

IN DIVERSITY OUR STRENGTH: NEW MOBILITY FOR THE NEW MILLENNIUM

DRAFT REPORT OF THE SUSTAINABLE TRANSPORTATION WORKING GROUP OF THE ENVIRONMENTAL TASK FORCE

CONTENTS:

1.	EXECUTIVE SUMMARY	Page 2
2.	RECOMMENDATIONS	Page 3
3.	BACKGROUND	Page 7
4.	WORKING GROUP PROCESS	Page 8
5.	WHAT IS SUSTAINABLE TRANSPORTATION (S.T.) AND WHY DO WE URGENTLY NEED IT?	Page 9
	5.1 WHAT IS SUSTAINABLE TRANSPORTATION?	Page 9
	5.2 WHY DO WE NEED IT?	Page 10
	A) Because Transportation Has Significant Impacts: Environmental, Social, Economic	
	B) But We Can't Do Without It: Transportation is Important to Our Lives and Our City / Region	
	C) Because Toronto is Facing New Challenges: Rapid Regional Growth and Demographic Shifts	
	D) And the Transportation Lead Time is Long	
	E) Because Toronto is Poised for Growing Opportunities	
6.	DEVELOPING A VISION AND A FRAMEWORK FOR ACTION: TORONTO AS LEADING SUSTAINABLE TRANSPORTATION CITY	Page 14
	6.1 TRANSPORTATION ASSOCIATION of CANADA (TAC) GENERIC VISION AS A GUIDE	Page 15
	6.2 TAC CHECKLIST FOR ACTION AS A GUIDE:	Page 15
	6.3 PRELIMINARY DIRECTIONS FOR THE NEW TORONTO	Page 17
	6.4 CURRENT AND EMERGING OPTIONS: BORROWING FROM THE BEST	Page 18
	6.5 IMAGINING THE SCENARIOS: DOOR TO DOOR	Page 20
7.	MAKING IT HAPPEN: KEY STEPS IN TORONTO'S CONTEXT	Page 22
	7.1 INFORMATION	Page 22
	7.2 INFRASTRUCTURE	Page 24
	7.3 INTEGRATION	Page 27
	7.4 INVOLVEMENT	Page 29
	7.5 INVESTMENT	Page 30
	7.6 IMPLEMENTATION	Page 31
	7.7 INNOVATION	Page 31
	7.8 INDICATORS OF PROGRESS	Page 31

8 IMMEDIATE NEXT STEP FOR THE CITY OF TORONTO:
A CONCERTED, CO-ORDINATED EFFORT

Page 32

9. CONCLUSION & RECOMMENDATIONS SUMMARY

Page 33

APPENDICES

- Working Group Members
- University of Toronto Innis College Studies: Annotated Listing
- Transportation Policy context
- City of Toronto sustainable transportation policies listing
- Integrated Mobility Systems Graphic
- Resources for more information

ATTACHMENTS

- Directory of Sustainable Transportation in Toronto

EXECUTIVE SUMMARY

Toronto City Council formed the Environmental Task Force (ETF) in March of 1998. A major activity of the Task Force is to recommend an Environmental Plan for the City of Toronto. Early in the process, the ETF recognized the importance of transportation and land use to the city's ecology, economy, and quality of life. The ETF requested that a chapter be prepared for the Environmental Plan on Sustainable Transportation.

To carry out this work, a Sustainable Transportation Working Group was formed and formulated this report as a basis for the Environmental Plan chapter. Its purpose is to:

- Demonstrate the immediate importance of sustainable transportation to the future of our city and the growing region - environmentally, socially, and economically
- Offer a preliminary vision and outline key steps to evolving a leading edge sustainable transportation system for the new Toronto as we enter the new millennium
- Stimulate the development of a coordinated plan or mechanism and ongoing function at the City of Toronto as leading sustainable transportation city with the purpose of:
 - bringing together and building on the successes of existing City of Toronto sustainable transportation and land use policies and programs
 - providing a coordinated framework for addressing emerging transportation and land use challenges and opportunities as the city and region grow and change
 - identifying and implementing new policies, programs, processes and partnerships for sustainable transportation infrastructure
 - reducing the significant and growing environmental, health, social, and economic impacts of transportation in Toronto
 - supporting Toronto's growing sustainable transportation business sector
 - making the provision of transportation in Toronto more cost effective

Through the group process, eight key steps for action were identified as essential to the establishment of a leading sustainable transportation city. They include:

1. Information: The First Step to Action
2. Infrastructure: The Foundation
 - Sustainable Land Use
 - Sustainable Transportation Modes and Networks
 - Telecommunications: The Emerging Virtual Transportation Network

3. Integration: For Greater Efficiency
 - Modes and Systems
 - Governance Structures and Responsibilities (City within a Region)
 - City Departments Related to Transportation
 - Other Issues and Sectors
4. Involvement: Of Users and Providers
5. Investment
 - Public Funding
 - Innovative Financing and Partnerships
 - Sector Development: Attracting Investment to Sustainable Transportation
6. Implementation: Beyond Policies and Principles
7. Innovation: For emerging needs and markets
8. Indicators of Progress: To Inform Future Action

2. RECOMMENDATIONS

The Environmental Task Force requests:

1. That City Council recognize the urgent and growing importance of sustainable transportation to the environmental, social, and economic health of our city in the light of current challenges:
 - A projected 40% population growth in the Toronto region over the next two decades
 - Rapidly increasing congestion levels related to increased reliance on single occupancy vehicles
 - Rapidly increasing congestion levels related to increased truck volumes (projected to double across the region in the next ten years)
 - Increasing urban sprawl, directly affecting costs and efficiencies of providing services and producing food
 - Declining air quality and water quality directly and indirectly related to transportation activity (transportation is the largest and fastest growing source of CO2 emissions)
 - Increasing sickness and death and associated health costs directly and indirectly related to transportation activity (\$9 billion per year in Ontario)
 - Recent international findings on the end of cheap oil (International Energy Agency)
 - Increasing costs of using and providing transportation (Canadians spend more on transportation than they do on food)
 - Shifting demographics leading to exacerbated health, social, and financial impacts for a growing aging population, as well as youths, homeless people, and the unemployed.
 - Decreasing public investment in transportation by senior levels of government
 - The absence of a coordinated transportation and land use plan for the growing region (and at present, for the City)

And emerging opportunities:

- Recent World Bank findings that cities that invest in sustainable transportation infrastructure (including Toronto) are more internationally competitive, more equitable, attract more businesses and residents, enjoy higher quality of life, and spend the least per capita on transportation
 - A growing worldwide sustainable transportation sector that is developing and providing a range of new and improved options as well as business and employment opportunities.
 - A growing public awareness of transportation and land use issues as they relate to sustainability and quality of life
 - A growing awareness by business, government, and media of the need to address sustainable transportation issues
 - New City planning processes and restructuring resulting from amalgamation and emerging regional issues affording opportunities for innovation and improvement
2. That City Council build on the successes of the former municipalities and establish the new City of Toronto as a leading sustainable transportation city by:
- providing all Toronto citizens and visitors to Toronto with the widest range of sustainable transportation options that are seamlessly linked, safe, convenient, enjoyable, affordable, and economically competitive, and applying the best available measures to significantly reduce the environmental, health, and social impacts of personal transportation
 - significantly reducing the congestion, pollution, danger, costs, and inefficiencies related to the movement of goods – the fastest growing segment of the transportation sector, with emerging consolidation systems, cleaner freight vehicles, and intermodal approaches.
 - replacing or reducing the need for transportation (of people or goods) where appropriate with emerging telecommunications technologies and stringent land use and development policies and practices
 - giving priority in all transportation and land use decisions to sustainable transportation as described in this report, in policy, spending, programs, and partnerships
- 3.1 That the Commissioners of Urban Planning & Development Services and Work & Emergency Services report to their respective standing committees by May 2000 on staff and resource requirements for the establishment of a comprehensive, co-ordinated plan or mechanism for achieving the goals of a leading sustainable transportation city, as outlined in (2) and described in this report, through the Transportation Implementation Plan of the Official Plan, or through the Strategic Plan, or through a multi-stakeholder and public involvement plan modeled after Vancouver's comprehensive transportation plan, or a combination thereof.
- 3.2 That the mechanism or plan for achieving the goals of a leading sustainable transportation city include the following:
- a) Development of an integrated framework / vision for the future of transportation and land use for Toronto as leading sustainable transportation city based on Toronto's context and available world bests (including detailed door to door scenarios for a wide range of key transportation users and transportation needs, applying the City's advanced modeling expertise to these sustainable transportation scenarios and proposals)
 - b) Consultation and partnership with all relevant City Departments and agencies, key transportation industries and agencies across the region, all levels of government, the Toronto business community, citizens, labour, community, and environmental groups and agencies both in developing and implementing the plan
 - c) Short and long term goals and principles for sustainable transportation development
 - d) Ambitious targets (and hence indicators) for 2021 and 2031 equal to or surpassing local and world bests in the following areas to establish a Toronto Sustainable Transportation Protocol:
 - Modal shift (to walking, cycling, transit, car sharing / pooling and other emerging options) (suggested starting point 75%)

- Reduction in number of single occupancy vehicles (suggested starting point 20%)
 - Reduction in vehicle kilometers traveled (vkt) by SOVs (suggested starting point 25%)
 - Reduction of number of car trips less than 7 km.
 - Increase in average speed of transit relative to cars
 - Increase in service kilometers / miles of transit relative to road provisions
 - Increase in bicycle and pedestrian infrastructure relative to road provisions
 - Decrease in bicycle thefts
 - Reduction in vkt by trucks (suggested 40%)
 - Decrease in noxious emissions from trucks
 - Increase in proportion of goods and food produced locally
 - Transportation related air quality targets (CO₂, Nox Vocs, Particulates, and # of smog days and transportation related hospital emissions)
 - Decrease in traffic injuries and deaths (and related costs)
 - Decrease in traffic speed limits
 - Reduction in land devoted to automobiles (roads, parking, drive throughs etc)
 - Increase in population within the City of Toronto limits related to brownfield and other progressive development approaches
 - Increase in densities around transit hubs
 - Decrease in average commute to work
 - Reduction in public money spent on transportation (through avoidance of duplication of efforts and by applying relatively less costly sustainable transportation systems)
 - Increase in percentage of spending on sustainable transportation as described in this report (provide current spending baseline on all transportation modes and related systems by City Departments and agencies and adapt according to sustainable transportation framework)
 - Increase in promotion of sustainable transportation relative to automobile advertising
 - Increase in investment attracted to and employment created by sustainable transportation industry
 - Other, as identified through various planning processes
- e) Assembly and where appropriate, City-wide implementation of all existing policies initiatives related to sustainable transportation as described in this report, relating to movement of people, movement of goods, and not moving people and goods (including Anti-Smog Strategy Transportation Section; Cycling Master Plan; Sustainable Transportation and Land Use Elements of All Former Municipalities' Official Plans, and other identified policies and initiatives)
- f) Assembly and where appropriate, implementation of proposed Sustainable Transportation policies and pilot initiatives included in current reports (Board of Trade Infrastructure Report, Pollution Probe Transit Action Plan, GTSB working documents, Coroner's report on Cycling Deaths, Federal Climate Change Table Recommendations (forthcoming))
- g) Establishment and application of an integrated mechanism for ongoing development of new policies, practices and pilot initiatives based on world bests related to eight key steps (see 4.2) and all areas listed in the Transportation Association of Canada's "New Vision for Urban Transportation" adopted by City Council in the fall of 1999, including:
- Urban structure and land use
 - Walking
 - Cycling
 - Transit
 - Automobile
 - Parking
 - Goods movement
 - Inter-modal integration
 - New technology
 - System optimization
 - Special user needs
 - Environment

- Funding / Financing
- Additional categories, as identified in the planning process

- h) Implementation schedules
- i) Required resources, financial sources and mechanisms, and strategies for stimulating investment in sustainable transportation sector (including current baseline of transportation related spending by all departments and agencies, by mode, system, and program)
- j) Staffing requirements and mechanisms for ongoing co-ordination of sustainable transportation efforts
- k) Mechanisms for establishing new and building on existing partnerships and public participation
- l) A communications and public outreach plan
- m) Recommendations related to City of Toronto sustainable transportation goals to key agencies, other levels of government, businesses, institutions and community agencies
- n) Detailed evaluation and monitoring mechanisms (see Recommendation 3b)

4.1 Request that this Sustainable Transportation Working Group report be submitted for incorporation of relevant elements into the following planning processes with consultation with the Sustainable Transportation Working Group as required:

- a) Official Plan
- b) Strategic Plan
- c) Strategic Transportation Planning Group
- d) Annual Budget Process
- e) Economic Plan
- f) Social Development Strategies
- g) All other current and future planning processes that relate to any aspects of transportation and/or land use

4.2 That all relevant departments, agencies and planning processes report annually to the proposed Sustainability Roundtable or City Council, beginning in May of 2000, on progress to date and plans for the future, in all areas found in the Transportation Association of Canada New Urban Vision (see recommendation # 3.2) and the following key areas related to sustainable transportation (see Report Card, appendix xx):

- a) Information
- b) Infrastructure
- c) Integration
- d) Involvement / Partnership
- e) Investment
- f) Implementation
- g) Innovation
- h) Indicators

To be submitted for promotion of successes in these areas through City and other communication channels

5. Request the Commissioners of Urban Planning & Development Services and Works and Emergency Services to work in partnership with the Toronto Atmospheric Fund (TAF) in consultation with relevant agencies and report back by February of 2000 on the feasibility and resource requirements for developing a two-tiered quick-start public outreach approach to sustainable transportation to include:

- a) A sustainable transportation interactive web-site as part of the City of Toronto site, to provide up-to-the-minute detailed information on sustainable transportation options, schedules, fares, information, links to further information, and facts and tips about sustainable transportation and climate change and impacts of various forms of transportation etc, as well as links to more detailed information on leading edge City of Toronto sustainable transportation policies and initiatives, and other leading initiatives around the world
- b) A one time only door to door information piece similar to the very successful Waste Watch and Water Watch (WES), to inform Toronto citizens of both the coming challenges of transportation in the growing region and the many new and improved options available for a healthier, more convenient transportation system, and to promote the launch of the City's sustainable transportation web-site

3. BACKGROUND

Toronto City Council formed the Environmental Task Force (ETF) in March of 1998. It is made up of City Councillors, City staff, and representatives from the business, labour, education, and environmental communities. A major activity of the Task Force is to recommend an Environmental Plan for the City of Toronto. Early in the process, the ETF recognized the importance of transportation and land use to the city's ecology, economy, and quality of life. The ETF requested that a chapter be prepared for the Environmental Plan on Sustainable Transportation.

To carry out this work, a Sustainable Transportation Working Group, chaired by Councillor Jane Pitfield, was formed involving key representatives from the transportation sector, business, government, and community in both the development and review process (appendix xx for contributors list). Contributors have been meeting and communicating since January through large group meetings and small advisory sessions to develop a framework and recommendations for inclusion in the Environmental Task Force's Environmental Plan. This workgroup report provides the basis for the Environmental Plan. Its purpose is to:

- Demonstrate the immediate importance of sustainable transportation to the future of our city and the growing region - environmentally, socially, and economically
- Offer a preliminary vision and outline key steps to evolving a leading edge sustainable transportation system for the new Toronto as we enter the new millennium
- Stimulate the development of a coordinated plan or mechanism and ongoing function at the City of Toronto as leading sustainable transportation city with the purpose of:
 - bringing together and building on the successes of existing City of Toronto sustainable transportation and land use policies and programs
 - providing a coordinated framework for addressing emerging transportation and land use challenges and opportunities as the city and region grow and change
 - identifying and implementing new policies, programs, processes and partnerships for sustainable transportation infrastructure
 - reducing the significant and growing environmental, health, social, and economic impacts of transportation in Toronto
 - supporting Toronto's growing sustainable transportation business sector
 - making the provision of transportation in Toronto more cost effective

In addition to this report, contributions by Working Group members include:

- An updated Directory of Sustainable Transportation in Toronto, prepared in partnership with Detour Publications / Transportation Options. It offers an extensive and descriptive listing of Sustainable Transportation initiatives, groups, and events in the Toronto region. Since the first edition published in 1994, it has:
 - doubled in size
 - added a new category of City of Toronto Initiatives / Partnerships
- A range of relevant background studies prepared by students of Innis College, University of Toronto – see appendix xx for annotated listing of studies

4. WORKING GROUP PROCESS

The Sustainable Transportation Working Group, chaired by Councillor Jane Pitfield, and involving a range of key transportation experts and advocates first convened in January of 1999. After a large introductory meeting, four smaller bi-weekly meetings focussed on Moving People, Moving Goods, Not Moving People and Goods, and Moving Decision Makers, respectively. Each meeting opened with guest speakers relevant to the theme, then through the "homework" sheets and in smaller breakout groups, members worked together to report back on key messages, key actions, and indicators related to the particular meeting topic. Four additional, less structured meetings focussed on responding to various drafts of this report. A number of working group members who could not attend meetings opted to contribute regularly by email and telephone, and one member initiated a small strategic meeting related to regional and official plan issues. The Working Group coordinator has also met formally and informally with members of the Official Plan team, and presented a draft of the report to the Environmental Task Force and to TIE in July.

It should be noted that because transportation is a growing concern there has been a plethora of visioning and planning sessions and workshops for transportation experts and advocates to attend over the spring and summer (see appendix B-policy context). Especially in this light, the high level and quality of involvement in the work group was commendable.

It should also be noted that because transportation is a well debated topic, the emphasis and process of the group was somewhat different from other groups which may have been tackling a newer topic or involving a less integrated community of advocates and experts. Because of this, the transportation group was able to zero in quickly on key, overarching gaps and themes rather than drawing up long lists of required actions or creating additional visions. Much of this visioning and list making work has already been done through various other processes and initiatives and is either included in the report or referenced in the appendices.

Nevertheless, a whole range of initiatives were proposed during the process, and many or most of them are included, in the understanding that eventually some suggestions may exclude others. In proposing that the City initiate a coordinated, comprehensive planning and implementation mechanism, it was intended that such discrepancies would be addressed.

In relation to setting targets, the group made recommendations beyond the traditional air quality and modal shift categories, in order to reflect the depth and interconnectedness of the transportation issue and the importance of positive constructive targets as well as reduction and impact targets. It is assumed that the Official Plan Transportation Implementation Team will set targets as part of its process, and will determine numbers for categories that have been proposed.

Key themes identified by the group have formed the basis of this report, however the overarching message was that urgent and coordinated action is required at the City if we are to address the transportation challenges posed by the rapidly growing region and continue to reap the very real and positive benefits of being a leading sustainable transportation city into the new millennium.

5. WHAT IS SUSTAINABLE TRANSPORTATION AND WHY DO WE NEED IT?

5.1 What is Sustainable Transportation (S.T.)?

In an ideal world, or perhaps at some time in Toronto's future, we wouldn't need to make a distinction between "sustainable" and "regular, run-of-the-mill" transportation. Meanwhile, sustainable transportation can be described as:

- Moving people and goods in cleaner, greener, healthier, safer, more equitable ways, and,
- Where appropriate, NOT moving people and goods

This short description, put forward by Moving the Economy, encompasses a wide range of applications, including:

- Telecommunications to reduce or replace travel, or to make it more efficient
- Cleaner and more efficient systems for moving (or not moving) goods
- Land use planning and green development to make cities more vibrant and efficient and reduce the need for travel
- Sustainable personal transportation modes, including transit, walking, cycling, and new hybrid mode
- New approaches to automobile travel, including car sharing, car pooling, and cleaner, lighter cars and fuels
- All the policies and practices and financial incentives and disincentives which enable these approaches

The Centre for Sustainable Transportation describes a sustainable transportation system in more detail as one that:

- allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations
- is affordable, operates efficiently, offers more choice of transport mode, and supports a vibrant economy
- limits emission and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, reuses and recycles its components, and minimizes the use of land and the production of noise

5.2 SUSTAINABLE TRANSPORTATION: WHY DO WE URGENTLY NEED IT?

5.2 A) Because Transportation Has Significant Impacts: Environmental, Social, and Economic

On an average day in Toronto, there are about 20,806,000 car trips, 248,101 truck trips, 1,108,000 transit journeys, 52,300 bike trips and 311,100 walking trips (Transportation Tomorrow Survey). To varying degrees, every one of these trips emits pollutants, takes up space, needs different equipment and infrastructure, happens at different speeds, carries different numbers of people and different things, and happens at peak times and slow times.

Take your last trip as an example. Was it a 15 kilometer subway ride or a 7 kilometer bike ride or a 55 kilometer car ride? Were you driving a truck full of chickens? Or were you taking a short walk? Could your trip have been eliminated altogether? If you multiply the effects of your trip by a couple of million, you can get an idea of the scale of effects – positive or negative – that shifting transportation choices could have over the course of an hour, let alone over the course of a decade.

(textboxes here on environmental, health, social and economic impacts of transportation - forthcoming)

5.2 B) ... But We Can't Do Without It: Transportation is Important to our Lives and our City.

It is an integral part of how, where, and with whom we live, love, work and play – on a daily basis. So much more than getting from a to b, it figures prominently in some of our deepest personal memories and in some of our greatest historical moments. It is one of the fundamental determinants of the character and quality of life and community – and our own place in that community.

It is this deeply entrenched and multifaceted quality of transportation that makes it so interesting and yet so challenging just to think about it – let alone to affect it or change it in any way . Especially in a big city, with the sheer volume and teaming complexity of modes and systems and people and places and needs and desires, it can be hard to get your head around getting people and things around. When a city gets bigger and that city is within the fastest growing region in the country, the complexity and all its effects (positive or negative) are multiplied and magnified.

5.2 C) Toronto Faces Urgent Challenges:

Unprecedented and Rapid Regional Growth and Demographic Shifts

In the first two decades of the new millennium, our population is projected to increase by 40% across the Toronto region. Current regional trends show an increasing reliance on single occupancy vehicles (cars) and trucks (truck volumes are projected to double over the next decade), amounting to even more congestion and pollution than we already experience along with all the associated costs and impacts.

Even though the City of Toronto is committed to and internationally recognized for its leading edge sustainable transportation and land use policies and practices, such rapid growth across a region over which we have no jurisdiction will have significant repercussions if current transportation and land use trends are left unchecked.

Already Torontonians spend more time stuck in traffic than we'd like (congestion stat). Already Canadians spend more on transportation than we do on food, and already over 1800 Ontarians die each year from the health effects of poor air quality – most of which comes from transportation. (Note: this does not include the xx traffic deaths in Toronto each year). The health, social, and financial impacts are felt even more severely by our growing aging population, by children, by the physically challenged and by the homeless and unemployed. (see impacts appendix). It also has an impact on business.

According to Elyse Alan, President and CEO of the Toronto Board of Trade,

Toronto is fortunate to be located in a one day delivery radius that encompasses a huge population base. A critical competitive edge that we can market internationally is the efficient and reliable means by which people, goods, and information can be moved in and out of this hub. This is attractive to head offices as well as manufacturing and warehousing operations, not to mention information and service providers. Yet, our infrastructure has not kept pace with the population growth and increased usage. As well, if current trends continue as projected, significant concerns about our future positioning must be addressed”

- in “Foundations for A Strong City: Improving Toronto’s Physical Infrastructure”

The downtown and the suburbs are economically interdependent and becoming more so (Blais). There is mounting awareness that as an economic and cultural hub of the region, the City of Toronto will increasingly need to fortify its current efforts and set the tone towards a more ecologically, socially, and economically sustainable transportation system not only in our city but in conjunction with the entire region.

5.2 D) The Transportation Lead Time is Long

As for most things but especially for transportation, being aware of the problem and affecting the solutions are two different things. Transportation, in all its complexity, is a bit like an ocean liner. If you want to be going in a different direction tonight, you’d better start turning around this afternoon. Improved transportation infrastructure and new land use patterns are not as easily or as quickly implemented as, for example, a blue box program. Whatsmore, from a regional perspective, key changes and decisions will occur in the next twelve to eighteen months. Hence we must start today, not only with short-term measures that will immediately benefit us, but also with far reaching approaches, so that our children may reap the full and integrated benefits of our foresight and vision.

And it will require vision. A long lead-time also means that we must anticipate and plan for emerging trends rather than using old tools to meet the needs and desires of past generations. At this turning point in Toronto, we are being challenged to adapt our tools and approaches to our emerging and changing needs, desires and means.

According to the Honourable Tony Clement, Ontario’s Environment Minister and past Transport Minister:

... we are on a new frontier in transportation that demands a new set of assumptions. In the boom times of the 1960’s and 70’s there were few fiscal constraints. That’s not the case today. We can’t spend our way out, nor can we build our way out in terms of roads. We’ve got to explore new strategies, and this means not only looking at the strategy of supply management but also at demand management. We’ve got to employ a broader range of tools, new technologies, for instance to help us meet that demand as never before. Maximizing facility efficiency and reducing the need for expansions. We’ve got to challenge traditional models and approaches based on increased partnerships between the private and public sectors, and updated roles and responsibilities in the distribution of costs and benefits...

5.2 E) TORONTO IS POISED FOR GROWING OPPORTUNITIES

- **Sustainable Solutions are Win-Win**

*Sustainable transportation doesn't have to be a threat to our economy – it can offer new opportunities.
The Honourable David Collenette, Federal Minister of Transport and the GTA,*

The good news is that solutions do exist, and just as the negative effects of our transportation choices are compounded with growth, so too are the beneficial effects of our positive actions and decisions. All over the world, sustainable transportation systems and initiatives – whether they are tried and true or new and innovative – are resulting not only in better air quality, but also in a better quality of life and local economic vitality.

A 1998 World Bank study found that the cities that invest and innovate in sustainable transportation infrastructure (including Toronto) are coming out ahead. It concluded that the world's wealthiest and most livable cities:

- have the most sophisticated sustainable transportation systems
- are highly transit oriented with strong regional passenger rail networks
- have (mixed), compact urban and suburban development with densities that support viable public transit and active transportation
- have developed highly integrated transportation systems that make efficient use of all transportation modes
- facilitate face to face economic communication, an essential requirement for global competitiveness of city regions
- spend the least per capita on transportation

Whatsmore, the sustainable transportation economic sector is growing worldwide, innovating and developing a wider and more integrated range of transportation choices for citizens and businesses – enhancing efficiency, safety, accessibility, convenience, enjoyment, and affordability, and providing new opportunities for business spin-offs, cost savings, job creation, and local economic revitalization (Moving the Economy, 1998)

- **Best Brightest Are Going Sustainable**

Since time began, humans have tried to tweak or even overhaul systems of our society so that they work better for us. From the invention of the wheel to the moon launch, we've been envisioning and at times actually creating transportation options or systems that are – for the time - cleaner, more impressive, more affordable, faster, more efficient, more democratic. In short – they make life better.

Back at the beginning of the twentieth century for example, the futurists and planners and best and brightest of the age envisioned and created an option that offered more convenience, comfort, freedom, and status for more people. It also provided a cleaner alternative to streets dominated by the particular form of pollution of the horse-drawn age. It was the automobile — and it worked for a while.

But since then the role of the private automobile has changed – especially in cities. Cars offer less convenience and freedom than they once did when there weren't quite so many of them and when they didn't take up quite so much space. We are increasingly realizing that they are no longer a clean alternative. More and more we are finding them (and their infrastructure) to be less affordable on a personal and societal level. And when communities are designed so that everyone needs one to get around, even the status perk begins to wear thin.

As we move into the new millennium, we have new patterns of life, and the transportation system that was envisioned at the turn of the century and very much expanded during the fifties and beyond does not promise to address these new patterns adequately.

So then, where are the best and brightest of *this* age heading?

It seems that the world's leading cities (including Toronto) are moving into a new age of sustainable transportation that is also about offering more convenience, choice, comfort, freedom, and status for more people but in a way that will also protect and enrich future generations. From the car companies to the economists, from government agencies to environmental and labour leaders, from the telecommunications gurus to the growing cadre of green developers, sustainable transportation is being embraced as a win-win solution, and the only way to go in our rapidly growing cities.

According to the Organization for Economic Co-operation and Development (OECD):

Access to people, goods, and services and the mobility it often engenders is essential for ensuring broad societal welfare. However, as transport-related environmental impacts continue to mount, it is increasingly clear that innovative solutions that go beyond “business as usual” must be sought and implemented.

Not surprisingly, the evolution of transportation systems around the world very much mirrors the evolution of other new and emerging systems and technologies. Just as we moved from the typewriter into the networked and multifaceted computer age without completely rejecting the typewriter, our transportation systems are evolving from an automobile oriented monoculture to become:

- lighter, cleaner, more compact
- capable of offering a much wider range of options
- networked, connected, integrated
- flexible, personalized, customized
- service oriented versus product oriented
- convenient, universally accessible
- convivial, humane
- swift
- safe
- comfortable
- cost-effective and affordable
- knowledge oriented, systems oriented, smart
- elegant, sophisticated
- sustainable

According to Dr. Robin Murray, former Director of Industry with the Greater London Council:

The new transportation system will have the economy of transit and the flexibility of the automobile.

Dr. Peter Newman, author of the World Bank study on sustainable transportation compares the evolution of cities (and their transport systems) to ecological evolution:

In ecological terms, it should come as no revelation that as cities grow and become more complex and diverse, they begin to create more efficiencies. Ecosystems grow from simple systems with a few pioneering species to more mature ecosystems with diversity and interconnection. Thus, after a fire or flood or some other disturbance, a cleared piece of land will begin developing the structure of its ecosystem with an emphasis on rapid and simple growth. After a period it becomes more diverse and more efficient as it establishes a more complex network of interactions.

More efficient and complex approaches to **Moving People** include sophisticated car-sharing schemes, integrated mobility products, advanced transit approaches, trip information and mobility centres, innovations in bicycle infrastructure and provision, advanced electrified urban rail networks, and more. A number of these innovations are being explored in the City of Toronto, including Auto Share’s successful car sharing business, and Integrated Mobility Systems, an electronic pass which links a whole range of transportation options (see Appendix XX)

New approaches to *Moving Goods* address the entire mobility chain through city logistics, joint distribution centres, bundling of freight transport, cleaner freight vehicles, fuels and green fleets, local production and distribution, and human powered goods movement. Goods movement is becoming a key urban issue as cities grow and as “just in time” manufacturing systems increase transportation of products. A number of these innovations are being explored or applied in Toronto, including, through the City’s green fleets initiative, an advanced route optimization system for fleets; the Community Bicycle Network’s Clean Air Cargo which is innovating human powered delivery and freight options; and Greenest City’s food miles and local production and distribution projects.

Sophisticated approaches to *Not Moving People or Goods* include advances in telework options as well as progressive zoning and growth management policies, mixed use community centres and development around transit stations, carfree housing options, and more. The City of Toronto has instituted innovative zoning approaches to revitalize downtown industrial and potential live-work areas, and has also explored a range of telecommuting options among other initiatives.

These trends - here and around the world — paint a picture of our emerging priorities in cities – not only of how we get around, but also of how we want getting around to relate to other parts of our lives (and our children’s lives).

- **Toronto Can Build On Success: A Window of Opportunity**

Here in Toronto we enjoy some of the best transit and bicycle infrastructure in North America, and because of our relatively high quality of life and community, we have been recognized by Fortune Magazine as one of the best cities in which to live and do business. According to the International Council for Local Environmental Initiatives (ICLEI) we are also ahead of the game internationally in our efforts to combat CO2 emissions (former City of Toronto).

Many of the benefits we reap today in terms of people and businesses choosing to locate and stay in Toronto can be credited to wise transportation thinkers and providers and informed and involved citizens of generations past. We are blessed with a very strong base from which to evolve and innovate solutions and systems for the new millennium. How will we build on this base?

6. DEVELOPING A VISION AND A FRAMEWORK FOR ACTION: TORONTO AS A LEADING SUSTAINABLE TRANSPORTATION CITY

To begin to develop and apply a comprehensive, integrated vision for Toronto as leading sustainable transportation city, we need to start with:

- A preliminary vision and action framework
- Preliminary directions for the new Toronto
- A sense of the available and emerging options, from here and around the world
- An understanding of our current context and our emerging opportunities

Then we need to involve a wider range of transportation users and providers in

- Refining the vision / framework
- Developing a detailed action plan to achieve the vision
- Partnering on an ongoing basis to carry out the evolving plan

6.1 TRANSPORTATION ASSOCIATION OF CANADA (TAC) VISION AS A GUIDE

The Transportation Association of Canada proposes a generic vision for Urban Transportation in 2023. It could serve as a jumping off point for Toronto's process.

By 2023:

- A long-term urban development plan has been approved. It emphasizes multi-use town centres and high density, mixed use along connecting corridors. Transit has funding and operating priority in those corridors.
- Short-medium term community / neighbourhood plans have been approved. They emphasize compact, mixed use communities based on pedestrian, cycling and transit-friendly design
- Transit, highways, arterials, parking and truck routes are planned and coordinated across the urban area
- The percentages of trips made by walking, cycling, transit and high occupancy automobiles are all increasing; the percentage of trips made by single occupant automobiles is decreasing
- The average distance and time for peak hour commuter travel is decreasing
- An area wide parking strategy is in place and enforced
- There are very few places which still require on-street goods transfer
- The physically challenged enjoy universal access to public transport facilities and services
- Roads and bridges are in a good state of repair
- Air pollution from motor vehicle sources is declining
- Urban transportation infrastructure and services are adequately funded from stable and sustainable revenues
- Political leaders have the support of a well-informed public when making decisions on urban development and transportation systems to serve the area.

6.2 TAC ACTION FRAMEWORK AS A GUIDE

There is currently no lack of excellent "to do" lists related to sustainable transportation. This checklist, also developed by the Transportation Association of Canada, is included as one of the most concise and best sets of action guidelines available. It has been endorsed by a range of agencies and municipalities including, recently, the new City of Toronto. Sustainable Transportation Working Group members have identified areas that should be changed or elaborated, and as such it should be used as a guide for planning and not as a prescription.

- **Urban Structure and Land Use:** Plan for increased densities and more mixed land use, including development of more compact, mixed use communities offering a range of housing types, with pedestrian friendly urban design as a prime objective; reurbanization of municipal core areas; a transit friendly grid pattern of local streets; pedestrian, cycling, transit and truck-friendly designs including sidewalks and foot paths, cycle lanes and paths; higher densities close to transit stops; and off street loading.
- **Walking:** Promote walking as the preferred mode for person trips, including: increased densities and mixed land use to bring origins and destinations closer together; design of public rights-of-way to encourage pedestrian use and not just motor vehicle use; protection from inclement weather; adequate lighting for safety and security; accessibility for the physically challenged; street level establishments close to the sidewalk
- **Cycling:** Increase opportunities for cycling, including: cycle lanes on the public right-of-way and separate cycle

networks; assuring that the needs of cyclists are considered in the preparation of community / neighbourhood plans; storage facilities at transit stations and on transit vehicles to encourage bike and ride; storage facilities in the downtown core, suburban town centres, and other key locations; provision of cycle facilities as a condition of development

- **Transit:** Provide higher quality transit service to increase its attractiveness relative to the private auto, including: development of a hierarchy of transit services; giving transit funding and operating priority; improving comfort, security, frequency, on time reliability, geographic coverage, access for the physically challenged, and public information services; encouraging park-and-ride, kiss-and-ride, and bike-and-ride by providing appropriate facilities; integrating transit stations, schedules and fares in areas with more than one transit system; introducing preferential income tax treatment for transit use
- **Automobile:** Create an environment in which automobiles can play a more balanced role, including reducing travel demand by bringing origins and destinations close together through higher densities and mixed land use; designing new suburbs, major developments and redevelopments to be more walking, cycling, and transit friendly; employing traffic management techniques to achieve more efficient use of roads; encouraging flexible working hours and ride sharing and car sharing programs
- **Parking:** Plan parking supply and price to be in balance with walking, cycling, transit and auto priorities including: detailed studies to determine current and future parking supply and demand; emphasizing short stay over long stay parking downtown; on-street parking priced at a higher rate than off-street; on-street parking limited to off-peak periods; off-street neighbourhood parking structures incorporating retail and commercial uses; park-and-ride facilities integrated with the transit system; municipal enforcement to ensure a balance of parking supply with demand
- **Goods Movement:** Improve the efficiency of the urban goods distribution system, including co-operative efforts by the trucking industry to give municipalities a better understanding of how to meet industry needs; consideration by municipal authorities of the total goods distribution system in all stages of urban planning and development (i.e. urban development plan, community/neighbourhood plan, site development plans); requiring off-street loading facilities or zones for all new developments; encouraging industry to make more use of consolidated delivery services to congested areas; improving the truck route network through designated routes, better road geometrics, stronger pavement, etc.
- **Inter-Modal Integration:** Promote inter-modal and inter-line connections, including designing the location of transit connections to be quick, easy and weather protected; minimize walking distances to transit; promote gateway / mobility centres; integrate fares and services between transit systems; consider inter-city links in developing urban area terminals for passengers and goods
- **New Technology:** Promote new technologies which improve urban mobility and help protect the environment including telecommunications to reduce peak period travel demand and lessen the strain on the system; Intelligent Vehicle Highway Systems and computerized signal control to increase the efficiency of existing road systems; vehicle locating systems to allow for demand responsive transit; enhanced pollution control equipment and standards for all motor vehicles to slow the increase in air pollution; fuel substitution and increased fuel efficiency

- **System Optimization:** Optimize the use of existing transportation systems to move people and goods including treating the road system as a multi use public facility which recognizes the needs of pedestrians, cyclists, transit, high occupancy vehicles, autos and trucks; making operational improvements through transportation management; promoting ways to flatten traffic peaks and shift modes through demand management; enhance transit services; implement supportive parking policies
- **Special User Needs:** Design and operate transportation systems which can be used by the physically challenged including using low floor transit vehicles; providing cost effective para transit services; establishing by-laws for minimum numbers of off-street parking stalls for the physically challenged; use curb cuts, ramps and other designs to improve access; provide for special vehicle access in parking structures.
- **Environment:** Ensure that urban transportation decisions protect and enhance the environment, including developing environmental codes of practice based on a national environmental policy; requiring environmental considerations to be an integral part of the urban development plan, community / neighbourhood plans and site development approvals; giving funding priority to the most environmentally friendly transportation options; considering mandatory regular inspections of motor vehicle emission control systems; encouraging the development and use of environmentally friendly power sources for vehicles
- **Funding / Financing:** Create better ways to pay for future urban transportation systems. Funding should be: stable over time; predictable in magnitude; transparent (open and easily understood by decision makers and the public); increasingly derived from users in proportion to benefits received; dedicated by law to urban transportation system enhancements; designed to foster an urban transportation system operating at the lowest possible cost.

6.3 PRELIMINARY DIRECTIONS FOR THE NEW TORONTO

A sustainable transportation framework specific to Toronto might begin with the following key aims:

- Provide all Toronto citizens and visitors to Toronto with the widest range of sustainable transportation options that are seamlessly linked, safe, convenient, enjoyable, affordable, and economically competitive, and applying the best available measures to significantly reduce the environmental, social and economic impacts of personal transportation
- Significantly reduce the congestion, pollution, danger, costs, and inefficiencies related to the movement of goods – the fastest growing segment of the transportation sector, with emerging consolidation systems, cleaner freight vehicles, and intermodal approaches.
- Replace or reduce the need for transportation (of people or goods) where appropriate with emerging telecommunications technologies and stringent land use and development policies and practices
- Give priority in all transportation and land use decisions to sustainable transportation as described in this report, in policy, spending, programs, and partnership
- Other, to be added and refined by a wide range of transportation providers and users through Toronto's transportation planning process

6.4 CURRENT AND EMERGING OPTIONS : BORROWING FROM THE BEST

Why reinvent the wheel? While solutions can be context-specific, living examples from elsewhere can serve to inform and inspire possibilities for adaptation here in Toronto. The following is a (not exhaustive) sampling of working examples of local and international sustainable transportation successes. It is drawn from Moving the Economy and a range of other sources. Additional examples and more details can be found on the Moving the Economy web-site, at <city.toronto.on.ca/mte>

URBAN STRUCTURE AND LAND USE

- Mixed use zoning and land use applications and policies for improved access / use – (Toronto, U.S., Europe)
- Grow In, Not Out intensification and growth targets and boundaries – (Portland)
- Main streets (Toronto)
- Central Urban industrial sites to keep jobs in the City - (Vancouver) and eco-industry parks (can be clustered around rail stations)
- Low cost housing as a sustainable transportation and land use measure (to reduce need for and cost of transportation) (US)
- Encourage development around rail (Leipzig, New Jersey)
- Big Box location and development guidelines (several U.S. centres)
- Drive-through development guidelines (U.S. location TBA)
- Urban regeneration (London, U.S. cities)
- Traffic calming (Europe, U.S.)
- Innovative Urban Retail (Toronto) and pedestrianized retail centres (Europe, U.S.)
- On-site local waste management
- Street and station redesign to attract human and economic activity – (St. George St. in Toronto, train stations in Germany, U.S.)
- Cycling and pedestrian land use requirements (locations forthcoming)
- Bubble zones around schools

WALKING

- Walkable City policies and investments (Ottawa and Europe)
- Walking School bus (Australia, Toronto)
- Active and Safe Routes to School (Canada wide)
- Community retrofits for active transportation
- Sidewalk expansions
- Improved signage for pedestrians (London Jubilee Walkway)
- Retail friendly street design - Miami, Toronto

CYCLING

- Comprehensive on-street bicycle route networks (Scandinavia, Germany, Netherlands, Montreal)
- Bicycle commuter routes and trails on hydro and rail corridors (Iowa, Quebec)
- Company bicycle fleets (Palo Alto, California)
- Free City Bikes (Copenhagen, Austin)
- Zero Emission vehicles and other custom designs (Ghent, Belgium)
- Valet bicycle parking - Eugene, Oregon
- Bicycle registry for theft prevention
- Bike parking innovations (Japan, Holland)
- Community bicycle recycling and co-op ventures (Vancouver, Toronto)
- Bicycle Safety, education and promotion of active transportation (Toronto, U.S.)
- Active transportation products and fashion (world-wide)
- Cyclist activated traffic lights (Holland)
- Pro-bicycle bilaws and exemptions (Bonn, Idaho)

TRANSIT AND RAIL

- Regional transit focus (Montreal, Vancouver, Ottawa)
- Support and expand commuter rail system (Cape Town, Cleveland, Toronto, New Jersey)
- Cleaner transit fuel (Ballard fuel cells in Vancouver, Chicago)
- Cleaner transit vehicles (Boulder)
- Lighter transit vehicles (Ottawa Carlton)
- Taxi buses (Rimouski)
- Gitneys (Miami, Asia)
- Innovative public private transit combinations e.g. using school buses (Ontario)
- Revive under-utilized railways and rights of way (Philadelphia, Toronto)
- Weekly passes
- Transit passes for unemployed and welfare recipients

AUTOMOBILE

- Transportation Demand Management (U.S.)
- Car sharing (Zurich, Vancouver, Montreal, Toronto)
- City Rideshare programs and trust funds (Los Angeles)
- Automated public urban vehicles (France)
- Cleaner cars - fuel cells, natural gas (world-wide)
- Lighter smaller cars (world-wide)
- Sunday road closures (Ottawa)

PARKING

- Parking pricing guidelines and innovations (highest elasticity)
- Employer “cashing out” of parking provision for use on other modes (U.S.)
- Provision of Secure bicycle parking
- Transit and Cycling supportive parking policies (Toronto Parking Authority)

GOODS MOVEMENT

- Increased use of rail for freight (Wisconsin)
- City Logistics - consolidating urban freight systems (Kassel, Germany)
- Green Fleets (Denver)
- Electronic Route Optimization (Toronto)
- Pedestrian Controlled Electric Recycling Vehicles (London)
- Floating Distribution Centres (Amsterdam, Dublin)
- Bicycle and other human powered delivery (Iowa, Toronto)
- Large items provided by retailers (world-wide)
- Local Food Production and distribution, Community shared agriculture, food miles (Toronto, Chicago)
- Neighbourhood composting centres

INTER-MODAL INTEGRATION

- Integrated Mobility Systems (Paris, Toronto)
- Iron Highway (Canada)
- Intermodal Logistics centre (Canada)
- Bike racks on buses (Ithaca, Vancouver, Victoria)
- Mixed mode bicycle park and ride (Toronto, Netherlands, Scandinavia, Germany)
- Union Station (Toronto)

NEW TECHNOLOGY

- Telework (Los Angeles, Canada, Cambridge)
- Electronic Fare collection (Hong Kong, Burlington, Ajax)
- Zero air pollution electric bikes
- Traffic demand signalling technology
- Ballard fuel cells and other innovative fuel technologies (world-wide)
- Natural gas and other alternative fuel and hybrid vehicles

SYSTEM OPTIMIZATION

- Route optimization for fleets (Toronto)

SPECIAL USER NEEDS

- Para transit (Ontario – CTAP)
- Planning, infrastructure and sound cues for physically challenged (Toronto)

ENVIRONMENT

- Urban Green Tourism (Austria, Bavaria, Vancouver, Toronto)
- Green Development and Greenspace (Copenhagen)
- Urban design and urban parks (Yorkville Park)
- Green Mapping (Malmo, New York, Toronto)
- Promotion, awards, incentives for positive action (U.S. EPA, Toronto)

FUNDING / FINANCING

- Employer provided Tax-exempt Transit Passes (U.S.)
- Dedicated Fuel tax (Vancouver) (in Toronto 2 cents per litre would mean \$100 million)
- Location Efficient Mortgages (Chicago)
- Green transportation tax incentives (cycling fuel incentive - Canada)
- Rail Route banking to protect rail rights of ways (Victoria)
- Distance based vehicle insurance
- Urban Road Pricing (Scandinavia, UK, Toronto)
- User pay incentives for fuel and fleet savings (Edmonton)
- Clean Transportation Business Incubation (California, Toronto)
- Channel Parking revenues to sustainable modes (Toronto)
- Economic Incentives for bicycle commuting (California)

6.5 IMAGINING THE SCENARIOS

When presented with a long list of options it is sometimes difficult to imagine how they would all work together, over the course of a journey, or several journeys, door to door. Bringing sustainable transportation home to practical reality through detailed scenariomaking has a few advantages:

- it gives a general picture of how a system or innovation will work and feel
- it places a vision of transportation within a larger vision of how we want to live
- it brings important details to the fore, useful to the planning and implementing process
- it focuses on the user – an emerging approach to transportation planning now being studied by the TTC and other progressive transportation marketing departments

The following scenarios (including a more extensive scenario, appendix xx) are intended to inspire a process of scenario setting amongst diverse transportation planners and providers. This work could be enriched by the advanced transportation modeling systems available at the City.

A Few Scenarios to Start:

- ***If you are a person going to work*** in the morning, you have a whole range of options. You may grab your electronic pass card (see PASS illustration) which, with a single swipe, gets you onto the fast and elegant regional transit system, which connects you seamlessly and at low cost to the frequent and comfortable local transit system. Or if you're in the mood, you may decide to skip your fitness class and avail yourself of the ready fleet of brightly coloured City free bikes, also connected through your electronic pass card. More than likely you will travel the rest of the way to work, and perhaps to some of your meetings today, on one of the many handy bike routes which form part of Toronto's comprehensive and safe bike route network which is lined with ample and secure bike parking. At work of course your employer provides you with showers and change facilities if you need them. To come home you may hook up with a car pooling buddy at work or in a nearby office tower. On the other hand, today may have been your telecommute day, and so you may not have traveled to the office at all.
- ***If you are in a family going away*** for the weekend, you can just get on line to Auto Share and book the most appropriate clean car or van from your local car-sharing club. Pick it up Friday night at your local transit stop with your electronic transit pass card, drive it home, pack, and away you go. Throw some rented mountain bikes in the trunk, or ask the car-sharing folks to supply them.
- ***If you are a visitor to Toronto*** you can pick up a tourist pass at the airport or the beautifully renovated train station, or arrange for one on-line before you get here. It gets you around the city on a whole range of modes with the help of your urban green tourism map. If your bike breaks down, call the roving repair folks and they'll be there in minutes – 24 hours a day. Pick up or drop off your rented bike or blades at any participating hotel or tourist outlet. Get out of town for the day on the integrated regional transit system. See some art at Kleinberg, then hike around a bit and get back in time to shower and stroll to the opera.
- ***If you are in a wheelchair***, you can move freely around the city through the now universally accessible transit system and through a range of innovative, integrated paratransit options.
- ***If you are a five year old*** you can have way more fun with the kids on your walking school bus than when your stressed out dad used to drop you off in the car on the way to taking your brother to day care on the way to dropping your mom off at her work before finally getting to work himself half exhausted. Now your parents go to work together on the beautiful new integrated transit system and take your brother to the great day care at dad's work and they saved so much money by selling the second car and joining the car share that they are taking you on a holiday in a couple of weeks.
- ***If you are a tomato*** you were grown here in Ontario and dropped off at a local market, or you were grown at a local organic farm and dropped off through Foodshare or Toronto Organics at someone's door by a Clean Air Cargo vehicle.
- ***If you are a computer part***, you arrived here by train, and your train car slipped easily onto a truck, which dropped you off at the warehouse, which had a variety of means for getting you sustainably to your computer store.
- ***If you are a piece of furniture*** you were delivered to your home by the furniture store after your owner came into the store to choose you, then took the efficient transit home. (for further development)
- ***If you are a piece of information*** you have either been emailed, or delivered by human powered courier.
- Other scenarios – to be developed by users, providers, people in Toronto

7. MAKING IT HAPPEN: KEY STEPS IN TORONTO 'S CONTEXT

How we put our visions, goals, and available options into practice is very much grounded in our current context. Eight key factors were identified by the Sustainable Transportation Working Group as essential to a leading sustainable transportation infrastructure. The following pages briefly describe the City of Toronto's current context and suggest areas of opportunity for immediate and ongoing action.

The eight factors are:

1. Information: The First Step to Action
2. Infrastructure: The Foundation
 - Sustainable Land Use
 - Sustainable Transportation Modes and Networks
 - Telecommunications: The Emerging Virtual Transportation Network
3. Integration: For Greater Efficiency
 - Modes and Systems
 - Governance Structures and Responsibilities (City within a Region)
 - City Departments Related to Transportation
 - Other Issues and Sectors
4. Involvement: Of Users and Providers
5. Investment
 - Public Funding
 - Innovative Financing and Partnerships
 - Sector Development: Attracting Investment to Sustainable Transportation
6. Implementation: Beyond Policies and Principles
7. Innovation: For emerging needs and markets
8. Indicators of Progress: To Inform Future Action

For each key step there is a brief overview of Toronto's context and a summary of our present opportunity for action.

7.1 INFORMATION (Awareness and Understanding): The First Step to Action

Toronto isn't one of the better cities to live in and get around for nothing. Some of the North America's leading transportation experts and visionaries were born here or chose to relocate here. So in terms of information, expertise, and understanding of the issues, we are fairly well placed.

Both at the City of Toronto and through Toronto's very active transportation community, we gather and share wide ranging information on sustainable transportation on an ongoing basis. This information and outreach includes (but is not limited to):

- City of Toronto efforts, ranging from advanced GIS and statistical analysis and mapping systems to the successful promotion and education programs of the Toronto Cycling Committee to the Pedestrian working group to Anti-smog Strategy outreach related to transportation.
- Moving the Economy On-Line, an expandable, searchable electronic database of local and international economic success stories in sustainable transportation, placing Toronto as an international hub of economic best practices in sustainable transportation.
- Detour Publications, the world's only on-line mail-order catalogue of books and resources on sustainable transportation and urban ecology <Detour@web.net>
- Toronto's Directory of Sustainable Transportation Groups, Projects, and Events produced by the Environmental Task Force
- A range of useful information and outreach on sustainable transportation produced by the Toronto Environmental Alliance, Pollution Probe, The Centre for Sustainable Transportation, Environmentalists Plan Transportation, Transportation Options, the Community Bicycle Network, Advocacy for Respect for Cyclists, Greenest City, and a range of other community and non-profit organizations.
- The Green Tourism Association, which provides sustainable transportation information to serve Toronto's 21 million annual visitors

- A progressive, well informed City Council
- A number of well versed Toronto journalists who cover transportation and related urban issues regularly

Both because of the reality of the situation, and because of this strong and growing information infrastructure, the risks of inaction and the urgency of the transportation situation are becoming more apparent to business and industry, all levels of government, organized labour, local communities, and concerned citizens. Business is beginning to see transportation-related lost productivity on their ledgers. Government is facing increasing health costs and a whole range of other social costs. Organized labour is feeling the effects of transportation inefficiencies on workers. And communities are suffering the effects of increasing local transportation and air quality problems. In short, smog, congestion, transportation and climate change are no longer reserved for slow media days.

On an institutional level, the past few years have seen a stepping up of awareness and dialogue by all levels of government and business. Since the early transportation efforts of the various Round Tables on Environment and Economy, there has been a plethora of policy and outreach discussion (see Appendix for annotated listing).

Recently there has been growing awareness of urban transportation issues at the federal and International Levels. Through the Climate Change process related to meeting Kyoto targets, a substantial investment has been made to inform Canadian decision-makers (individuals, politicians, and business) of the issues. In a similar vein, various international agencies, such as The United Nations, the International Council for Local Environmental Initiatives (ICLEI), the European Union, the Organization for Economic Co-operation and Development (OECD) and others are making concerted ongoing efforts to explore and promote sustainable transportation issues and options.

However, gaps and challenges do remain when it comes to information and understanding of sustainable transportation at the City of Toronto and beyond:

- Our information on the impacts of current transportation trends outweighs and outstrips our information on the positive benefits related to sustainable transportation options and solutions. Because transportation is so much a part of our daily lives, doom and gloom can have a numbing and paralyzing effect if not presented in conjunction with options for action – both related to our own travel behaviour, and to being part of a larger solution in our communities, businesses, governments. Recognition of positive action, such as the former Toronto’s Bike Friendly Business Awards, could also be expanded.
- Our understanding of transportation and of sustainable transportation can be fragmented and limited by our particular perspective or role. This allows us to neglect important pieces of the transportation puzzle – goods movement, telecommunications, social equity, community, just as examples. We may focus too much on technical issues, or on economic issues, without linking it to the big picture, which then limits the tools we use for the solutions. There is a saying: “To a man with a hammer, all problems look like nails”.

- Proposed solutions to transportation problems are often presented as single, simple fixes, or alternatively, long lists of options that are difficult to understand or prioritize. Without painting door to door scenarios of how a user will experience the particular innovation or system, it is difficult to understand and deliver the new, more sustainable options, and their benefits.
- While efforts have been made (particularly by the cycling community) to reach out to diverse communities on transportation issues, our efforts to inform and inspire amongst all ethnic communities and communities of interest could be improved in the context of such a diverse and multicultural city
- Although the Provincial government is responsible for transportation, the Province's public information efforts on sustainable transportation to date have been limited to the Drive Clean program.
- Toronto exists within a North American culture, which still holds the automobile as a symbol of success and a key to freedom. The private automobile — our most polluting urban transportation mode — is the one machine for which we will gladly forfeit our organs in advance in the event that we die as a result of its use.

Our present opportunity lies in our capacity to communicate more widely, effectively and compellingly with Toronto citizens, media, politicians, bureaucrats, and the business community, not only about the full range of problems and issues related to current transportation trends, but also about the options and benefits related to sustainable transportation. Our communication challenge is not only to underscore the significant risks of the status quo, but also to shift the mindset from one of fear, denial, and paralysis in this context of massive change, to one of opportunity, options, wealth, and sexiness.

7.2 INFRASTRUCTURE

Our transportation infrastructure can be divided into three different areas:

- a) Land Use
- b) Transportation Modes and Networks
- c) Telecommunications: The Virtual Transportation Infrastructure

Land Use

Our land is the basis for our transportation infrastructure. The way we choose to use and organize our land is one of the key determinants of the efficiency and cost effectiveness of our transportation system and other services, and in turn, the extent and effects of urban sprawl. It also very much affects how our communities feel and function.

Currently about 40% of our land is dedicated to automobile transportation, in the form of roads, parking lots, drive throughs, gas stations, etc. Movement by car demands at least 70 times more road space to move each person than is required when we walk (David Engwicht). Land devoted to automobiles means land not devoted to greenspace, commercial and retail operations, food production, and housing, not to mention walking, cycling, and transit. Using land for automobiles not only takes space from other transportation modes, it can also decrease the feasibility and efficiency of other modes. Appropriate densities and zoning in the appropriate nodes and areas are required for transit, cycling and pedestrian options to work to their optimal benefit.

Smart land use and zoning can vastly increase the number of people and the amount of industry and economy that can comfortably take place in a given space. It has been estimated that with thoughtful zoning, brownfield development, live-work arrangements, industry clustering and other land use and development approaches (supported by an efficient transportation network), the City of Toronto could comfortably accommodate at least another million people within its boundaries over the next ten years.

The City of Toronto, and in particular the former City of Toronto, has so far taken advantage of its pre-automobile urban form to maintain and improve its walkable, bike friendly and transit friendly land use patterns through innovative zoning policies and wise urban design. A growing league of developers is seeing the economic benefits of sustainable transportation and land use development. However, the transportation challenges of the rapidly growing region could have signifi-

cant effects on our land use patterns and related costs for both the city and the region.

Research in 1995 for the Greater Toronto Area Task Force estimated that continued urban sprawl in the GTA over the next 25 years would cost \$69 billion in new infrastructure (road, sewer, water) capital, operating and maintenance costs. But it was found that the same growth could be accommodated through more compact urban development for only \$57 billion, a saving to tax payers of @12 billion. When auto related costs of air pollution, health care, policing, congestion, and land acquisitions were factored in, the total annual savings approached \$1 billion per year over the 25 year study period. (as quoted in the Transportation Association of Canada briefing on Financing Urban Transportation)

The new City of Toronto is currently developing its new Official Plan. While the City has no jurisdiction over land use decisions of the region, growth management in the City can not only stem the effects of regional growth, it can also be beneficial to the efficiency and economy of the entire region.

When Portland Oregon first adopted a growth management strategy 20 years ago, local and national opponents said it would choke the region's economic prosperity. They were proven wrong. Portland is booming, and many say that growth management policies deserve some of the credit for making the region a highly desirable place to live, which attracts new residents and new businesses – Jay Walljasper

According to Elaine Wilkerson, Director of Growth Management Services for Metropolitan Portland, the region has grown by 24% over the last 20 years but only 13% in land area. Employment in the Portland downtown has nearly doubled. In addition, the average lot size for residential development has decreased by 50% over the last 20 years. This is due to a diversification of the housing market with land use initiatives to encourage a compact community. The region has adopted a 2040 Growth Concept that promotes minimal expansion of the existing Urban Growth Boundary (UGB), increased densities in centres and along transit corridors, multimodal accessibility, and protection of neighbourhoods, parks and green spaces.

Our present opportunity lies in the quality and strength of our own land use policies, guidelines and by-laws, and our capacity to apply and implement them. It also lies in our capacity to influence regional and provincial land use directions both by example and by direct participation in regional transportation decisions.

Transportation Modes and Networks: the Framework

As a sustainable transportation framework, Toronto has among the best regional and local transit systems in North America. It also has a growing bicycle infrastructure supported by innovative programs and support networks at the City and in the community. Bicycle transportation in the former City of Toronto has grown by over 75% in the past 8 – 10 years. Toronto is also a relatively walkable city, by large North American city standards, particularly in the core, where pre-automobile urban form and thoughtful urban design have combined in places to provide vibrant and safe places to walk, shop, and play. A recent decision to dismantle the Eastern portion of the Gardner Expressway for transformation into a livable, walkable urban space also serves to set a sustainable transportation tone.

However, with rapid regional growth, our current sustainable transportation framework will be challenged:

- Every new line or addition built by GO in the next ten years would immediately reach capacity – train bus ridership has increased by 300% in the past three years, and the demand for GO will increase by 90 – 170 % by 2031. However the GO system is currently focused on commuter travel to downtown, and provides limited hours and services over the course of the day or across the region. The challenge for GTA transit systems is to be effective enough to shape market demand for residential, commercial, and employment uses.
- While the fact that TTC derives 80% of its revenues through the fare box (highest in North America) is a testament to its success, this situation, with the remaining 20% derived from property taxes cannot be sustained under coming pressure of rapid population growth and shifting demographics. With service cuts and fare increases related to recent Provincial funding cuts, and with a dependence on fare box for operating capital, the capacity to keep current riders, let alone attract new (and more diverse) ones, is threatened. In addition, the TTC's funding situation is a disincentive to the kinds of innovations in marketing and service provision that could help to increase transit's modal share.
- Innovative and hybrid approaches to transit and sustainable transportation infrastructure based on international experience are in the early stages in Toronto. A range of innovative approaches, including jitney services, daytime use of school buses for transit and paratransit, pedicabs and tandem taxis, and car sharing linked with transit options have all been initiated in Toronto but have yet to be supported and marketed sufficiently and effectively
- While bicycle transportation infrastructure is being expanded across the new City through a network of on-street bicycle routes and lanes as well as through a series of converted hydro and rail corridors, the appeal of cycling as a viable option will be challenged by the safety and pollution impacts posed by increasing car and truck traffic volumes. In cities where bicycle transportation – a vastly underrated active urban mode - has been consciously developed to increase year round modal share of up to 30% (in similar climates to Toronto's), these initiatives are supported by cycle friendly land use, legislation, and promotion as well as by physical infrastructure. The success of the former city of Toronto in supporting increased bicycle use risks dilution through inadequate funding and staffing resources, as well as transportation trends that run counter to safe, convenient bicycle use.
- Toronto's present, and certainly its future pedestrian environments and networks are challenged by increasing car and truck volumes, not only in terms of space devoted to sidewalks and civic spaces, but in terms of quality of interaction and exchange. Increasing levels of pollution and noise impinge on the social and economic benefits of lively pedestrian environments.
- Toronto's remaining rail lines and corridors risk disappearing entirely unless reclaimed and reconnected into an integrated network of sustainable transportation options. There is still great potential for these remaining lines to offer a cost-effective, innovative opportunity for revitalization as a connected "orbital" framework for commuter travel, goods movement, and recreation that could provide a region-wide alternative to auto use on Highways 401 and 407 including multiple connections through radial transit services to Toronto's Central Business District. Much depends on land use decisions, development practices, and partnership building for network development and co-ordination.
- A road and highway system that is in a state of good repair can be a support to a sustainable transportation system. Highway and road innovations including HOV lanes, truck only lanes, transit routes on highways and road tolling can improve the efficiency of existing roads and highways, and reduce the need for additional road construction and expense. The Toronto region's only toll highway was achieving financial success before being recently sold by the Province. Rapid regional growth risks unbridled road building and expansion in the absence of a strong regional transit infrastructure
- Air and marine networks are seldom addressed in urban transportation planning. Air travel has even greater environmental impact than private automobile transportation. By contrast, marine travel can offer ecologically and economically efficient alternatives to present forms of urban passenger and freight movement. There has been limited discussion related to mitigating the impacts of air travel in the urban setting, and to integrating emerging marine options into the sustainable transportation network.

Our present opportunity lies in our capacity to build on our current sustainable transportation framework, envision and support an interconnected, user-based network of sustainable options, and attract and lever initial and ongoing investment in this development, with the aim of meeting all new transportation demand with sustainable transportation infrastructure.

Telecommunications: The Virtual Transportation Infrastructure

Our expanding electronic networks are assuming an increasingly important role in our patterns of settlement and transportation. On the one hand, electronic shopping, banking, working and playing can reduce or eliminate the need for travel. On the other hand, it has the potential to encourage travel by allowing people to locate farther away from other people and services. With a North America wide trend towards “wired” communities, the human and physical interface in cities and communities is assuming new forms. In relation to transportation, telecommunications is neither a roadblock nor a panacea in its own right. However it is important to recognize its growing presence and consciously plan for it sustainable evolution. According to Dr Peter Newman:

Rather than favouring scattered development, the information based city needs intensive areas where people can meet and share their expertise, to plan and develop their projects. Electronic communication supplements face to face contact, does not replace it.

Our present opportunity lies in our capacity to evaluate and apply telecommunications options and innovations to meet sustainable ends, through dialogue and partnerships with the telecommunications industry and community.

7.3 INTEGRATION

Modes and Systems Integration: The sum of the modes and systems is greater than its parts. Linking transportation options and systems increases the use, efficiency and cost effectiveness of all the modes and, in turn, the entire system. It extends the reach and increases the market. In Toronto while the transit systems across the region are integrated to a degree, there is great potential to link a much wider range of modes and systems seamlessly. It should be noted that integration goes beyond transport modes, to include links with networks of bikeways and walkways and other physical infrastructure and urban design geared to increasing the range of options and the ease of “switching” from one option to the other.

Through the Moving The Economy initiative, the City is currently exploring and developing an initiative called Integrated Mobility Systems based on “New Mobility” successes in Europe and smart card technology innovations worldwide (see graphic page xx) . Only in France has there been work on developing both concepts together. The concept: One electronic card links a range of transportation options, including local transit and regional rail, car sharing, swipe card free bicycles, taxis, parking, and even transponder systems. (see IMS graphic and outline, appendix xx)

Integration also increases the efficiency of moving goods. Intermodal and mixed mode applications to freight movement is increasing and paying off in other large urban centres.

Our present opportunity lies in our capacity to lead the way in applying proven approaches, new technologies and creative partnerships to the development of an integrated, multimodal, convenient, system both in Toronto and across the region.

Integration of Functions: Moving People, Moving Goods, Moving Information: Our decisions about the ways in which we move people, goods, and information are all interrelated. At present, passenger travel congestion can slow down truck movement, truck traffic can cause both risk and inconvenience to passenger travelers, and movement of information allows people to locate differently, which can either reduce the need to travel or move goods, or increase it by allowing people to locate farther away. And all of this both affects and is affected by our land use decisions.

Our present opportunity lies in our capacity to make decisions that take into account the inter-relatedness of transportation functions in the ways that have least environmental and economic impacts.

Integration of Governance Structures and Responsibilities: Responsibility for transportation policies and resources is spread across all levels of government. At present there is a need for greater and more efficient co-ordination of these responsibilities. While development at the regional level is key, there is also a need to re-involve the province and the federal level in urban transportation issues and infrastructure.

Our present opportunity lies in our capacity to generate interest and involvement by all levels of government in an integrated, coordinated way by demonstrating the relevance of sustainable urban transportation to our overall economy and quality of life. (See appendix xx for listing of current policy and planning processes). It also lies in ensuring that the evolution of our governance structures is as smart, efficient, and seamless as the evolution of our transportation systems.

Integrating the City and the Region: More and faster growth in population and in automobile use is happening in the region around Toronto than in the City itself. As the central employment and entertainment hub of the region, the City has a key role to play in developing an efficient, sustainable regional transportation and land use system.

Our present opportunity lies in our capacity to participate fully and actively at an early stage in regional sustainable transportation development.

Integrating City Departments, Agencies and other Efforts related to Transportation: The full range of issues related to sustainable transportation is covered by various City Departments, Agencies, and Initiatives. These include: Urban Planning and Development Services; Works and Emergency Services, Economic Development, Culture, and Tourism; The Office of the CAO through the Healthy City Office; Information Technology and Services (check the name here); the Toronto Cycling Committee; the Toronto Transit Commission, the Toronto Parking Authority, and more. While sustainable transportation functions do belong in all these areas, there is a risk of fragmentation and duplication of efforts if functions are not appropriately coordinated.

Our present opportunity lies in integrating these efforts to reduce duplication of effort and costs, and to increase the reach of each initiative through co-operation and partnership.

Integrating with Other Issues and Sectors: Transportation's complexity means that it is related to a range of other issues and policies at all levels of government, and a range of other industrial sectors and community issues. These include but are not limited to:

- housing policy and homelessness
- fiscal policy
- telecommunications policy and telework
- industrial development
- health policy and provision
- labour and employment policies and practices
- tourism
- green industry
- energy policy
- environment policy
- food policy, production, and distribution
- trade and trans-border issues
- and more

Our present opportunity lies in our capacity to develop and integrate related policies and sectors while achieving sustainable transportation goals.

7.4 INVOLVEMENT

Transportation is used by everyone and affects everyone. Involving all decision makers: citizens, businesses, workplaces, schools, places of worship, government, labour, community, is a key to ongoing participation not only in developing an awareness of the issues but also in effecting the solution. This is beginning to happen at all levels in the face of rapid changes and transportation challenges.

- A variety of workplace programs and supports have been initiated by business and labour in the City of Toronto, including City of Toronto Transportation Management Associations (TMA's); Pollution Probe Clean Air Commute, Labour and CUTA led campaign for employer-provided transit passes, Toronto Environmental Alliance Car Pooling Initiative, University of Toronto Cashing Out study, the City of Toronto Corporate Anti-Smog plan, Wheel Excitement corporate bicycle commuter workshops, and more (see Directory of Sustainable Transportation). However the challenge in building upon and facilitating involvement in these diverse workplace initiatives will be to offer a coordinated one-stop shopping approach for busy employers.
- There is a range of school-based sustainable transportation initiatives sparking involvement by teachers, parents, and children, including Greenest City's Safe Routes to School, Transportation Options Blazing Trails through the Urban Jungle, the Community Bicycle Network's Bicycle Recycling Program, the City's Kid's Can-Bike Program, and the Toronto Board of Education's environmental education program. At the same time, trends are moving away from children using sustainable transportation because of increasing security and health concerns. Fewer than 50% of Canadian children walk to school. The challenge will be to maintain and increase support for and involvement in the kinds of programs that will set a foundation for future generations.
- In the former City of Toronto, informed citizen involvement has made an immeasurable contribution to the development of our current sustainable transportation infrastructure. In the new amalgamated City and throughout the region, as the issue becomes more pressing, it will at the same time become more of a challenge to sustain meaningful dialogue and involvement in sustainable transportation issues on a larger scale. For information on community efforts in sustainable transportation, see the Directory of Sustainable Transportation in Toronto.

Our present opportunity lies in our capacity to maintain and build diverse partnerships and meaningful involvement in this urgent issue.

7.5 INVESTMENT

In addition to investment of human resources, a successful sustainable transportation infrastructure requires financial

investment, in the form of:

- Government Funding
- Innovative Financing Mechanisms: Incentives and Disincentives
- Sustainable Transportation Sector Development

While money doesn't necessarily translate into thoughtful and integrated sustainable transportation planning, it is essential, especially in the face of current changes, for maintaining and expanding our sustainable transportation capacity.

Unfortunately, at a time when demand is increasing, funding from senior levels of government is decreasing. The government funding playing field has never been level across modes. Considering the disproportionate amount of government subsidy towards private automobile and truck transport, it is both surprising and heartening that our sustainable transportation infrastructure has flourished to the point that it has. According to Joe Berridge in his recent report,

What is clear is that Toronto is investing at about one fifth the rate of its competitor cities, that this investment has not been tied to private investment, and that philanthropic investment is nearly entirely absent in Toronto.

Through the Kyoto Climate Change initiatives, urban transportation is emerging as a key target for federal support, and provincially, while no commitments have been made to transit or sustainable transportation funding, there may be opportunities in supporting systems improvements and technologies that increase integrated transportation efficiency. Decisions to fund sustainable transportation initiatives will be influenced by the existence of integrated plans, proposals and partnerships supported by social, environmental, and economic rationales. According to Robin Murray, former Director of Industry for the Greater London Council,

The British Government is forcing departments to bid for their own budgets and award it to them only if they create partnerships that will address the problems. Through such budget exercises there are opportunities for sustainable businesses and organizations to join in partnership.

From the point of view of generating revenues, municipalities as yet have limited powers to generate their own revenues for investment in the development of sustainable transportation infrastructure. For example, in Toronto 2 cents per liter of gas would translate into \$100 million for transit and other sustainable transportation initiatives.

It should be restated here that cities that invest in sustainable transportation spend less per capita on transportation, and accrue a whole range of additional benefits. Were the transportation playing field to be more level, smaller investments would go much farther. Faced with Toronto's aging infrastructure that is costly to repair, investing in more long term sustainable solutions becomes more cost effective.

In 1994, the City of Boulder, Colorado modeled the impacts of investing in new roads to relieve congestion. Their models revealed that new roadway expenditures of US \$200 million would result in a 58% congestion rate of the city transportation system, while no investment would lead to 60% congestion. Instead of squandering millions for a 2% improvement, the city wisely chose to invest its money in the promotion of alternative modes, aiming to maintain congestion at current levels of only 20%.

Sustainable transportation providers are also seeking and applying innovative funding mechanisms and partnerships. They are considering a range of options, including user fees, distance based insurance, location efficient mortgages, vehicle registration fees, gas taxes, pricing signals, and more, to link incentives to sustainable transportation with disincentives to private automobile use (carrot and stick)

There is also an emerging trend, initiated by Calstart in California, and being developed here in Toronto through Moving The Economy, to attract investment to and create jobs in the growing sustainable transportation sector. (see appendix on Moving the Economy and Integrated Mobility Systems)

Our present opportunity lies in our capacity to spend existing money more efficiently, generate new revenue that is more closely linked to actual costs and use, (through existing and new powers to the municipality) and stimulate increased public and private investment in sustainable transportation infrastructure. Our opportunity also lies in creating partnerships to establish innovative financial incentives to sustainable transportation.

7.6 IMPLEMENTATION:

Policies are 100% more effective if implemented. Occasionally policies are made with good intent but are not supported by enough staff and resources to see them through.

Our present opportunity lies in our commitment to implementing sustainable transportation and land use policies by allocating sufficient staff and other resources to seeing them through.

7.7 INNOVATION:

In challenging times, innovation is most needed and often least supported. Around the world innovative and sustainable approaches to transportation systems are paying back in both social and economic terms.

Our present opportunity lies in our capacity to build on innovations from elsewhere, and to provide a supportive context here in Toronto for innovation to be developed, applied and exported.

7.8 INDICATORS OF PROGRESS

Evaluation – both quantitative and qualitative, is essential to the success of specific sustainable transportation initiatives and to general future directions. Setting targets and identifying indicators to evaluate progress towards these targets serves to inform future directions. The S.T. Working Group has begun this process for incorporation into other reporting and monitoring processes currently being developed. (see appendix xx for report card framework for sustainable transportation evaluation at the City).

Our present opportunity lies in our capacity to develop cost effective, consistent and regular evaluation mechanisms that provide both qualitative and quantitative measures

8. IMMEDIATE NEXT STEP FOR TORONTO

Toronto as Leading Sustainable Transportation City:

A Co-ordinated Ongoing Mechanism for Meeting the Challenges and Reaping the Benefits

How, with all these challenges, needs, changes, and options, do we decide what to do, when to do it and who does it? We know that the next ten to twenty years will be a challenge regardless of whether we continue with business as usual or opt and act for a sustainable, liveable solution. While no one City government, or other government, or any person, corporation, or group could shift our transportation system single-handedly, the City can play a very important role in setting the tone, the direction, and the environment for sustainable transportation development here and across the region.

The Sustainable Transportation Working Group began a process for the new city. It developed an inventory of existing policies and initiatives, it identified an initial vision and framework for action, and it offered eight key steps to take within Toronto's specific context. But this was only the beginning.

The process must continue and expand in a concerted, integrated way within the City structure and in partnership with both users and providers of transportation across the region. For this we need a co-ordinated mechanism or plan. At this point in Toronto's evolution and growth, business as usual will neither address the urgent and looming challenges we face, nor will it take advantage of the rich array of opportunities for economic, social, and environmental benefit.

Unlike the Montreal, Ottawa or Vancouver regions, there is at present no transportation and land use plan for the Toronto region. Nor is there as yet an integrated plan for transportation at the City of Toronto. Responsibility for the many components of urban transportation and transportation infrastructure at the City is spread across diverse City departments, committees and agencies, including Urban Planning and Development Services, Works and Emergency Services, TTC, Economic Development, Culture and Tourism, The Office of the CAO, and more. Planning and policy making is happening at every level in every department, most of which involve some component of transportation and land use. But in order to cost effectively achieve the goals of a sustainable transportation city we must bring together these components and successes and build upon them in an integrated way.

Good plans save money and time by avoiding and reducing duplication of effort and spending, especially when the subject is complex, sophisticated, and related to a variety of sectors and players. From the beginning they involve both those who will carry out the plan and those who will be affected by it. They take the time and commit the resources to build a solid foundation and achieve early buy-in. And most importantly they build in implementation mechanisms and accountability. Good plans also send a message that we are open for business. They act as tools for garnering the resources and partnerships needed for success.

Vancouver's very successful transportation plan took about a year and cost under \$1 million. They are still reaping the benefits in terms of public buy-in and local commitment. Britain's transportation White Paper is getting a very positive response and sparking very positive results.

Few businesses would go forward confidently without detailed goals and an integrated mechanism or plan of action. Why would one of the world's major cities?

Toronto's current context makes co-ordinated planning both more challenging and more essential. The recent municipal amalgamation and development of the Greater Toronto Services Board gives us an opportunity to re-evaluate existing policies and practices, setting a clear direction for the future in transportation and land use issues and to help us become less reliant on single occupant motor vehicles. Both the Strategic Transportation Planning Group and the Transportation Implementation Plan of the Official Plan can provide key fora for ensuring and catalysing the appropriate and necessary processes and resources for making Toronto a leading sustainable transportation city.

9. CONCLUSION AND RECOMMENDATIONS SUMMARY

A top notch sustainable transportation system can be judged by the way in which it meets current and evolving needs within its current and evolving means. Addressing urgent and complex transportation challenges and reaping emerging opportunities and benefits will require concerted, co-ordinated, and immediate effort and leadership at the City of Toronto. We are fortunate to have a very strong base upon which to develop integrated sustainable transportation. By applying key steps outlined in this report, and by acting on the following recommendations, the new City of Toronto can build on successes of former municipalities, and best practices from elsewhere, to become a leading sustainable transportation City into the new millennium.

Recommendations Summary (see full recommendations on page 3)

The Environmental Task Force requests:

1. That City Council recognize the urgent and growing importance of sustainable transportation to the environmental, social, and economic health of our city.
2. That City Council build on the successes of the former municipalities and establish the new City of Toronto as a leading sustainable transportation city.
3. That the Commissioners of Urban Planning & Development Services and Works & Emergency Services report to their respective standing committees by May 2000 on staff and resource requirements for achieving the goals of a leading sustainable transportation city.
4.
 - i) That this Sustainable Transportation Working Group report be submitted for incorporation of relevant elements into relevant planning processes with consultation with the Sustainable Transportation Working Group as required
 - ii) That all relevant departments, agencies and planning processes report annually to the proposed Sustainability Roundtable or City Council, beginning in May of 2000, on progress to date and plans for the future.
5. That the Commissioners of Urban Planning & Development Services and Works and Emergency Services work in partnership with the Toronto Atmospheric Fund (TAF) in consultation with relevant agencies and report back by February of 2000 on the feasibility and resource requirements for developing a two-tiered quick-start public outreach approach to sustainable transportation.