

Staff Report



Development Services Department

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REPORT TO: Planning and Strategic Initiatives Committee

DATE OF MEETING: August 14, 2023

SUBMITTED BY: Barry Cronkite Director, Transportation Services,
519-741-2200, ext. 7738

PREPARED BY: Faranak Hosseini, Project Manager, Transportation Safety
519-741-2200, ext. 7665

WARD(S) INVOLVED: All Ward (1-10)

DATE OF REPORT: July 20, 2023

REPORT NO.: DSD-2023-286

SUBJECT: Speed Limit Review – School Zones and Bingemans Centre Drive

RECOMMENDATION:

That school zones in City of Kitchener neighbourhoods maintain a consistent and static speed limit of 30 km/h; and,

That Automated Speed Enforcement (ASE) school zone locations maintain a consistent and static speed limit of 30 km/h; and further,

That the speed limit of 50 km/h be maintained on Bingemans Centre Drive.

REPORT HIGHLIGHTS:

- The purpose of this report is to:
 - Review appropriate speed limits and time of day restrictions in school zones on City of Kitchener streets;
 - Review appropriate speed limits in ASE school zone locations; and,
 - Review the potential for increasing the 50 km/h posted speed limit on Bingemans Centre Drive to 60 km/h.
- The key finding of this report is:
 - Given the community function of school properties and the presence of children and other vulnerable street users throughout the day and year, staff recommend maintaining a consistent and static speed limit of 30 km/h for all school zones in Kitchener neighbourhoods including all ASE school zone locations. This approach is aligned with other municipalities including Cambridge, Guelph, Mississauga, and Waterloo.
 - Considering the existing conditions of Bingemans Centre Drive, including on-road cycling facilities, high operating speeds, transit service, and business community concerns regarding speeding and safety, staff recommend maintaining the speed limit of 50 km/h for this street.

*** This information is available in accessible formats upon request. ***
Please call 519-741-2345 or TTY 1-866-969-9994 for assistance.

- These recommendations have no expected financial implications.
- This report supports the delivery of core services.

BACKGROUND:

City Council approved a reduction in speed limits from 50 km/h to 40 km/h across neighbourhoods within the City of Kitchener (DSD-2021-189). Additionally, Council directed staff to reduce speed limits within school zones to 30 km/h within these neighborhoods. More information regarding the details of the Neighbourhood Speed Limit Project and results of the pilot project can be found in staff report DSD-2021-189.

In March 2023, Council passed a motion to review of speed limits in school zones, ASE areas, and on Bingemans Centre Drive as follows:

Whereas 30km/h school zones have been implemented across The City as per the Council approved Neighbourhood Speed Limit project;

Whereas safety concerns regarding speeding and street safety continue to be a top concern for Kitchener residents;

Whereas school zone bylaws on Region of Waterloo and City of Kitchener streets are not consistent in terms of the speed limit and time of day and time of year; and,

Whereas Automated Speed enforcement (ASE) has been installed on Westheights Drive and Franklin Street and residents find driving under the 30km/h hour posted speed limit extremely challenging;

Therefore be it resolved that staff be directed to investigate appropriate speed limits and time of day restrictions in school zones on City of Kitchener streets and report back to Council prior to the start of the 2023 school year;

Therefore be it resolved that staff be directed to review the appropriate speed limit in ASE zones for Westheights Drive and Franklin Street and report back on this matter prior to the fall 2023.

That staff be directed to review the potential for increasing the 50 km/h speed limit on Bingemans Centre Drive to 60 km/h."

REPORT:

This report reviews and provides recommendations on speed limits in school zones and ASE sites located on City of Kitchener streets. It also provides a review and recommendation for the posted speed limit on Bingemans Centre Drive.

School Zones Speed Limits

The reduction of posted speed limits was informed by a pilot project in three residential neighbourhoods in the areas of Doon South, Huron and Idlewood. This pilot project demonstrated the effectiveness of reducing neighbourhood speed limits to 40km/h and school zones speed limits to 30km/h. Data collected in school zones during the pilot showed a 12% (from 41.2 to 36.4 km/h) reduction in the average operating speed, and a 13% (49 to 42.4 km/h) reduction in the 85th percentile speed.

School properties serve as important community hubs offering a diverse range of amenities such as school activities, daycares, after-school programming, public meeting spaces, summer schools and camps, and rental areas for recreational leagues. Furthermore, school properties provide outdoor sports facilities such as basketball courts, soccer fields, and parks. Given the role schools play within the neighbourhoods they serve, and the variety of services they offer residents at all times of the day and year, they attract children and vulnerable street users who rely on active transportation methods for accessing school properties.

Staff conducted a comparison of speed limits and time restrictions in school zones across other municipalities. Other neighbouring municipalities have adopted a similar approach to the City of Kitchener regarding speed limits in school zones. These municipalities, which share similar road networks, and characteristics with Kitchener, have recognized the importance of implementing static 30 km/h speed limits in residential school zones. The consensus among these municipalities is that school zones attract children and vulnerable street users at all times of the day and serve as community hubs for programming and outdoor activities throughout the year. The following municipalities have implemented static speed limits of 30 km/h in school zones: City of Cambridge, City of Guelph, City of Mississauga, and City of Waterloo.

Transportation Services has received feedback from Region of Waterloo School Travel Planning to address safety concerns in school zones. Data collected in October 2022 highlights speeding as the top safety issue in these areas. Furthermore, a survey conducted in three Kitchener schools during the same period revealed that approximately 52% of students use active transportation, such as walking or cycling, to commute to school.

Transportation Services continues to recommend a static and consistent speed limit of 30 km/h in neighbourhood area school zones to prioritize the safety of residents of all ages who utilize school properties throughout the year and outside of regular school hours. The 30 km/h posted speed limit in school zones is applicable at all times for consistency and enhanced safety. Studies indicate a direct correlation between vehicle speeds and the probability of a collision resulting in serious injury or fatality. Specifically, the likelihood of survival in a vehicle-pedestrian collision is approximately 15% when a vehicle is traveling at 50km/h. However, the likelihood of survival can increase to 70% when the vehicle is traveling at 40km/h, and to 90% when the vehicle is traveling at 30km/h. Currently, staff have implemented the 30 km/h speed limits in approximately 85% of school zones across the city with the remaining 15% underway and to be converted by end of 2023.

Automated Speed Enforcement Locations

In 2021, the Region of Waterloo implemented Automated speed enforcement (ASE) on regional and municipal roads within the Region of Waterloo. A total of 16 sites received ASE units in the first phases of the program. Four (4) ASE units are currently located within the City of Kitchener; two on City of Kitchener streets and two on regional roadways. These sites were selected based on criteria developed by a working group comprised of regional and area municipality stakeholders and using data such as roadway characteristics and traffic speeds. In 2023, The Region of Waterloo is expected to expand the ASE program to include an additional 16 sites and two (2) additional cameras for a total of 32 sites and six (6) cameras across The Region. The ASE units currently located on streets under the

jurisdiction of the City of Kitchener are operational without any time restrictions, helping to ensure consistent enforcement for enhanced safety in school zones. More information regarding the details of the automated speed enforcement initiative can be found in staff report DSD-20-104.

In the Region of Waterloo, the ASE program has been implemented with the primary objective of reducing speeds within school zones. This strategic measure aims to mitigate the risk of severe collisions in areas where the safety of children and other vulnerable street users is a priority. The Region of Waterloo is currently conducting a pilot program to explore the implementation of static speed limits versus time/day/month speed limit restrictions in school zones on Region of Waterloo roads. This program aims to assess the impact of reducing speed limits on regional roads to 40km/h during school hours. An important difference between The Region's approach and The City's approach is the classifications and operating characteristics of their respective roadways and streets. The Region of Waterloo primarily operates and maintains arterial roadways that are designed to move significant volumes of traffic through the Region. Area municipalities primarily operate collector and local streets within communities that provide access to homes and neighbourhood amenities. Additionally, The City of Kitchener has adopted a complete streets methodology for neighbourhoods, transitioning streets to be more accommodating for active transportation and vulnerable street users.

Staff recommend a unified and standardized approach of 30 km/h speed limit at all times within City of Kitchener school zones, including school zones equipped with ASE units. This approach is consistent with area municipalities including Cambridge, Guelph, Mississauga, and Waterloo, and ensures that all school zones within Kitchener neighbourhoods maintain a predictable speed limit, prioritizing the safety of students, parents, and other vulnerable street users who utilize these properties throughout the day and year.

Bingemans Centre Drive Speed Limit

Bingemans Centre Drive is classified as a major collector roadway with a posted speed limit of 50km/h and services a range of businesses, vehicles, and street users. Currently the road is a transit corridor with painted bike lanes and a sidewalk on the north side. The south side of the road does not have sidewalk facilities and the corridor does not have any mid block-controlled crossings. The most recent traffic data for Bingemans Centre Drive from 2017 shows an 85th percentile speed of 75 km/h with average daily traffic volume of 11,292 vehicle trips. Between 2013 and 2023, a total of 28 collisions occurred on this road. Among these collisions, two involved pedestrians and one involved a cyclist. Of the 28 collisions, seven resulted in injuries. In March 2023, Council directed staff to review the potential for increasing the 50 km/h speed limit on Bingemans Centre Drive to 60 km/h.

The lack of a sidewalk on the south side of the street, the absence of mid-block crossings and the high traffic volumes and operating speeds pose challenges for street users who need to cross the street to access businesses and transit service. To address pedestrian safety concerns, two pedestrian islands are being installed at locations with a higher expected number of crossings as part of the Vision Zero Hot Spot Improvement program. More information regarding the Vision Zero Hot Spot Improvement program can be found in Staff Report DSD-2023-152. While these improvements aim to enhance safety, higher posted speed limits on the road could undermine the effectiveness of these measures and compromise the safety of vulnerable street users crossing the road or using the existing

painted bike lanes. An 85th percentile operating speed of 75 km/h on this street shows that vehicles are currently not complying with the posted speed limit. Increasing the speed limit could further increase the operating speeds of vehicles.

The unique characteristics of Bingemans Centre Drive, such as transit vehicles making frequent stops, slower moving truck traffic, turning vehicles slowing to access businesses, painted bike lanes without physical separation, and pedestrians crossing the roadway to access transit or due to the absence of a sidewalk on the south side of the road, all contribute to a recommendation for a 50km/h speed limit. Lower speed limits help reduce the potential for collisions and improve safety for all street users. An increased speed limit should only be considered when the existing on-road bike lanes are upgraded to separated cycling facilities to prioritize vulnerable road user safety.

Transportation Services has received feedback from businesses along this roadway expressing concerns about speeding, access challenges for driveways, and the safety of staff and patrons who do not rely on alternative modes of transportation including walking, cycling and transit.

Staff recommend maintaining the current posted speed limit of 50 km/h given the existing conditions on Bingemans Centre Drive. This approach prioritizes safety for vulnerable street users and helps address concerns expressed by businesses and other stakeholders in the area.

STRATEGIC PLAN ALIGNMENT:

This report supports the delivery of core services.

FINANCIAL IMPLICATIONS:

Capital Budget – The recommendation has no impact on the Capital Budget.

Operating Budget – The recommendation has no impact on the Operating Budget.

COMMUNITY ENGAGEMENT:

INFORM – This report has been posted to the City’s website with the agenda in advance of the council / committee meeting.

PREVIOUS REPORTS/AUTHORITIES:

- Report DSD-19-159 – Neighbourhood Speed Limit Review
- Report DSD-20-104 – Automated Speed Enforcement
- Report DSD-2021-189 – Neighbourhood Speed limit Review

APPROVED BY:

Justin Readman, General Manager, Development Services Department

ATTACHMENTS:

None