

**Ecological Fiscal Reform and Urban Sustainability
Case Study of the Ontario Provincial Government and
Greater Toronto Area Municipalities**

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Executive Summary

Urban Sustainability is emerging as an important policy concern for all levels of government in Canada. This paper specifically explores the “state of play” link between federal, provincial and municipal fiscal practices and urban environmental issues. An emphasis is placed on identifying situations where synergies exist or could be achieved between levels of government. Additionally this analysis highlights instances where revenue and expenditure practices work at cross-purposes to the detriment of sustainability goals.

The research is prepared for the National Roundtable on the Environment and Economy with the express intent of setting the stage for a discussion on the importance of Ecological Fiscal Reform (EFR) and Urban Sustainability. The research is structured as a case study using the Province of Ontario and three municipalities in the Greater Toronto Area: the amalgamated City of Toronto representing a mature urban centre, the City of Mississauga which is a mature traditional low density suburb, and the rapidly expanding suburban Town of Markham. In instances where two-tiered governments exist, the upper-municipal level is also included because these institutions are responsible for areawide infrastructure investments that shape local growth decisions as well as the protection of large-scale environmentally sensitive lands. Consequently, the Region of York (Markham) and Region of Peel (Mississauga) are incorporated into research. This work is augmented by a series of interviews conducted with key government officials affiliated with the case study subjects.

Province of Ontario

Ontario has several programs providing an economic incentive to purchase newly constructed housing as opposed to existing structures. As a result this could potentially attract residential demand to low density greenfield developments and away from existing urbanized and serviced areas. This is counter to local efforts to promote intensification and compact urban form. However, there are fiscal policies that do encourage the reuse of urban land, most notably the Province’s brownfields legislation

gives municipalities the opportunity to use Tax Increment Financing as tool for promoting urban redevelopment. Another practice related to sustainability is the Province's effort to use property tax reductions as an economic incentive for the stewardship of environmentally significant land as well as agriculture land protection. These initiatives are augmented by an effort to purchase land in areas such as the Oak Ridges Moraine in the Region of York as a means to protect land from development pressures.

Infrastructure investment through Ontario's SuperBuild Fund does not have specific sustainability criteria, which could be problematic given the scale of projects involved. However, there are several public transit oriented programs that are designed to improve service provision in cities across Ontario. In the area of energy conservation, the Province offers incentives that encourage energy efficient transportation such alternative fuel vehicles

Municipalities

Cities and regions are responsible for many sustainability-related policies including defining the urban growth patterns, protecting environmentally sensitive land and infrastructure provision. However, as the "Early Warning: Will Canadian Cities Compete" report suggests, municipal actions are constrained by a very limited range of revenue options. As a result municipalities are being asked to deal with complex problems without the proper resources.

One agency with strong ties to sustainability is the Toronto Atmospheric Fund (TAF). Armed with a significant endowment, the TAF is actively involved in the funding of studies, pilot projects and educational programs that promote reductions in greenhouse gas production. This organization's flexibility also allows for the creation of partnerships and the pursuit of programs that otherwise might not be considered by a municipal government.

Municipal fiscal decisions often compliment local sustainable objectives. From the public acquisition of environmentally sensitive land to promoting private stewardship activities, initiatives like The Greening of York strategy use local resources to preserve open space and promote healthy ecosystems. The ambitious Toronto Waterfront Revitalization effort represents a cooperative intergovernmental effort to restore the local lakefront.

The most common municipal revenue tool is the property tax. Case study municipalities are showing a willingness to reverse unsustainable biases built into the application of property taxes process. Most notably, low density residential properties have received favourable treatment, usually at the expense of multi-residential developments. This exclusionary practice is regarded as promoting sprawl, but several efforts in York Region and the Town of Markham are attempting to level the field with the hopes of encouraging higher density compact forms of growth. Additionally, municipalities use development charges to finance growth, but these fees tend to be assessed on an average cost basis regardless of the existing infrastructure context. Markham uses an area-specific development charge based on the real economic cost of growth by taking infrastructure availability into account.

Sustainable transportation investments are gaining popularity as municipalities seek to implement a network that will move people and goods efficiently and in an environmentally desirable manner. Broad projects such as the York Region Master Transportation Plan are linking rapid transit with high density developments in the effort to achieve their intensification objectives. Additionally, York is seeking a private sector partner to invest in their local transit system, a move designed to secure the funding necessary to implement the plan.

Municipalities participate in a broad range of sustainable practices related to solid waste collection, recycling, water and wastewater services as well as energy efficiency initiatives. Overall, the case study municipalities display flexibility and an ability to

innovate and a willingness to form partnerships, which suggests that this level of government is a key actor in the urban sustainability process.

Synergies

The case study highlights the existence of some beneficial synergies between the federal, provincial and municipal governments. Federal programs do support provincial and local actions, with a classic example being the Toronto Waterfront Revitalization effort. Similarly the Province and municipalities display synergies in ecosystem conservation, and the promotion of urban intensification.

Cross-Purposes

Instances exist where intentional and unintentional actions by the federal and provincial governments serve to work against sustainable objectives. Fiscal practices such as the application of the GST to renovation materials and infrastructure purchases increase the cost of sustainability and is likely to discourage this activity. Another significant impact are income tax and capita gains treatments that discourages the preservation of open space and agricultural land. There are also numerous cross-purposes observed between the Province and municipalities, particularly through Ontario programs that offer an economic incentive to consume greenfields when municipalities are trying to promote compact urban form.

Conclusions

Urban sustainability depends upon cooperative efforts between all levels of government in Canada. Federal and provincial must work to identify revenue and expenditure opportunities that will support sustainability. Once synergies are found efforts must be made to ensure that proper funding exists, and where potential opportunities exist, steps must be taken to ensure the link is made. But funding must also be consistent as one time federal programs do not create the certainty municipalities need to finance their sustainability agendas. When cross-purposes exist, all governments must work to eliminate these conflicts.

1 Introduction

This paper is presented as part of the National Roundtable on the Environment and economy's ongoing Urban Sustainability Program. Our research investigates the "state of play" for Ecological Fiscal Reform (EFR) using a case study format based on the Province of Ontario and a selected group of local and regional municipalities in the Greater Toronto Area (GTA.) Results from this analysis will be applied to similar EFR work completed for the federal government in order to identify the fiscal relationships between the three levels of government in Canada. Of particular interest is identifying potential synergies where fiscal instruments may combine in a supportive fashion as well as contradictory instances where the different levels of government may work at cross-purposes. Ultimately the objective is to identify existing practices that necessitate new policy initiatives from the various levels of government. It is important to stress that the focus of the research is on tax and expenditure polices undertaken by the various levels of government as opposed to regulatory policies.

Specifically, this project identifies the current "state of play" of tools applied by the Province of Ontario and the GTA case study municipal governments that have are relevant to the environmental sustainability of Canadian cities. Special attention is given to measures that have the potential to be used in conjunction with, or are supportive of federal government initiatives. Also where possible, the report identifies potential measures that may be applied or existing applications that are not fully utilized.

Being able to properly address the study's objective required the completion of a number of tasks that are detailed in this document. As a result, this work includes a survey on the current "state of play" for Ontario and the GTA cases where tax and expenditure instruments may have an impact on urban environmental sustainability. For the Province of Ontario it is necessary to examine potential tax and expenditure polices that may affect urban environmental sustainability in a number of ministries. This includes the Ministry of Municipal Affairs and Housing, Ministry of the Environment, Ministry of Transport, Ministry of Finance, SuperBuild Funding, Ministry of Agriculture, Food and Rural Affairs, Ministry of Health, Ministry of Economic Development and Trade, Ministry of

Energy Science and Technology, Ministry of Natural Resources, and the Ministry of Intergovernmental Affairs.

In a similar fashion, a number of municipal case studies regarding tax and expenditure policies that impact on urban environmental sustainability are undertaken. These cases include the City of Toronto, Town of Markham and City of Mississauga. Consequently, the regional governments where two-tiered government exists were also analyzed. This includes the Region of York (Markham) and the Region of Peel (Mississauga.)

In addition to the inventory of the “state of play”, follow up interviews were completed with Provincial, local government and regional government officials. The purpose of these interviews was to obtain feedback regarding the policies the subjects consider supportive of sustainable development while also obtaining their ideas about additional policies that could be adopted. The comments and information obtained in the interviews is incorporated into the analysis and conclusion sections of this report. A list of the officials interviewed is provided in Appendix A. Information and data included in the report were obtained from specific government websites, official documents related to various programs including budgets and public accounts, as well as thorough discussions that were part of the site visits completed to each of the respective governments. In a number of cases the program descriptions in the appendices to the report directly use the language appearing in the public documents. This was done to ensure that the programs are accurately described and they are not subject to our rewording or interpretation.

The report is organized such that the government “state of play” begins with the information for the Province of Ontario in Section 2 which is organized according to the issues that were addressed in the first EFR and urban sustainability workshop held in June. Section 3 addresses the “state of play” for selected municipalities in the GTA. This includes information for the City of Toronto, Mississauga and Markham. Where a two tiered local government exists, the upper tier also known as regional municipalities have been included in the presentation, i.e. York and Peel. In sections 4 and 5 the report deals with an analysis of synergies and cross-purposes, including missed opportunities

that exist with current tax and expenditure policies. This is completed both in terms of the relationship of federal policies with the other two levels of government, and the interaction between Ontario and the municipal governments included in the case studies. Section 6 presents conclusions based on the analysis and the information obtained in the interviews with the government officials.

2 Province of Ontario

Context

The Province of Ontario has the potential to support or work at cross-purposes with Federal tax and expenditure policy related to urban sustainability. Though this relationship may be intentional or unintentional it is important to identify these outcomes and foster a cooperative response that builds on the opportunities while avoiding the potentially negative impacts. To this end, it is useful to understand the general tax and expenditure context within which the Province has been developing policy in this area in recent years.

By going back to the early 1990's it is apparent that environmental issues, and more specifically those related to sustainable urban development, have been on the Province's policy agenda. This is particularly evident in both tax policy and planning policy. For example in 1993, a section in The Report of the Ontario Fair Tax Commission report addressed "Facing the Environmental Costs of Our Behaviour" which led to recommendations for increased reliance on environmental taxation. From the planning perspective, Ontario established a series of Provincial Policy Statements. The earlier Statements addressed aggregate resources, wetlands and floodplains while the most recent version (1997), currently under review, includes agriculture, mineral resources, natural heritage, water quality, and natural hazards. Despite that fact that planning generally leads to regulatory policy, the importance of these issues suggests that they may also be reflected in tax and expenditure policy.

More recently, in 2001, the Province embarked on its made in Ontario Smart Growth initiative that is based on three driving principles: strong communities, a strong economy,

and a clean healthy environment. These principles also are reflected in other complimentary Provincial policy areas and directly impact environmental fiscal decisions.

The material in the remainder of this section is organized around a number of issues identified in the discussion paper prepared for the June 4th workshop held by the National Roundtable on the Environment and Economy Urban Sustainability Program Task Force. The relevant Province of Ontario tax and expenditure items that are considered to have an impact on sustainable urban development are identified and briefly discussed.

Greenfields vs. Urbanized Land (including issues related to Density)

This issue relates to the need to encourage growth on existing urban land while also encouraging higher density development. Benefits associated with intensification strategy include using existing infrastructure, increasing the viability of public transit by increasing its ridership base, and reducing the pressure to develop greenfields comprised of farmland and environmentally sensitive areas. It has been pointed out that based on research completed for the Greater Toronto Area, savings on infrastructure costs between 22% to 32% could be realized for hard services through compact urban growth.¹ An example of this strategy exists in the proposed Official Plan for the City of Toronto in which one million additional people are proposed to be accommodated in the city through infill and brownfields development and intensification.

There is several Ontario tax and expenditure initiatives that provide incentives for development in what might be viewed in either a positive or negative fashion relative to the objective of urban sustainability. The *Ontario Land Transfer Tax Rebate* provides first-time buyers of newly constructed homes with a rebate on the Provincial Land Transfer Tax. This rebate applies to both freehold and condominium units and provides an incentive to purchase new housing as opposed to the old/resale options due to the presence of a relative price advantage. Consequently, from an urban form perspective,

this inducement has the potential to encourage the consumption of new housing developed on low-density greenfield sites as well as higher density condominiums that tend to be found in existing urban areas. In fact, the probability of the low-density outcome is confirmed by the fact that a large majority of residential construction is concentrated on freehold units as only 31% of the new housing share across the GTA was condominium development.²

A similar incentive or bias toward the purchase of new homes rather than resale housing arises through a tax expenditure program known as the Ontario Home Ownership Savings Program. This is a Provincial tax expenditure providing tax credits for first time homebuyers (with maximum incomes of \$40,000 for an individual and \$80,000 for couples) to save for their first home. A tax credit is available for \$500 per person or \$1,000 per couple per year contributed to the program as well as the interest earned on the invested funds. As new homes on greenfield sites are generally more affordable since they require lower down payments than resale homes, this program may support home purchases on greenfield sites³. As a result, this program is likely to create sprawl rather than more intensive forms of urban development.

Efforts to encourage development in already urbanized areas motivated the Province to pass the Brownfield Statute Law Amendment Act, which empowers cities to provide grants, or loans for the remediation of contaminated lands in municipally designated community improvement areas. Incentives include freezing or canceling the municipal portion of the property tax if a private landowner remediates a brownfield site. The tool used to implement this activity is known as tax increment financing (TIF.) Although the actual tax expenditure for this tool must be approved and borne by municipalities, it is included in this section due to the required Provincial legislation, i.e. policy initiation in order for municipalities to apply the tool. An exception has been made to the Ontario

¹ “Ecological Fiscal Reform and Urban Sustainability: The Current State of Play and Possible New Fiscal Measures, A Summary of Fiscal Policies Influencing Urban Environmental Quality and Possible New Measures” May 2002.

² Urban Development Institute, “GTA Market Outlook”, April 2002

Municipal Act as it generally prohibits granting development bonuses or any type of tax exemption or rebate by municipalities. The expectation is that TIFs will entice developers to build on underutilized urban sites that may not have been economically viable to redevelop in the absence of the financial incentives provided by municipalities through this brownfield law. Urban form advantages include using existing infrastructure and increasing densities to support public transit use. The new official plan for the City of Toronto anticipates that brownfield sites can accommodate the estimated one million additional residents. Some have criticized the legislation as not going far enough to create the incentives needed to attract private development capital to inner city sites.

The *Toronto Waterfront Revitalization initiative* is five phase \$1.5 billion plan designed to link the city with the water, attract development to the city core and create a more environmentally healthy lakefront. Costs will be equally shared between the federal, Provincial and local levels of government with Ontario indicating its \$500 million investment will be taken from its SuperBuild fund. Expected benefits from this substantial project include environmental improvements of the waterfront and shoreline, providing better access to the waterfront for residents, and facilitating the high-density development of waterfront lands based on intensification objectives that in turn will provide increased transit ridership. In addition to this Toronto based initiative, SuperBuild under its theme of urban renewal and making cities better, indicates in its progress report that it will also spend \$250 million for transportation, environmental and urban revitalization projects in eight other large urban centers in Ontario. This investment is intended to support urban development /renewal at relatively high densities.

The *Ontario Tax Reduction for Heritage Property* encourages the preservation of heritage properties by granting eligible property owners a 10-40% reduction of the municipal taxes levied. Properties must be designated under the Ontario Heritage Act and owners must sign an agreement respecting the preservation and maintenance of the property. The amount of the reduction granted under this tax expenditure is left to the

³ With CMHC insurance for mortgage loans on new housing, mortgage financing may be obtained for 95% of the purchase price as compared to conventional first mortgaging financing at a maximum of 75% for resale houses.

discretion of individual municipalities. Therefore the tax base decrease will be borne by the municipality but the Province will fund the education portion of the property tax reduction. Though the major objective of this initiative is the preservation of heritage properties it will also encourage the maintenance of buildings, as required in the agreement. This may ensure that there will be an incentive to preserve stronger urban neighborhoods and make existing developments in the vicinity an attractive option for residents while also attracting new investment capital to already developed areas. For example, in the hamlet of Buttonville (Markham) a real estate firm renovated and occupied an historic property and acted as a catalyst for other investment in the immediate vicinity. As a result, growth pressures could be channeled toward built up areas and away from greenfield sites.

Open Space and Agricultural Protection

Several Provincial initiatives attempt to maintain land in agricultural or open space uses. These efforts impinge on municipalities by requiring them to fund this tax expenditure. The first of these initiatives, the *Farmland Taxation Policy*, requires that the farmland property class be taxed at 25% of the municipal residential rates. Prior to the most recent property tax and assessment reform, reductions in farm property tax burdens were borne by the Province, but under the new system it is borne by municipalities. By reducing the tax burden on agricultural lands, farming costs are reduced thereby making this activity more viable while also helping to mitigate pressures to sell and convert land to urban uses. Another program, the *Conservation Land Tax Incentive Program* (CLTIP), is designed to preserve privately owned environmentally significant lands. Through this initiative property owners receive a 100% tax exemption for the eligible part of their holdings if they are willing to protect it from development. This program is designed to recognize, encourage and support the long-term stewardship of Ontario's Provincially significant conservation lands. The benefit of this program is that pressure is reduced for low-density greenfield development on these lands and growth may be encouraged within urban areas.

The Ministry of Natural Resources administers a program entitled the Natural Areas Protection Program (NAPP) with similar objectives to the CLTIP. However, this program targets Southern Ontario by funding the acquisition of land and capital projects in the Niagara Escarpment, Rouge Valley and Lynde Marsh Areas. A variety of methods may be used to meet the program objectives including fee simple purchase, acquisition of easements, accepting bequests and donations, land purchase and resale of surplus portions, and exchange of surplus lands. The program has been allocated \$20 million over four years, but partnering with other agencies is encouraged to lever additional funds. This program helps to preserve environmentally significant areas from urban development thereby preserving these lands for future generations. Additionally this initiative may shift development pressures to existing urbanized areas.

The Ministry of Natural Resources also has the Managed Forest Tax Incentive Program, (MFTIP). This is similar to the farmland property tax expenditure program as qualified managed forests are eligible for a property tax rate assessed at 25% of the prevailing residential property tax rate in a given municipality. This is a voluntary program in which participating landowners must agree to conserve and actively manage their forests. The qualifying requirements include the size of the forest; minimum four hectares, a minimum density of trees, and the forest cannot be part of a registered plan of subdivision or are licensed under the Aggregate Resources Act.

The financial benefits from reduced property tax will act as an incentive to maintain and sustain forests. It will also help to increase the owner's knowledge and participation in forest maintenance activities. As with the farmland program, the actual tax expenditure is borne by the municipality but the province administers the required agreement.

Controversy in the Greater Toronto Area over the preservation of the Oak Ridges Moraine has lead to the Oak Ridges Moraine Conservation Plan. The moraine is an environmentally sensitive landform in the Region of York that is currently threatened by serious growth pressures. This plan includes the creation of a trail across the moraine and the creation of the Oak Ridges Moraine Foundation which has the mandate to fund a range of activities including land securement, public education, research and monitoring.

The Province has committed \$15 million in cash plus significant land donations to the Foundation. It is anticipated the Foundation will become a partnership fund that will receive donations from the federal government and the private sector.

Infrastructure Including Transportation and Transit

The Province through its *SuperBuild Program* is investing in the building of Ontario's future through a number of expenditure programs that include infrastructure, transportation and transit. Ten billion dollars is earmarked for investment in both renewed and new infrastructure, a goal that will be achieved through the use of public-private partnerships to lever Ontario's capital expenditure. Program objectives include providing a physical foundation for sustained economic growth while also providing better services to the taxpayers of Ontario.

One component of SuperBuild and its associated partnerships is the *Canada-Ontario Infrastructure Program* where \$680 million is being targeted for infrastructure financing in the Province, but the approval process does not include any specific sustainability criteria. Nonetheless, there are examples where a sustainability focus has been pursued, such as the \$9 million City of Peterborough wastewater treatment plant upgrade and expansion been touted in a Provincial News Release as a "Green" infrastructure initiative.

Transportation expenditures are integral to sustainability and growth in the GTA and GO Transit is an important part of the overall regional strategy. GO Transit is a Provincially operated commuter rail and bus system that is often used by suburbanites working in the City of Toronto. Provincial operating expenditures are made in accordance with the *GO Transit Act and 10 Year Capital Plan*, but there are also plans to use SuperBuild funds to finance a series of capital improvements. Ideally these investments will be based on partnerships for financing. Among the planned GO capital investments are expansions to existing stations as well as the addition of new stops in the attempt to enhance service quality. One capital expenditure example is the decision to add a new station at York University. Improving the system's quality of service should increase ridership and decrease the use of cars for commuting in the GO service area, i.e. the GTA.

SuperBuild is also being used to make urban transit more appealing through the Provincial Transit Investment Fund, a program created to encourage transit investments based on Smart Growth principles. Included in this initiative is the \$100 million Ontario Transit Renewal Program that will fund the replacement of aging municipal transit vehicles in 65 municipalities. In addition to the purchase of replacement vehicles, the funds may be applied to refurbishing that will extend the life of vehicles in the existing fleet. There are a number of benefits associated with this program especially the replacement with new transit vehicles. These vehicles may be more attractive to riders and therefore encourage public transit ridership. They may also become more fuel-efficient and generate less air pollution.

The Ontario SuperBuild Fund's Provincial Transit Investment Plan was put in place to support strategic investments and partnerships in transit infrastructure. Funding will be made available to support Smart Growth objectives related to land use and regional transportation objectives. To the extent that Provincial Smart Growth objectives support sustainable development, this funding program will provide greater transit options with the potential for increased service areas to help reduce auto use, traffic congestion and the problems it causes.

In addition to the transit oriented SuperBuild programs, it is important to note that there is also substantial SuperBuild funding that has been allocated for highway rehabilitation and expansion. This includes significant expenditures for the 400 series of highways that act as the major corridors throughout the GTA. To the extent that these investments support auto use for commuters in urban areas rather than transit use they may tend to work at cross purposes to the objectives of sustainable development.

In general the SuperBuild Fund has not yet been fully integrated with the Made in Ontario Smart Growth program. If it is possible to reconcile any differences in the objectives of these programs and have them work together, there is an opportunity to use

sustainable development objectives as the basis for integrating these two significant Provincial initiatives.

Energy

A number of existing Provincial programs are identified in this section, however, it is important to note that a Select Committee report completed in June 2002 makes a broad range of recommendations for the use of alternative fuel and energy strategies.⁴

In the energy area there are currently several tax initiatives that could be considered to support urban sustainability objectives. These initiatives, incentives and disincentives focus on supporting the use of alternative fuels and discouraging the use of vehicles with high fuel consumption. An example of this approach is the fact that Ontario does not impose a fuel tax for automotive natural gas, methanol or ethanol. Propane is taxed at a rate that is less than gasoline. In addition to reducing the taxes on alternative fuels, there is also a program to reduce the cost of the clean energy vehicles themselves. Under the *Alternative Fuel Vehicle Incentive Program* purchasers and long-term lessors (12 months minimum) of qualifying alternative fuel vehicles may obtain a rebate of the retail sales tax. Qualifying vehicles that operate on electricity, propane, natural gas, ethanol, methanol, or manufactured gas, may receive a rebate of up to \$1,000. Electric hybrid vehicles that meet certain conditions are also eligible for the rebate. This sets up an obvious financial incentive to purchase or lease vehicles that use these alternative fuels. This alone may not be sufficient to act as a strong incentive for potential users. However, it is setting an incentive in a positive direction.

Ontario is attempting to penalize the use of inefficient vehicles through the *Tax for Fuel Conservation* program. This is a flat tax imposed on specific vehicles that are inefficient in terms of fuel consumption. This supplemental tax is imposed on passenger vehicles using 6.0+ litres of gas or diesel fuel per 100 kilometres of highway driving, and SUVs using 8.0 litres. The tax is calculated according to schedule published by the Ministry of

⁴ Legislative Assembly of Ontario, Select Committee on Alternative Fuel Sources: Final Report, June 2002.

Finance in which the tax begins at \$75 and increases in accordance with the degree of fuel consumption to a maximum of \$7,000 for consumption greater than 18 litres per 100 kilometres. The tax becomes part of the taxable value of new vehicles bought or leased. Conversely, there is Tax Credit for Fuel Conservation available to purchasers of new vehicles that use less than 6.0 litres of gas or diesel per 100 kilometres. The maximum credit is \$100.

Consequently there is a system of taxes and credits (tax expenditures) at the Province that advocates reduced gasoline consumption in automobiles. Alternative fuel automobiles are also being encouraged as environmentally efficient transportation choices.

3 Municipalities

The Greater Toronto Area case study suggests that urban sustainability continues to gain prominence as a municipal policy objective. This focus is entirely appropriate, as city and regional governments possess the expertise and experience to directly address local environmental issues. Municipalities make land use decisions and infrastructure investments that shape the intensity and pattern of urban growth, protect environmentally sensitive land, and provide infrastructure including water, wastewater, solid waste collection/disposal and transportation.

The flexible character of municipal institutions coupled with knowledge of the local policy context plays an important structural role in the pursuit of sustainable initiatives. City and regional officials are able to respond to sustainability issues much more readily than provincial or federal governments. Key local environmental initiatives funded by municipalities include conducting feasibility studies, implementing pilot projects and monitoring conditions through environmental indicators programs. Additionally, municipal governments capitalize on their inherent immediacy to offer local stakeholders and residents an impressive array of education programs designed to raise awareness and promote sustainable practices.

Local efforts to implement strategic environmental initiatives are constrained by access to a limited range of fiscal tools. This is an ongoing problem directly related to the institutional framework defining the authority granted to city and regional governments across Canada. The NRTEE "Early Warning: Will Canadian Cities Compete?"⁵ report completed by the Federation of Canadian Municipalities clearly documents the challenges faced by municipalities seeking to address increasingly costly and complex urban issues without the requisite resources and power to pursue local objectives. Additionally, province of Ontario has downloaded an array of services to the municipalities without granting a concomitant increase in revenue raising power. As a result municipalities are expected to handle a new level of responsibilities with their

traditional limited revenue sources of property taxes, user fees, and grants/transfers from senior levels of government

Another barrier faced at the local level is the longstanding support for unsustainable urban practices associated with growth, transportation, energy use, open space preservation and waste disposal. Efforts to reverse these well-entrenched trends continue to face resistance from stakeholders intent on maintaining the status quo for their own economic interests.

All of these factors combine to define sustainability efforts in the Greater Toronto Area. Each case study municipality offers a slightly different perspective that gives a broad range of sustainable initiatives.

City of Toronto

Population in the city of Toronto grew 4.0% between 1996 and 2001 to 2,480,000 with a density of 39.39 people per hectare. Concerns continue to focus on environmental problems associated with a large mature urbanized area, but the City has made attempts to respond to these issues in a forceful way. An Environmental Task Force was created in 1998 to identify the sustainability factors requiring attention in Toronto. After extensive deliberations the Task Force identified a series of issues include promoting mixed land use developments in a compact setting, a sustainable form of transportation, improved local quality of life, an energy efficient city with a greater reliance upon alternative fuel sources as well as a robust globally competitive local economy--all supported by a serious commitment to environmental education and awareness.⁶ These deliberations led to the Green Economy Plan as well as A Plan of an Environmentally Sustainable Toronto, which boldly states city's objective to make Toronto a "world leader in sustainable urban living."⁷

⁵ Federation of Canadian Municipalities, 2001.

⁶ City of Toronto, 1998. "A Vision for the Future of the Environment in Toronto."
http://www.city.toronto.on.ca/council/environtf_visionwksop.htm

⁷ City of Toronto, "A Plan of an Environmentally Sustainable Toronto", 1999.

Instrumental in the move toward a more sustainable city is the presence of the innovative Toronto Atmospheric Fund (TAF). This unique arm's length agency was initially created by the pre-amalgamated City of Toronto to promote the reduction of greenhouse gas production. A \$23 million endowment was established to finance the TAF in 1991, and the agency is a source for total or partial funding for many of the city's pilot programs, feasibility studies and educational efforts associated with sustainability issues. Another major contribution of the TAF is an ability to freely enter into partnerships with public and private sector interests. The presence of an entity dedicated to sustainability issues clearly raises environmental awareness and promotes constructive actions that sometime extend beyond the city's borders. Evidence of the TAF's GTA-wide contribution is the annual Smog Summit where governments and stakeholders throughout the region gather to discuss strategies for greenhouse gas reduction.

City of Mississauga

Mississauga is a suburban municipality located to the immediate west of Toronto. As city is the seventh largest in Canada it grew at a rate of 12.6% between 1996 and 2001 to a total of 612,945 with a population density of 21.25 per hectare. As an older sprawling suburb based on the traditional principles of master-planned communities, the city faces the environmental challenges associated with its prototypical low-density form of development. The City's current Official Plan represents a shift in thinking as policy-makers are expressing a desire to promote an ecosystem approach to planning, including the protecting of environmentally sensitive land from the problems associated with development. However, the City can still be characterized as very interested in continuing to promote development where it does not conflict with natural areas. Mississauga is more intent on regulatory approaches to sustainability as opposed to fiscal responses.

Region of Peel

The Region of Peel is comprised of three municipalities--Mississauga, Brampton and Caledon. The 2001 population total is 988,948 and the Region experienced a 16%

growth rate between 1996 and 2001. Peel provides Mississauga with a collection of regional services including water and wastewater, transportation and solid waste disposal. In Ontario lower-tier cities possess land-use planning authority, but the upper-tier regions control the many of the levers of growth through the hard infrastructure. Peel is aware of the impacts development could have and is still financing growth-related projects, but there is also a commitment to preserving and protecting its natural environment.

Town of Markham

Located north of Toronto, the Town of Markham is a municipality of 208,615 people according to the 2001 Census. The Town grew at a robust rate of 20.3% between 1996 and 2001 and shows little indication of slowing down. Mindful of the negative impacts associated with the low-density sprawl associated with a population density of 9.8 people per hectare, the town is making a concerted effort to encourage a more compact neo-traditional with a traditional city center. Markham is also using development charges to direct growth to already urbanized areas (this will be detailed in the Taxing and Financing Growth section). The Town is also actively promoting environmental educational programs designed to encourage a green approach to suburban living.

Region of York

The Region of York occupies the north-central portion of the GTA and consists of nine lower-tier municipalities with a total population of 729,254. The 23.1% population growth rate experienced between 1996 and 2001 far exceeds regional change experienced elsewhere in the GTA. Consequently, York's rapid development has potentially serious sustainability consequences that are exacerbated by ongoing threats to environmentally sensitive land and the significant amount of open space throughout the region. In particular, sustainability concerns rally around effort to protect the Oak Ridges Moraine landform, which is a valued component in the regional ecosystem as a wetland and natural habitat. Mindful of this danger the Region of York's is using municipal expenditures, as is the Province, to ensure the preservation of the Oak Ridges Moraine and other landforms through *The Greening of York* strategy. Additionally, York is pursuing an active sustainability agenda that incorporates municipal fiscal initiatives.

Land Use

Municipal fiscal practices exert significant intended and unintended influence over the location and intensity of urban land uses. A pressing issue faced by city and regional governments is the protection of environmentally significant areas and open space as in the face of continuing growth.

A major focus among the case study municipalities is the effort to conserve and expand urban forests as carbon sinks absorbing harmful carbon dioxide from the atmosphere. The *Greening of York Region Strategy* allocates \$1.8 million for the expansion of the region's existing forest through *the Regional Greenlands Property Securement Strategy*. The program prioritizes properties for public acquisition and is being carried out in partnership with the non-profit Nature Conservancy of Canada and other agencies. York also funds an information and education campaign to encourage land stewardship and promote sustainable forest management among private property owners in the region. At the local level, the *Markham Environmental Land Trust and Securement Fund* is budgeting \$2.1 million for the public acquisition of open space.

At a smaller scale the Toronto Atmospheric Fund (TAF) is funding reforestation efforts through its *Enhancing Toronto's Urban Forests*. The intent is simple, encourage reforestation along major corridors and in environmentally sensitive areas to restore natural habitats and ecosystems, while also creating more green urban recreation space. Non-government organizations are eligible for this funding and readily take advantage of this resource. For example Rouge Valley groups including the Friends of the Rouge Valley and Save the Rouge Valley Systems Inc. received \$72,500 in grants for reforestation activities between 1998 and 2001. In addition to these actions, the 10,000 Trees for the Rouge Valley group planted trees as a result of funding received via the federal *EcoAction* program in 2000. All the case study municipalities spent funds on smaller environmental projects concentrating on ecosystem renewal and park improvement plans such as tree planting, erosion control and park space enhancement

These programs fall under the responsibility of the Mississauga Urban Forestry Unit and the Markham Parks and Recreation Department as well as Toronto Parks and Recreation.

Inattention to the environmental damage being caused by urbanization created many problems in and around many cities. After years of neglect municipalities have begun to enact plans focussing on the preservation of environmentally significant through costly restoration projects. A major catalyst for these projects in the GTA has been the landmark work on ecosystem planning completed by the Royal Commission on the Future of the Toronto Waterfront, which later became the Waterfront Regeneration Trust. With a special emphasis on waterfronts and waterways, these publicly funded projects seek to restore animal and plant habitats, clean polluted waterways and reconnect urban dwellers with their local natural environment. The massive *Toronto Waterfront Revitalization* discussed in the Provincial section of this report is receiving a \$500 million contribution from the City over the next 20 years to restore Toronto's lakefront. Additional Toronto initiatives include *Renaturalizing the Mouth of the Don River* at a capital cost of \$1.3 million, will also be evenly divided between the federal government, the Province and the City. Another noteworthy project is the \$60.7 million Port Lands remediation, which is a significant brownfield redevelopment initiative that could benefit from Ontario's TIFs program. Eventually this reclaimed land will have a mixed-use high development that will be serviced by public transit in a way that could attract growth away from greenfields and to this prime land in Toronto's downtown core.

Fiscal tools have the potential to produce undesirable impacts on urban form as is evident with the *Ontario Property Tax Rebate for Vacant Commercial and Industrial Buildings*. Under this program municipalities provide landowners with a property tax rebate based on the time during the year that a commercial or industrial building remains vacant. Though the intent is to adjust property tax levels to compensate for the absence of economic activity, this tax expenditure has potentially negative implications for sustainability by providing an incentive to keep urban property vacant. Landowners not pressured to reuse underutilized commercial and industrial property that tend to be located in urban cores keep employment space off the real estate market and as a result

potentially force additional development pressures out to greenfield suburban land. Conversely, an example of a fiscal program that can support intensification principles exists in the *Markham Heritage Fund*. Under this program, property owners receive low-interest loans of up to \$15,000 for the conservation or restoration of qualified heritage buildings. This program encourages reuse of buildings and revitalization of urban neighbourhoods while diverting resources away from greenfield locations. Markham is using this program as part of their ongoing strategy to bolster their town centre in the hopes of lessening greenfield development pressures.

Property taxes are the primary revenue source for Canadian municipalities and its administration can greatly influence the shape and intensity of urban growth. A longstanding bias toward single-family residential property owners is a practice that continues to define development patterns across North America. Specifically, lower tax rates are assigned to single-family residential properties in comparison to multi-residential (defined as structures with seven or more units) structures. Consequently, the property tax system provides an incentive to exclude new multi-residential structure from suburban municipalities, thus reinforcing low density and unsustainable development patterns. The GTA case study identifies several attempts to reverse the unfair treatment of higher density rental housing by encouraging the construction of apartment buildings. A new *Multi-residential Property Class* is a tax expenditure created by the Province to permit municipalities to impose a lower than usual multi-residential tax rate on newly constructed apartment buildings. Cities are permitted to grant the special class for the first eight years after occupancy, but after that period the property must be subject to the regular municipal rate.

The Region of York is aggressively making strides toward encouraging high-density residential development by altering the tax ratios between property classes. These ratios determine tax burden of all property classes relative to the single-family residential rate. Ratios above one indicate that a comparably priced property in another class is taxed at a higher rate in comparison to single-family residential properties. Traditionally, single-family residential has received preferential treatment, often at the expense of high-density

rental construction. To correct this imbalance, the Province has mandated a readjustment through prescribed transition ratios to produce a fairer tax structure between the classes. However, York is accelerating the transition with the intent of having a ratio of 1 for the multi-residential property class by 2003. Consequently, York will have a tax ratio equalizing single family and multi-residential properties, thus removing an economic disincentive that could lead to greater intensification activities in the Region's suburban centres.

Taxing and Financing Growth

Fiscal issues associated with growth are largely dealt with at the municipal level of government. Cities and regions are responsible for imposing a cost on new development through taxes and development charges and subsequently using the collected revenue to finance the capital improvements required to service growth. Until the 1980s growth was financed from general revenues and infrastructure continued to be provided on demand to facilitate development. Absence of a fiscal discipline meant that growth was not paying for the costs imposed on municipalities, resulting in a disconnect contributing to an unsustainable form of low-density sprawl.

Development charges were introduced to directly charge growth a fee related to the costs it imposed on municipalities. Revenues generated by these charges must be spent to build the infrastructure demanded by new development. Standard practice for development charges in most Canadian cities, including Toronto and Mississauga, relies upon average cost pricing which applies the same rate to all new growth, regardless of location or infrastructure availability. This is inefficient, as the true economic costs are still not entirely borne by new growth. Markham is moving to rectify this situation by utilizing Area-Specific Development Charges that are based on marginal cost pricing. Through this alteration, Markham is able to calculate a more accurate cost on growth by taking into account infrastructure availability. Development charges are lower in serviced urbanized areas and higher in underserved greenfield locations, creating an economic incentive to intensify development and discourage continued sprawl.

Transportation

Public sector infrastructure investments generally cater to the needs of automobile users, often producing or reinforcing an urban form that leads to the generation of harmful greenhouse gases. Changes to municipal investment are beginning to recognize more sustainable forms of transportation. The recently adopted *York Region Transportation Master Plan* is based on proposals totaling between \$5.6 billion to \$7.3 billion in capital investments over a thirty-year period. A framework is established for all regional transportation decisions by integrating land use planning with rapid transit and sustainable road investments. Part of the plan involves the stated objective to improve York's rapid transit system, expand GO Transit commuter rail service, construct up to 15 new GO Transit stations and coordinate a bus service network linked to the rapid transit system. Development patterns will be required to create suitable demand for mass transit. Funding plans detailed by York assumes a contribution of one third from the federal and provincial governments as well as a significant investment from a private sector rapid transit partner.

Transportation Demand Management (TDM) is a policy aimed at alleviating the environmental problems associated with travel by encouraging public transit use, carpooling, vanpooling, cycling and walking. Peel Region recently purchased property for the potential creation of a new carpool lot and through the acquisition of future sites could persuade suburban commuters to opt for ridesharing. In a more urbanized context, Toronto is committed to fostering an inviting setting for cycling by adopting and implementing the bike plan. A key component of the plan is the 1,000 km bike network that is estimated to cost \$66.8 million. The Toronto Atmospheric Fund contributed toward the cost of formulating the plan, as well as financing a series of bicycle education programs.

Energy

Cities are actively financing the use of alternative energy sources in the attempt to reduce the quantity of greenhouse gases generated through daily urban activities. Many of these initiatives are still under development, as is the case with The Toronto Atmospheric Fund's participation in several innovative clean energy pilot projects. Most notably, it is actively participating in the *Toronto Renewable Energy Cooperative's* planning and construction of the first urban wind turbine in North America. The Cooperative received partial funding from the TAF for a project feasibility study. Additionally, the TAF is providing bridge financing for the construction of the project. Once the turbine is operational, residential consumers will be able to purchase energy generated by the turbine and other renewable resources through a green power pool supplied by Citisource Green Power, a retailer associated with the Toronto Hydro-Electric Commission.

District energy is another innovative alternative to traditional energy sources. Downtown Toronto buildings have access to district energy generated by the Enwave District Energy Corporation. Enwave was previously the city operated the Toronto District Heating Corporation but it is now a private corporation that is owned fifty percent by the city of Toronto and fifty percent by the Ontario Municipal Employees Retirement Fund (OMERS). Four steam generators are used to pump steam heat to public and private buildings across the downtown core. The company, in partnership with the City of Toronto, is currently evaluating the feasibility of expanding its district cooling capabilities through the implementation of the *Deep Lake Water Cooling Project*.

Energy efficient buildings can potentially produce significant financial for property owners and appreciable environmental savings in terms of reduced fuel consumption. The city of Toronto is promoting energy efficiency in new construction, renovations and retrofits through the *Better Buildings Partnership (BBP)*, a public-private partnership that also includes Enbridge Consumers Gas, the Toronto Atmospheric Fund, Toronto Hydro and Ontario Hydro Energy. Thus far, the resulting reduction in carbon dioxide emissions related to BBP programs is estimated to be 4.1 percent. BBP loans and services are available through private sector Energy Management Firms approved by the city and the

TAF provides \$2 million in loan security to improve access to the program. At the residential level, the *Toronto GreenSaver* program provides subsidized house audits to encourage energy efficiency. Homeowners pay \$200 for a comprehensive evaluation that is able to identify drafts and the efficiency of the existing furnace, ducts and water heating systems. Thus far over 12,000 homes have been audited and the TAF estimates that the average annual reduction in carbon dioxide released per house is of 4.2 tonnes.

A strong educational component is essential in the effort to improve urban sustainability. Municipalities in the case study offer a thorough collection of programs geared toward informing citizens about the sustainable options in areas as diverse as water and energy conservation, forestation, encouraging public transit and bike travel, and discouraging the use of pesticides. One example involves the TAF funds "Cool Schools" which provides lessons and class projects to educate students and fund educational projects in order to encourage sustainable practices.

Waste Management

Landfills are quickly reaching capacity as solid waste creation grows as cities continue to grow. The costs of solid waste disposal are evident, as new landfill sites are required to solve the dilemma of garbage disposal. Municipalities are actively pursuing strategies geared toward promoting waste diversion that is encouraging the separation of recyclables by adopting programs that minimize waste generation. Peel Region and Markham have taken a big step by implementing three bag limits for residential waste pick-up. Extra bags require municipal-issued tags, and Peel will begin charging for additional tags in September 2002 while Markham relies upon the inconvenience of obtaining a tag as an adequate deterrent.

Peel continues to purchase and distribute backyard composters at a significant subsidy to residents in order to divert organic waste from landfills. Since 1985 Peel has distributed over 100,000 composters while also initiating a curbside compost pick-up that required the design and construction of a processing facility at a cost of \$12.6 million. York has a

centralized composting facility where residents are able to drop off organic waste for a small fee. York sells the resulting compost to landscaping companies, which helps defray the cost of operating an organic recycling program.

Recycling in Markham is facilitated by the Town subsidizing the cost of recycling boxes purchased by local residents. The Town also uses a section of their subdivision agreement that requires developers to purchase recycling boxes at full cost and then distribute them to all new residential units. Mississauga and Markham fund programs to provide and maintain recycling receptacles in public spaces such as arenas, libraries and government offices in an effort to increase the convenience of waste separation.

Diverting as much incompatible waste as possible is another objective being pursued by municipalities. One area being considered is the disposal of computer and other electronics goods that occupy space in landfills while also containing toxic materials that could create problems. York Region has implemented an *Electronic Recycling Pilot Project* where the municipality collects items at no cost to residents and then pays a private company to properly dispose of the items.

Overall awareness is an essential component in the recycling process and one strategy involves educating the public on the value reducing the pressure on urban landfills. One example worth noting is Markham's Environmental Services Department presentation of recycling education programs in schools throughout the municipality. Markham and the Recycling Council of Ontario jointly fund the cost of this program.

Water and Wastewater

Residential water services in the case study municipalities is mostly metered, meaning the utility charges users by the amount of water consumed on a full cost recovery basis. The use of this economic tool imposes a certain awareness of water usage and increasing the cost can be a valuable way to encourage conservation. Recently, the city of Toronto increased user fees by 9% to finance water infrastructure renewal, but also to serve as an

incentive to conserve. Older portions in the city of Toronto still have residential units that pay for water on a flat rate. Through the *Toronto Water Meter Program* the city pays for the meter installation and provides a bundle of water saving devices such as low flow showerheads, at no cost to the homeowner. The subsequent water savings more than offset the cost of the meter installation. York's *Water for Tomorrow* program is a public awareness campaign offered to encourage water conservation, provide free landscape audits, and supply residents with free upgrades of showerheads and toilets.

Rainwater and melting snow unnecessarily flowing into sanitary sewer systems creates a burden city services that often leads to overflow situations that directly deposit untreated pollutants into water systems. Several programs are being implemented in municipalities to divert runoff away from the municipal sewer systems. Toronto is currently eliminating combined sewers in the older sections of the city that carry both sanitary and storm drainage. The solution is the installation of storm sewers that divert runoff away from treatment plants. Additionally, municipalities such as Toronto and Peel Region have *Downspout Disconnection Program* to reduce the burden on municipal sewer systems and reduce the likelihood of flooding in certain areas, all at no cost to the building owner.

Monitoring the Environment

Data is an important component in the environmental sustainability planning process. Being able to measure current conditions and establish a benchmark is essential for monitoring environmental change over time. Ongoing indicator reports give stakeholders a clear sense of what actions could be required in the future. The Region of Peel funds indicators reports through its *The State of the Environment Program* that individually focus on Atmosphere, Water and Land. Originally the reports were completed between 1995 and 1998, and the Region is currently in the process of collecting the next set of indicators. Similarly, the Region of York released its own *State of the Environment Report* in 2000 with the intent of measuring existing conditions. Access to this information bolsters the decision-making process and also acts as a valuable tool for educating stakeholders on environmental conditions.

House-In-Order

Evidence in the case study suggests all the municipalities are changing their own corporate behaviour in order to enact more sustainable practices. Toronto is making a concerted effort to improve its own practices through its *Energy Efficiency Office*, which is developing a comprehensive energy efficiency and conservation strategy for all city-owned buildings. At the implementation level, the *Better Buildings Partnership* operates the *In-House Energy Efficiency Program* to oversee the proper retrofitting of municipally owned buildings in order to maximize energy and water savings. Additionally, the City has set a goal to purchase 25 % of all its corporate energy needs from *Citisource Green Power*, the agency that sells electricity generated in a sustainable manner. Additionally, the City is encouraging all its agencies, boards and commissions to fill 25% of their energy needs through Green Power program. This cumulative buying power is a strategy designed to create a market that will quickly attract green energy generating companies to Toronto.⁸

Green procurement is another House-in-Order undertaking in place in the case study municipalities. According to the Federation of Canadian Municipalities, Green Procurement involves purchasing products with the following characteristics: durable, reusable or energy efficient, generate less pollution, contain the maximum level of post-consumer waste or recyclable content and provides minimal impact on the environment.⁹ An extensive guide to green purchasing is available from the FCM's Governments Incorporating Procurement Policies to Eliminate Refuse (GIPPER)¹⁰ Municipalities in the case study, have, or are in the process of codifying green purchases into their by-laws. The city of Toronto adopted an *Environmentally Responsible Procurement Policy* in 1999. As one of the single largest purchasers in Canada, Toronto is intent on using its buying power to buy green goods and services, when feasible in the acquisition and tender process. The Region of York is reinforcing its commitment to green products by incorporating the requirement into its purchasing by-laws. Markham is in the process of implementing a Green Procurement program that will review its purchasing procedures to

⁸ Ibid.

⁹ Federation of Canadian Municipalities website

ensure environmentally friendly items are given preference in the purchasing and tendering process.

Several municipalities are making an effort to purchase and operate city-owned vehicles that are hybrid gas and electric or run on alternative fuels such as natural gas. Under the Markham *Green Fleets Plan* the municipality is testing hybrid vehicles with \$100,000 from the town's Hydro Interest Income. The Toronto *Greening our Fleet* pilot program is another example of a municipal effort to move away from gas combustible vehicles. The *Toronto Better Transportation Partnership* (BTP) and the Toronto Atmospheric Fund are jointly funding the purchase of the vehicles, with additional assistance from Toyota Canada and Honda Canada. Since this is a pilot program the city is evaluating the overall environmental and economic performance. York Region is currently studying the feasibility of a similar program, but does have the *Corporate Clean Air Initiative* that sells low sulfur diesel fuel for municipal fleets in the region.

¹⁰ Federation of Canadian Municipalities, *G.I.P.P.E.R.'s Guide to Environmental Purchasing*. (3rd edition).

4 Policies Working to Produce Synergies

Synergies: Federal vs. Other Levels of Government

In this section key federal and provincial programs are identified to highlight actual and potential synergies that would benefit municipal sustainability efforts. It is essential to recognize these links because cost-cutting and downloading can take these positive connections for granted. As a result existing links could be eliminated or potential benefits might be overlooked.

**TABLE 1:
SYNERGIES: FEDERAL VS. OTHER GOVERNMENTS**

<u>Federal Measure</u>	<u>Provincial</u>	<u>Municipal</u>
Transit and Land Use		
1. Moving on Sustainable Transportation (MOST)		X
2. Urban Transportation Showcase Program (UTSP)	X	X
3. Toronto Waterfront Revitalization Corporation	X	X
4. Affordable Housing Program	X	X
5. Residential Rehabilitation Assistance Program	X	X
6. CMHC Mortgage Insurance for Non-Profits		X
7. Regional Watershed Rehabilitation Program	X	X
8. Canada Lands		X
Infrastructure Spending		
9. Green Municipal Enabling Fund		X
10. Green Municipal Investment Fund		X
11. Smart Communities	X	X
12. EcoAction Community Funding Program		X
Energy Efficiency, Conservation, Renewables		
13. Federal Fuel Tax	X	X
14. District Heating and Cooling		X
15. Climate Change Action Fund	X	X

1. Transport Canada recently implemented MOST to fund studies, pilot projects, workshops and educational programs dealing with sustainable transportation. Community, non-government and private sector groups are qualified for the grants, but municipalities are not eligible. However, MOST encourages

applicants to partner with cities in order to maximize the benefit of these grants. Synergies exist as a MOST recipient can take their Federal funding and join up with government agencies such as The Toronto Atmospheric Fund on feasibility studies, pilot projects and educational programs. In fact the TAF cites MOST as a potential funding source for the City's bike plan.

2. This Transport Canada initiative is a partnership program with provinces and municipalities that is structured to advance the cause of sustainable urban transportation. The federal government plans to use the results of selected pilot projects as the basis for a national Greenhouse Gas emission reduction program by 2010, while also establishing an information network for interested stakeholders. Though this is a one-time funding opportunity, it provides a model for federal expenditures being directed toward urban sustainability.
3. The Toronto Waterfront Revitalization is a noteworthy example of a synergy based on collaboration between the Canada, Ontario and Toronto. Each level of government is committed to contributing \$500 million toward the lakefront revitalization. Expenditures will be managed by a corporation comprised of representatives nominated by all three levels of government.
4. Canada and Ontario recently signed an agreement to provide \$480 million for affordable housing throughout the Province in partnership with municipalities as well as the non-profit and private sector. Since most affordable housing is high density and concentrated in urbanized locations, this initiative compliments municipal fiscal actions such as the Province's enabling legislation to reduce the York Region's property tax adjustments to level the playing field for multi-unit residential structures. A problem exists in this area in that the Province of Ontario has only committed a contribution in the form of a grant that is roughly equal to a rebate of the provincial sales tax, a sum that is slightly less than \$2,000 per unit.

5. RRAP is another affordable housing example, in this case dealing with subsidies to renovate rooming houses and other structures geared toward low-income households. Again, most units of this type are located in urbanized areas, and the creation of more units will intensify existing cores.
6. CMHC mortgage insurance improves access to financing for non-profits organizations. In combination with a favorable multi-unit municipal tax structure, the feasibility of non-profits is improved, thus attracting more high-density residential development to urban centres. Since non-profits cater to a broad mix of residents, there is likely to be a group of residents that would have the opportunity to live in urbanized areas who otherwise might only find suitable and affordable housing in greenfield developments.
7. Environment Canada geographically targets specific watershed restoration actions, but a synergy could exist if the parameters are expanded to urban locations. Work done by the Toronto and Region Conservation Agency could qualify for federal assistance.
8. Canada Lands Corporation has significant urban land holdings and could contribute toward local sustainability issues by making development decisions that support local and regional sustainable land use goals. The federal government is not obliged to adhere to local land use planning designations, but a synergy could exist through the disposition or utilization of land to meet municipal objectives. This is a federal house-in-order objective with beneficial local outcomes.
9. Funded by the federal government and administered by the Federation of Canadian Municipalities the Enabling Fund's mission is to enable the pursuit of innovative environmental projects. Synergies exist as the Enabling Fund finances municipal and private sector feasibility studies--four grants were awarded in the case study area in 2002 including Generating Methane from Municipal Waste for

District Energy in Toronto, the Toronto Zoo Biogas Generation Project, Supporting the Development of Integrated Mobility Systems in the GTA and an Energy Conservation Study for Uxbridge Arena and Swimming Pool (Region of York.) This link provides funds to municipalities that are excellently situated to use their unique local knowledge as a basis for innovative ideas.

10. The Green Municipality Investment Fund utilizes a \$200 million permanent revolving loan fund provided by the Federal government to supply low-interest financing for environmentally significant proposals. One loan has been granted in the case study area for the City of Toronto's Humber Arboretum Sustainability Project, which is an extensive educational facility operated in conjunction with Humber College and the Toronto and Region Conservation Agency. These initiatives provide definite synergies by facilitating innovative plans that otherwise might not have access to the necessary funding.
11. The Smart Communities program promotes the urban expansion of information and telecommunication technology. A potential synergy exists with the Ontario SuperBuild that could integrate this program into its infrastructure expenditures in the attempt to reduce commuting and other travel trips in urban areas. Smart Communities could also be integrated with the Ontario Smart Growth Program. For example, the Town of Milton is attempting to develop an “Eco-Tech Village” development, which will incorporate the principles of both initiatives.
12. Funds are available for non-government groups involved in environmental projects, enabling citizens to make a positive contribution toward local sustainability. A strong synergy exists, as is discussed in the Rouge Valley example, as local interest groups interested in environmental activities can attract additional money and interest to city and regional ongoing city and regional ecosystem-based initiatives. Local applications ensure that projects deemed to be the most worthy by citizens receive assistance.

13. Greenhouse gas generating vehicles are the source of the Federal Fuel Tax. A portion of this revenue could be used to support sustainable transportation initiatives as a way to defray the environmental costs created by internal combustion vehicles. The province's GO Transit and municipal systems such as the ambitious York Region focus on rapid transit could benefit from this revenue source.
14. The Community Energy Systems Program offered by Natural Resources Canada through the CANMET Energy Technology Centre provides funds to promote district heating and cooling technologies through feasibility studies, management plans and system testing. A synergy exists with efforts such as Toronto's Enwave that could help defray their current feasibility studies and eventual pilot testing.
15. Organizations addressing climate change issues, including the Ontario Climate Change Fund and the Toronto Atmospheric Fund could collaborate on relevant initiatives. Synergies exist as all three entities focus on pilot projects as well as comparable educational and awareness campaigns. Cooperation could reduce the likelihood of duplication, while also leveraging their resources to strengthen their impacts.

Synergies: Provincial and Municipal Governments

Fiscal tools utilized by the Province of Ontario have the potential to make positive contributions toward municipal sustainability. Several initiatives reinforce city and regional objectives and if properly linked with the Province they can help municipalities overcome the fiscal limitations they continually must face.

Land Use

Local and regional goals related to intensification and the promotion of compact urban form could potentially benefit from several fiscal tools implemented by Ontario. Through the Brownfield Statute Law Amendment Act municipalities can use Tax Increment Financing to remediate contaminated sites and offer an economic advantage to development interests by reducing or waiving local property taxes. This supports in principle the rationale underlying the adoption of area specific property taxes currently being used in Markham. By attracting investment to already serviced areas, municipalities are able to increase densities with minimal infrastructure costs.

The Ontario Tax Reduction for Heritage Property enables cities to offer an economic incentive to rehabilitate historic properties that tend to be located in urban centres. This tool compliments local efforts such as the Markham Heritage Fund that are intended to attract investment to existing urbanized areas and away from greenfield developments.

Open Space and Agricultural Protection

A variety of fiscal initiatives are in place to augment municipal efforts to protect open space and agriculture from development. The Province's Conservation Land Tax Incentive Program and Managed Forest Tax Incentive Program creates synergies with the stewardship goals stated in the Greening of York's Regional Greenlands Property Securement Strategy. These programs offer private property owners an economic incentive to conserve land in accordance with the Region's plan. The Oak Ridges Moraine Conservation Plan, which is applicable to the Region of York and the Natural Areas Protection Program, are examples of specific legislation designed to preserve an environmentally sensitive landform that is subject to significant growth pressures. In this

case the Province is stepping in to use its resources to achieve an urban sustainability objective that would be difficult to fulfill at the local and regional levels.

Transportation

Public transit is seriously under funded at the local and regional levels due to the limited financial resources available to municipalities. However, a viable transit system is essential in the pursuit of a sustainable transportation plan. In response, the Province of Ontario is allocating a portion of its SuperBuild Fund through the Ontario Transit Renewal Program to improve local public transit vehicles. Furthermore, the SuperBuild Fund also includes the Provincial Transit Investment Plan, which is supportive of the capital investments outlined in the York Region Master Transportation Plan. If a sustainable component is indeed incorporated into the Ontario SuperBuild program, a wide range of local initiatives related to cycling could improve local and regional transportation provision.

The primary focus in this section concentrates on the interaction between Federal government policies and those found at the Provincial and local levels. Additionally, the Provincial–municipal synergies is important for defining the potential responses to Federal action and inaction.

5 Policies working at Cross-Purposes

This section of the report conducts an analysis of the current situation in terms of cross-purposes and sustainable urban development policies. This reflects two types of situations. The first case involves governments that have made conscious policy decisions that are in conflict and work at cross-purposes toward supporting measures to support sustainable development. The second case deals with situations where one level of government approves a policy with the intent of supporting sustainable urban objectives while other government(s) choose not to make appropriate supportive policy decisions. The first part of this section addresses the relationship between the Federal level and all other levels of government, while the second section examines the relationship between the Province of Ontario and the municipalities included as case studies.

Cross Purposes: Federal vs. Other Levels of Government

This analysis is based on a comparison of the short list of measures that were identified by the Experts Panel Meeting on the July 4th with the policies that were identified by the case studies for the Province and the municipalities. Table 1 includes all of those measures, both high priority and longer term that worked at cross-purposes as indicated above, with Provincial or municipal policies. The measures are grouped by the issues that were used in the reporting of the Expert Panel meeting. In addition to identifying the existence of the interaction in the table, a short description of the nature of the interaction is identified after the table.¹¹

¹¹ The short list of measures resulted from the second Expert Panel meeting on July 4th, 2002, which followed the first meeting on June 4th. These meetings examined the working data and information assembled by both this research and an analysis of Federal government policies that effect urban sustainability.

**TABLE 2:
CROSS-PURPOSES: FEDERAL VS. OTHER GOVERNMENTS**

<u>Federal Measures</u>	<u>Provincial</u>	<u>Municipal</u>
Transit and Land Use		
1. Fiscal incentives for Residential Renovations		X
2. Taxation of Urban Land: to encourage Redevelopment	X	X
3. Stable Capital and Operating Funding for Transit	X	
4. Capital Gains Taxation of Farmlands	X	X
5. Capital Gains Tax on Ecological Land Gifts		X
Infrastructure Spending		
6. Adopt Standardized Sustainability Criteria	X	
7. Fund Innovative Sustainable Community Projects	X	X
8. GST on Municipal Infrastructure	X	
Energy Efficiency, Conservation, Renewables		
9. Sliding Scale Tax for Vehicles	X	
10. GST on Hybrid Vehicles	X	
11. Tax Incentives for Renewable Energy	X	

1. Since there is a GST charge on residential rehabilitation materials it is useful to indicate that waiving the tax would be supportive of at least one City of Toronto program that among other activities assists in the rehabilitation multi-residential non-profit buildings. The program is the Better Building Partnership that focuses on the energy efficiency component of rehabilitation. Its addresses all components and types of building rehabilitation that could reduce CO₂ emissions. If there was no GST on the work preformed the money in the program could encourage more rehabilitation to meet the program objectives.

2. The Federal government imposes a capital gains tax on the sale of non-residential urban land. This would appear to be a disincentive to sell land for redevelopment that winds up working at cross-purposes with Provincially enabled and locally funded tax policy through Tax Increment Financing and forgiveness of property taxes that may be used to encourage urban redevelopment and intensification.

3. The cross-purposes in this measure are related to the lack of Federal funding for transit. Cross-purposes were not identified with local governments as they have the prime responsibility for transit funding. However, the Province of Ontario is mentioned as they have initiated several funding programs including transit renewal. Perhaps most significantly they are funding the operating costs of GO Transit and have a ten-year capital plan in which they hope to have Federal Government financial participation.
4. The concern of this measure is the elimination of the capital gains tax on farmland in order to maintain the viability of agricultural uses. The absence of this exemption works at cross-purposes with Provincial legislation and local government funding of property tax reductions on farms that supports farming enterprises. Farm classed property in Ontario is taxed at 25% of the single-family residential rate.
5. The taxation of capital gains on land given for ecological reasons to governments works at cross purposes to programs and efforts by municipal governments such as Markham and York Region that are making efforts to have the private sector contribute to lands for parks open space and ecological purposes. This includes efforts like the Rouge Alliance and other York Regional Forest acquisition initiatives.
6. The Federal –Provincial Infrastructure Program has not adopted sustainability criteria for the approval of projects. However, the Province via its SuperBuild and Smart Growth initiatives has indicated that it supports infrastructure investments related to sustainability. However, there needs to be a common criteria and standard to be consistent and strengthen this approach. One might expect that the Province may not apply the criteria if Federal funding is available for a project that they deem to be important. Therefore, there is the need for consistent sustainability criteria to be applied to project funding.

7. While the Federal government has not explicitly undertaken this approach, there is some evidence that this has been undertaken by the Provincial government in some of its SuperBuild funding in conjunction with municipal initiatives. For example, funding for what has been termed “Green” infrastructure for the City of Peterborough’s wastewater treatment system. However, it is not clear that this is actually a consistent approach undertaken by the Province in its infrastructure funding allocation.
8. Whereas municipal governments pay GST on infrastructure expenditures, Provincial governments and territories are not subject to the GST. This means that Federal and Provincial Infrastructure grants do not buy as much infrastructure as they could if this tax was eliminated. There is a benefit in this system if the Provincial government undertakes the infrastructure, which is not subject to the GST. Municipal governments do get a rebate but still pay effectively 3% tax.
9. Despite the lack of this approach by the Federal Government, the Province has a program called ‘Tax for Fuel Conservation’ in which there is a sliding scale of tax (or rebate) related to the sale and long term leasing of vehicles. The amount of the tax or rebate is determined by the fuel consumption of the vehicle. The program would be more effective in terms of the quantum of the financial incentive, if a similar Federal program supported the Provincial government.
10. Once again the Provincial government has the incentive while the Federal government does not have a similar motivation. In this case, the Province has a program entitled the Alternative Fuel Incentive Program_in which rebates on the retail sales tax are provided for qualifying vehicles that are hybrids or those that use alternative fuels. As with the last measure the financial incentive would be enhance with a compatible Federal program.

11. Although a specific Provincial program is not currently in place to support the use of renewable energy, it is important to be aware that there have been some recommendations made to support renewable energy at the Provincial level by the recent “Report of the Select Committee on Alternative Fuel Sources”, June 2002. Section A.12 of the Report addresses that relationship to Federal energy policies and makes six recommendations, which are generally regulatory in nature. If any of the recommendations in the report are implemented the lack of Federal initiatives may work against them.

Cross-Purposes: Provincial vs. Municipal Governments

Although the main focus of the study is the relationship between Federal policies and other levels of government, it is also useful to comment on the interaction between Provincial and local government policies. This is important to understand because in considering Federal government policy alternatives, it is important to know when they will be received positively by both lower levels of government, or whether a new policy will have differential impacts due to conflicting Provincial and local policies in major cities.

Since the Province and municipalities have different taxing responsibilities and expenditure/service areas, the most useful way to make the comparison between these two levels of government to identify cross-purpose urban sustainability policies in each of the issue areas used to organize existing Provincial policies in section 2 of this report. In the area of “Greenfields vs. Urbanized Land” Provincial policies such as the Land Transfer Tax rebate favour the purchase of new housing which supports greenfield development that is associated with sprawl. This not only tends to work at cross purposes with municipal regulatory land use policy that tends to encourage intensification and compact urban form, but it also works against the benefits of area specific development charges which should support lower charges, i.e. marginal costs, adjacent to built up/serviced areas. It also works against those municipalities choosing to apply tax

increment financing to support intensification, and those municipalities choosing to apply lower property tax rates for new multi-family residential buildings.¹²

In the area of “open space and agricultural protection” there does not appear to be any cross-purpose tax or expenditure policies that exist between the Provincial and municipal governments. Perhaps the municipalities feel that there may be missing opportunities or the need for greater Provincial expenditures in some areas of open space/ ecological land acquisition in joint purchase such as those for York Region’s Greenlands Property Securement Strategy or the Rouge Alliance. This could be achieved by increasing allocations to the Ministry of Natural Resources Natural Areas Protection Program and perhaps expand the eligible geographic locations. We do recognize that the funding for the Oak Ridges Moraine Conservation Plan is an important contribution for the entire Greater Toronto Area, but there may be other specific municipal needs as well as this broader need for the moraine.

The major cross-purpose issue regarding “infrastructure including transportation and transit’ has to do with transit expenditures. Too much of this burden has been downloaded on the municipalities despite new post-downloading funding such as the Provincial Transit Investment Fund and the Ontario Transit Renewal Program. There is also the question of road improvement expenditures by the Province being counterintuitive to supporting municipal public transit ridership and high-density urban form. If ridership decreases it will affect transit fares and the user fees that will be charged may affect municipal expenditures in financing public transit. Again new and improved transit is essential to support higher density built form.

The last area is “energy” where the Province has some initiatives relating to fuel usage for automobiles, and the use of alternative fuel automobiles. However, the Select Committee on Alternative Fuel Sources Report is recommending that municipalities use alternative fuels in their vehicles and buy vehicles that support this approach, the

¹² The Ontario property tax legislation permits municipalities to undertake this approach at council’s discretion. It would be expected that multi-family residential property tends to be built in more fully developed areas, including infill, and where transit exists as opposed to greenfield sites.

Province may need to provide some fiscal incentives for municipalities who currently do not undertake this approach or to accelerate fleet replacement for those who may be undertaking these initiatives independently. Some municipalities are already pursuing alternative fuel approaches under general greening type programs.¹³ Municipalities may support the reduction of automobile use by altering parking rates in municipal garages in peak periods, or if they could place tolls on certain roads to reduce driving in urban areas. This as well as obtaining and perhaps increasing the gas tax in urban areas would require Provincial legislative approval. It has also been suggested that an approach could be to place a toll on all 400 Series highways coming into Toronto as a potential approach to reduce congestion and raise revenue that could be directed toward financing public transit. The Province could also support other municipal energy measures such as Toronto's Better Building Partnership. Finally, there is no Provincial support for district heating such as that originally undertaken by the City of Toronto, and now Enwave.

In conclusion, the main focus in this section should be on the interaction between Federal government policies and those observed at the Provincial and local government levels. However, the Provincial–municipal government interaction in terms of cross-purpose policies and lack of consistent support may be instructive regarding interactions, relationships, and responses to Federal policies that may be considered.

¹³ The "Select Committee Report on Alternative Fuel Sources" has a section A.11 devoted to the municipal sector with a set of recommendations that are mostly regulatory. However it does recommend a 25% Provincial contribution toward the municipal purchase of alternative fueled vehicles.

6 CONCLUSION

There is a clear range of tax and expenditure policies related to urban sustainability that currently exist across the Federal, provincial, and municipal levels of government. They fall into three different categories with regard to potential interactions: they can create synergies, they can work at cross-purposes, or they can be latent in terms of having the potential to create synergies if one government is willing to take the appropriate policy decision. It is important to identify and be aware of synergies across government policies for two reasons: first, so that they can be built upon and improved in terms of outcomes. In order to create this added value, the nature of the synergies must be understood. Second, it is necessary to be aware and understand them so that policies are not changed or funding is inadvertently decreased only to later realize the negative impacts involved. With regard to policies that work at cross-purposes, coordination is necessary to ensure that several levels of government are pulling in the same direction to meet a specific policy objective. The same is true where the potential is identified. If one government will simply examine a policy field and then make a positive step to undertake a new tax or expenditure, enhancements may be possible. In either case, negotiation and coordination may be required across various levels of government to achieve a positive result.

There are some areas where synergies have been identified across all levels of government. In particular this occurs with the Canada-Provincial Infrastructure Program. However, despite the existence of synergies, this needs to be strengthened by adopting environmentally sustainable criteria for the selection of programs. This is purported to exist in the Ontario SuperBuild funding, but it needs to be strengthened from the Federal perspective. The Toronto Waterfront Revitalization Corporation is another area of synergy. However, this may be a “one off” investment in the waterfront of a major city rather than a model for continued development in major urban areas. In the transportation area there is a Transport Canada pilot program focusing on sustainable urban transportation. The program's primary objective is a reduction in greenhouse gases. However, this is a limited pilot project with uncertainty about funding beyond the pilot programs. There is also the Municipal Green Enabling and Investment Funds that

provide some synergies with municipal governments in attempting to meet common environmental objectives.

The point is that all of these synergies need to be developed and matured either by tightening up the criteria and relationships among the participating governments, or by a willingness to invest more funding on a permanent sustaining basis. This is necessary to provide other governments the opportunity to respond to the initiatives, and plan to have the funding available for its use in future years.

In terms of what has been called “house-in-order”, it appears that most municipalities have their own initiatives that amount to “house-in-order” approaches although they may not formally use this term. The information collected and discussions with officials sited numerous “greening type programs” in terms of open space, water sustainability, alternative fuels, fleet purchases etc. However, these tend to be stand-alone policies and are not always integrated with programs at senior levels of government.

As we examine the hierarchy of synergies, they are most effective when not only the Federal government and provinces work together, but also when municipalities share common objectives and policies with the provinces. In the Ontario case, Local Services Realignment has adversely affected this relationship as “downloading” has dismantled the previous Ontario grant system to municipalities. Under the previous system, there was a catalogue of known grants; many of which were conditional, and they lead to similar policy objectives between the Province and municipalities. This relationship was reinforced by the “conditional” requirement of matching expenditures. This led to synergies in areas where the Province wanted lead by financial incentives. Under the new system there is less potential for consistent policies to be applied across municipalities throughout the province as SuperBuild funding tends to be more “one off” and strategic than comprehensively available for all municipalities to meet a specific objective.

In examining the four areas of issues that were addressed at the expert panel meetings; urban form (greenfields vs. urban development), infrastructure including transportation

and transit, open space (ecological) and farmland preservation, and energy, there is consensus among the municipal officials interviewed for this study regarding the most significant sustainability urban problem that exists and that the same problem also presents the greatest need for synergies. This is the need for improved transit and associated funding which includes the use of taxes to accomplish this objective. In considering the issue areas referred to above, transit is not surprising choice as it relates to all the other major of sustainable issues. It is central to the urban form and intensification issue, particularly in this era when most municipalities are concerned with encouraging higher densities to support public transit and reduce traffic congestion, and address the negative effects it generates. Support for public transit by encouraging higher densities of development will also help to protect the infringement of growth on farmland, ecologically significant areas and open space. Also sustainable transit with higher development densities will lead to energy efficiency as people may use public transit rather than automobiles. Higher densities also provide the opportunity for the use of district heating and cooling. Having considered these linkages it is not surprising to hear officials identify public transit as the prime issue, and the area where synergies need to be developed via expenditures and support from the Provincial and Federal government. Financial support could be generated from tax revenues, by allocating a percentage of the gas tax for public transit funding, or in the Greater Toronto Area through the imposition of a toll on the 400 series highways with the revenue supporting municipal public transit.

Another other type of synergy referred to exists through the use of public-private partnerships. This is a message being delivered by the Province via its SuperBuild program. Municipal officials considered this to be an important element to consider in a number of areas including the acquisition of ecologically sensitive lands, and new public transit facilities. The point is that we are in an era of fixed resources where cooperative activities are important and partnerships, linkages, and synergies should be developed in multiple directions, public and private. One of the most important areas where attempts must be made to ensure that there are synergies and cooperation is between the Federal and provincial governments. Urban sustainability is jeopardized when these two levels of

government assign blame to each other for their inaction on sustainable programs, or claim that the other senior level of government does not want them to participate. In fact, both the federal and provincial governments must consult with municipal decision-makers who possess the knowledge and expertise needed to properly inform the urban sustainability policy-making process.

This report has shed some light on policy areas where governments have performed well, where there is the need for a change in direction to eliminate working at cross-purposes, and where there are opportunities for cooperation to coordinate policies. It is imperative for the well being of cities that positive steps are taken in these areas.

Appendix A: Government Officials Interviewed:

Jim Baird, Manger of Policy Planning, Town of Markham

Paul Bedford, Chief Planner and Executive Director City Planning Division, City of Toronto

Chris Goethel, Senior Economist, Ministry of Finance

Patrick Moyle, Executive Director, Association of Municipalities of Ontario

David O'Brien, CAO, City of Mississauga

Almos Tassonyi, Policy Analyst, Ministry of Finance, Province of Ontario

Bryan Tuckey, Planning Director, Region of York

Nick Tunnacliffe, Commissioner of Planning, Region of Peel

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Environmental Task Force

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