Transportation Demand Management Plan for Greater Sudbury

Background:

In December 2016, Council adopted the Transportation Master Plan (TMP) for the City of Greater Sudbury. The TMP recommends a sustainability-focused approach to the planning and management of the transportation network in the City, which is to optimize the network through the improvement of transportation facilities for motorists, transit users, cyclists and pedestrians. In line with this approach, the TMP recommends the development of a Transportation Demand Management Plan ('TDM Plan') to maximize the effectiveness of the City's investments in sustainable transportation.

The TDM Plan is being funded through a partnership with the Provincial and Federal governments through the Public Transit Infrastructure Fund. A consultant has been retained to develop the TDM Plan for the City, which is anticipated to be completed by March 2018.

What is Transportation Demand Management?

Transport Canada defines Transportation Demand Management (TDM) as a wide range of policies, programs, services and products that influence how, why, when and where people travel to make travel behaviours more sustainable. TDM can, therefore, include strategies to improve the efficiency and effectiveness of existing transportation infrastructure in addition to strategies that aim to change travel behaviour. Put another way, the objectives of TDM are to motivate individuals to change modes (walk, cycle, take transit or carpool instead of driving alone), travel less (telework, shop online, link several purposes in one trip), or change trip times or routes (choose off-peak hours or less congested roads). The following diagram (Figure 1) shows potential TDM programs, services, policies and measures that may be included in a TDM Plan for Greater Sudbury.



Figure 1. Potential Programs, Services and Policies for the TDM Plan for Greater Sudbury

Why undertake the development of a TDM Plan for the City of Greater Sudbury?

TDM has the potential to support land use policies, encourage more sustainable transportation options, reduce congestion and air pollution and improve public health. TDM programs can result in measureable and positive changes to traffic and pollution issues.

Throughout North America, municipalities are continuing to experience increasing levels of traffic congestion, resulting in longer commute times, increased levels of stress and significant economic losses. To effectively increase the efficiency of the transportation network, solutions other than roadway expansion are required; of which TDM is an integral component. Transportation Demand Management provides a framework for optimizing the transportation system, and may enable the municipality to utilize scarce transportation resources more efficiently.

The introduction and implementation of TDM programs and policies may introduce a number of benefits to the community, including:

- 1. Integrating land use planning with transportation supply (infrastructure) and transportation demand (Figure 2; Transport Canada);
- Providing residents and workers with the opportunity to explore alternative transportation options;
- 3. Reducing costs related to building and maintaining transportation-related infrastructure;

- 4. Reducing impacts from transportation infrastructure on the environment
- 5. Improving quality of life for residents and visitors;
- 6. Reducing overall household transportation-related costs; and
- 7. Improving health and physical activity levels of the population.

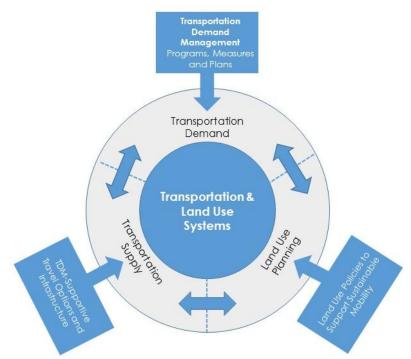


Figure 2. Influencing Travel Behaviours

What Constitutes a Successful TDM Program?

TDM is an excellent way to maximize the efficient operation of urban land use and transportation systems. However, it is critical to emphasize that TDM programs and policies are not a substitute for transportation supply (the infrastructure, vehicles and services that people use to travel) and land use changes – rather, they are a powerful and cost-effective complement. In fact, all three types of measures represented in Figure 2 work best when planned and delivered together in an integrated approach.

Successful TDM programs across North America have seen reductions in single occupant vehicle kilometres travelled in the order of 4% (Vancouver, BC) to 10% (Arlington, VA). Achieving these reductions required both a concerted effort and investment over a period of years.

Opportunities for Greater Sudbury

Implementing TDM requires examining opportunities available within a municipality. Greater Sudbury has many existing building blocks from which to move forward and build a complementary and comprehensive TDM program for the City. The following is a list of City-led initiatives currently underway which may be further enhanced by transportation demand management:

- 1. The <u>Transportation Master Plan</u> was recently adopted and includes a significant component dedicated to improving Active Transportation, including recommendations for the development of a cycling and pedestrian network. The TDM Plan will assist with achieving objectives outlined in the TMP.
- The development of the <u>Transit Route Optimization Study</u> (occurring in parallel with the development of the TDM Plan) will provide the City with recommendations to improve the overall efficiency and attractiveness of public transit, which will directly support TDM efforts, and vise versa.
- 3. Phase 2 of the <u>City of Greater Sudbury Official Plan Review</u> is anticipated to begin later in 2017 and will integrate policies and recommendations of the Transportation Master Plan into the update. This will also present an opportunity to incorporate TDM supportive development policies into the City's Official Plan.
- 4. The <u>Downtown Master Plan</u> for the City of Greater Sudbury was completed in 2010 and provides a number of recommendations to improve access to downtown by modes other than motor vehicles and to improve the walkability of the area. The TDM Plan will continue to encourage residents to access while limiting the use of a personal motor vehicle.
- 5. The <u>Strategic Parking Plan</u> for the City of Greater Sudbury, completed in 2011, focuses on the Central Business District (Downtown) and is based on the principle that a balanced approach must be adopted for all facets of parking, as parking issues may be improved by more than just increasing supply.

Engagement Strategy

The public is perhaps the most important audience for the TDM Plan, given that ultimately, it is the behavior and transportation choices of the general population that are intended to be influenced by the outcomes of the TDM Plan. The public will have significantly varying levels of understanding related to TDM, and will need to be educated, informed, engaged and consulted through a variety of consultation and engaged tactics and promotional tools. The consultant for the City of Greater Sudbury's TDM Plan has proposed a range of engagement and consultation activities designed to solicit the input of a variety of important stakeholders, including decision-makers, technical stakeholders and community interest groups.

An online public opinion poll will be made available on the City's website to gather information about public knowledge and perceptions of transportation demand management measures. This survey will target the general public, with a particular emphasis on obtaining information from individuals who regularly use a motor vehicle for transportation. Information collected will be used to inform which types of programs and solutions may be most effective in the Greater Sudbury context.

The TDM Plan is being developed with input from partners across the organization, including Transit Services, Planning Services, Leisure Services, Parking Services and Environmental Planning Initiatives, as these divisions are likely to play a significant role in the delivery and success of a transportation demand management program for the City of Greater Sudbury.

Next Steps:

The Transportation Demand Management Plan for Greater Sudbury will be presented to Operations Committee for approval prior to the end of Q1 2018. Programs and policies to be recommended in the TDM Plan will be implemented as funds become available.

Resources Cited:

Transport Canada, *TDM Definition, Overview and Rationale,* Accessed online: <u>http://data.tc.gc.ca/archive/eng/programs/environment-utsp-tdmintro-1039.htm</u>

Transportation Association of Canada, *Effective Strategies to Influence Travel Behaviour: Practical Guide*, November 2012

City of Greater Sudbury, *Downtown Master Plan 2012*, Accessed online: <u>http://www.greatersudbury.ca/inside-city-hall/downtown-sudbury/the-downtown-sudbury-master-plan/</u>

City of Greater Sudbury, *Strategic Parking Plan 2011,* Accessed online: <u>http://www.greatersudbury.ca/inside-city-hall/open-government/strategic-plans1/</u>

City of Greater Sudbury, *Transportation Master Plan 2016*, Accessed online: <u>http://www.greatersudbury.ca/living/roads/draft-transportation-master-plan1/</u>