OVERVIEW

Transportation Resources









TDM Primer



Vision to Reality

- Case Study
- Partnerships
- Simcoe OP



"What if we considered empty transit and car seats as a <i>perishable commodity?"



SMOOTHING THE PEAK

Reducing peaks in demand takes the strain off the <u>power</u> system, helps lower the price of <u>electricity</u> – and reduces our overall environmental footprint. IESO 2013















- Access Options
- R.O.W. Management
- Vehicle Occupancy





















































Source: ACT Canada 2010



- Focus on TDM & promotion/support of all sustainable modes (cycling, walking, transit, carpooling, telework)
- Interested stakeholders: ~15 (2000) to ~4,500 (2012)
 - Multi-disciplinary representing government, transportation, planning and health professionals, consultants, not-for-profit organizations, employers
- Priority of networking, collaboration, information exchange and provision of centralized resources

Sustainable Mobility Summit Calgary 2013



Thank you for attending

ACT





Canadian Parking Association Association canadienne du stationnement











www.ACTCanada.com

TDM Resources

- <u>http://www.actcanada.com/</u>
- <u>http://www.fcm.ca/home/searchresults.htm?q=TDM</u>
- <u>http://www.vtpi.org/</u>
- <u>http://www.toolkit.bc.ca/sites/default/files/FBC_TDM_toolkit_web-1.pdf</u>
- <u>http://www.canadawalks.ca/casestudies.asp</u>





City of Mississauga: Case Study

• Integrating TDM into the land development process.





THEN



1970 Population – 52,186



NOW



Population & Employment









1991 Population 479,624

Employment 274,100

2001 Population 612,925

Employment 368,750

2011 Population 713,443

Employment 415,710

2031 Population 812,000

Employment 519,000

DOWNTOWN CORE POPULATION : EMPLOYMENT



Transportation Elements OP Implementation (Part 4 – 19-3/4)

Studies that may be warranted:

- <u>Transportation Impact Study</u>
- <u>Traffic Safety Impact Study</u>
- On-street Parking
- Parking Utilization Study
- <u>Transportation Demand Management (TDM) Plan</u>
- Urban Design
- Health Impact Study
- Sustainability Design



TDM and Development

- <u>June 2010</u>
 - Sheridan College TDM Plan approved
- December 2011
 - Meeting with Planning and Development Managers to discuss TDM as it relates to development approvals
- January April 2012
 - TPO and TIP review of current policy context and associated opportunities
 - Preparation of draft implementation tools
- <u>May October 2012</u>
 - Workshop development with ACT Canada and Peel, Brampton, Caledon and Mississauga planning staff
- <u>November 23, 2012</u>
 - TDM knowledge exchange and building local capacity
 - o Identifying policy gaps and needed implementation tools/guidelines
 - Developing TDM 'prescriptions'
- <u>January 2013</u>
 - TDM Coordinator to attend T&W preDARC meetings (2013)
 - Draft policy recommendations
 - Draft TDM implementation process and associated 'tool kit'

TDM and Development – Implementation Process

STEP 1 A. Preliminary review of application (legislative)

STEP 1 B. preDARC – staff confirm transportation related studies to be requested, determine scope and terms of reference for studies and associated outcomes.

STEP 2 Transportation Impact Study (T.I.S.) Guidelines

- STEP 3 Review TIS submission using a 'TDM checklist'
- **STEP 4** TDM conditions drafted to include in relevant agreements and reports.
- **STEP 5** City staff to monitor and confirm implementation of TDM measures.

Required Plans Submitted and Reviewed

Transportation Impact Assessment Study/Plan

For

ABC Development

Application: XXXXXX

Travel Demand Management (TDM) Implementation Checklist

Travel Demand Management (TDM) Measures

	č ()				
	Features	Yes	No	N/A	Comments
th fo	he building owner/occupant has prepared a TDM plan at targets a (20%) reduction in peak hour SOV trips using recast trip generation based on recommendations of a ualified planner / engineer.				
m m ap	he building owner/occupant agrees to become an active ember of a local Smart Commute transportation anagement association. An on-site coordinator will be oppointed to oversee and organize marketing opportunities and events.				
	 building owner/occupant will provide a transit incentive rogram; including, Presto fare card loaded with a minimum (\$25) credit for all occupants Real-time transit schedule information display Contribute towards the installation of a transit shelter(s) to serve the location 				
se	he building owner/occupant will provide a ride matching ervice for carpooling and promote carpooling through articipation in a regional carpool program.				
en	rovides priority parking in close proximity to main trances for carpooling/vanpooling participants <i>equivalent</i> (10%) of <i>employee spaces</i> .				
ho	he building owner/occupant will provide emergency ride ome options (ie: free/reduced taxi ride home in case of mergency or illness)				
fin	he building owner/occupant agrees to present parking nancials as an unbundled cost to occupants esidents/tenants/leasers)				
co	he building owner/occupant agrees to provide reduced sst parking for users of carpool, bicycle, oped/motorcycle spaces				

Travel Demand Management (TDM) Implementation Checklist

Features	Yes	No	N/A	Comments
The building owner/occupant has prepared a TDM plan that targets a <mark>(20%)</mark> reduction in peak hour SOV trips using forecast trip generation based on recommendations of a qualified planner / engineer.				
The building owner/occupant agrees to become an active member of a local Smart Commute transportation management association. An on-site coordinator will be appointed to oversee and organize marketing opportunities and events.				
 The building owner/occupant will provide a transit incentive program; including, Presto fare card loaded with a minimum (\$25) credit for all occupants Real-time transit schedule information display Contribute towards the installation of a transit shelter(s) to serve the location 				
The building owner/occupant will provide a ride matching service for carpooling and promote carpooling through participation in a regional carpool program.				
Provides priority parking in close proximity to main entrances for carpooling/vanpooling participants equivalent to (10%) of employee spaces.				
The building owner/occupant will provide emergency ride home options (ie: free/reduced taxi ride home in case of emergency or illness)				
The building owner/occupant agrees to present parking financials as an unbundled cost to occupants (residents/tenants/leasers)				
The building owner/occupant agrees to provide reduced cost parking for users of carpool, bicycle, moped/motorcycle spaces				





New Carroliton (C Gcar train Gcar train	Drange) Is now boarding arriving in 12 minutes		HOT SOLE DOL	
Vienna (Orange)	arriving in 8 minutes arriving in 14 minutes	VRE makes plans "We've probably subgrow VRE." Date Zener, the c CED, told the Operations Shend, May 18, 2012, M		
	300		-	
Court House	JTN Shirlington via Leed Park	12:00 ** tren:12:30 **	11	
ART 41 501	JTH Columbia Pike via Estiston	12:00 " Det 12:157		
M 3885 EA	ST Farragut Square via Rost7m	11:56 ** (her: 12:10**		
M 388 W	EST Ballston Via Clarendon	11:59 ** mm 17:21**		
ARLINGTON	SERVICES			







DRAFT - TDM CONDITIONS

Preamble

The following 'DRAFT – TDM Conditions' are based on {INCLUDE RELEVANT DETAILS FROM TRANSPORTATION IMPACT STUDY} prepared in support of the {INCLUDE RELEVANT DETAILS FROM DEVELOPMENT APPLICATION}.

A. DEVELOPER PROVIDED TRANSIT/SHUTTLE SERVICES

E.G. - That the Owner agrees to provide from Monday to Friday an employee shuttle bus service from Kipling Station (TTC Bloor-Danforth Line and GO Milton Line) to the Spectrum Square development that meets or exceeds the travel demand requirements of the building occupants.

- B. That the Owner agrees to provide a 'Real Time' transit and transportation information system to be installed in a prominent location with-in the main building entrance area.
- C. That the Owner agrees to become an active participating member of the Smart Commute Mississauga – Transportation Management Association for a minimum period of two (2) years.
- D. That the Owner agrees to provide a parking management program that includes the provision of; 100 signed carpool parking spaces and 10 alternative fuel parking spaces for electric plug-in vehicles.
- E. That the Owner agrees to provide 2 car-share service parking spaces to accommodate a car-share service provider.
- F. That the Owner agrees to provide secure bicycle parking with-in 183 meters of a building entrance for 5% or more of all building occupants, based on an occupant load of 23 sq. m./person, measured at peak use.
- G. That the Owner agrees to provide shower and change facilities to accommodate the needs of building occupants.

Power of Partnership







Collaboration

- 1. the act of working with another or others on a joint project
- 2. something created by working jointly with another or others

Partnership

a contractual relationship between two or more persons carrying on a joint business venture with a view to profit, each incurring liability for losses and the right to share in the profits

"When competition walks through the door collaboration goes out the window!"

Municipal Engineering and Planning Departments

- Zoning bylaws (parking standards)
- TDM and Land Development
- Urban realm enhancements





Economic Development

- Chambers of Commerce
- EDO Regional and Provincial
- Industry and Trade Associations
- Tourism Associations



Tourism Simcoe County

Transportation Management Associations

- Multi-modal focused on user needs
- Access to commuters customers
- Relationships with business













Public Transit

- Industry Associations
- Municipal Operators
- Private Operators
- Institutions
- Community Organizations



A PARTNERSHIP OF TRANSIT, BUSINESS, GOVERNMENT AND NON-PROFIT AGENCIES.





Car Share and Automobile Sector



- 1000 members
- Fleet of 37 vehicles
- Operating in 5 Ontario Communities
- Kitchener-Waterloo
- Hamilton
- Elmira
- Guelph
- St. Catharines









Professional Associations

- Design guidelines
- Transit and transportation policy
- Best practice and case study summaries









Public Health Agencies

- Built environment
- Active transportation (school)
- Transportation equity



URBAN PUBLIC HEALTH NETWORK Réseau canadien pour la santé urbaine



Regional and Local Public Health Units


Environmental Organizations

- Program delivery support
- Access to new customers
- Linking and integrating with other modes







ecosupe

ENVIRONMENTAL PROGRAMS





Property Management Firms

- Tenant services
- Parking management
- LEED & EBOM Certification

LEED: Leadership in Energy and Environmental Design

EBOM: Existing Building Operations & Maintenance











St. John's - NFLD





Loyalty and Incentive Pilot Program

- Earn 1 reward mile for every 2 rides
- 87% of NFLDer's collect Air Miles

Newfoundland Labrador Liquor Corporation (NLC) – Corporate Social Responsibility Initiative

• Doubling the reward miles for riders travelling between 7:00 p.m. until 'last ride,' every Friday and Saturday

NEWFOUND LAND LABRADOR LIQUOR CORPORATION



Mississauga - ON

Geographic market segmentation *Is transit for you?*

 Choice rider – recruitment based on origin, destination and work schedule

Car-share service pilot project

 Market test to support downtown transit and parking management objectives









Winnipeg – MB

Commuter Challenge

• Transit - co-sponsor, promoter and event planning

Creative Commuting Ambassador Training

 Workplace coordinator instruction on transit tools (BUStxt, apps, Navigo)



EcoPass program

• G.A.C. promotes discounted bus pass program

Collaboration

- Transit and G.A.C . co-present at forums
- Downtown BIZ Transportation Committee
- Co-learning webinars



Peterborough – ON

Programs:

- Shifting Gears Work Place and Neighbourhood
- Active and Safe Routes to School
- Eco-Driver



Shifting Gears – Challenge

- 1/3 of Peterborough's labour force is employed at a workplace that participates in Shifting Gears
- 118 workplaces participated

Peterborough County-City Health Unit









4.8 TRANSPORTATION

4.8.1 Objectives and TDM

4.8.42 Initiating TDM Programs

4.8.43-45 Carpool Parking

4.8.46-49 Transit

Population Growth

	Year 2006	Year 2031	% Change
Simcoe County	437,100	667,000	53%
*Jurisdiction of County of Simcoe	272,200	416,000	53%
Adjala-Tosorontio	11,100	13,000	17%
Barrie	133,500	210,000	57%
Bradford West Gwillimbury	25,000	50,500	102%
Clearview	14,600	19,700	35%
Collingwood	18,000	33,400	86%
Essa	17,600	21,500	22%
Innisfil	32,400	56,000	73%
Midland	16,900	22,500	33%
New Tescumseth	28,800	56,000	94%
Orillia	31,400	41,000	31%
Oro-Medonte	20,800	27,000	30%
Penetanguishene	9,700	11,000	13%
Ramara	9,800	13,000	33%
Severn	12,500	17,000	36%
Springwater	18,100	24,000	33%
Tay	10,100	11,400	13%
Tiny	11,200	12,500	12%
Wasaga beach	15,600	27,500	76%

Table 2.1.1.2 - 4: County of Simcoe and Province of Ontario Population by Age Group (2011)

Age	County of Simcoe		Greater Toronto and Hamilton Area		Province of Ontario	
Group (years)	Population	% Population	Population	% Population	Population	% Population
0 - 14	76,345	17%	975,330	17%	2,180,770	17%
15 - 24	58,870	13%	752,090	14%	1,716,545	13%
25 - 64	240,985	54%	3,148,980	56%	7,076,190	55%
65+	69,855	16%	706,665	13%	1,878,325	15%
Total	446,055	100%	5,583,065	100%	12,851,830	100%

Source: Statistics Canada. 2011

County of Simcoe - Total Labour Force

2001	2006	2010	% Change (2001 – 2010)
127,265	142,540	160,298	26.0%

Source: Derived from Statistics Canada (Census & Population, 2001 & 2006) and Manifold Data Mining, 2010 by Millier Dickinson Blais Inc.

Employment vs. Labour Force (2006)

Jobs	Labour Force	Jobs to Population
83,525	142,540	0.59 : 1.0

Source: Derived from Statistics Canada (Census & Population, 2006) via REDDI for jobs by Millier Dickinson Blais Inc.

Transportation Objectives

4.8.1 To maintain and improve the County transportation system to provide efficient automobile, truck, transit, and where feasible, bicycle and pedestrian routes which link settlement areas and other activity nodes throughout the region, separate through traffic from local traffic, link with other forms of transportation, and provide for the movement of goods. These improvements will be achieved through the following means:

- Long-term transportation planning;
- Improving roads, intersection and traffic control devices;
- Constructing new road sections and widening existing road sections where
- warranted;
- Employing traffic management techniques to achieve more efficient use of
- roads;
- Requiring appropriate conditions of approval for development applications; and
- Considering the needs of pedestrians and cyclists in road design.

4.8.2 To develop Transportation Demand Management (TDM) programs, cooperative transit initiatives and supportive land use strategies which facilitate TDM and transit providing choices amongst walking, cycling, transit, and the automobile.

Transportation Demand Management (TDM)

4.8.42 The County should initiate TDM programs by:

Supporting carpool opportunities, utilizing existing infrastructure at municipal facilities scattered throughout the County and by designating a certain number of parking spaces for people who carpool. The spaces can be signed and marked and promoted to offer preferential spaces for employees who carpool.

- Establishing new carpool lots in strategic locations along County Roads throughout the County.
- Developing a pilot program for County employees, focusing on carpooling initiatives.
- Providing funding and program support assistance to encourage employer-based TDM.
- Initiating Ride Matching programs for Simcoe area residents or partner with existing private service providers.

Carpool Parking

4.8.43 The County will work with local municipalities to determine the feasibility of providing carpool spaces at local municipal facilities.

4.8.44 While significant efforts will be made to reduce the dominance of the single occupant automobile in the future, the dispersed population and vast geography of the County will likely require continued use of the automobile as a primary mode of transportation. As such, the County considers carpool lots to be necessary for the use of the general public using highways.

4.8.45 The County may require the dedication of lands for new carpool lots through the plan of subdivision approval process, in strategic locations suggested by the Transportation Master Plan or in other locations as determined by the County of Simcoe.

<u>Transit</u>

4.8.46 Local municipalities which operate or plan to operate transit services are encouraged to work cooperatively with neighbouring municipalities to expand transit service to Simcoe area residents.

4.8.47 The County will, in conjunction with local municipalities and GO Transit, establish Transit Service Areas and Plans to address such issues as:

a) the feasibility of improved transit links within the Georgian Triangle area (Town of Collingwood, Town of Wasaga Beach and Township of Clearview);

b) the feasibility of improved transit links between the Towns of Midland and Penetanguishene, and the Townships of Tay and Tiny;

c) the feasibility of improved transit links within and between the Town of Bradford West Gwillimbury, the Town of Innisfil, the Town of New Tecumseth and the Township of Essa;

d) the provision of innovative intra-regional transit services through partnerships with the private sector;

e) the pursuit of innovative approaches to encourage increased use of public transit;

f) the role of the County and local municipalities in the implementation of the Transit Service Plans.

<u>Transit</u>

4.8.48 The County, in conjunction with local municipalities, will work with the Cities of Barrie and Orillia to expand existing transit services to adjacent municipalities and communities within the County, where feasible and appropriate.

4.8.49 Local municipalities that operate transit services are encouraged to promote increased transit ridership, and reduce the need to make trips by automobile, through such means as:

a) the development of a network of sidewalks, pedestrian trails and bicycle facilities that provide access to transit nodes and/or routes;

b) the use of land, density and site plan and road pattern design which minimize walking distance to transit stops;

c) the integration of transit connections with other transportation modes;

d) the improvement of the comfort and convenience of transit facilities;

e) the development of innovative fare structures.

Let's try this out!

- 1. As a group choose one of the following TDM projects;
- Transit
- Carpool Parking
- Telework

2. With the OP objectives and general policy direction in mind - consider the various organizations (internal and external) you may need to collaborate with to implement the project.

3. Consider and record how each partner you've identified would be involved in moving this project from 'Vision' to 'Reality'.

Transit

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- 1. Collingwood Accessible Transit (1 year pilot program);
- 2. Collingwood-Wasaga Beach Transit Link
- 3. Town of Bradford West Gwillimbury Transit Implementation Study
- 4. Barrie Transit expansion to Angus & CFB Borden
- 5. Penetanguishene Transit Feasibility Study.

Carpool Parking

PROJECT	LOCATION
1. Design & Construction	County Carpool Lot at Hwy 11/County Road 169 (Washago)
2. Design & Construction (Partnership)	Provincial Carpool Lot at Hwy 26 West/County Road 27 on County lands (Midhurst)
3. Site investigations & Feasibility analysis	County Carpool Lot at Hwy 9/County Road 10 (Town of New Tecumseth)
4. Site investigations & Feasibility analysis	County Carpool Lot at County Road 93/ Yonge Street (Midland)
5. Preferred parking for Carpool vehicles	County Administration Centre (Midhurst)

Community Telework

- 2009 Rural Connections Project resulted in 90% of the County having access to broadband internet.
- Telecommuting provisions to accommodate home-based employment
- Broader opportunities for businesses to establish themselves throughout the County