

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Engineering and Transportation Division

To: Mayor and Members of Council
From: Mark Ceppi, Engineering Technologist I
Date: July 9, 2018
Subject: School Zone Speed Limits and Community Safety Zones – Phase 1

Recommendations

It is recommended that:

1. A maximum speed limit of 40 km/h (at all times) and Community Safety Zones (School Days Only, from 8:00 AM to 6:00 PM) be implemented on the following 26 road sections:
 - a) In the Community of Blenheim:
 - i. King Street between a point 20 m east of Regent Street and a point 20 m west of Snow Avenue.
 - b) In the Community of Chatham:
 - i. Alexandria Avenue between a point 30 m west of Queen Street and a point 30 m east of McGuigan Avenue.
 - ii. Crystal Drive between King Street and the southerly limits.
 - iii. Dale Drive between a point 50 m east of Bear Line and Hamlet Court/Twilight Trail.
 - iv. Delaware Avenue between a point 60 m south of McNaughton Avenue and a point 30 m north of Gladstone Avenue.
 - v. Eugenie Street between a point 20 m east of Foreman Drive and a point 10 m west of Meadowlea Road.
 - vi. King Street West between a point 50 m north of Merritt Avenue and 20 m east of Crystal Drive.
 - vii. McFadden Avenue between McGuigan Avenue and the easterly limit.

- viii. Willowmac Avenue between a point 30 m west of Queen Street and a point 30 m east of McGuigan Avenue.
- c) In the Community of Thamesville:
- i. Edith Street between Wallace Street and Lamila Street.
 - ii. Graham Street between a point 50 m south of Jane Street and Edith Street.
 - iii. Lamila Street between Edith Street and Mary Street
 - iv. Mary Street between a point 50 m west of Wallace Street and Lamila Street.
 - v. Wallace Street between a point 100 south of Jane Street and a point 20 m south of Edith Street.
- d) Ella Street South between Fort Street and a point 50 m north of Gladstone Avenue in the Community of Tilbury
- e) In the Community of Wallaceburg:
- vi. Ella Street South between Fort Street and a point 50 m north of Gladstone Avenue.
 - vii. Bertha Street between John Avenue and Francis Avenue.
 - viii. Elm Drive South between Turnbull Avenue and a point 30 m north of Warwick Drive.
 - ix. Francis Avenue between a point 30 m north of Elgin Street and Bertha Street.
 - x. Gordon Street between a point 10 m east of Daw Avenue and the easterly limit.
 - xi. John Avenue between a point 30 m north of Elgin Street and the northerly limit.
 - xii. Lawrence Avenue between Emma Crescent and a point 50 m west of Dora Drive.
 - xiii. Murray Street between a point 50 m north of Wills Street and Roy Street
 - xiv. Roy Street between Murray Street and the easterly limit.
 - xv. Turnbull Avenue between Elm Drive South and a point 20 m east of Chestnut Drive.

- xvi. Thomas Avenue between Dora Drive and a point 30 m west of Janssens Street.
2. Community Safety Zones (School Days Only, from 8:00 AM to 6:00 PM) be implemented on the following six road sections in the Community of Tilbury:
 - a) Elm Street between St. Clair Street and a point 30 m north of Canal Street
 - b) Lyon Avenue North between a point 40 m north of Canal Street West and St. Clair Street.
 - c) Mable Street between a point of 40 m north of Stewart Avenue and Fort Street.
 - d) Maple Street South between a point 30 m north of George Street and a point 60 m north of Goodal Drive.
 - e) Poplar Street between the westerly limit and Lyon Avenue North.
 - f) St. Clair Street between the westerly limit and Elm Street.
 3. The Municipality of Chatham-Kent Traffic and Parking By-law 245-2004 be amended accordingly with:
 - a) The creation of Community Safety Zone regulation and Schedule JJ.
 - b) Insertion of speed limit zones and community safety zones described in Recommendation 1.

Background

At the January 15, 2018 Council Meeting the following notice of motion was approved:

1. "School Safety Zones" be established in Chatham-Kent.
2. The school portion of the Community Safety Zones study be pulled from the Traffic Calming Policy that is to be conducted in 2018 with recommendations not coming to Council until an undetermined date in 2019.
3. The School Safety Zones be established adjacent to the main entrance and/or bus loading areas of schools within Chatham-Kent that allows for a reduction of speed limit to 30km/h and permits double the speed limit fines.
4. This be phased in beginning in the summer of 2018 as determined by the Engineering Department with preference given to elementary schools which are located in higher traffic areas as determined by the AADT report.
5. Our By-law be amended to permit the above.

Provincial legislation in the form of Bill 90, Highway Traffic Amendment Act (School Safety Zones), 2016 has been drafted to amend the Highway Traffic Act, R.S.O. 1990 (HTA) with regulations allowing for the creation of School Safety Zones. However, Bill

90 has not yet been passed and has been in first reading status since December 8, 2016.

Regulations allowing municipalities to implement Community Safety Zones (CSZs) on public highway sections within their jurisdiction was established in the HTA on September 1, 1998. The CSZ designation can be implemented with specified days and times or anytime. When in effect, fines issued for traffic related offences (for example, speeding, disobeying stop or yield signs, disobeying traffic signals, illegal turns) committed within the zone are doubled.

The HTA provides regulations which defaults speed limits in the Province of Ontario at 50 km/h on all urban highways and 80 km/h on all rural highways. The HTA also provides for Municipal Council to pass by-laws to create speed limit zones that are different from the HTA defaults.

In addition, the HTA also provides for Municipal Council to implement reduced speed limit zones on roadways adjacent to schools. Unlike the typical speed limit zones that are in effect at all times, the reduced rate of speed in the school speed zone is limited to school days, and specific time periods within the school day. The HTA requires the installation of programmable electronic illuminated signs, or flashing yellow beacons, at the start of the school speed zone which activate to notify motorists when the reduced rate of speed is in effect.

The Ontario Traffic Manual (OTM) provides guidelines for the installation of school zone speed limits which includes limiting the speed limit reduction to no less than 40 km/h on roadways with speed limits of 60 km/h or less and 60 km/h on roadways with speed limits of 80 km/h or less. In compliance with the HTA, the OTM provides guidelines for the installation of electronic signs or flashing beacons to be operated when the school speed limits are in effect.

Chatham-Kent Traffic and Parking By-Law 245-2004 regulates speed limits implemented on all Chatham-Kent roadways that are different from the default speed limits found in the HTA.

Comments

Engineering and Transportation Division (Engineering) has identified all elementary and secondary school locations in Chatham-Kent, including public and private schools, and selected candidates to review for Phase 1. Additional Phases will be implemented once detailed road reviews are complete on the remaining school locations.

30 Km/h Speed Limits

Consistent with the OTM guidelines, Engineering has concerns regarding the implementation of full time 30 km/h speed limits on arterial and collector roadway classes, which typically have the highest traffic volumes and heavy vehicle usage. Lower speed limits will reduce the capacity of those roadways, making them less efficient. The 30 km/h speed limit is unusually low for these classes of roadways. Motorists will typically become frustrated with this condition and begin to find alternative

routes to avoid these areas. This will create increased traffic on roadways that are not intended to have higher traffic volumes.

Urban arterial and collector roads typically are designed for speeds of 60 km/h and posted at 50 km/h. Therefore, introducing a 30 km/h speed limit will likely reduce the consistency of vehicle speeds and reduce speed limit compliance which in turn reduces overall roadway safety.

For these reasons, Engineering does not recommend the implementation of full time 30 km/h speed limits on collector or arterial roadways. The use of 40 km/h school zone speed limits in conjunction with the electronic illuminated signs or beacons is the preferred method of introducing lowered speed limits in school areas along these classes of roadway. The implementation expense for the school zone speed limits are higher due to the illuminated signs or beacons, which are estimated to cost \$10,000 to install per location.

Engineering also recommends the continued improvement of infrastructure to increase pedestrian safety at schools. This would include the continuation of the new sidewalk construction program which over the last 5 years has been constructing new sidewalks along arterial and collector roadways to improve safety by physically separating the pedestrians and vehicles using the roadway.

School Travel Planning is a program that, in conjunction with school boards, Chatham-Kent Police Services, and Health and Family Services, identifies safe routes to school and any additional infrastructure (sidewalks, pedestrian crossings) required to improve safety along these routes. School Travel Planning was conducted in Blenheim in 2010 and resulted in the construction of sidewalks and intersection pavement marking improvements to enhance pedestrian safety. The sidewalk installations occurred along local roadways that would not normally have been included in the new sidewalk construction program.

Phase 1 Implementation

For Phase 1, the following schools are identified for reduced speed limits along adjacent roadways:

- Blenheim: W.J Baird Public School
- Chatham:
 - Winston Churchill Public School
 - Victor Lauriston Public School
 - King George VI Public School
 - Queen Elizabeth II Public School
- Thamesville:
 - Thamesville Area Central Public School
 - Good Shepard Catholic School
- Tilbury:
 - St. Joseph Public School
 - Ecole Elementaire Catholique Sainte-Francis
 - Tilbury Area Public School

- Wallaceburg:
 - St. Elizabeth Catholic School
 - Holy Family Catholic School
 - Christ the King Catholic School
 - A.A. Wright Public School
 - H.W. Burgess Public School

The majority of the roadways located adjacent to these schools are local roadways and there are no concerns with implementing full time reduced speed limits. These local roadways are currently 50 km/h except for in Tilbury, where the speed limits on local roads is 40 km/h. Engineering recommends limiting the speed limit reduction on these roadways to 40 km/h, except for in Tilbury where there will be no change to the speed limit.

The only collector or arterial roadways included in Phase 1 are King Street West for Winston Churchill School in Chatham, Ella Street South for Tilbury Area Public School, and Murray Street for Holy Family Catholic School in Wallaceburg. While implementing a 40 km/h school zone speed limit with beacons is preferred, a fulltime speed limit reduction is recommended due to lack of budget funding in the current year for the installation of the beacons. In addition, these roadways will be monitored to determine if conversion to a school zone speed limit with the installation of beacons is required in the future.

All reduced speed zones will be implemented in conjunction with a CSZ designation. The 40 km/h roadways in Tilbury will also receive CMZ designations. Each of the CSZs will be in effect on school days only and from 8:00 AM to 6:00 PM on these days. Fines for traffic violations received with a CSZ will be doubled.

All signs required for the implementation of these reduced speed zones and CSZs will be installed per OTM guidelines.

A by-law approval is required to implement the new Community Safety Zones and the 40 km/h Speed Limit zones in the Municipality of Chatham-Kent. New by-law regulations are also required in Traffic and Parking By-law 245-2004 for the creation CSZs. A by-law to amend the Traffic and Parking By-law 245-2004 based on the recommendations listed in this report is attached to the Council agenda for reading.

Areas of Strategic Focus and Critical Success Factors

The recommendations in this report support the following areas of strategic focus:

- Economic Prosperity:
Chatham-Kent is an innovative and thriving community with a diversified economy
- A Healthy and Safe Community:
Chatham-Kent is a healthy and safe community with sustainable population growth

- People and Culture:**
Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community
- Environmental Sustainability:**
Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

- Financial Sustainability:**
The Corporation of the Municipality of Chatham-Kent is financially sustainable
- Open, Transparent and Effective Governance:**
The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership
- Has the potential to support all areas of strategic focus & critical success factors
- Neutral issues (does not support negatively or positively)

Consultation

Engineering has consulted with various surrounding urban Municipalities in regards to the use of school zone speed limits and/or CSZs. These included the Town of LaSalle, City of London, City of St. Thomas, City of Sarnia, Municipality of Strathroy-Caradoc, and Town of Tecumseh.

LaSalle and Tecumseh have 30 km/h speed limits on a roadways near a school but no CSZs. They confirmed that these speed limit reductions are ineffective unless actively enforced by the police. London has been reducing speed limits around schools from 50 km/h to 40 km/h but they have not incorporated CSZs in the same areas. St. Thomas has implemented CSZs around schools but have not implemented reduced speed limits. They did not have comparison results to report on the effectiveness of the CSZs. Sarnia has been using CMZs and plan to incorporate more in the future. St. Thomas and Sarnia implemented the CSZs mainly to increase the fines police issue for traffic violations.

Strathroy-Caradoc do not currently use school zone speed limits and CSZs but plan to incorporate these into a Traffic Calming policy.

Engineering consulted with the Chatham-Kent Police Service regarding the speed reduction in Community Safety Zones. They indicated should the speed limit be lowered they will conduct enforcement as required.

Financial Implications

Approximately 121 new sign installations and further sign adjustments are required to implement the Phase 1 of the school zone speed limits and Community Safety Zones. The estimated cost to complete this sign work is as follows:

| | |
|-----------------------|-----------------|
| Maximum Speed Signs | \$25,750 |
| Community Safety Zone | <u>\$25,750</u> |
| Total | \$51,500 |

All sign costs will be funded through the Lifecycle Roads budget.

Prepared by:

Reviewed by:

 Ellen Sinclair, P. Eng.
 Engineering Technologist II,
 Engineering and Transportation Division

 Mark Ceppi
 Engineering Technologist I,
 Engineering and Transportation Division

Reviewed by:

Reviewed by:

 Chris Thibert, P. Eng.
 Director,
 Engineering and Transportation Division

 Thomas Kelly, P.Eng., MBA
 General Manager,
 Infrastructure and Engineering Services

Attachments: Appendix A: By-law Amendment

(P:\RTC\Infrastructure and Engineering\I & ES\2018\4021 - School Speed Limit
 Community Safety Zones - Phase 1)

Appendix A

By-law Number _____

Of The Corporation
of the Municipality of Chatham-Kent

A By-law to amend By-law Number 245-2004 of the Municipality of Chatham-Kent.

(Implementation of reduced speed limits and Community Safety Zones on various roadways for school areas)

Finally Passed the ____ day of _____, 2018.

Whereas the Corporation of the Municipality of Chatham-Kent did enact By-Law 245-2004 for the purpose of regulating traffic on highways in the Municipality of Chatham-Kent.

And Whereas the Corporation of The Municipality of Chatham-Kent now deems it expedient to amend certain provisions of said By-law 245-2004.

Be it Therefore Enacted by the Municipal Council of the Municipality of Chatham-Kent as follows:

1. Schedule "Y" (Speed Limits of Highways) of By-law 245-2004 be and the same is hereby amended by deleting therefrom:

| COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 |
|----------------|-------------|-----------|---------------------------------------|
| <u>HIGHWAY</u> | <u>FROM</u> | <u>TO</u> | <u>MAXIMUM SPEED</u> <u>(Km/h)</u> |

COMMUNITY OF TILBURY

- a) Ella Street Henderson Street Northerly limits 50

2. Schedule "Y" (Speed Limits of Highways) of By-law 245-2004 be and the same is hereby amended by adding thereto and inserting therein:

| COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 |
|----------------|-------------|-----------|---------------------------------------|
| <u>HIGHWAY</u> | <u>FROM</u> | <u>TO</u> | <u>MAXIMUM SPEED</u> <u>(Km/h)</u> |

COMMUNITY OF BLENHEIM

Appendix A

| | | | | |
|---------------------------------|-------------------|---------------------------------|--------------------------------|----|
| a) | King Street | 20 m east of Regent Street | 20 m west of Snow Avenue | 40 |
| COMMUNITY OF CHATHAM | | | | |
| b) | Alexandria Avenue | 30 m west of Queen Street | 30 m east of McGuigan Avenue | 40 |
| c) | Crystal Drive | King Street West | Southerly limits | 40 |
| d) | Dale Drive | 50 m east of Bear Line Road | Hamlet Court/Twilight Trail | 40 |
| e) | Delaware Avenue | 60 m south McNaughton Avenue | 70 m north of Gladstone Avenue | 40 |
| f) | Eugenie Street | 20 m east of Foreman Drive | 10 m west of Meadowlea Road | 40 |
| g) | King Street West | 50 m north of Merritt Avenue | 20 m east of Crystal Drive | 40 |
| h) | McFadden Avenue | McGuigan Avenue | Easterly limit | 40 |
| i) | Willowmac Avenue | 30 m west of Queen Street | 30 m east of McGuigan Avenue | 40 |
| COMMUNITY OF THAMESVILLE | | | | |
| j) | Edith Street | Wallace Street | Lamila Street | 40 |
| k) | Graham Street | 50 m south of Jane Street | Edith Street | 40 |
| l) | Lamila Street | Edith Street | Mary Street | 40 |
| m) | Mary Street | 50 m west of Wallace Street | Lamila Street | 40 |
| n) | Wallace Street | 100 m south of Jane Street | 20 m south of Edith Street | 40 |
| COMMUNITY OF TILBURY | | | | |
| o) | Ella Street South | Fort Street | Northerly limits | 50 |
| p) | Ella Street South | 50 m north of Gladstone Avenue | Henderson Street | 50 |
| COMMUNITY OF WALLACEBURG | | | | |
| q) | Bertha Street | John Avenue | Francis Avenue | 40 |
| r) | Elm Drive South | Turnbull Avenue | Warwick Drive | 40 |
| s) | Francis Avenue | 30 m north of Elgin Street | Bertha Street | 40 |

Appendix A

| | | | | |
|----|-----------------|----------------------------|------------------------------|----|
| t) | Gordon Street | 10 m east of Dauw Avenue | Easterly limit | 40 |
| u) | John Avenue | 30 m north of Elgin Street | Northerly limits | 40 |
| v) | Lawrence Avenue | Emma Cres | 50 m west of Dora Drive | 40 |
| w) | Murray Street | 50 m north of Wills Street | Roy Street | 40 |
| x) | Roy Street | Murray Street | Easterly limit | 40 |
| y) | Turnbull Avenue | Elm Drive South | 20 m east of Chestnut Drive | 40 |
| z) | Thomas Avenue | Dora Drive | 30 m west of Janssens Street | 40 |

3. That By-law 245-2004 is hereby amended by adding the following:

Community Safety Zones – Schedule “LL”

306 When official signs are on display in accordance with the Highway Traffic Act, the portion of highway between the limits and during the times and days set out respectively in Columns 1, 2, 3, 4 and 5 of Schedule “LL” of this by-law designated by such signs is hereby established as a "Community Safety Zone" and subject to the regulations under the said Act.

4. Schedule “LL” (Community Safety Zones) of By-law 245-2004 be and the same is hereby amended by adding thereto and inserting therein:

| | COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 |
|------------------------------|-------------------|-----------------------------|------------------------------|---------------------------------------|
| | <u>HIGHWAY</u> | <u>FROM</u> | <u>TO</u> | <u>TIME(S)/DAY(S)</u> |
| COMMUNITY OF BLENHEIM | | | | |
| a) | King Street | 20 m east of Regent Street | 20 m west of Snow Avenue | 8:00 am - 6:00 pm School Days Only |
| COMMUNITY OF CHATHAM | | | | |
| b) | Alexandria Avenue | 30 m west of Queen Street | 30 m east of McGuigan Avenue | 8:00 am - 6:00 pm School Days Only |
| c) | Crystal Drive | King Street West | Southerly limits | 8:00 am - 6:00 pm School Days Only |
| d) | Dale Drive | 50 m east of Bear Line Road | Hamlet Court/Twilight Trail | 8:00 am - 6:00 pm School Days Only |

Appendix A

| | | | | |
|----|---------------------|---------------------------------|-----------------------------------|---------------------------------------|
| e) | Delaware Avenue | 60 m south McNaughton Avenue | 70 m north of Gladstone Avenue | 8:00 am - 6:00 pm School Days Only |
| f) | Eugenie Street | 20 m east of Foreman Drive | 10 m west of Meadowlea Road | 8:00 am - 6:00 pm School Days Only |
| g) | King Street West | 50 m north of Merritt Avenue | 20 m east of Crystal Drive | 8:00 am - 6:00 pm School Days Only |
| h) | McFadden Avenue | McGuigan Avenue | Easterly limit | 8:00 am - 6:00 pm School Days Only |
| i) | Willowmac Avenue | 30 m west of Queen Street | 30 m east of McGuigan Avenue | 8:00 am - 6:00 pm School Days Only |

COMMUNITY OF THAMESVILLE

| | | | | |
|----|----------------|--------------------------------|----------------------------|---------------------------------------|
| j) | Edith Street | Wallace Street | Lamila Street | 8:00 am - 6:00 pm School Days Only |
| k) | Graham Street | 50 m south of Jane Street | Edith Street | 8:00 am - 6:00 pm School Days Only |
| l) | Lamila Street | Edith Street | Mary Street | 8:00 am - 6:00 pm School Days Only |
| m) | Mary Street | 50 m west of Wallace Street | Lamila Street | 8:00 am - 6:00 pm School Days Only |
| n) | Wallace Street | 100 m south of Jane Street | 20 m south of Edith Street | 8:00 am - 6:00 pm School Days Only |

COMMUNITY OF TILBURY

| | | | | |
|----|-----------------------|------------------------------------|------------------------------------|---------------------------------------|
| o) | Ella Street South | Fort Street | 50 m north of Gladstone Avenue | 8:00 am - 6:00 pm School Days Only |
| p) | Elm Street | St. Clair Street | 30 m north of Canal Street West | 8:00 am - 6:00 pm School Days Only |
| q) | Lyon Avenue North | 40 m north of Canal Street West | St. Clair Street | 8:00 am - 6:00 pm School Days Only |
| r) | Mable Street | 40 m north of Stewart Avenue | Fort Street | 8:00 am - 6:00 pm School Days Only |
| s) | Maple Street South | 30 m north of George Street | 60 m north of Goodal Drive | 8:00 am - 6:00 pm School Days Only |
| t) | Poplar Street | Westerly limit | Lyon Avenue North | 8:00 am - 6:00 pm School Days Only |
| u) | St Clair Street | Westerly limit | Elm Street | 8:00 am - 6:00 pm School Days Only |

COMMUNITY OF WALLACEBURG

| | | | | |
|----|---------------|-------------|----------------|---------------------------------------|
| v) | Bertha Street | John Avenue | Francis Avenue | 8:00 am - 6:00 pm School Days Only |
|----|---------------|-------------|----------------|---------------------------------------|

Appendix A

| | | | | |
|-----|-----------------|----------------------------|------------------------------|---------------------------------------|
| w) | Elm Drive South | Turnbull Avenue | Warwick Drive | 8:00 am - 6:00 pm School Days Only |
| x) | Francis Avenue | 30 m north of Elgin Street | Bertha Street | 8:00 am - 6:00 pm School Days Only |
| y) | Gordon Street | 10 m east of Dauw Avenue | Easterly limit | 8:00 am - 6:00 pm School Days Only |
| z) | John Avenue | 30 m north of Elgin Street | Northerly limits | 8:00 am - 6:00 pm School Days Only |
| aa) | Lawrence Avenue | Emma Cres | 50 m west of Dora Drive | 8:00 am - 6:00 pm School Days Only |
| bb) | Murray Street | 50 m north of Wills Street | Roy Street | 8:00 am - 6:00 pm School Days Only |
| cc) | Roy Street | Murray Street | Easterly limit | 8:00 am - 6:00 pm School Days Only |
| dd) | Turnbull Avenue | Elm Drive South | 20 m east of Chestnut Drive | 8:00 am - 6:00 pm School Days Only |
| ee) | Thomas Avenue | Dora Drive | 30 m west of Janssens Street | 8:00 am - 6:00 pm School Days Only |

5. By-law 245-2004 of the Corporation of the Municipality of Chatham-Kent as heretofore amended from time to time are hereby ratified and confirmed in all respects save and except as amended hereby.

This By-law shall come into full force and effect upon the final passing thereof.

Read a First, Second and Third Time this ____ day of _____, 2018

Mayor – Randy R. Hope

Clerk - Judy Smith