

To: Community and Operations Services Committee

From: Kevin Alexander, Commissioner,
Community and Operations Services Department

Report Number: CO-24-55

Date of Report: November 13, 2024

Date of Meeting: November 18, 2024

Subject: Reduction of Speed on Burk Street

Ward: Ward 4

File: 03-05

1.0 Purpose

The purpose of this Report is to respond to the following Council direction from April 29, 2024 related to Item CNCL-24-52:

“Whereas in the past residents on Burk Street between King Street and John Street brought forward concerns about motor vehicle traffic speed and infiltration on their street, including drivers using their street as a bypass for the nearby intersections on Park Road; and,

Whereas a Radar Message Board (RMB) was placed on Burk Street, and during the time there only had a marginal impact, and since its removal in mid-2023, residents continue to experience speed and infiltration concerns;

Therefore be it resolved that:

1. A speed of 40km/h be implemented on Burk Street with appropriate signage; and,
2. That staff be directed to examine options using the process in the Council-approved Neighbourhood Traffic Management Guide (N.T.M.G.), engage with residents on their concerns and input into the available options, and report back to Community and Operations Committee with possible proposed solutions.”

Attachment 1 is a key plan showing the road network, existing parking restrictions and potential locations for traffic calming devices on Burk Street between King Street West and John Street West.

2.0 Recommendation

That the Community and Operations Services Committee recommend to City Council:

That Report CO-24-55 dated November 13, 2024 concerning potential traffic calming options on Burk Street, between King Street West and John Street West, using the Neighbourhood Traffic Management Guide be received for information.

3.0 Input From Other Sources

Not applicable.

4.0 Analysis

4.1 Burk Street – Road Characteristics

Burk Street is a local residential street with a pavement width of 8.3 metres and currently at a posted speed limit of 50 km/h. It connects with King Street West at the north limit, and continues south of John Street West. There are sidewalks along both sides of Burk Street between King Street West and John Street West.

There is a “No Parking Anytime” restriction along the east side of Burk Street between King Street West and John Street West. There is 3-hour parking available along the west side of the street.

Burk Street from King Street West to John Street West is a Prohibited Area for Driving School Instructors and signage has been installed to address past traffic concerns.

A Heavy Traffic Prohibition is installed on Burk Street between John Street West and a point 100 metres south of King Street West.

4.2 40 km/h Area Program

As part of the Council approved 40 km/h Area Program, staff have priority ranked the residential neighbourhoods based on the type of land use in that area such as schools, parks, churches, daycare, etc. Burk Street between King Street West and John Street West and the surrounding area is scheduled to be converted to a 40 km/h Area in Q3 2025.

4.3 Collision History

In the past five years, there has been one (1) reported midblock collision on Burk Street between King Street West and John Street West. This collision was property damage only with no reported injuries.

4.4 Traffic Data Collection

Staff collected traffic speed and volume data along Burk Street between King Street West and John Street West using pneumatic road tubes. The traffic data collected from May 2023 and October 2024 is summarized below in Tables 1 and 2.

Table 1: Burk Street Traffic Data Summary (May 18, 2023)

Road	Location	Direction	Posted Speed Limit	85th Percentile Speed	Traffic Volume – 24 Hour Period
Burk Street	Between King Street West and John Street West	Northbound	50 km/h	49 km/h	312 vehicles
Burk Street	Between King Street West and John Street West	Southbound	50 km/h	49 km/h	667 vehicles

Table 2: Burk Street Traffic Data Summary (October 2, 2024)

Road	Location	Direction	Posted Speed Limit	85th Percentile Speed	Traffic Volume – 24 Hour Period
Burk Street	Between King Street West and John Street West	Northbound	50 km/h	50 km/h	388 vehicles
Burk Street	Between King Street West and John Street West	Southbound	50 km/h	44 km/h	585 vehicles

4.4.1 Traffic Data Review

The analysis of traffic data collected in May 2023 and October 2024 did not identify speeding issues on Burk Street between King Street West and John Street West.

As per the warrant criteria outlined in the City of Oshawa N.T.M.G. for traffic calming measures to be considered, the 85 percentile speed (the speed at which 85% of vehicles are travelling at/or below) must be greater than 10 km/h above the posted speed limit. The traffic data collected showed the 85 percentile speed was at or below the posted speed limit of 50 km/h.

The traffic volumes collected on Burk Street are acceptable and do not indicate a traffic infiltration or 'short cutting' issue as per the criteria in the City of Oshawa N.T.M.G.

4.5 Radar Message Board Program

As per Council direction to address speeding concerns reported by area residents, a radar message board was installed on Burk Street between King Street West and John Street West from 2021 to 2023.

4.6 Feasibility of Potential Traffic Calming Measures

Traffic calming measures are a means to address traffic and safety issues such as speeding and traffic infiltration or 'short cutting.' It must be noted that not every traffic calming measure is suitable for every street. Along with sound engineering judgement, the City of Oshawa N.T.M.G. provides guidance on where each type of traffic calming device should be implemented.

Staff have reviewed each traffic calming measure in the N.T.M.G. and noted the suitability on Burk Street between King Street West and John Street West based on road geometrics, road classification and existing conditions.

The traffic calming measures identified in the City of Oshawa N.T.M.G. are summarized below in Table 3.

See Attachment 1 for a map illustrating the potential traffic calming locations on Burk Street between King Street West and John Street West.

Table 3: Traffic Calming Measures in the City of Oshawa Neighbourhood Traffic Management Guide

Traffic Calming Measure	Description	Primary Purpose	Approx. Cost	Suitability for use on Burk Street
Vertical Measures				
Raised Intersection	A raised intersection is an intersection at a higher elevation than the road to reduce vehicle speed and better define pedestrian crosswalk areas.	Speed reduction and pedestrian safety	\$50,000-\$100,000	Not Applicable: Construction of a raised intersection is not applicable for this location.
Speed Hump	It is a raised area of road designated to cause discomfort for drivers travelling at higher speed.	Speed reduction	\$1,000-\$5,000	Potential Option: As per design standards and specifications, and due to existing driveway spacing, there are only two suitable locations on Burk Street where construction of a standard size speed hump may be considered.
Speed Cushion	Similar to a speed hump, a speed cushion is a raised area of road but does not cover the entire road width requiring passenger vehicles to limit speeds while larger vehicles can straddle and pass with no difficulty.	Speed reduction	\$4,000-\$6,000	Potential Option: As per design standards and specifications, and due to existing driveway spacing, there are only two suitable locations on Burk Street where construction of a standard size speed cushion may be considered.

Traffic Calming Measure	Description	Primary Purpose	Approx. Cost	Suitability for use on Burk Street
Horizontal Measures				
Chicane	A chicane is a series of curb extensions on alternate sides of a road which narrow the road and require drivers to steer in an S-shape, therefore reducing the vehicles speed and through traffic.	Speeding reduction and traffic infiltration	\$15,000-\$50,000	Not Applicable: This option is not feasible due to the spacing of the existing driveways.
Curb Extension	A curb extension is a horizontal intrusion of the curb into the roadway resulting in a narrower section of roadway.	Speed reduction	\$50,000-\$100,000	Not Applicable: This option is not feasible; it may impact existing on-street parking and any future active transportation initiative.
Curb Radius Reduction	A curb radius reduction is an intersection corner with a reduced radius, which slow down right-turning vehicles	Speed reduction	\$50,000-\$100,000	Not Applicable: This measure would not be appropriate as no issues with right-turning vehicles were reported on Burk Street.
On-Street Parking	On-street parking allows vehicles to park parallel to curb, effectively reducing the width of the road. This reduces vehicle speed and through traffic.	Speed reduction	\$1,000-\$5,000	Existing Measure: General 3 hour on-street parking is allowed on one side of the street.

Traffic Calming Measure	Description	Primary Purpose	Approx. Cost	Suitability for use on Burk Street
Raised Median Island	A raised median island is a raised median in the centreline of a two-way road. This reduces the travel lane width, causing a reduction in vehicle speeds.	Speed reduction	\$15,000-\$50,000	Not Applicable: This option is not feasible. A Raised Median Island may reduce parking and driveway access and may cause motor vehicle conflicts with bicycles. There is not sufficient roadway width to implement.
Traffic Circle	Traffic circles are installed inside existing intersections and require motorists to slow down to navigate around them.	Speed reduction	\$15,000-\$50,000	Not Applicable: Not suitable with existing road geometry and parameters.
Flexible Bollards	A flexible bollard is a rubber post placed in the center of a road in order to make drivers uncomfortable travelling at high speed. Flexible bollards are removed during winter months.	Speed reduction	Approx. \$2,000 per set	Potential Option: The installation of flexible bollards may be considered. As per installation guidelines, there are only two suitable locations on Burk Street where a set of flexible bollards could be safely installed without impacting access to residents' driveways. Flexible bollards may also require supplemental 'No Parking' restrictions to maintain traffic access.

Traffic Calming Measure	Description	Primary Purpose	Approx. Cost	Suitability for use on Burk Street
Obstruction Measures				
Directional Closure	A directional closure is a curb extension or barrier which extends to the centerline of the road in order to prohibit traffic in one direction of travel.	Volume reduction (traffic infiltration/short cutting)	\$15,000-\$50,000	Not Applicable: Not practicable as per existing road geometrics. A Directional Closure would also shift traffic onto nearby local streets.
Diverter	A diverter is a raised barrier placed diagonally across an intersection and used to restrict traffic flow.	Volume reduction (traffic infiltration/short cutting)	\$50,000-\$100,000	Not Applicable: Not practicable as per existing road geometry
Full Closure	Full closure is a barrier extending across the entire widths of a roadway that restricts all motor vehicle traffic movement from continuing along the roadway.	Volume reduction (traffic infiltration/short cutting)	\$50,000-\$100,000	Not Applicable: It restricts access to local vehicles and may impact or delay emergency access. It may cause an increase in trip times for the area residents, and shift traffic to nearby local streets.
Regulatory Measures				
Community Safety Zones (C.S.Z.)	C.S.Z. is a marked and designated portion of road, where the community and municipality have determined that road safety is a concern.	Speed reduction	\$75-\$200 per sign	Not Applicable: As per N.T.M.G., a C.S.Z. is not warranted on Burk Street.

Traffic Calming Measure	Description	Primary Purpose	Approx. Cost	Suitability for use on Burk Street
40 km/h Speed Limit Area (S.L.A.)	A 40 km/h S.L.A. is a policy tool aimed at lowering speed limits across a Neighbourhood or specific areas of a road network.	Speed reduction	\$75-\$200 per sign	Existing Measure: Reduced speed limit (40 km/h) will be implemented on Burk Street from King Street West to John Street West in 2025.
Others				
Pavement Markings	Pavement markings can be used to draw attention to a specific area or information.	Speed reduction	\$1,000-\$5,000	Potential Option: Pavement Markings could be implemented on Burk Street, however these pavement markings are generally best suited to be used to bring attention to a specific area or information, such as a school area, stop ahead or speed limit change.
Radar Message Board (RMB)	Radar Message Boards record and display vehicle speeds back to motorists. It is an education tool designed to increase motorist awareness and safety.	Speed reduction	\$3,000-\$8,000 per unit	Potential Measure: A Radar Message Board was installed on Burk Street facing southbound traffic from 2021-2023. A Radar Message Board could be re-installed through the Council Directed Radar Message Board Program.

5.0 Financial Implications

There are no financial implications associated with the recommendation in this report.

6.0 Relationship to the Oshawa Strategic Plan

This report responds to the Oshawa Strategic Plan Priority Area “Care: Safe and Sustainable Environment” with the goal to collaborate and advocate for effective services, programs, and community safety and well-being support.





Mike Harrington, P. Eng., PMP, Director - Interim,
Parks and Roads Operations Services



Kevin Alexander, Commissioner,
Community and Operations Services Department



LEGEND

-  - Existing 'No Parking Anytime' restriction.
-  - Potential Location of Speed Hump, Speed Cushion, or Flexible Bollards

CITY OF OSHAWA
COMMUNITY AND OPERATIONS SERVICES

BURK STREET - STUDY AREA

DATE: 11 13 2024

SCALE: NTS