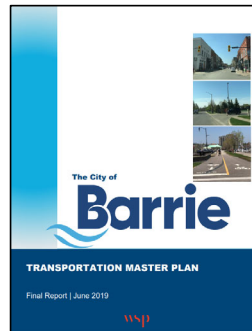
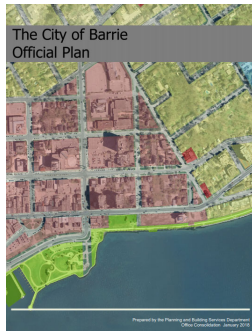


Source: Google Maps

# Assessing Development Related Transportation Impacts

Transportation Planning  
Branch

December 1, 2020



## Planning for Growth: Macro Level

- Provincial Growth Plan
- Official Plan
- Population & Employment Forecasts
- Transportation Master Plan
- Development Charges Background Study / By-Law
- Capital Planning and Operational Costs



# Planning for Growth: Transportation Master Plan

- Plans for growth to 2041 (to accommodate development)
- Establishes mode targets to support growth
- Identifies City-wide macro level improvements for road widenings / Active Transportation / Transit
- Input into the DC Background Study
- Capital planning
- Future Operational Costs





## Planning for Growth: Transportation Impact Studies

Objective assessment of development specific traffic impacts

- Site and Local Network
- Intersection / Road Capacity Analysis
- Site Access & Circulation
- Active Transportation, Transit & Parking



# Transportation Impact Study: Intersection & Road Capacity Analysis



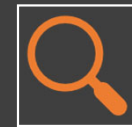
Assessment of Existing  
Traffic Conditions



Trip Generation



Assessment of Future  
Traffic Conditions  
(Site Generated Traffic +  
Background Growth +  
Approved Developments)



Identification of  
Improvements





# Transportation Impact Study: Intersection Capacity Analysis

Metric	Definition	Criteria / Target
Level of Service	LOS is a function of the average vehicle control delay	<p>LOS D or better (delay of 35-55 seconds) for overall intersection operations</p> <p>LOS E or better for individual movements (55-80 seconds)</p>
Volume-to-capacity	The v/c ratio, also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand	V/C ratio less than 0.85 generally indicates that adequate capacity is available and vehicles are not expected to experience significant queues and delays
Queuing Analysis	A queueing analysis assesses the amount of storage required for turning lanes and determine whether spillover occurs to upstream facilities (i.e. blockage of turning or through lanes due to excessive queue lengths relative to available storage and/or creation of gridlock conditions)	Required storage = available storage



Level of  
Service



Volume-to-  
Capacity



Queuing  
Analysis



# Transportation Impact Study: Site Access & Circulation



Source: Google Earth

- Access Management
- Access Geometrics / Configuration
- Site Circulation

# Transportation Impact Study: AT, Transit, Parking & Transportation Demand Management



Source: City of Monterey

Suite of measures to reduce auto dependency in ways to benefit the environment, community and economy

- Remote Work
- Education / Outreach
- Rideshare / Commuter Programs
- End of Trip Facilities
- Support of Parking Reductions
- Transit Fare Discounts





MacMillan  
Crescent

Yonge Street

Sample  
Development

# Traffic Brief Excerpts Prepared for 481 Yonge Street

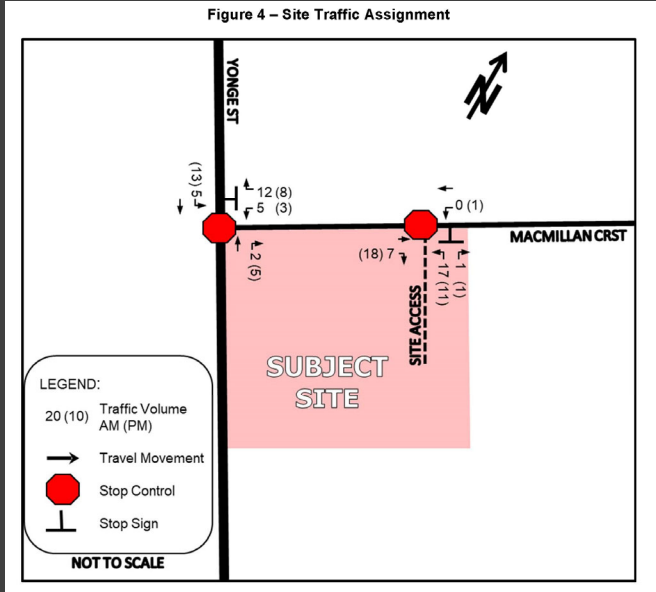
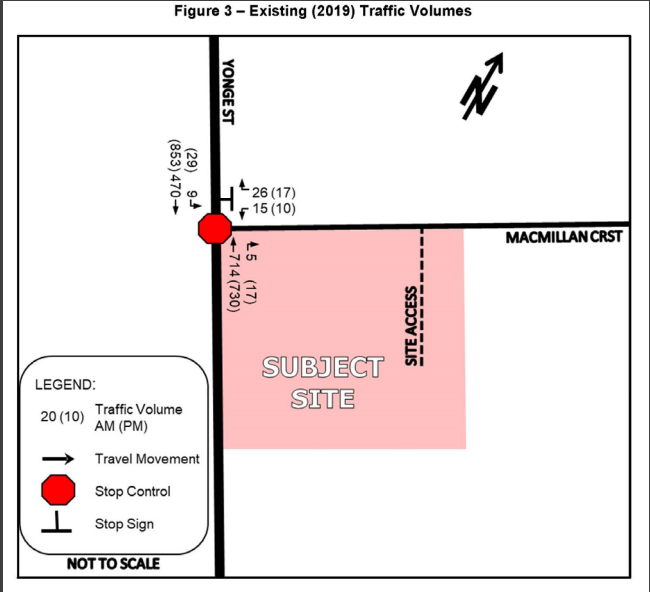
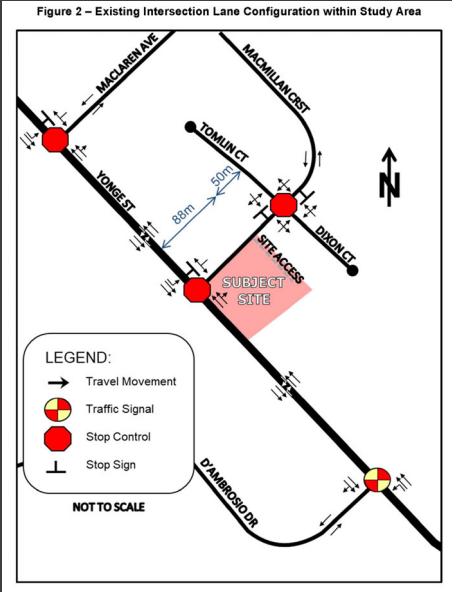


Table 2 – Estimated Traffic Generation of Proposed Development

Land Use	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Multifamily Housing (Mid-Rise) ITE Land Use: 221	67 units	7	18	25	19	12	31

Table 3 – Proposed Development Traffic Distribution Summary

Travel Direction (to/from)	Percent of Total Traffic Generation
North via Yonge Street	69%
South via Yonge Street	26%
East via Macmillan Crescent	4%
<b>Total</b>	<b>100%</b>

# Strategic Actions to Support Growth From a Transportation Planning Lens



Supporting growth in the UGC and intensification corridors



Establishing development charge rates that are reflective of the true cost of required infrastructure



Continued investment in transportation capital projects



Expansion of active transportation infrastructure and transit service



Implementation of best practices such as Transportation Demand Management as well as Access Management Controls



# Thank you

- Questions & Discussion

