

- 3. Gateway speed zones in Old Ottawa East, the Glebe and the Glebe Annex**
Zones de limite de vitesse à l'entrée du Vieil Ottawa-Est, du Glebe et de l'annexe du quartier Glebe

COMMITTEE RECOMMENDATIONS

That Council

That the Transportation Committee recommend Council approve that the speed limit be lowered to 30 km/h through the implementation of 30 km/h Gateway Speed Limit Signs within the following zones and corresponding boundaries:

- a) Zone 1 (“Glebe Annex”): Between Bronson Avenue and Lebreton Street South, and between Carling Avenue and the 417 as indicated in Document 1;**
- b) Zone 2 (“Glebe East”): Between Bank Street and Queen Elizabeth Drive, and between the Rideau Canal and the 417 as indicated in Document 2;**
- c) Zone 3 (“Old Ottawa East—East”): Between Main Street and the Rideau River, and between the 417 and the Rideau River which is generally shown in Documents 3 & 4;**
- d) Zone 4 (“Old Ottawa East—Northeast”): Between Main Street and Nicholas Street, and between the 417 and Colonel By Drive which is generally shown in Document 5;**
- e) A speed limit of 30 km/h on Lees Avenue between Main Street and east of Chestnut Street to be included within the adjacent Gateway zone 3; and,**
- f) A speed limit of 30 km/h on Greenfield Avenue between Main Street and Mann Avenue to be included within the adjacent Gateway zone 4.**

RECOMMANDATIONS DU COMITÉ

Que le Conseil

approuve la réduction de la limite de vitesse à 30 km/h par la mise en place de panneaux de limite de vitesse de 30 km/h à l'entrée des zones suivantes et des délimitations correspondantes :

- a) **Zone 1 (« annexe du quartier Glebe ») : Entre l'avenue Bronson et la rue Lebreton Sud, et entre l'avenue Carling et la 417 comme indiqué dans le document 1;**
- b) **Zone 2 (« Glebe Est ») : Entre la rue Bank et la promenade Reine-Élizabeth, et entre le canal Rideau et la 417, comme indiqué dans le document 2;**
- c) **Zone 3 (« Vieil Ottawa-Est-Est ») : Entre la rue Main et la rivière Rideau, et entre la 417 et la rivière Rideau, représentée de manière générale dans les documents 3 et 4;**
- d) **Zone 4 (« Vieil Ottawa Est-Nord-Est ») : Entre la rue Main et la rue Nicholas, et entre la 417 et la promenade du Colonel-By représentée de manière générale dans le document 5;**
- e) **Une limitation de vitesse à 30 km/h sur l'avenue Lees entre la rue Main et l'est de la rue Chestnut, à inclure à l'entrée de la zone adjacente 3;**
- f) **Une limitation de la vitesse à 30 km/h sur l'avenue Greenfield entre la rue Main et l'avenue Mann, à inclure à l'entrée de la zone adjacente 4.**

DOCUMENTATION

- 1. Councillor's report, dated August 23, 2021 (ACS2021-OCC-TRC-0024)
Rapport du conseiller, daté le 23 août 2021 (ACS2021-OCC-TRC-0024)

Subject: Gateway speed zones in Old Ottawa East, the Glebe and the Glebe Annex

File Number ACS2021-OCC-TRC-0024

**Report to Transportation Committee on 1 September 2021
and Council 8 September 2021**

Submitted on August 23, 2021 by Councillor S. Menard

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613-580-2487, Shawn.Menard@ottawa.ca

Ward: Capital (17)

Objet : Zones de limite de vitesse à l'entrée du Vieil Ottawa-Est, du Glebe et de l'annexe du quartier Glebe

Dossier : ACS2021-OCC-TRC-0024

**Rapport au Comité des transports le 1er septembre 2021
et au Conseil le 8 septembre 2021**

Soumis le 23 août 2021 Conseiller S. Menard

Personne ressource : Conseiller S. Menard

613-580-2487, Shawn.Menard@ottawa.ca

Quartier : Capitale (17)

REPORT RECOMMENDATION(S)

That the Transportation Committee recommend Council approve that the speed limit be lowered to 30 km/h through the implementation of 30 km/h Gateway Speed Limit Signs within the following zones and corresponding boundaries:

a) Zone 1 (“Glebe Annex”): Between Bronson Avenue and Lebreton Street

- South, and between Carling Avenue and the 417 as indicated in Document 1;
- b) **Zone 2 (“Glebe East”):** Between Bank Street and Queen Elizabeth Drive, and between the Rideau Canal and the 417 as indicated in Document 2;
 - c) **Zone 3 (“Old Ottawa East—East”):** Between Main Street and the Rideau River, and between the 417 and the Rideau River which is generally shown in Documents 3 & 4;
 - d) **Zone 4 (“Old Ottawa East—Northeast”):** Between Main Street and Nicholas Street, and between the 417 and Colonel By Drive which is generally shown in Document 5;
 - e) **A speed limit of 30 km/h on Lees Avenue between Main Street and east of Chestnut Street to be included within the adjacent Gateway zone 3; and,**
 - f) **A speed limit of 30 km/h on Greenfield Avenue between Main Street and Mann Avenue to be included within the adjacent Gateway zone 4.**

RECOMMANDATION(S) DU RAPPORT

Que le Comité des transports recommande au Conseil d’approuver la réduction de la limite de vitesse à 30 km/h par la mise en place de panneaux de limite de vitesse de 30 km/h à l’entrée des zones suivantes et des délimitations correspondantes :

- a) **Zone 1 (« annexe du quartier Glebe ») :** Entre l’avenue Bronson et la rue Lebreton Sud, et entre l’avenue Carling et la 417 comme indiqué dans le document 1;
- b) **Zone 2 (« Glebe Est ») :** Entre la rue Bank et la promenade Reine-Élizabeth, et entre le canal Rideau et la 417, comme indiqué dans le document 2;
- c) **Zone 3 (« Vieil Ottawa-Est–Est ») :** Entre la rue Main et la rivière Rideau, et entre la 417 et la rivière Rideau, représentée de manière générale dans les documents 3 et 4;
- d) **Zone 4 (« Vieil Ottawa Est–Nord-Est ») :** Entre la rue Main et la rue Nicholas,

et entre la 417 et la promenade du Colonel-By représentée de manière générale dans le document 5;

- e) **Une limitation de vitesse à 30 km/h sur l'avenue Lees entre la rue Main et l'est de la rue Chestnut, à inclure à l'entrée de la zone adjacente 3;**
- f) **Une limitation de la vitesse à 30 km/h sur l'avenue Greenfield entre la rue Main et l'avenue Mann, à inclure à l'entrée de la zone adjacente 4.**

BACKGROUND

It has been a priority of both the City of Ottawa and the office of Councillor Shawn Menard to improve the safety of street users, whether they be occupants of cars, pedestrians or bicyclists. The city has funded numerous initiatives through its Traffic Services Department and Safer Roads Ottawa, and recently released the *Road Safety Action Plan 3.0*. With its theme, *Think Safety, Act Safely*, the plan seeks to achieve a reduction in the average annual rate of fatal and major injury collisions of 20% by 2024.

The city has implemented the concept of residential area speed zones, providing staff and council with an efficient means to lower speed limits within residential communities. The motion adopted by council allows for the creation of speed zones of either 40 km/h or 30 km/h.

The issue of safer, calmer streets is an important one for residents of Capital Ward, with residents and community associations regularly seeking ways to slow down motor vehicle traffic. Residents in the Glebe, the Glebe Annex and Old Ottawa East have sought safer, slower and calmer streets. Each community has a community association, and each community association has members dealing with transportation and safety. Reducing traffic speed is a goal of each committee.

In 2019, Councillor Menard's office implemented the first two residential speed zones in Capital Ward, one for the western section of the Glebe and one for the western section of Old Ottawa South. This was followed up in 2020 with the implementation of residential speed zones in the western section of Old Ottawa East and the western section of Old Ottawa East.

Because traffic speed has a direct impact on the safety of our streets, implementing gateway speed zones of 30 km/h—coupled with TTC measures and other traffic

calming initiatives—aligns with and furthers the city’s goal of increased safety for all road users.

DISCUSSION

Street safety is a significant concern for the residents of the Glebe, the Glebe Annex, Old Ottawa East and all of Capital Ward.

The Glebe Annex is a residential neighbourhood in central Ottawa. It is an eminently walkable neighbourhood close to LRT and soon to be situated beside Bus Rapid Transit along Carling Avenue. It is currently experiencing intensification, with numerous large-scale developments underway or on the horizon. As part of the proposed downtown transect in the draft new Official Plan, it is expected to continue this growth, with an emphasis placed on sustainable transportation methods.

The Glebe is also a walkable residential community in central Ottawa. It has robust transit service, and significant bicycling and pedestrian facilities. With a mix-use main street (Bank Street) providing commercial and public services, as well as numerous parks and public amenities, the Glebe supports and facilitates active transportation. Within the proposed gateway zone, there are five parks, an elementary school, an alternative school, a daycare centre, the Rideau Canal Linear Park and Lansdowne Park.

The section of the Glebe west of Bank Street was converted to a 30 km/h residential area speed zone in 2019. Implementing the proposed speed zone would provide consistency and predictability to motorists, pedestrians and bicyclists.

Similar to the other communities described in this report, Old Ottawa East is a walkable residential community in central Ottawa, with robust transit service, and significant bicycling and pedestrian facilities. The mix-use main street (Main Street) is a Complete Street with sidewalks and raised cycletracks. It provides commercial and public services, as well as parks and public amenities. Old Ottawa East supports and facilitates active transportation.

Within the proposed residential area speed zones in Old Ottawa East is the Greystone/Oblats development. A 30 km/h residential area speed zone has already been implemented for the area of the development. In addition, the area of Old Ottawa East located west of Main Street had a 30 km/h speed zone implemented in 2020. The

proposed speed zone would bring consistency to this area, bringing all streets down to 30 km/h.

There is ample evidence that lowering speed limits and traffic speeds has a positive correlation with overall street safety, as well as lower fatality rates. Specifically, lowering speeds towards 30 km/h has the potential to significantly reduce severe injuries and to save lives.

In one study, studied the effects of reducing speed limits from 40 km/h to 30 km/h on pedestrian motor vehicle collisions (PMVC). The study found that “[s]peed limit reductions from 40 km/h to 30 km/h were associated with a 28% decrease in the PMVC incidence rate in the City of Toronto (IRR = 0.72, 95% CI: 0.58–0.89). A non-significant 7% decrease in PMVC incidence rates were observed on comparator streets that remained at 40 km/h speed limits (IRR = 0.93, 95% CI: 0.70–1.25). Speed limit reduction also influenced injury severity, with a significant 67% decrease in major and fatal injuries in the post intervention period on streets with speed limit reductions (IRR = 0.33, 95% CI: 0.13–0.85) compared with a 31% not statistically significant decrease in major and fatal injuries on comparator streets (IRR = 0.69, 95% CI: 0.37–1.31). (Fridman et al. BMC Public Health, *Effect of reducing the posted speed limit to 30 km per hour on pedestrian motor vehicle collisions in Toronto, Canada – a quasi experimental, pre-post study*)

The Curtin-Monash Accident Research Centre found risk of pedestrian death reduced exponentially as collision speeds dropped: “It is estimated that less than 10% of pedestrians would die when struck by a vehicle travelling at 30 km/h, compared with fatality rates of 26% at 40 km/h and over 80% at 50 km/h.” (Curtin-Monash Accident Research Centre, [Improving Pedestrian Safety](#) and [The Impact of Lowered Speed Limits in Urban/Metropolitan Areas](#).)

The European Transport Safety Council found that collisions at 32 km/h resulted in a 5% pedestrian fatality rate, whereas collisions at 48 km/h resulted in a 45% pedestrian fatality rate. (ETSC (1995) *Reducing Traffic Injuries resulting from excess and inappropriate speed*.)

In 2004, the World Health Organization noted that studies suggest that for each decrease of 1 km/h in a car’s speed, there is a 2% to 3% reduction in collisions. (WHO, *World report on road traffic injury prevention*).

Switzerland saw fewer accidents (15%) and a reduction in severity (27%) in 30km/h zones. (Lindenmann, H. P. (2005). *The effects on road safety of 30 kilometer-per-hour zone signposting in residential districts*. Institute of Transportation Engineers. ITE Journal, 75(6), 50-54.)

In 32 km/h speed zones in London, UK, there was a significant reduction in road casualties (42%, 48% among those under 16 years old) compared to adjacent areas where the speed limits were not reduced. (Grundy, C., Steinbach, R., Edwards, P., Green, J., Armstrong, B., & Wilkinson, P. 2009. *Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis*. Bmj, 339).

Lancashire County, UK, implemented 30 km/h speed limit zones in all residential areas and all school zones. Initial indications were that deaths and injuries dropped (WHO. 2013. *Pedestrian safety: a road safety manual for decisionmakers and practitioners*. World Health Organization. from http://apps.who.int/iris/bitstream/10665/79753/1/9789241505352_eng.pdf).

Lowering speed limits is only part of the efforts to reduce traffic speed in Capital Ward. The city has, recently, added additional bicycle lanes to a number of streets, narrowing the roadway and deterring speeding. The councillor's office has been dedicated to implementing further measures to reduce speeds, including using TTC measures, as well as more permanent initiatives.

The councillor's office will continue to use the Capital Ward TTC budget to calm traffic. This will include implementing the necessary line painting to narrow the street openings at the border of the gateway speed zone. This line painting will be implemented throughout the Term of Council.

Capital Ward has a significant active transportation modal share. Providing more opportunities for residents to walk and bicycle safely has been a focus of city development in the ward. In recent years, the city has installed additional bicycle and pedestrian infrastructure, most notably the recent construction of the Flora MacDonald Footbridge and the new underpass along the Rideau River Multi-Use Path. This year, the Bank Street Canal Bridge will provide segregated facilities for bicyclists and pedestrians. In the near future, another active transportation connection will be constructed between the Carleton University campus and Vincent Massey Park.

Calming streets and slowing traffic will help support these efforts by the city. It will also create safer and healthier neighbourhoods. Lowering speed limits to 30 km/h and creating gateway speed zones in the Glebe areas and Old Ottawa East are a part of this endeavour.

FINANCIAL IMPLICATIONS

The estimated cost to implement Gateway Signage for Zone 2 (\$25,000) can be funded from within Traffic Services existing operating budget. The remaining three zones (\$37,500) signage will be installed and paid out of Councillor Menard's Temporary Traffic Calming project when funds are confirmed as available.

LEGAL IMPLICATIONS

There are no legal impediments to approving the recommendation as outlined in this report.

COMMENTS BY THE WARD COUNCILLOR(S)

Councillor Menard is supportive of the proposal to create residential area speed zones of 30 km/h in the Glebe, the Glebe Annex and Old Ottawa East, as outlined in this report. This is an important initiative for both communities, and it will help provide continuity for drivers, as other areas with Capital Ward have already seen 30 km/h residential speed zones implemented.

CONSULTATION

Transportation Services Comment:

Road safety engineering best practices support that it is important to maintain consistent, uniform speed limits on any roadway to provide all users including pedestrians, cyclists, adjacent residents and motorists with a correct representation of the actual speed of traffic on that roadway. The provision of speed limits considers the roadway function and its design. Implementing a speed limit that does not align with these considerations may result in enforcement difficulties and increases in traffic hazard. Lowering the speed limits on City streets without consideration of the physical configuration of the road will have minimal impact on driver behaviour. In such cases where a posted speed limit is below operating speeds, most motorists will continue to drive at speeds they feel are reasonable and prudent unless continual police

enforcement is present. The visual and physical cues a driver uses to determine the appropriate travel speed should be consistent with the posted speed limit.

Transportation Services has two different approaches to consider when lowering a speed limit to less than 50 km/h in Ottawa:

1. Existing Policies: When operating speeds are not at 40 km/h or 30 km/h, both the Council-approved Speed Zoning Policy and the 30 km/h Speed Limit Policy, provide the criteria which must be met in order for staff to have the authority to implement a speed limit change on a specific roadway; and,
2. Council-Approved Gateway Signage By-law: On August 29, 2018, City Council approved the Gateway Speed Limit Signage in Residential Areas Report (2018-TSD-PLN-0008), and the revised Gateway Speed Limit Signage By-law. By-Law No. 2018-288 provides the General Manager of Transportation Services the delegated authority to designate certain residential areas with speed limits lower than 50 km/h through the use of 40 km/h or 30 km/h Gateway Signage consistent with both the Speed Zoning and the 30 km/h Speed Limit Policies. When this by-law is applied, the petition requirements identified in the City's Speed Zoning Policy and the 30 km/h Speed Limit Policy are waived for those areas that will be signed using Gateway Speed Limit Signage. This is due to the onerous implications required to undertake a petition process for a large area consisting of multiple residential roadways.

As per the Council-approved eligibility criteria, 30 km/h Gateway Speed Limit Signage can only be used to establish the speed limit in neighborhoods with roadways meeting either of the following criteria:

1. operating speed (defined as the 85th Percentile Speed) equal to or less than 35 km/h; or,
2. meet Roadway and Traffic Environment criteria, the Active Transportation Environment

Traffic Services staff completed a site investigation of the affected areas which have been put forward for 30 km/h Gateway Speed Limit Signage; each consist of residential and collector roadways. The addition of Lees Avenue with an existing speed limit of 50 km/h, between Main Street and the Eastbound Highway 417 on ramp, is to be included within Zone 3 while Greenfield Avenue from Main Street to Mann Avenue, which has a

current 40 km/h speed limit, is to be included within zone 4, but are arterial roadways that would not normally be included. It is however noteworthy that Greenfield Avenue is expected to be reconstructed within the next few years with a design speed targeting a 30 km/h speed limit and the section of Lees is mostly residential, similar to other streets in the area.

Staff reviewed the existing speed data on file, and also collected additional speed data, for the local, collector and arterial roads in order to complete a review of the multiple roadways to assess the areas' eligibility for gateway signage. Speed data within the general boundaries for the proposed new 30 Km/h Gateway Speed Limit areas is identified in the report's supporting documents; the available data indicates that all areas generally have an operating speed greater than 35 km/h. Additionally, upon further review, many of the roadways do not meet the required Roadway and Traffic Environment criteria, the Active Transportation Environment criteria and Roadway Width criteria required for the implementation of 30 km/h Gateway Speed Limit Signage.

In order to meet the policy criteria, given that most operating speeds are greater than 35 km/h, affected roadways would need pavement marking modifications to narrow local residential entrance widths to 7 meters. The cost to modify entrance widths at all intersections within all of the four areas using appropriate pavement marking applications is approximately \$136,000 . The cost to apply the initial pavement markings, as required, would be funded through Councillor Menard's future Ward Temporary Traffic Calming (TTC) budgets over the next few years.

Posting a 30 km/h speed limit on a roadway where the operating speed is much greater, may increase the crash risk. Some drivers will choose to comply with the 30 km/h speed limit while others will continue to drive the higher speed at which they feel comfortable travelling. The varying difference in operating speeds between individual vehicles may increase the risk of collision as the potential for interactions or conflicts between vehicles is greater.

The Transportation Services Department does not expect the community's operating speed to be significantly reduced because of the implementation of 30 km/h speed limit gateway signage unless considerable police enforcement occurs on an on-going basis.

Upon Council approval of the report, the Transportation Services Department will endeavor to implement gateway signage for all four zones as soon as practicable.

The estimated cost for the implementation of signs is \$62,500 for labour and materials for all zones. The installation of signs in Zone 2 Glebe East (\$25,000) would be funded by the Traffic Services' Signage Maintenance account as this would be the one speed zone area installed in Ward 17 for 2021 funded by City budget, please see Document 2 for this zone's boundaries. The remaining three zones (\$37,500) will be installed and paid out of Councillor Menard's Temporary Traffic Calming budgets when funds are confirmed as being available.

The installation of gateway signage in these areas can be completed prior to the installation of pavement markings, however Traffic Services would recommend that the painted road narrowings be implemented in 2021 at locations where the 30 km/h gateway signs are placed. The narrowings are recommended to provide further guidance to motorists that they are entering a 30 km/h zone, which may lead to improved adherence to the 30 km/h speed limit.

ACCESSIBILITY IMPACTS

There are no specific accessibility impacts identified associated with this report or its recommendations.

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications associated to this report.

RURAL IMPLICATIONS

There are no rural implications associated with this report or its recommendations.

TERM OF COUNCIL PRIORITIES

The implementation of gateway speed zones in the Glebe, the Glebe Annex and Old Ottawa East aligns with the following three Term of Council Priorities:

Integrated Transportation

The gateway speed zones, and associated traffic-calming measures will help enable effective mobility through a sustainable, accessible and connected city transportation system; they will provide residents with easy access to their preferred transport choice; and they will enhance the safety of vulnerable road-users.

Thriving Communities

The gateway speed zones, and associated traffic-calming measures will enhance safety and livability of our streets by slowing vehicles and making the streets more welcome for all road-users.

Environmental Stewardship

The gateway speed zones, and associated traffic-calming measures will provide safer streets, allowing more residents to switch to active transportation

SUPPORTING DOCUMENTATION

- Document 1 - Speed Survey Results - Glebe Annex (Zone 1)
- Document 2 - Speed Survey Results - Glebe East (Zone 2)
- Document 3 - Speed Survey Results – Old Ottawa East Between Main Street and the Rideau River, and between Lees Avenue and the Rideau River (Zone 3 – South)
- Document 4 - Speed Survey Results – Old Ottawa East Between Main Street and the Rideau River, and between Lees Avenue and the Rideau River (Zone 3 - North)
- Document 5 - Speed Survey Results - Old Ottawa East - Northeast Between Main Street and Nicholas Street, and between Lees Avenue and Colonel By Drive (Zone 4)

DISPOSITION

The Transportation Services Department will take appropriate action based on the recommendations made by the Committee and Council and will endeavour to install both the signs and pavement markings as soon as practicable.