicate where they live, worked, played, and shopped. Another board asked participants to identify opportunities and challenges on the two sites.

Opportunities mentioned included

- Going Beyond traditional boundaries: creating sophisticated connections to neighboring parks, roads, Lake Ontario and credit landing in terms of transit, natural areas and water/waste management
- A sustainable community: complete LID design and LEED standardization + closed-loop energy/water and waste systems
- Swimming Pool
- Please have a look at Townsville, Australia for: equitable access to water, mixed communities (ethnic/age), and connectedness to all other waterfronts
- Model for self-sustained community in future cities
- Boat Storage
- Year-round family oriented museum/science facility, like a Science Center
- Fisheries interpretive center
- A restored portion of the shoreline with increased public space, ecologically robust shoreline, and new stormwater management technologies
- 5-star hotel on waterfront
- Make both break walls publicly accessible
- Refurbish Ridgeway
- More direct waterfront tanks
- Revamp Arena
- Nicer public access
- UTM brought in



Source: Dillon, 2012



Source: Dillon, 2012



Source: Dillon



Source: Dillon, 2012

- Artists space

Challenges mentioned included:

- Maintaining an easy flow of traffic & pedestrian when light rail is built
- Minimizing construction waste, noise and pollution into surrounding waters
- Maintain public access to the credit river (very important)

2. Handout Feedback

In addition to the display boards, participants were also invited to fill out comment cards that asked two questions:

1. What is important to you about Mississauga's waterfront in Port Credit?
2. What do you see in Port Credit's future on the waterfront?

The following answers were received:

What is important to you about Mississauga's waterfront in Port Credit?

- Maintain a marina and make it world class
- Vibrant place to visit
- Create an atmosphere for success for the merchants
- Future development of Imperial Oil Lands
- The trail; ability to walk along water and parks

- Public access to the waterfront that is free and welcoming; passive recreations; views of Lake Ontario and Credit River; places to gather to just sit and watch the world go by
- Expanded GO transit parking
- Healthy, clean Credit River
- Public access to waterways via marina for unpowered crafts
- Local shops
- Community and parkland
- Maintain public access to Credit River and places to park boats
- Maintain town feel rather than commercializing the area
- Maintain heritage sites, but modern
- Create a better flow to the waterfront trail
- Create more natural areas in parks and reduce bookable spaces
- Maintain community atmosphere rather than a revenue generosity area
- Not to overcrowd the community with housing development
- Healthy, ecologically robust waterfront
- Easy access and flow for people, bikes, LRT and buses
- Variety of food options
- Year round attractions, sense of community
- Diverse, multi-purpose, increasing tree canopy
- Everything – the fact that we can access it. That it is well kept, clean and safe. That it is



Source: Dillon, 2012



Source: Dillon, 2012

very people rather than car oriented.

- Keep it green and continue with the superb bike paths
- No casino
- Small business friendly
- Creative, educational, design
- Access to clean, adequate well maintained facilities for all who use the waterfront

What do you see in Port Credit's future on the waterfront?

- The premiere locator on the lake to come to for during, Entertainment+Shopping
- ww the water, the place to come to!
- Maximum public access. Low-rise development.
- Waterfront trail and a big park. Townhouses and some commercial. NO high-rise please.
- Making Port Credit Harbour Marina a destination point with huge tourism potential.
- Natural areas for walking. cycling-passive enjoyment. Salmon+site fishing. Sailing, canoeing, kayaking. Limited motorboats because of noise. A centre for local residents, a place for concerts, ceremonies. Extensive board. Beach similar to Halifax. Lined with places to eat, drink, relax, play. A combination of live/work/play where Imperial Canada Lands can come into play. Out of town visitors to come+relax, hotels?
- More noise (Vehicles, restaurants)
- More traffic (cars, cruising)
- More bars/clubs as opposed to shops.
- More light pollution
- To develop brown lands into either park land or natural area...Historical plaques about Imperial Oil.
- Creation of traffic and more local noise.
- Costs increasing for local businesses which will end up affecting customers
- Opportunity to develop an outdoor education centre/museum in brownland area.
- Smart light/noise pollution technology.
- First and second point above being fully recognized
- Small scale waterways, ecologically robust parcels of land for healthy wildlife and healthy people.
- District energy systems with a focus on small-scale wind and solar as well as geothermal heating+cooling.
- Sophisticated efficiency in water+waste management.
- What I want to see happen is all future pathways be wide enough to allow people walking 2 abreast not have to move aside when passing a couple going in the opposite direction.
- I would love an opportunity to buy a coffee or an ice cream cone right by the lake.
- A functioning transportation system to move the population safely.
- Local artist structures
- Self sustained community
- Leader in green technology
- Community, more pedestrian, less cars.
- Leading design in Architecture clean, fresh, contemporary.
- UofT building/mini campus
- Educational
- Lots of happy pedestrians
- Traffic

B. Ideas Workshop November 29-December 1, 2012

1. Walk + Talk: Connect/Lakeshore Road Thursday November 29, 2012 6pm

Walk and Talk along Lakeshore Road with local residents was intended to gather information about potential concerns, observations and discuss the everyday use of the road as well as its surrounding neighborhoods.

The walk started from Clarke Memorial Hall going West to the IOL site where it turned back to the East and continued all the way to Hurontario Street and back West to Clark Memorial Hall. Walk included few stops along the way. The following lists the dialogue from the participants:

IOL stop

- Residents are very aware of rich and diverse wilderness of the IOL site through multiple noises coming from the site. Wildlife will need to be taken under consideration with any future development. Residents are concerned that the wildlife will migrate to their back yards once the site is developed.
- Residents really like the gas station at the intersection of Lakeshore Road and Mississauga Road. It makes the intersection more vibrant and dynamic.
- The Loblaws shopping center caused mixed reactions due to its deep front parking and lack of pedestrian accessibility. Residents do not want this kind of development to happen to the other side of the Lakeshore Road (IOL site).

Lakeshore Road next to Memorial Park stop

- Residents are concerned that current sport and recreational facilities do not

accommodate enough senior activities.

Any new recreational or sport development could enhance seniors engagement with sports (stay active – active Mississauga)

- Port Credit/Lakeshore is a very active running destination for residents from across Mississauga. One of the residents participating in this walk commutes 3-40 min from North Mississauga to Port Credit to run along the lake
- There is a need for an additional pedestrian bridge along the GO train bridge between Legion Building and rail.
- The Lakeshore Road around the Light House is missing crosswalks. Current underpass is not enough according to local residents. Overall concern about pedestrian, runners and bicyclist safety.

Hurontario Street stop

- Residents enjoy much more the east part of Lakeshore Road due to its richer storefront development but still would like to have much more engaging streetscape that would allow more outside patios and sitting areas on the sidewalk.
- Residents would see Port Credit's new streetscape as more summer destination for tourists.
- Residents are aware of how low density the commercial development along the Lakeshore Road is; they see a potential for densification and introduction of new commercial or office spaces through increasing height of the buildings along the Lakeshore Road

2. Walk + Talk: Green/Parks Friday November 30, 2012 11:30am

- Discussed Port Credit vision, waterfront parks strategy
- Everyone on the walk agreed that there could be some connectivity between the various marinas in how the needs of boaters are met. In other words, each marina (including Lakefront Promenade) does not have to service every type and size of boat.

Green / Parks Walk Route



Connect / Lakeshore Walk Route



Source: Stoss 2012

- Launch area for kayaks, canoes at JC Saddington?
- Strong opinions expressed both for and against adding a pedestrian/cycling connection across the mouth of the Port Credit Harbour

3. Walk + Talk: Prosper/Business Context Friday November 30, 2012 11:30am

This Walk and Talk along Lakeshore Road was intended to gather information about business and economic diversity of Port Credit. The walk included few stops near local businesses at the East side of Lakeshore Road. The following documents participants' inputs:

Port Credit Library stop:

- Port Credit need for parking space could be partially resolved by introduction of additional levels to already existing parking next to the library
- There is an overall need to have more Lakeshore Road crossings in addition to existing underpass across Lakeshore Road by the library and Light House

Post Office stop:

- Lakeshore Road streetscape (trees and sidewalk) could be improved; proposed post office redevelopment is a good example of how commercial development could help with this
- Potential densification along Lakeshore Road, potential to use sidewalk for dining, sitting and more

Starbucks Coffee stop:

- Places to attract residents and visitors to water (restaurant, etc.)
- Concerns that bringing nightlife could bring additional noise and unruly activity to village
- Diversifying dining experiences for both locals and new visitors; offering fresh product in restaurant could be an opportunity here – and it would support local farmers
- Providing more affordable retail spaces for local farmers could increase interest in small local retail
- Opportunity for additional office space along Lakeshore Road – would add employment. Current retail lease prices

Prosper / Business Context Walk Route



Move + Belong + Connect / Bus Tour Route



are too high for small businesses to survive
Approximate 800 sq. m retail space costs
\$4000 per month.

- Analysis of parking study of Port Credit could be very useful to develop any future strategies
- QEW is a major barrier separating Port Credit from northern Mississauga

3. Bus Tour: Move/Belong/Connect Saturday, December 12, 2012 10am-12pm

Walk and talk (Bus Tour) organized to familiarize local residents with current development strategies and brief historic background for both sites IOL lands and CLC site and their surrounding developments and transportation corridors. The following documents participants' input.

Port Credit Harbour Marina Stop - CLC - Walk Through Marina:

- Port Credit is the largest and deepest (natural) operating marina On Lake Ontario.; multiple boats from across Canada and US use the marina
- Most activity in marina happens during Marina Shows in August
- Main operation of the marina is based on two loading and unloading docks:
 - South West dock serves smaller boats
 - North East dock serves for long and large boats
- Most of the boaters prefer storing their boats closest possible to loading dock -to

minimize transportation distance and costs associated with it - transportation arrangement is most difficult with larger boats

- Some people keep their boats in the marina (in water) - heated throughout the winter (with outside bubbler - plastic wrap + interior heater running 24/7) - In most cases it is not a preferred storage for the boat. There are few boats in the marina that are also occupied throughout the winter

Townhouse Development (FRAM) at Hurontario Street Stop:

- The townhouse development includes approximately 137 multifamily units.
- Each section of the development includes underground parking, with the exception of the north side of the development which includes open lower level parking
- Most of downtown Port Credit includes high-rise development which is still desirable but raises architectural and design issues of building's connection to the ground - open space, parking, and accessibility

Transportation- GO train station stop:

- Hurontario Street is one of the busiest roads in Mississauga, handling biggest amount of local and regional bus routes
- The proposed LRT poses traffic concerns

Bus Tour, including Marina walking tour



Source: Photos provided by the City of Mississauga, 2012

where segregated traffic requires additional widening of the street and limiting pedestrian circulation network - in both cases residents raise are concern with future traffic jams.

- Currently most of GO train stations parking lots are being considered for multi storey parking development.
- Lakeshore Road - Resident's concerns include accommodation of cyclist and increasing traffic jams as a result of segregating right of way.
- Some other solution might include removing or limiting on street parking.
- From transportation point of view additional parking structures are needed to be able to restructure Lakeshore Road to accommodate any future redevelopment of the road.

3. Water Recreation Focus Group Thursday, November 19, 2012 4pm

- Water quality and water quality of Credit River system are threatened
- Credit River is too shallow
- Impacts on salmon population?
- Need jobs that operate in marina
- Winter boat storage is important and ancillary uses
- Concern about marina (only one around that is deep enough for large vessels)
- How to improve rather than wipe out?
- Marina is part of heritage
- Astronomy viewing at JC Saddington
- Shallow water in Credit River reduces recreation and boating opportunities
- What can be done on Imperial Oil Limited (IOL) site? What do regulations allow?
 - Testing is beginning now and will take one year
- Rowing club: interested in IOL as sports site, especially for water sports center, including 500m short course for rowers, canoers, dragon boaters

- Wildlife in IOL?
 - As part of testing, they are looking at species
- What do you want to see in Port Credit?
 - Ferry service to Toronto
 - Community center or park – uses beyond development that communities can use
 - Beach (sand and swimming) east of marina?
 - Tennis (currently go to Clarkson)
 - Milton-bicycle track anticipated to create significant economic impact
 - Tourism, something that is unique and creates local employment (jobs and destination)
 - Natural environment
 - Ball uses, badminton courts in winter
 - Additional opportunities for physical activity for all ages
 - Ice skating
- Winter?
 - Little park use in winter – hard to make all season destination
 - Winter events could encourage activity (need to make sure Celebration Square)
 - How to encourage recreation users to spend money locally? (not just leave)
 - How to co-locate warm indoor spaces with outdoor winter opportunities
- How to develop culture of active lifestyles (in all seasons)?
- Cycling – already a hub of cycling activity, important to capitalize on (build on what's already in Port Credit)
- “Mississauga's Village on the Lake” – don't lose this!
- Residential uses are concerning as a future use on site, especially on marina site
 - Lose public access (private property)
 - Requires significant parking
 - Height may destroy views
 - Disagree: FRAM development has access all way long

- Currently no public access allowed on CLC site (marina), could change security point
- Public access is more than just boardwalk along edge
- Why aren't there more eating facilities along water's edge? (like Snug Harbour)
- Resident concerns:
 - Do we have enough parking and road/transit capacity to accommodate new uses?
 - How to have "high quality" restaurants and other uses?
- Differences between sites?
 - Heritage Conservation District lies between; don't necessarily need to be different
- Marina Park with launch ramps (busiest launch ramps on lake); 100% increase in traffic in past 2 years
- Heritage Pump buildings could be adaptively reused as Fisheries Interpretive Center
- Morning fishing 5-10am, pleasure boaters midday, afternoon fisherman afternoon
- Keep power launch, add non-motorized launch
- Traffic on river is an issue
- Could divert sea-doo traffic to Lakefront Promenade
- Need parking next to launch ramp
- Southern lot could be an opportunity, but would need to deal with condition of seawall
- Need to integrate Marina Park with new uses on IPC sites
- Make-up of boats that are stored in winter
 - 60% from marina (90% of boats that dock there)
 - 40% other
- Lake level declines will make opportunities at marina more desirable (limits access elsewhere with more shallow water)
- Destination for boaters
- Vision must be for both visitors (land and water) and residents
- Best astronomy in GTA
- Canoe club and rowing club would prefer public docks stay south of bridge
- Marina west: need to ensure sufficient land preserved for use (1,000 Dragon Boats on day)

**Water
Recreation
Focus Group**



Source: City of Mississauga, 2012

C. CONNECT! Saturday December 1, 2012 Interactive Station 1

CONNECT! was an interactive station that discussed issues of access and connectivity. All modes of transportation were discussed. The following documents the participants' input.

1. East/West Connections

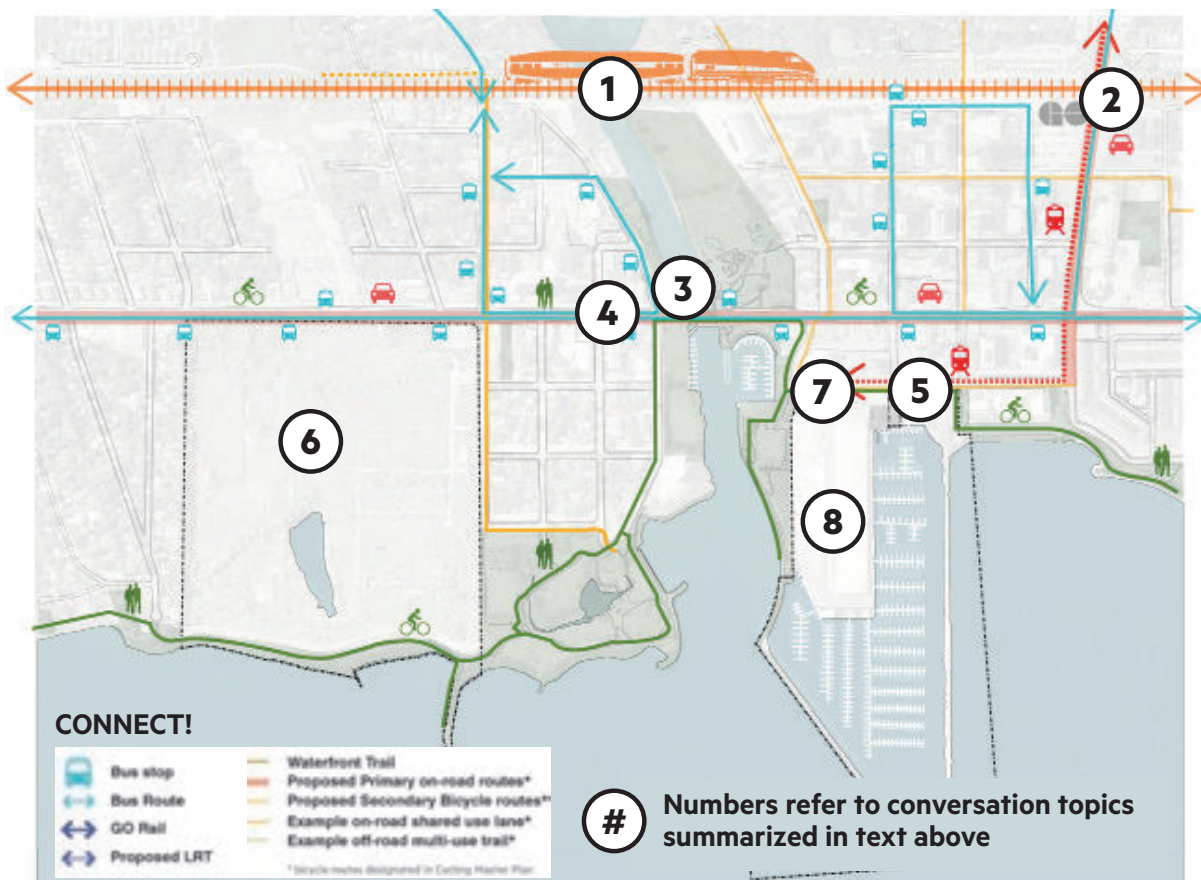
- E-W pedestrian and cycling connection at rail bridge desired
- Provides commuters from west easier access to GO station via bike or foot
 - This location is more protected from

the winds off the lake than a crossing at the mouth of the Credit River

- Provides a recreation loop around the Port Credit park system
- More pedestrian/cycling activity can revitalize commercial area near GO station
- Some suggestions that an additional vehicle connection be considered for this location or further north (e.g. at North Service Road)

2. North/South Connection

- Hurontario Street underpass under the rail corridor is not a pleasant pedestrian connection; an overpass was suggested as a better option



3. Credit River Crossings

- The need for an additional vehicle connection across the Credit River was frequently raised. Location options identified included the rail bridge; further north at North Service Road;
- Support for new underpass under Lakeshore Road along west side of Credit River

4. Lakeshore Road

- Pedestrians and Cyclists on Lakeshore Road
 - Consider opportunity for separated bike lane
 - Most participants agreed that cyclists and pedestrians needed space in Lakeshore Road corridor
 - Participants agreed that Lakeshore Road needs to provide an enjoyable pedestrian experience; the widened sidewalks and outdoor cafés enjoyed last summer were appreciated by the community
- Managing traffic on Lakeshore Road
 - It was agreed that traffic issues are most notable during peak hours and festivals; traffic often moves too fast during non-peak times

- 3 lanes (1 per direction and a continuous centre lane) would provide improved traffic flow; left turns would not hold up traffic
- Could consider having a lane that changes direction based on the peak traffic flow (e.g. traffic would move east during the am and west during the pm)
- Not all supported removal of lanes; some felt that with increased development and over time more traffic is inevitable and the 4 lanes should remain
- Downtown Oakville was frequently referenced during the discussion. The 2+1 lane configuration in Oakville is the feeling residents are looking for; however, it was noted that Oakville has more river crossing options and thus more traffic flexibility
- Other Lakeshore Road issues
 - Signal timing should be improved for safety and efficiency
 - Intersections – poor design for some (e.g. Stavebank, Mississauga Road), signal timing is issue; left turns cause traffic uncertainty
 - There is a feeling that the focus is on through traffic rather than the enjoyment of the village

Connect! Station



Source: Photos provided by the City of Mississauga, 2012

5. Port Street

- Port Street should have no cars or limited cars; would help with festival space; others noted that it would be important to provide vehicle access to the existing and future development
- Concern with impact on Port Street associated with LRT

6. IOL Lands

- Desire for smaller lots and compact/fine grid street pattern; human scale
- Bike connections should be provided
- Connection via the street pattern to the Heritage District to the east was desired by some; others felt that there needs to be a separation (likely through natural area) with no vehicular connection. Concern raised with vehicular connection related to traffic infiltration into the neighborhood
- Access should be to Lakeshore Road; align access to the site to areas where lights already exist
- Build complete streets in IOL lands from the start
- Consider opportunities associated with digging out contamination (e.g. PATH system)
- Waterfront trail connection up west side of IOL lands connecting to Lakeshore Road

7. Transit/ LRT

- Increased bus service to the LRT will help alleviate traffic (Lakeshore Road is now busy on weekend evenings)
- Consider a people mover type system along Lakeshore Road
- Need to make transit more user friendly ideas included:
 - Increased frequency
 - More interesting vehicles/make it exciting to ride
 - Make more interesting for younger people
 - Consider using smaller transit vehicles
- Suggested that the LRT could connect to

something like a water taxi

- The end of the LRT should be a destination
- Some people saw the ending of the LRT as an opportunity for a waterfront destination with shops and restaurants
- LRT needs to be a reverse vehicle so that turn-around space is not required

8. CLC Lands

- Provide public access to the breakwaters on CLC lands; east breakwater be built up and made accessible; could be designed as one of the amenities that attract young people
- Concern regarding conflict between the waterfront Trail on the CLC lands and the working operations of the marina (e.g. boat haul out)

9. Additional General Comments about Connectivity

Active Transportation:

- Some suggestion for a pedestrian bridge between JJ Plaus and JC Saddington Park (one that can open for boats); cable car was also suggested. Some form of protection for all or part of the crossing was recommended. Others suggested that there should be no bridge at the mouth of the Credit because it is a small harbour and too many bridges creates visual impact
- Need to make sure bike parking is included at destinations
- Consider bike rental such as Bixi
- Important to distinguish between commuter cycling and recreation cycling as they need different types of facilities
- It was noted that all pedestrian routes in Port Credit should be about exploration; we want to be able to walk on different streets for different discoveries; all should be rich in the discoveries they provide
- There is current congestion on the waterfront trail – need to make sure it is wide enough
- Improve the sidewalk along Ann Street to the GO station

Parking

- Parking should be kept off local streets; crime and litter was attributed by some to parking in the residential neighborhoods
- City should allow/facilitate event parking
- It was noted that the options for parking even today are not made clear (e.g. City owns part of underground structure at Hurontario and Lakeshore Road which is not well signed)
- Parking structures were suggested at the GO station, on IOL and at the library.
- It was noted that it is not a far walk to downtown Port Credit from the GO station and parking there and walking or use of a shuttle should be encouraged
- No issues about parking were raised when on-street parking was removed over last summer
- It was suggested that a more efficient travel flow may be accomplished if the different travel methods were separated onto their own corridors
- Neighborhoods are used for cut-through traffic
- Consider changes to Mississauga Road to address traffic

More on Transit/LRT

- It was cautioned that the timing of transit is likely a long way off and development is likely to occur in advance – need to consider the implication of that development (which has been allowed based on assumed transit) on the community pre-LRT
- It was noted that rapid transit is only being discussed for the N-S direction but that Port Credit is an E-W village; need to consider E-W rapid transit options

Marine Transportation

- Some discussion about water and boating connectivity; including consideration of whether there were opportunities to re-organize water activities to improve over the long term and whether dredging should take place.
- Consideration of a ferry that could connect people to the LRT was noted

Transportation Network and Mode Split

- It was agreed that a mix of travel opportunities was needed; need choice as we can't force people out of their cars and into transit
- Need to consider wildlife connections/ corridors; importance of maintaining corridors for wildlife and views along the river
- If there is a dog park on the IOL lands it should be accessible to the trail system
- Need thoughtful placement of street furniture giving consideration to bikes, those with strollers etc
- If Port Credit is to be a destination need to provide amenities such as public washrooms

Connect! Station



Source: Photos provided by the City of Mississauga

D. ACTIVATE!

Saturday December 1, 2012

Interactive Station 2

ACTIVATE! was an interactive station that used playing cards to generate conversations about potential combinations of land uses and open spaces for the two sites. Discussion focused on each site separately. The following documents the participants' input.

1. Imperial Oil Limited Lands

Imperial Oil Limited (IOL) Lands: Group 1

- Implementation is a consideration
- How to create employment
- Public uses that capitalize on waterfront
- Multifunctional indoor and outdoor spaces
- Waterfront is a resource and a draw for many people
- Uses for younger and older people
- Interaction between ages is important
- Important to think long term; wouldn't hesitate about remediation
- Attract creative uses to waterfront
- Affordability of commercial retail space along Lakeshore Road

Imperial Oil Limited (IOL) Lands: Group 2a

- Small scale hotels
- Small health care facility
- Satellite university campus
- Marina
- Outdoor activities, sports, waterfront parks, picnic, pier with feature at the end
- Concerts, events, plazas
- All season uses/all ages
- Mainstreet retail, restaurants
- Affordable housing
- Multi-use community facility (flex use)
- Small scale activities (do not compete with current activities)
- Waterfront access (develop away from water)
- First Nation Interpretation/Cultural Center somewhere in Port Credit
- Lakeshore Road frontage: fine grain, small scale
- Satellite facilities
- Sports fields: rugby pitches and other uses
- Hospital (small scale): "mini mini" health care centre (city within a city)

Imperial Oil Limited (IOL) Lands: Group 2b

- Need to consider uses' impact on Lakeshore Road



Activate!
Station

Source: Photo provided by the City of Mississauga, 2012

- High peaks in traffic are undesirable
 - Larger public space to link parks and bring waterfront trail inland
 - Places for people to sit and socialize, listen to outdoor music, community spaces, for people and children
 - Shelter for weather
 - Miniature Canada
 - Learning spaces
 - Multiple Uses
 - Campus? Or outdoor education center, could include an Environmental studies program and could monitor and display climate change information and research
 - Pier
 - Greenhouse; creation and innovation - Lake is idea generator
 - Mixed use along Lakeshore Road; green space by lake
 - Residential above; help address traffic considerations
 - Trails and benches
 - Public open spaces
 - Informational hall
 - Conservation feel
 - Water feature on site
 - Bicycle parking
 - Economics are important to consider
 - Trolley on site (could bring in revenue too) or bicycle rental (with 3 Wheels and Grocery Basket)
 - Drop in center
 - Uses can change depending on population
 - flexibility is important
 - Phasing is important – build uses as demand changes
- Imperial Oil Limited (IOL) Lands: Group 3**
- Smaller campus – branch of other school?
 - How does this relate to adjacent residential?
 - Instead, inspire creativity and entrepreneurship for multiple generations; creative incubator, “creative class”
 - Commercial
 - Combinations – synergy
 - Live, work, play within single site
 - Next wave of employment
 - Tech center; “community genius bar” where multiple generations mix; engage youth to help out
 - Infrastructure to support different mixing of ideas, people and activities
 - Innovative ways to finance centers
 - “Play” is important aspect of center (Google)
 - Funded by private enterprise, but open to others
 - Look for big employer who wants Class A space
 - How can also attract young people to work there
 - Flexible buildings
 - Connection to Go station important (shuttle, more frequent bus service)



Source: Photo provided by the City of Mississauga, 2012



Source: Dillon, 2012

- Health center, workshops/outreach
- Move boat storage to IOL
- Skating that takes you somewhere
- Road structure that doesn't allow for Wal-mart
- Recreation district with 24 hour activity (even camping at night)
 - Korea has campgrounds (rent tents) in city, Sydney has too
- Big employer
- Office space class "A"
- Employment/residential ratio
- Functional for those who only come out at night
- Inhabit the bridge catalysts
- Creative incubator; more than just work, vocation rather education
- Mars? Like innovation research facility; educational inspiration
- LRT drop people off
- Commercial uses
- Tourists
- High quality design
- Something for all ages – parents, children
- How to recognize past, including native Canadians, totem pole
- Visitor centers – this is a hub for villages
- Importance of implementation/zoning
- Enhance marina
- BIG PICTURE is important to keep in mind
- Pedestrian street; Port Street/local access only
- High density should be around GO station

1. Canada Lands Company Site

Canada Lands Company (CLC) / Port Credit Harbour Marina: Group 1

- Unique site: largest marina in Ontario
- Landscaping
- Boat storage on bottom, build on top with viewing platform (publicly accessible)
- Retail or condos – public conflict?
- Pier
- Security is issue
- Museum, gallery, art festival
- Water sports
- Outdoor activities
- Marina
- Markets (farmers)
- North side restaurants, small retail, outdoor patios
- Clean public facilities
- Waterfront park – south
- Employment – maintain working marina
- Pedestrian precinct
- Integrate with hotel use and other uses adjacent
- Boat could be public art

Canada Lands Company (CLC) / Port Credit Harbour Marina: Group 2a



Source: Photos provided by the City of Mississauga, 2012

- Residential is a given (not excluded)
- Food carts and park pavilion/café
- Creative economy

Canada Lands Company (CLC) / Port Credit Harbour Marina: Group 2b

- Opportunity to attract more marina uses and companies
- Preserve marina uses (largest and most important deep water marina)
- Need to enhance
- Educational facility
- How to balance public access with marina functions
- Potential to use shed for other activities without competing with marina uses
- Festival marketplace (Faniuel Hall, Boston or St. Lawrence Market)

Canada Lands Company (CLC) / Port Credit Harbour Marina: Group 3

- Move boat storage
- Logistics are important consideration
- How many of 100 employees at marina live in Port Credit?
- Waterscreens
- Artisan or farmer's market
- Beach or green space; Ridgetown as observatory
- Restaurants on water

- Granville Island
- Mini version of Harborfront Centre
- Either site: off-shore art installation
- Make sure people don't have to leave to live
- Camping on Ridgetown
- Heritage link to First Nations
- Relationship between sites important
- Valuation matters (need to control)



Source: Photos provided by the City of Mississauga, 2012

E. THRIVE!

Saturday December 1 2012

Interactive Station 3

THRIVE! was an interactive station focused around the large 3-dimensional model of the study area and the area of influence. This station was intended to spark conversation and generate discussion about alternative methods for structuring open space and density on the two sites and to allow people to move components around e.g. buildings, streets, parks, etc. Discussion centered around alternative ways to approach questions of open space, built form, and density on the sites. Each group discussed one potential way to organize the sites, based upon different starting points. The following documents participants' input.

1. Group 1: Model

IOL site

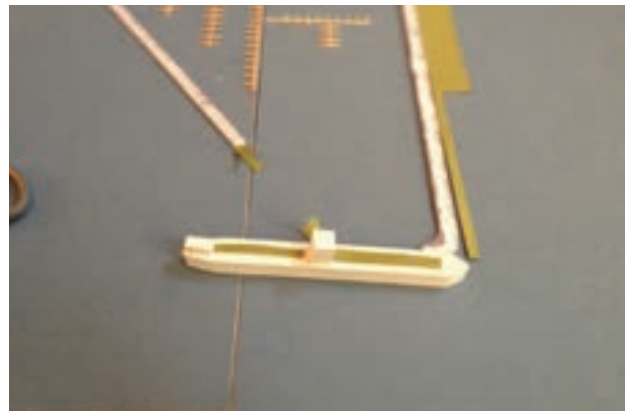
- No single family residential: liability/ insurance + doesn't meet goals of PC Concept Plan
- One strategy for density is to reinforce Lakeshore Road but maintain a minimum height along it.
- Other strategy, stagger density/height internal to site; central park model; minimize wallsapes along Lakeshore Rd.
- Introduction of university/college campus; an amphitheatre/forum; include some residential medium density, include arts/ culture component

- Did not encourage connection of east/ west road network because of sensitivity to Heritage network
- Recognition of a stormwater feature along greenbelt (central park) either naturalized or not
- How to balance new employment and historic Port Credit BIA and along Lakeshore Rd. frontage at IOL's
- Careful to view connectivity between IOL's and existing historic lands to east
- Are there cross connections of streets from IOL to historic area?

CLC site

- Make CLC site publicly accessible, include green/open space edge around site connecting to east and JJ Plaus
- Move marina repair portion to east side of break wall off end of Helene St.
- Retain some marine job growth but recognize that building can be removed
- Move/relocate large boat region to west side. Protect jobs and enhance job growth
- Some acceptance of extension of Stavebank Rd. to act as a buffer to JJ Plaus
- Capacity for density/height at top of site to front of property close to proposed LRT
- Density/height in middle. Green open space – centralized. Academic use (southeast grid). Debate about cultural and performance facility (part of campus or dorm?)
- Support for idea of waterfront promenade on CLC site
- Extension of marina supports idea of mixed use cross streets, density at front of CLC site

Group 1 Model



Source: Stoss, 2012

2. Group 2: Model

IOL Site

- Different starting point, let's look at expanding waterfront first and then deal with density and built form
 - Suggestion of open space spine along west side of Mississauga Road; create buffer from IOL and existing historic district
 - Establish new north/south road west of spine off of Lakeshore Road. 2 roads.
 - Some density internal to site
 - Tiered density (?) some density internal to site
 - Intensity open space along existing shoreline – potential for new waterfront fill out/off shore (creation of new marina) (sheltered) to accommodate new boat ramp/launch
 - Concern expressed about protection of existing ramp and fishing pier
- Allow for open space interconnection through site from east to west.
 - Inclusion of open view/unique open space (multi-functional space), ie. Battery Park (squares become public attractions themselves)
 - IOL's same support for extending retail/commercial uses along Lakeshore Rd. as long as there is parking
 - Lower development along water with higher density internal.

CLC site

- Some agreement about retention of marina jobs being in portion of existing structure
- Doing more jobs there. Building on existing marina jobs.
- Public access/open space is proposed around marina, need to consider safety issues for boaters if a marina (ships) is proposed on east side.



Source: Photos provided by the City of Mississauga, 2012

Group 2 Model: IOL Site



Group 2 Model: CLC Site



Source: Stoss, 2012

Group 3: Model

- Different starting point: implications of light rail
- Single family homes not insurable, backyards high starting cost - \$50-100M if we excavate all site; + costs to recap investment
- What if we have LRT across to IOL's, bridge across river (Light rail bridge) from extension of Stavebank Road on CLC's over and across river along northerly point of JC Saddington to Mississauga Road and into IOL lands
- IOL lands open space on 2 contaminated portions (internal to site) creates land value. Density along spine of internal green space.
- Add medium density along Lakeshore Rd. with commercial mixed uses. Mainstreet scale.
- Scale of density on periphery of site to and on east and west to buffer existing residential communities
- Connectivity of roads into east and west into IOL's from existing communities on east and west? Grid pattern.
- Open space within spine and along water's edge should incorporate recreational uses and skating rink.
- Employment - where?
- If institutional use (ie. University/college), integrate it into neighborhood fabric
- Performing/cultural arts – would work on Port Sec site. – yes – general support.
- Potential for marina on IOL's adjacent to spit/wharf. Potential for extending a break wall – islands out into lake. Idea of protecting deep water and enhances natural habitat.
- CLC's site:
 - Suggestion – increased density on site with open space elements on roof top
 - Possible “art park” at Ridgeway break wall.
 - On CLC's site, increase some height/density near proposed LRT station at end of Port St at Stavebank. Potentially include Ports Hotel.
 - Lands – potential for mixed use office/retail/residential
 - Some suggest of interspersed parkettes. Potential for open space along easterly break wall.
 - Extend medium rise residential with at grade commercial/retail along new street edge at J.J. Plaus park.



Source: Photo provided by the City of Mississauga, 2012

Group 3 Model: IOL Site



Group 3 Model: CLC Site



Source: Stoss, 2012

F. Public Drop-In Times

Additional feedback about potential land uses was gathered during public drop-in times. Participants were invited to place dots on images of potential land uses and open spaces that they felt would be desirable for the Imperial Oil Limited (IOL) lands, Canada Lands Company (CLC) Site, or in Port Credit as a whole.

Just over 1,400 dots were placed total, divided across the three categories as follows:

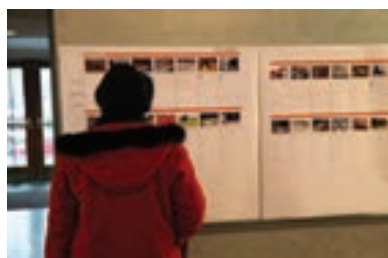
IOL Lands: 681 dots (48% of dots placed)
CLC Site: 392 dots (28% of dots placed)
Port Credit: 324 dots (23% of dots placed)



Source: Stoss, 2012



Source: City of Mississauga, 2012



Source: Photo provide by the City of Mississauga, 2012

	Imperial Oil Limited (IOL) Lands	Canada Lands Company (CLC) Site	Port Credit	Other comments
Restaurants	25	24	26	
Outdoor Dining	23	22	16	
Roof Deck	19	19	14	
Farmer Market	16	11	21	1
Community Sailing	12	21	8	
Boat Storage	21	18	2	
Conservation Area	32	3	1	2 3
Bars	10	12	13	
Bike Trails	22	4	7	
Affordable Housing	12	5	16	4 5
Public Art	8	14	10	
Separated Bike Lane	14	6	11	
Fishing	14	8	9	
Pier	15	8	7	
Marina	6	21	3	
Water Trail	16	5	8	
Concert	10	11	7	
Performances	5	13	10	
Cross Country Skiing	22	1	4	
Kayaking	10	11	5	
Rentals - Bicycle and Boat	9	9	8	
Art Gallery	10	3	13	
Bike Lane	6	8	11	
Jogging	15	4	6	
Ice Skating	17	4	3	
Art Festival	5	17	2	
Cobble Beach	21	1	1	
Recreation Center	13	1	7	
Running/Jogging Trail	16	3	2	
Community Garden	17		4	
Botanical Garden	17		3	
Outdoor Activities	18	1	1	
Tennis	8	5	5	6
Stormwater Swale	7	5	5	
Museum	8	1	7	
Dog Park	15	1		
Public Parking (Day)	5	4	5	
University Campus	13		1	
Skate Park	8	3	2	
Waterfront Park	9	3	1	
Outdoor Movie		6	7	

	Imperial Oil Limited (IOL) Lands	Canada Lands Company (CLC) Site	Port Credit	Other comments		Imperial Oil Limited (IOL) Lands	Canada Lands Company (CLC) Site	Port Credit	Other comments
Outdoor Movie		6	7			Zoo	2		
Multi-Family	9	2	2	7		Heliport*	2		12
Observation Tower	8	2	2			Speed Skating Oval	1		
Visitor's Center		9	3*	8		BMX Park		1	
Soccer Fields	10		1			Petting Zoo	1		
Snow Shoeing	11					Laser Tag		1	
Dining Pavilion	3	3	5*	9		Rodeo		1	
Ferry		11				Big Box Store*	1		13
Unique Event Space	5	6				Hospital	1		
Golf Course	10					Olympic Training Facility			
Aquaculture	4	3	3			Bob-sledding			
Floating Hotel	1	6	1			Skydiving			
Convention Center		8				Dog Sledding			
Rock Climbing Facility	4	3	2*	10		Regional Sports Facility			
Olympic Pool	3		3			Horse Racing			
Boathouse	3	2	1			Amusement Park			
Hotel		2	4			Mall			
Cruise		6				Plaza			
Water Taxi	2	3	1			Lightning Field			
Mountain Bike Track	5								
Camping	5								
Playground	3	1	1						
Bowling Alley	3	1	1						
Float Plane Marina	2	3							
Kite Flying	4								
Sledding	4								
Formula One	4								
Aquarium	2		2						
Indoor Track	2		1						
Climbing Wall	1		2*	11					
Fly Fishing	1		2						
Ice Fishing	2	1							
High Rise	2		1						
Curling Rink	1		1						
Hockey Arena	1		1						
Baseball fields	2								
Cricket Fields	2								
Downhill Sledding	2								
Large Playground	1	1							
Kite Boarding	1		1						
Science Center	1	1							

USES ADDED									
Art Installation Off Shore									
Move Boat Storage to IOL									
Camping Cockatoo Island Sydney Example, First Nations Link									
Age Related Services and Support									
Research/Creative Employment* *Entwined with natural areas, like in Sophia-Antipolis, France.									
Comments added to uses									
1. Seasonal, no dedicated building									
2. It has to be this! Why would we move all those animals?									
3. What an opportunity. Get an ecology assessment and make it an ecological sanctuary.									
4. No more housing along the Lakeshore South . . . drive, transit is impossible. Go North!									
5. Affordable housing should ONLY be a couple of units within larger market developments - to avoid ghettos like St. Jamestown in Toronto or the high-rise projects in Paris, France.									
6. YES! Tennis like whiteoaks									
7. Small rise, respecting zoning elsewhere									
8. At the library or instead of									
9. At the library, second story									
10. Beside/near arena									
11. By arena									
12. WHY?! ; No thanks! Use the airport!									
13. No! :(

G. Website Input October 16 - December 19, 2012

<http://inspirationportcredit.com>

1. What do you see in Port Credit's future on the waterfront?

Comments (27)

User1 Comment 126 Oct 2012, 8:20 AM

I see a beautiful waterfront, bustling with activity... with high quality, fully accessible public spaces where we can appreciate our greatest asset (the Credit River and Lake Ontario), restaurants, shops, children laughing, adults eating ice cream, ice sculptures in the winter, the freedom for people to play music (without permits) all year round...especially guitarists.

User2 Comment 1.11 Nov 2012, 2:31 PM

Guitars ... and maybe the occasional cowbell.

User3 Comment 1.28 Nov 2012, 2:27 PM

I agree with this vision. Let's make Port Credit THE place to be.

User4 Comment 2 26 Oct 2012, 5:14 PM

Port Credit already has a fair number of summer events for people to attend, but there could be some big event going on every weekend.

One thing Port Credit lacks is sports events. The future could build on this aspect of bringing people and business to the Port Credit area. Music festivals are fine, but you can't have a different one every weekend. The occasional sports tournament weekend would balance the existing music.

User5 Comment 2.110 Nov 2012, 5:17 PM

I think some events definitely need to be brought to Port Credit. Maybe a skateboard competition for the youth, or a professional competition of some sorts. Port Credit Arena looks amazing after the reno, maybe an indoor event could be planned there in the summer.

Sporting events will definitely draw more people outdoors and allow them to enjoy our amazing City.

User5 Comment 326 Oct 2012, 5:17 PM

Definitely would love to see more Winter activities & events! Living in Port Credit is great in the summer as there is always stuff going on but in the Winter it seems forgotten. Also, less hair salons lol.

User6 Comment 429 Oct 2012, 3:56 PM

Let's keep the Waterfront natural and open to pedestrians and bicycles and free from commercial developments.

There are many proposed commercial developments:

- in conjunction with the LRT parking facility on Hurontario and Park St;
- Lakeshore Rd at the Imperial Oil Lands;
- Port Street;
- Ann St. Fram-Slokker Condo;
- as well as the Trinity proposal further East at Enola and Lakeshore Rd.

On the east side of Hurontario, the North Shore Condo street level commercial area doesn't seem to be as well used as the area south of Lakeshore beside the Ten Restaurant where the courtyard area where children love playing while adults enjoy a coffee or meal at one of the patios makes it viable.

I've noticed many business closing in the Work/Live Fram-Slokker project on Lakeshore East of Hurontario.

I love the vibrancy and activity that successful commercial development brings to the area but am concerned that unsuccessful businesses, leading to empty storefronts are dispiriting.

User2 Comment 51 Nov 2012, 2:30 PM

I'd like to see a cultural facility like a Museum or something like a Science Centre where we could take our families, instead of having to trek to museums in other cities. An inspiring building that integrated well with nature and the waterfront would round out the experience (we can certainly do better than a brick box with a cinder-block chimney).

User7 Comment 5.18 Nov 2012, 1:48 PM

There is only so much waterfront available. Crowding the area with a ton of people- with hustle and bustle seems to be missing the point, and the beauty of the area. In my humble opinion.

User2 Comment 5.18 Nov 2012, 4:27 PM

We can either build places that do the best to suit our growing population or we can fence it off and limit access. The best compromise is to follow the traffic and usage guidelines that benefit the community and the city. I believe that it needs to INTEGRATE WELL WITH NATURE AND THE WATERFRONT. To me this statement means, there still needs to be nature and a waterfront and a cultural facility needs to fit into that overriding principle and feel. But I can feel your pain, my wife and I would be lost if we couldn't get away from the bustle and walk along the waterfront.

User8 Comment 5.29 Nov 2012, 11:03 AM

This land definitely presents a unique opportunity to build a world-class educational facility - perhaps a science facility or other type of museum could be a shared development and responsibility as part of building a satellite campus! This setup could be like how UofT supports the ROM and other nearby facilities or Ryerson and Maple Leaf Gardens...There are so many universities and colleges looking to expand in Ontario and this site presents one of the most attractive and beautiful places to set-up shop! Think of Humber and George Brown and all the development and healthy planning that came with those campuses - we can do even better!

User9 Comment 5.31 Dec 2012, 4:00 PM

I respectfully disagree with having a science museum for the very reason you believe in building one. It would be very tough for a museum to coexist and compete with the ROM and the Ontario Science museum in nearby Toronto; just too close.

As overly ambitious as this may sound, something that Toronto doesn't have is an AQUARIUM! It could have a small feature on lake species. Of course the main feature would still be marine species. This of course is me dreaming big, I do very much have doubts as to how realistic this is though; namely \$\$\$ I also don't think its a good idea to build a campus on the Lakeshore. It doesn't make sense to build a educational institution on such expensive real estate. I think if UTM could do it over they wouldn't choose the current site on Mississauga Rd. Where would students find affordable off-campus housing?

User2 Comment 5.3.11 Dec 2012, 5:02 PM

Toronto is already building an aquarium: <http://thetorontoblog.com/2012/08/17/ripleys-aquarium-shaping-up-filling-in-fast/> In terms of a museum making it or not - that's up to a well thought out business plan an feasibility study. If it can get the support of Peel and Halton region school boards it should do fine. Paying for parking, buses, and the time lost in travel to Toronto makes it a better deal for the schoolboards in Peel and Halton - they visit during the week day. Which means families and individuals can visit evenings and on weekends. I have seen plans for successfully run museums with weaker population bases. The biggest issue is not financial viability, it's whether the people of Port Credit want such a facility.

User9 Comment 5.3.1.11 Dec 2012, 5:32 PM

Who knew...Good for TO

Even then though, its not really the kind of aquarium I had in mind. A Ripley's aquarium is probably going to focus on sharks, marine life that can do special things. I was thinking of something far more broad, educational focus and bigger.

Another idea is perhaps a "Green Technology Museum". That would be something very unique.

I hear what you're saying but I'm still very skeptical of a science museum (in particular)

being that close to Toronto. There are museums in smaller populations but they focus on different things. The only museum that I can think of, comparable to what you're saying are various art museums that coexist with the AGO.

User10 Comment 62 Nov 2012, 5:43 AM

Keep the "Port" in Port Credit by making this marina and surrounding lands a major draw for boaters from all of the Great Lakes. After all, they are connected.

Set up a water ferry service that will run from here to the Toronto waterfront and possibly beyond. It could help with commuting when the season allows for safe, comfortable transit by water. Just think of how wonderful that would be for someone to have the choice of taking a ferry to work instead of the Gardiner! In the Caribbean, there are large vessel marinas being established to attract tourism and commerce. We should study this and I would welcome an opportunity to be involved in some manner. And of course, doing it in a sustainable, "green way" is the only way!

User7 Comment 78 Nov 2012, 1:44 PM

During the warm months, I start each morning by the lake. One thing I have noticed is how many people will find a quiet spot by the water and just sit, listening to the birds and the waves. For many people, myself included, the Port Credit waterfront is one of the last places one can go to sit and think. It is a place of healing, and it is a place to reflect.

I agree that it would be nice to see some coffee shops and some diversity, but I strongly believe that the area directly around the lake should be kept natural. It would be heartbreaking for many people not to be able to go and sit and reflect. and dream. and breathe.

User1 Comment 7.19 Nov 2012, 5:53 AM
Very well put...your words took me to a nice place... thanks

User11 Comment 7.230 Nov 2012, 3:48 PM
Great points! A natural waterfront is a great oasis from the sterile city. Very important!!

User12 Comment 88 Nov 2012, 4:38 PM

I Would Like To See A Walking Bridge (Up And Over) The Mouth Of The Port Credit River Joining J J Plaus Park And Pier On The East And Saddington Park To The West.

It Would Have To High Enough To Accommodate The Pleasure Craft Into Snug Harbor.

The Bridge Could Be An Architecture Contest And A Wonder When Completed.

The Distance Straight Across Measures About 200M

The Walking Bridge Would Unite The Two Parks And Create An Excellent Walk Along The Waterfront.

Could It Be Possible Just Imagine.

User12 Comment 98 Nov 2012, 5:02 PM

With Regard To The Work/Live Shops Fram-Slokker Project On Lakeshore (South Side)East Of Hurontario.

The Shops Appear To Be To Much In The Open There And Look Very Uninviting.

I Believe The Shops Here Would Do Much Better If They Had A Colonnade Over The Street To Bring Them All Together And Protect The Shopper From The Weather.

If Done Right This Area Could Be Really An Eye Catcher To The Drivers Passing By.

User8 Comment 9.19 Nov 2012, 11:05 AM

Cooksville has a nice smaller-scale example of this, where transit, retail and living space thrive in a fairly tight space, even if it isn't the most sustainable or attractive, people really like it there!

User8 Comment 109 Nov 2012, 11:46 AM

For the Imperial Oil Lands...It would start with a quiet waters edge full of natural spaces to reflect but also celebrate and take part in water and other recreational fun...as we move

inland I see a mix of parkland and natural ponds which also acts as filters for all the runoff in the area - the site is anchored by a beautiful new college or university satellite campus, with small shops and cafes in between for all to enjoy as well as a medium-sized museum or science facility to inspire people of all ages to come to the waterfront. Moving further in I see a mixed use community of 4-10 story buildings accommodating street-level arts and retail space and services, small business and residential apartment/townhouse style would make up the tops of these classy buildings. Most importantly this new community would be healthy, walkable and completely sustainable. A mixture of small streets with bike lanes and green boulevards, a lane for cars and one for transit; space for a future LRT loop off Lakeshore and low-impact development throughout is what would make this community really stand out.

To go even bigger - fully integrated stormwater management and waste management (waste, recycling, organics, liquid and hazardous) for all facilities, smart lighting and noise attenuation to limit pollution, underground geothermal for heating and cooling and an intelligent mix of white, green and solar roofing. Along with rainwater recycling, reuse of materials for construction and community gardens in the parks we WILL make this a precedent-setting community!

User8 Comment 119 Nov 2012, 7:32 PM

A museum, educational center, sustainability complex or perhaps even mixed use "attractions" center (ie. skating rink, movie theatre, attractive retail and business)...any of this, should look like this: http://www.thecrystal.org/_html/
Let's set a precedent for the world before we fall to the back of the pack.

User2 Comment 11.113 Nov 2012, 11:52 AM
or something like this: <http://www.zeiss.co.jp/c12567b00038cd75/Contents-Frame/191d11396e66e1e041256882003c79e8>

User5 Comment 1210 Nov 2012, 5:10 PM

I think park lands are VERY important along the lake and the City has done a great job with the current waterfront parks. I would hate to see our waterfront look like Toronto's, skyscrapers and buildings everywhere. People come to the water to relax, watch the boats, do some fishing, feed the birds, NOT to look at huge buildings, they can see those at work.

User13 Comment 1328 Nov 2012, 9:14 PM

Port Credit right now is home to many events especially in the summer, and often is quite crowded as such. As far as pedestrians on foot go, it's not a problem but when planning this space we should take into consideration the effect these plans will have on traffic patterns. Although this is a space for the people and not for automobiles, the plan should at least take note of the potential implications it will have on traffic throughout the region.

Of what to actually make with the land? Lots of shops, restaurants, etc. and more open, functional space as one travels closer to the water (i.e. small parks, clearings, etc.). Keep the buildings low. No more condos, there are quite enough around. Aim for the space to be one people will enjoy walking around in both summer and winter, then we will have a successful waterfront for growth of the community in port credit. That's how I see it.

User9 Comment 141 Dec 2012, 6:29 PM

Imperial Oil Lands:

Extend JC Saddington Park along the lake going west such that it connects B Machree Park. This would be similar to Spencer Smith Park in Burlington. The park could be used as festival grounds, such as Canada Day or maybe new location for Mississauga Ribfest! If the water is clean enough, include beach wide enough to accommodate beach volleyball. Then have small retail development along a strip of land facing Lakeshore Rd. I'm not really sure about land in between.

Marina

I personally could care less about a marina but it seems like most people want one. It would be nice to have the view of boats in the marina, water far more accessible. As in get rid of the big parking lot on Port St! Make it look like the marina waterfront in Victoria, BC.

2. What is important to you about Mississauga's waterfront in Port Credit?

Comments (18)

User14 Comment 125 Oct 2012, 2:22 PM

As a member of the City of Mississauga Dragon Boat Team, we would like to see the public access docks and gravel lot remain accessible. For approximately the past 10 years, we have docked our boat at this location as well as utilize the gravel lot of off season storage.

User15 Comment 1.126 Oct 2012, 9:40 AM
I believe it should remain public access as it is a public waterway for recreation including our dragon boat team. Anything else would make it inaccessible and probably more noisy.

User16 Comment 1.230 Oct 2012, 4:52 AM
I echo the pleasure and utility of the water front (in and along side). As a competitive rower on the Credit River mixing it up with competitive paddlers, water polo games, other rowers, dragon boaters, fishermen, flat water paddlers, fish, turtles, birds, deer, I see a growing use and enjoyment of the waterway and surrounding land.

The power of the lake is not friendly to most of this fragile group of players, so the river itself is getting more congested. If we could create protected water offshore of the land, think of the potential for expanded sport and enterprise on and around this land.

User1 Comment 226 Oct 2012, 8:14 AM

If there is magic on this planet, it is contained in water.

User16 Comment 2.130 Oct 2012, 4:40 AM

Well said! I embrace this as a strong inspired thread within the fabric of the end result.

User5 Comment 326 Oct 2012, 5:21 PM

Keeping the waterfront clean and kept is important to me. It seems they do a good job at that every year.

User17 Comment 428 Oct 2012, 8:04 AM

Accessibility is a priority for me and my family. We love the walking/biking trails - they give us inspiration to keep active as a family.

User6 Comment 529 Oct 2012, 2:52 PM

Pedestrian accessibility is important to me. With all the emphasis that is placed on the benefits of walking it is crucial for the municipality to make safe and pleasant places to walk a priority.

User10 Comment 630 Oct 2012, 7:42 AM

It is important that Port Credit Harbour Marina continues to offer it's current services to boaters that are a necessity for this area. This includes deep water mooring, off-season storage and sufficient parking for those who keep their boats here. Equally important is the continuance of service to the boating community that is comprised of the yacht brokers, boating instruction (BoaterSkills.ca) and Bristol Marine's boat repair services. This can and should be a preferred destination for boaters from around the lake. Let's keep boating services in mind during this planning stage for our waterfront.

User5 Comment 6.110 Nov 2012, 5:02 PM

PCHM is a JOKE. They barely look after their docks and there are ALWAYS open slips. Word on the lake is that it is very "commercial looking", the docks are not in good shape/looked after and bristol marine is a rip-off. I have heard many horror stories about bristol marine overcharging and doing poor repairs, many people have learnt the hard way too. The best thing to do is demolish that building,

SHUT DOWN BRISTOL and start from new, new marina staff, management, EVERYTHING. If there is any hope of this being a “preferred destination” then there are major changes needed. I heard a story of CITY staff that cleaned the shoreline(along the rocks) on THEIR property because a resident complained, the place is a disgrace. The deep harbour is a great benefit for larger vessels, but if you want to attract larger vessels (like the tallships from Toronto) then you need the proper facilities for it. Not only that, nobody wants to visit Port Credit on his luxury/expensive yacht and stay at a trailer park, time for a MAJOR RENO to PCHM! The City should take that over and open another marina, Lakefront Promenade Marina has one of the best reputations on the lake, and no I don't have there, I am stuck somewhere else.....

User6 Comment 730 Oct 2012, 11:15 PM

Section 4.3 “Waterfront” of the Directions Report of Oct 28, 2008 provides a comprehensive set of recommendations concerning what the community wants in this regard. I'm hoping that the City will acknowledge the time and enthusiasm which the community participants have already contributed and will summarize the Public Policy Recommendations which have been accepted already so as to avoid frustrating those of us who have given our time and attention to the issues in the past.

User18 Comment 82 Nov 2012, 9:36 AM

After attending the most recent meeting on October 18, it's quite clear that Canada Lands plans on using the existing land portion to create walking pathways and parkettes. That's fine, but they are also considering some residential, and businesses like restaurants, coffee shops, etc... In their example of where else in the world this type of marina environment exists, they site Granville Island in Vancouver, Brighton UK, Amsterdam Holland, Barcelona Spain, and Copenhagen Denmark. There is one very critical difference

between all those locations and 1 Port Street East: Frozen water! All those locations don't haul all their boats out. There is one very critical difference between all those locations and 1 Port Street East: Frozen water! All those locations don't haul all their boats out for the winter because they have either salt water and/or a temperate climate. A few get hauled out year round to have work on them and then they get relaunched. The space to store those few boats pales in comparison to what Port Credit requires. Port Credit is located on fresh water that freezes. There is no option for most boat owners to leave their boat in the water for the winter. Not convinced? Look at all the boats stored on site this winter. Where will these boats be stored if there is no planned storage?

The conversation at this meeting on October 18 did not affect the dockage in the harbour, but there was no conversation about where they would be stored on land for the 7 months of the year when the harbour would be empty of boats. Off site storage for the majority of the boats would be cost prohibitive and would lead those owners to not return to the harbour over time.

Please consider on land storage when planning this location's future.

User8 Comment 8.19 Nov 2012, 10:54 AM

Perhaps we could create an innovative multi-story boat parking structure? I'm not sure if any such thing exists on Earth but it could be a creative building with street-level commercial space with the side facing the waters edge acting as a loading dock for cars or other vehicles to haul boats to a parking area on one of the floors of the building...this could be an awesome sight and even look artistic on the outside!

User 5 Comment 8.1.110 Nov 2012, 5:07PM

Such buildings do exist for smaller boats, but not for larger boats/sailboats. If the storage land at PCHM is lost, then the marina will lose a lot of revenue and

boaters will either have to keep their boats in water with bubblers or find another marina.....

User3 Comment 98 Nov 2012, 2:25 PM

The waterfront trail and parks are important to me and I would like to see it full of people being active, relaxing, having fun and just being there.

User8 Comment 109 Nov 2012, 10:57 AM

Finding a balance between green public space, set-aside natural space, and a mix of residential, industry and commercial/institutional that attracts people from all walks of life...like the recent issues in Toronto concerning a balanced development approach, our planners must make sure we give a fair share to each type of development (though all should be under an umbrella of sustainability, this is crucial) so that people can live, work and play within our community, and wildlife can thrive too!

User13 Comment 1128 Nov 2012, 9:20 PM

Access to the water itself, green space (i.e. parks with running/cycling trails), pedestrian accessibility are the most important features of the waterfront.

User11 Comment 1230 Nov 2012, 3:42 PM

Swimmable water! We have a beautiful Great Lake at our doorstep; it's vital that a great city be able to use its waterfront for human recreation without fear of people getting ill. This is an issue beyond the scope of just one city, so perhaps some kind of water purification plan for the lower Credit River (which empties into Lake Ontario right at Port Credit) would be a wise addition.

3. What is missing in Port Credit?

Comments (2)

User1 Comment 126 Nov 2012, 11:43 AM

Restaurants, cafes, food on the waterfront. Every great waterfront city has restaurants on

the water. The only one we have is not even on the lake, it's on the River. This would provide destinations, resting places, and add some vibrancy to the winter season.

User13 Comment 228 Nov 2012, 9:31 PM

Port credit's waterfront lacks unity. For example, take the lighthouse by the credit river. Most would identify that lighthouse with Port Credit pretty easily, but the space behind it is a parking lot. There are walkways to cross the river on foot away from the cars that lead to ... a parking lot? If the waterfront was pedestrian oriented throughout, it would feel more unified and be an easier place to live and spend time in. Not that access to the waterfront for industry should be forgotten, just isolated to an area separate from the pedestrian area.

4. What is important to you?

This exercise instructed respondents:

"Knowing that the City's Strategic Plan calls for a model, sustainable, creative waterfront community, how important are the items listed below for the future of Port Credit's waterfront?"

Respondents marked each of the following elements on a scale of 1 to 10, with 1 as the most important.

Access to the water was ranked, on average, the most important by respondents. Almost half of respondents gave this element a "1" or the most important. Marina and launch facilities were given a "1" ranking by 5 respondents, the most "1's" of any element other than water access. Parking for vehicles, trailers, and boats received the 3rd most 1's (4 total). Interestingly, the average score of these elements ranked only 7th and 6th highest, respectively (out of 10 elements). In general, residents placed similar levels of importance to many of the elements (average scores for lowest 6 of 10 elements were within 0.6 average priority of each other).

What is most important to you?

Results <i>(33 respondents as of December 19, 2012)</i>		
	Average Score *	# of 1's (most important)
Access to the water (visual, physical, emotional)	3.8	16
Public lands for recreation or waterfront park	4.7	2
Movement for pedestrian, cycling, transit, etc.	5.0	0
Cultural & heritage (landmarks, public art, tourism)	5.3	1
The form and function of the harbour and piers	5.7	1
Parking for vehicles, boats, trailers	5.8	4
Marina & launch facilities	6.0	5
Connections to surrounding areas/trails/piers	6.1	1
Restoration of natural lands	6.3	1
Sustainable approaches using green technologies	6.3	2

* On a scale of 1-10 where 1 indicates most important



APPENDIX B: CASE STUDIES

Case Studies

Granville Island Vancouver, British Columbia

Granville Island was built in 1915 through the addition of dredging material to a pair of sandbars at the delta of False Creek. It is linked to the mainland and connected to the infrastructure of the Granville Bridge. Originally housing a machine shop and a number of residents, Granville built up to its heyday in the 1940s. Postwar decline in the need for industrial products along with the recognition of the pollution of False Creek created by the island's industry led to a period of decline. This lasted until the 1970s at which time it was transformed through what is considered to be a successful urban redevelopment process.

The Island is currently predominantly an arts and entertainment based tourist stop, but continues to house some light industry as well as numerous continued marine operations. Amenities include a public market where butchers, bakers, fishmongers, farms, and craftspeople sell their wares on a rotating basis. Also found on the island are a kids market, the 'adventure zone' (a kids entertainment center) a

live theater, restaurants, art galleries, a brewery, and art and design school and a working marina and boat rides. The island is host to a number of festivals such as an annual music festival, wooden boats festival and smaller events for performing arts, literature and food. There are a number of small house boat style residences on the North East side of the island.

The island can be accessed via public transportation, ferry and private automobile. Parking is available in one of 5 paid lots or for short term parking, in a series of free parking spaces. Paid parking is available for hourly, daily, weekly and monthly rates that change with the season while free parking is time limited based on location, up to 180 minutes. Buses can park for free in lot 5. All parking and traffic management is run by a separate company, Canada Mortgage and Housing Corporation on behalf of the government of Canada.

Relevance to IPC:

- Example of mixed use development combined with marina operations. May provide insight into future development on the CLC site



Port Credit Harbour Marina



Granville Island

Scale Comparison



100 meters



Source: Aerial photo from Google Earth, Diagram by Stoss



Granville Island: Context + Land Use Distribution



<http://www.seegravilleisland.com/>



<http://shop-cook-eat-share.blogspot.com/>



<http://www.thepoint.ubc.ca/2012/03/22/get-out-there-granville-island/>

Navy Pier Chicago, Illinois

Navy Pier is a 1,010 meter long, 90 meter wide pier on the shoreline of Lake Michigan. It was built in 1914 as part of planner and architect, Daniel Burnham's plan for Chicago, and was originally meant to serve as a mixed-purpose piece of public infrastructure. The pier went through many phases of use from commercial/entertainment to public education to use by the US Navy until it fell into a state of under utilization from 1965-1989. In the 1990s it was purchased by Metropolitan Pier and Exposition Authority who engaged in major renovations. In 2011 the pier became a 501(c)3 not-for-profit corporation.

Today it is primarily an arts and entertainment district connected to the lake through boat tours, most of which leave from the South Side of the pier. Amenities include outdoor rides such as a ferris wheel and carnival style entertainments such as a fun house as well as a children's museum, stained glass museum, restaurants, beer garden, imax theater, performance stages, outdoor sculpture, bike rentals, segway tours and space for seasonal events and fireworks.

Access to the pier is via boat or via private automobile and/or public transportation, both of which access the pier from the Western edge and travel down the North side. Parking for 1740 cars is available in one of two lots and is paid. Another lot inland from the pier a few blocks is available for parking should the pier parking be full. Signs posted at the entrance will inform visitors when no spaces are available on the pier. Motorcycle and trailer parking are also available.

Relevance to IPC:

- Example of commercial and tourist destination combined with commercial marina operations. May provide insight into future development on the CLC site



Port Credit Harbour Marina



Navy Pier

Scale Comparison

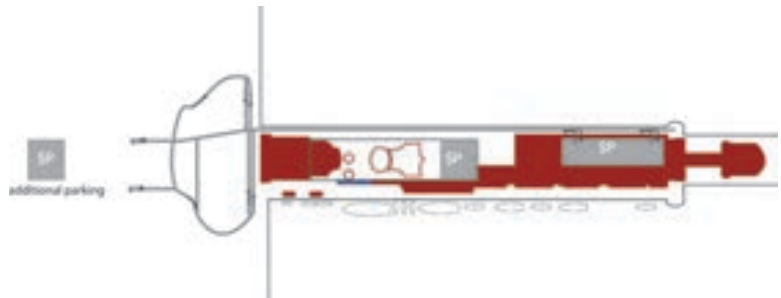
100 meters



**Navy Pier
Context + Land Use
Distribution**



- Commercial
- Institutional
- Residential
- Industry
- Parking



Source: Aerial photo from Google Earth, Diagram by Stoss



<http://www.aboutparking.com/chicago/wp-content/uploads/2012/05/chicago-navy-pier-1309392914-781.jpg>



<http://www.destination360.com/north-america/us/illinois/chicago/images/s/navy-pier.jpg>



<http://simplykierste.com/2011/03/a-weekend-getaway-and-a-giveaway-winner.html>

Brooklyn Bridge Park Brooklyn NY, 2010, MVVA.

The 85 acre park is located on 1.3 miles of waterfront on the East River across from the southern tip of Manhattan. The park is a redevelopment of an industrial site that has been a working waterfront for ferries and cargo ships since the 17th century. In addition to the upland portion of the park on firm ground, the park also extends on six existing piers. The redevelopment of the park is occurring in phases. Currently, Piers 1, 5 and 6 are open to the public, with the others to be opening in Fall 2013.

Generally, the park is divided both north to south and east to west. The southern portion of the site focuses on the harbor and Statue of Liberty, while the north is framed by the east tower of the bridge. The west side of the park is oriented outward towards Manhattan, while the west side is more introverted.

The new design includes a variety of diverse programming, including: playgrounds, boat and kayak launches, hard courts, paths, fishing piers, various cafes and concessionaires, a marina, a boat house, sand volleyball courts, a habitat preserve, and many open lawns.

The park integrates sustainability throughout. Materials have been salvaged

for reuse by carefully deconstructing existing structures. New shoreline habitat was created throughout the park by the conversion of a post-industrial area into a lush park with local species. Stormwater from the park and adjacent buildings is collected and circulated through the park through topography. The retained water is also used for irrigation. Photovoltaic panels and green used on the parks' structures and each pier's lighting is controlled independently for energy efficiency.

The ongoing operation and maintenance of the park will be funded primarily through the limited number of revenue-generating development sites scattered throughout the park. These sites will consist of a combination of residential and commercial uses, and underground parking. Some of the sites are existing structures and others are vacant. The allowable heights for the undeveloped sites range up to 315 ft. On-site concessions will contribute a nominal amount to the cost of the parks' upkeep.

Relevance to IPC:

- Example of commercial and tourist destination combined with commercial marina operations. May provide insight into future development on the CLC site



Source: Rogers Marvel Architects



Port Vell

Barcelona ESP, 1992

Port Vell is Barcelona's oldest port. Master planning in the late 1980's for the overarching Port of Barcelona, focused particularly on the Port Vell. It had become isolated and obsolete by the extension of industrial port facilities further out to sea. The harbor was redeveloped for the 1992 Summer Olympics, turning 55 hectares of unprofitable industrial land into a recreation and tourist destination. In 2011 National Geographic ranked Barcelona as the world's best beach town because of Barceloneta Beach with a specific mention of associated redevelopment of Port Vell.

The redeveloped site's primary features are a Mare Magnum, an IMAX theater, Europe's largest aquarium and the Rambla del Mar. The two-story Mare Magnum features shops, bars, and restaurants. The Rambla del Mar is a walkway across the mouth of the harbor that is a popular tourist destination. The redevelopment of the port has directly created 7,000 jobs and the area now experiences more than 320 million Euros of annual economic activity. Currently, the marina, in the heart of the port, is undergoing a transition into a megayacht destination with facilities for ships up to 180m.

Relevance to IPC:

- Example of large waterfront development in combination with marina operations May provide insight into future development on the CLC site



Westergasfabriek

Amsterdam NL, 2002, Kathryn Gustafson

This 36 acre site is a former coal gas production facility in the city of Amsterdam. The polluted site ceased gas production in the 1960's, when electricity reduced the demand for gas. In 1980's and 90's the site was rediscovered when it gained recognition for its architecture and became a popular place for informal use by artists. This revealed the site as a successful event location, with it hosting the De Kunstvlaai art fair, the Holland Festival and Awakenings club events.

A master plan by Kathryn Gustafson in the early 2000's guided the redevelopment of the site, which now has features such as trails and gardens, an events field for 10,000 people, a playground, waterfall, bridge and artificial lake. During the redevelopment the 13 remaining structures were sold to a private interest because of the high cost of bringing them up to code, with the stipulation that their future use must emphasize culture and the arts. The rehabilitated buildings now feature restaurants, galleries, a bakery, daycare center, studios, art cinema and a nightclub. The larger buildings now host trade fairs, conferences, theater, performances and special events.

Relevance to IPC:

- Example of successful redevelopment of contaminated site to a vibrant recreational space. May provide insights into the future potential of the IOL site



Source: Siebe Swart



Borneo-Sporenburg Amsterdam NL, 2000, West 8

Borneo-Sporenburg, built on two peninsulas in the Eastern portion of the Amsterdam docks, is a 2500 unit housing project that incorporates water-related activity into a ground accessed development with a density of 100 units per hectare. The project is built on the idea of creating maximum variety within the housing as well as providing for a maximum of private open space. The masterplan required a suburban style low-rise housing with each unit opening onto the street while keeping a much higher density than the typical suburb allows. Patios, internal voids and accessible roofs help fulfill the 30-50% void requirement while providing private open space and a sense that spaces are larger than they are within the dense housing units. Larger collective spaces are present inside three large apartment block buildings that break up the regularity of the smaller housing units. However, the harbor is the primary public space. The two peninsulas are connected to each other via a series of unique bridges, a lower inner bridge and an exterior, higher bridge. The bridges create both a sense of identity and views or physical access to the water. The higher of the two bridges allows

sail boats to pass below in order to access the marina between them.

The development is purely residential and lacks local shops and facilities, however it does possess a school and. Amsterdam's center is a 15 minute bike ride away. Parking spaces are located within the unit plots, typically creatively sharing the street frontage with the entrances. Apartment blocks, in contrast, have underground parking. While parking is available, the design overall promotes walking and bicycle use as dominant modes of transportation. Boat access to the site is also available in the marina that lies between the two bridges and individual unit owners are able to dock boats along the back side of their unit. Larger boats are able to dock along the Southern edge of the peninsula.

Relevance to IPC:

- Example of residential development combined with small scale marina operations. May provide insight into future development on the CLC site



Source: West 8



Shanghai Houtan

Shanghai CN, 2010, Turenscape

Shanghai Houtan Park is a 14 Hectare brownfield site along the Huangpu River. Designed by Turenscape, the project is a constructed wetland and flood control system that utilizes reclaimed industrial structures and materials from the steel factory that previously existed on site. The water in the area was highly polluted, unsafe for recreational use and ecologically degraded. Turenscape's design aims to re-create the river as a living machine that cleans the water while making the entire site publicly accessible. Water cleaning is done through a linear system of wetlands, cascades and terraces. A variety of plants are used in order to filter out different contaminants and the cascades are used to oxygenate the water while also creating a public amenity through water features. The terraced design navigates the 3-5 meter elevation change between the city and the river while also adding to flood control protection. An existing floodwall of 6.7 meters had protected against flood but had no public or ecological value. In contrast the stepped wetlands and areas of rip-rap that replaced the wall provide habitat and protect the shoreline.

According to the Landscape Architecture

Foundation the site has reduced waste and saved an estimated \$ 17,300 by reusing materials from the steel factory. Up to 634,000 gallons of water are treated via biological processes and able to be used for non-potable uses. This water is currently used by the water features in the adjacent Expo Park. Use of this water saves the park \$116,800 per year in operation costs. In addition, biodiversity and carbon sequestration are dramatically increased while recreational and educational opportunities are created.

Relevance to IPC:

- Example of landscape strategies dealing with heavily contaminated land and water as it pertains to issues on IOL site



Source: Turenscape



The CityDeck

Green Bay WI, 2009-2012, Stoss

The CityDeck is the heart of a multi-phase redevelopment project along Green Bay's Fox Riverfront, whose aim is to allow for significantly increased access to the river and to diversify social and ecological life along it.

The boardwalk is activated by an undulating wooden surface that provides spaces for gathering, docking, watching, and playing. The sectional diversity creates a wide range of seating configurations and river overlooks. The boardwalk is designed flexibly, to accommodate both large and small gatherings comfortably, and for round-the-clock and year-round activity.

The design inventively integrates sustainable stormwater, material, and lighting strategies; it reorients downtown to the riverfront; it frames opportunities for new development; and it creates an entirely new image for the City of Green Bay.

Project planning and design involved intense public and stakeholder participation, as well as extensive coordination with local, county, state, and federal agencies.

Relevance to IPC:

- Example of a Stoss built project creating a vibrant waterfront development. May provide insights for future potential for either the IOL or CLC sites.



Source: Photo by Mike Roemer



Source: Photo by Jeff Mirkes

Erie Street Plaza Milwaukee WI, 2010, Stoss

Milwaukee's new waterfront plaza is the result of an international design competition won by Stoss. The proposal is for a flexible social space that can accommodate large gatherings and day-to-day activities, built on sustainable design principles. It is one of a series of public space activators along the Milwaukee Riverwalk, a three-mile pedestrian and bicycle corridor that connects downtown Milwaukee to the emerging and redeveloping Third Ward and Beerline Districts, and to the lake front beyond.

The plaza is conceived as a flexible field that fosters social and environmental activity and appropriation. It activates and registers environmental cycles of stormwater by collecting runoff to support a reconstituted marsh/ wetland, re-charges the groundwater tables, and utilizes river water for irrigation. Socially, the plaza is designed to accommodate a wide array of potential activities, including art festivals, gatherings, concerts, movies, weddings, festivals, farmer's markets, and winter carnivals, as well as less intense, every-day activities like boat-watching, fishing, sunbathing, and simply hanging out.

The project included extensive interface

with the Wisconsin Department of Natural Resources, the City of Milwaukee Public Works and Community Development Departments, the Planning and Fine Arts Commissions, and various community groups, abutters, and stakeholders.

Relevance to IPC:

- Example of a Stoss built project creating a vibrant waterfront development. May provide insights for future potential for either the IOL or CLC sites.



Source: Photos by John December



Former BP Refinery Golf Course and Office Park Casper, WY, USA

Overview

The wetland system designed for British Petroleum in Casper, Wyoming can handle flows up to 3 million gallons of BTEX and MTBE-contaminated groundwater per day. Due to land availability challenges, the wetland was designed to blend into the middle of a premier Robert Trent Jones golf course, and will be able to operate for over 100 years with low operations and maintenance (O&M) costs.

Three Crowns Golf Club resides in the Platte River Commons, formerly known as the Amoco refinery. The refinery was first operated by Midwest Refining Company in 1913, to process petroleum from the Salt Creek Field, located about forty-five miles north of Casper. In 1923, the Salt Creek Field peaked at 100,000 barrels per day. In 1941, refining was modified to supply the military with fuel oil, toluene for explosives and aviation fuel. In 1953, the refinery began making commercial aviation fuel and increased the octane of motor gasoline. At the height of production, 48,000 barrels of oil were processed, and the refinery employed

approximately 750 people. In 1973, Standard Oil Refinery changed its name to Amoco Refinery.

Waste generated at the refinery was either buried or allowed to discharge directly into the North Platte River or into the groundwater below. Unfortunately, these early practices have now left the need to clean up the site.

The refinery process area occupied approximately 340 acres, which was supported by a tank farm, to the north, of approximately 700 acres. Beginning in 1981, prior to the time of the refinery shutdown, Amoco began to implement a plan to clean up the site and prevent the underground flow of contamination. It did so by installing several groundwater recovery wells and accompanying pumps. Around 120 recovery wells have been installed within the golf course and along the barrier wall. These wells pump groundwater out at a rate of 700 gallons per minute. The oil and other chemicals are then separated through a series of filtering wetlands, which serve as water hazards on the golf course.

Relevance to IPC:

- Example of a project dealing with post-refinery contamination. May be useful in considering future of IOL site.

