



Development of Progressive Transportation Master Plans for Rural Municipalities

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**A Transportation Master Plan (TMP)
sets the framework for a how a
municipality will address
its current and future
transportation needs.**

What is a “small” or “rural” Municipality?

Location?

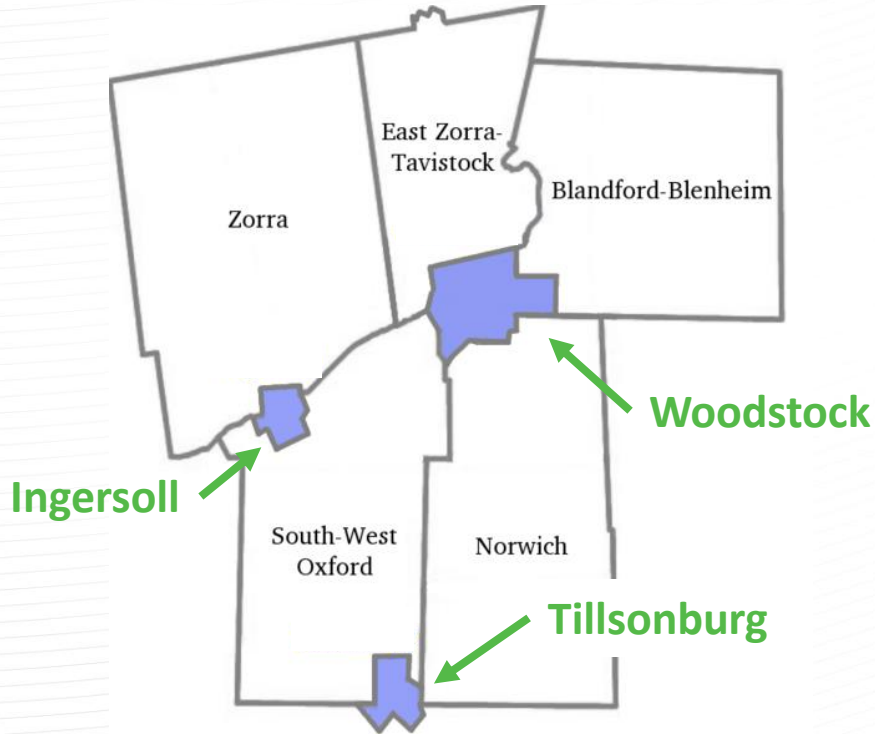
**Geographical
extent?**

Population?



Oxford County

Oxford County



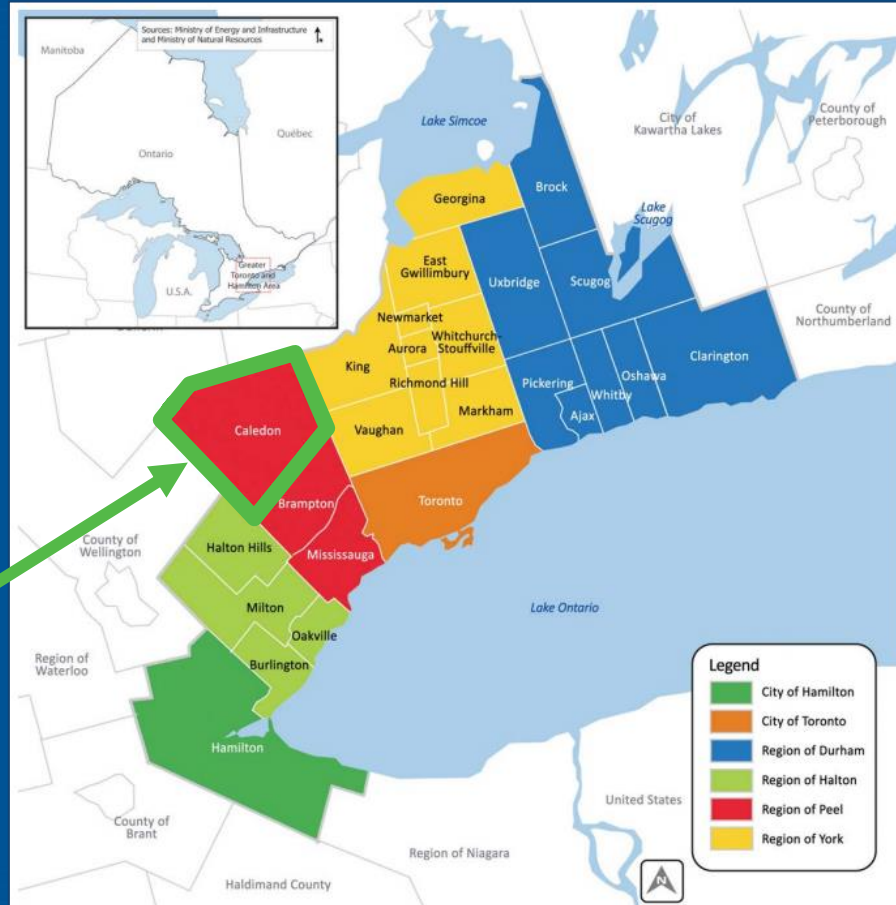
- ▶ **112,00 Residents**
- ▶ **2,040 km²**
- ▶ **615 km of roads**
 - 80% rural
- ▶ **Urban Centres**
 - Woodstock (41,000)
 - Ingersoll (13,000)
 - Tillsonburg (16,000)

Appeal

“Oxford represents the best of both worlds. From the urban view, our communities of Ingersoll, Tillsonburg and Woodstock offer an abundance of business and residential opportunities. They are able to support well recognized franchise operations as well as smaller business independents. They are **big enough to cater to world markets, yet small enough to know your neighbours and feel safe.**”

– County of Oxford website

Town of Caledon



Appeal

“Located just minutes from North America's fifth largest urban area, labour pool and transportation hub, Caledon offers ready access to regional, national and international markets.

*This town of almost 70,000 residents has also earned a reputation for providing a **safe, stable** and sustainable environment for its private and corporate residents and has been named "Ontario's Greenest Community" AND "Canada's Safest Community" by independent media outlets on multiple occasions.*

*Caledon also boasts one of the largest inventories of **planned and shovel-ready industrial lands** in the GTA as well as access to an assortment of programs that provide financial assistance and relief to companies that adopt environmentally-friendly development and operating practices.”*

-Town of Caledon website

Rapid population increase

**Surrounding
Municipalities**

Proximity to major centres

TMP Considerations

**Planned
Infrastructure
Impacts**

**Agricultural & Industrial
Forces**

Easy Commute

Planning for growth

Geographical area and data

TMP Challenges

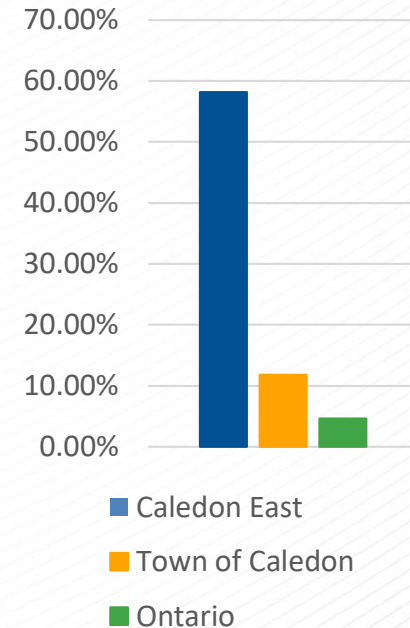
Urban solutions,
rural context

System users

Alternative transportation modes

Accommodating Growth

- ▶ **Accommodating considerable planned growth in communities not used to it**
- ▶ **Transitioning roads from rural to urban**
- ▶ **Balancing rural character with urban development**
- ▶ **Expectations of new residents – expect urban service levels but preserve the rural charm and don't raise taxes**



Geographical Area & Data

- ▶ **Large geographic study area**
- ▶ **Small budgets**
- ▶ **Extensive road network**
- ▶ **Limited traffic and collision data available**
- ▶ **Challenges/expectations of developing models**

Employing New Technologies for Data Collection

- ▶ **Bluetooth readers for Origin-Destination surveys**
 - Lower costs
 - No human component
 - No weather limitations
 - Potentially 100% capture rate

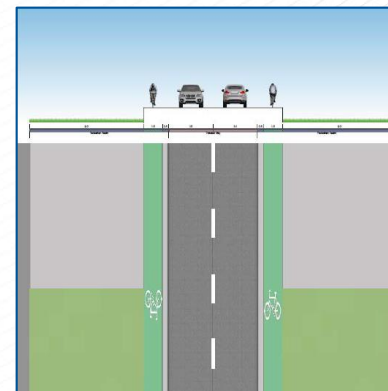


Urban Solutions, Rural Context

- ▶ **Limited number of rural solutions in the transportation planning toolbox**
- ▶ **Bridging rural and urban perspectives**
- ▶ **Trying to apply big city ideas to small town opportunities and constraints**

Maintaining Rural Character

Street Type	Land Use Designation	Through Lanes	Right of Way [m]	Desired Operating Speed [km/h]	Transit Role	Area for Pedestrians and Other Facilities	Bicycle Facilities	Drainage Conditions	Freight Role
Rural Road	Prime Agricultural Area, Rural Lands	2 to 4	26 m	40 to 80 km/h	Very Limited and Site Specific	Shoulder	Shoulder	Rural Swale	Agricultural Material Transport and Local Deliveries Only
Rural Main Street	Rural Service Centre	2 to 4	20 to 26 m	40 to 60 km/h	Limited to Designated Stops or Stations	Village Specific - 1.5 m Minimum Sidewalk + Furnishing/Planting Zone + Splash Strip + Utility Zone	Behind the Curb where Design Speeds Exceed 50 km/h Otherwise On-Street	Curb and Gutter	Local Deliveries
Urban Main Street	Village or Hamlet	2 to 4	20 to 26 m	40 to 60 km/h	Major	Desired 1.5 m Minimum Sidewalk + Furnishing/Planting Zone + Splash Strip + Utility Zone	Behind the Curb	Curb and Gutter	Local Deliveries
Industrial Collector	General, Dry, Prestige Industrial	2 to 4	26 m	40 to 60 km/h	Moderate to Major	Location Specific - Desired 1.5 m Minimum Sidewalk + Planting Zone + Splash Strip + Utility Zone	Recommend the Use of Professional Judgement in High Volume Traffic Areas Where Access Points to Adjacent Uses or Intersections are <300m Apart	Curb and Gutter or Rural Swale Depending on Adjacent Uses	Local Deliveries



Alternative Modes of Transportation

- ▶ **Automobile dominated communities**
- ▶ **Low transit ridership**
- ▶ **Large operating area**
- ▶ **Safety concerns for pedestrians and cyclists**
- ▶ **Lack of supporting infrastructure**



Oxford Alternative Modes

- ▶ **AT connections across lower tier municipalities**
- ▶ **Supporting AT facilities**
- ▶ **Expanding passenger rail service**
- ▶ **Transit connections to major centres**
- ▶ **Flexible bus routes**
- ▶ **Carpool lots**



Caledon Alternative Modes

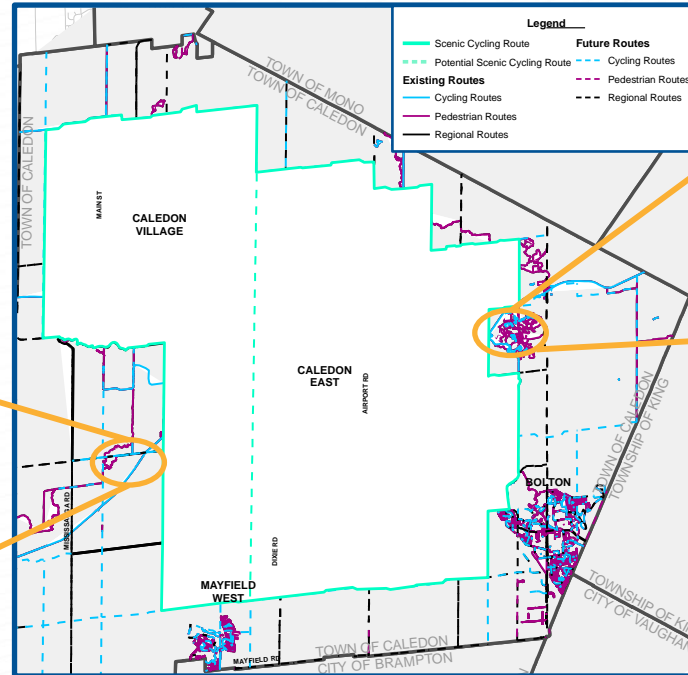


Image Source: Toronto and Region Conservation Authority.



Image Source: Caledon Enterprise.

Transportation System Users

Aging Population | Younger Population | Farm & Agricultural Vehicles





paradigm
TRANSPORTATION SOLUTIONS LIMITED

