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The Environmental Impacts of Recent and Expected Changes in Transportation Patterns in Southern Ontario

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Introduction

The past decade has witnessed major changes to the ways in which goods are handled and moved by North American industry. The combination of a reduced reliance by industry on holding on-site inventory and increased trade, possibly as a result of the Canada-US and North American Free Trade Agreements (NAFTA), has led to a significant expansion in the amount of freight being transported by truck. In Canada, this has been particularly evident in the Windsor - Quebec City corridor. This traffic is predicted to continue to increase, and there are growing demands for a significant expansion of the highway system to accommodate these expanded volumes. This potential expansion may have major implications for air quality, land-use and overall community sustainability in this corridor and surrounding region. There has been a growing need to address the environmental impacts resulting from highway expansions. The proposed scoping paper would identify the trends and patterns of trade and transport corridors and also provide an initial overview of the environmental issues raised by these developments.

Objectives

The objectives of this paper is to identify and examine the following issues:

- To identify the trends and patterns of trade and transport corridors in Southern Ontario;
- To examine the environmental impacts of recent and expected changes in transportation patterns in southern Ontario; and
- To identify the current policy issues related to environmental initiatives.

Defining The Problem

Highways are the dominant mode of transportation for North American trade, carrying 80 per cent of US exports to Canada and 60 per cent of Canadian exports to the US. Over 70 per cent of Canada - US trade (by value) moves by truck, 17 per cent by rail, 6 per cent by air and 2 per cent by marine. Approximately 40 per cent of Canadian domestic production is exported, with the US being Canada's major trading partner. In 1996, the Canada-US total merchandise trade amounted to \$362 billion. The National Highway System (NHS) comprises 24,400 kilometers of the most economically important interprovincial and international linkages within the 900,000-kilometer Canadian road network.

As a result of Ontario's economic growth, there are more drivers and vehicles using the highway system. According to the Ministry of Transportation, almost \$200 billion worth of goods pass over international bridge crossings linked to provincial highways. Therefore, for southern Ontario, the new millennium will be filled with many challenges and uncertainties in the transportation sector due to its strategic spatial location, dismantling of non-administrative trade barriers such as quotas and tariffs, increased traffic due to NAFTA implementation leading to expansion of old and construction of new highways, increasing emissions, land use changes etc. Among these issues, the

environmental implications will be the most crucial problem facing the southern Ontario region. Trade between Canada and US has witnessed a tremendous growth since 1994 when NAFTA took effect. NAFTA has led to a reorientation of markets. On one hand, the increase in trade has produced economic benefits to all three countries but has also resulted in problems like highway congestion, safety issues, bottlenecks at the border, lack of infrastructure development and support and has also raised several environmental concerns.

Environmental Implications of Increasing Trade and Transport in Southern Ontario

As discussed above, with an increasing trade between US, Mexico and Canada and also the east-west trading between Canadian provinces, there has been a mounting pressure for constructing new and expanding old highways. The environmental implications due to highway expansion is enormous in terms of increased air pollution, urban sprawl, loss of wetlands, etc. but sadly there is a lack of information and concern towards these issues within government, corridor proponents, policy maker, administrators and general public.

The province of Ontario recognizes that air pollution is a cause of respiratory distress and death and asthma-afflicted children are especially vulnerable but there has been little or no focus on studying the emissions from increased traffic in the highways. Similarly, issues of land use changes, urban sprawl, noise pollution have not been given due importance. These are some of the environmental implications resulting from increased trade and transportation:

- 1. Air pollution
- 2. Climate change
- 3. Land Use change
- 4. Unchecked urban sprawl
- 5. Water Pollution
- 6. Energy demand and use
- 7. Noise pollution

Trends And Patterns Of Trade And Transport Corridors In Southern Ontario

The term "corridor" has been used to refer to a variety of route types. Some of these routes are well-established and recognized as existing trade corridors, while others are smaller, more local designations. In its June 1999 Discussion Paper for the Interdepartmental Working Group on Corridors, Transport Canada defines a corridor as:

- the flows of goods and people domestically and internationally within North America;
- the ground transportation infrastructure and systems (highway and rail) that facilitate these flows; and
- the policy, legislation and regulations governing these elements.

It is notable that although Transport Canada does not officially recognize corridors within Canada, it does acknowledge the existence of the corridor system in the US and its connections with Canadian highways. Canadian transportation policy has traditionally been to build east-west connections among the provinces and major cities to facilitate trading between the provinces but with the Canada/US Free Trade Agreement (1988) and NAFTA (1994) the Canadian perspective has expanded to encompass north-to-south routes. However, the focus of trade corridors has been only towards trade expansion and reducing traffic related problems. There appears to be little or no thought given to the environmental implications arising from traffic increase or highway expansion.²

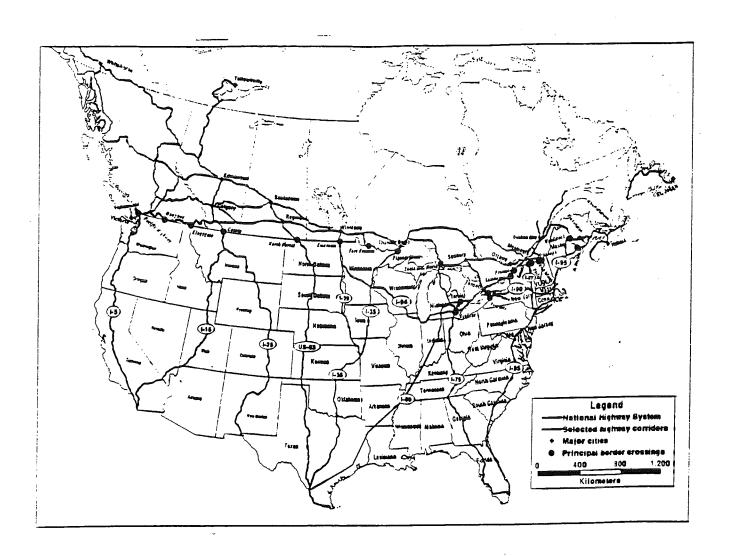
Transborder Highway Corridors

According to a report prepared for the *Commission of Environmental Cooperation* on North American Trade and Transportation Corridors, the road system in Canada has expanded north-to-south to accommodate the growing trade and truck traffic for goods moving into and out of the various US corridors. Canadian extensions of the US High Priority Corridors have become a top consideration and objective of the federal and provincial governments across Canada. As in the US list, domestic highways, regardless of the amount of traffic flow, are not included. Transport Canada has identified its list of 15 primary transborder highway corridors with US connections (Figure 1). These are as follows:

- 1. I-5- British Columbia lower mainland to San Diego, CA
- 2. I-15- Alberta border at Coutts to San Diego, CA
- 3. I15/25- Alberta border to El Paso
- 4. US-83- Manitoba border at Coulter and the Saskatchewan border at North Portal to Brownsville, TX
- 5. I-29/35-Manitoba border at Emerson to Laredo, TX
- 6. I-35- Ontario border at Pigeon River to Laredo, TX
- 7. I-94- Manitoba border at Emerson to the Ontario border at Sarnia, via Minneapolis
- 8. I-80- Manitoba border at Emerson to New York, NY
- 9. I-75- Ontario border at Sault Ste. Marie to Fort Lauderdale, FL
- 10. I-69- Ontario border at Sarnia to Laredo, TX
- 11. US-219- Ontario border at Fort Erie to Miami, FL
- 12. I-90-Ontario border at Lacolle to New York, NY
- 13. I-87- Quebec border at Lacolle to New York, NY
- 14. I-91/93- Quebec border at Rock Island to Boston, MA
- 15. I-95- New Brunswick border at Woodstock to Miami, FL

Of the above-mentioned primary transborders, five of them cross the southern Ontario region. These are I-35, I-94, I-69, I-90 and US-219. From among this list, US recognizes two of them as high priority corridors, they are I-69 and I-35. Another high priority corridor recognized by the US is I-73/74 not in the list of Transport Canada.

Figure 1: Canadian National Highway system and Selected North American Highway Corridors



Source: North American Trade and Transportation Corridors, CEC, September 1999

Domestic Highway Corridors in Southern Ontario

From figure 2 it is evident that Ontario has the largest share of border crossing in Canada at 81.6 per cent of daily truck traffic.³ Ontario's road exports to the U.S. and Mexico reached a substantial \$77 billion in 1996. The province is separated from the U.S. by water over most of its frontier (Great Lakes and St. Lawrence). As a result, Ontario's huge exports are funneled through relatively few border crossings that process substantial amounts of trade. They are at Windsor which connects Highway 401 with Interstate Highways 75, 94 and 96; Fort Erie which connects the QEW with Interstate Highway 90; Sarnia connecting Highway 402 with Interstate Highways 69 and 94; Queenston Bridge in Niagara Falls connecting the QEW with Interstate Highway 190; and Lansdowne connecting Highway 401 with Interstate Highway 81.4 Ontario has the three busiest Canadian border crossings because of southern Ontario's prominent role within the highly integrated North American automobile industry (e.g. Detroit-Windsor) and Ontario's proximity to the US industrial hinterland. These border crossings also account for more than 90 per cent of the province's road exports. Every day, at the busiest Canadian border crossing - the Ambassador Bridge in Windsor - Ontario goods worth \$100 million are in transit.

The recent changes in transportation pattern are largely due to the Us-Canada and NAFTA agreements. According to Transport Canada, from 1986 to 1991, truck traffic at Canada/US border crossings remained almost steady at approximately 20,000 vehicles per day (Figure 3). But there has been a significant surge in truck traffic at Canada/US border since 1991.⁴

The recent trend in transportation pattern shows an increasing growth in trade between the NAFTA partners. The growth is more evident between US and Canada. This has resulted in demand for highway expansion to accommodate the daily truck traffic. Although transport authority has recognized the importance of trade corridors the environmental implications of expansion is being overlooked. There has been no real concern to address the impact of increasing truck traffic on the air pollution or urban sprawl.

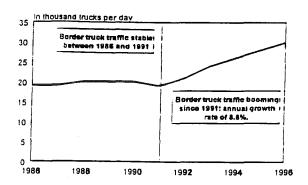
The Government Responses to Changes in Trade Traffic

Federal Government

The Canadian Federal Government does not officially acknowledge the existence of trade and transportation corridors, nor does it have any official policy to recognize or assign them. A mid-1999 submission from Transport Canada to the Federal Cabinet suggested an official policy and some federal corridor-related initiatives, but it was rejected with a request for more study and regional involvement.

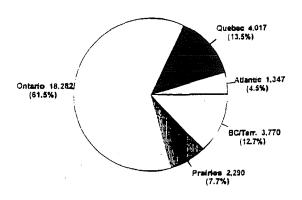
At the same time, the Federal Government is considering a major new project to provide funding to the provinces for highway development, specifically for the roads and connections into the United States linking with the major corridors there. A federal Interdepartmental Working Group on trade corridors was formed in 1997. Co-chaired by

Figure 2: Daily Truck Traffic at Canada/US Border Crossings 1986-1996



Source: Trade and Transportation Corridors, Discussion Paper, Transport Canada, June 1999.

Figure 3: Daily Truck Traffic at Canada/US Border Crossings by Region 1996



Source: Trade and Transportation Corridors, Discussion Paper, Transport Canada, June 1999.

Transport Canada and the department of Foreign Affairs and International Trade, the working Group includes representation from Revenue Canada, Industry Canada. Finance, Western Economic Diversification (WD), Canada Economic Development for the Quebec Region (CED) and the Atlantic Canada Opportunities Agencies (ACOA). It is notable that Environment Canada and Health Canada are conspicuously absent from being a part of the Interdepartmental Working Group.

Provincial Government

Lately, Ontario Ministry of Transportation has responded to the emerging trends in highway expansion especially due to increased traffic since the implementation of NAFTA. It recognizes the changing patterns, especially in the North-South trading, and the expected growth in traffic in southern Ontario. The ministry is contemplating major investments in highway expansion and improvement in southern Ontario. According to a press release by the Ministry, southern Ontario highways will see improved pavement, new construction, including road widening and passing lanes. Additionally, major projects in Southern Ontario will include improvements to Highway 401 from London to Windsor and Highway 401 rehabilitation in the Toronto area. All of these capital construction projects are part of the Government of Ontario's new SuperBuild Growth Fund, a five year, \$20-billion partnership capital fund established to renew Ontario's infrastructure and build for the future.⁵

Ministry of Transportation's stated goals are to ensure that "Ontario's trade corridors and gateways continue to accommodate the transportation needs of Ontario's predominantly north-south trading relationship." The ministry of transportation will be working with the federal government and other provinces to develop a national strategy especially on trade corridors. However, there has been little or no mention about the environmental implications due to highway expansion. The ministry is spending huge amounts of money in expanding the infrastructure with little thought to the environmental impacts it will have in southern Ontario. Issues like air pollution, land use changes, etc., has been given no priority by the Ministry. There has been no recommendation or study being attempted by the Ministry to come up with viable alternative plans to highway expansions for instance, the importance of trade through railways, support and fund public transit, This notable lack of interest has to be addressed by the Ministry in order to come up with a sustainable transportation plan for the future.

Regulatory/Policy Framework for Examining Environmental and Health Impacts

Ontario

In Ontario, Environmental Assessment Act provides for review of proposed highways. However, the Act was significantly weakened by amendments adopted in 1996 (Bill 76). These removed mandatory requirements for examination of need for undertakings or consideration of alternatives. Environmental groups involved in 407 expansion and Red Hill Creek clearly stated that they do not believe provincial assessments have provided for an adequate review.

The Red Hill Creek Expressway is a proposed link between Highway 403 and Queen Elizabeth Way (QEW) in Hamilton. The 648-hectare (1,600-acre) Red Hill Valley, in the city's east end, is the only remaining natural link between the Niagara escarpment and Lake Ontario in Hamilton and accounts for 36 per cent of Hamilton's parkland (Figure 4). A recent biological inventory found 27 species of mammals, 75 to 80 species of breeding birds, 18 types of fish, 47 species of butterfly, and 600 species of plants in the valley.⁷

The key approval for the expressway came at the mid-1980's joint Environmental Assessment-Ontario Municipal Board hearing where only three witness panels out of eleven provided evidence dealing with environmental impacts. The evidence on environmental issues was contentious, and remains so today. A Hamilton-Wentworth Waterfront study was tabled which identified the Red Hill Creek Valley as an irreplaceable environmental resource. The conservation authority and the escarpment commission were unalterably opposed to an expressway in the valley, and remain so to this day.⁸

Additional planning work will also be occurring on the proposed Mid-Peninsula Corridor as well as the Windsor-Detroit border. Transportation Minister has recently announced a 10-month study to examine several alternatives in the Niagara region. The main alternatives are between the construction of mid-peninsula corridor or further widening of Queen Elizabeth Highway (QEW). There has been a growing interest in the region for constructing the mid-peninsula corridor because around 65 per cent of truck traffic from U.S. into Canada crosses at the Niagara border, all of it channeled up the QEW, along with tourism and GTA-bound traffic.

Proponents of the mid-peninsula corridor visualize a route that would flow from an extended Highway 407 to the 403 to the new Highway 6, passing by the Munro airportand across to Welland. It would go under the Welland Canal along an existing tunnel at Townline Rd. and join the QEW at the Netherby interchange north of Fort Eerie (Figure 5). According to the transport Minister David Turnbull, the province hopes to have technical recommendations within a year. Public hearings would be held if the project advances to an environmental assessment.¹⁰

Similarly, the expansion of Highway 407 East Partial has been planned as an ultimate 10-lane highway approximately 15.9 km in length, stretching from Highway 48 to Brock road (Figure 6). The proposed project is a 4-lane highway with a typical rural cross-section. The impact assessment undertaken by the provincial government and the planning and design considerations of the environmental impacts were inadequate.

For 65 years, highways have been built in Ontario without any examination of the adverse effects the air pollution they create has on public health and the environment, but lately, the government and planners have recognized this oversight. However, air quality issues are still in the background for example in the case of highway 407 extension, the air quality assessment was done after the EA was completed and it is cursory and

Figure 4: Proposed Red Hill Creek Expressway

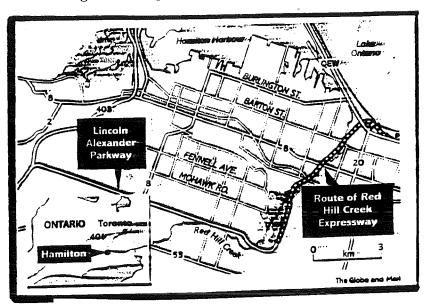


Figure 5: Proposed Mid-Peninsula Highway

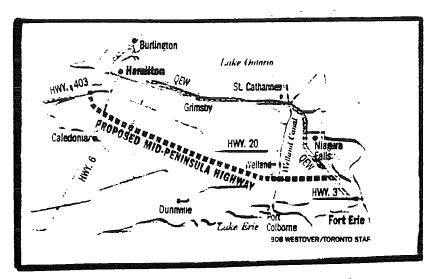
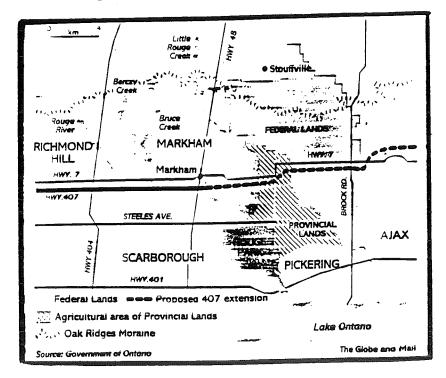


Figure 6: Highway 407 Extension Proposal



demonstrably flawed. Pushing highway 407 east will mean more pollution-spewing traffic and increased health risks, warns David Pengelly, an air quality expert. Provincial air quality studies on the tollway extension do not tell the whole story and underestimate damages to public health. Pengelly said provincial air pollution assessments on the 407 extension were based on the traffic generated by a four-lane road. Future plans, however, call for a 10-lane highway to accommodate projected growth. The studies, therefore, minimized the effects of the highway and traffic on air quality. Provincial air quality standards used in this study was outdated. He predicted the 16-kilometre eastern extension of highway 407- from highway 48 in York region to Brock road in Durhamwill expose residents of Scarborough, Markham, Whitchurch-Stoufville and Pickering "to a significant increase in the risk of adverse health effects due to transportation-generated air pollution." ¹¹

In a letter addressed to Environment Minister David Anderson, David Pengelly, believes that:

- Contrary to the findings of the Ministry of Transportation (MTO)-funded studies, the proposed eastern extension of Hwy 407 will have significant adverse effects on air quality and public health;
- Contrary to the assumption in the CEAA Screening report (p. 3), the air quality impact assessments were not done for the ultimate 10 lane Hwy 407 capacity, therefore, the air quality impacts are much more significant than predicted in the MTO study;
- The MTO-funded studies make a number of flawed assumptions which lead to a significant under-estimation of the emissions of health-damaging pollutants;
- As Health Canada notes in the Screening Report, the available studies fail to address Highway generated ground-level ozone and its potential adverse health effects:
- The air quality standards used by the MTO-studies are out-dated, and as Health Canada notes at pages 46 and 47 of the CEAA Screening Report, many recent studies show significant health damage at pollution levels well below the standards used in the MTO studies.

Based on his review of the available information, he believes that the proposed eastern extension of Hwy 407 will expose the residents of Scarborough, Markham, Whitchurch-Stouffville and Pickering to a significant increase in the risk of adverse health effects due to transportation-generated air pollution.

It is clear that there has been little or no study being attempted by the provincial government about the environmental implications, especially increasing air pollution and

urban sprawl, due to highway expansion. The ministry is spending huge amounts of money in expanding the infrastructure with little thought to the environmental impacts it will have in southern Ontario. There has been no recommendation or study being attempted by the Ministry to come up with viable alternative plans to highway expansions for instance, the importance of trade through railways, support and fund public transit, This notable lack of interest has to be addressed by the Ministry in order to come up with a sustainable transportation plan for the future.

Federal Government

Failure of MTO to consider environmental impacts or examine alternatives to highway expansion and David Pengelly's study on failure to examine air pollution implications of highway 407 expansion has resulted into concerned residents and communities looking increasingly to federal environmental Assessment process under Canadian Environmental Assessment Act to provide for environmental review of these undertakings.

Department of Fisheries and Oceans has emerged as responsible authority as CEAA is being triggered by need for approvals to alter fish habitat under Fisheries Act in case of both highway 407 expansion and Red Hill Creek and likely by Mid-peninsula highway too. However, department is taking a narrow approach to crossings, etc. and not wider environmental and health implications of the undertakings. In the case of highway 407 expansion, the ministry has rejected a full federal environmental assessment claiming that proper damage-control measures are in place so the highway 407 can be expanded without causing serious environmental problems. The federal environmental assessment has mostly focused on the impact on fisheries and mitigation measures for water-courses. They did not study the health impacts due to increased pollution in detail neither did they explore the viable alternatives to highway expansions.

Environmental Impacts and Alternatives to Highway Expansion

The study of the relationship between transportation and environmental impacts has not been given due importance by the transportation sector. It was only after the introduction of NAFTA, which led to increased traffic and demands for highway expansion, that the environmental implications are being addressed.

From an environmental viewpoint, publicly funded super highways not only add enormously to the public debt it also encourages non-sustainable sprawl, dependence on private cars and also creating demand that can never be met: as soon as one is finished, instant congestion establishes impetus for the next.²³

The use of energy for transportation is a major cause for air pollution. Since the early 1980's, there has been an increasing concern about the possibility that the combustion of fossil fuels and the release of hydrocarbons may be causing not only global warming but also affecting the health of human as well as the ecosystem. Various studies have shown that increased highway capacity leads to increased highway usage. Increased levels of traffic are induced in feeders to arterials, and increased development, which has not been

planned to include other modes of passenger and freight movement, will lead to increased local air pollution. 12

Impact on health due to increasing air pollution is a source of concern and the use of energy for transportation is a major cause for air pollution. Instead of building more highways, governments should be putting more money and planning into developing better transportation policies. Ross Snetsinger, of Transportation 2000- a transportation issues lobby group- said more railways are the answer to providing better and cheaper transportation. Also, a better support system for public transit system is needed to address the increasing air pollution from automobiles.

Similarly, there will be land use changes due to transport expansion. Ontario has a rich variety of natural resources-the forests and fields, lakes and rivers, and fish and wildlife that make up this vast province. We rely on our resources to sustain jobs and communities, provide opportunities for recreation, and ensure a healthy and diverse environment. The construction or expansion of highways therefore, has unsustainable impacts on land use. It destroys farmlands, wetlands, and other natural environments besides leading to unchecked urban sprawl.

Alternatives

A study by North American Trade and Transportation Corridors, prepared for the Commission for Environmental Cooperation concludes that the US government has produced several legislative initiatives to identify, develop and strengthen its highway infrastructure, notable among them are the Intermodal Surface Transportation Efficiency Act (ISTEA), The national Highway System Designation Act of 1995, and the Transportation Equity Act for the 21st Century (TEA-21). Each of these corridors primarily focuses on economic and infrastructure development with few environmental initiatives. Canada does not have any program equivalent to TEA-21 and lags behind the US in addressing the sustainability issues in transportation sector. Transport Canada, however, announced on September 21, 1999 that it was establishing the Moving on Sustainable Transportation (MOST) program to encourage innovative methods for decreasing the impact of transportation on the environment. The program is aimed at the kinds of projects corridor organizations want to undertake. It provides funding on a shared-cost basis for projects that benefit the Canadian public, demonstrate quantifiable results and advance sustainable transportation thinking.

To address the increasing concern regarding impacts on the environment, a national and provincial sustainable transportation policy is needed. It is evident that there is going to be a significant demand on improving trade infrastructure in Ontario leading to more highway constructions and expansions. In order to meet this demand, a concerted effort has to be made to look for viable alternatives which are less damaging to the environment. Some of the suggestions are as follows:

Trade through Railways

The two Class 1 railways, Canadian National (CN) and Canadian Pacific (CP), have integrated their US operations with their respective Canadian operations. The share of railways in Canadian exports to the US by value rose from 12 per cent in 1988 to 28 percent by 1995. The volume of transborder rail traffic now averages one million freight cars per year. There has been a growing interest by transportation authority to focus on strengthening and expanding the railways for trading between US and Canada. In 1999, the US surface Transportation Board (STB) approved CN railway's takeover of the Illinois Central Railway. This merger will create what has been called "NAFTA railway" as north-south rail trade via CN will be greatly facilitated through seamless service. The expansion of railways will reduce the burden on existing highways. The transport authorities although have recognized the importance of railways, the progress towards its strengthening is slow, the focus is still on expanding highways.

Expansion of Public Transit

According to a report published by Statistics Canada, transit use is down across Canada, having fallen from 1.53 billion trips in 1990 to 1.37 billion in 1996 before climbing back to 1.43 billion in 1998. It said that suburban sprawl has led to demands for transit works best moving large numbers of people to a few destinations. Partly because many of them live in low-density neighbourhoods, Canadians are driving longer distances, spending more time on the road and increasingly driving alone. The results include traffic jams and lengthening commutes.¹⁵

The biggest transportation challenge is population growth, the focus of a document published earlier this year by the Greater Toronto Services Board. The GTSB oversees transit planning in the Greater Toronto Area (Toronto and surrounding regions) plus neighboring Hamilton-Wentworth. That territory, which stretches north to Lake Simcoe and around the west end of Lake Ontario, is already home to more than five million people and is expected to reach seven million people by 2021. The situation is different in downtown Toronto, where service is good because of high number of people using the transit. Therefore, service and number of people using the transit is the key. But due to low-density urban sprawl, it is difficult to provide people with an efficient transit system therefore, suburbs are so automobile-dependent. According to a study by IBI Group, an urban planning and design firm, there will be a projected 59 per cent increase in demand for road capacity in GTA-Hamilton-Wentworth area by 2021, far exceeding current plans to add 12 per cent. It is difficult to keep up with demand for roads because what has happened historically is that when you build more roads and provide more capacity, people make longer and longer trips and move to low-density suburbs. 16

Municipalities in greater Toronto and Hamilton-Wentworth now spend about \$570 million a year expanding and repairing their transportation infrastucture. That is not enough to even solve the congestion of today, let alone meet the demands of tomorrow. At current investment rates, transit is not expanding and is having difficulty maintaining existing service levels. It is up to the planners and administrators to recognize the importance of public transit and provide impetus for its growth and usage.

Conclusions

Since the NAFTA agreement was put in place in 1994, trade between Canada. US and Mexico has increased tremendously. The increase is especially evident between US and southern Ontario. The main focus of the transportation planners and associated government authorities has always been on increasing the efficiency of transportation by constructing or expanding highways and technological innovations to facilitate easy movement of goods. The environmental impacts arising due to recent and expected changes in transportation patterns, especially in southern Ontario, have been neglected.

To address the growing environmental impacts of highway expansion, governments need to carry out a full federal EA's and public hearings for any future highway system growth and modification. Additionally, a National and Provincial transportation policy must be developed which explores other options to highway expansion and provide incentives to optimize the use of public transit and railways.

North America's transportation corridors are predominantly about moving goods (and people) as efficiently and safely as possible. Environmental implications are not usually considered. There is no current effective legislation in place in Ontario to study the environmental impacts of transportation projects with respect to air quality, local ecologies or urban sprawl.

Recently, environmental issues like increased air pollution, changing land use pattern, noise pollution, etc, have emerged as a huge concern in the environmental sector. Although these issues are being addresses through various government organizations, corridor groups and NGO's, this is not enough. There is still a dearth of information and study on issues like how would the increased traffic impact on air pollution? What are the policies in place to encourage sustainable transportation like use of fuel-efficient transport, support the public transit system, etc.? Who should act as the responsible authority to lead environmental assessments? Unless these concerns are addressed in detail, the issue of sustainable transportation would remain in the fringes. Therefore, a serious effort is needed for more studies and interactions amongst the various stakeholders like, government organizations, corridor groups and NGO's in order to formulate a comprehensive plan to combat the unsustainable impacts of transportation growth.

The current proposal to assess and evaluate the environmental impacts of increased highway usage should be considered for the following reasons:

- 1. Trends are showing an increased amount of North-south truck traffic on Southern Ontario's highway network, putting pressure on expansion plans;
- 2. This trend has resulted in a situation where we are witnessing major public investments in new highway infrastructure with no real examination of long-term environmental and health effects, or consideration of alternatives to highway expansion to deal with increased north-south trade through southern Ontario. The

- environmental implications of expansion in the past and currently planned are either inadequate or have been completely ignored; and
- 3. With reference to air pollution and urban sprawl, there are no detailed analyses available on which to base environmental regulations and recommendations.

ENDNOTES

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