

PART III: PLACES

This part of the final report of the Royal Commission is an appreciation of the waterfront as a place and as a series of places. Moving across the bioregion, from Burlington Bay in the west to the Trent River in the east, it offers comments about the Commission's experience of the diverse places on the waterfront.

While those who live, work, and play forcing to in these places probably have a deeper surround appreciation of their attributes, in this section the Commission attempts to define the public values and objectives for each place on our halong the waterfront, as well as recommending strategies for the future.

The kinds of places we create

The kinds of and evolve tell us who we are places we create and and what is important to us. evolve — the buildings we allow to be built; the way we treat our rivers, roads, wastes, trees, and water; the care and attention we pay to democration our offices, schools, factories, restaurants, spend or recreational facilities, monuments, and are and places of worship — measure who we are and what is important to us.

In his excellent book, *The Experience of Place* (1990), author Tony Hiss captures

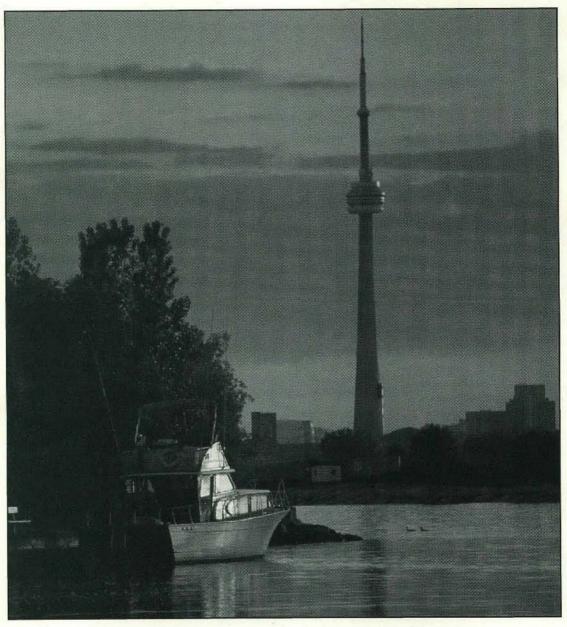
the importance place has in the ordinary, day-to-day experiences of people.

We all react to the places where we live and work, in ways we scarcely notice or that are only now becoming known to us. Ever-accelerating changes in most people's day-to-day circumstances are helping us, prodding us, sometimes forcing us, to learn that our ordinary surroundings, built and natural alike, have an incredible and continuing effect on the way we feel and act, and on our health and intelligence. These

places have an impact on our sense of ourself, our sense of safety, the kind of work we get done, the ways we interact with other people, even

our ability to function as citizens in a democracy. In short, the place where we spend our time affects the people we are and can become.

As places around us change — both the communities that shelter us and the larger regions that support them — we all undergo changes inside.



Toronto, cityview in the evening

This means that whatever we experience in a place is both a serious environmental issue and a deeply personal one. Our relationship with the places we know and meet up with — where you are right now; and where you've been earlier today; and wherever you'll be in another few hours — is a close bond, intricate in nature, and not abstract, not

remote at all. It's enveloping, almost a continuum with all we see and think. And the danger we are now beginning to see is that whenever we make changes in our surroundings, we can all too easily short-change ourselves by cutting ourselves off from some of the sights, or sounds, the shapes or textures or other information from a

Most and Least Desired Types of Waterfront Development



When asked to consider different development options for the waterfront, respondents favoured low rise over high rise development.

Source: Environics Poll. 1991.

place that have helped mold our understanding and are now necessary for us to thrive.

When people speak about vivid experiences of place, they are often referring to fond memories or magical moments; the waterfront offers many of these. Stand at the foot of Grindstone Creek and see the densely treed slopes rise steeply on either side of the water; glance across Humber Bay from the eastern shore of Etobicoke and see the distant gleaming towers of downtown Toronto shining in the sun; watch children play in Ajax's Rotary Park with the rushes and shrubs of Duffin Creek in the background; walk on Scarborough's bluffs and look out over the lake - these are experiences to savour and remember for a lifetime.

Sometimes, however, people's most unforgettable experiences are of places that have been damaged and diminished over time. Absorb and survive the assault on all

the senses when walking down York Street under the rail viaduct and the Gardiner across Lake Shore Boulevard, past the parking lots to reach the water's edge; fight the down-draft winds hurling down the sides and around the corners of the new high-rises along Toronto's Central Waterfront on a windy day; find an historic vista across the bay, one that has brightened the daily lives of many, but is now being appropriated for the benefit of a few hundred — these experiences remind us that we need to safeguard, repair, and enrich the places our heritage has lent to us so that we can enjoy them before we pass them on to others.

Many of the places surveyed here are in transition: sometimes that transition is measured and gentle, while nonetheless important, while in others, change is fundamental and magnificent in its impact. In all of these places, we have the opportunity not to "short-change" either our heritage or our future.

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CHAPTER 7: HALTON

The Halton waterfront comprises some 33 kilometres (20 miles) of Lake Ontario shoreline, and 5 kilometres (3 miles) along Burlington Bay/Hamilton Harbour. The regional waterfront includes the local waterfronts of Oakville and Burlington and stretches from Joshua Creek west to Grindstone Creek, where the waterfront meets the Niagara Escarpment. A significant number of watercourses enter the lake through deeply incised valleys, the most prominent being Bronte Creek (Twelve Mile Creek) and Sixteen Mile Creek, both in Oakville.

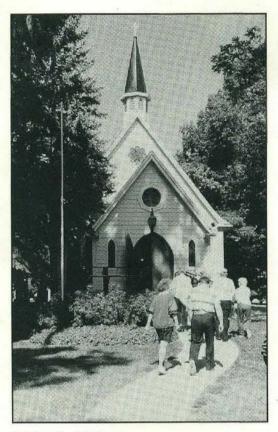
The waterfront area was the first to be settled, both in Oakville and in Burlington. Consequently, the area has more historical diversity in the age of its buildings and built forms and in the maturity of vegetation than can be found in more inland areas.

Across Burlington Bay, the stark Stelco and Dofasco steelworks in Hamilton contrast with waterfront residential estates, golf course lands, and the lush greenery of the Burlington side. La Salle Park on the Burlington waterfront, but owned by the City of Hamilton, is named after the French explorer who set out from Montreal in 1669



to find a way to the southern sea. His party reached Burlington Bay and, after landing at what is now the park site, continued inland to the Seneca Indian hamlet of Tinaouataoua, near present-day Westover, before returning to Montreal. It was only 13 years later that La Salle completed exploration of the Mississippi River and reached its mouth.

St. Luke's Church in Burlington, built in 1834, still retains its unbroken view of Lake Ontario from the main south door. For almost 160 years, this narrow strip of treelined lawn — 20 metres by 160 metres (66 by 525 feet), extending from the lake to Ontario Street, and originally without streets crossing it — has been known as Church Avenue. This green lane provides a visual connection to the lake and is part of the



St. Luke's Church, Burlington

property given to the Church of England by Joseph Brant, chief of the Six Nations.

Spencer Smith Park, gently sloping to the lake, presents an inviting vista of Lake Ontario and the Niagara Peninsula. On a clear day, the CN Tower is visible in the east. The view of the lake, from the lower end of Brant Street, is an invitation to take a break from work and to contemplate the magic of land meeting open water. A children's play area, recently added at the western edge of the park away from the water's edge, enables parents to enjoy the waterfront view while youngsters are busy.

The extreme western end of Spencer Smith Park is the former site of the Brant Inn which, from 1920 to the mid-1960s, hosted the big jazz and swing bands, and saw the beginnings of rock and roll.

In October 1990 the City of Burlington purchased the 5.6-hectare (14-acre) McNichol estate at the mouth of Shoreacres Creek. The City will preserve the McNichol house, dating back to the 1930's, and will retain the eight-acre creek valley in its natural state. Plans for the approximately 2.4 hectares (6 acres) of tableland overlooking Lake Ontario have not yet been made.

The Town of Oakville also offers a variety of waterfront vistas. On the eastern part of the Oakville waterfront, Gairloch Gardens stretch from Lakeshore Road south to the lake. The gardens are a highly manicured formal park with rose beds, decorative landscaping, flagstone walkways, and an armourstone shoreline. The land was bequeathed by James Gairdner to the Town of Oakville in 1971 so that the public could enjoy the beautiful lakefront setting at the mouth of Morrison Creek, where numerous ducks and geese make their home. The existing stucco dwelling has been converted to a gallery and artists' studio operated by the Oakville Art Gallery. This park is a favourite for wedding photos which, because of demand during the spring and summer, have to be scheduled months ahead.

In western Oakville, the Lakeshore Road bridge over Bronte Creek offers a number of views: looking toward the lake, you can see the inner harbour, the rivermouth, and the new Bronte Outer Harbour. Beyond the breakwalls of the outer harbour, which is nearing completion, is Lake Ontario. Connecting the two harbours is a public boardwalk along the edge of the river, extending along the lake frontage. Upstream from the Bronte bridge is a large lagoon and cattail marsh; a new eight-storey condominium building wraps partially around the eastern edge of the marsh

before the marsh merges with the heavily vegetated slopes of the creek valley.

In contrast to other parts of Lake Ontario in the Greater Toronto region, the Halton waterfront has no overwhelming environmental problems. However, the adjoining Hamilton Harbour has been identified by the International Joint Commission (IJC) as one of 42 Areas of Concern in the Great Lakes. Significant progress has been made on the Hamilton Harbour Remedial Action Plan (RAP), and improvements to water quality in Hamilton Harbour have resulted from actions by the responsible parties, principally the steel companies and sewage treatment plant operators.

The dominant image of the Halton waterfront, encompassing both the Burlington and the Oakville waterfront areas, is one of suburban, maturing residential communities. It has the highest

average household income of any region's waterfront in the Greater Toronto Area, the highest proportion of residents engaged in managerial and professional occupations, and a pattern of dispersed housing and employment that makes people strongly dependent on automobiles. The region's waterfront area also has below-average housing opportunities for households of moderate and lower income.

Employment opportunities are concentrated at the edges of the Halton waterfront, with heavy industry on the western Hamilton side and the high-growth service and office sectors in Mississauga and Metro Toronto, on the eastern side of Halton. The two edges are connected by the Queen Elizabeth Way, the Lakeshore GO Transit commuter route, and the CN Rail line. Adjacent to the transportation corridor is a growing band of mixed industrial

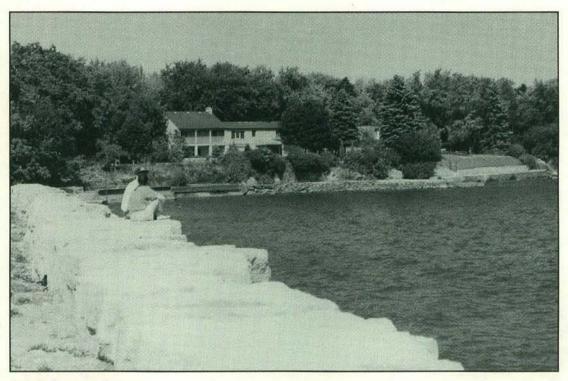


The McNichol Estate at the mouth of Shoreacres Creek, purchased by the City of Burlington, 1990

and commercial buildings, the most significant of which is still the Ford assembly plant in Oakville, built in 1953.

The limited number of waterfront industrial uses, such as the Shell oil refinery and test track, are gradually being displaced by more intensive residential development. The extensive environmental clean-up required prior to redevelopment of the Shell lands is nearing completion.

1981 and 1986, its waterfront-area population actually declined by three per cent to 43,500 persons, as household size decreased. In fact, this area has the lowest proportion of children and the highest proportion of seniors on the Greater Toronto region waterfront. Housing ownership is increasing in this area, which is likely to continue to accommodate residential development once the economy improves. Almost 1,500 units



On the Burlington waterfront

Residential estates, with large formal grounds, form a significant portion of the lakefront uses south of Lakeshore Road. Development north of Lakeshore Road is also predominantly suburban residential with newer developments further inland.

Almost 37 per cent of Burlington's population live in waterfront communities. While the population of the City of Burlington increased marginally between

of medium or high density housing are either approved or in process.

As part of its Official Plan review, the City of Burlington commissioned a Gallup Community Attitude Survey; it found that 78 per cent of City residents say there is a need to provide a wider range of housing prices throughout the City. A further 61 per cent want more land used for multiple unit housing and smaller homes in new

development areas. While not specific to waterfront areas, these results show general support for a broader mix of household incomes and diversity of housing types in new waterfront residential developments.

The Oakville waterfront, with a population of nearly 30,000, has approximately 34 per cent of the Town's population. This waterfront area has the highest concentration of single detached homes, the highest proportion of residents in managerial and professional jobs, and the highest average household incomes on the Greater Toronto region waterfront.

As might be expected, the Oakville waterfront has a low proportion of residents with housing affordability problems and a low incidence of overcrowded dwelling units. There is a low proportion of young adults (aged 20 to 34) on the Oakville waterfront probably because of the limited opportunities for those people who need rental or affordable housing.

The Oakville waterfront area also has the highest proportion of GO Transit use (13 percent of work trips) of any local waterfront area in the Greater Toronto region. This reflects the proximity of the Lakeshore GO train route and the high proportion of residents working in Metro Toronto.

WATERSHED UPDATE

In its 1990 Watershed report, the Royal Commission made two recommendations regarding the Halton waterfront. First, as requested by Halton Region, Burlington, and Oakville, it urged the Province to declare a Provincial Interest in the Halton waterfront. Second, the Commission recommended that the Province negotiate a Waterfront Partnership Agreement with the Region of Halton, as well as with other levels

of government and their agencies. The purpose of these recommendations was to create a more open and accessible waterfront, as well as stronger connections with the creeks and river valley systems.

Subsequently, the Region of Halton, the Halton Region Conservation Authority, the Town of Oakville, the City of Burlington, and Ontario Hydro, acting independently, have endorsed the *Watershed* recommendations.

While no Provincial Interest was declared, the Province has endorsed the principle of Waterfront Partnership Agreements. The region and local municipalities have begun to respond to some of the issues identified as a basis for negotiations, including:

- reviewing the (1982) Halton
 Waterfront Plan's conformity to the
 nine waterfront principles, as part of
 the Halton Region Official Plan Review;
- helping identify interim and preferred waterfront trail routes in the provincially initiated waterfront trail study;
- identifying opportunities to maintain and create green corridors as described in the 1990 planning document, *A Greenlands Strategy for Halton*, with strengthened policies to be included in the Halton Official Plan Review;
- preparing to add, as part of the Burlington Official Plan Review, a Council-approved policy requiring that the water's edge to be dedicated for public use whenever redevelopment takes place; and
- reconsidering the Region of Halton's residential designation of 4.2 hectares (10.3 acres) of waterfront, known as the Shell House lands, prior to

approving the 511 hectare (1,263 acre) Burloak Secondary Plan.

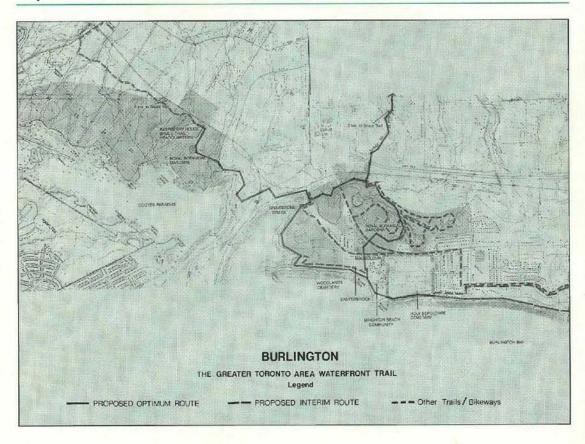
TOWARDS A GREEN NET

The Waterfront Trail should be a major pedestrian and bicycle link in an integrated greenway system. (See Chapter 5 on Greenways for further information.) The Burlington waterfront encompasses both Lake Ontario and Burlington Bay portions of the Waterfront Trail. One of the fundamental trail planning questions in this area is how to ensure greenway connections to the Hamilton waterfront, to the Niagara Escarpment and to the existing Bruce Trail.

Map 7.1 shows part of the Burlington Bay waterfront greenway and trail. In this context, the existing trails, landscaped grounds, and strategic location of the Royal Botanical Gardens (RBG) offer an immense resource. The gardens front on Cootes Paradise and Grindstone Creek, and the RBG is prepared to participate in developing an integrated trail system for the area. The objective would be to connect five basic elements: the RBG lands, the Grindstone Creek valley, the Niagara Escarpment, the environmentally sensitive Cootes Paradise wetlands, and the western edge of Burlington Bay. This would greatly enhance public access and use, while maintaining the environmental integrity of each of these significant natural areas.

On the Lake Ontario side, the threekilometre (two-mile) long Burlington Waterfront Park, from the Spencer Smith

Map 7.1 The waterfront trail, Burlington



Park headland to the Hamilton Harbour canal, is publicly owned. This continuous park is the result of long-term co-operation among the Halton Region Conservation Authority, the City of Burlington, the region, and the Province of Ontario. In the summer of 1991 a bike trail was established on the former CN Rail bed adjoining the Beach Strip.

Burlington opened the Beach Strip proper to full public use, including supervised swimming and beach programs, and general recreation. During the summer, approximately 24,500 persons used

the park. The beach was "posted" as unsafe for swimming on 12 days because of poor water quality; but was nevertheless open for swimming 82 percent of time.

The Breezeway link, which would connect Hamilton's Confederation Park to the Burlington Beach waterfront, was proposed in the 1987 Hamilton Beach Concept Plan and approved by both the City of Hamilton and the Hamilton Region Conservation Authority. However, the more recent draft Hamilton Beach Neighbourhood Plan (1991) proposes local modifications to the original plan and, in its current state, appears to reduce both public waterfront access and local and regional waterfront recreational potential. In particular, the Breezeway link appears to have been removed and more restrictive access to the waterfront proposed. Clearly, there is a need to reconcile local and regional waterfront uses: the fact that the Breezeway link is proposed for the western edge of the Greater Toronto waterfront offers both continuity with the Waterfront Trail and a unique

opportunity to strengthen the Hamilton Beach community.

According to the 1991 provincial study, The Waterfront Trail: First Steps from Concept to Reality (Reid et al.), only about eight per cent of Burlington's shoreline has an existing waterfront trail located on the optimal route. In contrast, about 20 per

cent of Oakville's waterfront has an existing trail along the optimal route — outside of Metro Toronto, the highest proportion of any local municipality in the Greater Toronto

region. Local waterfront planning policies make the difference: while Oakville requires that a 15-metre (50-foot) strip be dedicated to the town when waterfront redevelopment takes place, the City of Burlington has no such requirement.

In March 1990, the Region of Halton, in concert with its local municipalities and conservation authorities, submitted A Greenlands Strategy for Halton to then-MPP Ron Kanter's (1990) study, Space for All: Options for a Greater Toronto Area Greenlands Strategy. In general, that document takes a watershed approach, recognizing the interconnections between the Niagara Escarpment, the river valleys, and the waterfront. Although short on specifics, Halton's submission clearly acknowledges the multiple roles that green space can play in a regional framework. The Halton Greenlands Strategy objectives include:

 protecting the diversity of fauna and flora, ecosystems, communities, and landform of Halton;

One of the goals in Burlington is to

connect five areas of natural significance,

greatly enhancing public access and use

while maintaining the environmental

integrity of each natural site.

- maintaining the water quality and natural flow regulation of rivers and streams within Halton;
- providing expanded opportunities for a variety of public outdoor recreation activities near urban settings;
- contributing to a continuous natural open space system to provide visual separation of communities and to provide continuous corridors between ecosystems; and
- protecting significant scenic and cultural landscapes, including archaeological resources.

The Halton Parkway Belt Review
Committee has since recommended that
Sixteen Mile Creek be included in the
Parkway Belt designation in order to preserve
major green space. The Committee's recommendations have not yet been heard by
Regional Council and a provincial amendment would be needed to the Parkway Belt
West Plan, if those recommendations were
to take effect.

The Parkway Belt Plan is a corridor plan for major infrastructure (e.g., roads and utilities) and open space (e.g., urban separators and natural corridors). While not explicitly acknowledged as a potential tool in the Halton Greenlands Strategy, the Parkway Belt designation could provide additional protection for valleylands and the adjacent tableland edges, involving the provincial government in the approvals process as soon as a development application is submitted.

WATERFRONT PLANNING POLICIES

The 1982 Halton Waterfront Plan recognized the need to identify nodes of

intensive public use through a series of major regional waterfront parks at intervals along the entire Halton waterfront; and to provide access links between them on existing and proposed public lands and roadways. In the words of the Halton plan,

The concept excludes a waterfront strip along the entire shoreline, as previously envisioned in the Halton-Wentworth Waterfront Study, and instead provides a nodal rather than linear pattern of open space areas.

However, local municipalities have considerable discretion in interpreting the regional plan and articulating local waterfront policies.

As noted previously, Burlington is in the process of reviewing its Official Plan and intends to develop waterfront policies as part of that review process. The review will include a reappraisal of extensive lakefilling proposals for the vicinity of the downtown waterfront. In the interim, the municipality is proceeding on a site-by-site basis to ensure that waterfront public access is obtained whenever there is development of waterfront lands.

A Gallup Community Attitude Survey commissioned by the municipality as part of its Official Plan Review found that 82 per cent of the City's residents felt that it should give high priority to increasing public access to the waterfront. Moreover, 96 per cent of residents felt that new waterfront development should not obstruct views of the lake or public access to it.

The Town of Oakville's long-time planning policy has been to require, as a condition of development approval, dedication of a 15-metre (50-foot) strip along the water's edge whenever waterfront redevelopment occurs. This strip, along with required

shoreline stabilization, ensures an incremental extension of public access to the water's edge. In comparison, the City of Burlington has no such requirement. The result, as noted earlier, is evident in the amount of land accumulated over time for public access.

The Town of Oakville's public access policy, consistently applied since the mid-1970s, has shown great foresight and has been of substantial long-term benefit to citizens. It can also delay recognition of new opportunities. For example, the Burloak Secondary Plan (1991, formerly Shell Lands Secondary Plan) involves redevelopment of 511 hectares (1,262 acres), including the 4.2-hectare (10.3-acre) lakefront Shell House lands. The Town is currently seeking only a 15-metre (50-foot) wide public access strip, if and when the lakefront Shell House lands are redeveloped.

The Plan also proposes two new residential neighbourhoods with a planned

population of 7,500 persons. New light industry and a business park proposed for the northern portion are expected to add an eventual 14,000 to 16,000 jobs.

The Shell House lands represent a unique opportunity to acquire several hectares for a waterfront park, as part of the largest secondary plan along the entire Greater Toronto waterfront. These lands also adjoin the proposed Burloak Park, where extensive lakefilling is proposed. Designating the Shell House lands as public open space would expand public waterfront access using the existing land base while reducing, to some extent, the need for 9.4 hectares (23 acres) of lakefill at Burloak.

The provincially initiated waterfront trail study, *The Waterfront Trail: First Steps from Concept to Reality* (Reid et al. 1991), identified the Shell House lands as the first of eight priority candidates for "green nodes" along the trail.



The waterfront Shell House lands; part of the Burloak Secondary Plan

Urban development strategies and the forms that we impart to the urban landscape must reflect our commitment to conserving, developing, and sustaining urban places of quality while satisfying a broad range of bio-physical and cultural needs; those that are functional and those that are symbolic; and those that tap our individual and collective imagination.

Jacobs, P. 1991. Sustainable urban development, Montreal: Third Summit of the World's Major Cities.

PLANNING INITIATIVES

Halton Region is drafting a new Official Plan, with strengthened environmental and waterfront policies, scheduled to be completed in mid-1992. As part of its Official Plan Review, in January 1991 the Region of Halton issued a draft report, Land Stewardship and Healthy Communities: A Vision for the 90's and Beyond, which sets out values and directions for changes to the Plan. It presents a clear and concise summary of proposed changes, as well as the reasoning behind the proposals. In terms of the natural environment, it proposes a Greenlands System

... to provide a single framework for the protection of the natural environment while at the same time affording the opportunity for the public to appreciate and learn from the ecosystem.

Clearly, the region is now moving beyond formulating ideas to implementing them.

Overall, there are also significant opportunities to create and enhance the public use and enjoyment of the Halton waterfront. At various times, the local waterfront municipalities, regional municipality,

and conservation authority have demonstrated leadership and foresight on waterfront-related issues. They have tended to operate within a broad collaborative framework or loose partnership. A renewed commitment to ensuring long-term public benefits from both private and public waterfront projects and to a greater recognition of new opportunities that can bring net environmental gains would be benificial to everyone.

RECOMMENDATIONS

- that Halton Region, the Town of Oakville, the City of Burlington, and the Halton Region Conservation Authority (HRCA) continue to review relevant documents including official plans and any waterfront-specific plans to ensure that they incorporate an ecosystem approach and the nine waterfront principles described in Part I.
- that Halton Region, the Town of Oakville, the City of Burlington, and the HRCA participate in preparing the proposed shoreline regeneration plan, including the waterfront greenway and trail, and ensure that any other plans for waterfront areas are reviewed and/or developed in this context.
- **54.** The Province should negotiate a Waterfront Partnership Agreement or agreements with the Region of Halton, as well as with other levels of government and their agencies, and, where it is appropriate, with the

private sector. The agreement should use the Halton Waterfront Plan as the basis for negotiations, and should consider the following issues:

- confirmation of agency roles in implementing the plan, with Halton Region as the leading co-ordinating agency;
- expanding the ability of the Halton Region Conservation Authority to regulate valleyland development, based on ecological and recreational objectives and on planning for protection from floods and erosion;
- implementing interim and preferred routes for the Waterfront Trail in Halton, as well as developing mechanisms to establish the trail;
- making arrangements to transfer federal and provincial Crown lands and waterlots to local public agencies, at nominal cost, where they are needed for public access and use;
- relocating the Ministry of Transportation work yards from Burlington Beach to allow redevelopment of the present site;
- exploring the most feasible means of removing Ontario Hydro's existing electrical transmission lines from Burlington Beach;
- identifying opportunities and plans to maintain or create green corridors up the valleys of Grindstone Creek, Bronte Creek, Fourteen Mile Creek, and Sixteen Mile Creek, and to

- preserve and enhance natural habitats at creek mouths such as those at Fourteen Mile and Shoreacres creeks:
- reviewing, within the current
 City and Regional Official Plan
 reviews, the City of Burlington's
 current policy of not requiring
 dedication of the water's edge
 for public use as part of redevel opment activities; and
- financial arrangements under which the federal, provincial, local, and regional governments, and the private sector, would participate in the development of the proposed Great Lakes Science Centre, as a means of educating the public about the historical, environmental, recreational, and economic importance of Great Lakes rehabilitation.
- Halton Region, the Town of Oakville, the City of Burlington, and the HRCA re-examine the proposed Waterfront Urban designation of the waterfront Shell House lands and the design of the proposed Burloak lakefill park in the Draft Burloak Secondary Plan. The municipalities, in co-operation with the Province and Shell Canada Ltd., should also recognize the opportunity to make the Shell House lands public open space.
- Region Conservation Authority, and Hamilton-Wentworth Region should review the Hamilton Beach Neighbourhood Plan and the approved

Hamilton Beach Concept Plan to ensure linkages to the Waterfront Greenway and Trail and other trail systems. This review should evaluate whether the potential for the Breezeway link, public access, and local and regional waterfront recreation are adversely affected by the Neighbourhood Plan. If they are, local and regional uses should be reconciled.

57. Halton Region and the provincial government should provide additional protection to the Sixteen Mile Creek valleylands and adjacent tableland edges; this could be done by designating these features as Parkway Belt Open Space in the Parkway Belt West Plan and providing generous building setbacks for adjoining new development.



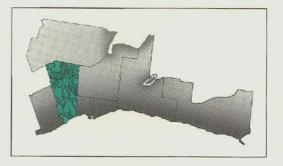
CHAPTER 8: MISSISSAUGA

The City of Mississauga is the only local municipality within Peel Region which is located on the Lake Ontario waterfront.

The Mississauga waterfront stretches 15 kilometres (9 miles) along the lake, approximately from Joshua Creek east to Etobicoke Creek. Its major natural features are the Rattray Marsh at the mouth of Sheridan Creek and the Credit River, the lower course of which is entirely within the City of Mississauga. In addition, a number of smaller creeks enter the lake at various points along the waterfront.

The waterfront contains a mix of shoreline uses including parks, industries, utilities, and residential neighbourhoods. The proportion of shoreline devoted to each use is approximately as follows: public parks, 33 per cent; industrial, 21 per cent; utilities and residential, 23 per cent each. Approximately two-thirds of the Mississauga shoreline is protected by armourstone and other erosion control measures.

The Mississauga waterfront includes two major lakefill projects undertaken by the Credit Valley Conservation Authority (CVCA), at J. C. Saddington Park and



Lakefront Promenade Park. The latter, which was officially opened in May 1991, includes an extensive boat basin with a public marina as well as an area for the relocated Credit Valley Yacht Club.

The City of Mississauga lies on the doorstep of the Lake Ontario salmon fishery and bills itself as the "Salmon Capital of the World". In addition to providing recreation for anglers, sport fishing has contributed to the local economy of Port Credit and adjoining harbour areas. The cumulative impact of Mississauga's lakefilling proposals could include diminished cold-water fish habitat, particularly in the nearshore forage and nursery areas, as well as silting of nearshore spawning beds.

The Mississauga waterfront has a mix of land uses and a broad range of images:

from the abundant life of the Rattray Marsh to the Lakeview Thermal Generating Station's four stacks, or the "four sisters".

The natural features of our landscape often conceal their own history: looking at Rattray Marsh, for example, may lead us to assume that we have always protected its natural beauty, its diverse flora and fauna, its uniqueness. In fact, the fight to save the existing part of the marsh spanned 16 years, from 1959 to 1975.

If some people loved its natural state, there were others who wished to develop Rattray Marsh as a site for luxury homes, replete with yacht basin and marina. In 1965 the township's engineer announced that the marsh was not worth saving because run-off water quality would become so poor that the marsh would degenerate into a "stinking mess". Early in 1967, the fight seemed lost. Bulldozers moved in to begin Phase 1 of the Rattray Park Estates. As a personal protest, a neighbourhood boy

stood in front of a bulldozer to block its path. He was not successful in stopping Phase 1, but in the next four years citizens redoubled their efforts to save the remaining marsh. In 1971 the CVCA purchased 9.7 hectares (24 acres) of the marsh, the site of a proposed marina.

In the spring of 1973 help came from an unexpected source: Lake Ontario rose to its highest level in more than 20 years, flooding the other low-lying Rattray lands. Citizen action — combined with nature, and the timely introduction of fill regulations — made the developer decide to sell the remaining 23 hectares (57 acres). These lands were acquired by the CVCA and, in 1975, the marsh and buffer land was opened to the public as the Rattray Marsh Conservation Area. It exists today because people persevered and acted in consort with nature, rather than against it.

If Rattray Marsh is nature's jewel, the "four sisters" of the Lakeview Thermal



Rattray Marsh today

Generating Station are a landmark of a different order. These tall stacks, fronting Lake Ontario, are a beacon to sailors and boaters and, when viewed from the water, are a welcome sight: the circular tapered towers are somewhat majestic and contrast sharply with the boxy structure of the generating plant itself. Moreover, they represent industry, jobs, and the utilitarian parts of the waterfront; and are the most prominent feature of the Mississauga waterfront skyline.

Between the marsh and the stacks, at the mouth of the Credit River, lies the Port

Credit community and harbour. The village of Port Credit, on the river's west bank, is part of the original settlement, established in 1843. The attractive, small neighbourhood of cottage-style homes

may be designated a Heritage Conservation District. The Port Credit downtown, on the east bank of the river, dates back about 150 years.

The Port Credit Harbour Marina at the mouth of the Credit River comprises 21 hectares (51 acres) of land and water, and is one of the largest fresh-water marinas (1,000 berths) in North America. Two rubble and armourstone breakwaters and a sunken freighter protect the harbour. The marina and much of the rivermouth are under federal ownership and leased to private operators and yacht clubs, resulting in restricted public access. Mississauga's *Port Credit Harbour and Waterfront Concept* (Hough Stansbury and Woodland et al. 1987) proposes an ambitious revitalization of the area.

The Mississauga waterfront area, as the Commission has defined it, extends

from the lakefront to the Canadian National (CN) railway tracks, which are located north of Lakeshore Road. This area includes communities that either have a waterfront orientation or have the potential for one.

The Draft Mississauga Waterfront Plan uses the south side of Lakeshore Road as its northern boundary. Although it is quite wide, Lakeshore Road does not represent a major physical barrier to the movement of people along or into the waterfront area. Waterfronts are a significant public amenity serving a variety of interests that

are both local and regional. Consequently, proximity to the waterfront generally means use by members of nearby communities.

The Mississauga waterfront has a

number of community characteristics that distinguish it from other waterfront areas. The housing stock has the lowest proportion of single detached dwellings of any region's waterfront, the highest proportion of high-rise apartment dwellings, and the third-highest proportion of rented dwellings of any local waterfront in the Greater Toronto region. (Most high-rise buildings are north of Lakeshore Road, not on the water's edge.) Between 1981 and 1986, the population of the Mississauga waterfront area grew by a moderate 4.4 per cent to about 375,000 people. In order to meet the community's housing needs, construction of a broader range of housing types and tenures should be encouraged. Rental and social housing targets should be included in waterfront Secondary Plans and residential developments should be designed with

 $m{T}$ he Port Credit Harbour Marina at the

mouth of the Credit River comprises

21 hectares of land and water, and is

one of the largest fresh-water marinas

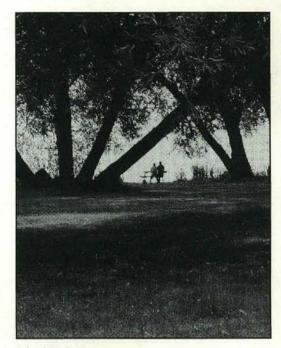
(1,000 berths) in North America.

particular attention to affordable housing and meeting the housing needs of families with children. In addition, the waterfront rental stock should be protected and improved, to preserve mixed-income waterfront neighbourhoods.

The Mississsauga waterfront is a diverse suburban area that includes a broad range of housing types and tenures, despite the limited variety built over the past decade. Unlike the waterfronts of Burlington and Oakville, Mississauga's includes a substantial amount of rental housing, particularly in high-rise apartments, most of which were constructed before the 1980s. Average annual row housing and apartment construction activity on the waterfront has been relatively low since 1980, because of the limited number of waterfront area sites. Waterfront multiple-unit housing completions averaged 60 units per year, almost 60 per cent of them condominiums, between 1981 and 1988. While waterfront housing starts have doubled since 1986, 95 per cent of them are condominiums; no assisted housing or private rental starts have taken place in the waterfront area since 1985.

Affordability is less of a problem in the Mississauga waterfront area than on the Greater Toronto region's waterfront as a whole because of the range of housing opportunities in the waterfront area, particularly its large existing stock of modestly priced rental accommodation.

There is no clear distinction between the occupations of residents on the waterfront and of the region as a whole. However, while waterfront residents have the same occupation patterns as those in the region, they have lower average household incomes and represent a higher proportion of lowincome households. The similarity in



Lakeside Park, Mississauga

occupations, but substantial differences in income, are explained by the higher proportion of both older rental housing and younger adults (aged 20 to 34) in the waterfront area.

People on the Mississauga waterfront are slightly less dependent on the automobile than are those from other suburban waterfront areas: GO Transit accounts for 10 per cent of all work trips from the Mississauga waterfront, the highest of any region, while local transit use accounts for an additional 5 percent. This greater use of transit is the result of both the sizable number of moderate-income households and the better public transit availability, particularly the Lakeshore GO Transit route for commuters.

In 1987 — the most recent year for which there are data — there were approximately 12,800 jobs in the Mississauga waterfront area, almost 53 per cent of which were in the retail, service, and construction sectors, with 47 per cent in manufacturing

and wholesaling. Between 1983 and 1987, waterfront area employment in the retail, service, and construction sectors grew by 21 per cent, while manufacturing and wholesaling increased by only two per cent.

WATERSHED UPDATE

In its Watershed report of August 1990, the Royal Commission made two recommendations concerning the Mississauga waterfront. First, in accordance with a request by the City of Mississauga, it recommended that the Province declare a Provincial Interest in the Mississauga waterfront, and, second, it recommended that the Province negotiate a Waterfront Partnership Agreement with the City of Mississauga and other relevant agencies. These recommendations focused on creating an open and accessible waterfront, protecting and enhancing natural areas, and site specific redevelopment.

The Region of Peel in October 1990 adopted the following resolution as its response to the Commission's report:

... that the principles contained in the report titled *Watershed* be encompassed into the review of the draft Regional Official Plan forming the basis for the development of a regional greenspace framework that incorporates, among other things, river valleys, the Niagara Escarpment, the Oak Ridges Moraine, the Mississauga waterfront and other environmentally sensitive features.

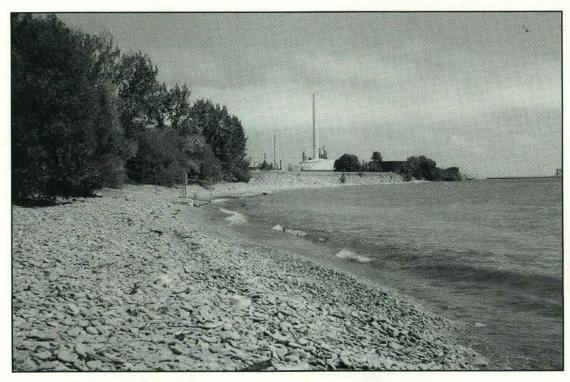
In December 1990, the Province of Ontario endorsed the Commission's nine waterfront principles; agreed that a Waterfront Trail should be established; and supported the concept of Waterfront Partnership Agreements, identifying Mississauga as one of two priority municipalities for such agreements.

The City of Mississauga continues to work on the Mississauga Waterfront Plan and has invited the Royal Commission and others to comment on its draft document. In addition, it is still pursuing those priority items identified through its waterfront planning process and contained as major elements of the proposed Partnership Agreement.

In late 1990 the City expanded its existing Lakeside Park by acquiring the westerly 5.3 hectares (13 acres) of the former National Sewer Pipe Property from Petro Canada. In addition, the municipality has co-operated in identifying interim and preferred waterfront trail routes, which are to be incorporated in the Mississauga Waterfront Plan.

In the past year, there has also been action on the highest-priority land acquisition identified in the draft plan. At the invitation of the Mayor of Mississauga, the Royal Commission encouraged continued negotiations by the City, Province, Metro Toronto, Peel Region, and MTRCA regarding acquisition of the Canada Post site (formerly Canadian Arsenals property). Agreement would see the MTRCA acquiring 14.7 hectares (36.3 acres) of land south of Lakeshore Road, adjacent to the existing Marie Curtis Park, for waterfront park purposes.

Ontario Hydro responded positively to Watershed. In addition to supporting planning that is consistent with the ecosystem approach, Hydro recognizes the importance of the waterfront to the community and will continue to cooperate with provincial and local authorities in providing access to their lands, where space, safety and security considerations can be met.



The Petro Canada refinery, Mississauga waterfront

WATERFRONT PLANNING POLICIES

In the absence of relevant provincial policies or guidelines and specific regional official plan policies, the Mississauga Official Plan, drafted in 1976 and approved in 1981, is the only planning instrument for the waterfront. Mississauga's Waterfront Plan, when approved, will lead to changes to the Official Plan, and will consequently become the major document guiding development of the waterfront.

The Waterfront Plan, begun in March 1988, is currently in draft form; the planning process is intended to result in a comprehensive plan for the entire Mississauga waterfront, changes to the Official Plan, and amendments to waterfront Secondary Plans. The plan proposes development concepts for the waterfront that are to be achieved over the next 30 years.

Thus far, several waterfront planning documents have been released as background studies to the final proposed plan. The documents, Fundamentals, Vision 2020, and Implementation, were released for public review in June 1990, and the results of the review process were consolidated in the Draft Mississauga Waterfront Plan: Results of Agency Review and Public Consultation (1991).

Fundamentals sets out 60 waterfront planning principles; identifies associated issues; and applies various sets of principles to specific waterfront properties. Vision 2020, the draft waterfront plan, begins by exploring the planning context and existing conditions of the waterfront, and then sets out general concepts for waterfront planning and an analysis of waterfront issues.

The *Vision* document contains a siteby-site plan of the waterfront, analyzing constraints and opportunities, and proposing strategies for each site. Readers are referred to the *Implementation* document for matters of policy or guidelines. That paper was not complete at the time of the Commission's review, but it is likely to provide a clearer set of waterfront policies and further guidance on lakefilling and urban design issues.

As Vision 2020 notes:

In some respects, this Plan should be considered a work in progress until the relevant investigations by other agencies are concluded and any resulting provincial and federal interests defined and policies established.

The openness and flexibility of that comment is an acknowledgement that the Mississauga Waterfront Plan is being prepared while the work of the Royal Commission and other agencies has not been concluded. The draft plan, and its policies and guidelines, will likely be refined to reflect the ongoing work by the City of Mississauga and other organizations.

The Draft Mississauga Waterfront Plan begins by accepting the fundamental direction of the Waterfront Plan for the Metropolitan Toronto Planning Area (Proctor Redfern Bousfield and Bacon Consultants 1967), a document never formally adopted by Metro but implemented over the last 20 years. The 1967 Plan included the Mississauga waterfront, and proposed extensive lakefilling in Metro's portion of the waterfront, but said there was a lack of available and suitable material for a similar scheme for Mississauga. Vision 2020 further notes that:

Notwithstanding current concerns about the environmental and social impacts associated with lakefill, the potential benefits of extending the land base as proposed by the 1967 Metro Waterfront Plan are equally valid today.

The two major components of the draft plan are lakefilling, for a variety of purposes, and waterfront access including acquisition of public land and establishment of a trail system. It proposes approximately 70 hectares (170 acres) of lakefilling in a series of projects across the Mississauga waterfront. These will be subject to further refinement as environmental imperatives are more fully considered. In addition, *Vision 2020* sets out three planning concepts for the waterfront — that it be green, clean, and accessible — which are among the Royal Commission's nine principles.

The Royal Commission, in its review of the Draft Mississauga Waterfront Plan and supporting documents, is strongly supportive of the consultative approach adopted by the City. The Commission has also suggested that they reconsider waterfront principles and environmental imperatives, including proposed lakefilling.

The Results of Agency Review and Public Consultation document proposes that the Fundamentals report not constitute a component of the final Plan. However, the review and consultation process confirmed widespread support for the 60 principles articulated in Fundamentals. The Commission is of the opinion that a condensed set of core principles should be an integral component of the plan, and the basis for developing a clear set of waterfront policies.

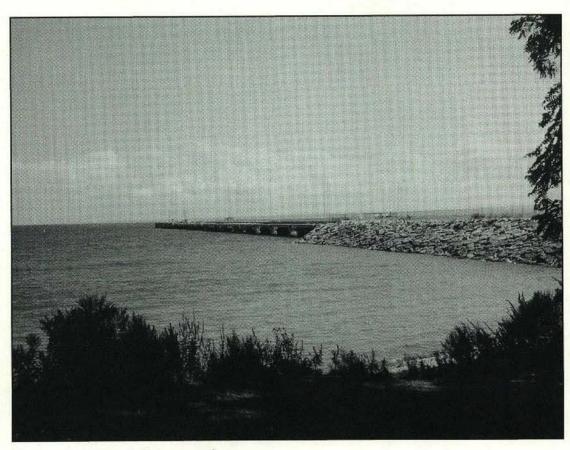
The Draft Mississauga Waterfront Plan would be further improved if it explicitly adopted the ecosystem approach, and included all nine waterfront principles, as recommended by the Commission's Watershed report, and later adopted by Peel Regional Council. Elements of the ecosystem approach and several waterfront principles are already included in the draft plan.

The draft waterfront plan has two elements directly related to the environment: lakefill proposals and landward environmental issues on the waterfront. A 1991 Environics poll conducted for the Royal Commission found that, of all residents in the Greater Toronto Area (GTA), those in Mississauga were most likely to feel that environmental protection should be the greatest influence in any GTA development strategy.

The plan proposes that lakefill be used extensively in order to create a chain of islands and to extend the land base into the lake by constructing artificial headlands and marinas. However, there appears to be little consideration given to the cumulative environmental effects of these proposals.

There are several potential concerns with the lakefill component of the draft plan. First, it may draw attention from planning opportunities for waterfront recreation, amenities, natural areas, and development on existing lands.

Second, the difficult environmental issues regarding lakefill, a central focus of the plan, are not made clear. Rather, the plan gives the impression that its impact on the environment and its cumulative effects have been fully considered, with only engineering concerns to be resolved. No reference is made to any extensive environmental analysis that might have taken place before the lakefill proposals were made. In addition, the goals to be achieved by the lakefill proposals in terms of fish



St. Lawrence Cement pier on the Mississauga waterfront

and aquatic habitat, public access, etc. are not clear.

Third, the lakefill proposals are subject to approval by the provincial and federal governments, respectively the owners of the lakebed and the managers of fisheries and navigable waters. Consequently, the lakefill proposals are at this stage only conceptual.

Chapter 4 of this report, "Shoreline", contains recommendations for a Shoreline Regeneration Plan within which various proposals could be assessed. The study will be helpful to the City in this regard.

Mississauga independently commissioned a consultant's report concerning Guidelines for Shoreline Regeneration Relating to Fish Habitat and Water Quality. It recommends initial modifications to the draft waterfront plan's lakefill proposals including the elimination of two proposed islands and the reduction in the size of the larger "Salmon Island". Additional changes will result from more detailed assessments of the lakefill proposals.

While the draft plan mentions such issues as site decommissioning, habitat restoration, naturalization, and stormwater management in waterfront areas, it does not yet provide sufficient strategic guidance for addressing these issues.

As noted in the plan, site decommissioning and soils clean-up at the former Canadian Arsenals site and at the Texaco site are important, with implications for the future use of these lands and for other waterfront properties. Habitat restoration includes compensation for aquatic habitat diminished by lakefill and renaturalization of creek mouths and valleylands. Naturalization itself becomes an issue in the draft plan, which proposes modifying both the

shoreline and coastal processes in order to enhance nature (e.g., "correcting" the lack of a wetland at the creek mouth); but it does not analyse possible adverse effects. Stormwater management relates to the creation of hard surfaces (e.g., parking lots and roads) near the water's edge, storm run-off, and the locations of outfalls for storm and combined storm/sanitary sewers. The Commission expects that these issues will be more fully addressed as the draft plan moves through the planning process and as implementation strategies are developed.

The Draft Mississauga Waterfront Plan notes that half of the 14 utilities and industries situated on the waterfront require access to Lake Ontario for water intake, discharge or shipping; however, none requires exclusive use of the shoreline. In addition, three of the 14 sites no longer support active industrial enterprises (the National Sewer Pipe East, Texaco Canada South, and St. Lawrence Starch properties).

Planning for the future should take advantage of opportunities as they become available. In particular, there are significant land-based opportunities offered by three non-active industrial sites that together make up 10 percent of Mississauga's total shoreline, as well as by recently acquired public lands and acquisitions in process.

WATERFRONT GREENWAY AND TRAIL

The City of Mississauga places importance on public access to the waterfront, as noted in their draft Waterfront Plan. Their proposals are consistent with the Royal Commission's recommendations in Chapter 5, "Greenways", which further discusses public access to the shore and the river valleys in the Greater Toronto bioregion.

As a result of consultation between the City of Mississauga and the Ontario Ministry of the Environment, a tentative agreement has been reached to locate part of the Waterfront Trail on the water's edge of the Lakeview Pollution Control Plant, eliminating the need for a "lakefill trail link" around that site. The trail will connect to adjacent lands including Ontario Hydro's Lakeview Generating Station. Mississauga hopes to begin work on the first phase of the Waterfront Trail, between Marie Curtis Park and Lakefront Promenade Park, in 1992, based on design work begun in 1991.

The Waterfront Trail will connect a series of nodal parks, ranging in scale and function from local neighbourhood parks to regional facilities. The "linked-nodal" strategy for waterfront public access and use is implicit in the draft plan. However, it is equally important to connect the Waterfront Trail to more inland locations, which will require special attention to the use of river valleys and floodplain lands, as well as public rights-of-way and road allowances. Such links to the waterfront are essential to enhanced access and should be identified in the plan. There should also be concerted regional action to protect the environmental integrity of natural features and ensure that a greenlands strategy becomes an integral component of future planning and development.

PLANNING INITIATIVES

Peel Region was formally incorporated in 1974 but still lacks an approved Official Plan; a draft plan prepared in 1988 was not approved by the Regional Council. As a result, development is guided by a patchwork of local Official Plans with no clear, region-wide strategy to protect and enhance

natural features of either regional or interregional significance. These features include the waterfront, the river valleys, and the Oak Ridges Moraine.

Regional participation in waterfront planning and development has been limited to approval of, and financial contributions to, the waterfront development program of the Credit Valley Conservation Authority (CVCA). There has been a lack of effective action on regional planning issues. A greenlands strategy for Peel in the regional Official Plan would effectively address environmental and human settlement issues. In particular, such a strategy should link the waterfront to the river valleys and headwaters, simultaneously increasing public use and enjoyment, and protecting the environmental integrity of each element.

The CVCA is proposing a new set of policies to protect watercourses and valley-lands in the Credit River watershed. In 1988, the Authority commissioned a water management strategy study, which predicted dire consequences for the watershed if new methods are not found to deal with development. Typical of most watersheds in the bioregion, the approach to flooding and erosion problems had been oriented to "engineering", including the channelling of streams and constructing rip-rap and concrete banks. As a result, fish and wildlife habitat were lost and watercourses and valleys degraded.

The new approach is designed to work with nature and to accept a certain level of erosion as part of natural processes.

New policies are designed to avoid future erosion problems by keeping new development far from valley edges and by including water management as a basic at the beginning of the development review process.

The valleyland protection policy was approved in principle by the CVCA in October 1991 and is being circulated for comment prior to being finalized.

RECOMMENDATIONS

- that the City of Mississauga, the Region of Peel and the Credit Valley Conservation Authority continue to review relevant documents including their official plans and waterfront-specific plans to ensure they incorporate the ecosystem approach and the nine waterfront principles described in Part I.
- that the City of Mississauga, the Region of Peel and the Credit Valley Conservation Authority participate in preparing the proposed shoreline regeneration plan, including the waterfront greenway and trail, and ensure that any other plans for waterfront areas are reviewed and/or developed in this context. Specifically, the proposed lakefill and shoreline modification components of the Mississauga Waterfront Plan should be analysed in the context of the shoreline regeneration plan prior to being approved.
- 60. As part of the approval process for the Mississauga Waterfront Plan, the Province should negotiate a Waterfront Partnership Agreement or agreements with the City of Mississauga, the Credit Valley Conservation Authority, the Region of Peel, the federal government, and other appropriate agencies

and private-sector interests. This agreement should be based, in large part, on the waterfront plan currently being prepared and on the Port Credit Harbour Master Plan, and other relevant documents. Among other things, the agreement should consider:

- designating which agencies will implement such an agreement, with the City of Mississauga in the lead co-ordinating role;
- incorporating the results of the approved Mississauga Waterfront Plan into the Official Plan and Secondary Plans;
- implementing preferred and interim routes for the Waterfront Trail, including negotiating public walkways and bicycle paths across Ontario Hydro lands and properties with water and sewer facilities;
- establishing suitable mechanisms to permit redevelopment of the Port Credit Harbour; and
- finalizing transfer of the Canadian Arsenals property from
 Canada Post Corporation to
 MTRCA, so that it can be
 managed as parkland.



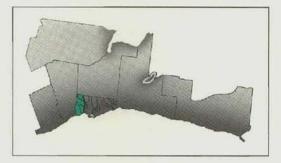


CHAPTER 9: ETOBICOKE

The City of Etobicoke waterfront is approximately 9.7 kilometres (6 miles long) stretching along the Lake Ontario shoreline from Etobicoke Creek east to the Humber River. Etobicoke Creek forms a major part of the City's western boundary with Mississauga, while the Humber is its eastern boundary with the City of Toronto. The only major watercourse inside the Etobicoke municipal boundaries is Mimico Creek; there are, however, several small feeder streams to the Humber River and Etobicoke Creek, and a significant portion of the west branch of the Humber River, all wholly within the municipality.

The waterfront area comprises parts of the former villages of Mimico, New Toronto, and Long Branch, which were amalgamated with Etobicoke in 1967. The Lake Shore Boulevard commercial strip ties together these formerly separate municipalities, and provides employment and services to their waterfront neighbourhoods. Manufacturing and industries are located north of Lake Shore Boulevard.

The neighbourhoods include the modest single-family homes and small-scale apartment buildings of Long Branch and



New Toronto, as well as the more intensely developed Mimico apartment strip. The former Lakeshore Psychiatric Hospital site, with its historic quadrangle of residential buildings, its clock tower and landscaped grounds sloping gently to the water's edge, provides a large window to the lake in the central part of the Etobicoke waterfront.

Lake Shore Boulevard, west of Royal York Road, is a continuum composed mostly of low-rise streetfront retail and commercial buildings interspersed with newer, modest-scale developments. The wide expanse of Lake Shore Boulevard, with its ample on-street parking, streetcar service, and broad sidewalks, creates a neighbourhood feel reinforced by the vibrant mixed-income community that surrounds it.

Until the mid-'80s, the Etobicoke waterfront had a stable population of about 40,000 residents and little new development. The area had one of the broadest mixes of income groups on the Greater Toronto waterfront. Almost 45 per cent of the waterfront housing stock was in walk-up apartments and 63 per cent of the total stock was rental. As a result, this waterfront area had the lowest average household income on the Metro Toronto waterfront, and the lowest proportion of residents engaged in managerial and professional occupations.

Major parts of the Etobicoke waterfront area are in transition: in part, the substantial loss of manufacturing jobs results from firms shifting production to other locations so as to take advantage of the increased land values at their Etobicoke sites. Industrial closings have been accompanied by a large number of proposals for high-density residential development. The area is tending to shift from an open, inclusive community of mixed incomes and jobs to isolated new developments that capitalize on waterfront locations. Recent waterfront housing activity includes a very high proportion of condominiums, with major new residential developments being planned and proposed.

From 1981 to 1988, housing completions on the waterfront were relatively low: only 400 units were added. These were balanced among ownership, assisted, and rental housing and reinforced the mix of tenures in the community. Recent housing starts since 1986 have shown a dramatic change: almost 2,000 dwelling units have been started. The Etobicoke waterfront has more housing units in the development approval process than any other area on the

Greater Toronto waterfront. Of the more than 10,800 dwelling units with development applications either approved or in process, all but 100 are high-density.

There have been equally dramatic changes in employment: in the 1980s, more than 2,200 full-time manufacturing jobs were lost (a 33-per-cent decline). In fact, the Etobicoke waterfront accounts for almost all the loss of full-time manufacturing jobs on the Metro waterfront, and it is the only area with a net loss in total full-time employment (–six per cent). In 1990, the Etobicoke waterfront lost a further 800 full-time manufacturing jobs (–17 per cent) and total employment declined by an additional 3.5 per cent.

Thus far, new developments on the Etobicoke waterfront are located east of Royal York Road in the Mimico section of the waterfront, where the differences in scale and form between new and old are striking. Essentially, new waterfront development has been exclusive water's-edge condominiums catering to upscale adult lifestyles. Moreover, these developments are self-contained — closed and insular vertical communities that appear to exist in isolation while exploiting the uniqueness of their waterfront locations and views of the lake.

In the words of a recent advertisement for the Grand Harbour development:

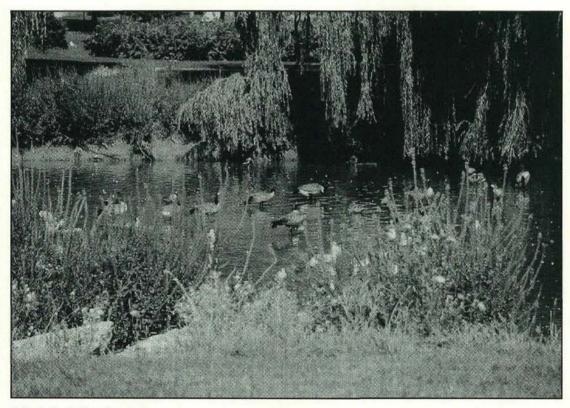
In days past harbours filled with the rich rewards of international trade brought prosperity to the world's great cities. Today waterfronts are the exclusive reserve of the world's most elegant residences. Presenting the homes of Grand Harbour, traditionally styled residences with exquisite site details and finishes crafted from brick, slate and

stone. Strategically located on Toronto's waterfront. Traditional Waterfront Residences From \$349,000 To Over \$2,000,000.

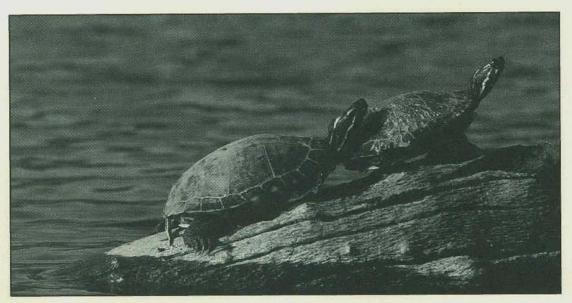
Large portions of the Etobicoke lakefront have been altered from their natural state by major lakefills. Humber Bay Park East and Humber Bay Park West now flank the mouth of Mimico Creek and together comprise about 65 hectares (161 acres) of lakefill. Colonel Samuel Smith Park, at the southern extreme of the former Lakeshore Psychiatric Hospital site, now extends into the lake and displaces approximately 19 hectares (47 acres) of water surface.

New lakefill proposals include 12 hectares (30 acres) immediately west of the mouth of Etobicoke Creek, at Marie Curtis Park, to create an artificial boat basin. An additional 3.7 hectares (9 acres) of lakefill are proposed to smooth out the shoreline at the motel strip and provide a minimum 50-metre (164-foot) wide public amenity strip. (The existing shoreline consists of unregulated lakefill dumped primarily during the 1950s, which has created an unnatural and irregular edge of indenttions and protrusions.) As part of the motel strip redevelopment, fill is to be placed in embayments at Humber Bay Park East to raise the lakebed and create a wetland as a demonstration area for stormwater management.

The entire Humber Bay has been identified as part of Metro's waterfront Area of Concern by the International Joint Commission, as the result of contaminants in the aquatic sediments; metals and organics in the water and biota; and



Etobicoke Creek, Marie Curtis Park



Painted turtles

elevated levels of nutrients and bacteria. (See Chapter 3 for a more detailed discussion of Areas of Concern in the Great Lakes.) Efforts to clean up the waterfront will be meaningless unless significant sources of upstream pollution and sedimentation are controlled effectively. The recently formed group, Action to Restore a Clean Humber (1989), has been a strong voice of reason and should be given a prominent place at any round table dealing with the Humber River watershed.

Water quality in Humber Bay is generally poor because of pollution entering from the Humber River, Mimico Creek, and the Humber Sewage Treatment Plant. Furthermore, the bay is sheltered from the main-lake circulation currents and has been described as a "bathymetric trap", in which most of the sediments discharged into it accumulate and remain relatively undisturbed. An area of sediment, described by the Ministry of the Environment as "highly contaminated", extends south of the motel strip as much as three kilometres (2 miles) into the bay.

WATERSHED UPDATE

In its 1989 Interim Report the Royal Commission recommended that:

The heritage values of the Lakeshore Psychiatric Hospital and associated grounds should be preserved by using the site for compatible institutional, cultural, and recreational purposes.

The Ministry of Government Services' current development proposal for housing on the Humber College site and adaptive reuse of the hospital buildings for college purposes is generally consistent with this recommendation.

In Watershed (1990), the Royal Commission made three recommendations concerning the Etobicoke waterfront:

- that the Province declare a Provincial Interest in the Etobicoke waterfront area and its immediate hinterland;
- that the Province, Etobicoke, and Metro Toronto jointly undertake strategic planning for the waterfront

- area, culminating in a comprehensive waterfront plan and a consolidated waterfront component to the Official Plan; and
- that the Province, in order to protect the integrity of these planning studies, impose a moratorium on development in the waterfront area until a comprehensive waterfront plan and changes to the Official Plan are adopted.

The recommendations were a response to two factors: the Etobicoke planning approach of approving site-specific development applications and narrow areaspecific secondary plans without a clear planning strategy and public objectives for the waterfront; second, the magnitude of development, either conditionally approved, in process or proposed, that would, in total, add as many as 12,000 high-density dwelling units and 251,000 square metres (2,701,741 square feet) of non-residential space in the waterfront area.

In its December 1990 response, the provincial government noted that:

... Etobicoke, Metro and the Province will be working co-operatively to ensure that there is a comprehensive planning framework for new development in South Etobicoke, culminating in modification to the Etobicoke Official Plan, plus other implementation measures. The three levels of government have agreed on a program that includes extensive community consultation.

In April 1991, the *Lakeshore Overview Study South Etobicoke: Draft Report* (Butler Group), jointly initiated by the Province, Metropolitan Toronto, and Etobicoke, was completed; it provides a partial basis for a

comprehensive waterfront plan. It also indicates that some progress has been made toward creating a waterfront planning policy that is closer to the nine principles recommended in Watershed.

WATERFRONT GREENWAY AND TRAIL

The bases of a "green net" for Etobicoke are its waterfront and river valleys. A significant trail system already exists up the Humber River Valley, and there are beginnings of a similar trail up Etobicoke Creek. These valleylands along with those of Mimico Creek, should be linked to the waterfront in an integrated greenway trail system that both provides public access and protects the environmental integrity of natural features and the tableland edges.

The Etobicoke section of the Metropolitan Toronto waterfront offers significant potential for a waterfront trail because nine local parks and five regional parks already exist along the shoreline. In some sections, because of residential development along the water's edge, the trail route will likely have to follow the first road inland from the lake. However, there are substantial sections where a water's-edge route is possible. Perhaps the greatest potential is from the western entrance to the boat basin of Humber Bay Park West to the Humber River, including the Mimico apartment strip.

In the Mimico apartment strip, parts of the trail and greenway currently exist in a series of unconnected waterfront parks. The strip itself consists mainly of low- and medium-rise rental apartment buildings on the south side of Lake Shore Boulevard, most on long, narrow lots running down to

the lake. The unconnected local waterfront parks in the area include:

- Norris Crescent Park at the foot of Douglas Boulevard over to Summerhill Road, with approximately 200 metres (656 feet) of lake frontage and extending 25 to 90 metres (82 to 295 feet) inland;
- Amos Waites Park and Swimming Pool at the foot of Mimico Avenue, comprising about 140 metres (459 feet) of lakefront (including the former Sikh Temple lands) and extending 80 metres (262 feet) inland;
- Superior Park, at the foot of Superior Avenue, encompassing about 50 metres (164 feet) of lakefront and 100 metres (328 feet) inland.

The City of Etobicoke's 1983 *Mimico Study*, under review by Council, recognized the potential for a linear waterfront park and boardwalk in the area. What is needed to link the existing parks is to negotiate public easements in perpetuity over the intervening privately owned waterfront land, and to extend public use over the public portions of filled waterlots.

The Mimico apartment strip represents an opportunity to work with both rental property owners and tenants to achieve waterfront access that will benefit all parties. While this is not current practice in Etobicoke, the apartment strip could be used as a pilot project for working out easement agreements that could be applied there and elsewhere. Strategies for the negotiation of public easements are discussed more fully in Chapter 5, "Greenways".

The Grand Harbour and Marina Del Ray developments, immediately east of the apartment strip, have a 15-metre (50-foot) waterfront promenade, with pathways at the property edges, constructed as a condition of development. Since the mid-1980's Etobicoke has had an informal policy of requiring dedication and construction of such public access strips as part of waterfront development. The adjoining Humber Bay Park West and Humber Bay Park East constructed by the Metropolitan Toronto and Region Conservation Authority provide for public access, except in those areas leased to yacht clubs.

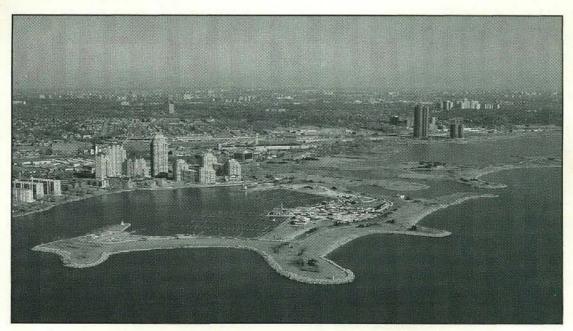
Further east is the Motel Strip Secondary Plan Area. As a condition of redevelopment, the developers will be required to pay for a Waterfront Public Amenity Strip having a minimum width of 50 metres (164 feet). In the main, it is to be constructed from lakefill and will smooth out the undulating shoreline (itself the result of unregulated dumping of fill); it will also widen the development area so that a grid street pattern can be provided. The resulting public road network will provide both public access to the amenity strip and public parking.

The adjoining Palace Pier development, to the east, has both a local park and a water's-edge public walkway that can be linked to the Waterfront Public Amenity Strip. The second phase of the Palace Pier development, at the entrance of the Humber River, has a six-metre (20-foot) wide water's-edge accessway that, in future, can be linked to trails going up the Humber River Valley.

WATERFRONT PLANNING POLICIES

Commenting on Etobicoke waterfront planning policies, *Watershed* noted:

Changing values, such as the upsurge in environmental consciousness and the



Humber Bay Parks west and east

concern about the quality of life in an intensely urbanized setting, appear to have caught decision-makers unaware. It is not that the City is without plans but, rather, that the plans to which it has committed itself, and those it is contemplating, may not have been formulated on the basis of an integrated and comprehensive approach. Public concerns about the barrier effect of high-density development at the water's edge, about waterfront access and the cumulative impact of lakefilling, have not yet been fully resolved. Instead, decision-makers in the City have been quick to support development applications and to grant high densities, because they view the waterfront area as stagnating and in need of revitalization.

Normally, Secondary Plans are built on policies and strategies found in Official Plans. However, Etobicoke's existing Official Plan and its proposed Official Plan Update do not treat the waterfront as an area requiring a special planning strategy. Due to the absence of a clear planning strategy, both Secondary Plans and site-specific applications lack strategic guidance and public objectives. This lack of clear direction is of particular concern given the densities permitted or proposed on major sections of the Etobicoke waterfront.

There are three plans related to the Etobicoke waterfront. First, the 1991 Lakeshore Overview Study South Etobicoke: Draft Report has been the major initiative toward a comprehensive plan for the waterfront area. Second, the Motel Strip Secondary Plan (approved by Etobicoke Council February 1988 and revised May 1990) is the only secondary plan approved by Council for any portion of the Etobicoke waterfront; it has been subject to a number of further changes during the life of the Royal Commission. Third, there is a Park Master Plan for the Colonel Sam Smith Waterfront Area approved by the Environmental Assessment Board.

LAKESHORE OVERVIEW STUDY SOUTH ETOBICOKE: DRAFT REPORT

The Lakeshore Overview Study South Etobicoke: Draft Report was initiated by the Province of Ontario, Metro Toronto, and the City of Etobicoke to assess the cumulative impact of development applications in the South Etobicoke waterfront area and outline a planning framework.

This framework accommodates residential intensification along Lake Shore Boulevard with sections widened to suit the approved and in-process development applications, in the "Mainstreet Activity Area". In addition, an industrial-based Secondary Plan is proposed for the New Toronto area.

The development applications in the Mainstreet Activity Area include: the Long Branch Village lands, comprising 11.7 hectares (29 acres); the Lakeshore Psychiatric/Humber College redevelopment, 25 hectares (62 acres) in size; the 8.1-hectare (20-acre) Goodyear/Daniels site; the motel strip of 20 hectares (49 acres) of land and water; the McGuinness site, 6.2 hectares (15 acres); as well as lands adjoining Park Lawn Road.

The Mainstreet area would be divided into two Secondary Plan areas: the Mainstreet Lakeshore Secondary Plan Area and the Park Lawn/Lakeshore Secondary Centre Planning Area. Significant portions of the Etobicoke waterfront area and of the water's edge are excluded from these two proposed Secondary Plan areas.

The Lakeshore Overview Study South Etobicoke: Draft Report recommended that:

 a survey of community livability be considered:

- there be comprehensive planning and modifications to the new Official Plan as soon as possible;
- these modifications include revised Secondary Plan areas and incorporation of the Royal Commission's nine waterfront principles;
- a study be made of the existing industrial areas south of the CNR line, to provide for industrial revitalization and stability;
- the City of Etobicoke complete the Master Parks Plan and integrate its recommendations into future Secondary Plans; and
- a Human Services Needs Assessment Study be undertaken and applications for redevelopment include a social impact study.

The Overview Study has yet to be fully considered by any level of government, and consequently its recommendations have not been accepted to date. In the meantime, individual development applications and area-specific secondary plans continue to weave their way through the approval process.

At the same time as the Overview Study was being completed, the Ontario Municipal Board (OMB) began hearings concerning the Daniels Group's redevelopment of the former Goodyear Tire plant site. The OMB decision of 13 August 1991 confirmed the Daniels Group's Lakeshore Village Development, which comprises over 1,700 dwelling units, as well as industrial and commercial space, on 8.1 hectares (20 acres) of land. Building heights will range from four to 14 storeys and the development is to proceed in two phases, the second phase to depend on the availability

of schools and community facilities and services.

On 1 November 1991 the 6.2-hectare (15 acres) redevelopment of the former McGuinness Distillery site was referred to the Ontario Municipal Board (OMB) as a site-specific amendment to the Etobicoke Official Plan.

On 21 October 1991, the City of Etobicoke asked staff to prepare a draft Secondary Plan for the proposed Park Lawn Road/Lake Shore Boulevard Secondary Plan Area (also known as the Secondary Centre) — to include both the motel strip and the former McGuinness Distillery site. The OMB began hearings on the Motel Strip Secondary Plan on 1 October 1991. Consequently, issues dealing with the motel strip are being debated prior to policies being established for the larger Secondary Centre area.

Just as there is currently no planning framework for the Secondary Centre area, which is a part of the waterfront, there is no comprehensive plan that sets out a clear strategy and public objectives for the Etobicoke waterfront. Such a waterfront plan is needed, as both a framework for assessing major development applications and a context for securing public values and setting Secondary Plan objectives.

THE MOTEL STRIP SECONDARY PLAN

In 1988, a 20-hectare (50-acre) Motel Secondary Plan was approved by Etobicoke Council. The Plan called for 2,700 dwelling units base on a comprehensive land assembly of the site. (This was consistent with a Provincial Cabinet decision in 1977.)

In August 1988, citizens' concerns about the proposed motel strip developments

and the proposed lakefilling led them to request that the Secondary Plan Area be designated under the Environmental Assessment Act. The Minister of the Environment decided not to subject any part of the redevelopment to such a review under the Act. Instead, the Province declared a Provincial Interest in the motel strip and instituted an Environmental Management Master Plan (EMMP)/Public Amenity Scheme process within the context of the Planning Act. This process is intended to bridge the gap between environmental and planning concerns.

The EMMP study was designed to address concerns about both lakefilling and urban design, while the densities assigned in the proposed Secondary Plan were outside its terms of reference. The study took place over just three months and proposed three elements: a deflector arm (to deflect water pollution from the development area and to create a sheltered mooring basin); shoreline lakefill to create a public amenity strip; and urban design guidelines to ensure that built form relationships would be subject to some type of review.

The Minister of the Environment subsequently announced that the proposed deflector arm, if it was to proceed, would be subject to a separate environmental assessment. The deflector arm represents 5.1 hectares (13 acres) of lakefill, while the other components are shoreline smoothing combined with a public amenity strip of 3.7 hectares (9 acres) and marshes, for stormwater management, which cover 6.5 hectares (16 acres).

The shoreline smoothing would help the lake flush the shore; however, the deflector arm could potentially reduce flushing and create a relatively stagnant embayment. Although it is recognized as being subject to a separate environmental assessment, the arm is included in the revised Motel Strip Secondary Plan.

The EMMP process has helped clarify the public amenity area in the motel strip, but it does not provide a comprehensive approach to lakefill or other environmental matters; nor does it adequately address urban design and density considerations.

The Secondary Plan was revised in May 1990 — in part, to reflect the results of the provincially initiated Environmental Management Master Plan/Public Amenity Scheme for the area. The proposed waterfront public amenity strip in the revised plan was widened from the initial minimum of 15 metres (50 feet) to 50 to 80 metres (164 to 262 feet), predominantly through proposed shoreline lakefill.

Furthermore, the revised plan allowed incremental development of the waterfront public amenity area — which means that the entire public amenity strip need not be established at one time. The revised plan also dropped the requirement that the McLaughlin portion be comprehensively assembled as a condition for permitting development of the 2,700 units, allows a reduction in the amount of parkland that must be dedicated and off-site development of affordable housing, and would permit designation of a school site only if the form and occupancy of developments warrant it.

DIAMOND SCHMITT URBAN DESIGN STUDY

After the Royal Commission's Watershed report was released, the Ontario Ministry of Municipal Affairs hired the firm of Diamond Schmitt Architects to consider urban design and density for the motel

strip, within the broad framework of the Commission's nine waterfront principles. Having declared a Provincial Interest in the motel strip, the Province asked Diamond Schmitt to provide guidance regarding built form, public access, and public use in the area.

The study, undertaken over eight months, was released for public review in June 1991 (A. J. Diamond Donald Schmitt and Company). It began by setting out neighbourhood planning objectives and principles, to be followed in controlling built form in the Secondary Plan Area. The study then further developed the neighbourhood objectives and principles in terms of a possible grid street pattern; open space lay-out, including a central park; land use; built form; parking and sun/shade and view studies.

The built form objective was to distribute the mass of buildings in such a manner that a livable, open and publicly accessible community would result. Assuming 2,721 dwelling units at a density of 3.3 times net lot area, the Diamond Schmitt study recommends that low-scale four-storey structures be built immediately north of the waterfront public amenity strip and Lakeside Drive because, given the orientation of the site, high structures near the lake edge would have shaded the entire waterfront park in the afternoons. Buildings of eight storeys were to predominate along Lake Shore Boulevard, with an intermediate zone of six storeys between them and the shorter buildings. The result would be a "stepped" development, in which four-storey structures adjoin the water's-edge public amenity strip, progressing to six storeys in the middle of the development, and eight storeys along most of the Lake Shore Boulevard frontage. At the northeastern Lake Shore Boulevard

frontage the structures would rise to a maximum of 15 storeys.

The sun/shade studies in the Diamond Schmitt report are shown for the existing development applications and the 2,700 dwelling units with a floor space index of 3.3. They indicate clearly that, using the stated neighbourhood development principles, any net floor space with an index of more than 3.3 would result in diminished daylight on the public roadways, sidewalks, parks, and interior courtyards of buildings.

KIRKLAND URBAN DESIGN REPORT

After the Diamond Schmitt report was released, the City of Etobicoke hired the Kirkland Partnership (1991) to advise it and, later, to prepare an Urban Design Supplement to the Etobicoke Motel Strip Secondary Plan. The consultants were instructed to use the Secondary Plan's density of 4.0 times net lot area in developing guidelines.

On 7 October 1991, shortly after the OMB began hearings on the amended Motel Strip Secondary Plan, Etobicoke Council endorsed a revised Secondary Plan. Using a 4.0 times density, the urban design supplement to the plan allows maximum building heights of 10 storeys on the first blocks inland from the waterfront public amenity area and 15 storeys on the second blocks, which front Lake Shore Boulevard. In addition, a maximum building height of 20 storeys would be permitted at the Lake Shore Boulevard frontage of the Camrost lands.

On 21 October 1991, Etobicoke Council approved additional changes to the proposed motel strip plan that was before the OMB. There were three types

of modifications. First, Council recognized that the need for a school site or sites should ultimately be determined by boards of education and, if they were required, they should be accommodated in the Secondary Plan Area. Second, Council provided a planning rationale for the location of two 25-storey buildings on the Camrost site, claiming that it would create a "central gateway . . . in a distinctive landmark built form". Curiously, the proposed buildings exceed the guidelines Council had approved only two weeks earlier. Moreover, additional modifications were made to the site-specific development policies for the Camrost lands. Third, the implementation of the built form guidelines was relaxed so that they would apply in general intent and variations could be permitted by Council.

On 17 December 1991 the City of Etobicoke presented the OMB with further revisions to the plan, including removal of the deflector arm. There appear to be an added number of unresolved issues which the Ontario Municipal Board may consider in the course of its review. They include: the water's-edge location; density transfers from water to land; ultimate densities (including bonuses and the treatment of seniors' units); the adequacy of built form guidelines in relation to detailed sun/shade studies and neighbourhood objectives; affordable housing; and implementation mechanisms for the plan. In its deliberations, the OMB will also have to bear in mind the Province of Ontario's Declaration of Provincial Interest in the motel strip.

The lack of a comprehensive Etobicoke waterfront plan, as noted earlier, is a major impediment in assessing the public values and objectives for the motel strip, and for assessing the secondary plan itself. The

Royal Commission believes that it is important to recognize how much is at stake. As explained in the following chapter on the Central Waterfront of Greater Toronto, the entire eastern part of Etobicoke, including the motel strip, is part of Humber Bay. It is in the public interest to ensure that plans, decisions, and developments take this broader context into full account.

THE COLONEL SAMUEL SMITH WATERFRONT AREA

In 1978 the Metro Toronto and Region Conservation Authority (MTRCA) prepared a park Master Plan for the Colonel Samuel Smith Waterfront Area, covering the area south of Lake Shore Boulevard, between 23rd and 13th streets. The plan provides for a multi-service park, including moorings for 335 boats and a boat basin to be constructed through substantial lakefilling. It includes park uses on parts of lands owned by the Metro Works Department, Humber College, and on the Lakeshore Psychiatric Hospital site.

In approving the Colonel Samuel Smith Master Plan in 1980, the Environmental Assessment Board summarized the undertaking:

The Colonel Sam Bois Smith Water-front Area will provide 70.5 acres of recreational/educational park space on the Etobicoke waterfront . . . 48.5 acres of the park would consist of landfill extending approximately 1,500 feet into Lake Ontario. . . . The components of the park would include an artificial swimming lake, mooring facilities for boats, an amphitheatre, environmental gardens and educational display areas, a fitness trail, sunbathing beaches, and passive areas for picnicking and viewing,

for both local and regional visitors of all ages (Ontario. Environmental Assessment Board 1980).

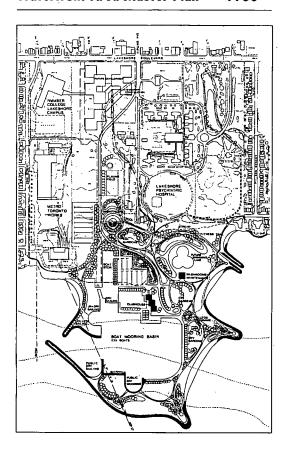
The proposed park, shown in Map 9.1, is intended to serve both local and regional needs and, in part, address a critical shortage of public park space in the South Etobicoke area.

Since the original approval was given, there have been several changes to the geographic limits covered by the proposal, including the removal of approximately 6 hectares (15 acres) of Humber College and Metro Works Department lands and the addition of 13 hectares (32 acres) of the psychiatric hospital site, which were purchased from the Ministry of Government Services (MGS). The Ministry of the Environment's Environmental Assessment Branch has yet to consider the impact of these changes on the delivery of other public elements contained in the approved Master Plan. Substantial lakefilling, completed in 1990, created the headland and boat basin.

The only element of the Master Plan that has proceeded to date is a Boating Federation Concept Plan providing for an eventual 500 boating slips and adjoining parking for 500 cars. Phase 1 of the proposal provides for 250 moorings and associated waterfront parking to be completed in 1992. The latter is to be used exclusively by federation members for their cars and for winter storage of boats.

There is no indication of the timing of delivery, location, and funding of most of the public elements in the approved 1980 park Master Plan. However, the waterfront/fitness trail is to be in place within three years and there are to be passive areas available for picnicking and viewing.

Map 9.1 Colonel Samuel Smith Waterfront Area Master Plan — 1980



MTRCA acknowledges the lack of certainty regarding delivery of these public elements.

The success of the park and planning for its public elements is linked to integrated planning for the proposed MGS/Humber College development and the proposed expansion of the R. L. Clark Filtration Plant.

On 27 November 1991, the provincial government announced that as compensation for a settlement of the Toronto Islands issue, about 9 hectares (23 acres) of the MGS/Humber College development would be made available as additional parkland to Metro Toronto and Etobicoke, leaving about 15 hectares (39 acres) for redevelopment.

The provincial decision, added to MTRCA's purchase of surplus Lakeshore Psychiatric Hospital lands, means that the overall land base of the park will be bigger than originally planned. Therefore, while the planning context has shifted, there would appear to be sufficient lands to incorporate the public elements and it may be possible to ensure that they are delivered, especially if all parties are prepared to work together.

RECOMMENDATIONS

- that the City of Etobicoke, the Regional Municipality of Metropolitan Toronto and the Metropolitan Toronto and Region Conservation Authority (MTRCA) continue to review relevant documents including official plans and waterfront-specific plans to ensure that they incorporate an ecosystem approach and the nine waterfront principles described in Part I.
- that the City of Etobicoke, Metropolitan Toronto and the MTRCA participate in preparing the proposed shoreline regeneration plan, including the waterfront greenway and trail, and ensure that any other plans for waterfront areas are reviewed and/or developed in that context.
- Toronto, and the Province, in partnership with the lakeshore community, should jointly implement the following recommendations of the *Lakeshore*

Overview Study South Etobicoke and of the Royal Commission:

- to prepare a comprehensive
 Waterfront Plan for the Etobicoke
 waterfront area and modify both
 the Official Plan (to create a con solidated waterfront component)
 and Secondary Plans;
- to enhance comprehensive planning in South Etobicoke's waterfront area by:
 - preparing and approving a
 New Toronto Industrial

 Secondary Plan and a study of industrial revitalization and stability in the broader area south of the CNR tracks;
 - adopting two additional secondary planning areas (the Mainstreet Lakeshore and the Park Lawn Road/Lake Shore Boulevard Secondary Centre Planning Areas); and
 - preparing long-term implementation strategies including a Parks Master Plan, Human Services Plan, Metropolitan Waterfront Plan, and integrating the recommendations of those plans into Secondary Plans.
- **64.** The Metropolitan Toronto and Region Conservation Authority should undertake a public review to update the approved 1980 Colonel Samuel Smith Park Master Plan.

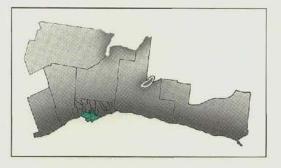


CHAPTER 10: THE CENTRAL WATERFRONT

This chapter deals with the bioregion's Central Waterfront and its three bays: Humber, Toronto, and Ashbridge's. Two rivers — the Humber and the Don — empty into this part of the waterfront. South and east of Toronto Bay, separating it from Ashbridge's Bay (or what little remains of it), stretches the Leslie Street Spit which, with the Toronto Islands, forms a southern ring around Toronto Harbour. On the landward side, the Central Waterfront stretches east from Park Lawn Road to Woodbine Avenue, while on the north lies the escarpment carved by the shoreline of ancient Lake Iroquois.

The Central Waterfront embraces parts of the waterfronts of two cities: Etobicoke (at its eastern end), and Toronto (as far as the Beach). This area, home of indigenous peoples before European exploration and settlement began, the meeting place where ancient trails joined, and the trading place where indigenous and other peoples have traditionally traded goods and services, is the cradle of our modern region.

It is also the central part of an area identified by the International Joint Commission as one of the hot spots around



Lake Ontario, with clean-up problems as complex and difficult as any in the Great Lakes. In addition, it is the area on the entire waterfront in which the greatest change is occurring. Almost all the places along this waterfront are in a state of transition, which raises major issues but also produces major opportunities — opportunities to regenerate the environment, reconnect the waterfront to the river valleys and the cities to their waterfront, and stimulate economic recovery.

This is the part of the waterfront where the Government of Ontario first made significant interventions, signalling the emerging importance of waterfront issues in the Province. The Provincial commitment to making substantive changes in the way the waterfront is

As we approach Toronto, everything looks doubly beautiful, especially the glimpses of blue Ontario's waters, sunlit, yet with a slight haze through which occasionally a distant sail. The city made the impression on me of a lively dashing place. The lake gives it its character.

Whitman, W. 1904. Walt Whitman's diary in Canada. Edited by W. S. Kennedy. Boston: Small, Maynard and Company.

redeveloped can be found in three moves: the declaration of a Provincial Interest in the Etobicoke motel strip and in the East Bayfront/Port Industrial Area; and the ministerial zoning order freezing development on the Harbourfront and Stadium Road lands until redevelopment plans met the test of public values and objectives, including public access to the waterfront.

As then-Premier David Peterson and Cabinet Minister John Sweeney explained when announcing these actions, the Province wanted to ensure the integrity of the Royal Commission's work and provide an appropriate opportunity for formulating policies and plans.

In October 1989, the provincial and federal governments asked the Royal Commission to carry out an in-depth environmental audit of the East Bayfront/Port Industrial Area. In December 1990 the provincial Minister of the Environment asked the Commission to study the feasibility of relocating the Gardiner Expressway, and to examine the possibility of pooling lands and integrating future plans for the Canadian National Exhibition, Ontario Place, Fort York, and HMCS York. Among them, these three studies cover the most

important issues on the waterfront: environment, transportation, and land use.

In response, the Royal Commission organized intergovernmental steering committees and work groups, and contracted consultants who have a wide variety of disciplines, skills, and experience, to research the issues and formulate policy, planning, and program recommendations. The Commission also consulted the private sector (business and labour), neighbourhood, environmental, and other community groups, and members of the general public to obtain their views of the problems and opportunities.

The results of these collaborative efforts were published in four background reports (No. 10, Environment in Transition: A Report on Phase I of an Environmental Audit of Toronto's East Bayfront and Port Industrial Area (RCFTW 1990); No. 11, Pathways: Towards an Ecosystem Approach: A Report of Phases I and II of an Environmental Audit of Toronto's East Bayfront and Port Industrial Area (Barrett and Kidd 1991); No. 14, Garrison Common Preliminary Master Plan (Berridge Lewinberg Greenberg et al. 1991); and No. 15, Toronto Central Waterfront Transportation Corridor Study (IBI Group et al. 1991)) and, in addition, 12 working papers and an in-depth technical report.

All work was based on the ecosystem approach. A common thread running through every piece was that, because the Central Waterfront has the greatest pressures, problems, and opportunities, regeneration of that area, more than of any other part of the regional waterfront, requires integrated planning.

Balancing and integrating these issues is difficult but necessary. The best example of doing that can be found in the Royal

Commission's last background report, Toronto Central Waterfront Transportation Corridor Study. It is based on the Commission's earlier work, reflecting what had been learned about environmental issues during the environmental audit of the East Bayfront, and applying the understanding of placemaking that had been developed as part of the Garrison Common Preliminary Master Plan. In its turn, the corridor study gave those involved an opportunity to apply the ecosystem approach to resolving transportation issues, as well as the challenge of integrated environment, land use, and transportation planning.

Therefore, this chapter begins with an essay that follows "Watershed Update", which summarizes the process and findings of the transportation corridor study, describes how governments could move toward integrating the elements of the ecosystem, and proposes a Stage I program designed to reach that goal.

This is followed by a survey of various places in transition, starting with Humber Bay, the western gateway to the Central Waterfront, and concluding with the Lower Don Lands at the eastern end. There is no reason to comment at length on those waterfront places — Swansea, High Park, Parkdale, the Toronto Islands, and the Beach — that have important qualities of their own but are not in serious or significant transition. Obviously, the Commission recognizes their values, and urges that these be maintained.

For the purposes of this analysis, the Commission classifies the places along the waterfront according to a combination of natural, cultural, and/or functional characteristics. The transitional processes affecting them have been operating for at least 20 years. All these areas have smaller sub-places,

districts or neighbourhoods within them, each with its own characteristics and functions as part of the greater whole. They are discussed in the following order:

Humber Bay:

eastern Etobicoke Humber bridges Swansea High Park Sunnyside Parkdale

Garrison Common:

Ontario Place
Exhibition Place
HMCS York and
Coronation Park
Fort York
Northern Industrial Area
Niagara neighbourhood
Fleet Street
Lower Bathurst

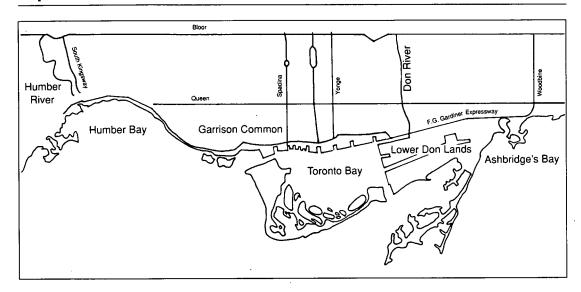
Toronto Bay:

Railway Lands (CityPlace,
Central Park and
Southtown)
Harbourfront
Toronto Island Airport
Union Station, and Bayfront

Lower Don Lands:

East Bayfront
Ataratiri Lands
Gooderham and Worts
Lower Don Industrial Area
Port of Toronto
Cherry Beach
Leslie Street Spit (Tommy
Thompson Park)
Ashbridge's Bay

Map 10.1 Central Waterfront



There is remarkable diversity within and among the different places along the waterfront. It must be recognized and sustained. At the same time, there is the potential to integrate the area's natural and cultural environments with transportation functions and land use in a way that connects the various places along the waterfront, links the waterfront to the hinterland, and attaches the central waterfront to the region.

At present, proponents of plans for the various places
bump into one another as they try to move through the maze of approval processes, an intra- and intergovernmental gridlock.

None, however, can move alone. Matters along the waterfront are complex and linked to each other. Progress in shaping and improving the waterfront, regenerating the environment, and reviving the region's economy requires consensus about its future and the various places along it.

Co-ordinated action plans and partnerships, which are also needed, are discussed in Part IV.

WATERSHED UPDATE

In its Watershed report, the Commission described the Gardiner/Lakeshore Corridor as the central fact of the Central Waterfront, and noted that:

Depending on the decision made about its future, the people of Greater

Toronto will have an excellent waterfront — or they will not. The waterfront will be integrated into downtown Toronto — or it

will remain essentially separate from it.

The combination of the elevated portion of the Gardiner Expressway, Lake Shore Boulevard underneath it, and the rail corridor beside it has created a physical, visual, and psychological barrier to the Central Waterfront.

 $oldsymbol{T}$ echnology makes a good servant

but a bad master.

— Jacques Ellul

It is a constant source of noise and air pollution, a hostile, dirty environment for thousands of people who walk under it daily, and a barrier to thousands of others who risk life and limb to get across or around it. The Gardiner/Lakeshore is not only a road; it is a structure. As it processes traffic, it stunts land use; meant to move us along, it limits our opportunities.

The Commission has concluded that the elevated portion of the Gardiner Expressway is incompatible with the fundamental environmental and land-use objectives in the Central Waterfront.

With respect to the rail corridor the Commission concluded that:

As it crosses over major north-south arteries such as York, Bay, and Yonge streets, the rail corridor is a major barrier between the City and the waterfront, visually and in day-to-day pedestrian use. The effect can be greatly reduced by such changes as glass partitions between the sidewalk and road traffic, improved lighting, and possibly opening up retail outlets along the sidewalks under the rail corridor.

The length of the underpass and its barrier effect will be substantially reduced when the rail corridor is narrowed in preparation for redeveloping the Railway Lands.

Pedestrian walkways and amenities could be greatly improved south of the railway corridor, as suggested by the Gardiner/Lakeshore Task Force, which proposed tree-lined, widened sidewalks and improved pedestrian crossings to recreate Lower Yonge as an urban street, rather than an expressway ramp.

Another promising possibility would be to deck over the rail corridor in the central area, to allow pedestrian access between the City and the waterfront, in conjunction with a newly created plaza and park, which would have harbour vistas.

THE PROVINCIAL RESPONSE

In December 1990, in response to these comments, the Province of Ontario asked the Royal Commission, in consultation with the Ministry of Transportation and Metropolitan Toronto, to address the feasibility of relocating the Gardiner Expressway.

SETTING UP THE STUDY

In early 1991, in order to reconcile transportation functions with environmental regeneration and evolving land uses along the Central Waterfront, the Royal

Creating sustainable urban transport systems that meet people's needs equitably and that foster a healthy environment requires putting the automobile back into its useful place as a servant. With a shift in priorities, cars can be part of a broad, balanced system in which public transport, cycling, and walking are all viable options. Neither the exploding Cairos and Delhis nor the relatively stabilized New Yorks and Londons can sustain future growth in automobile use.

Lowe, M. D. 1991. "Rethinking urban transport." In State of the world. 1991. Washington, D.C.: Worldwatch Institute:

Commission — with the active participation of the Province, Metropolitan Toronto, the City of Toronto, and the federal government — contracted with a consulting team comprising 11 different firms and individuals to undertake a major study.

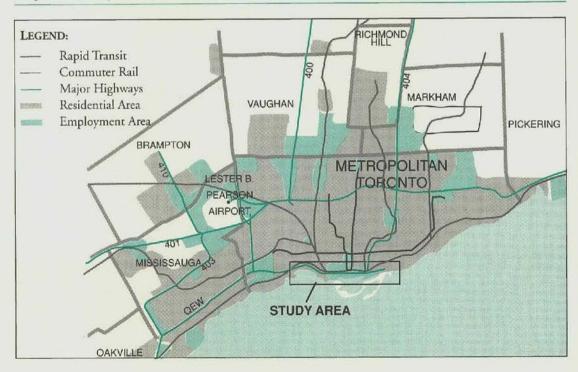
The team that was assembled included a broad range of skills and expertise in a variety of disciplines: environmental science, landscape architecture, urban and regional planning, land use and land development, transportation and civil engineering, economics, and finance. A steering committee was organized, composed of senior officials from all four levels of government and the special-purpose bodies concerned; in addition, a work group of technical specialists from Metropolitan Toronto, the City, and the Province was established to provide overall direction and technical advice and support for the study.

The terms of reference specified an integrated ecosystem approach, one that brings together environmental, land-use, transportation, and economic considerations, and asked the team to take a long-term (20- to 30-year) planning perspective.

The team was also asked to consider the Gardiner/Lakeshore in the light of three objectives:

- to improve the Central Waterfront, recognizing its strategic importance as a place, as well as a corridor, in the context of the Greater Toronto bioregion (GTB);
- to improve the relationship and links between the GTB, the central city, and the waterfront, and;
- within the context of the first two objectives, to improve the overall transportation system to and through the Central Waterfront.

Map 10.2 Regional context



The primary geographical focus of the study was the Central Waterfront: i.e., stretching from Park Lawn in the west to Woodbine in the east, Queen Street in the north and the water's edge to the south. However, the study also examined the Central Waterfront in the context of a Toronto's Central Area: from Bathurst Street to the Don River, and from Lake Ontario to the CP Rail tracks north of Dupont Street. Considerable thought was also given to the full regional context and functions: to the area beyond Metropolitan Toronto, as well as the implications for all of Metro of changes to the Central Waterfront.

SUMMARY OF THE STUDY FINDINGS

The study was completed in November 1991, and the results published in two documents: Publication No. 15, The Toronto Central Waterfront Transportation Corridor Study (IBI Group et al. 1991), and a detailed 450-page technical report. In a sense, the study belies its name: while it establishes the fact that the role of the Gardiner/Lakeshore is diminishing in the overall regional transportation system, it does more than that. The study also offers new insights on future environmental conditions; green infrastructure; the strategic value of place-making on the Central Waterfront, supported by a major housing program and transit expansion; the need for consolidated capital budgets among participating governments; and the role of the private sector. It came to the conclusion that:

1. It is both feasible and desirable to relocate and redesign the expressway and Lake Shore Boulevard, as part of an integrated and phased plan to improve the Central Waterfront.

- 2. Green infrastructure (parks, open space, and waterfront trail links) and other environmental infrastructure are needed as a priority in regenerating the waterfront.
- 3. Regionally, workplaces and living places must be integrated, in order to reduce sprawl, improve the regional urban structure, contribute to regional environmental goals, reduce dependence on the automobile, and moderate the pressure of commuter traffic on the Central Waterfront and the central area.
- 4. There are major opportunities for place-making and community-building on the Central Waterfront.
- 5. A substantial and sustained long-term housing program would be a catalyst for doing so.
- There is a need to maintain and extend a connected arterial road system to support the regional economy.
- 7. A "civilized" street system should be designed as the armature around which places, community, and green infrastructure can be organized in the Central Waterfront.
- 8. There is an urgent need to expand the transit system as a means of linking the region and the centre and of providing freedom of movement and circulation within the centre.
- 9. If the necessary critical mass of private and public investment is to be created, integrated approval processes, consolidated capital budgets, and timely decision-making are vital.
- 10. The framework and conditions for private-sector involvement should be established, in order to fully exploit its enterprise, initiative, and capability for investment and creativity.

11. The first stage of the suggested implementation program in the study offers opportunities for public/private sector co-operation and action.

These matters, which are part of the summary that comprises the rest of this chapter, are covered in greater detail in *The Toronto Central Waterfront Transportation Corridor Study*; readers who are particularly interested in this aspect of the waterfront should read it in conjunction with this part of the final report.

THE REGIONAL CONTEXT

The consultants first examined the relationships between the Central Water-front, the Central Area, and the region in the light of economic trends, population growth, and changing land uses since the Second World War. This included the migration of heavy industry from the centre to the suburbs, the accompanying changes in rail and road systems, office and commercial growth in the Central Area and in the regional centres, and the residential growth of suburbs.

Toronto's Central Waterfront has undergone economic changes similar to those in other major metropolitan areas: at the end of World War II, Canada was the world's fourth-largest manufacturing country. While manufacturing has continued to be of basic importance to Canada's economy in the years since then, its relative significance has declined and its nature has changed as other nations have developed their own capabilities and Canada's service economy has grown.

During the war and for some years following it, Toronto's Central Area and parts of South Etobicoke and Scarborough, as well as areas north of what is now Metropolitan Toronto, contained perhaps the single largest concentration of manufacturing capability in Canada. This important sector was supported by the massive roadbuilding program of the 1950s and 1960s which included, among other important links, the Gardiner Expressway, the Don Valley Parkway, and Highway 401.

However, as the metropolitan region grew, land values in the Central Area increased dramatically and so did intensification of land uses in the Central Area and Central Waterfront. As early as the 1960s, and in the face of these trends and the resultant increases in road traffic and congestion, heavy industries started to migrate from their original, central locations to suburban sites where land values were lower, modern one- or two-storey facilities could be constructed economically, and adjacent freeways provided greatly improved access for increasingly important truck traffic.

Thirty years ago CN Rail also decided to transfer its rail freight operations from the Central Area to the suburbs. It built a by-pass freight rail line (the York and Halton subdivisions just north of Metro's boundary), and constructed major new freight yards adjacent to that line. Similarly, CP Rail created a major new freight classification yard at Agincourt and moved its freight operations from the centre, while continuing to use its Galt, North Toronto, and Belleville subdivisions (which pass through midtown Metropolitan Toronto) as its main freight line. The railways were responding to the same economic forces and the centrifugal migration of their major industrial customers: it was efficient and economic to build the extensive new classification yards on suburban land, which was also well served by highways for truck

interchange movement, and to free up more valuable downtown land for other, more intensive, urban uses.

The railways' move also freed up significant capacity on the "spider's web" of radial rail lines converging on Union Station, allowing the Province of Ontario to introduce commuter rail service, initially on the Lake Shore West and Lake Shore East lines, in 1967.

The major concentrations of heavy industry, as well as of other industrial activities, are now in the outer reaches of Metropolitan Toronto (e.g., towards Pearson International Airport and in northeast Scarborough) and beyond (in Oakville, north Mississauga, Brampton/Bramalea, Vaughan, Markham, Pickering, Ajax, Oshawa, etc.). While some of these

municipalities had substantial industrial activity during and following the War, all have benefitted economically from the industrial exodus from central Toronto, and have experienced related residential growth.

During the 1960s and early 1970s, most of the remaining underdeveloped land in Metropolitan Toronto was covered, and there has been dramatic population growth in the outer regional municipalities (Peel, Durham, York, and Halton) in the past two decades.

As documented in the 1990 Greater Toronto Area Urban Structure Concepts Study (IBI Group et al.), earlier suburban residential development in Metropolitan Toronto was relatively compact and occurred in the context of a well-developed urban transit system. Until very recently, by contrast,

Map 10.3 Major existing industrial areas, freight rail, and highway facilities



development in the outer regions tended to be at lower densities, without the benefit of extensive urban transit services, and it created extensive auto-dependent areas surrounding Metropolitan Toronto. These trends added greatly to the pressure for cross-boundary commuting trips to jobs within Metropolitan Toronto, a large majority of which are by automobile.

As these regional changes were going on, a trend developed on the Central Waterfront for more intense and specialized land uses, utilizing the hundreds of hectares of prime land vacated by industrial and rail activities. Obvious examples include the expanding financial service industry, manifested in the office buildings of major international and national financial institutions in Toronto's central core. Office, retail, and trade activities also expanded and intensified greatly in the Central Area, as well as

in other city centres (e.g., North York, Scarborough, Mississauga) in keeping with the Metropolitan Toronto Official Plan, the Official Plans of adjacent municipalities, and provincial policies.

In recent years, total office/commercial growth in the regional centres and throughout the region rivalled that of the Central Area in absolute terms; but the Central Area remains an order of magnitude greater in size, diversity, and critical importance than any others. While continuing growth is anticipated in all these centres, it is expected that the Central Area will remain paramount in the region and will continue as a major financial centre in the global markets of the next century. In

addition, the Central Waterfront has become the focal point for Toronto's important international tourism, trade, and convention industries and associated recreational areas and facilities.

While there has been a tendency to move heavy manufacturing and related warehousing to the suburbs, there has been significant growth in a wide variety of light industrial activities, sometimes referred to as urban industrial, which are thriving in the shoulder areas adjacent to the financial core. These activities, many of which are directly related to office/commercial activities but cannot support premium rents, include the burgeoning information industry (computer systems, data processing centres, word processing, software development, communications) and media industries (e.g., publishing, film, music, visual art) that have expanded in their own right and

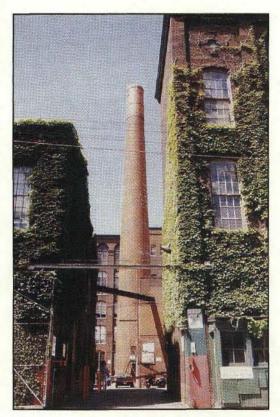
in support of other commercial activities.

Such urban industrial activities tend to be "at home" in medium-rise (four-to eight-storey) buildings located on urban

streets, and have naturally congregated in buildings in the shoulder areas surrounding the financial core. Accordingly, these areas have been transformed in both occupying uses and physical rehabilitation, particularly during the past two decades.

Beginning in the 1970s, and especially after the OPEC cartel crisis, the suburban dream began to crumble as gas prices rose. At first, those who already lived downtown simply stayed put; later, people who had moved out began to move back in. In doing so, they were renewing a Toronto tradition

The Central Area will remain paramount in the region and will continue as a major financial centre in the global markets of the next century.



Many buildings that housed industry have been converted for office and retail use

 maintaining the downtown as a place, not just for the very rich and the very poor, but for middle-class families.

POPULATION, EMPLOYMENT, AND TRAVEL PROJECTIONS

Having considered the past and present regional context, the team examined the projections of the Central Area's share of population and employment projections to the year 2021, as well as forecasts of travel demand; on that basis it assumed a total regional population of 6 million people with a total employment of 3.4 million.

To evaluate the implications of the relationship between place of work and place of residence, including various degrees of compactness, five land-use scenarios were

developed, representing a range of future possibilities for the region. These were used as a basis for estimating travel demand to the year 2021.

In four scenarios, the 2021 population in Metropolitan Toronto was 2.8 million, and in the fifth 3.2 million, while in all five scenarios, Metro's 2021 job total was assumed to be 1.9 million.

The 2021 Central Area resident population in the scenarios ranges from 235,000 people to 405,000, compared with the 1986 level of 133,000 people. Future employment there ranges from 571,000 to 617,000 jobs by 2021, relative to the 1986 level of 429,000 jobs. The higher number of people, compared with the number of jobs, reflects policies of the City of Toronto and Metro and is consistent with the 1989-1990 provincial long-term forecasts for the Greater Toronto region.

The projections and scenarios were used throughout the study as a basis for considering the implications of growth for environmental conditions, place-making, and transportation requirements.

ENVIRONMENTAL CONDITIONS

The environmental conditions of Toronto's Central Waterfront have always been dynamic, responding to changes in climate; forces of glaciation; the power of wind and waves; and, more recently, human activities.

For thousands of years, aboriginal people travelled the rivers — trading, fishing, and hunting. For them, "Toronto" meant a "meeting place" at a natural lakeside landing. Few in number, the Indians lived lightly on the land: they made trails in the forests, cut timber for shelter and firewood, hunted

and fished for food, and planted crops on small clearings above the valleys.

With the arrival of European settlers in the 18th century, the environment began to change dramatically. As described in Chapter 4, the waterfront was soon modified to provide piers for the boats and ships that were the primary means of transportation. Large quantities of stone were removed from nearshore waters for ballast and building. The land base was extended by lakefilling: almost all the land south of Front Street was once part of the lake; the vast Ashbridge's Bay marshes at the mouth of the Don River became a new port and industrial area. The ponds and creeks of High Park were severed from Lake Ontario, first by railway lines, and then by lakefill at Humber Bay, where a breakwater was built to protect the newly created beaches from wave action and to establish sheltered water for boating.

Humber and Toronto bays quickly became repositories for the wastes of the growing population: first for raw sewage and industrial effluents, later for waste that had undergone varying degrees of treatment. Today, stormwater and treated sewage from three treatment plants pollute the Humber and Don rivers and the lake; this is still one of the most serious environmental problems in the Central Waterfront (see Chapter 3).

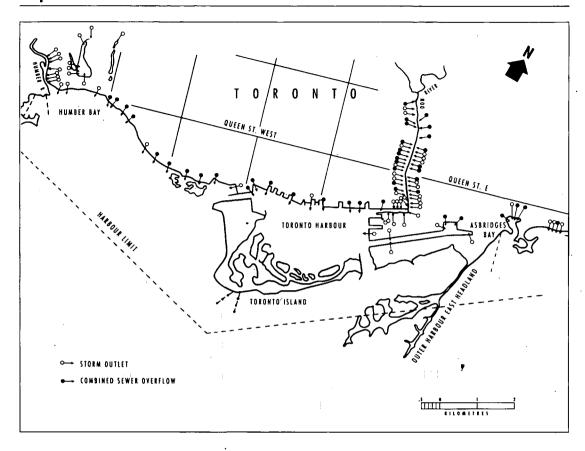
If Elizabeth Simcoe, wife of Upper Canada's first lieutenant governor and a diarist who faithfully recorded her impressions of Upper Canada, could visit the Central Waterfront today, she would find little to remind her of the wetlands, sand spits, clear rivers, creeks, and forests she enjoyed nearly two hundred years ago. In their place, she would find the manicured lawns of the Western Beaches, the asphalt of the CNE, the built landscape of Harbourfront, the lower Don in its concrete channel, the vacant lots and old industrial buildings of the Port District.

There are only small, fragmented patches of good-quality natural habitat remaining in the marshes of the lower Humber River, High Park, the Toronto Islands, and the Cherry Beach area. But pehaps Mrs. Simcoe would be pleasantly surprised to explore the Leslie Street Spit — a headland created by lakefill — where she would find many of the plants and animals that once lived all across the waterfront. A victim of malaria ("the shaking ague"),



Painting of the Town of York, 1803

Map 10.4 Storm outlets and combined sewer overflows



she would certainly enjoy the decline in mosquitoes!

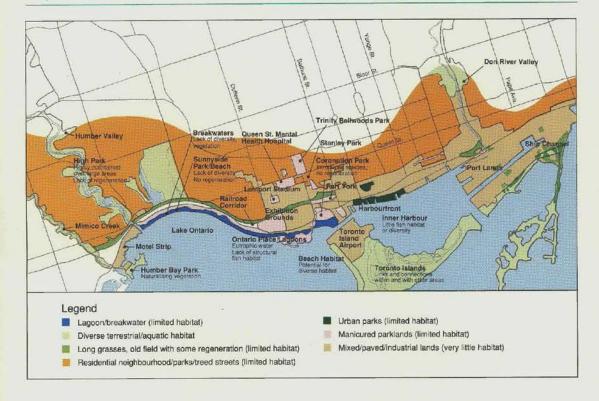
Typical of most towns and cities,
Toronto tended to ignore the floodplains of
its rivers as it grew along their fertile valleys.
Hurricane Hazel, which swept through this
area in 1954, wreaked havoc across the city,
destroying lives and property, especially in
the Humber watershed. In the aftermath,
authorities moved to keep many river valleys
free of development, to avoid future tragedies. However, some older areas of the City,
particularly in the Central Waterfront, still
sit in the floodplain of the Don River.

The microclimate of the Central Waterfront is affected by both the city and by the lake. All cities affect their climatic conditions: vehicles and the heating/cooling

systems of buildings create excess heat; built form creates shade and changes wind patterns and speeds; and pollution in the air reduces the intensity of solar radiation. Combined with these factors, the Central Waterfront is influenced by weather patterns associated with the lake: wind, fog, and the moderating effects of the water on temperatures.

Air quality in the Central Waterfront generally meets health-related guidelines, except that there are often high levels of ground-level ozone during spring and summer; there are high levels of nitrogen dioxides, carbon monoxide, volatile organic compounds, and dust near the transportation corridor.

In the past decade, pollution from all sources except vehicle emissions has been



reduced in the City of Toronto. Although advances in technology could be expected to reduce automobile emissions in the future, the *Toronto Central Waterfront Transportation Corridor Study* concluded that benefits in terms of overall air quality may be minimal:

... over the next 30 years, technological developments may make possible substantial reductions in energy consumption and/or vehicular emission per vehicle-kilometre, but absolute reductions in energy consumption and the impact on the environment would require greatly improved transit and changes to land use/urban structure. These will be needed in order to reduce average trip lengths, encourage transit use, and motivate behavioural change to divert discretionary travel from cars to transit, cycling, and walking. Stabilization or

reduction of vehicle-kilometres of auto travel will be required if we are to achieve the significant reductions in automobile energy consumption and emissions made possible by technological developments.

Air pollutants from industrial activities also cause concern locally; in the Port Industrial Area, for example, high levels of dust and odour create unpleasant conditions and sometimes affect nearby residential neighbourhoods (such as parts of South Riverdale).

Transportation is also the greatest source of noise in the Central Waterfront: traffic on the Gardiner/Lakeshore, trains and shunting yards, aircraft at the Toronto Island Airport — all are major contributors. Residential communities on the Toronto Islands and at Harbourfront have been particularly affected by aircraft noise. Buildings in the St. Lawrence neighbourhood were designed without open windows and

balconies facing the Gardiner/Lakeshore/railway corridor.

The Ataratiri and East Bayfront/Port Industrial areas are also subjected to high noise levels from the transportation corridors, which may restrict the form and design of any residential buildings there.

Lakefilling and former industrial activities have left a legacy of contaminated soils and groundwater in much of the Central Waterfront, particularly Ataratiri, the Railway Lands, and the East Bayfront/Port Industrial Area. In many places, toxic metals, oil and grease, and complex organic chemicals are found at levels that may have harmful effects on people, other animals or plants.

The costs of cleaning up — which must be done if these lands are to be kept in productive use — are uncertain because of a lack of knowledge on several fronts: the full nature and extent of the problem; standards to which the soil must be cleaned; and the best methods of treatment. There are many methods, of varying cost and effectiveness, so that not even experts can say with certainty what should be done and how much it will cost.

The uncertainties and the possible liabilities have caused almost all parties — owners, investors, lenders, and governments — to hesitate. For its part, the banking industry has identified the problem as the biggest single domestic issue facing Canadian banks in the 1990s. To avoid potential liability, which could exceed the value of assets, banks are simply refusing to extend credit to business facilities that show signs of pollution. However, the problem cannot be ignored; nor should we allow it to bring clean-up to a grinding halt.

The built environment of the Central Waterfront is a mixture of old and new,

from the historic Gooderham and Worts distillery to the high-rise condominiums of Harbourfront. Although much of the heritage on this part of the waterfront has already been lost to redevelopment, enough remains to retain a sense of history — if changes are approached thoughtfully.

Although every one of the Commission's studies in the Central Waterfront focused on environmental conditions, the environment of the East Bayfront/Port Industrial Area was studied in greatest depth. The environmental audit of that area is relevant to the rest of the Central Waterfront in two respects: first, many of the audit's findings and recommendations are appropriate to other places along the waterfront. Second, the audit process is applicable to future studies elsewhere. (A description of the audit results is included in the Lower Don Lands section of this chapter.)

Having reviewed past, present, and possible future environmental conditions (air, water, soil quality, and other factors) along the Central Waterfront, the Toronto Central Waterfront Transportation Corridor Study concluded that:

Urbanization processes in the Central Waterfront have degraded both terrestrial and aquatic habitats resulting in a poor environment for wildlife and for human activity. The ongoing transition of the Central Waterfront from largely industrial and related transportation uses to a more diverse and urban place — and the fact that hundreds of hectares are currently vacant or underutilized and waiting for the second half of the transition to occur — provides this generation of Torontonians with a unique opportunity to improve the area's natural and physical environment

— first in terms of creating a "green infrastructure" of open spaces, parks, and links and then in terms of other aspects of environmental quality.

The study sees green infrastructure as an essential element of urban infrastructure, as important as - some would say more important than — streets and utilities. "Green" is shorthand for natural and pedestrian spaces of many kinds, from plazas and streets to public gardens and urban wilderness. The arrangement and proportion of paving, structures, and plantings vary, but green infrastructure has certain common characteristics: it provides a useable, diverse, open, accessible, connected, safe, and attractive environment for people outdoors, whether they are walking, running, playing, sitting, lounging or using wheelchairs, bicycles, or roller skates.

The reviews of environmental conditions undertaken for the Transportation Corridor Study and the Environmental Audit of the East Bayfront/Port Industrial Area provided an understanding of the requirements for green infrastructure and environmental regeneration in this area. For example, it became apparent that plans and programs in the Central Waterfront should:

- take into account current and future pollution levels and noise from all sources;
- include measures to improve the quality of water, soils, and air;
- ensure that studies are conducted to assess levels of toxic contaminants in air; assess air quality in the vicinity of the Gardiner/Lakeshore Corridor; undertake further air modelling in the area; and assess noise levels in the area;

- ensure that there is an adequate buffer between industry and utilities, including the Main Sewage Treatment Plant, and any sensitive uses in the area;
- include consultation with emergency response departments on access, hazardous material use and storage, and availability of hospital and other emergency services;
- increase the diversity and connectedness of parks and other open spaces;
- ensure that future recreation in, and access to, open spaces in the area strikes a balance between the needs of people and those of wildlife;
- increase the diversity and quality of terrestrial and aquatic habitats;
- maintain and enhance the diversity and distinctiveness of places in the Central Waterfront, and, through integration and reuse, keep as much as possible of the area's industrial and natural heritage; and
- protect and enhance vistas.



PLACE AND CORRIDOR

The central theme of the *Toronto*, *Central Waterfront Transportation Corridor Study* is the balance between place and corridor within this regional and environmental framework.

As used in the study, "place" is shorthand for a habitable place, a memorable place, one that can be occupied comfortably by people on foot or seated, to linger and appreciate, a place which can and should be clean, green, useable, diverse, connected, and beautiful. In short, a pleasant and accessible place. It is a suitable and desireable place in which to work, live, and play — a place that can be developed economically.

The term "corridor" is used as shorthand for a passageway for high-speed and efficient movement, the primary purpose of which is the easy flow of powered vehicles and where people on foot or bicycle or in a wheelchair are unwelcome and unsafe. The corridor may contain different modes of transport: rail, road, transit, etc. If the transport is by automobile, the corridor usually connotes an expressway, highways, regional or arterial roads — through routes, as opposed to main, local or neighbourhood streets that rank lower in the road hierarchy.

Many main or neighbourhood streets in Toronto accommodate movement and, in a sense quite different from that meant in the study, can be described as corridors.

But a street's placemaking — its social attributes are dominant. If done well, the social or place-making element gives main and

neighbourhood streets a civilized quality. However, there is a limit to their capacity to perform this function if they are made to carry too much traffic.

Protecting Toronto's neighbourhoods from corridor traffic has channelled vehicles to fewer and fewer free-flowing corridors, and these, having surpassed their social carrying capacity as places, have now reached their transportation carrying capacity as corridors. The primary vehicular conduit serving the downtown is the Gardiner/Lakeshore couplet.

To varying degrees, it compromises the habitability of all the places it goes through, but it does so most severely between the downtown and Toronto Bay. The balance of place-making and corridormaking design criteria will have to shift in favour of the former if this central piece of the waterfront is to become truly habitable, an integral part of the downtown.

PLACE-MAKING

For the past several decades our regional community has been playing out two urban development themes. The first has been continued urban sprawl, designed around the auto as the dominating factor, augmented by single-use zoning, which was originally intended to separate unhealthy industrial workplaces from residential areas. It is characterized by free-standing houses, separated workplaces, and shopping centres linked by vast networks of roads. This form has been immensely popular,

space-consuming, and, it is now apparent, very expensive in land, money, environmental health, and travelling time.

The second theme is becoming increasingly evident here, as in other parts of the world: it features closer integration of workplaces and living places, more compact mixed-use zoning interspersed with larger green spaces, a greater role for transit, and less reliance on cars. This composite model for development has begun to take hold in Toronto's Central Area, and is showing signs of acceptance elsewhere. All the Commission's studies, including the *Central Waterfront Transportation Corridor Study*, reinforced the need for a greater emphasis on the second model.

A significant portion of the study dealt with the ingredients of place-making, the changes and planning approaches necessary for a more habitable central waterfront. It

 $oldsymbol{T}$ he central theme of the study is

the balance between place and corridor.

We are molded, we say, by the conditions and the surroundings in which we live; but too often we forget that environment is largely what we make it.

Bliss, C. 1904. The kinship of nature. Toronto: Copp Clark.

pointed out that there is a unique opportunity to make the waterfront memorable, as the result of the regional shift in heavy industrial and related transportation uses from the city core to the periphery. Making the waterfront a better place will not only be of benefit locally, but will help the city and region as a whole. This offers a chance to create an extensive green infrastructure, a better quality of urban development, and economic growth in the City's Central Area, which is otherwise constrained for space.

The study showed that a quantity of new housing is particularly important; it will reduce pressures for more long-distance commuting; create a livelier, more diverse, and safer place day and night throughout the week; and reduce the tendency to destroy outlying countryside.

The presence of people who live on or close to the waterfront in well-designed communities is the best way to ensure the vitality of the Central Waterfront, assure public security and safety, and encourage the fullest use of waterfront amenities.

The study envisages a range of neighbourhoods (and supporting community facilities), with a wide mix of different housing types and tenures, and a population that is socio-economically reflective of the region: all income groups, all ages, all family types, including childless couples, singles, and people who are able-bodied as well as those who are handicapped.

Given the Central Area's dominance as the region's workplace, with its current surplus of office capacity, more emphasis on housing and community development will help to redress the balance and integrate workplace and living place there.

In order to understand the full scope as well as the impediments to place-making there, and to explore the regional effects, the team studied each of the places along the Central Waterfront. They also analysed the emerging land-use trends, including land prices and related economic considerations.

It became clear that there is sufficient land capacity — some 300 hectares (750 acres) — to accommodate most or all of the expected increase in the Central Area population, projected at between 100,000 and 270,000 people. Furthermore, it is also obvious that jobs, housing, and related community facilities on the waterfront could co-exist in mixed-use developments.

The analysis showed that at normal Central Area densities and at the rate projected in Cityplan '91 (3,500 housing units per annum), one year's production of housing would consume about 16 hectares (40 acres) of Central Waterfront land (rather than the 280 hectares (700 acres) that suburban densities would consume).

It also showed that increasing the ratio of population to employment in the Central Area, and creating a more compact urban structure in the Greater Toronto region, would reduce increased demand for travel into the centre, by as much as 50 per cent.

But the analysis showed that if placemaking in the Central Waterfront is to be done well, the barrier and environmental effects of the Gardiner/Lakeshore and the rail corridor would have to be eliminated or substantially reduced; the green infrastructure would have to be installed; and the City's normal "neighbourhood-friendly" street grid would have to be extended wher-

ever possible south of Front Street to the water, where it does not now exist.

This more interconnected, multi-use,
civilized street network
would have to be developed as the armature around which housing, mixed-use development, and a green the houses along infrastructure could be created.

THE CARRYING CAPACITY
OF CITY STREETS

As development in the region around Toronto spreads, it becomes increasingly obvious that the Central Area road network is limited: untold acres of land in outer municipalities have been dedicated to road networks that, increasingly each year, feed traffic that winds up on the Central Area's fixed amount of roadway. Moves to

make this central road network operate more efficiently lead inevitably to road designs that only increase traffic flow, and that do so at

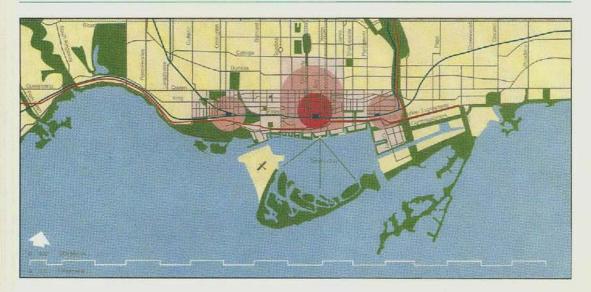
> the expense of the pedestrian environment and the sense of the street as a habitable public place.

A neighbourhood street can be wonderful: the public

domain that serves as a means of address to the houses along it, a space in which neighbours meet and children play, where trees grow, and from which services of all kinds are supplied. A main street can be equally enjoyable: diverse and active, organizing elements that serve the local community, it offers shopping, commerce, entertainment, and the company of others.

Such main streets frame public space. While they permit traffic movement, they have a finite carrying capacity which, if exceeded, changes them from being attractive to becoming dreary stretches that serve

Map 10.6 Emerging urban intensities in the Central Waterfront



It is also obvious that jobs, housing,

and related community facilities

only vehicles going to and from somewhere else. In the shorthand of the *Central Waterfront Transportation Corridor Study*, they become corridors dedicated to or dominated by traffic, rather than public places.

The turning point or threshold at which place-making dominates corridor-making can be called the social, as opposed to transportation, carrying capacity of the street. While not usually expressed that way, the fact that liveable streets have a carrying capacity is well-known to residents of Toronto's neighbourhoods. They have successfully insisted that traffic flow remain below this threshold — a major reason that Toronto's neighbourhoods work so well.

The team suggested that the street system in the Central Waterfront be designed to meet standards that limit — and, if necessary, reduce — the quantity of commuter traffic to fit a street's social carrying capacity;

necessary transportation capacity would be made up by improved public transit service.

THE CENTRAL WATERFRONT AS A CORRIDOR

The Central Waterfront is also a strategic corridor for moving people and goods to, from, and through the Central Area. Road, rail, marine, and air transportation facilities are all part of the Central Waterfront's role as corridor.

The major rail facility is the Lakeshore Corridor, which stretches across the Central Waterfront, and is joined by lines from the Don River corridor in the east and the northwest corridor in the west. GO Transit provides rail commuter services on seven radial lines that converge along these corridors to arrive at Union Station, while VIA provides rail service to other cities and provinces.



A friendly street, Markham Street, Toronto

A rail freight spur runs south from the rail corridor to the East Bayfront/Port Industrial Area, connecting there to a number of freight spurs. Most of the other rail freight lines that served industries in the Central Waterfront have followed the exodus of industrial customers.

The other significant transportation facility on the Central Waterfront is the Gardiner Expressway/Lake Shore Boulevard, which also cut across the waterfront as far east as Woodbine Avenue. This part of the waterfront is also served by arterial and local roads that form a network that is sparser south of Front Street than the more closely spaced urban streets north of it; that reflects the industrial and institutional uses that predominated south of the rail corridor during most of the past century.

The team studied the use of the corridor over the past 15 years (and, in one case, the past 30 years) by analysing traffic volumes and movements in a number of categories (truck, automobile, transit, and person), including origins and destinations. The analysis was based on data supplied by Metropolitan Toronto, the City, the Province, the TTC, and GO Transit. It included traffic counts for the peak morning hour (7:45 a.m. to 8:45 a.m.), the peak morning three-hour period (7:00 a.m. to 10:00 a.m.) and the 12-hour daily period (6:30 a.m. to 6:30 p.m.), as well as origin and destination surveys. (The team was not able to obtain comparable vehicular traffic data for the full 24-hour period.) As already mentioned, the team developed travel demand projections to the year 2021, based on population, employment, and land-use scenarios.

When combined with the land-use analysis, the traffic analysis showed clearly

that the Central Waterfront is in transition, not only as a place but as a corridor. In particular, its corridor function is undergoing modal change to a degree that has hitherto escaped notice, and the projections indicate that changes are permanent and must be taken into account if the waterfront's full potential is to be achieved. The following is a description of the directions and the trends of the modal changes.

GOODS MOVEMENTS

Depending on the time of day, these make up between 10 and 15 per cent of the road traffic in the corridor; over the past 15 years, the number of trucks on roads in the corridor increased slightly (by three to five per cent) but there was a significant decline (by more than 70 per cent from 870 to 210 peak-hour trips) in the number of heavy trucks (those having three or more axles), which was offset by an increase of 70 to 85 per cent (from 880 to 1,630 peak-hour trips) in the number of more mobile light trucks.

PERSON TRAVEL

According to the Transportation Tomorrow Survey (TTS), in 1986 in the Greater Toronto region (extended to include Hamilton-Wentworth), there were almost two million trips during the morning peak period (trips starting between 6:00 a.m. and 8:49 a.m.); some 318,000, or 16 per cent, were destined for Toronto's Central Area. Of the 318,000, approximately 36,000 were from the Central Area, 218,000 from the remainder of Metro, and the rest from regions outside Metro.

The TTS revealed that about 65 per cent of the total a.m. peak period travel in the Greater Toronto region was by private

car; 25 per cent by public transit; and the remaining 10 per cent by foot, bicycle or other means. However, of trips to the Central Area, only 36 per cent were by automobile whereas 58 per cent were by public transit, and the rest by other modes.

About 40 per cent of trips in the Central Area itself were by other modes: walking — 36 per cent; cycling — two per cent; and taxi/motorcycle — two per cent; while 34 per cent was by public transit and 26 per cent by automobile. The survey showed that walking is the most common mode for trips within the Central Area.

Using information from the Toronto Transit Commission to supplement these data, it was possible to examine trends as far back as 1960; since that time, there has been a tendency for the total person trips entering the Central Area in the a.m. peak period to increase, while the number of persons entering in automobiles has actually declined slightly.

According to Metropolitan Toronto's traffic counts, between 1975 and 1990 the number of vehicles travelling into the Central Waterfront was virtually stable in the a.m. peak hour; increased slightly in the a.m. peak period (by six per cent); and rose somewhat more in the 12-hour daily period (by 15 per cent). This suggests that the road network in the waterfront corridor has been operating at near-capacity since 1975, restricting increases in vehicular traffic during the peak periods. The more significant growth in the 12-hour vehicle traffic may reflect a spread in the a.m. and p.m. peak periods in the waterfront corridor.

There were similar traffic trends on the Gardiner Expressway/Lake Shore Boulevard facility: between 1975 and 1990, auto traffic on the Gardiner/Lakeshore grew two per cent (from 10,580 to 10,780 vehicles) in the a.m. peak hour; five per cent (from 27,500 to 28,900) in the a.m. peak three hours, and 17 per cent (from 75,200 to 87,600) in the 12-hour day-time period.

In those same years, however, auto occupancy in the a.m. peak period declined from 1.31 persons per car to 1.22: in other words, the same number of vehicles were carrying seven per cent fewer people in 1990 than they carried in 1975.

Person trips into the waterfront corridor had a very different growth pattern, growing substantially in all three periods: by 32 per cent in the a.m. peak hour, 28 per cent in the a.m. peak period, and 22 per cent in the 12-hour daytime period. These figures also show that, in contrast to the surface transit and automobile traffic trends, the concentration of total person trips into the Central Waterfront during the morning peak hour and the peak three-hour period actually increased.

With the exception of the 12-hour period, in which auto person trips grew discernibly, the growth in person trips in the 15 years under study was due mainly to growth in the number of persons carried by GO Transit commuter rail services, which increased 259 per cent (from 10,000 to 36,190) passengers in the a.m. peak three-hour period. However, between 1975 and 1990, the number of persons entering the Central Waterfront by other forms of public transit declined in all three periods. (This occurred despite an increase in the number of persons travelling by transit into the entire Central Area.)

The study team estimated that the number of persons entering the Central



The central waterfront viewed from the east

Waterfront could grow from about 46,900 in the peak hour in 1990 to between 79,200 and 111,000 in 2021 (an increase of between 69 and 137 per cent). This is a range of about 32,000 to 64,000 additional trips per hour, with the lower end corresponding to scenarios with relatively more housing in the Central Area and the higher end corresponding to scenarios with relatively less housing there.

PEDESTRIAN AND CYCLE TRAFFIC

Unfortunately, statistics on volumes of pedestrian and cycle traffic in the Central Waterfront and adjacent areas are not collected in as much detail as those for vehicular travel by road and transit. However, the 1986 Transportation Tomorrow Study revealed that, during the a.m. peak three hours, about 12,600 or 36 per cent of

total person trips made entirely within the Central Area were pedestrian trips. This was the most-used method of travel for trips within the Central Area, more than the number of transit trips within the area, and almost half again as high as the number of auto trips. There were only 870 peak-period cycle trips, about two per cent of the total.

THE DIMINISHING ROLE OF THE GARDINER

The Gardiner Expressway, designed and built in phases between the mid-1950s and the mid-'60s in what was then a largely industrial area, serves a dual function: it is an efficient route for moving goods, in particular by heavy trucks going between the Port area, industrial sections of southern Etobicoke, and other industrial parts of the Central Area; and it offers a radial route for truck and automobile traffic entering the

CARS AND OUR QUALITY OF LIFE

At about the time the first automobiles appeared, the horse-and-buggy industry confidently predicted that their number would be limited by the chauffeurs who could be trained to drive them. How right they were: today hundreds of millions of drivers around the world sit behind the wheels of 400 million cars, an eight-fold increase since 1950.

This tremendous growth reflects the obvious improvements cars have made to the quality of people's lives. They offer convenience, flexibility, comfort, privacy, speed, and independence. They have altered our very perceptions of time and space: we speak not of the distance to another place, but of the time it takes to arrive there by car. We think of places being nearby that, a century ago, involved arduous overnight journeys. And for many people today, there are no alternative modes of transportation.

Despite these positive benefits, however, cars contribute to the deteriorating health of our planet and erode the quality of life in urban centres in many ways. They consume roads, resources, and — increasingly — the environment.

Cars are the biggest single source of the greenhouse gases that threaten global climatic patterns. Even "clean" cars produce nearly two and half kilograms of carbon dioxide for each litre (20 pounds per gallon) of gas used. Other gases released from the end of a tailpipe include nitrogen oxides, volatile organic compounds, hydrocarbons, carbon monoxide, and suspended particulates.

In addition to their greenhouse effect, these emissions contribute to acid rain, reduce crop yields, and affect human health. For example, by inhibiting the photosynthesis process, accumulations of ground-level ozone, which are produced when nitrogen oxides and hydrocarbons react in sunlight, reduce crop production. The Ontario Ministry of the Environment estimates that meeting ozone standards could increase crop production in Ontario by an average of \$39 million per year (in 1986-87 dollars).

Our excessive dependence on the automobile has affected our quality of life by encouraging the separation of work, recreation, home, and shopping. "The great emancipator" has given us long commutes and daily traffic chaos, and increased stress levels. It has affected the form and structure of our cities by eating up at least a third of the land for roads, parking lots, and other elements of car infrastructure.

There is a wide range of strategies to reduce the cumulative effects of individual car use. Technical improvements such as alternative automobile fuels, and cleaner and more efficient vehicles, are among the first steps. However, to deal with such problems as congestion, we must move beyond technical solutions towards innovative transportation management policies in which cars complement other forms of transportation. Finally, distances between daily destinations must be reduced so that biking, walking, and transit are feasible and enjoyable alternatives to the car.

Sources: Carson, P. and J. Moulden. 1991. Green is gold: business talking to business about the environmental revolution. Toronto: Harpercollins Publishers; Pearson, R. G. and J. A. Donnan. 1989. "Impact of ozone exposure on vegetation in Ontario". In Proceedings environmental research: 1989 technology transfer conference. Toronto: Ontario. Ministry of the Environment; Renner, M. 1988. Rethinking the role of the automobile. Washington, D.C.: Worldwatch Institute; Schaeffer, R. 1990. "Car sick". Greenpeace 14.

Central Area from west and east, as well as being a through connection to and from the lower end of the Don Valley Parkway. Much of the expressway is elevated; in the central and eastern portions, Lake Shore Boulevard runs underneath it at grade.

A 1986 survey of Gardiner Expressway users, carried out by the City of Toronto, showed that about 22 per cent of those coming from the west between 7:00 a.m. and 9:00 a.m., and 39 per cent of a much smaller volume from the east (about 1,100 to 1,200 vehicles per hour in each direction), were through traffic.

In terms of truck traffic, totals for both light and heavy trucks on the Gardiner/Lakeshore facility grew by eight to 12 per cent in the 15 years from 1975 to 1990. Specific heavy/light truck counts for the Gardiner/Lakeshore were not available, but the trends are probably consistent with those for the Central Waterfront mentioned earlier: heavy truck traffic declined while light truck traffic increased.

Based on the downward trend in heavy truck traffic in the Central Waterfront as a whole, it can be argued that one of the original purposes of the Gardiner Expressway — carrying heavy truck traffic in a largely industrial area — has been significantly decreased because of economic and landuse changes described earlier.

The other major purpose of the expressway — as a radial commuter route for trips from outside Metro Toronto and within Metro to the Central Area — has continued, but is declining, relatively and absolutely. Its role as a commuter route has diminished compared to that of its major competitor, GO Transit. While the number of a.m. peak-hour person trips to the Central Area, using the Gardiner Expressway, declined

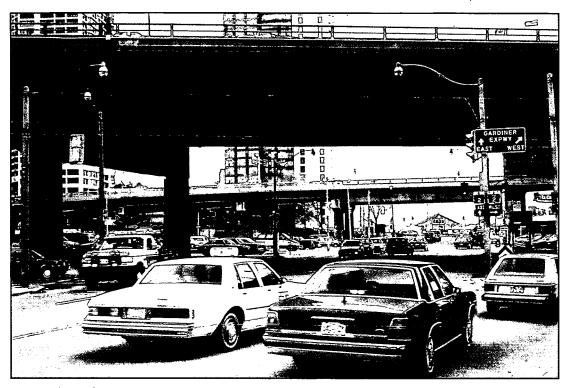
from about 10,500 to 8,000 between 1975 and 1990, the number carried by GO Transit increased from about 6,800 to about 21,600, and in 1991 increased further to about 26,000.

In relative terms, the proportion of total person trips carried by the Gardiner Expressway to the Central Area declined between 1975 and 1990: from 8.4 per cent to 5.4 per cent of the total during the a.m. peak hour; from 10.4 per cent to 6.9 per cent during the a.m. peak three hours; and from 13 per cent to 10 per cent of the total during the 12 hours between 6:30 a.m. and 6:30 p.m.

In absolute terms, reflecting the reduction in average vehicle occupancy, the number of persons carried by auto on the expressway also declined in the same period: by 24 per cent in the a.m. peak hour; by 21 per cent in the peak three hours; and by four per cent in the 12 hours from 6:30 a.m. to 6:30 p.m.

Approximately one-third of commuting trips crossing the Metro boundary are destined for the Central Area, with the rest going elsewhere in Metropolitan Toronto. In particular, there is strong pressure for automobile commuting to the Central Area, from Peel and Halton, with less pressure from Durham in the east; these trips rely heavily on the Queen Elizabeth Way/ Gardiner Expressway from the west and the Don Valley Parkway from the east and northeast. GO Transit serves the same commuter market and has captured an increasing share of it as rail service improved while roads became increasingly congested.

In summary: while the Gardiner Expressway continues to be used as a through route, its role as a heavy truck carrier and a commuter route is declining in both relative and absolute terms, as the result of a



Barriers to the waterfront

variety of factors. Among the most basic are economic forces and land-use changes that encouraged heavy industry to move to the suburbs and the resultant decline in heavy truck trips on the Gardiner. Furthermore, car occupancy levels have declined; increasingly, peak-period operations are limited by the expressway's capacity; and GO Transit patronage has expanded substantially.

While there has been growing pressure to use the expressway as a commuting route and for light trucks serving the Central Area, commuter traffic is being taken over increasingly by GO Transit and related TTC services.

In the same period, the physical and fiscal impracticality of expanding road capacity into and through the Central Area has resulted in specific City of Toronto, Metropolitan Toronto, and provincial policies to serve growth by expanding transit rather than building more roads. This is

reflected in the relatively static number of auto trips entering the Central Waterfront in the a.m. peak period in the past 15 years, while the number of transit passengers (particularly of GO Transit) has increased.

Considering changes in the use made of the expressway, and recognizing that it is a barrier to the waterfront — particularly in the central section between Jarvis and Bathurst streets — this is the time to examine the continuing role and existence of that section, in the context of greater intensification and specialization of land uses in the area, parallel development of a network of green open spaces and links, and the need to improve the environment.

The ongoing importance of the expressway for moving persons and goods must be recognized before any decision can be made on whether the central section could be removed and, if so, under what

circumstances. Even if discretionary use of autos in the area were to decline in line with the reduced road capacity, and if congestion levels remained stable, removing the central link in the limited-access highway system in and through the Central Area would further delay east-west vehicular trips — particularly by commercial truck, essential auto, and emergency vehicle — because speed limits would be reduced from 80 kilometres per hour to 50 or 60 kilometres per hour. In addition, the greater volume of east-west vehicular traffic on at-grade roads would create more conflict with north-south movements of pedestrians, cyclists, and vehicles.

THE TRANSPORTATION CHALLENGE

Given the Toronto Central Waterfront Transportation Corridor Study's conclusion that the role of the Gardiner Expressway as a carrier of heavy trucks and as a commuter route is declining in both relative and absolute terms, the question — whether to relocate and redesign the Gardiner and Lake Shore Boulevard — is of much less consequence in transportation planning than was previously imagined. It is overshadowed by a much greater concern: if the Gardiner's role is diminishing, if the roadway obstructs opportunities, and if the road system cannot be expanded by very much, how will it be possible to sustain the movement and circulation necessary to maintain the quality of life and economic prosperity of the region?

To explore these questions, the team carried out two major planning exercises: first to explore, cost, and evaluate various concepts for modifying the Gardiner Expressway/Lake Shore Boulevard facility and, second, to explore various plans and proposals for expanding the transit system.

FINDING A SOLUTION FOR THE GARDINER EXPRESSWAY AND LAKE SHORE BOULEVARD

The team assembled, designed, and mapped a number of ideas for modifying the Gardiner Expressway and Lake Shore Boulevard. To do so, they compared each idea with the existing road structure and system, using the implications of four elements as basic criteria:

- the environment;
- land-use and urban design;
- · transportation; and
- economy/finances.

Initially, there were nine different concepts, three each of three "families" (i.e., ways of retaining, removing or burying the Gardiner) were evaluated. Of the nine, two "best options" emerged: removing the central section of the elevated expressway and replacing it with surface roads, or retaining the expressway but relocating Lake Shore Boulevard and redesigning surface roads.

The team concluded that the water-front would be most substantially improved as a place if the central section were removed and replaced by normal urban, grade-related streets. However, members were concerned that the reduced transportation service that would result might create too much stress on this important vehicular corridor, unless it were balanced by changes to land use and public transit.

The evaluation showed the strengths and weaknesses of each concept: for example, those that favoured land use had transportation drawbacks, while those that favoured road transportation would impede land-use and environmental objectives. It

became clear that to maintain an appropriate balance between place and corridor, one that would meet place-making and environmental objectives while sustaining the diminished but still important role of the Gardiner/Lakeshore Corridor and a connected road system, a generic approach — retaining the entire Gardiner, removing it or burying it entirely — would not work.

The evaluation stimulated the team to find a solution that would maximize benefits for the environment, land use, and transportation in a balanced and economic way. This led it to consider a mixed concept in which the Gardiner is treated differently along its different sections, according to localized land uses and environment. For example: the Gardiner could remain elevated in some parts, be relocated in others, and be buried in still others.

This alternative would make it possible to relocate and redesign the Gardiner and Lakeshore appropriately, taking into account the various places through which they pass; it has another benefit: it would be possible to make changes in phases, as part of an integrated plan that would include more housing in the Central Waterfront and an expanded transit system.

TRANSIT AS THE WORKHORSE OF COMMUTER TRAVEL

The transportation carrying capacity of the Gardiner is a diminishing asset which must be balanced against the increasingly valuable asset of the waterfront as a a more habitable and economically productive place.

Given that the Gardiner carries only about seven per cent of the Central Area's inbound morning peak-period trips, if it were removed the rest of the transportation system would be sufficiently flexible to absorb it — and does occasionally when maintenance closes the road system. It would have to absorb even fewer trips if additional surface roads and connections were created. Whether or not that happens, the most important point is that retaining the Gardiner at its current capacity will not begin to deal with the real transportation problem.

The fact is that travel to and through the Central Waterfront will grow and the number of residents there will double in the next two or three decades. These will have to be accommodated when governments do not have the resources to expand the road system very greatly. Therefore, the choice is not between one road system or another, but whether to take steps now to improve transit service so that people can continue to have convenient access to the city centre.

Table 10.1 shows why: choosing a single point on an expressway and in ideal conditions for each mode, one lane of automobiles on the expressway, with the current average occupancy of 1.2 people each, can carry only seven per cent of the passengers

Table 10.1 Capacity of various transportation modes

Transport mode	Persons carried past a point in one hour	Efficiency in relation to subway
Autos on one lane		
of the expressway		
1.2 occupants per auto	2,400	7%
4 occupants per auto	8,000	23%
Streetcar or bus on own	•	
right of way	15,000	43%
Commuter rail (GO Rail)	25,000	71%
Subway rail	35,000	100%

Source: IBI Group.

that can be accommodated on the Toronto subway. When the ratio of travellers to roads favoured travellers, at most this was a statistic of academic interest; in current circumstances, as more and more roads become chronically congested, it takes on greater and greater practical importance: a minor increase in transit capacity can numerically balance a major reduction in road capacity.

It is a matter of great good fortune that Toronto's rail corridors parallel the expressways for so much of their length, making it practical to convert commuters from road to rail. That has been evident over the years as GO Transit passenger volumes have continued to grow, and was most noticeable in September 1991, when GO Transit volumes increased during a TTC strike. Commuter travel is the most easily converted to transit; moreover, the majority of those using the Gardiner for peak-period travel are long-distance commuters, the market GO Transit is specifically designed to serve.

Of course, efficiency is not the only criterion for choosing a mode of access: people may choose on grounds of convenience, flexibility, privacy, and time, including waiting time. The ability to carry goods, and, more recently, the opportunity to conduct business by phone also make car travel attractive.

By contrast, a rail system is scheduled, and can neither pick up nor deliver from communities already designed to facilitate car travel; moreover, trains are often crowded. But a more extensive and better integrated transit system can minimize these disadvantages or at least offer as good or better convenience as congested highways. Flexibility can be improved if settlements are designed to encourage walking and transit — which can be done by placing sufficient quantities

of housing and workplaces within walking distances of each other and of transit stops.

It is clear that our economic growth will depend substantially on our ability to develop a transportation system that takes into account the link between changes to the economic base of the waterfront/Central Area, and the constrictions imposed by the Gardiner's diminishing capability to serve those parts of the city. Projected travel demand needed to ensure an economically healthy region leaves no choice about drastically increasing the extent and amenity of the transit system: it must be done if the standard of liveability of the Central Waterfront, and of the city core and region as a whole, are to be maintained and improved. The choice is not whether to act, but whether to take steps now or simply react to problems that, inevitably, will have to be faced. Obviously the former is by far the better choice.

Because we will have to rely increasingly on transit in the future, we should plan now to provide sufficient capacity to absorb the traffic that results from stabilizing or reducing road capacity when redesigning the Central Waterfront road network.

A PLAN FOR TRANSIT

The last truly bold transportation initiatives in Toronto go back a generation or more, when the subways, commuter rail, and expressway systems were created. While the subway system and expanded commuter rail service have been fine-tuned in recent years, it is clear that the latter should continue to be expanded rapidly and that other bold initiatives are necessary to meet traffic needs in the core.

Therefore, the study team developed a conceptual plan for an expanded transit system to serve the Central Waterfront,

Map 10.7 Possible transit concepts



Legend:



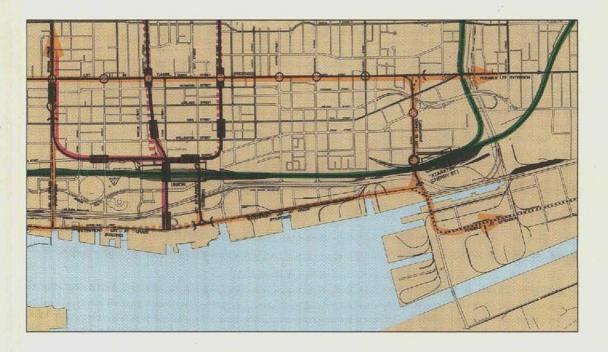
Central Area, and greater region for generations to follow, just as the bold investments made by previous generations now serve us. The plan proposes the following major improvements:

- an expanded GO service centred on Union Station, with two new shoulder stations: one in Garrison Common (Strachan Avenue) and the other in the Lower Don Lands (Cherry Street);
- an expanded Waterfront LRT, extended to Park Lawn in the west and Greenwood in the east, combined with the GO service already suggested;
- introduction of a high-quality LRT Waterfront loop system along Queen Street, Cherry Street, Queen's Quay, and Strachan Avenue;

- extension of the Spadina subway to Union Station and the University Avenue subway to the waterfront; and
- other transit service improvements, such as high-occupancy vehicles (HOV)/express bus lanes, and more efficient, higher-capacity service on the King and Queen streetcar routes, etc.

The team concluded that:

Increasingly, transit is the key for economic development in large urban regions. It is, of course, essential that local and regional road access continue to be available for both automobile and truck traffic serving local land uses, but, increasingly, the key indication of accessibility is the availability of surface and



rapid transit services, particularly in Central Areas.

There are many examples of this reliance on transit: in New York City, the World Financial Center development at Battery Park in Lower West Side Manhattan was initiated a few years after the West Side Highway collapsed, despite the fact that the road was never replaced with a limited-access facility, because the developer knew that high-capacity rapid transit services were available. Similarly, the Canary Wharf development in the London Docklands is in an area not served by limited-access roads; the developer realized that high-quality rapid transit links are essential and, therefore, indicated a willingness to consider providing significant front-end funding for such facilities. Closer to home, rapid office/commercial development has occurred in the North York City Centre and more recently in

the Scarborough City Centre following the extension of rapid transit lines to each of them, linking them to the downtown and the rest of the Greater Toronto region.

The Commission believes that the Central Waterfront must be recognized and treated as a valuable place, both for its own sake and for the benefit of the city and region. Already, more pedestrians and cyclists use the waterfront in the central core, because of the SkyDome and the residential community along Queen's Quay. East-west movement is also increasing, especially along the waterfront, as the result of recreational and cultural attractions that have been developed at Harbourfront. That trend will continue - pedestrian traffic, in particular, will keep increasing - and the need will grow for improved sidewalks, more streets that are pedestrian-friendly, and laneways transecting large blocks to facilitate pedestrian and cycle movement.

In a city like Toronto, transit plays a big part in cutting down air pollution. Subways and streetcars produce up to 99% less hydrocarbons and carbon monoxide than cars per passenger mile, buses up to 90% less. Plus, a transit rider saves over 900 litres of gasoline per year. In fact, a commuter driving uses the same amount of energy in four years as a commuter riding transit consumes over their entire working lifetime of 40 years. So remember, the more you ride transit, the more you save with our Frequent Rider Plan, and the more you help the environment.

Toronto Transit Commission. [1991]. On track: the year in review. Toronto: Toronto Transit Commission.

A PROGRAM TO INTEGRATE ENVIRONMENT, PLACE, AND CORRIDOR

The team of consultants concluded that the Central Waterfront would be improved as a place by a program including:

- a green infrastructure system of open spaces, parks, and links;
- improvements to the quality of the natural environment;
- a balanced and diverse mix of residential, employment, and recreational uses;
- pedestrian-friendly built form and streetscape designs that are more liveable, workable, and accessible, and that have legible public and private spaces;
- greatly improved public transit at both the regional and local scales;
- an interconnected and balanced road network;

- enhanced opportunities for economic competitiveness and renewal; and
- infrastructure capital and operating costs that are feasible because of the economic activity they create.

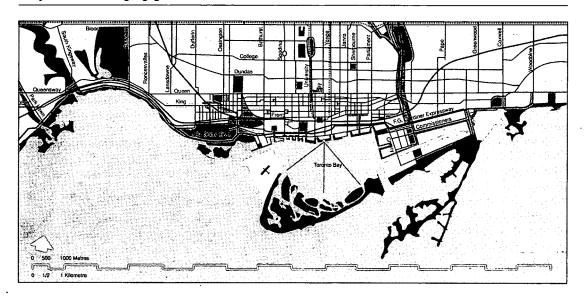
An important part of that vision is a redesigned and relocated Gardiner Expressway/Lake Shore Boulevard that strengthens links between the city and its renewed Central Waterfront and improves the area's quality as a place; at the same time, it will maintain and even improve its essential function as a corridor serving transit, rail and air passengers, auto travellers, truck, rail, and marine freight movements, pedestrians, and cyclists.

STAGE I

The team proposed Stage I of this program designed to achieve the improved links; in its words:

The study set out a range of transportation options, identified the environmental, land-use, urban design, and economic opportunities and concepts they help make possible, and assessed the required financial resources and related risks involved; it proposed a Stage I program aimed at achieving those opportunities in a costeffective manner. The combined landuse transit system, road network, and environmental concept which could subsequently evolve would be compatible with various treatments of the Gardiner/ Lakeshore facility, and the anticipated consequences of these were described. The Stage I program is designed to leave open the more promising options for the central section of the Gardiner/ Lakeshore facility.

Map 10.8 Emerging green infrastructure in the Central Waterfront



Implementation of the Stage I program will provide a considerably firmer basis than now exists for deciding on the most appropriate option, while moving purposefully to create a better place and corridor in the Central Waterfront.

Stage I programs and priorities are:

1. Green Infrastructure

The basic "green infrastructure" of parks, open spaces, and green links among them, plus steps to improve air, water, and soil quality and other environmental conditions, should be built as early as possible to begin the process of re-creating the Central Waterfront as a better place that, while part of the city, is connected to the water and to natural areas. These environmental programs should be implemented before or concurrently with the housing developments, in order to help attract residents to the area while ensuring that the open space system is completely achieved and protected.

2. Central Waterfront Housing and Economic Development

Another priority is a program for the delivery of as many as 3,000-4,000 housing units per year in the Central Area for the next 30 years, starting with appropriate designation of the lands.

Substantially increased Central Waterfront housing is essential to improve the quality of the Central Waterfront as a place, to moderate the growth of long commuter trips from suburban areas to the Central Area, and to help achieve an improved structure and quality of development throughout the region. At the same time, continuing development of employment and recreational uses is vitally important to maintain economic impetus. This includes developing the international trade centre and other economic development and tourism initiatives proposed in the Garrison Common study, establishing employment activities in the Railway Lands, and the mixed-use development



GO Transit plays an essential role in linking the centre and region

in other parts of the Central Waterfront described earlier.

3. GO Transit Expansion

Expansion of GO Transit service in the Lakeshore and Milton corridors and increases in Union Station's capacity, along with the Garrison Common shoulder station and related rail relocation, are essential to improve the relationship between the region and the centre and to serve the substantial increase in commuting and other trips to the centre that is anticipated, even if Central Area housing targets are met (and they will be much greater if the targets are not met).

4. Improved TTC Services

Significantly improved local transit is also essential to serve the residential

and employment developments and circulation in the Central Waterfront; initially this can be bus services on the improved arterial road network with HOV lanes as appropriate. This would lead, over the medium term, to implementing other transit improvements such as a downtown LRT loop system linking to the Garrison Common (Strachan Avenue) GO Transit station and later to a Cherry Street GO Transit station.

5. Better Road Connections

The Front Street extension is required both for local land access and to allow direct regional access from the west to the Central Area north of the rail corridor without having to pass through the south/central section of the Central Waterfront, and should be in place to

help carry traffic during the extensive construction work that will be required in the Central Waterfront.

Redesign and reconstruction of the Humber crossing bridges are required because of the deteriorating quality of the existing structures and related safety and operational imperatives.

The two continuous east-west arterial roads in the Central Waterfront. along with improved north-south streets and continuous, pedestrian-friendly sidewalks, walkways, cycle paths, and mid-block connectors, are essential to provide local access, create a legible framework, and re-establish visual and physical links between the city and its waterfront. This could include partial relocation of Lake Shore Boulevard from under the expressway, as well as related ramp changes to reduce further the barrier effects to the Gardiner/ Lakeshore facility while leaving open the question of subsequently modifying the central section of that facility.

Timing and Funding

The goals of the Stage I implementation program would be to deliver the initial components of the green infrastructure and other program elements in five years. This includes: a continuous Greenway across the Central Waterfront, Roundhouse Park, etc.; 12,000-20,000 housing units in the Central Waterfront; a 50-per-cent expansion of GO Transit peak-period capacity on the key east-west lines, as well as augmented full-day service; the beginnings of improved feeder/distributor transit in the Central Waterfront, initially by means of buses using HOV

lanes as appropriate; and a more continuous arterial road network for land access by trucks, autos, surface transit, pedestrians, and cyclists.

This Stage I program would be the first giant leap in rejoining the Central Waterfront to both the city and the lake, making it a much better place to be rather than just to travel through, while still enabling it to fulfil its important function as a corridor. Additional facilities, such as the LRT loop system or its equivalent, would be in final design or possibly under construction.

It should be noted that the infrastructure elements listed above either have been included in municipal and/or provincial budgets, are currently being considered, or are part of the normal development process. The important point about this program is that it is based on an integrated concept of the Central Waterfront as a better place and corridor and moves purposefully to achieve that concept, building largely on projects and investments already proposed by individual governments and agencies, selected and modified in light of the overall concept.

Finding the key to sustainable, healthy urban places is essential; indeed it is probable that the ultimate success or failure of society as a whole to achieve sustainability will be determined by our cities.

Alberta. Urban Environment Subcommittee. 1988. Environment by design: the urban place in Alberta.

N. p.: Environmental Council of Alberta.

STAGE II

While implementation of Stage I is under way, planners should prepare the second stage of the program. Elements of the second stage could include:

- continuing implementation of the green infrastructure system;
- further residential, mixed-use, commercial, industrial, and recreational development;
- further expansion of GO Transit services;
- construction of the LRT waterfront loop and the Cherry Street GO station; and
- redesign and relocation of the Gardiner Expressway and Lake Shore Boulevard consistent with plans integrating environment, land-use, and transportation on the waterfront.

Major public policy issues are at stake and decisions made (or not made) in the next few years will greatly affect the quality of Toronto's Central Waterfront and adjacent areas for two generations at least. It is clear that a new process is needed for planning and reaching necessary decisions and agreements, and for creating programs that will help achieve the bold plan within our grasp.

Within the context of integrating environmental, land-use, transportation, and economic issues across the Central Waterfront as a whole, it is useful to consider the various places that comprise the Central Waterfront, starting with its western gateway, Humber Bay. Projects, in addition to those already described in the Stage I program, are identified for each part of the water-front, to contribute to the critical

mass of productive investment needed to help stimulate the region's economic recovery.

RECOMMENDATIONS

- 65. The Royal Commission recommends that the Province, Metropolitan Toronto, the City of Toronto, the City of Etobicoke, the Government of Canada, appropriate special purpose bodies, and the private sector negotiate a Waterfront Partnership Agreement or agreements to implement Stage I of the program to integrate environment, land use, and transportation in the Central Waterfront.
- mends that, to expedite the implementation of Stage I, processes be designed to integrate approvals, consolidate capital budgets, and achieve concurrent decision-making by all levels and agencies of government.
- **67.** Concurrent with implementation of Stage I, the parties should prepare a plan for Stage II of the program.
- Metropolitan Toronto, and the Metropolitan Toronto and Region Conservation Authority should participate in preparing the proposed shoreline regeneration plan, including the waterfront greenway and trail, and ensure that any other plans for waterfront areas are reviewed and/or developed in this context.