Staff Memorandum



To Mayor A. Nuttall and Members of Council

Subject Investigation – Speed Reduction on Lakeshore Drive to

40 km/h

Date December 3, 2025

Ward 2

From M. Banfield, RPP, Executive Director of Development

Services

Executive Member Approval M. Banfield, RPP, Executive Director of Development

Services

CAO Approval M. Prowse, Chief Administrative Officer

The purpose of this memorandum is to provide members of Council with an update concerning council motion 23-G-288 – Investigation – Speed Reduction on Lakeshore Drive to 40 km/h. This motion requested that Development Services Department investigate the feasibility of reducing the speed limit on Lakeshore Drive from Tiffin Street to Mulcaster Street to 40 km/h as well as investigating alternative speed control measures and report back to General Committee.

The corridors that were studied for speed limit reductions were Lakeshore Drive between Tiffin Street and Toronto Street, and Simcoe Street between Toronto Street and Mulcaster Street. It should be noted that the original request on Lakeshore Drive between Tiffin Street to Mulcaster Street is not a continuous corridor.

Lakeshore Drive, between Tiffin Street and Toronto Street, is classified as a parkway. The corridor consists of two lanes per direction with landscaped centre medians. These medians restrict direct access, as entry to waterfront parking is controlled at designated openings. The roadway includes on-street parking on both sides, sidewalks, and a multi-use path along the waterfront. The corridor showcases Barrie's waterfront with a designed aesthetic appeal. On average, approximately 10,000 vehicles travel through this corridor per day.

Simcoe Street, between Toronto Street and Mulcaster Street, is classified as a major collector road. The corridor consists of two lanes per direction from Toronto Street to Bayfield Street, transitioning to one lane per direction from Bayfield Street to Mulcaster Street. Centre medians are present along portions of the roadway. Sidewalks are provided on both sides, with a multi-use path located on the waterfront side to support pedestrian activity in the downtown area. The corridor also features Barrie's inclusive crosswalk connecting Heritage Park to Meridian Place. On average, approximately 6,000 vehicles travel through this section per day.

Both road sections already include traffic calming measures, such as centre landscaped medians, on-street parking, and enhanced pavement markings. These features narrow the travel lanes, bring attention to pedestrians and encourage slower traffic speeds.

The main purpose of determining an appropriate speed limit is to strike a balance between safety and mobility. It should be noted that drivers adjust their speed based on their perception of safe speed rather than the speed limit unless heavy enforcement is present for a long period of time. The major objective of setting an optimal speed limit is to decrease speed differentials along the roadways. This improves operations and safety through avoiding unnecessary acceleration and deceleration, allowing for more efficient progression along a corridor.

Staff conducted speed studies on both weekdays and weekends at multiple points along Lakeshore Drive and Simcoe Street. A map of the study locations is provided in Appendix A. The results are summarized below:

Location	Direction of Traffic	85th Percentile Speed	Average Speed
Location A - Lakeshore Drive	Northbound	52 km/h	44 km/h
Location B - Lakeshore Drive	Southbound	57 km/h	50 km/h
Location C - Lakeshore Drive	Northbound	53 km/h	47 km/h
Location D - Lakeshore Drive	Southbound	53 km/h	44 km/h
Location E - Simcoe Street	Eastbound	46 km/h	38 km/h
Total Average	Both Directions	52 km/h	45 km/h

Total Speed Average Per Corridor			
Location	85th Percentile	Average Speed	
Lakeshore Drive	53 km/h	46 km/h	
Simcoe Street	52 km/h	45 km/h	

On Lakeshore Drive, the 85th Percentile speed was 53 km/h, with an average speed of 46 km/h.

On Simcoe Street, the 85th Percentile speed was 52 km/h, with an average speed of 45 km/h.

Based on the review of existing speed limits, site investigations, and traffic data, it is recommended that the maximum posted speed limit should remain at 50 km/h on Lakeshore Drive between Tiffin Street and Toronto Street and on Simcoe Street between Toronto Street and Mulcaster Street. The analysis identified an 85th percentile speed of 52 km/h and an average speed of 45 km/h, which staff do not consider a speeding concern for the roadways. Maintaining the current default municipal speed limit will support safe, consistent, and realistic travel speeds, encourage compliance, and minimize speed variations along these important corridors of the waterfront and downtown in the City of Barrie.

Appendix:

Appendix A – Speed Limit Investigation – Lakeshore Drive and Simcoe Street

Memo Author:

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File #:

Not Applicable

Pending #:

Not Applicable

Appendix A – Speed Limit Investigation – Lakeshore Drive and Simcoe Street

