

INFORMATION REPORT

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: October 17, 2011	
SUBJECT/REPORT NO: Smart Commute Hamilton Annual Report 2010 - (PW11069) - City Wide) (Outstanding Business List)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department	PREPARED BY: Peter Topalovic (905) 546-2424, Extension 5129
SIGNATURE:	

Council Direction:

Council at its meeting of June 23rd, 2010 approved the following:

- (a) That the General Manager of Public Works be authorized and directed to execute, on behalf of the City of Hamilton, certain funding agreements with Metrolinx regarding Smart Commute Hamilton Services, and all necessary associated documents required to give effect to Smart Commute Hamilton programs, to the satisfaction of the City Solicitor;
- (b) That funds be made available from the Transportation Demand Management Programs Capital Projects account (4030855820) for Smart Commute Hamilton programs and services;
- (c) That staff be directed to report back to the Public Works Committee annually on the funding agreements and all necessary associated documents relating to the Smart Commute Hamilton programs that have been executed by the General Manager of Public Works.

Information:

This report is in response to the council direction cited above in item (c), that an annual report on Smart Commute Hamilton services and Transportation Demand Management (TDM) activities be provided to Council. The report will provide details on programs, initiatives, research activities, awards and policy analysis conducted for the purposes of managing travel demand at workplaces, schools and neighbourhoods in all wards.

Smart Commute Hamilton and the City of Hamilton's Public Works Transportation Demand Management (TDM) team were very active with a variety of programs in 2010. The programs vary in nature from new incentive programs for carpooling, and TDM Guidelines for land use to education and city wide events. The team continues to develop and improve relationships with partner organizations. Relationships with these partners have led to a variety of successes over the 2010 year including provincial awards, financial grants and engaging programs.

This report is separated into the following categories which outline key elements of the TDM and Smart Commute Hamilton Program:

1. Smart Commute Employer Services
2. Sustainable Transportation Events
3. Pedestrian Realm
4. Cycling
5. Transit
6. Ridesharing/Carpooling
7. Car sharing
8. Telecommuting
9. Policy Analysis, Research and Workshops

Smart Commute and TDM are key to implementing Metrolinx's "Big Move", the regional transportation plan for the Greater Toronto and Hamilton Area; specifically they relate to: (a) Strategy #2 Enhance and Expand Active Transportation, (b) Strategy #4 Create an Ambitious Transportation Demand Management Program, (c) Strategy #7 Build Communities that are Pedestrian, Cycling and Transit-Supportive.

Smart Commute and TDM are also central to the implementation of Hamilton's Transportation Master Plan and Official Plan, while also aligning well with the Transportation Association of Canada's (TAC) Effective Strategies to Influence Travel Behaviour. Appendix A outlines how TDM helps achieve the measures and targets of the Transportation Master Plan and Appendix B outlines TAC strategies that are in place and planned in the short and long term.



Smart Commute Hamilton is an association led by the City of Hamilton which works with local businesses and community organizations to provide programs and initiatives that encourage the use of active and sustainable transportation for improved employee health and wellness, cost savings and reduced environmental impact.

Transportation Demand Management is a set of tools, policies and programs that aims to reduce the travel demand associated with single occupancy vehicles (SOVs) and encourage a shift to other modes including: walking, cycling, transit, carpooling, carsharing, telework and work-shifting.

It examines why, when, where and how people travel in order to more sustainably manage the demand in a cost effective manner.

1. Smart Commute Employer Services

Smart Commute Hamilton works with corporate partners to provide them with a range of services to help manage their travel demand, reduce parking requirements, improve employee health and wellness, reduce commuting costs and reduce environmental impact.

Employer Engagement Process

Each employer completes an employee survey along with a site analysis, which evaluates the existing infrastructure and current travel flows. The data is analysed and a transportation demand management plan is developed to help reduce single occupancy vehicle use at the employer site.

The employer also receives services that are provided, in part, by Metrolinx which include:

- Carpoolzone.ca, a ride matching service
- EmergencyRideHome.ca, commuter insurance
- Commute Cost Savings Calculator
- SmartCommute.ca, an integrated suite of online services
- Smart Commute Expos and Events
 - 22 expos were conducted at 11 employer sites to help employees learn about sustainable transportation and health and wellness
 - 20,000 employees were directly engaged
- Each employer received a survey and a site analysis to help them determine the types of infrastructure improvements and program improvements that would have the best benefits for their employees this includes:
 - Secure bike parking
 - Transit route awareness
 - Carpool parking
 - Carsharing programs
 - Walking and cycling routes analysis and promotions

Number of New Employers in 2010:

7

Number of Total Employers:

11

Percentage increase:

64%

Number of New Employees in 2010:

10,500

Number of Total Employees:

80,000

Percentage Increase:

13%

New Metrolinx Funding Secured:

\$40,000

Total Metrolinx Funding:

\$100,000

Percentage Increase:

40%

Current Employer Partners:

McMaster University
Mohawk College
Hamilton Health Sciences
St. Joseph's Healthcare
City of Hamilton
Horizon Utilities
McMaster Innovation Park
Canadian Automobile Association
Hamilton Chamber of Commerce
McMaster Downtown Centre
ILR Industries

Appendix C contains the list of all partners including community partners.

Awards and Recognition

Smart Commute Hamilton was named one of the:

Top 3 Performing TMAs (Transportation Management Associations) out of 11 in the Greater Toronto and Hamilton Area receiving a \$2500 bonus to be used in 2011 in recognition for exceeding employer targets.

2. Sustainable Transportation Events

Open Streets Hamilton (June and Sept. 2010)

TDM staff helped establish the inaugural Open Streets Hamilton: A unique street fair that celebrates physical activity and recreation in our City, while introducing people to the businesses and organizations that make our community great. A network of streets is "opened" to pedestrians but limits vehicular traffic, creating a temporary urban park allowing 12,500 to participate over 2 events (www.openstreetshamilton.ca)

Awards and Recognition

Open Streets Hamilton (OSH) was presented with the **Smart Commute Champion Award** by Metrolinx, recognizing OSH's efforts in promoting sustainable mobility in the GTHA. This award is presented to one organization in the region that exemplifies a champion of sustainability.

Clean Air Commute Week (June 2010)

Participants are encouraged to log their sustainable commutes during one week in June in order to reduce their green house gas emissions, improve their health and wellbeing and reduce their environmental footprint.

In addition, a week of events takes place including:

- > Clean Air Commute Breakfast Launch
- > Bike to Work Day
- > Walk to Work Day and Lunchtime Walk
- > Transportation & Healthy Living Fair (Gore Park)

Awards and Recognition

The City of Hamilton was awarded the "Most participants to log sustainable commutes" prize in



Number of Engaged Participants:

12,500	OpenStreets Hamilton
2,000+	Clean Air Commute
400+	Bike to Work Day
700+	Wristbands (free HSR)

Participating employers, organizations and community groups:

100 +

Community and Business Benefit:

- Increased Business
- Downtown Renewal
- Media Recognition
- Healthy Lifestyle Promotion
- Cost Savings for participants

the Over 5000 Employees category and McMaster University was awarded the prize in the 2500 – 5000 Employees category for the Clean Air Commute across the entire GTHA.

The Transportation and Healthy Living Fair engaged 30 sustainable businesses and 450 participants in two hours in Gore Park (June 2010).

700 Smart Commute Hamilton Wristbands were given to participants in order to use the HSR for free on Thursday of Clean Air Commute week.

3. Pedestrian Realm

Ministry of Transportation Grant – Hamilton Pedestrian Initiative

The City of Hamilton received a \$47,500 grant from the Ministry of Transportation TDM Grant Program for the Smart Commute Hamilton Pedestrian Initiative (which will be implemented in 2010/11). This includes:

- **Transportation Summit: “Taking Back the Streets”** (April 2010), brought together 80 community leaders, NGOs, City staff, concerned citizens and business leaders to discuss, brainstorm and monitor progress regarding transportation issues related to pedestrians. Outcomes of the conference can be found on the [Transportation Summit website](#). The outcomes include many of the elements of the pedestrian initiative which are listed below.
- Undertaking a City-wide **Pedestrian Master Plan** relating to the Walking Master Class and 8 principles of the International Walking Charter (www.hamilton.ca/pedestrianmp).
- Establish a **Pedestrian Committee** to facilitate a multi-stakeholder approach to implement the Walking Charter principles and Master Plan recommendations.
- **Active and Safe Routes to School Infrastructure Funding** for improved bike racks and the development of a green committee toolkit for schools. Currently 11 schools are installing bike racks through the program, which is promoted and developed in partnership with Public Health Services. A total of 20

MTO TDM Grant Funding

\$47,500

Programs funded by the Grant

Open Streets Hamilton
12,500 participants
50+ employers/groups

Transportation Summit
80 delegates
Key actions and outcomes

Pedestrian Master Plan
Pedestrian Committee

School Bike Rack Funding
11 schools participating
20 schools planned in 2011

Bike Routes and Trails
Google Mapping
Partnership has allowed us
to make trails and routes
searchable online

schools are projected to participate in the program with each school installing 1 to 4 racks holding 6 to 24 bikes.

(<http://www.smartcommutehamilton.ca/en/schools/cyclinginfrastructure>)

- Establish a **Pedestrian Website** to include the pedestrian survey, events calendar, links to associated agencies and an interactive walking, cycling and trail map. This function is currently underway as part of the pedestrian master planning process
- **Open Streets Hamilton**, a temporary urban park and street opening event, had a very successful first year. The program helped to improve awareness for sustainable transportation and engage businesses and community groups in programs that encourage walking, cycling, taking transit, carpooling and carsharing. The ultimate goal of the program is to improve quality of life and provide physical activity opportunities for all neighbourhoods in Hamilton.

4. Cycling

The TDM program supports the installation of cycling infrastructure with a variety of initiatives and programs intended to promote the use of cycling routes, bike lanes, trails and amenities for commuting to work and school, leisure and recreation.

Secure Bike Parking

In partnership with the Metrolinx BikeLinX Program, \$167,000 in funding provided by Metrolinx is being spent to develop facilities at various locations in the City. In 2010, a 32 bike facility was built in the City Hall parking lot. This was built to complement the existing locations at the York Boulevard Parkade, Summers Lane Parkade and McMaster University. In 2011 facilities at Mohawk College and St. Joseph's Healthcare are planned.

Secure facilities are enclosed, have controlled access through magnet swipe card technology, are monitored by closed circuit TV cameras or security guard, are well lit and provided at a nominal cost to the user.



(Bike Parking in the York Parkade)

Total Number of Secure Bike
Parking Spots:

146

Usage across all facilities:

75%

Bike Parking for Schools

This program is part of the MTO TDM Grant Application as described in Section 3. Transportation planning staff process applications for school bike rack grant money requests. Schools are eligible for \$600 in grant funding per school. 11 schools are currently participating in the program. An additional 5 -10 schools will install racks by the end of 2011 when the program is completed. A total of 16-20 schools will be engaged for a total of \$10,000 in bike rack funding.

Active and Safe Routes to School & “Stepping It Up” Pilot Project

Transportation Planning staff support Public Health staff on a joint program lead by Metrolinx to establish school travel plans in the region. School travel plans involve undertaking inventories, audits and walkabouts at participating schools and assisting in trip and route planning. Ten Pilot School Site Analysis were completed in 2010 and 5 additional pilot schools will be complete by 2011. Action items from the planning processes are forwarded to various City departments that are able to respond to the request with timelines, project status and probability of the request being met.

Wear Yellow Day

A new TDM initiative in 2010 developed to complement the “Stepping It Up” project involved the encouragement of students in participating schools to walk, cycle, or take the bus to school and wear yellow, the colour of school transit. Students who participated received leaves to put on their school’s “Tree of Transportation”. Schools were also encouraged to creatively display their Transportation Trees, leaves and students wearing yellow. The winning school received \$500 towards school projects that involved physical activity. Over 15 schools participated in the program.



St. Marguerite D'Youville, winning school for Fall 2010 competition

CAN Bike Cycling Instruction Courses

Transportation planning staff have been working with Public Health, Traffic and Recreation to establish CAN Bike Courses at various Recreation Centres. The program is planned for a spring 2012 start. CAN Bike courses are offered through the Canadian Cycling Association and are comprised of a standardized series of courses on all aspects of cycling safety on the road for recreational and commuting purposes.

Bike Share Feasibility Study and Business Plan

In August of 2010 a workshop was held for the public and key stakeholders. Bike sharing companies, Bixi and B-Cycle demonstrated their public bike share systems and collected feedback from stakeholders on a plan to have a public bike share system in Hamilton.

A Feasibility Study completed in 2010 demonstrated that Hamilton could support a Bike Sharing system. A business plan is currently being developed, with potential implementation in 2012, using a not-for-profit model, similar to that of Minneapolis' "Nice Ride" Program.

Bike to Work Day

On May 30, 2010, Smart Commute Hamilton organized group rides from various locations around Hamilton to meet in Gore Park, the Downtown GO Centre, McMaster University and Mohawk College as part of Smart Commute's Bike to Work Day across the GTHA.

Bike to Work Day T-shirts, healthy snacks and prizes were offered to all participants. Cyclists were asked to register online.

A total of 350 experienced and new cycle commuters rode to work together and explored Hamilton's cycling route. Of those who participated over 150 registered online prior to the event: <http://www.smartcommutehamilton.ca/en/events/biketoworkday2011>

Car Free Day

On Sept. 22, 2010, Hamilton celebrated Car Free Day with a second Bike to Work Day and a reception at the Hamilton GO Centre, a Parking Space Party on James Street North and a "Bike-in" Movie Night in Gage Park. The events were intended to celebrate car-free travel and reward those who walk, cycle and take transit to work or school.

5. Transit

The TDM program supports transit in a variety of ways, over and above promoting the use of transit for commuting purposes through the Smart Commute Employer Services Program.



Expanded Subsidized Employer Commuter (EC) Pass program

In June of 2011 Council approved the EC Pass Pilot Program (for Hamilton residents) that was developed in 2010. A \$40,000 upset limit has been allocated from the Transit Gas Tax Reserve to pilot the program which will match the contribution an employer makes for an employee's transit pass, up to 20% of the cost of the pass. It is estimated that 2 – 4 employers will participate in the Pilot. TransitZone.ca will be used to manage employee requests for subsidized passes from various employers as a 1-year pilot for 2011-12, with quarterly reports.

Rural Routes

Transportation planning staff and the HSR support Environment Hamilton in this program which links transportation and local food. Participants have the opportunity to take an HSR bus to a farm and learn more about the farm and buy or pick some of the food they grow. The monthly event runs from June to October and has helped reduce the trips made to outlying Hamilton area farms by single occupancy vehicle and provides a more sustainable travel option for accessing area farms. The event involved a once per month bus service to local area farms with 5 farms visited in 2010 and over 300 participants (www.smartcommutehamilton.ca/en/events/ruralroutes)



Awards and Recognition

The Rural Routes Program was the recipient of the Ontario Government's 2010 Premier's Award for Agri-Food Innovation Excellence, in recognition of the program's innovation and its efforts to strengthen Ontario's farming industry.

Bikes and Transit

Transportation planning staff and the HSR support the initiative to encourage and facilitate bicycle and transit travel across the Greater Toronto and Hamilton Area and the Niagara region. The website features inexpensive, "self-serve" cycling day trips using local busses, GO transit and highway coaches to get to destinations for day and overnight trips (www.bikesandtransit.com).



6. Ridesharing/Carpooling

Two of the key services provided by Smart Commute Hamilton are CarPoolZone.ca and EmergencyRideHome.ca. These services work together in order to help commuters get to work more sustainably and cost effectively.

Carpool Week and CarpoolZone.ca

Carpool Week occurs in the month of February and encourages new employees to create a Carpoolzone.ca account and rewards those who are already in the Zone. Contests, employer expos and prizes were offered to encourage people to sign up. The grand prize included an Apple iPad to complement the Tim Horton gift cards (smartcommutehamilton.ca/en/events/carpooltowin)

Awards and Recognition

- From November 2009 to March 2010 the City of Hamilton was considered the fastest growing carpooling community in the Greater Toronto and Hamilton area with a 117% growth.
- From November 2010 to March 2011, the City of Hamilton doubled the number of carpools formed in the seeing a 77% increase, the largest increase amongst the 11 Transportation Management Associations in the GTHA.

Emergency Ride Home (ERH)

Emergency Ride Home, a “Commuter Insurance” Program, enables employees to commute sustainably to work while being assured that they have a way to address an emergency. If an urgent situation comes up unexpectedly during the course of the workday, registered employees who regularly commute sustainably to work are eligible for a free taxi ride home. In 2010, the ERH was offered to all Smart Commute Hamilton employers. Registered employees are eligible for up to 4 emergency ride homes each year. In 2010, employees at the City of Hamilton and Horizon Utilities made use of the program on three occasions.



www.CarpoolZone.ca is a ride matching tool that connects employees with similar commutes, making it easier to carpool with people in the same company.

Growth in Number of CarpoolZone Employee Registrants

117%

Growth in Number of Carpools Formed:

77%

Number of Carpool Parking Spots

15 at McMaster University

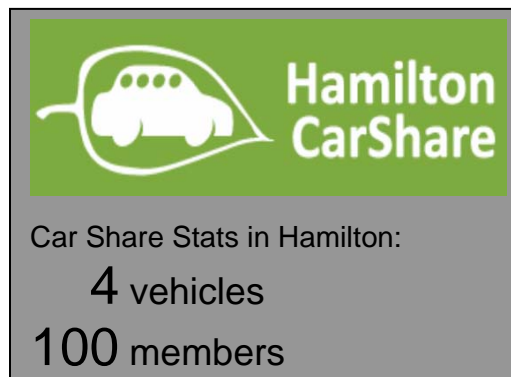
25 at Hamilton Health Sciences

Spots also planned at
> City of Hamilton sites
> St. Joe's Healthcare
> Mohawk College



7. Car Sharing

Hamilton CarShare has operated a successful service since 2009. They are currently seeking to expand the program and develop a corporate carsharing program in addition to their community car sharing program. CarSharing is another example of a TDM program that supports reduces congestion and the need for multiple car ownership, reduces parking demand and improves air quality.



A Hamilton Car Share delegation to General Issues Committee in 2010 requested a \$150,000 revolving line of credit from the City of Hamilton to expand CarSharing in Hamilton and establish it as a sustainable mode of convenient transportation. Transportation Planning staff along with the Corporate Finance, Central Fleet and Facilities and Public Health Services have been collaborating on a report. It is anticipated that a staff report will be considered by Council in October 2011.

8. Telecommuting

An employee who telecommutes is able to work from home or a satellite office for a portion of the work week, while still meeting their work expectations and performance goals. In general, their daily commute to a central place of work is replaced, in part, by telecommunication links (cell phones, laptops and software-based solutions). There are many benefits that may be achieved from telecommuting including higher employee engagement, higher productivity, enhanced work-life-balance, reduced environmental impact, decreased green house gas emissions, reduction in road congestion and potential cost savings for the commuter and the employer.

Transportation Planning staff worked as part of a multi-departmental team to develop a telecommuting policy for the City of Hamilton. A six-month telecommuting pilot program will be considered in the fall of 2011 for designated staff and results from the pilot will be shared with Hamilton-area employers. Employers who may also be interested in introducing a telecommuting program will benefit from the pilot program and other data and information available through Smart Commute – Metrolinx resources.

9. Policy Analysis, Research and Workshops

TDM and Land Use Study

This study is intended to work towards the goal of implementing long term policy approaches to include TDM into the development review and approvals process. Long term policy approaches include official plan policies, secondary plans, and transportation master plans. However, interim strategies to contribute positively to the approvals process include the development of TDM guidelines for developments. This checklist-based approach provides developers with infrastructure and behaviour changing guidelines to help increase the sustainability of their development and improve their transportation-related LEED points. This is meant to complement existing Transit Oriented Development guidelines. In 2010 a set of draft guidelines were developed. Other municipalities are conducting similar internal studies as part of the Greater Toronto and Hamilton Area TDM Coordinating Committee.

TDM and Land Use Workshop

Public Works and Planning staff worked with their partners across the Greater Toronto and Hamilton Area (GTHA) to gather senior provincial and municipal transportation and community planning officials to develop a better understanding of how to incorporate TDM in the planning and development approval process. This process will make new developments and redevelopments more transit, cycle/pedestrian and TDM friendly. The full-day workshop held in Metro Hall in downtown Toronto for 75 delegates in February of 2010, aimed to identify areas of common thinking on basic standards for TDM in development projects across the GTHA.

Key outcomes of the workshop were to create a GTHA-wide TDM Plan which includes guidance for TDM policy development and implementation. Municipalities that do not include TDM in transportation plans should develop and include TDM policies within plans and municipal development process requirements. Information obtained at the workshop will be used to develop the TDM guidelines for developments.

Complete Streets

Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work.



The revitalization of York Boulevard is a good example of a Complete Street Project.

They allow buses to run on time and make it safe for people to walk to and from train stations. The renovation of York Boulevard provides a good example of a complete street in Hamilton.

Transportation Planning staff attended the Complete Streets Workshop (April 2010) coordinated by the Toronto Coalition for Active Transportation. In 2010, staff researched a variety of complete streets policies and worked with a McMaster graduate student to complete a study on Complete Streets. This research will aid in the development of a Complete Streets Strategy in 2011. Currently the focus is on compiling existing policies that already in place in the City of Hamilton which support a Complete Streets policy implicitly.

The goal of this policy and implementation research is to establish partnerships with Planning Staff, Public Health, Public Works and community stakeholders to investigate the potential for implementing a complete streets strategy for Hamilton. A multi-stakeholder approach will be used in order to work with all the groups that contribute to the design and operation of a complete street. This strategy complements the TDM program by increasing access to transit, cycling, walking, bike sharing, carsharing and carpooling facilities.

TDM Framework and Communications Plan

The completion of the TDM and Land Use study and research into Complete Streets has led to a need for a strategic review of all TDM plans, policies, initiatives and communications. This will be conducted in 2011 and funded in part under the MTO TDM Grant funding.

In the interim, Transportation Planning staff piloted the use of social media tools such as twitter and facebook to engage a wider audience. This complemented Smart Commute Metrolinx's use of social media to perform a similar type of engagement process across the GTHA.

In 2011, the TDM Framework and Communications plan will examine the use of social media as part of a broader social marketing plan. These activities will lead to a community based social marketing pilot program for 2011-2012. The study will investigate the benefits of this type of program, as many other jurisdictions have demonstrated success.

Social Media Successes:



facebook®

326 Likes



twitter

500 followers

612 following

Smart Commute Hamilton
Newsletter:

2500 registered

10. Summary

2010 has been a successful year for Smart Commute Hamilton and Transportation Demand Management Programs. Each project and program has made significant progress and achieved the targets set fourth in work plans submitted to Metrolinx and Public Works senior management.

As we move forward in 2011, we expect to see growth in many TDM and Smart Commute indicators. Central to this growth will be the inclusion of more corporate partners in the Smart Commute program, coupled with new programs to improve travel demand and modal split at these workplaces. Additional follow-up surveys are planned to monitor performance along key TDM metrics including percentage of those carpooling, taking transit, cycling and walking.

In 2011, greater focus will be placed on neighbourhood social marketing and transportation demand management initiatives. The success of the Smart Commute program for employers and institutions will further benefit from similar programs that operate in neighbourhoods. In doing so, both the origin of the trip and the trip destination will be accounted for in the TDM strategy for Hamilton.

This document is accompanied by 3 appendices which augment the report with additional information demonstrating how TDM policies, programs and initiatives benefit the City's transportation network and its citizens who use the system to get to work, school, run errands, and for health, wellness and leisure activities.

Appendix A: describes how Transportation Demand Management (TDM) tools, policies and programs, including Smart Commute Hamilton, can help meet the targets and measures required to implement the Transportation Master Plan for the City of Hamilton. TDM relates to all of the Master Plan's objectives and many of the actual performance indicators associated with the seven objectives.

Appendix B: outlines the Transportation Association of Canada's (TAC's) strategies to influence travel behaviour and which of these tools, policies and programs are already in place in Hamilton, planned for the short term or factor in to long term planning.

Appendix C: lists current Smart Commute Hamilton employer and community partners.

The following chart describes how Transportation Demand Management (TDM) tools, policies and programs, including Smart Commute Hamilton, can help meet the targets and measures required to implement the Transportation Master Plan for the City of Hamilton. TDM relates to all of the Master Plan’s objectives and many of the actual performance indicators associated with the seven objectives.

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
<i>Objective 1: Offer safe and convenient access for individuals to meet their daily needs</i>			
A	Roadway Level of Service (LOS)	1. Number of signalized intersections operating at LOS C/D or better	N/A
		2. Average AM peak period auto trip travel time (minutes)	TDM works to reduce road congestion during peak periods through mode shifting
B	Transit Supply and Level of Service (LOS)	1. AM peak period transit supply (AM peak period transit seat-km per capita)	TDM works to reduce road congestion during peak periods through mode shifting
		2. All day transit supply (24-hr transit seat-km per capita)	N/A
		3. Completion of rapid transit network (%)	N/A
		4. Average AM peak period transit trip travel time (minutes)	TDM works to reduce road congestion during peak periods through mode shifting
		5. Transit Service Hours and Service Frequency (# of Transit Service Hours and Frequency from major transit Centre to other areas of the City)	Smart Commute supports increased use of GO Transit with the “Carpool to GO” program
		6. GO Transit Service Hours and Frequency	
C	Parking Level of Service (LOS)	1. Amount of public off-street	TDM seeks to park not only cars but bicycles, motorcycles and those who participate in carpools. This can reduce the need for parking in some areas.
		2. Amount of paid on-street parking	
		3. Parking utilization rates within HMPS (Hamilton Municipal Parking System)	
		4. Average duration of stay within HMPS	
		5. Car Pool Lots – No. of Lots, utilization	

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
D	Walking Facility Supply	1. Sidewalk coverage (percent of collector and arterial roads with sidewalks or pathways on both sides)	N/A
		2. Walking and Cycling infrastructure Condition (% of sidewalk and cycling network meeting or exceeding performance indicator acceptability benchmarks)	N/A
E	Biking Facility Supply	1. Bicycle facility supply (kilometres of bicycle lanes, shoulder lanes, and multi-use paths)	N/A
		2. Completion of bicycle network (%)	TDM supports the completion of the network through research, workshops and the Transportation Management Association
F	Safety	1. Road injuries (number)	TDM related education programs promote sharing the road and cycling safety
		2. Road fatalities (number)	
		3. Reported pedestrian collisions (number)	
		4. Reported cyclist collisions (number)	
Objective 2: Offer a choice of integrated travel modes, emphasizing active transportation, public transit and carpooling			
A	Auto Ownership & Use	1. AM peak period & all day auto mode share	TDM promotes the use of other modes including carpooling, transit, cycling and walking through Carpoolzone.ca, emergencyridehome.ca, online services, employer programs, events and marketing.
		2a. Automobile ownership (automobiles per capita)	
		2b. Car Share – utilization and km travelled	
		3. AM peak period & all day auto occupancy	
B	Transit Use	1. AM peak period & all day transit mode share	
		2. Transit use (Transit trips per 1,000 capita)	
		3. GO Ridership (AM peak and all day transit mode share)	

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
C	Transit Accessibility	1. Residential transit accessibility (proportion of households within 400 m of Transit Stops)	N/A
		2. Employment transit accessibility (proportion of employment within 400 m of Transit Stops)	
D	Bicycle Use	1. AM peak period & all day bicycle mode share	TDM promotes the use of other modes including carpooling, transit, cycling and walking through Carpoolzone.ca, emergencyridehome.ca, online services, employer programs, events and marketing.
		2. Bicycle racks and secure bicycle parking use	
E	Pedestrian Activity	1. AM peak period & all day walk mode share	
F	Active Living	1. Obesity rates	Promotion of active transportation has been proven to improve population health
		2. Diabetes rates	
		3. Heart disease rates	
Objective 3: Enhance the liveability of neighbourhoods and rural areas.			
A	Neighbourhood traffic issues	1. Neighbourhood traffic complaints received (e.g. noise)	Bicycles use and walking helps reduce noise in neighbourhoods
Objective 4: Encourage a more compact urban form, land use intensification and transit-supportive node and corridor development			
A	Population Distribution	1. Population density (population per ha)	Behaviour change and mode shift promote urban living and higher residential densities
B	Employment Distribution	1. Employment density (employment per ha)	
		2. Employment self-containment (% of employed labour force working in Hamilton)	
		3. Home-based workers (number per 1,000 capita)	
		4. Average journey to work trip distance (km)	

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
C	Land Use	1. Breakdown of new housing types	N/A
		2. Vacant Residential Rental Rate (%)	
		3. Vacant Retail Space (m ² or %)	
		4. Vacant Employment Lands (hec)	

* Includes pedestrians and cyclists

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
<i>Objective 5: Protect the environment by minimizing impacts on air, water, land and natural resources</i>			
A	Land & Stormwater Runoff	1. Land consumption (occupied urban land by type of transportation infrastructure/total urbanized land) (e.g. new road construction, comparison of Greenfield development and infill and brownfield redevelopments)	TDM promote dense urban living and reduced use of single occupancy vehicles
B	Air Emissions	1. Greenhouse gas intensity of travel (CO ₂ emissions/ person-trip)	TDM programs reduce single occupancy vehicle use thereby reducing emissions and idling times.
		2. Air pollutant intensity of travel (NO _x , SO ₂ , CO, PM ₁₀ , PM _{2.5} , TPM, VOC emissions/ person-trip)	
		3. Greenhouse gas emissions from personal travel (total CO ₂ emissions from personal travel in Hamilton)	
		4. Air pollutant emissions from personal travel in Hamilton (NO _x , SO ₂ , CO, PM ₁₀ , PM _{2.5} , TPM, VOC emissions)	
C	Healthcare	1. Respiratory related illnesses (e.g. asthma) (%)	

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
Objective 6: Support local businesses and the community’s economic development			
A	Goods Movement Conditions	1. Off-peak road congestion (volume/capacity)	TDM improves transportation efficiency allowing for improved goods movement flows.
		2. Increase/decrease in heavy truck %	
		3. Shipping tonnage to/from Hamilton Port Authority	
		4. Number of cargo flights to/from John C. Munro Airport	
		5. Rail Yard Traffic (CP/CN Data)	
B	Business-Employee Accessibility	2. Average auto commute time (minutes)	The Transportation Management Association works with employers to improve commute times through the use of other modes
		3. Average transit commute time (minutes)	
Objective 7: Operate efficiently and be affordable to the City and its citizens			
A	Transit Network Efficiency	1. Transit vehicle utilization (passenger-km per vehicle-km)	TDM supports the use of transit as a primary commuting mode
		2. Transit off-peak period utilization (100% - % of daily transit person trips in AM & PM peak periods)	
B	Road Network Efficiency	1. Road off-peak period utilization (100% - % of daily automobile person trips in AM & PM peak periods)	TDM’s key goal is to improve road network efficiency
C	Transit Affordability	1. Increase in transit fare (%)	N/A
D	Parking	1. Increase in parking rates (%)	N/A

INDICATOR GROUP		Performance Indicator	How Does TDM Apply?
E	Transportation Funding	1. Capital investment in municipal transportation projects (\$/capita) <ul style="list-style-type: none"> • Roads • Parking • Streetscape (sidewalk / trail amenities) • Transit (facilities and fleet) • Pedestrian facilities • Cycling facilities 	<p>TDM programs are funding in part by Metrolinx in a matching contribution program</p> <p>The MTO TDM Municipal Grant funding is available for TDM-based projects</p> <p>The Federation of Canadian Municipalities Green Municipal Fund also includes funding for TDM projects</p>
		2. Operating investment in municipal transportation projects (\$/capita) <ul style="list-style-type: none"> • Roads • Parking • Streetscape (sidewalk / trail amenities) • Transit (facilities and fleet) • Pedestrian facilities • Cycling facilities 	

Appendix “B” Report PW11069
Transportation Association of Canada (TAC)
Effective Strategies to Influence Travel Behaviour

The following chart outlines the TAC’s strategies to influence travel behaviour and which of these tools, policies and programs are already in place in Hamilton, planned for the short term or factor in to long term planning.

Tools to engage and enable individuals	Current Program	Short Term Plan	Long Term Plan
Branding, messaging and positioning	✓		
Special Events	✓		
Individualized marketing		✓	
Real-time transit customer information		✓	
Centralized travel information			✓
Ridematching	✓		
Cycling skills training		✓	
Driver education	✓		.
Tools to enhance the built environment	Current Program	Short Term Plan	Long Term Plan
Integration of cycling and transit	✓		
Integration of TDM and land use planning	.	✓	
Wayfinding for walking and cycling	✓		
Bicycle parking	✓		
Secure Bike Parking	✓		
Shower, change and locker facilities		✓	
Park-and-ride arrangements		✓	
Carpool parking arrangements	✓		
Public Bike Share program support	✓		
Carsharing service support	✓		
Tools to influence commuter travel	Current Program	Short Term Plan	Long Term Plan
Employer engagement	✓		
Workplace travel planning support	✓		
Employer transit pass	✓		
Bike Racks on Busses	✓		
Post-secondary universal transit pass	✓		
Transit fare incentives	✓		
Emergency ride home	✓		
Tools to influence school travel	Current Program	Short Term Plan	Long Term Plan
School engagement	✓		
School travel planning support	✓		
Road safety services around schools	✓		.
Tools to shift costs	Current Program	Short Term Plan	Long Term Plan
Vehicle ownership pricing			✓
Pay-as-you-drive insurance			✓
Environmental Pricing Reform		✓	.

Appendix “C” Report PW11069
Smart Commute Hamilton’s Employer and Community Partners

Employer Partners:



Community Partners:



Funders:

