

CITY OF WINDSOR AGENDA 07/27/2022

Environment, Transportation & Public Safety Meeting

Date: July 27, 2022 **Time:** 4:30 o'clock p.m.

Location: Council Chambers, 1st Floor, Windsor City Hall

All members will have the option of participating in person in Council Chambers or electronically and will be counted towards quorum in accordance with Procedure By-law 98-2011 as amended, which allows for electronic meetings. The minutes will reflect this accordingly. Any delegations will have the option of participating electronically or in person.

MEMBERS:

Ward 1 - Councillor Fred Francis

Ward 2 - Councillor Fabio Costante

Ward 4 – Councillor Chris Holt (Chairperson)

Ward 8 – Councillor Gary Kaschak

Ward 9 - Councillor Kieran McKenzie

ORDER OF BUSINESS

Item # Item Description

1. CALL TO ORDER

READING OF LAND ACKNOWLEDGEMENT

We [I] would like to begin by acknowledging that the land on which we gather is the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomie. The City of Windsor honours all First Nations, lnuit and Métis peoples and their valuable past and present contributions to this land.

- 2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF
- 3. ADOPTION OF THE MINUTES OF THE ETPS STANDING COMMITTEE
- 3.1. Adoption of the Environment, Transportation & Public Safety Standing Committee minutes (Transit Matter Items only) of its meeting held June 22, 2022 (SCM 174/2022)
- 3.2 Adoption of the Environment, Transportation & Public Safety Standing Committee minutes (Excluding Transit Matter Items) of its meeting held June 22, 2022 (SCM 174/2022)
- 4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS
- 5. **COMMUNICATIONS**
- 6. PRESENTATIONS AND DELEGATIONS
- 6.1. John Hartig, Ph.D. Great Lakes Institute for Environmental Research regarding the Great Lakes Way Progress and Connecting Green Ways

7. COMMITTEE MATTERS

7.1. Essex Windsor Solid Waste Authority Board Meeting Minutes June 7, 2022 (SCM 188/2022)

8. **ADMINISTRATIVE ITEMS**

- 8.1. Local Road Speed Humps Program Initial Set of Locations Wards 2, 6, 8, & 10 (\$ 76/2022)
- 8.2. Matchett Road (Chappus Street to Sprucewood Avenue) Traffic Calming Ward 1 (\$ 81/2022)
- 8.3. Vision Zero Action Plan Development Progress Report #2 City-wide (\$ 87/2022)
- 8.4. Pillette Road (Tecumseh to Plymouth) Traffic Calming Wards 5 & 8 (\$ 13/2022)

9. TRANSIT BOARD ITEMS

- 9.1. The Contributory Pension Plan for Employees of Transit Windsor Actuarial Valuation as at December 31, 2021 City Wide (C 121/2022)
- 9.2. The Contributory Pension Plan for Employees of Transit Windsor Audited Financial Statements for the year ended December 31, 2021 City Wide (C 122/2022)
- 9.3. Change to the Transit Windsor War Veteran's Transit Pass Program City Wide (\$ 84/2022)

10. ADOPTION OF TRANSIT BOARD MINUTES

11. QUESTION PERIOD

12. ADJOURNMENT



Committee Matters: SCM 174/2022

Subject: Adoption of the Environment, Transportation & Public Safety Standing Committee minutes of its meeting held June 22, 2022



CITY OF WINDSOR MINUTES 06/22/2022

Environment, Transportation & Public Safety Standing Committee Meeting

Date: Wednesday, June 22, 2022 Time: 4:30 o'clock p.m.

Members Present:

Councillors

Ward 1 - Councillor Francis

Ward 2 - Councillor Costante (Vice Chairperson)

Ward 8 - Councillor Kaschak

Ward 9 - Councillor McKenzie

Member Regrets

Ward 4 - Councillor Holt

Clerk's Note: Councillor Francis and some members of Administration participated via video conference (Zoom), in accordance with Procedure By-law 98-2011 as amended, which allows for electronic participation.

ALSO PARTICIPATING VIA VIDEO CONFERENCE ARE THE FOLLOWING FROM ADMINISTRATION:

lan Day, Senior Manager of Traffic Operations & Parking Anne Marie Albidone, Manager of Environmental Services Angela Marazita, Manager of Fleet Sandra Gebauer, Council Assistant

ALSO PARTICIPATING IN COUNCIL CHAMBERS ARE THE FOLLOWING FROM ADMINISTRATION:

Chris Nepszy, Commissioner of Infrastructure Services
Tony Ardovini, Deputy Treasurer – Financial Planning
Shawna Boakes, Deputy City Engineer / Executive Director of Operations
Tyson Cragg, Executive Director of Transit Windsor
Stephen Laforet, Fire Chief
Jonathan Wilker, Deputy Fire Chief
Anna Ciacelli, Deputy City Clerk / Supervisor of Council Services

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 2 of 9

1. CALL TO ORDER

Following the reading of the Land Acknowledgement, the Vice Chairperson calls the meeting of the Environment, Transportation & Public Safety Standing Committee to order at 4:30 o'clock p.m.

2. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

None disclosed.

3. ADOPTION OF THE MINUTES OF THE ETPS STANDING COMMITTEE

3.1. Adoption of the Environment, Transportation & Public Safety Standing Committee minutes of its meeting held April 27, 2022

Moved by: Councillor Kaschak Seconded by: Councillor McKenzie

THAT the minutes of the Environment, Transportation & Public Safety Standing Committee meeting (excluding Transit Matter items) held April 27, 2022 **BE ADOPTED** as presented. Carried.

Moved by: Councillor Kaschak Seconded by: Councillor Francis

THAT the minutes of the Environment, Transportation & Public Safety Standing Committee meeting (Transit Matter items only) held April 27, 2022 **BE ADOPTED** as presented. Carried.

Report Number: SCM 123/2022

4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS

None requested.

5. COMMUNICATIONS

None presented.

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 3 of 9

7. COMMITTEE MATTERS

7.1. Essex-Windsor Solid Waste Authority Regular Board Meeting Minutes - April 5, 2022

Moved by: Councillor Kaschak Seconded by: Councillor McKenzie

Decision Number: ETPS 895

THAT the minutes of the Essex-Windsor Solid Waste Authority (EWSWA) of its meeting held April

5, 2022 **BE RECEIVED**.

Carried.

Report Number: SCM 142/2022

Clerk's File: MB2022

7.2. Essex-Windsor Solid Waste Authority Annual Report - Essex-Windsor Residential Waste Diversion 2021

Moved by: Councillor McKenzie Seconded by: Councillor Francis

Decision Number: ETPS 896

THAT the Essex-Windsor Solid Waste Authority (EWSWA) Annual Report - Essex-Windsor

Residential Waste Diversion 2021 **BE APPROVED**.

Carried.

Report Number: SCM 143/2022

Clerk's File: MB2022

7.3. Minutes of the Windsor Bicycling Committee of its meeting held May 4, 2022

Moved by: Councillor Kaschak Seconded by: Councillor McKenzie

Decision Number: ETPS 897

THAT the minutes of the Windsor Bicycling Committee (WBC) of its meeting held May 4, 2022 BE

RECEIVED. Carried.

Report Number: SCM 151/2022

Clerk's File: MB2022

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 4 of 9

8. ADMINISTRATIVE ITEMS

8.1. CQ24-2019 - Designating all BIA's as "Tourist Destinations" - City Wide

Moved by: Councillor McKenzie Seconded by: Councillor Kaschak

Decision Number: ETPS 898

THAT the Trailblazing and Identification Sign Policy **BE ADOPTED** by Council as amended.

Carried.

Report Number: S 66/2022

Clerk's File: MI2022

8.2. Fleet Documentation - City Wide

Councillor McKenzie inquires about the greening of the fleet, specifically regarding the extent to which a matrix is used to make determinations around fleet procurement and environmental impacts. Angela Marazita, Fleet Manager, appears via video conference before the Environment, Transportation and Public Safety Standing Committee regarding the administrative report "Fleet Documentation – City Wide" and indicates that administration has replacement plans in place for vehicles for various City departments. Ms. Marazita adds that administration identifies the vehicles that are due for replacement and determines what options are available and whether funding is available.

Councillor McKenzie inquires as to what extent cost implications are considered as part of the matrix, including long-term impacts and environmental impacts. Ms. Marazita indicates that research is conducted and costing for new equipment is determined within existing budgets. Administration is formalizing a transition process and plan for electric vehicle replacements to convert the fleet moving forward. Ms. Marazita indicates that they are currently focusing on smaller fleet vehicles to start the process, including reviewing energy and implementation costs. Ms. Marazita adds that a small portion of the fleet is electric with the focus on infrastructure for these electric vehicles. Administration provides details related to a government grant that the City has received related to installing charging infrastructure. Administration will provide a report to update Council on the transition process moving forward.

Moved by: Councillor McKenzie Seconded by: Councillor Kaschak

Decision Number: ETPS 899

THAT City Council APPROVE the Fleet Division Mandate and the Fleet Use Policy as attached in

Appendix A and Appendix B; and,

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 5 of 9

THAT City Council **APPROVE** the Fleet Review Committee Charter as the corporate policy for the ongoing replacement of the Corporate, Parks and Fire First Response fleets as attached in Appendix C. Carried.

Report Number: S 67/2022 Clerk's File: SW2022

8.3. City of Windsor Traffic Pre-Emption and Priority Project - Pre-Approval – City Wide

Councillor McKenzie asks administration to provide a brief overview of the administrative report. Shawna Boakes, Deputy City Engineer / Executive Director of Operations, appears before the Environment, Transportation and Public Safety Standing Committee regarding the administrative report "City of Windsor Traffic Pre-Emption and Priority Project - Pre-Approval — City Wide" and indicates that Fire and Transit will be added to the upgrade to the existing Advance Management Traffic Software, which utilizes existing GPS technology. Ms. Boakes provides a brief outline of how the technology will work, specifically for Fire and Transit. Ms. Boakes adds that this is cuttingedge GPS technology and very few other municipalities have implemented this new system within their transit systems.

Councillor Mckenzie inquires whether Fire or Transit have concerns related to this new technology. Stephen Laforet, Fire Chief, appears before the Environment, Transportation and Public Safety Standing Committee regarding the administrative report "City of Windsor Traffic Pre-Emption and Priority Project - Pre-Approval – City Wide" and has no concerns with this project and is pleased to be moving forward with this new technology. Tyson Cragg, Executive Director of Transit Windsor, appears before the Environment, Transportation and Public Safety Standing Committee regarding the administrative report "City of Windsor Traffic Pre-Emption and Priority Project - Pre-Approval – City Wide" and indicates this is a unique opportunity for Transit and is part of the Transit Master Plan and is happy to obtain the technology sooner than anticipated.

Councillor Kaschak inquires about the funding. Ms. Boakes indicates that this is the same service provider that provides the software currently being utilized by the City, and this would simply be an upgrade that would be built into the existing software with yearly updates also included.

Moved by: Councillor McKenzie Seconded by: Councillor Kaschak

Decision Number: ETPS 900

THAT City Council **APPROVE** the purchase of Transit Signal Priority (TSP), Emergency Vehicle Pre-emption (EVP), and subscriptions associated therewith, in the total amount of \$1,043,000 USD (exclusive of applicable taxes), to Kimley-Horn, in accordance with Purchasing By-Law 93-2012 and amendments thereto, with the funding to come from the sources identified in the financial section of this report; and,

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 6 of 9

THAT City Council **APPROVE** a pre-commitment of \$600,000 CDN in 2025 capital funding for immediate use, as identified in the Fire & Rescue Emergency Vehicle Pre-emption project FRS-004-22; and,

That City Council **APPROVE** a transfer of \$100,239 in additional funding from Project 7191009, Grant Matching and Inflationary Pressures, for the Fire & Rescue Emergency Vehicle Pre-Emption project; and further,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to sign any agreement or applications necessary to implement Emergency Vehicle Pre-emption (EVP), Transit Signal Priority (TSP), and a Traction Gold subscription, satisfactory in legal form to the City Solicitor, in financial content to the Chief Financial Officer and City Treasurer, and in technical content to the City Engineer.

Carried.

Report Number: S 71/2022 Clerk's File: SW/13188

9. TRANSIT BOARD ITEMS

9.1. Tuition-Based ("SaintsPass") Bus Pass Program - Partnership with St. Clair College Student Representative Council - City Wide

Councillor Kaschak inquires about financials for this new buss pass program. Tony Ardovini, Deputy Treasurer – Financial Planning, appears before the Environment, Transportation and Public Safety Standing Committee regarding the administrative report "Tuition-Based ("SaintsPass") Bus Pass Program - Partnership with St. Clair College Student Representative Council - City Wide" and provides information related to existing monthly bus pass income and expected income with the new program.

Moved by: Councillor Kaschak Seconded by: Councillor Francis

Decision Number: ETPS 901

THAT the Environment, Transportation and Public Safety Standing Committee, sitting as the Transit Windsor Board of Directors and City Council:

- i. **AUTHORIZE** Transit Administration to develop a tuition-based bus pass program, called the "SaintsPass" for St. Clair College students; and,
- AUTHORIZE Transit Administration to enter into a three-year Agreement (September 1, 2022 to August 31, 2025) with the St. Clair College Student Representative Council (SRC); and,

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 7 of 9

iii. **AUTHORIZE** the Chief Administrative Officer and City Clerk of the City of Windsor to sign the resulting Agreement, satisfactory in form to the City Solicitor, in financial content to the City Treasurer, and in technical content to the Commissioner, Infrastructure Services, and the Executive Director of Transit Windsor.

Carried.

Report Number: S 52/2022 Clerk's File: MT/14417

9.2. Transit Windsor Route Infrastructure Planning & Design Guidelines - City Wide

Councillor McKenzie inquires about existing infrastructure and whether new standards can be incorporated. Mr. Cragg explains the ongoing warrant system for bus stops/shelters and that upgrades to the current infrastructure may be limited. Mr. Cragg adds that they will upgrade existing infrastructure where possible and as per available funding.

Councillor Kaschak refers to speed humps and speed tables and whether there are any concerns for busses regarding them. Mr. Cragg has not received any concerns related to this existing infrastructure from the operators.

Moved by: Councillor Kaschak Seconded by: Councillor McKenzie

Decision Number: ETPS 902

THAT the Environment, Transportation and Public Safety Standing Committee, sitting as the Transit Windsor Board of Directors and City Council **RECEIVE FOR INFORMATION** Transit Windsor's updated route infrastructure planning and design guidelines as shown in Appendix A. Carried.

Report Number: S 69/2022 Clerk's File: MT2022

9.3. Town of Amherstburg - Transit Service Agreement - City Wide

Councillor McKenzie inquires whether the new agreement will have a negative impact on City Transit service as a result of the Amherstburg agreement. Mr. Cragg indicates Transit has no concerns and it will not have a negative impact to the City's Service. Mr. Ardovini explains that the costs in the current agreement were developed taking into consideration existing funding pressures, which eliminates the risk to the City.

Councillor Kaschak commends administration on these new agreements moving forward.

Moved by: Councillor McKenzie Seconded by: Councillor Kaschak

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 8 of 9

Decision Number: ETPS 903

THAT the Environment, Transportation and Public Safety Standing Committee, sitting as the Transit Windsor Board of Directors, and City Council **RECEIVE** for information the update regarding negotiations for transit service with the Corporation of The Town of Amherstburg; and, THAT Transit Windsor **BE AUTHORIZED** to enter into a 2-year pilot agreement (2022-2024) with the Corporation of The Town of Amherstburg to provide a transit service route that connects the town's resident to services provided by Transit Windsor as detailed in the report; and,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to sign the resulting Agreement with the Corporation of The Town of Amherstburg, satisfactory in form to the Commissioner of Legal and Legislative Services, in financial content to the Commissioner of Corporate Services, and in technical content to the Commissioner of Infrastructure Services and the Executive Director of Transit Windsor. Carried.

Report Number: S 70/2022

Clerk's File: MT2022

9.4. 2022 Decommissioning of Transit Windsor Buses - City Wide

Moved by: Councillor McKenzie Seconded by: Councillor Kaschak

Decision Number: ETPS 904

THAT the Environment, Transportation and Public Safety Standing Committee, sitting as the Transit Windsor Board of Directors, and City Council, in accordance with Section 151 of the Purchasing By-Law, **APPROVE** the decommissioning and disposal of surplus conventional transit bus numbers 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 438, 440, 441, 442, 443, 444, 555, 557, 558, 559, 562 and 564.

Carried.

Report Number: S 73/2022

Clerk's File: MT2022

10. ADOPTION OF TRANSIT BOARD MINUTES

None presented.

11. QUESTION PERIOD

None registered.

Environment, Transportation & Public Safety Standing Committee Wednesday, June 22, 2022 Page 9 of 9

12. ADJOURNMENT

Mard 2 Councillar C	\		Danish City Cla	mls /	
& Public Safety Stand	iing Committee wiii b	e neid July 27, 2	022.		
Committee is adjourn	•		•	onment, Trans	sportation
There being no furt	•	•	•	_	

Item 7.1



Committee Matters: SCM 188/2022

Subject: Essex Windsor Solid Waste Authority Board Meeting Minutes from the meeting held on June 7, 2022



Essex-Windsor Solid Waste Authority Regular Board Meeting MINUTES

Meeting Date: Tuesday, June 7, 2022

Time: 4:00 p.m.

Location: Council Chambers (2nd Floor)

Essex County Civic & Education Centre

360 Fairview Ave. West Essex, Ontario N8M 1Y6

Attendance

Board Members:

Gary Kaschak – Chair
Fabio Costante
Kieran McKenzie
Jim Morrison
Ed Sleiman
Marc Bondy
Hilda MacDonald
City of Windsor
City of Windsor
City of Windsor
City of Windsor
County of Essex
County of Essex

EWSWA Staff:

Michelle Bishop General Manager

Steffan Brisebois Manager of Finance & Administration

Cathy Copot-Nepszy Manager of Waste Diversion Tom Marentette Manager of Waste Disposal

Teresa Policella Executive Assistant

City of Windsor Staff:

Anne Marie Albidone Manager of Environmental Services
Tony Ardovini Deputy Treasurer Financial Planning

County of Essex Staff:

Mary Birch Director of Council & Community Services/Clerk

Absent:

Gary McNamara County of Essex (Ex-Officio)

Aldo DiCarlo – Vice Chair County of Essex

Shawna Boakes Executive Director of Operations

Tracy Beadow Project Administrator

Natasha Gabbana Manager of Performance Measurement & Financial

Administration

Chris Nepszy City Engineer/Commissioner of Infrastructure Services

Mike Galloway County of Essex CAO

Sandra Zwiers Director of Financial Services/Treasurer

Drew Dilkens City of Windsor (Ex-Officio)

1. Call to Order

The Chair called the meeting to order at 4:07 p.m.

2. Roll Call of Board Members Present

Marc Bondy – Present
Fabio Costante - Present
Aldo DiCarlo – Not present
Gary Kaschak - Present
Hilda MacDonald - Present
Kieran McKenzie - Present
Gary McNamara – Not present
Jim Morrison - Present
Ed Sleiman - Present

3. Declaration of Pecuniary Interest

The Chair called for any declarations of pecuniary interest and none were noted. He further expressed that should a conflict of a pecuniary nature or other arise at any time during the course of the meeting that it would be noted at that time.

4. Approval of the Minutes

A. May 3, 2022 Regular Meeting Minutes

Moved by Kieran McKenzie Seconded by Marc Bondy

THAT the minutes from the Essex-Windsor Solid Waste Authority Regular Meeting, dated May 3, 2022, be approved and adopted.

52-2022 Carried

5. Business Arising from the Minutes

No items were raised for discussion.

6. Delegations

There were no delegations for June 7, 2022.

7. Waste Diversion

A. 2022 Spring Outreach Update

The Manager of Waste Diversion provided an update regarding the 2022 spring outreach activities.

In April, an Earth Day celebration was held at Malden park along with the City of Windsor. The event attracted 1,600 people of all ages. The focus of the event was food and organic waste and the Regional Organic survey was launched.

The Virtual Scavenger Hunt has continued due to its success last year. There were 47 missions offered and attracted 132 participants. The virtual event was done through the Goose Chase app and is great way to reach residents virtually.

The Authority held its spring inventory sale to continue supporting residents to divert waste.

Registration for the Gold Star Program has closed and inspections at the curb have already begun and are almost complete.

Mr. McKenzie asked what more can be done in regards to outreach perspective that could increase the diversion rate. He asked if a report could be brought forward to the Board where they could consider different alternatives that may require additional funding and have the Board look at what the potential options might be.

The Manager of Waste Diversion stated that in recent years, the Authority has been focusing on aligning outreach activities to operation so that issues can be addressed increase diversion and enhance better habits at the curb. She noted that the Authority could look at what other municipalities are doing from an outreach standpoint.

Mr. McKenzie stated that he has a motion at the appropriate time.

Mr. Kaschak asked how do we reach out to residents better from an outreach standpoint.

The Manager of Waste Diversion stated that the Authority has been hovering at a 34% diversion rate for some time. She noted that an organics program will definitely help increase this rate significantly. As Mr. McKenzie has noted, there may be other initiatives that the Authority can do to enhance what we currently have with the Blue Box program and other reduce and reuse programs that currently exist.

Mrs. MacDonald commented on resident participation and the diversion rate. She stated that we can't expect to get to that target until society starts to

change and right now she thinks that we are at a point where society is just not changing. She noted that the Authority is doing a very good job and maybe we should just keep doing what we are doing and wait for the evolution of the generations. She does not know what else you can do besides making it mandatory and forcing people.

The General Manager stated that when compared to other municipalities, the Authority is in a unique situation in that we do not control any waste collection contracts. When compared to other municipalities similar to the Authority, like London, that don't have an organics program and have bi-weekly recycling collection, you see where they have implemented bag limits, referred to as disincentives. In order to drive diversion rates up, you are not only looking at providing incentives like an organics program, drop-off depots, Gold Star programs and public education but also a disincentive program. Without providing the disincentive to residents to not put out that third bag of garbage and sort better at the curb, the diversion rate will remain stagnant. The General Manager noted that in order to drive the waste diversion rate up, it will require residents to place less waste at the curb and it will take a global municipal effort.

Mr. Morrison asked if there is a consistency between municipalities on how much garbage can be placed at the curb.

The General Manager stated that it does vary between municipalities. She noted that each of the seven County municipalities and the City of Windsor operate their own garbage collection contract and they are free at this time to place whatever limits they choose.

Mr. Morrison stated that we need to start policing this and perhaps audits should be done.

Mr. Bondy commented that if limits are enforced, residents may dump garbage in the rural areas.

The Manager of Waste Diversion stated that when limits are put into place, municipalities offer supports. For example, to prioritize diversion, Niagara increased recycling collection to weekly collection and garbage collection to biweekly and they saw an increase in their diversion rate. We have to offer the supports, like recycling bins, and the guidance to change and more enforcements at the curb. She noted the Authority has implemented some of the efforts but some of them are larger investments for this Board or the next Board to consider.

Mr. Kaschak asked for Mr. McKenzie's motion.

Mr. McKenzie stated that he would move Administration's recommendation but with the addition that Administration report back with outreach options with

high level cost estimates for the Board to consider to help improve diversion rates. He stated that he would speak to the motion if there was a seconder.

Mr. Bondy seconded the motion.

Mr. McKenzie stated that he appreciates all of the comments and remains optimistic that with a greater level of awareness we can increase the diversion rate.

Moved by Kieran McKenzie Seconded by Marc Bondy **THAT** the Board receive the report as information.

THAT Administration report back with outreach options with high level cost estimates for the Board to consider to help improve diversion rates.

53-2022 Carried

B. Blue Box Transition Update

The General Manager referred to page 21 of the agenda package and provided a summary and background information regarding the transition of the Blue Box Program to Extended Producer Responsibility (EPR).

The General Manager noted that at the April 5, 2022 Board meeting, an update was provided on the proposed amendments to the regulation. Those amendments were passed with minor revisions with the exception of the plan submission deadline. The Producers must now submit their plan by July 1, 2022 to the Resource Recovery and Productivity Authority (RPRA).

The Producer Responsibility Organizations (PROs) get to make the plan. The PRO, that either on their own or in partnership, makes up 66% of the material that is in the market will submit their plan. Circular Materials Ontario (CMO) represents the large producers such as Clorox, Coca-Cola, Costco, Dr. Pepper, Kraft, Loblaws and McDonald's. CMO looks like they will most likely have 66% of the market. If they don't have 66% of the market, they will combine with Ryse Solutions (Ryse), and have 66% of the market. It looks like CMO will most likely be the lead in this program. They are moving forward under the assumption that they get to create the rules and develop the plan.

CMO has published a list of documents for collection services during the transition period. CMO has issued these documents to all 249 municipalities as a take it or leave it approach. There does not seem to be direct consultation or direct negotiations with the municipalities.

The General Manager stated that there was a survey requesting a simple yes or no answer asking if Windsor-Essex wishes to contract with CMO. The General Manager stated that the Authority has not answered the survey. She noted that she, the Manager of Waste Diversion and the City of Windsor's Manager of Environmental Services sit on various committees with other municipal representatives and they have been able to provide input to a joint letter to CMO.

The General Manager summarized the letter on page 25 that was submitted to CMO which highlighted a number of areas of concern.

The letter was sent out on May 26th. On June 3rd, a response was received from CMO. The General Manager noted that the response was not included in the agenda as it was received after the agenda was distributed. CMO has acknowledged receipt of the letter. The letter states that they reviewed the feedback and are in the process of updating their agreements to address and clarify the points that have been raised. The agreements are expected to be updated and shared by June 15th. The General Manager noted that they listened to the municipalities, which is good and it is clear that municipalities were not going to accept this. The PROs are working on a very tight deadline. CMO needs to work with municipalities to work within existing contracts so that residents are not impacted with their curbside collection.

The General Manager stated that due to the upcoming election, recesses and potential lame duck situations, the Association of Municipalities of Ontario (AMO) has strongly recommended that municipalities have their Administration receive delegated authority from their councils or boards so that Administration has the ability to negotiate in the absence of a Board. The General Manager stated that a report will be brought forward to the Board at the July meeting.

Mr. McKenzie asked to what extent will the PROs remain accountable to the Province and what if they are not successful in meeting their diversion targets.

The General Manager stated the wording says producers have to do their best effort to maintain the system through transition. They have initially said that if they cannot come to an agreement with a municipality, they will be contacting the contractor directly. In our situation, our contractor is the City of Windsor for the County of Essex and GFL for the City of Windsor. As far as who decides if they are doing what they should be doing, it is up to RPRA. The General Manager asked the Manager of Waste Diversion and City of Windsor's Environmental Services Manager to provide further comments.

The Manager of Waste Diversion stated that the vast majority of municipalities are all on the same page. CMO responded to the letter immediately and they are looking to set up a municipal working group to be more collaborative.

Mr. Costante asked if this is an item that should be discussed in-camera.

The General Manager stated that the Authority has not had any direct communication with CMO and is not in formal negotiations. The letter and

documents are all publicly available. She noted that if the Authority is able to have direct dialogue with CMO, an in-camera meeting may be required.

The Manager of Environmental Services referred to the question in regards to who has more leverage. She noted that it is important for the Board to keep in mind that we can say yes or no at any time. She thinks that we need to wait until the June 15th response and see what they come back with. It is very encouraging that they have heard the municipalities and that they are looking to change some of those terms that are in the documents. Then at the point, we can then make a decision that is suitable for Windsor and Essex County.

Mr. McKenzie asked whether or not others were considered to be a signatory or support on the letter that was sent to CMO.

The General Manager stated that through our membership on AMO, the Municipal 3Rs Collaborative (M3RC) as well as the Regional Public Works Commissioners of Ontario (RPWCO), it was decided that instead of each municipality corresponding directly, that AMO, RPWCO, the Municipal Waste Association (MWA) and the City of Toronto (who does not participate with AMO), put up a united front on behalf of all municipalities.

The General Manager stated that updates regarding the blue box transition will continue. She also noted that there will be a report at the July meeting recommending delegated authority through Authority Administration in conjunction with the Technical Staff Committee which is comprised of City of Windsor and County of Essex staff, to make any required decisions on behalf of the Board and councils if needed during recess.

Moved by Kieran McKenzie Seconded by Fabio Costante **THAT** the Board receive the report as information.

> 54-2022 Carried

C. Reallocation of Budgeted Recycling Program Funds

The Manager of Waste Diversion referred to page 32 of the agenda. The recommendation of the report is the reallocation of approved 2022 budgeted funds from Consulting – Waste Audits to Purchased Services – Contract Staff. This reallocation will support Authority staff to collect data that will aid in the transition of the Blue Box program for information regarding ineligible sources.

The 2022 recycling program budget that was approved by the Board in November 2021 included \$54,000 for Consulting – Waste Audits. This allocation was for a consultant to support with residential curbside waste audits that would help Administration collect data for the transition of the Blue Box program. This data would provide updated information on solid waste

materials that are currently in the collection system. This has not been done since 2013.

Since the 2022 budget, the Authority has secured a service at no cost from the Continuous Improvement Fund (CIF), therefore, the \$54,000 is no longer required. CIF will be doing this across the province so municipal data collection is standardized. CIF has committed to supporting this area for the last quarter of 2022 and the first three quarters in 2023, which will provide data in all four seasons.

Additionally, the RPRA and AMO have confirmed that Producers are not obligated to collect ineligible sources at their expense per Ontario Regulation 391/21. Examples of ineligible sources are daycares and municipal buildings such as arenas.

Authority Administration and other municipalities have been advised through participation on different collaborations, such as the CIF and AMO, that it is likely that Producers will assume that these ineligible sources are a significant percent of existing collection programs and will charge municipalities accordingly. If a municipality wants to continue to service these facilities with a Blue Box program, it is important that accurate data is collected.

The Manager of Waste Diversion stated that the Authority is looking for support through a consultant to help identify the ineligible sources in our current common collection system in Essex County and the City of Windsor. This will allow the Authority to understand what the costs will be to the Authority and allow the Board to make an informed decision on whether we want to address that service delivery gap.

There are no financial implications as the intent is to reallocate the funds that were currently approved in the 2022 budget to a new line item.

Mr. Bondy asked if this would be one-year budget item.

The Manger of Waste Diversion stated yes and this would be completed this summer and fall.

Mr. Morrison asked if curbside audits are currently conducted to see if recyclables are placed in the garbage.

The Manager of Waste Diversion stated that audits are not currently conducted and the last audit was done in 2013. This will be a good exercise to help potentially address some of the issues that we have been talking about and help with outreach programs and to increase the diversion rate.

Mr. Sleiman asked for clarification regarding BIAs.

The General Manager stated that the Blue Box transition to Producers is only for residential and a certain amount of public spaces. With the transition to

Producers, it does not include industrial, commercial and institutional (ICI) recycling. Currently, the Authority collects BIAs, small businesses and some other ineligible sources like municipal facilities. We need to get an accurate count of what these ineligible sources are and decide if we want to keep providing this service.

Mr. McKenzie asked if there has been discussion or a potential policy change that would include ICI.

The General Manager stated that ICI is one of the largest producers of recycled material. It has been communicated but has not been revised at the provincial level.

Moved by Fabio Costante Seconded by Marc Bondy

THAT the Board approve the reallocation of \$54,000 from the approved 2022 Recycling Program budget from Consulting – Waste Audits to a new expenditure, Purchased Services – Contract Staff to support data collection for the transition of the Blue Box program to Extended Producer Responsibility.

55-2022 Carried

D. RFP for the Processing of Source Separated Organic Waste (Verbal report)

The General Manager advised that the RFP for the Processing of Source Separated Organic Waste was issued on Thursday, May 19, 2022. The deadline for questions is Thursday, June 23, 2022. The closing date of the RFP is June 30, 2022. To date, there have been 14 plan takers. One plan taker advised they will not be submitting a bid which leaves 13 potential bidders.

Moved by Marc Bondy Seconded by Kieran McKenzie **THAT** the Board receive the report as information.

> 56-2022 Carried

8. Waste Disposal

A. Closed Landfill 3 End Use Plan

The General Manager referred to page 35 of the agenda package and provided an update regarding closed Landfill 3 and the end use plan. Landfill 3 is located on Puce Road (County Road 25) in the Municipality of Lakeshore. The landfill closed in June 1997 for the receipt of waste. The Regional Landfill opened in July 1997.

In 1996, the Authority submitted a closure and end use plan to the Ministry of the Environment, Conservation and Parks (MECP), formerly the Ministry of Environment, that was approved. The closure and end use plan recommended a passive recreation site for the landfill, for example walking trails. An amendment was approved in 1999 and the Authority was issued an Environmental Compliance Approval (ECA). Within that document was the closure and end use plan. The approval does not imply that they are mandating the implementation of the end use plan but they do mandate the closure plan. The MECP's primary concern is the protection of the environment and ensuring that the perpetual care of the site is being maintained in accordance with MECP guidelines.

In 2011, the Authority secured clay from the Windsor-Essex Parkway project. The clay that was received from the project was used to properly cap Landfill 3. Without the site being properly capped, there was not an opportunity to implement the end use plan. The Authority continues to perform traditional perpetual care activities as well as remediation activities at the site to prepare for future end use.

In January 2022, the Authority engaged consultants to prepare lifespan evaluations which outlined how long the Authority would have to collect and haul leachate from the site. The number was in excess of 100 years.

In April 2022, the Authority received correspondence from the Municipality of Lakeshore requesting an update on the remediation process of Landfill 3 and the potential to use the site a passive park.

The Environmental Protection Act (EPA) stipulates that a waste disposal site cannot be used for a period of 25 years from the time it ceases to accept waste. Twenty-five years from 1997 puts us at 2022. In order to use the site, the Authority, through monitoring of the site in conjunction with the consulting engineer, will have to determine if the site has stabilized. The Authority would have to submit an application to the MECP requesting permission to implement the end use plan. The MECP will have to determine if the site can be used by the public. A public consultation may also be required.

The General Manager stated that she has had discussions with Truper McBride, CAO of Lakeshore, to have a better understanding on how Lakeshore wants to use the site. She stated that it was unclear from the discussions with Mr. McBride on what exactly Lakeshore is looking for but she did have an opportunity to discuss some of the concerns that the Authority would have in implementing the end use plan and the maintenance of the site. If the site was to become a passive recreation site, it would need to be supervised and ensure that the Authority is protected from liability issues.

The General Manager has also communicated with the County of Essex Infrastructure Services department regarding the County Wide Active Transportation System (CWATS). They indicated that they are in process of updating the Master Plan. The draft is scheduled to be released soon. In 2021, Lakeshore Council received a report that included a recommendation to

construct paved shoulders along County Road 25. This perhaps would be an opportunity to use the site and work in collaboration with CWATS and provide a passive trail.

The financial implications would depend on the scope of the project and what type of facility is being proposed. The incorporation of the walking trails into the existing landscape would be the most cost-effective solution. If it was determined that the municipality was looking for a more enhanced system where trails would need to be maintained year-round or if there was a need for parking and washroom facilities, that would raise costs significantly.

The General Manager stated that prior reports about the closure and end use plan speaks to the funding of closure and perpetual care costs. The reports do not specifically speak to the costs associated with end use. The current funding for the perpetual care, as outlined in the report, is between the three municipalities with the highest municipality being the City of Windsor at almost 92%. It is unclear in the report, if post closure activities are meant to include end used activities. With that being said, the City of Windsor does need to approve the budget for perpetual care of Landfill 3 through the budget approval process.

Mr. Morrison commented that this is very preliminary and is in favour of the recommendation. Mr. Morrison asked if the City of Windsor can still approve or not approve the budget for this landfill.

The General Manager stated the process of the Authority budget approval is to have the budget approved by the Authority Board, the City of Windsor and the County of Essex.

Mr. McKenzie asked if there are situations across the region where there is a landfill that is retired, for example Malden Park, where the municipality is directly benefiting and is undertaking more of the cost than other municipalities. He wants to understand the precedent that we are operating under.

The General Manager stated she was not aware of a similar situation and that Malden Park was the waste site for the City of Windsor and no other municipalities. The City of Windsor has chosen to turn it into a park as an end use.

Mr. Morrison noted that the recommendation does not include a study that would be needed to see if the MECP would be satisfied that the site would be safe to use. He asked if this should happen before further discussions take place regarding allocation of costs and usages.

The General Manager stated that the second recommendation would direct Administration to begin discussions regarding the implementation of the end use recommendation. This would include the work required to engage with the Authority's consulting engineer to determine if the site is stable enough for an end use plan. Any work that needs to be done with have to be included in the 2023 budget.

Moved by Ed Sleiman Seconded by Jim Morrison **THAT** the Board receive the report as information.

THAT the Board direct Administration to begin discussions around the implementation of the End Use recommendation and this be the subject of budget deliberations between the three funding municipalities.

THAT the General Manager be instructed to communicate with the Municipality of Lakeshore to provide an update on the remediation process and the potential future use of the land as a passive park.

57-2022 Carried

9. Finance & Administration

A. Procurement Policy Update

The General Manager stated that the report is recommending that the existing operating capital expenditure policy be revised and renamed so it aligns with the procurement policies of the City of Windsor and the County of Essex and addresses legislative compliance and trade agreements and increased complexity of the Authority's procurement function. She noted that the existing policy approved on June 1, 2004 has not been revised since that time. The update establishes a transparent and efficient framework to ensure purchases are acquired through an open and fair process. Legal wording has also been updated to protect both the Board and the Authority.

The General Manager summarized some of the significant revisions to the policy.

Mr. Costante referred to the expenditure threshold increasing from \$50,000 to \$100,000. He asked how many transactions, on average, are captured between \$50,000 and \$100,000 on an annual basis.

The General Manager stated that she did an analysis and the difference would probably be one or two per year. This past year, there was one which was the relining of the flare which cost approximately \$88,000, which would not have been brought to the Board but was included in the 2022 Capital budget.

Mr. Costante asked if the Board will continue to receive reports even if the threshold is increased.

The General Manager stated that any variances will continue to be brought forward to the Board through the three month and six month reports as well as in October or November as part of the full-year projection.

Mr. Costante referred to the revision of the \$5,000 threshold requiring three quotes. He asked if exceptions could be made if something was just over \$5,000.

The General Manager stated that there are situations that this may happen and the policy will allow for the General Manager to approve the expenditure. For example, a break down in equipment and the Material Recovery Facility, a repair on the sprinkler system or a leak in the middle of the night due to a frozen pipe.

Mr. Costante noted that he was pleased that this discretion and flexibility is allowed in the policy.

Mrs. MacDonald noted that the Municipality of Leamington also completed this process and this policy will allow for more efficiencies.

Mr. Morrison asked what kind of oversight do we have that the Authority is following the procurement policy. He noted that there is no mention of an internal auditor.

The General Manager stated that the Authority's auditor, KPMG, audits the Authority's policies and purchasing approvals through a sampling of documents. KPMG is also the auditor for the City of Windsor and the County of Essex. KPMG reviews meeting minutes and reviews budget approvals to ensure the policy is being followed. This gives assurance to both the City of Windsor and the County Essex because the Authority's financial information is included as part of their financial documents. The General Manager noted that the Authority is also the subject of the City of Windsor's internal audit scope of work and has been audited in the past.

Moved by Fabio Costante Seconded by Hilda MacDonald

THAT the Board approve the revised Procurement Policy EW-008.

58-2022 Carried

10. Other Items

Mr. Costante stated that he has been corresponding with Administration and the Chair earlier today and acknowledges that a resolution was passed at the last Board meeting regarding a hybrid model and those who are eligible to attend meetings virtually. Mr. Costante would like to request that the

exceptions be expanded to those who want to attend the meeting virtually for other reasons.

Mr. Kaschak suggested that Mr. Costante's Notice of Motion start today and have the General Manager prepare a report for the next meeting. Mr. Kaschak asked the General Manager if that would be sufficient.

The General Manager noted that the circumstances to attend a Board meeting virtually were adopted at the last meeting. She stated that if a Notice of Motion is what is decided today, then it would give her an opportunity to bring the policy language back to the Board for discussion.

Mr. Kaschak stated that would be fair. He noted that the Board had a wholesome discussion at the last meeting that was carried unanimously. He asked Mr. Costante if he would be fine with the General Manager's suggestion.

Mr. Costante stated that he does not want to overcomplicate things but would like the opportunity to attend meetings virtually. Mr. Kaschak proposed that it would be fair to give the General Manager 30 days to prepare a report for the next meeting and the Board can vote accordingly at that time. Mr. Kaschak appreciates Mr. Costante's cooperation.

Mr. Kaschak asked if there was any other new business. He received a question from a candidate asking if election signs are recyclable. He asked if there will be an area set up at the Public Drop Off where the signs can be dropped off instead of going through the scales.

The Manager of Waste Diversion stated that the signs are recyclable and a tote has been placed on the yard waste pad. There will be an area set up at the Regional Landfill as well. She stated that a promotion through social media can be done and can be posted on the Authority website on where to drop off the material.

11. By-Laws

A. By-Law 7-2022

Moved by Marc Bondy Seconded by Hilda MacDonald

THAT By-Law 7-2022, being a By-law to Confirm the Proceedings of the Board of the Essex-Windsor Solid Waste Authority be given three readings and be adopted this 7th day of June, 2022.

59-2022 Carried

12. Future Meeting Dates

Tuesday – July 5, 2022 Wednesday – August 10, 2022 Wednesday – September 14, 2022 Tuesday – October 4, 2022 Tuesday – November 1, 2022 Tuesday – December 6, 2022

13. Adjournment

Moved by Ed Sleiman Seconded by Jim Morrison **THAT** the Board stand adjourned at 6:02 p.m.

> 60-2022 Carried

All of which is respectfully submitted.

Gary Kaschak Chair

Michelle Bishop General Manager



Council Report: S 76/2022

Subject: Local Road Speed Humps Program - Initial Set of Locations - Wards 2, 6, 8, & 10

Reference:

Date to Council: July 27, 2022

Author: Jeff Hagan

Transportation Planning Senior Engineer

519-255-6100 ext 6003 jhagan@citywindsor.ca Planning & Building Services

Report Date: July 7, 2022 Clerk's File #: ST/13863

To: Mayor and Members of City Council

Recommendation:

THAT Administration **BE DIRECTED** to install speed humps and associated signs and pavement markings on Dandurand Avenue between Piazza Street and Northwood Street.

Executive Summary:

N/A

Background:

The City of Windsor Traffic Calming Policy was first adopted in 2005. The Policy underwent major updates in 2015 and 2021.

When the 2021 Traffic Calming Policy was brought before Council at its April 19, 2021 meeting, in addition to adopting the proposed policy, Council directed that Administration report back with additional policy measures related to traffic calming (CR168/2021):

That administration BE DIRECTED to report back to Council with a policy, including a rollout plan, that would allow residents to request speed bumps if the majority in the subject block wish to see that happen.

The requested report back was brought before Council on May 9, 2022. The report provided a new Local Road Speed Hump Procedure as well as related minor amendments to the Traffic Calming Policy in order to implement the new procedure. Council adopted this new Procedure. These amendments to the Traffic Calming Policy were approved by Council (CR 199/2022). In the course of discussion at this meeting,

several members of Council noted a desire to see speed humps installed in 2022 under the new Local Road Speed Hump program.

Discussion:

On adoption of the Local Road Speed Hump Procedure, four locations that were already in the queue for permanent traffic calming plans were able to proceed immediately to approval surveys for speed humps:

- Norman Road South National to Tecumseh Road East
- Norman Road Tecumseh Road East to Haig Avenue
- Partington Avenue College Avenue to Tecumseh Road
- Virginia Avenue Wyandotte Street East to Raymond Avenue

Approval surveys for these four streets were active from May 26, 2022 to June 26, 2022.

Residents were informed of the surveys by the following methods:

- Mailouts to all households and property owners in the survey areas
- Advisory signs placed in the survey areas
- Posts on City social media accounts requesting that residents on these streets vote in their approval survey
- Pilot outreach initiatives done on a trial basis:
 - All four streets: hand-delivered reminder notices to households that had not voted
 - Virginia Avenue and Partington Avenue: pop-up consultation on street on a weekday evening or Saturday or to allow immediate, in-person resident voting.

In addition, just prior to the approval of the Local Road Speed Hump Procedure, a resident petition was received requesting speed humps on Dandurand Avenue (Piazza Street to Northwood Street). This petition was reviewed and confirmed to have:

- Unambiguous wording that clearly expressed a desire for speed humps
- Petition area limits that matched an appropriate area to be traffic calmed
- Signatures from a significant majority of households (71%), well above the approval thresholds in the Local Road Speed Hump Procedure.

For these reasons, and since the approval process for speed hump requests had not been established at the time the petition was received, the petition was accepted in lieu of a survey as a demonstration of resident support for speed humps.

Results

For the streets surveyed, there are two components to the approval threshold for traffic calming. To be approved, both criteria must be met:

- Response rate: votes are received from at least 50% of households and commercial properties in the survey area.
 - o City-owned and vacant properties are ignored for this calculation.
- Level of Support: 60% of the votes received are in favour of traffic calming.

The survey results are provided in Table 1.

Table 1: Resident Approval Survey Results

Street	Response Rate		Level of Support		Overall	
	Required	Actual	Required	Actual	Result	
Dandurand Avenue – Piazza Street to Northwood Street	50% (21 of 41 households or commercial properties)	71% (29 of 41 households or commercial properties)	60% [Note 1]	71% [Note 1]	Passes	
Norman Road – South National to Tecumseh Road East	50% (83 of 165 households or commercial properties)	45% (74 of 165 households or commercial properties)	60% (45 of 74 respondents voting "yes")	65% (48 of 74 respondents voting "yes")	Does not pass	
Norman Road – Tecumseh Road East to Haig Avenue	50% (55 of 109 households or commercial properties)	48% (52 of 109 households or commercial properties)	60% (32 of 52 respondents voting "yes")	58% (30 of 52 respondents voting "yes")	Does not pass	
Partington Avenue - College Avenue to Tecumseh Road	50% (88 of 175 households or commercial properties)	49% (85 of 175 households or commercial properties)	60% (51 of 85 respondents voting "yes")	75% (64 of 85 respondents voting "yes")	Does not pass	
Virginia Avenue – Wyandotte Street East to Raymond Avenue	50% (23 of 46 households or commercial properties)	57% (26 of 46 households or commercial properties)	60% (16 of 26 respondents voting "yes")	54% (14 of 26 respondents voting "yes")	Does not pass	

Notes:

 Since the Dandurand Avenue petition did not provide an opportunity for "no" votes, non-responses have been treated as equivalent to "no" votes as a conservative approach. Based on the survey results, Dandurand Avenue (Piazza Street to Northwood Street) is recommended for installation of speed humps. The other four locations do not meet the approval threshold for installation of speed humps on these streets.

In addition to the survey area votes summarized in Table 1, in some cases, responses were received from outside the survey area. These results are not reflected in the results in Table 1, but are provided below for information:

- Norman Road (South National to Tecumseh Road East): 0 responses from outside the survey area
- Norman Road (Tecumseh Road East to Haig Avenue): 2 responses from outside the survey area 0% supported traffic calming
- Partington Avenue (College Avenue to Tecumseh Road): 2 responses from outside the study area 50% supported traffic calming
- Virginia Avenue (Wyandotte Street East to Raymond Avenue): 23 responses from outside the study area 74% supported traffic calming

Next Steps

Should Council approve the report recommendations, Administration will proceed with issuing a tender for construction of speed humps on Dandurand Avenue.

The streets where speed humps are not installed will be eligible for a new resident approval survey under the Local Road Speed Humps Procedure 12 months after their previous survey (i.e. July 2023), should a new request be received. The resident approval threshold under that process (support from 50% of households or commercial properties) is somewhat higher than the approval threshold for the most recent set of surveys (50% response rate and 60% approval from the respondents).

Radar speed feedback signs have been identified for Partington Avenue under the Expedited Temporary Traffic Program; these signs will be installed when delivered by the supplier.

Traffic calming reviews for additional streets are ongoing; through process improvements, Administration has been able to increase the rate that local road speed hump requests are reviewed and processed from 3-5 per month (the rate identified in report C 56/2022) to carrying out approximately 10 surveys per month. Resident approval surveys under the Local Road Speed Hump Program that are active as of the date of this report are listed in Table 2.

Table 2: Resident Approval Surveys that are Currently Active

Street	Segment	Ward
Melville Dr	Esplanade Drive to Cul-De-Sac	7
Langlois Ave	Ottawa Street to Tecumseh Road East	4
Buckingham Rd	Wyandotte Street East to Cul-De-Sac	6
Maitland Ave	Radcliff Avenue to McNorton Street	7
Lynngrove Cres	Melville Drive to Esplanade Drive	7
Watson Ave	Wyandotte Street East to Little River Road	6
Rosedale Ave	Sandwich Street to Wyandotte Street West	2
Laporte Ave	Wyandotte Street East to Little River Road	6
Hansen Cres	Conservation Drive to Foster Avenue	9
Buckingham Dr	South National Street to Tecumseh Road East	8
McKay Ave	Ojibway Street to Dobrich Street	10
Austen Dr	Grand Boulevard to Wachna Drive	8
Robinet Rd	Tecumseh Road East to Mulberry Rd	7
Beals St	Dougall Avenue to Huntington Avenue	1
Chandler Rd	Alice Street to Tecumseh Road E	5
Marentette Ave	Ottawa Street to Tecumseh Road East	4

Locations in this list – or in future resident approval surveys – where the resident approval threshold is met will be brought forward for Council approval in future reports.

Risk Analysis:

No critical or significant risks have been identified for the report recommendation.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

The estimated cost to install speed humps and related signage on Dandurand Avenue is summarized in Table 3. There are sufficient funds in Traffic Calming capital budget project 7069022 for initial installation.

Table 3: Cost Estimate - Dandurand Avenue Traffic Calming

Item	Unit	Cost per Unit		Quantity	Total Cost	
		Initial Installation	Annual Maintenance		Initial Installation	Annual Maintenance
Speed humps and associated signs and pavement markings	Each	\$7,425	\$435	5	\$37,125	\$2,175
"Traffic Calmed Neighbourhood" Signs	Each	\$250	\$5	2	\$500	\$10
Grand Total				\$37,625	\$2,185 per year	

The ongoing annual maintenance cost is estimated as \$2,185 per year (speed hump maintenance: \$1,750 per year; signs and markings: \$435 per year). Maintenance costs for initiatives such as this have not been previously identified within operating budgets and therefore this cost may not be able to be accommodated in the existing Signs and Markings operating budget. Should Council approve the traffic calming plan, a budget increase will brought forward as part of the 2023 operating budget submission.

Consultations:

Staff Consultation

Operations: Shawna Boakes, Phong Nguy

Traffic Operations: lan Day

Windsor Fire Rescue Services: Mike Coste

Windsor Police Service: Insp. Jennifer Crosby, Barry Horrobin

Transit Windsor: Jason Scott, Kelsey Amlin

Public Consultation

Key points of public consultation Norman Road, Partington Avenue and Virginia Avenue were as follows:

- Mailout to all property owners and tenants in the project areas (May 25, 2022)
- Two rounds of social media posts (May & June 2022)
- Notification signs posted in each survey area

Additionally, two pilot initiatives to increase response rate were trialed:

• Reminder letters during the last week of the survey period to households that had not voted (carried out for all four survey areas)

 Pop-up consultation in the survey area to allow immediate in-person voting (carried out for Partington Avenue and Virginia Avenue).

Conclusion:

The traffic calming approval survey results for five locations have been provided. Dandurand Avenue (Piazza Street to Northwood Street) meets the resident approval threshold identified in the Traffic Calming Policy and is recommended for the installation of speed humps.

The remaining four locations surveyed did not meet the resident approval threshold; the installation of speed humps on those streets is not recommended.

Planning Act Matters:

N/A

Approvals:

Name	Title
John Revell	Chief Building Official
Josie Gualtieri	Financial Planning Administrator
Jelena Payne	Commissioner of Economic Development and Innovation
Chris Nepszy	Commissioner of Infrastructure Services and City Engineer
Joe Mancina	Commissioner of Corporate Services and Chief Financial Officer
Onorio Colucci	Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Costante		
Councillor Gignac		
Councillor Kaschak		
Area residents and project notification list (list provided to Clerks)		

Appen	dic	es:
--------------	-----	-----

N/A



Council Report: S 81/2022

Subject: Matchett Road (Chappus Street to Sprucewood Avenue) Traffic Calming - Ward 1

Reference:

Date to Council: July 27, 2022

Author: Jeff Hagan

Transportation Planning Senior Engineer

519-255-6100 ext 6003 jhagan@citywindsor.ca Planning & Building Services Report Date: June 17, 2022

Clerk's File #: ST/13863

To: Mayor and Members of City Council

Recommendation:

THAT Administration **BE DIRECTED** to implement traffic calming on Matchett Road between Chappus Street and Sprucewood Street as shown in Appendix B to report S 81/2022.

Executive Summary:

N/A

Background:

Matchett Road was identified as a candidate for traffic calming based on a resident service request received in August 2019.

This request followed a recommendation by the Windsor Essex County Environment Committee (WECEC) made at its July 4, 2019 meeting for seasonal closures of Matchett Road and Malden Road to address traffic-related wildlife mortality in and around the Ojibway Prairie Complex. WECEC's recommendation came before Council at its September 9, 2019 meeting and was not supported (CR463/2019 CR411/2019).

In response to the traffic calming service requests, Administration conducted a traffic calming review. Matchett Road was confirmed to meet the speed and volume criteria for traffic calming. A petition form (required under the 2015 Traffic Calming Policy, which was in effect at the time) was provided to the original requestor; the completed petition was returned in January 2020.

Following the receipt of the completed petition, additional traffic data was collected and a warrant/prioritization review was carried out for the full traffic calming project area

(Chappus Street to Sprucewood Drive) in May 2021. A traffic calming plan was prepared and was presented to the public at an online public open house on February 1, 2022.

Related Projects

The project area for the Matchett Road Multi-Use Trail project, currently underway, overlaps the traffic calming project area. Phase 1 (Chappell to EC Row Expressway) was completed in 2021. Phase 2 (EC Row Expressway to Broadway) is scheduled for completion in 2022.

The multi-use trail project is not expected to have a significant effect on traffic speeds or volumes on Matchett Road and does not affect Matchett Road's traffic calming warrant score.

Discussion:

Development of the traffic calming plan took a number of key factors into account, as summarized in Table 1.

Table 1: Key Issues and Design Constraints

Factor	Details	Implications
Key Issues for 1	raffic Calming	
Traffic Speed	 Speed limit: 50 km/h Average speed: 61 km/h 85th percentile speed: 69 km/h 	These results indicate a high degree of speeding.
Traffic Volumes	 South of Matchett: 8,800 vehicles per day Target maximum traffic volume (Class 1 Collector): 6,000 vehicles per day 	These results indicate moderately high volumes for a street of this classification.

Factor	Details	Implications
Collision History (2015-2019)	Broadway to Sprucewood:	Matchett Road has a collision rate that is lower than the city-wide average for other similar streets.
Key Design Con	nstraints	
Road Classification	Matchett is a Class 1 Collector road	Matchett Road is intended for relatively high volumes of traffic. Displacement of traffic onto nearby local streets would not be a desirable outcome.
Roadway Type	 In the project area, Matchett Road has a narrow pavement width (6.5 m to 7.0 m) In the project area, Matchett Road has a rural cross-section (i.e. ditches without curbs or catch basins) gravel shoulders or no shoulders 	Most traffic calming measures would not be suitable for Matchett Road in the project area.
Road Network	Matchett Road has an interchange on the E.C. Row Expressway	Significant diversion of traffic off of Matchett Road onto other major roads in the area would need measures that are beyond the scope of a traffic calming project.

Factor	Details	Implications
Transit	 Existing: transit route (South Windsor 7) on Matchett Road for entire study area Future (Transit Master Plan): study area is within an ASD (alternative service delivery) area. 	For existing conditions, the traffic calming plan should accommodate transit buses along its entire length. For future conditions, the traffic calming plan should accommodate through movements and turns for smaller ASD vehicles.
Cycling	 Existing: no cycling infrastructure Future (Active Transportation Master Plan): connector bikeway, non-AAA ("all ages and abilities), low priority 	The traffic calming plan should be compatible with future cycling infrastructure.

The traffic calming plan that was developed and presented to the public at the February 1, 2022 online public meeting included the following features:

- Peripheral transverse bars: striped pavement markings to increase the feeling of speed for drivers.
- Radar speed feedback signs
- Potential pedestrian crossover at Titcombe Road / Ojibway Nature Centre

The presentation boards from this meeting can be seen in Appendix A.

A comment period was provided following the public meeting, in which residents were invited to respond via 311 or online poll to express their opinion on the traffic calming plan presented and provide additional comments, if any. 167 responses were received during the comment period following the public meeting, broken down as follows:

- Confirmed study area residents: 2 responses (1% of responses)
- Residents (of Windsor, LaSalle or Amherstburg) outside the study area: 148 responses (89% of responses)
- Respondents who did not provide their location: 17 responses (10% of responses)

Responses are summarized in Table 2. Percentages may not total to 100% due to rounding.

Table 2: Response Summary - February 2022 Online Public Meeting

Category	Do you support the proposed tra Number of plan within the study are			
Category	Responses	Yes	No	No Answer or Unclear
Study Area Residents	2	100%	0%	0%
Outside Study Area (includes unknown location)	165	43%	55%	1%
Overall	167	44%	54%	1%

Some residents chose to provide additional comments. Common themes expressed in the comments are summarized below:

- Concerns about speeding on Matchett Road
- Concerns about wildlife mortality on Matchett Road
- Requests for measures to increase capacity of Matchett Road as a commuting route (e.g. roundabout or signal at the Sprucewood and Matchett intersection or increasing the number of lanes on Matchett Road)
- Requests for speed limit increases on Matchett Road
- Suggestions for other alternative speed control measures (e.g. speed humps or automated speed enforcement)
- Requests for other Windsor streets to be prioritized for traffic calming ahead of Matchett Road
- Requests for the cycling infrastructure on Matchett Road to be extended

Approval Poll

An approval poll of residents and business owners in the project area was carried out from June 3, 2022 to July 3, 2022. Respondents were invited to contact 311 or complete an online survey form. The notice letter, including the traffic calming plan presented for resident approval, is provided in Appendix B.

Residents were notified of the approval poll by a variety of methods:

- Mailouts to all property owners and tenants in the project area (June 1, 2022)
- One round of social media posts, geo-targeted on the postal codes for the project area (June 2022)

 Notification signs posted on Matchett Road (4 signs total, placed at the ends and midpoint of the project area)

The results of the survey are summarized in Table 3. As noted, all resident approval criteria are met; therefore, it is recommended that the traffic calming plan be implemented.

Table 3: Survey Results

Criteria	Minimum Required	Received	Criteria Met?
Response rate	50% (5 out of 10 households & commercial properties)	60% (6 out of 10)	Yes
Level of support	60% of respondents voting "yes"	83% "yes" (5 out of 6) responses)	Yes
Overall	Both Criteria Above Are Met		Yes

An additional 4 responses were received from people outside the project area. Of these responses, 100% (all 4 responses) were in favour of the traffic calming plan. These responses from outside the project area are not included in Table 3.

Next Steps

Pending Council approval, Administration will implement the proposed traffic calming plan shown in Appendix B. Based on the project value, no additional approvals from Council will be required before implementation.

In accordance with the Traffic Calming Policy, a follow-up report will be provided 6 to 12 months after implementation of the traffic calming plan. This report will provide information on the effectiveness of the traffic calming measures.

Risk Analysis:

Proceeding with the traffic calming plan is subject to minor financial risk due to the uncertainty in predictions of future capital and maintenance costs. This risk is normal and inherent in construction projects and will be mitigated by standard project management and cost control practices. It is recommended that this risk be tolerated.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

The total construction cost for the traffic calming plan shown in Appendix B is \$30,000 exclusive of HST. There are sufficient funds in Traffic Calming capital budget project ID #7069022 for this work.

The ongoing annual maintenance cost is estimated as \$3,500 per year. Maintenance costs for initiatives such as this have not been previously identified within operating budgets and therefore this cost may not be able to be accommodated in the existing Signs and Markings operating budget. Should Council approve the traffic calming plan, a budget increase may be brought forward as part of the 2023 operating budget submission.

Consultations:

Staff Consultation

The following departments were consulted during the development of the traffic calming plan:

- Operations
- Traffic Operations

- Operations Maintenance
- Parks
- Windsor Fire Rescue Services
- Windsor Police Service
- Transit Windsor

Public Consultation

Key points of public consultation were as follows:

- Public information centre (online): February 1, 2022
 - Notification for the public information centre was by mailout to all property owners and tenants in the project area and geo-targeted social media posts.
 - Presentation boards and the meeting recording were posted to the City website.
- Mailout to all property owners and tenants in the project area (June 1, 2022)
- One round of social media posts, geo-targeted on the postal codes for the project area (June 2022)
- Notification signs posted on Pillette Road (4 signs total, placed at the ends and midpoint of the project area)

Conclusion:

Based on the results of the resident approval survey, Administration recommends that the traffic calming plan for Matchett Road between Chappus Street and Sprucewood Avenue, shown in Appendix B, be implemented.

Planning Act Matters:

N/A

Approvals:

Name	Title
John Revell	Chief Building Official
Josie Gualtieri	Financial Planning Administrator
Jelena Payne	Commissioner of Economic Development and Innovation
Chris Nepszy	Commissioner of Infrastructure Services and City Engineer
Janice Guthrie	On behalf of Commissioner of Corporate Services and Chief Financial Officer
Onorio Colucci	Acting Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Francis		
Windsor Essex County Environment Committee		
Area residents and project notification list (list provided to Clerks)		

Appendices:

- 1 Appendix A: Presentation Slides, February 1, 2022 Online Public Meeting
- 2 Appendix B: June 1, 2022 Letter to Residents (includes proposed traffic calming plan)





Matchette Road Traffic Calming

Broadway Street to Sprucewood Avenue

February 1st, 2022 – Public Information Centre (PIC) 6:30 PM – 8:30 PM

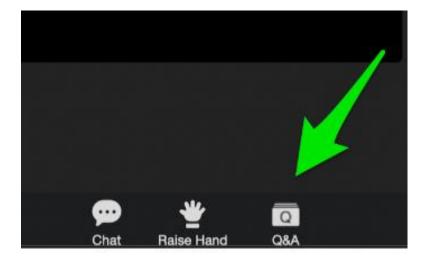
Agenda

- Traffic Calming:
 - What it is and what is not?
- Background on Matchette Road
 - Original Concerns
 - Speed Profile and Volume Analysis
- Proposed Traffic Calming Concept
- Next Steps



Housekeeping Items

- Presentation slides
 - https://tinyurl.com/tcalming
- Questions
 - Q & A function
 - Upvote!
 - Text: 519-560-7971
 - Raise hand
 - (*9 if on phone)
- Comments and more info
 - -311
 - transportation@citywindsor.ca
 - 519-255-6267 x6831





What is Traffic Calming?

Traffic Calming is the implementation of mainly physical measures to:

- Reduce negative effects of motor vehicle use
- Alter driver behaviour
- Improve conditions for non-motorized street users

The objective of Traffic Calming are to:

- Reduce vehicle speeds
- · Reduce cut-through traffic volume
- Reduce the number and severity of collisions
- Improve the neighbourhood environment





Matchette Road at Titcombe Road
Source: www.ctvnews.ca



Matchette Road

Key Features

- A high traffic volume class 1 collector
- Posted speed limit: 50 km/hr.
- Emergency/Bus route
- Bonded by Nature Reserve :
 - Ojibway on South East
 - Tom Joy Woods on Northwest Side
- Speeding and high vehicular activities in the neighborhood
- The city reviewed the volume, speed to determine the suitable measures to address traffic concerns



Matchette Road



Matchette Road around Ojibway Nature Center



Matchette Road - Collisions Data (2015-2019)







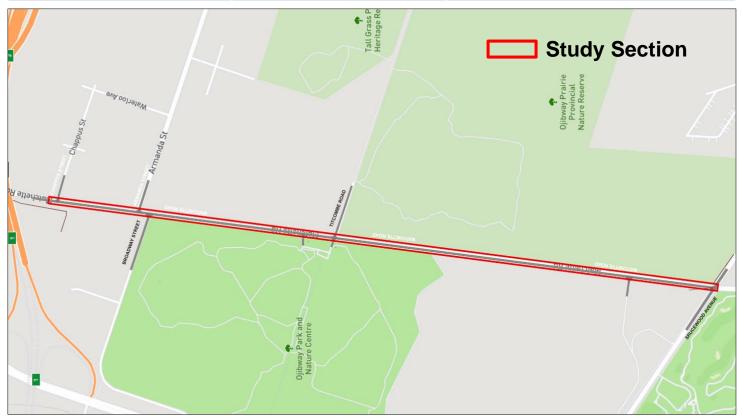
Six (6) reducible collisions possible

- Four (4) at Matchette and Sprucewood Intersection
- Two (2) along Matchette Road Segment



Matchette Road - Speed & Volume Data

Vehicles Per Day	Speed Limit	85 th Percentile Speed
8886	50 km/h	69 km/h





Traffic Calming Objective

Reduce speeding on Matchette Road without pushing traffic onto nearby local roads



Selected Traffic Calming Measures

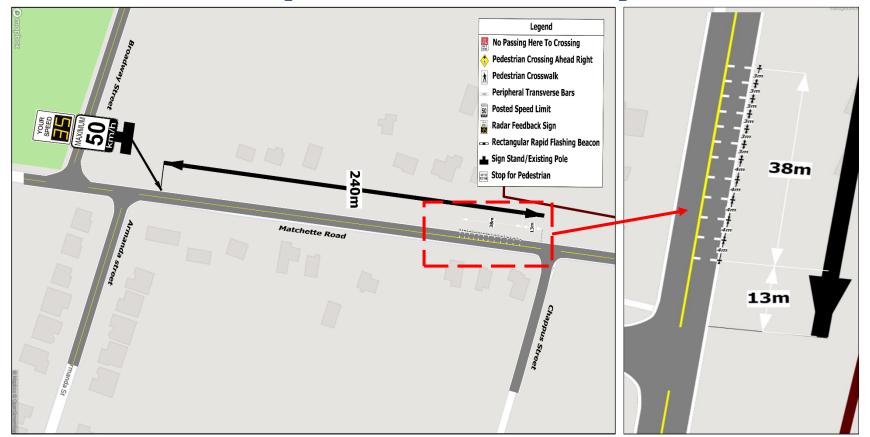
Speed management techniques recommended:

- Peripheral Transverse Bars
- Radar Feedback Signs

We highlight only the sections on Matchette Road where these measures are to be implemented



Proposed Concepts



Matchette Road at Chappus Street

- Adding peripheral transverse bars on Matchette road on the approach from Chappus street
- Beyond the transverse bars, adding a radar feedback sign to further serve as speed enforcement



Proposed Concepts

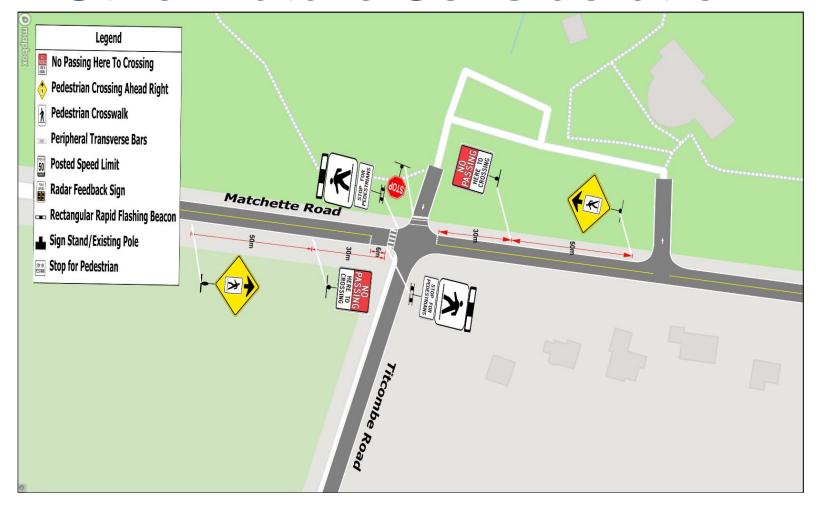


Matchette Road at Sprucewood Avenue

- Adding peripheral transverse bars on Matchette road on approach from Sprucewood Avenue
- Similar to Chappus Street and beyond the transverse bars, a radar feedback sign is required for further speed enforcement



Other Future Consideration



Level 2 Type C Pedestrian Crossover at Titcombe and Matchette Road

• Future consideration not included in the current implementation



Potential Impact on the Neighbourhood

Reduction in vehicular speed

- Improved community safety:
 - Reduction in numbers of collisions



Matchette Road – Next Steps

Review Feedbacks from Residents and Stakeholders Deadline: March 1, 2022



Finalize Traffic Calming Plan



Approval Poll by Residents in the Project Area



Report to Environment, Transportation and Public Safety Standing Committee



Council Approval



Thank You!



Matchette Road Traffic Calming

Broadway Street to Sprucewood Avenue

Please provide comments by March 1st 2022



TRANSPORTATION PLANNING

June 1, 2022

RE: APPROVAL POLL Traffic Calming Plan – Matchette Road (Broadway Street to Sprucewood Avenue)

Dear Resident,

We heard your concerns about the traffic safety on Matchette Road. As a result, a Public Information Centre (PIC) was held to present a draft traffic calming plan to the public for feedbacks on Tuesday February 1, 2022. Below are the main features for traffic calming that we have proposed:

Traffic Calming Features		
Radar Feedback Signs	 Downstream of both the North and Southbound traffic on Matchette Road 	
Peripheral Transverse Bars Installed near: i. Sprucewood and Matchette Road Intersection ii. Chappus Street and Matchette Road Intersection		
Total Estimated Cost for Traffic Calming: \$30,000		

The plan will be brought forward to Council for consideration if the required level of residential approval described below is reached:

• A minimum of 50% of the households and commercial properties must respond within the polling area, and from this 60% must indicate their support for the Traffic Calming Plan.

Project related information including this document will be maintained on the City website at www.citywindsor.ca, search word: traffic calming.

To determine the level of support, we are asking neighborhood residents and property owners to respond by completing our survey online at https://tiny.one/matchettesurvey.

Alternatively, you can vote by calling 311:

- Identify that you are calling about the Matchette Road traffic calming plan
- Provide your name and address
- Indicate whether you support the traffic calming plan

Note that the City's 311 Call Centre is open from 8:00 a.m. to 5:00 p.m., Monday to Friday. The survey will be open until **July 3, 2022** (Only one vote per household will be considered).

If you have further comments or questions on this project, please do not hesitate to contact Seun Daniel Oluwajana, Transportation Planning Coordinator, at 519-255-6267, ext. 6463 at your convenience.

Yours Truly, Jeff Hagan, P. Eng, PTOE Transportation Planning Senior Engineer cc: Chief Building Official, Ward 1 Councilor

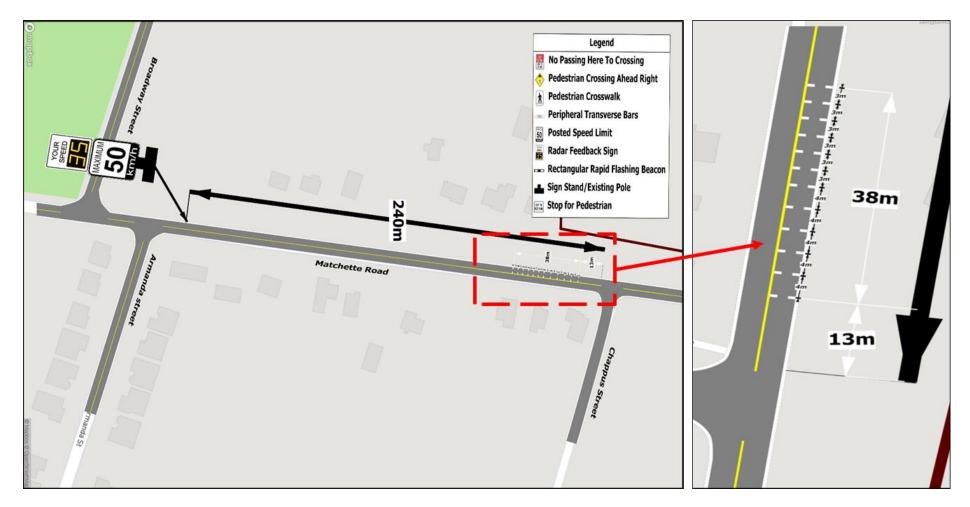


Figure 1. Matchette Road at Chappus Street



Figure 2. Matchette Road at Sprucewood Avenue

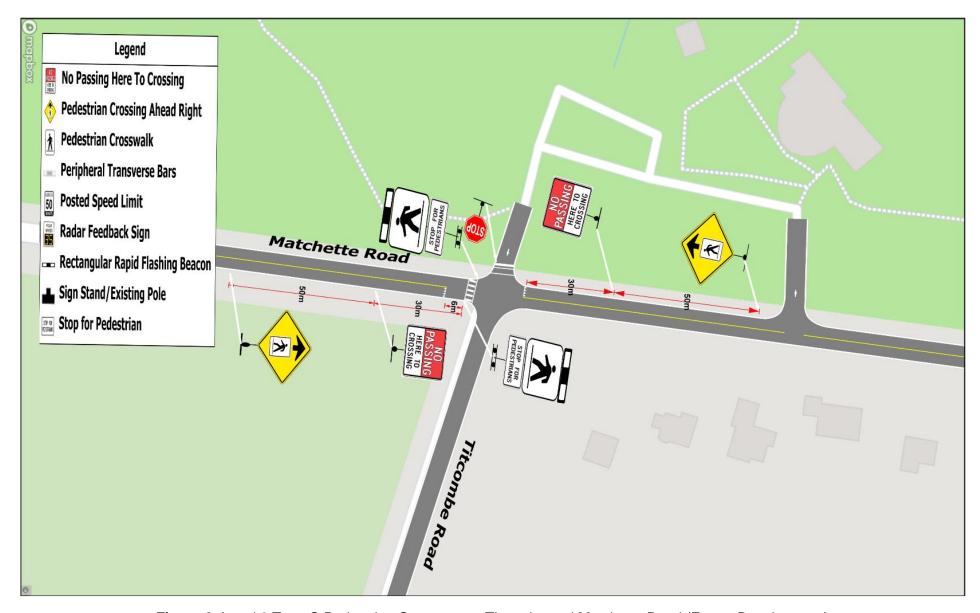


Figure 3. Level 2 Type C Pedestrian Crossover at Titcombe and Matchette Road (Future Development)



Council Report: S 87/2022

Subject: Vision Zero Action Plan Development - Progress Report #2 - City-wide

Reference:

Date to Council: July 27, 2022

Author: Jeff Hagan

Transportation Planning Senior Engineer

519-255-6100 ext 6003 jhagan@citywindsor.ca Planning & Building Services

Report Date: July 7, 2022 Clerk's File #: ST/13714

To: Mayor and Members of City Council

Recommendation:

THAT report S 87/2022, Vision Zero Action Plan Development – Progress Report #2 **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

At the February 24, 2020 Council meeting, Council passed the following resolution:

That the attached Vision Zero Policy, Vision Zero Procedure, and Vision Zero Stakeholder Group Terms of Reference BE ADOPTED; and,

That Council APPOINT Councillor Chris Holt to represent Council on the Vision Zero Stakeholder Group.

Membership of the Vision Zero Stakeholder Group was approved by Council at its March 29, 2021 meeting (Council Resolution CR123/2021).

The Vision Zero Policy and Vision Zero Procedure:

- Endorsed the goal of eliminating fatal and major injury collisions on City streets;
- Directed Administration to prepare a Vision Zero Action Plan to achieve this goal;

- Established two groups:
 - Vision Zero Task Force: a staff committee with representatives of City departments and emergency services generally responsible for responding to collisions and addressing road safety concerns; and
 - Vision Zero Stakeholder Group: an advisory committee with members affected by severe collisions, including representatives of vulnerable road user groups, representatives of neighbourhood associations, and the public at large.

The Vision Zero Policy sets out a framework for the preparation of the Vision Zero Action Plan. The Policy identifies that reports will be brought forward to the Environment, Transportation and Public Safety Standing Committee – and subsequently to Council – at the following points in the development of the Vision Zero Action Plan:

- Progress Report #1: after development of strategic priorities
- Progress Report #2: after development of recommended initiatives
- Final Report (including the completed Vision Zero Action Plan): after development of interim goals

Progress Report #1 was presented to the Environment, Transportation & Public Safety Standing Committee at its October 27, 2021 meeting. This report identified a number of themes and strategic priorities for the Vision Zero Action Plan, as summarized in Table 1.

Table 1: Themes and Strategic Priorities

Theme	Strategic Priority
1: Driver Behaviours	1A: Vehicle Speeds
	1B: Drug and Alcohol Impairment
	1C: Inattentive Driving
	1D: Failing to Yield at Intersections
2: Road User Types	2A: Vulnerable Road Users (Pedestrians,
	Cyclists, and Motorcyclists)
	2B: Data Gaps – People
3: Locations and Infrastructure	3A: High Injury Corridors
	3B: Signalized Intersections
4: Process Improvements	4A: Improved Data Sources and Information
	Sharing
	4B: Design Standards and Best Practices

Initiatives that form a Vision Zero Action Plan typically follow the Safe Systems approach. The Institute of Transportation Engineers summarizes the key features of the Safe Systems approach as follows:

- 1. <u>Anticipating Human Error</u> A Safe System is designed to anticipate and accommodate errors by drivers and other road users.
 - Example: Even a momentary distraction can prevent a driver from seeing vulnerable road users or vice-versa. Separating vulnerable road users, such as pedestrians and bicyclists, from traffic wherever possible reduces the likelihood that such predictable errors will lead to a deadly collision.
 - Example: On rural highways the application of rumble strips can recapture
 the driver's attention when they drift out of the lane due to distraction or
 fatigue. In newer vehicles, lane-keeping technologies can provide similar
 benefit.
- 2. <u>Accommodating Human Injury Tolerance</u> A Safe System is designed to reduce or eliminate opportunities for crashes resulting in forces beyond human endurance.
 - Example: Where pedestrians and vehicles need to occupy the same space – such as urban crosswalks – reducing vehicle speeds through the use of lower speed limits combined with road design changes can reduce the likelihood of fatal collisions with pedestrians or bicyclists.
 - Example: Breakaway designs on traffic control devices installed in the right-of-way can reduce the force of impact when struck by an errant vehicle.

Discussion:

Development of the Vision Zero Action Plan was done in two components:

- Inventory of Existing Road Safety Initiatives: this component involved cataloguing existing programs – regardless of agency or organization – that address the Vision Zero strategic priorities. This inventory serves as a foundation for new initiatives to build upon, and also provides insight into gaps between current road safety programs and a Vision Zero approach focused on all of the Vision Zero strategic priorities.
- New Initiatives: this component involved identifying additional initiatives that
 could be undertaken to address the Vision Zero strategic priorities. Except as
 noted, new initiatives were focused specifically on areas of City responsibility.

Details on the inventory of Existing Road Safety Initiatives are presented in Appendix A. Details on recommended new initiatives are presented in Appendix B.

Before developing recommended initiatives, an inventory of existing road safety initiatives in Windsor – City programs as well as initiatives by other agencies and groups – was developed. This inventory is summarized in Table 2; additional details are available in Appendix A. The existing initiatives were taken into account when developing the list of new recommended initiatives for the Vision Zero Action Plan.

Table 2: Existing Road Safety Initiatives

Eviating Initiative	Load Aganay or City
Existing Initiative	Lead Agency or City
	Department
Enforcement and Emergency Response	
Traditional Enforcement	Windsor Police Service
High Visibility Enforcement (HVE)	Windsor Police Service
Selective Traffic Enforcement Program (STEP)	Windsor Police Service
Road Watch	Windsor Police Service
Report Impaired Driving (RID) program	MADD Windsor Essex County
	Windsor Police Service
Emergency response to collisions	Essex Windsor EMS
	Windsor Fire & Rescue Services
	Windsor Police Service
	Windsor Regional Hospital
City Programs and Policies	
Traffic Calming Policy	City – Transportation Planning
Community Safety Zone Policy	City – Transportation Planning
Radar Trailer Program	City – Traffic Operations
School Neighbourhood Policy	City – Transportation Planning
Bikeways Development Project	City – Transportation Planning
Pedestrian Generator Sidewalk Program	City – Operations
Pedestrian Safety Improvement Program	City – Engineering
Intersection Improvements Program	City – Engineering
Audible/ accessible pedestrian signal program	City – Traffic Operations
Pedestrian crossover program	City – Transportation Planning
Winter maintenance program	City – Operations
Pavement marking maintenance program	City – Traffic Operations
Sign maintenance program	City – Traffic Operations
Sight line clearing at intersections	City – Traffic Operations
Before-after analysis of road safety	City – Transportation Planning
countermeasures	
Red light cameras	City – Traffic Operations
Vehicle operator training	City – Human Resources
	Transit Windsor
Periodic driver's abstract review	City – Human Resources
	Transit Windsor
Collision Review Group (for collisions involving	City – Fleet Review Committee
City vehicles)	
Fleet vehicle standard development	City – Fleet Review Committee
Education Programs	
Children's Road Safety Programs	Safety Village
	Bike Windsor Essex
PARTY (Prevent Alcohol and Risk-related	Windsor Regional Hospital
Trauma in Youth) Program	

A number of new City road safety initiatives are already planned, as summarized in Table 3. These initiatives have been incorporated into the overall list of recommended initiatives for the Vision Zero Action Plan.

Table 3: Future Road Safety Initiatives - Already Planned

Planned Initiative	Lead Agency or City Department
Develop and Implement a Complete Streets Policy	City – Transportation Planning
Construct Roadway Capital Projects (for certain corridors) Obtain Collision Data through Provincial ARIS	City – Engineering City – Transportation Planning City – Transportation Planning
System Continue to Implement the Transit Master Plan	Transit Windsor
Review Yellow and All-Red Intervals for Traffic Signals	City – Traffic Operations
Install Retroreflective Backboards for Traffic Signals	City – Traffic Operations
Increase Winter Roadway Maintenance	City – Operations
Driver Simulation Training for Commercial	City – Human Resources
Motor Vehicle Operators	
Commercial Motor Vehicle Driver Evaluation by Independent Party	City – Human Resources

A list of potential new Vision Zero initiatives was presented to the Vision Zero Task Force and Vision Zero Stakeholder Group, then revised based on feedback received. The initiatives considered not only the City's role as a road authority, but also its role as a fleet operator, land development authority, provider of social services, and its other functions and responsibilities.

These varied roles provide a wide range of ways in which the City of Windsor can exert influence to encourage a culture of road safety throughout the region and beyond.

New recommended initiatives are summarized in Table 4; initiatives identified by the Stakeholder Group as especially high priority are highlighted. Other potential initiatives that were presented to the Vision Zero Stakeholder Group but are not recommended based on feedback received are presented in Table 5. Additional details on both groups of initiatives are provided in Appendix B.

Conflicting feedback from the Vision Zero Stakeholder Group was received on one initiative included in Table 4: Adopt a "No Right Turn Channels" Policy or Best Practice for New Intersections and Major Roadway Projects. While some comments received from the Stakeholder Group identified this as high priority, other comments expressed concerns related to cyclist safety and comfort at roundabouts.

Table 4: Future Road Safety Initiatives – Recommended

Recommended Initiative (highlighting indicates initiatives identified by members of the Stakeholder Group as high	Lead Agency or City Department
priority)	City Transportation Diaming
Conduct Road Safety Audits of Identified High	City – Transportation Planning
Injury Corridors	City Transportation Diaming
Carry out a Value Engineering & Road Safety	City – Transportation Planning City – Engineering
Review of Existing Approved Preliminary	Orty - Engineering
Designs for Roadway Projects	To be determined
Establish a Fatal Collision Response Team	To be determined
Explore Data-Sharing Arrangements Between	City – Transportation Planning
Agencies Corrected Pasident Survey	City Transportation Planning
Carry out a Resident Survey	City - Transportation Planning
Implement Target Speed Requirements for	City – Transportation Planning
New Construction and Major Roadway	
Projects Implement Speed Limit Reductions	City – Transportation Planning
Implement Speed Limit Reductions – Neighbourhoods	City – Transportation Flaming
Implement Speed Limit Reductions – Major	City – Transportation Planning
Streets	City – Transportation Flaming
Implement Speed Limit Reductions and	City – Traffic Operations
Increased Fines – Construction Zones	Oity Traine Operations
Reduce Progression Speed for Traffic Signal	City – Traffic Operations
Coordination	Only Traine Sperations
Carry out Education Campaigns	City – Transportation Planning
Adjust Project Prioritization Criteria in the	City – Transportation Planning
Active Transportation Master Plan to Place a	
Greater Emphasis on Safety and Collisions	
Include Collision History as a Factor in	City – Engineering
Prioritizing Capital Projects	City – Operations
Review Official Plan and Zoning By-laws for	City – Planning
Vision Zero Opportunities	City – Transportation Planning
Review Design Standards and Development	City – Engineering
Manual for Vision Zero Opportunities	City – Transportation Planning
Require Transportation Impact Studies for	City – Transportation Planning
New Developments to Include a Full	
Multimodal Review	
Develop Safety Performance Functions	City – Transportation Planning
Implement Automated Speed Enforcement	City – Traffic Operations
Install Transverse Rumble Strips at Select	City – Transportation Planning
Locations	

Recommended Initiative	Lead Agency or City
(highlighting indicates initiatives identified by	Department Department
members of the Stakeholder Group as high	
priority)	
Implement a Parking Ticket Forgiveness	City – Transportation Planning
Program to Target Impaired Driving	
Provide Free (or Cost-Included) Transit	Transit Windsor
Service for Alcohol-Oriented Special	City – Special Event Resource
Events	Team
Support the Development of a "Safe Ride	To be determined
Home" Service	
Provide Stop Bars and Crosswalk Markings at	City – Traffic Operations
Unsignalized Intersections	, i
Provide Ladder Crosswalk Markings at	City – Traffic Operations
Signalized Intersections	
Implement Fully Protected Intersections	City – Transportation Planning
•	City – Engineering
Implement Leading Pedestrian Intervals	City – Traffic Operations
Install Pedestrian Countdown Signals	City – Traffic Operations
Implement Hardened Centrelines at	City – Transportation Planning
Intersections with High Speed Left Turns	
Adopt a "Roundabouts First" Policy or	City – Engineering
Best Practice for New Intersections and	
Major Roadway Projects	
Adopt a "No Right Turn Channels" Policy	City – Engineering
or Best Practice for New Intersections and	
Major Roadway Projects	
Implement a Road Diet Program	City – Engineering
	City – Transportation Planning
Carry Out Additional Driver Training for City	City – Human Resources
Employees Based on Highway Traffic Act	
Offenses	
Develop a Comprehensive GIS-based	City – Transportation Planning
Collision Information System	
Develop Safety-Related Vehicle Design	City – Fleet Review Committee
Criteria for Future City Vehicle Fleet	
Purchases & Leases	

Table 5: Future Road Safety Initiatives - Considered But Not Recommended

Initiative – Not Recommended	Rationale for Not Recommending – feedback from Stakeholder Group members
Install Pavement Edge Rumble Strips at Select Locations	Concerns regarding the effectiveness of existing pavement edge rumble strips
Develop a Cell Phone App to Address Inattentive Driving	Many other electronic tools exist to address distracted driving
Require Helmets for all E-Scooter Riders	Difficulty of enforcement

Risk Analysis:

No risks are associated with this informational report.

Risks associated with the Vision Zero Action Plan will be identified when the Action Plan is brought forward for approval.

Overall, the Vision Zero Policy, Procedure and Action Plan are tools to reduce and mitigate life safety risks to the community due to motor vehicle collisions.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

No new expenditures are recommended by this progress report.

The Vision Zero Action Plan, when completed, will be brought before Council for approval of the plan. The Action Plan is intended as a multi-year plan; it is expected that funding approval for initiatives of the plan will be brought forward for Council approval as part of annual budget submissions over the life of the Action Plan.

Most of the recommended initiatives will not result in any additional cost increases; some initiatives will result in cost savings. Costing and phasing for the Vision Zero Action Plan will be developed during the next step of the Action Plan development process: development of interim goals.

Consultations:

Consultations with the Vision Zero Task Force and Vision Zero Stakeholder Group occurred as summarized in Table 3.

Meeting	Vision Zero Task Force Meeting Date	Vision Zero Stakeholder Group Meeting Date			
1 – Kickoff, Review of Fatal and Major Injury Collision Trends and Patterns, Roundtable Discussion	May 13, 2021	May 25, 2021			
2 – Review of draft strategic priorities	June 18, 2021	July 2, 2021			
3 – Review of draft recommended initiatives	November 5, 2021 April 4, 2022	June 29, 2022			

Conclusion:

Recommended initiatives for the Vision Zero Action Plan are provided. The initiatives presented in this report reflect the input of the Vision Zero Task Force and the Vision Zero Stakeholder Group.

The next step in the development of the Vision Zero Action Plan, identification of interim goals, will build on these recommended initiatives to create a draft Action Plan that will be presented to Council for review and approval.

Planning Act Matters:

N/A

Approvals:

Name	Title
John Revell	Chief Building Official
Jelena Payne	Commissioner of Economic Development and Innovation
Chris Nepszy	City Engineer and Commissioner of Infrastructure
Onorio Colucci	Chief Administrative Officer

Notifications:

Name	Address	Email
Vision Zero Stakeholder Group		
Windsor Bicycling Committee		
MADD Windsor Essex County		maddwin@yahoo.ca
The Safety Village		mlauzon@thesafetyvillage.com
Melissa Lauzon, Executive Director		
Bike Windsor Essex		hello@bikewindsoressex.com
Lori Newton, Executive Director		
Vision Zero Action Plan project notification list		
(list provided to Clerks)		

Appendices:

- Appendix A: Existing Road Safety Initiatives Appendix B: New Vision Zero Initiatives 1
- 2



TO: Environment, Transportation and Public Safety Standing Committee

FROM: Jeff Hagan, Transportation Planning Senior Engineer

DATE: July 8, 2022

SUBJECT: Vision Zero Action Plan – Existing Initiatives

This memo provides an inventory of existing road safety programs in Windsor that address the strategic priorities of the Vision Zero Action Plan, regardless of agency carrying them out.

The intent of this inventory is to identify a starting point for new initiatives of the Vision Zero Action Plan; these new initiatives are addressed in a separate memo.

Table 1 provides a summary of existing initiatives that address the Vision Zero Strategic Priorities. Abbreviations used in the table are as follows:

EWEMS: Essex Windsor EMS

WFRS: Windsor Fire and Rescue Services

WPS: Windsor Police ServiceWRH: Windsor Regional Hospital

Table 1: Summary of Existing Initiatives

Existing Initiative	Lead Agency or City Dept.	Theme 1: Driver Behaviours				Theme 2: Theme 3: Local Road User and Infrastructives						
		1A: Vehicle Speeds	18: Drug and Alcohol Impairment	1C: Inattentive Driving	1D: Failing to Yield at Intersections	2A: Vulnerable Road Users	2B: Data Gaps – People	3A: High Injury Corridors	3B: Signalized Intersections	3C: Pedestrians Crossing Mid- block	nproved Data Sources Iformation Sharing	4B: Design Standards and Best Practices
Enforcement and E	mergency Respo	onse										
Traditional Enforcement	WPS	Х	Х	Х	Х	Х		х	Х			
High Visibility Enforcement (HVE)	WPS	х	Х	Х	Х	Х		х	Х			



Existing Initiative	Lead Agency or City Dept.	Theme 1: Driver Behaviours						e 3: Loca		Theme 4: Process Improvements		
		1A: Vehicle Speeds	18: Drug and Alcohol Impairment	1C: Inattentive Driving	1D: Failing to Yield at Intersections	2A: Vulnerable Road Users	28: Data Gaps – People	3A: High Injury Corridors	3B: Signalized Intersections	3C: Pedestrians Crossing Mid- block	4A: Improved Data Sources and Information Sharing	4B: Design Standards and Best Practices
Selective Traffic Enforcement Program (STEP)	WPS	х	Х	Х	Х	х		х	Х			
Road Watch	WPS	Х	Χ	Χ	Х	Х						
Report Impaired Driving (RID) program	MADD Windsor Essex County WPS		X									
Emergency response to collisions	EWEMS WFRS WRH WPS				Mitigatio	n measi	ıre for a	ll collisi	on types	5		
City Programs and	Policies											
Traffic Calming Policy	City – Transportation Planning	х				Х				Х		
Community Safety Zone Policy	City – Transportation Planning	х			x	х		х	Х			Х
Radar Trailer Program	City – Traffic Operations	Х										
School Neighbourhood Policy	City – Transportation Planning					Х						Х
Bikeways Development Project	City – Transportation Planning					Х		х	Х			
Pedestrian Generator Sidewalk Program	City – Operations					Х		х	Х	х		



Existing Initiative	Lead Agency or City Dept.	Theme	Theme 1: Driver Behaviours				iver Behaviours Theme 2: Road User Types			ations cture	Theme 4: Process Improvements	
		1A: Vehicle Speeds	18: Drug and Alcohol Impairment	1C: Inattentive Driving	1D: Failing to Yield at Intersections	2A: Vulnerable Road Users	2B: Data Gaps – People	3A: High Injury Corridors	3B: Signalized Intersections	3C: Pedestrians Crossing Mid- block	4A: Improved Data Sources and Information Sharing	4B: Design Standards and Best Practices
Pedestrian Safety Improvement Program	City – Engineering					х						
Intersection Improvements Program	City – Engineering	Х			Х	х		Х	Х			
Audible/ accessible pedestrian signal program	City – Traffic Operations					Х		Х	Х			
Pedestrian crossover program	City – Transportation Planning					Х		х		х		
Winter maintenance program	City – Operations				Х							
Pavement marking maintenance program	City – Traffic Operations				х	Х			х			
Sign maintenance program	City – Traffic Operations	Х			Х	Х						
Sight line clearing at intersections	City – Traffic Operations City –				Х	Х						
Before-after analysis of road safety countermeasures	Transportation Planning										Х	х
Red light cameras	City – Traffic Operations				Х			Х	Х			



Existing Initiative	Lead Agency or City Dept.				Theme Road U Types			e 3: Loca		Theme 4: Process Improvements		
		1A: Vehicle Speeds	1B: Drug and Alcohol Impairment	1C: Inattentive Driving	1D: Failing to Yield at Intersections	2A: Vulnerable Road Users	2B: Data Gaps – People	3A: High Injury Corridors	3B: Signalized Intersections	3C: Pedestrians Crossing Mid- block	4A: Improved Data Sources and Information Sharing	4B: Design Standards and Best Practices
Vehicle operator training	City – HR Transit Windsor	Х		Х	х	Х						
Periodic driver's abstract review	City – HR Transit Windsor	Х	Х	Х	х	Х						
Collision Review Group (for collisions involving City vehicles)	City – Fleet Review Committee	Х		Х	х	х						
Fleet vehicle standard development	City – Fleet Review Committee											Х
Educational Progra	ims											
Children's Road Safety Programs	Safety Village Bike Windsor Essex					х						
PARTY (Prevent Alcohol and Risk- related Trauma in Youth) Program	WRH		Х									



TO: Environment, Transportation & Public Safety Standing Committee

FROM: Jeff Hagan, Transportation Planning Senior Engineer

DATE: July 7, 2022

SUBJECT: Vision Zero Action Plan - Recommended New Initiatives

Introduction

This memo provides a range of initiatives that could be included in the Vision Zero Action Plan. They are grouped into three categories:

- Already Planned: these initiatives support Vision Zero goals and are already in process. Some are
 already approved but not yet implemented; some are in the initial planning stages. Generally, these
 initiatives could be (or have already been) approved outside of the Vision Zero framework, but should
 be included in the Vision Zero Action Plan for completeness. In some cases, the initiative could be
 expanded, enhanced, or accelerated to support Vision Zero goals.
- New Recommended Initiatives: these initiatives have not yet been approved, but would comprise
 fundamental core elements of an action plan that supports Vision Zero goals and the strategic priorities
 already identified.
- Initiatives Considered but Not Recommended: these initiatives were included in submissions to the Vision Zero Task Force and Vision Zero Action Plan, but were not included in the list of recommended initiatives based on feedback received.

The new initiatives are summarized in Table 1.



Table 1: Summary of Initiatives

Category	Initiatives
Already Planned	Develop and Implement a Complete Streets Policy
	Construct Roadway Capital Projects (for certain corridors)
	Obtain Collision Data through Provincial ARIS System
	Continue to Implement the Transit Master Plan
	Review Yellow and All-Red Intervals for Traffic Signals
	Install Retroreflective Backboards for Traffic Signals
	Increase Winter Roadway Maintenance
	Driver Simulation Training for Commercial Motor Vehicle Operators
	Commercial Motor Vehicle Driver Evaluation by Independent Party
Recommended	Conduct Road Safety Audits of Identified High Injury Corridors
New Initiatives	Carry out a Value Engineering & Road Safety Review of Existing Approved
	Preliminary Designs for Roadway Projects
	Establish a Fatal Collision Response Team
	Explore Data-Sharing Arrangements Between Agencies
	Carry out a Resident Survey
	 Implement Target Speed Requirements for New Construction and Major Roadway Projects
	Implement Speed Limit Reductions – Neighbourhoods
	Implement Speed Limit Reductions – Major Streets
	Implement Speed Limit Reductions and Increased Fines – Construction Zones
	Reduce Progression Speed for Traffic Signal Coordination
	Carry out Education Campaigns
	Adjust Project Prioritization Criteria in the Active Transportation Master Plan to
	Place a Greater Emphasis on Safety and Collisions
	Include Collision History as a Factor in Prioritizing Capital Projects
	Review Official Plan and Zoning By-laws for Vision Zero Opportunities
	 Review Design Standards and Development Manual for Vision Zero Opportunities
	Require Transportation Impact Studies for New Developments to Include a Full Multimodal Review
	Develop Safety Performance Functions



Category	Initiatives
For Discussion	 Implement Automated Speed Enforcement Install Transverse Rumble Strips at Select Locations Implement a Parking Ticket Forgiveness Program to Target Impaired Driving Provide Free (or Cost-Included) Transit Service for Alcohol-Oriented Special Events Support the Development of a "Safe Ride Home" Service Provide Stop Bars and Crosswalk Markings at Unsignalized Intersections Provide Ladder Crosswalk Markings at Signalized Intersections Implement Fully Protected Intersections Implement Leading Pedestrian Intervals Install Pedestrian Countdown Signals Implement Hardened Centrelines at Intersections with High Speed Left Turns Adopt a "Roundabouts First" Policy or Best Practice for New Intersections and Major Roadway Projects Adopt a "No Right Turn Channels" Policy or Best Practice for New Intersections and Major Roadway Projects Implement a Road Diet Program Carry Out Additional Driver Training for City Employees Based on Highway Traffic Act Offenses Develop a Comprehensive GIS-based Collision Information System Develop Safety-Related Vehicle Design Criteria for Future City Vehicle Fleet Purchases & Leases
Considered but Not Recommended	 Install Pavement Edge Rumble Strips at Select Locations Develop a Cell Phone App to Address Inattentive Driving Require Helmets for all E-Scooter Riders

WINDSOR ONTARIO CAMADA

INTER-OFFICE MEMO

New City Initiatives – Already Planned

Develop and Implement a Complete Streets Policy

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections
	3C: Pedestrians Crossing Mid-block
	4B: Design Standards and Best Practices

"Complete Streets are streets that are safe for all users, regardless of age, ability, income, race, ethnicity, or mode of travel. By using a Complete Streets approach to designing road networks, we can create spaces that allow all users to thrive — not only motorists."

- Complete Streets for Canada

The following strategy and actions from the Active Transportation Master Plan, *Walk Wheel Windsor*, relate to Complete Streets:

- Strategy 2A: Develop Complete Streets
 - Action 2A.1: Develop And Adopt A Complete Streets Policy And Design Guidelines
 - Action 2A.2: Follow Complete Street Design Principles In All New Development And Road Projects

A Windsor Complete Streets Policy is currently under development.

Developing and implementing a Complete Streets Policy will support Vision Zero goals by:

- Identifying target speeds for all street types and implementing features that discourage drivers from travelling faster than the target speed.
- Ensuring that all users are accommodated in the right-of-way appropriately, comfortably and safely.

The Complete Streets Policy is intended as a City-wide policy, but high injury corridors could be prioritized for implementation.



Construct Roadway Capital Projects (for certain corridors)

Lead Agency/Department	Transportation Planning				
Strategic Priorities	1A: Vehicle Speeds				
Addressed	1D: Failing to Yield at Intersections				
	A: Vulnerable Road Users				
	3A: High Injury Corridors				
	3B: Signalized Intersections				
	3C: Pedestrians Crossing Mid-block				

For some high injury corridors, there are capital projects in the current capital budget that will address the current collision patterns:

Table 2: Current Capital Projects for High Injury Corridors

High Injury Corridor	Capital Project
Tecumseh Road East	Tecumseh Road East Infrastructure Improvements (ECP-005-07)
(Jefferson to Forest Glade)	
EC Row Expressway	EC Row Expressway Environmental Assessment
(Howard to Banwell)	(Transportation Planning Environmental Study Reports – OPS-009-07)

Obtain Collision Data through Provincial ARIS System

Lead Agency/Department	Transportation Planning
Strategic Priorities	4A: Improved Data Sources and Information Sharing
Addressed	

Currently, City staff obtain collision data from the Windsor Police Service's Collision Reporting Centre contractor. There are issues with this current approach:

- Police resources involved in manually redacting collision reports to remove personally identifying
 information are considerable. Because of this, the lag between when the collision occurs and when the
 collision data is provided to City staff is significant: the process typically takes at least several months
 and often takes more than a year.
- Collision reports prepared by other police agencies are not reflect in the collision data received by City staff. Collisions where another police force responds, even if they occur on Windsor streets, are not reflected in the collision data currently received. This has led to concerns that the collision database may not provide a full picture of the collisions occurring on City streets, particularly at intersections along the City boundary, where OPP or LaSalle Police may be the first police force to respond to some collisions.



All police forces in Ontario are required to transmit all collision reports to the Province. The Ontario Ministry of Transportation has recently made collision data available to municipalities through its ARIS (Authorized Requestor Information Service) system. City staff are actively pursuing access to collision data through the ARIS system. Anticipated benefits of this new approach:

- Much quicker access to collision data after a collision: the ARIS service standard is to make the collision report available within four weeks of the collision.
- Collision data from all police forces will be available, ensuring that City staff have a full picture of the collisions occurring on City streets.

Continue to Implement the Transit Master Plan

Lead Agency/Department	Transit Windsor
Strategic Priorities	1B: Drug and Alcohol Impairment
Addressed	1C: Inattentive Driving

The 2019 Transit Master Plan, *More than Transit*, provides a long-term vision to grow and improve transit service in Windsor. Increasing the convenience and appeal of transit as a travel mode is complementary to Vision Zero goals in many ways; in particular, providing an alternative to driving a motor vehicle will help to directly address the safety issues caused by driver impairment and inattentive driving by providing these road users with another travel mode besides driving.

Review Yellow and All-Red Intervals for Traffic Signals

Lead Agency/Department	Traffic Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	3A: High Injury Corridors
	3B: Signalized Intersections

Increasing the length of yellow and all-red intervals at signals can be an effective collision countermeasure, particularly for right angle collisions. In the short term, Traffic Operations will be carrying out a review of their yellow and all-red interval lengths against Ontario Traffic Manual guidelines to determine if adjustments are needed.

Install Retroreflective Backboards for Traffic Signals

Lead Agency/Department	Traffic Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	3B: Signalized Intersections

Retroreflective backboards are included in the US Federal Highway Administration's (FHWA) list of "Proven Safety Countermeasures;" the FHWA notes that they can reduce total collisions at a signalized intersection by



up to 15%. Retroreflective backboards help to improve driver compliance with traffic signals by making them more conspicuous in both daytime and nighttime conditions, as can be seen in Figure 1.





Figure 1: Retroreflective Backboards (source: Virginia DOT / FHWA)

Traffic Operations has installed retroreflective backboards at some intersections as a pilot measure, and will be implementing them City-wide at all traffic signals over time. Currently, the plan is to install retroreflective backboards at new and reconstructed signals.

Increase Winter Roadway Maintenance

Lead Agency/Department	Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users

Operations is currently planning to bring forward a budget issue to the 2023 budget recommending increased levels of winter roadway maintenance (e.g. salting and plowing).

This measure will help to address collisions involving failing to yield at intersections by improving pavement friction under existing conditions, and vulnerable road user collisions by ensuring that painted and buffered bicycle lanes are kept clear during winter conditions.



Driver Simulation Training for Commercial Motor Vehicle Operators

Lead Agency/Department	Human Resources
Strategic Priorities	1A: Vehicle Speeds
Addressed	1C: Inattentive Driving
	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users

This measure, aimed at improving the City's Commercial Vehicle Operator Registration rating, will involve training the City's commercial motor vehicle drivers in a simulator. The training will focus on spatial awareness, with the goal of reduced collision rates for City vehicles.

Commercial Motor Vehicle Driver Evaluation by Independent Party

Lead Agency/Department	Human Resources
Strategic Priorities	1A: Vehicle Speeds
Addressed	1C: Inattentive Driving
	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users

This measure, aimed at improving the City's Commercial Vehicle Operator Registration rating, will involve contracting with an outside, independent service provider to carry out driver evaluation of the City's commercial motor vehicle drivers.

New Recommended Initiatives

Conduct Road Safety Audits of Identified High Injury Corridors

Lead Agency/Department	Transportation Planning
Strategic Priorities	2A: Vulnerable Road Users
Addressed	3A: High Injury Corridors
	3B: Signalized Intersections

Road safety audits for each of the identified high injury corridors will identify road safety issues that are specific to these areas. The key deliverable for each road safety audit will be a report including recommended countermeasures.

The identified high injury corridors are as follows:

- Motor vehicle collisions:
 - E.C. Row Expressway (Howard to Banwell)
 - Wyandotte Street (Pelissier to Gladstone)

WINDSOR ONTARIO CANADA

INTER-OFFICE MEMO

- Pedestrian collisions:
 - Tecumseh Road East (Jefferson to Forest Glade Drive)
 - Wyandotte Street (Ouellette to Chilver)
- Cyclist collisions:
 - Wyandotte Street (Pelissier to Parent)

Carry out a Value Engineering & Road Safety Review of Existing Approved Preliminary Designs for Roadway Projects

Lead Agency/Department	Transportation Planning
	Engineering
Strategic Priorities	1A: Vehicle Speeds
Addressed	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections
	3C: Pedestrians Crossing Mid-block

For major roadway projects, such as widenings and new streets, a preliminary design is selected and developed through the environmental assessment process. These preliminary designs are used as the basis for detailed design and construction.

These preliminary designs are often prepared well in advance of construction, and detailed design and construction of the preliminary design from a single environmental assessment can take multiple phases over several years. Windsor has a number of preliminary designs that have not yet proceeded to detailed design, or with phases that have not proceeded to detailed design.

Aspects of the designs that are expected to be of particular importance to this review:

- Lane widths
- Horizontal and vertical alignment
- Curb radii
- Cycling facilities
- Pedestrian crossings
- Intersection control



Establish a Fatal Collision Response Team

Lead Agency/Department	To Be Determined
Strategic Priorities	4A: Improved Data Sources and Information Sharing
Addressed	

Certain other municipalities have successfully implemented fatal collision response teams to allow for rapid response to fatal collisions. These teams are typically made up of members from:

- Emergency response agencies (e.g. Police, Fire, EMS)
- Medical trauma care providers (e.g. hospitals)
- Agencies responsible for investigating collisions (typically Police)
- Agencies and departments responsible for carrying out road safety audits (typically the municipal Transportation Planning Department)
- Agencies and departments responsible for designing and maintaining transportation infrastructure and implementing transportation policy (e.g. Operations, Engineering, Traffic Operations, Transportation Planning)

In the Council resolution adopting the Vision Zero Policy (CR82/2020), Council requested that Administration provide information related to developing a fatal collision response team.

This initiative would entail setting up a multi-disciplinary, multi-agency fatal collision response team that would be activated as soon as possible after a fatal collision. The purpose of the committee would be to allow (within the limits of applicable legislation) a quick and free exchange of information in order to rapidly identify and address factors that could help to prevent or reduce the severity of future severe collisions.

Explore Data-Sharing Arrangements Between Agencies

Lead Agency/Department	To be determined
Strategic Priorities	2B: Data Gaps – People
Addressed	4A: Improved Data Sources and Information Sharing

Currently, information related to collisions and road safety is compartmentalized across several agencies:

- Emergency services agencies (Police, Fire, EMS) prepare their own records related to their response to collisions;
- EMS and hospital staff have records on injuries sustained by victims and the treatment they receive;



- Police have primary responsibility for investigating collisions, and carry out detailed investigations and collision reconstructions following severe collisions;
- Police, social services agencies, and medical providers may have records related to prior points of contact and interventions involving the people who were later in fatal and major injury collisions; and
- City departments have traffic data and information about road infrastructure design, as well as information on detailed road safety audits (when carried out).

In most cases, this information is not shared beyond the originating agency; notable exceptions include:

- Windsor Police Services provides the City of Windsor with redacted MVA reports to use as the data source for the City's collision database, and
- City staff provide speed data to Windsor Police Services as it is collected, and consult with Windsor Police Services when road safety audits identify issues that can be addressed by enforcement.

While some of this lack of sharing of information is due to legal requirements for privacy and confidentiality, there may be some opportunities to share information – particularly anonymized or aggregated data – to inform road safety-related decisions of these agencies while still complying with relevant laws.

This initiative would entail reaching out to the departments and agencies that collect data related to road safety issues and determining information sharing arrangements that would be:

- Compliant with relevant law,
- Useful for informing road safety decisions, and
- Are within the scope of what the agency who is the custodian of the data is willing and able to provide.

Carry out a Resident Survey

Lead Agency/Department	Transportation Planning
Strategic Priorities	2B: Data Gaps – People
Addressed	

While collision data provides a wealth of information that can be used to inform road safety decisions, certain key details are not reflected in collision data, including:

- Locations that road users particularly vulnerable road users avoid because of perceived safety issues;
- The reasons behind behaviours that lead to increased likelihood or increased severity of collisions, including:
 - Speeding;

WINDSOR ONTARIO CANADA

INTER-OFFICE MEMO

- Inattentive driving;
- o Impaired driving; and
- Failure to use safety equipment (or failure to use it properly) such as helmets, seat belts, and infant car seats.
- Details that are relevant for policy responses to road safety issues, but either are not collected in MVA reports or, due to privacy laws, cannot be obtained without the consent of the involved parties.
 Including:
 - How do social determinants of health correlate with road safety outcomes in Windsor?
 - What opportunities exist *before* the collision (e.g. previous interactions with law enforcement or social services) to intervene to address risk-taking behaviours that can result in fatal or major injury collisions?

This initiative would entail developing one or more surveys for residents and – to the extent that these individuals can be identified – persons involved in fatal and major injury collisions.

Implement Target Speed Requirements for New Construction and Major Roadway Projects

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections
	3C: Pedestrians Crossing Mid-block
	4B: Design Standards and Best Practices

Traditionally, streets and highway designs have been based on the concept of **design speed**: all aspects of the design – e.g. sight lines, curve radii, or roadside clear zones – accommodate a vehicle travelling at a speed equal to or greater than then design speed.

Recently, the concept of target speed is coming into broader use as well, though it is not yet incorporated formally into any City of Windsor design standards or best practices. A roadway's **target speed** is the intended speed for traffic; features of the street – lane widths, "optical width," curve radii, etc. – are chosen to encourage vehicles to travel no faster than the target speed.

Implementing this recommendation will involve identifying target speeds for each roadway type. This work is planned to be carried out as part of the development of the Complete Streets Policy, but could be accelerated to produce standalone target speed recommendations, which would then be incorporated into the Complete Streets Policy once the policy is completed.



Implement Speed Limit Reductions - Neighbourhoods

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	2A: Vulnerable Road Users

Vehicle speed is a key factor in the severity of a collision. At the same time, the effect of speed limit reductions alone on vehicle speeds is usually minor without physical measures (e.g. traffic calming).

This initiative would entail reducing speed limits in neighbourhoods as follows:

Table 3: Interim and Ultimate Speed Limits - Neighbourhoods

Street Type	Interim Speed Limit (Without Physical Changes to Roadway)	Ultimate Speed Limit (After Physical Changes to Roadway to Reduce Vehicle Speeds)
Local Residential	40 km/h	Target speed [Note 1]
Class 2 Collector in residential areas	40 km/h	Target speed [Note 1]
Class 1 Collector in residential areas	Review case by case	Target speed [Note 1]

Notes:

1. Under the initiative "Implement Target Speed Requirements for New Construction and Major Roadway Projects," above, target speeds by road type would be determined. Once physical measures are installed on a street to encourage the target speed, the speed limit would be reduced to the target speed for the particular street.

There may be certain cases (e.g. school zones or local street bikeways) where a lower interim speed limit may be appropriate; this recommendation is not intended to prohibit enacting lower speed limits than those given in Table 3 where warranted. Streets with existing speed limits lower than the proposed interim speed limit would not have their speed limit increased.

Implement Speed Limit Reductions - Major Streets

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections
	3C: Pedestrians Crossing Mid-block

Most fatal and major injury collisions involving vehicle speed occur on higher-order streets and highways, such as arterials and expressways.



This initiative would entail reducing speed limits on major streets as follows:

Table 4: Interim and Ultimate Speed Limits - Major Streets

Street Type	Interim Speed Limit (Without Physical Changes to Roadway)	Ultimate Speed Limit (After Physical Changes to Roadway to Reduce Vehicle Speeds)
Scenic Parkway	40 km/h	Target speed [Note 1]
Local Commercial Industrial	Review case by case	Target speed [Note 1]
Class 1 Collector in non-residential	Review case by case	Target speed [Note 1]
areas		
Urban Class 2 Arterial	50 km/h	Target speed [Note 1]
Rural Class 2 Arterial	Review case by case	Target speed [Note 1]
Class 1 Arterial	60 km/h	Target speed [Note 1]
Expressway	No change	Target speed [Note 1]

Notes:

1. Under the initiative "Implement Target Speed Requirements for New Construction and Major Roadway Projects," above, target speeds by road type would be determined. Once physical measures are installed on a street to encourage the target speed, the speed limit would be reduced to the target speed for the particular street.

There may be certain cases (e.g. school zones or local street bikeways) where a lower interim speed limit may be appropriate; this recommendation is not intended to prohibit enacting lower speed limits than those give in Table 4 where warranted. Streets with existing speed limits lower than the proposed interim speed limit would not have their speed limit increased.

Implement Speed Limit Reductions and Increased Fines – Construction Zones

Lead Agency/Department	Traffic Operations
Strategic Priorities	1A: Vehicle Speeds
Addressed	2A: Vulnerable Road Users

The Highway Traffic Act and Traffic By-law 9148 allow for temporary reduced speed limits in construction zones, as well as doubling of speeding fines in construction zones. To date, the City of Windsor has only rarely implemented doubled speeding fines or reduced speed limits in construction zones.

This initiative would consist of:

- Installing "fines doubled when workers present" signage for all construction zones as standard practice;
 and
- Implementing temporary speed limit reductions in construction zones in cases where:
 - The normal design speed of the roadway cannot be maintained during construction,



- o There is the potential for conflicts between traffic and construction vehicles, or
- o A speed limit reduction would provide benefit for worker safety.

Reduce Progression Speed for Traffic Signal Coordination

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	3B: Signalized Intersections

Traffic signals are coordinated along signalized corridors to provide a "green band" to allow vehicles to proceed along a corridor with a minimal amount of stopping.

Currently, the coordination is done to minimize delay based on current traffic behaviour. In the case of some corridors with high operating speeds, this practice can mean that the progression speed for the green band is higher than the speed limit.

This initiative would involve setting the progression speed used for signal coordination at the speed limit or lower. The effect of this change would be that drivers travelling significantly faster than the speed limit would tend to encounter more red lights, and drivers travelling at the speed limit would stay in the green band and encounter fewer red lights.

Carry out Education Campaigns

Lead Agency/Department	To be determined
Strategic Priorities	1A: Vehicle Speeds
Addressed	1B: Drug and Alcohol Impairment
	1C: Inattentive Driving
	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users

This initiative would entail education and outreach activities as follows:

Target Group	Campaign Content
Drivers	Messaging aimed at risky driver behaviours, including:
	Speeding
	Drug and alcohol impairment
	Inattentive driving and cell phone use
	 Respecting and watching for vulnerable road users
	 Establishing positive driver behaviours and attitudes among new drivers (e.g. National Teen Safe Driver Week events).



Target Group	Campaign Content
Vulnerable road users	 Encouragement of helmet use for cyclists, motorcyclists, and scooter riders. Cycling skills training. Informing cyclists as new all ages and abilities routes are built out. Commemoration of vulnerable road user crash fatalities, such as the Ride of Silence (third Wednesday in May each year).
Bar and restaurant owners and servers	 Messaging aimed at reducing impaired driving. Information on initiatives aimed at reducing impaired driving (e.g. a safe ride home program, if provided).
General	 Commemoration of road crash fatalities generally, such as an event for the National Day of Remembrance for Road Crash Victims (third Sunday in November each year). Information to the public to build awareness of the Vision Zero Action Plan, its contents, and the reasons behind Vision Zero initiatives.

Adjust Project Prioritization Criteria in the Active Transportation Master Plan to Place a Greater Emphasis on Safety and Collisions

Lead Agency/Department	Transportation Planning
Strategic Priorities	2A: Vulnerable Road Users
Addressed	3A: High Injury Corridors

The prioritization criteria used in *Walk Wheel Windsor*, the Active Transportation Master Plan, are as follows. All criteria are weighted equally:

Table 5: Pedestrian and Cycling Network Prioritization Criteria – Active Transportation Master Plan

	Pedestrian Network	Cycling Network
1	Destination Density	Destination Density
2	Pedestrian Mode Share	Cycling Mode Share
3	Pedestrian Potential	Cycling Potential
4	Equity	Equity
5	Pedestrian Generators – Commercial	Cycling Generators – Commercial
	Areas	Areas
6	Pedestrian Generators – Community	Cycling Generators – Community
	Facilities	Facilities
7	Transit	Transit
8	Road Classification	Bicycle Network Classification
9	Network Contribution	Level of Protection



	Pedestrian Network	Cycling Network
10	Network Need	Network Need
11	Pedestrian Collisions	Cyclist Collisions
12	Traffic Volumes	Traffic Volumes
13	Road Rehabilitation	Road Rehabilitation

Currently, the collision criteria are based on total pedestrian or cyclist collisions only. Collisions are not weighted based on severity.

This initiative would entail:

- Increasing the weighting of pedestrian and cyclist collisions relative to other criteria, and
- Increasing the weighting of fatal and major injury collisions within the collision criteria.

Include Collision History as a Factor in Prioritizing Capital Projects

Lead Agency/Department	Engineering
	Operations
Strategic Priorities	2A: Vulnerable Road Users
Addressed	3A: High Injury Corridors
	3B: Signalized Intersections

While road safety concerns are considered implicitly to some degree in the prioritization process for capital projects, the City of Windsor has no formal process to give collision history a specific weighting when prioritizing capital projects.

This initiative would entail:

- Determining weightings for safety improvement versus other prioritization factors;
- Determining the history of fatal and major injury collisions in the area of each roadway capital project;
- Identifying the likely safety improvement or collision reduction associated with the capital project.
- Applying this safety improvement along with other factors to prioritize capital projects for roadway works.



Review Official Plan and Zoning By-laws for Vision Zero Opportunities

Lead Agency/Department	Transportation Planning
	Planning
Strategic Priorities	4B: Design Standards and Best Practices
Addressed	

A key element of achieving the Vision Zero goal of zero fatal and major injury collisions is speed reduction. Many elements that are addressed by the Official Plan and Zoning By-laws have an impact on vehicle speeds, including:

- "Optical width" of the street between fixed features (e.g. building face, substantial landscaping, fencing) on either side of the street influences the speed at which drivers feel comfortable driving.
- On-street parking: where on-street parking is allowed and actually used, it creates visual "side friction" that helps to encourage drivers to slow down.
- The number of institutional or commercial buildings/driveways along a street segment can suggest to drivers that they are in a pedestrian-oriented zone and cause them to lower their speed.

This initiative would entail developing a set of recommended amendments to the Official Plan and Zoning Bylaws intended to encourage lower vehicle speeds. These recommended amendments would be brought forward to Council for approval.

Review Design Standards and Development Manual for Vision Zero Opportunities

Lead Agency/Department	Transportation Planning
	Engineering
Strategic Priorities	4B: Design Standards and Best Practices
Addressed	

New streets and modifications to existing streets are governed by City design standards, Standard Engineering Drawings, Best Practices, and the Development Manual. This initiative would entail reviewing these existing governing documents to ensure that:

- The required characteristics for each road classification (e.g. curve radii and pavement widths) are in accordance with the street's target speed.
 - Note: developing target speeds by road classification is recommended as a separate initiative.
- The Complete Streets Policy is reflected in City standards and guidelines affecting City streets, and
- Street design aspects that impact the potential for fatal and major injury collisions (e.g. curb radii at intersections) are in compliance with Vision Zero principles.



This review would also consider whether additional standard drawings, best practices, etc., are required for other Vision Zero Action Plan initiatives.

Portions of this initiative would need to follow other work – for instance, a review for compliance with the Complete Streets Policy could not happen until the Complete Streets Policy is prepared and approved – but some aspects of the initiative may be able to proceed immediately.

Require Transportation Impact Studies for New Developments to Include a Full Multimodal Review

Lead Agency/Department	Transportation Planning
	Engineering
Strategic Priorities	2A: Vulnerable Road Users
Addressed	

Currently, transportation impact studies (TISes) are required for development applications (e.g. site plans, rezonings, and Official Plan amendments) if they:

- Are large enough to generate 100 peak hour site trips,
- Include a new connection to an arterial road,
- Have the potential to increase collisions at an existing collision "hot spot," or
- Have the potential to adversely impact an intersection already experiencing capacity issues.

The standard scope for a TIS includes a discussion of impacts and issues for non-auto modes, but does not require a quantitative review for non-auto modes.

When a TIS is required for a development application, this recommendation would entail requiring the applicant's consultant to carry out a full multimodal transportation review to ensure that:

- · The development will not adversely impact non-auto modes, such as walking, biking, and transit; and
- Appropriate infrastructure to support walking, biking and transit needed to support the development is provided as off-site improvements.

Procedures and criteria for this multimodal review would be identified as part of the Complete Streets Policy.



Develop Safety Performance Functions

Lead Agency/Department	Transportation Planning
Strategic Priorities	4A: Improved Data Sources and Information Sharing
Addressed	4B: Design Standards and Best Practices

A safety performance function is a regression model used to predict the collision frequency for a particular facility type (e.g. signalized intersections) based on a set of variables. They can be developed for total collisions or particular collision categories (e.g. cyclist collisions). Safety performance functions can be used in network screening to identify locations that experience a higher-than-expected number of collisions based on their characteristics. They can also be used to predict the safety impact of future changes (e.g. changes in road network due to infrastructure capital projects, or changes in traffic volumes due to land development) in order to identify and prevent potential safety concerns before construction.

Currently, the City of Windsor does not use safety performance functions; all network screening is carried out based on collision rate.

This initiative would entail:

- Identifying a range of safety performance functions to develop;
- Carry out the statistical analysis needed to generate and calibrate the safety performance functions;
- On an ongoing basis, use these safety performance functions for safety reviews and network screening.

Implement Automated Speed Enforcement

Lead Agency/Department	Traffic Operations
Strategic Priorities	1A: Vehicle Speeds
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3C: Pedestrians Crossing Mid-block

The Ontario government recently introduced legislative changes to allow municipalities to implement automated speed enforcement ("photo radar") in community safety zones and school zones. Council has directed City staff to investigate the feasibility of an automated speed enforcement (ASE) program for Windsor (CR258/2020).

This program would directly address vehicle speeds, which would indirectly address a number of other strategic priorities, particularly vulnerable road users, including pedestrians crossing mid-block.



Most of the high injury corridors meet the criteria in the City's Community Safety Zone Policy for community safety zones and could be considered for automated speed enforcement. However, technical considerations might make installing speed cameras in some of these areas difficult (e.g. a lack of roadside space to install a pole and camera, or streetscaping obstructing the camera's field of view).

Key issues to be considered when deciding whether to include this initiative in the Vision Zero Action Plan:

- The experience of other jurisdictions that have implemented automated speed enforcement
- Whether the provincially-mandated processing centre would have capacity to take on a Windsor ASE program, or, alternately, whether it would be feasible for Windsor to set up its own processing centre.

Install Transverse Rumble Strips at Select Locations

Lead Agency/Department	Transportation Planning
Strategic Priorities	1A: Vehicle Speeds
Addressed	1D: Failing to Yield at Intersections

Transverse rumble strips are grooves cut across the road surface that encourage speed reduction by generating an uncomfortable noise and vibration when vehicles drive over them at high speed. They are typically used in rural contexts for alerting drivers to the need to reduce their speed, typically for a stop-controlled intersection or sharp curve ahead. An example installation is shown in Figure 2.



Figure 2: Transverse Rumble Strip Example (Source: Neal Hawkins/lowa DOT)

Transverse rumble strips are effective at reducing vehicle speeds, but they can create a number of issues:

- Associated noise can create a disturbance for nearby residents.
- They can be difficult for cyclists to traverse.
- Water and ice can pond in the grooves.



Cutting rumble strips into the road surface can reduce pavement life.

This initiative would entail identifying locations to install transverse rumble strips as a pilot program. The top candidates for this program would be the approaches to rural intersections that have a history of stop sign non-compliance or a collision pattern that suggests that stop sign non-compliance may be occurring.

Implement a Parking Ticket Forgiveness Program to Target Impaired Driving

Lead Agency/Department	Transportation Planning
Strategic Priorities	1B: Drug and Alcohol Impairment
Addressed	

This initiative would entail creating a framework that would allow for a parking ticket to be forgiven if an intoxicated person chose not to drive because they were impaired and instead used another way to get home.

Details of the program that would need to be resolved before implementation:

- How would it be determined that the person was intoxicated and got a safe way home?
- Where and when would the program be offered? What would the limits on the program be?

Provide Free (or Cost-Included) Transit Service for Alcohol-Oriented Special Events

Lead Agency/Department	Transit Windsor
	Special Event Resource Team
Strategic Priorities	1B: Drug and Alcohol Impairment
Addressed	

Under this initiative, attendees of special events oriented around drinking alcohol would be provided with a ticket or voucher (e.g. their event ticket) which they could use for a transit ride to and from the event at no additional charge to the attendee.

Options for funding this initiative:

- Fees collected from event organizers as a condition of their special event permit, or
- City funding (in whole or in part) as a budget item.

In the case of events that take place in areas not served by Transit Windsor or taking place outside Transit Windsor service hours, the event organizer would be required to make alternate arrangements to ensure that event attendees have travel options other than personal cars, such as:

Taxi fares included in the event admission charge, or



• Chartered buses or vans to provide shuttle service to and from a transit terminal.

Support the Development of a "Safe Ride Home" Service

Lead Agency/Department	To be determined
Strategic Priorities	1B: Drug and Alcohol Impairment
Addressed	

In certain other municipalities, "safe ride home" services such as Operation Red Nose/Opération Nez rouge help to deter impaired driving by providing a way for people to get themselves and their vehicles home.

Key questions that would need to be addressed before such a program could be offered in Windsor:

- Who would be responsible for operating the program?
 - In most other jurisdictions, these programs are run by not-for-profit organizations and not by municipal governments directly.
- How would the program be funded?
 - In the case of Operation Red Nose/Opération Nez rouge, the program is funded by a combination of corporate sponsorships, government grants, community donations and user donations. No user fee is charged, but service users have the option of making a voluntary donation.
- When and where should the program operate?
 - Operation Red Nose/Opération Nez rouge operates only in the month of December.

This initiative could entail:

- Canvassing existing not-for-profit organizations to determine interest in operating a safe ride home service
- Encouraging new or existing not-for-profit organizations to launch a safe ride home service by establishing a City grant program for this purpose.

Provide Stop Bars and Crosswalk Markings at Unsignalized Intersections

Lead Agency/Department	Traffic Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors



Currently, the City of Windsor does not typically paint stop bars or crosswalks at unsignalized intersections. For the 2022 budget, Council was presented with a budget issue (Issue #2022-0044) that provided options to paint stop bars and crosswalks. In that budget issue, four options were presented:

Option	Annual Cost
	Increase
1 – All Stop Bars and Crosswalks	\$2,250,000
2 – Collectors and Arterials	\$955,000
3 – Arterials, Scenic Parkway and Multi-Use Trail Crossings Only	\$300,000
4 – Top 30 High Collision Unsignalized Intersections (from 2019 Road Safety Report)	\$25,000

The budget issue was not approved by Council; none of the four options were selected for implementation.

If this initiative is carried forward, it could entail some sort of stop bar and crosswalk pavement marking program; either one of the four options previously identified or an alternate option to implement the pavement markings at a limited number of intersections.

Provide Ladder Crosswalk Markings at Signalized Intersections

Lead Agency/Department	Traffic Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections

High-visibility crosswalk treatments such as ladder crosswalks can help emphasize the potential to drivers of pedestrians at an intersection; this tends to increase driver compliance when yielding to pedestrians.

The Ontario Traffic Manual identifies ladder crosswalks as an optional feature at signalized intersections.

This initiative would entail installing ladder crosswalk markings at a set of signalized intersections to be determined. Pedestrian high injury corridors could be prioritized for ladder crosswalks.

WINDSOR ON THE CITY OF

INTER-OFFICE MEMO



Figure 3: Ladder Crosswalks (Source: City of Hamilton)

Implement Fully Protected Intersections

Lead Agency/Department	Transportation Planning
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections

Protected intersections have been implemented across North America as cities have expanded their protected bikeway networks. Also known as setback or offset intersections, this design keeps bicycles physically separate from motor vehicles up until the intersection, providing a high degree of comfort and safety for people of all ages and abilities. This design can reduce the likelihood of high-speed vehicle turns, improve sightlines, and dramatically reduce the distance and time during which people on bikes are exposed to conflicts. For example, in San Francisco, a protected intersection design resulted in 98% of drivers yielding to people on bikes, and 100% yielding to people walking. A study in New York found that protected intersections had fewer vehicle-bike conflicts than even a dedicated turn lane with a dedicated bike signal phase.

(Source: NACTO)

An example of a protected intersection is provided in Figure 4.

This initiative would entail considering protected intersections in future environmental assessments for roadway projects as appropriate, with the aim of implementing protected intersections at a set of locations.

WINDSOR ONTARIO, CANADA

INTER-OFFICE MEMO

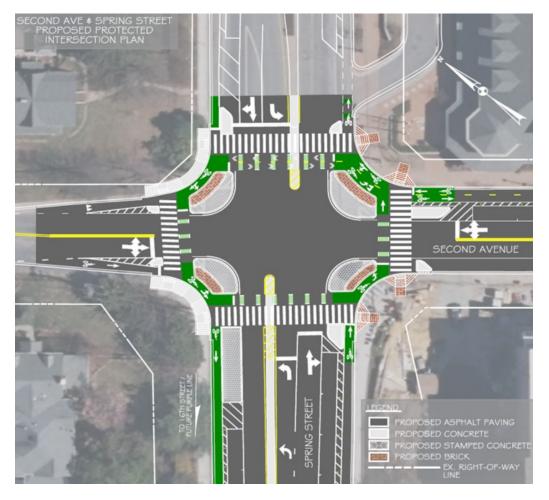


Figure 4: Protected Intersection (Source: Montgomery County Division of Transportation Engineering / Kittelson Associates)

Implement Leading Pedestrian Intervals

Lead Agency/Department	Traffic Operations
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections

With a leading pedestrian interval, the walk signal is activated while the intersection remains in "all red" for vehicles, typically for 3 to 7 seconds. This allows the pedestrians to have a head start on vehicles, putting the pedestrians in a more visible position in the crosswalk before vehicles are released.

In other jurisdictions, leading pedestrian intervals have been found to reduce pedestrian collisions at treated intersections by up to 60%. Nevertheless, there are potential issues related to leading pedestrian intervals:



- Driver unfamiliarity with leading pedestrian intervals particularly the long "all red" period for vehicles may lead to misunderstandings of the purpose for the change as well as problems with driver compliance.
- At some intersections, holding vehicles for an additional 3 to 7 seconds per phase would create significant capacity issues, which could result in safety issues in some circumstances (e.g. increased queue spillback leading to increased rear end collisions).

This initiative would entail:

- · Identifying candidate intersections,
- · Implementing leading pedestrian intervals, and
- An education and outreach program to ensure that drivers and pedestrians are aware of the reasons for the change.

Install Pedestrian Countdown Signals

Lead Agency/Department	Traffic Operations
Strategic Priorities	2A: Vulnerable Road Users
Addressed	3B: Signalized Intersections

Pedestrian countdown displays have been found to provide a safety benefit, particularly in reducing pedestrian collisions. Pedestrian countdown displays are recognized by the Ontario Traffic Manual as optional.

There are issues with their use in some situations, however: most pedestrian countdown displays currently on the market do not communicate with the traffic signal controller, and instead base the countdown time shown on the length of the green interval from the *previous* cycle. Because of this, pedestrian countdown displays work best in cases where phase lengths are steady from cycle to cycle. In cases when phase lengths change significantly from one cycle to the next, the countdown display can show an incorrect time remaining, potentially creating confusion and discomfort for pedestrians.

This initiative would entail identifying intersections where pedestrian countdown displays could be installed, either:

- Locations that already operate with steady phase lengths from cycle to cycle, or
- Locations where the traffic signal timings and phasings could be adapted to suit the limitations of pedestrian countdown displays currently on the market.



Implement Hardened Centrelines at Intersections with High Speed Left Turns

Lead Agency/Department	Transportation Planning
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users
	3A: High Injury Corridors
	3B: Signalized Intersections

Centreline hardening involves using features – typically rubber humps or bollards – at major intersections to discourage taking left turns at high speed. These measures improve pedestrian safety by:

- Reducing collision severity by forcing left turning vehicles to travel at lower speeds, and
- Improving pedestrian visibility to drivers by forcing vehicles to approach the crosswalk at a right angle.

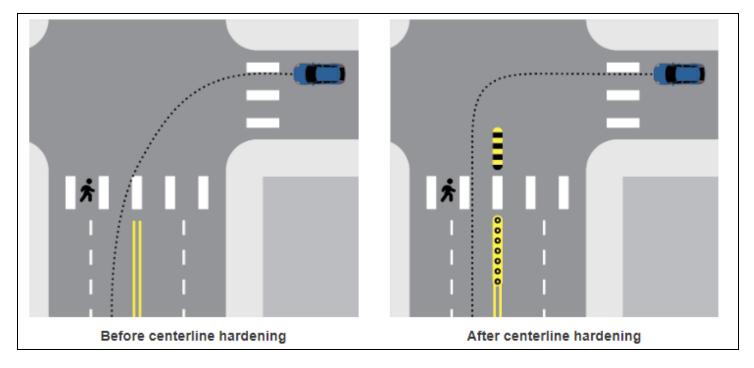


Figure 5: Centreline Hardening Example (source: Insurance Institute for Highway Safety)



Adopt a "Roundabouts First" Policy or Best Practice for New Intersections and Major Roadway Projects

Lead Agency/Department	Engineering
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	3A: High Injury Corridors
	3B: Signalized Intersections
	4B: Design Standards and Best Practices

Roundabouts are effective at reducing the severity of intersection collisions, since they virtually eliminate right angle ("T-bone") and turning collisions, two types of collisions with high injury potential.

Other jurisdictions, particularly the Region of Waterloo, have adopted policies that identify roundabouts as the preferred intersection control type. In that jurisdiction, before other intersection control types are considered, a screening is carried out to confirm that a roundabout is not appropriate.

This initiative would entail adopting a similar policy for Windsor.

Potential issues with this initiative:

- Navigating a roundabout, particularly a multi-lane roundabout, can be uncomfortable for pedestrians and cyclists.
- Visually impaired pedestrians can have more difficulty judging gaps in traffic at a roundabout than at a traffic signal.
- Roundabouts can have negative impacts on their surroundings:
 - Typically, roundabouts need more right-of-way space at the intersection than is needed for a similar signalized intersection.
 - Typically, access controls (e.g. restrictions on driveways) are needed for a longer distance from the intersection for a roundabout than for a signalized intersection.



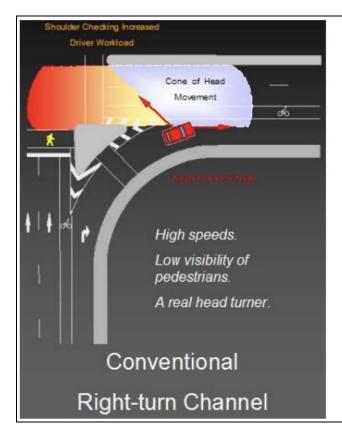
Adopt a "No Right Turn Channels" Policy or Best Practice for New Intersections and Major Roadway Projects

Lead Agency/Department	Engineering	
Strategic Priorities	1A: Vehicle Speeds	
Addressed	1D: Failing to Yield at Intersections	
	2A: Vulnerable Road Users	
	3B: Signalized Intersections	
	4B: Design Standards and Best Practices	

Conventional right turn channels can contribute to high vehicle turning speeds and poor visibility of pedestrians, creating the potential for severe collisions.

This initiative would entail adopting a policy or best practice against right turn channels for new construction. For road reconstructions and other major roadway projects, the preference would be to remove existing right turn channels where possible.

In situations where the right turn channel island is required (e.g. when there would be no suitable place for traffic signal poles without the island), a "smart" right turn channel would be acceptable, as shown in Figure 6.



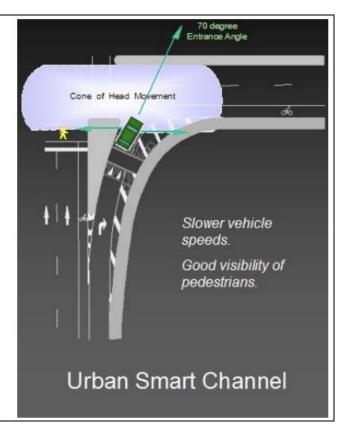


Figure 6: Conventional Right Turn Channel vs. "Smart" Right Turn Channel (source: City of Ottawa)



Implement a Road Diet Program

Lead Agency/Department	Engineering	
	Transportation Planning	
Strategic Priorities	1A: Vehicle Speeds	
Addressed	2A: Vulnerable Road Users	
	3A: High Injury Corridors	
	3B: Signalized Intersections	
	3C: Pedestrians Crossing Mid-block	

A road diet is the reallocation of roadway space to better serve road users, particularly for roads that have significant amounts of excess capacity.

A typical road diet is a "4 to 3" conversion, where a 4-lane undivided street (with 2 lanes in each direction and turns from shared lanes) is restriped so that there is a single lane in each direction and a two-way left turn lane. A recent example of a "4 to 3" conversion in Windsor is Eugenie Street; the layout before and after the road diet can be seen in Figure 7. Depending on turning volumes, a "4 to 3" road diet can often result in negligible decrease in capacity, since providing a two-way left turn lane allows through traffic to flow unimpeded by vehicles stopped waiting for a gap to turn.



Before Road Diet



After Road Diet

Figure 7: Road Diet Example: Eugenie Street

Road diets may also involve reducing the number of excess lanes on a street by physically reducing the pavement width. In these types of road diets, other benefits (e.g. a reduction in paved area resulting in lower flooding risk) can be achieved.

Road diets are effective at reducing speeding, which in turn tends to decrease collision severity, especially for vulnerable road users. The reallocation of roadway width can provide space for measures to improve conditions for vulnerable users, such as bikeway infrastructure or bump-outs or pedestrian refuges to reduce crossing widths. Some road diet types are effective at improving sight lines at signalized intersections.

This initiative would entail identifying candidate locations and then implementing road diets.

WINDSOR ONTARIO CANADA

INTER-OFFICE MEMO

Carry Out Additional Driver Training for City Employees Based on Highway Traffic Act Offenses

Lead Agency/Department	Human Resources
Strategic Priorities	1A: Vehicle Speeds
Addressed	1B: Drug and Alcohol Impairment
	1C: Inattentive Driving
	1D: Failing to Yield at Intersections
	2A: Vulnerable Road Users

Currently, the Human Resources Department is exploring the possibility of using the driver abstract review process to identify drivers who have Highway Traffic Act violations like speeding or careless driving and provide them with supplemental training.

Additional work is still required to determine the exact form that this program would take.

Develop a Comprehensive GIS-based Collision Information System

Lead Agency/Department	Geomatics
	Transportation Planning
Strategic Priorities	4A: Improved Data Sources and Information Sharing
Addressed	

A geographic information system (GIS) is a system that creates, manages, analyzes, and maps all types of data. GIS connects data to a map, integrating location data (where things are) with all types of descriptive information (what things are like there). This provides a foundation for mapping and analysis that is used in science and almost every industry. GIS helps users understand patterns, relationships, and geographic context. The benefits include improved communication and efficiency as well as better management and decision making.

(Source: ESRI.com)

The City of Windsor uses GIS extensively and has a significant amount of data in GIS form.

Currently, the Windsor Collision Database is a standalone database, not connected to other data sources. This initiative would entail translating data from the collision database into a GIS, which would allow more efficient analysis of collision data to identify collision "hot spots" and City-wide trends.

Having a GIS-based collision information system would also allow for comparisons with other mapped data, which would enable analyses that City staff have not been able to do to date, such as identifying correlations between road safety outcome and neighbourhood characteristics (e.g. social determinants of health), which could inform future road safety policies or outreach programs.



Develop Safety-Related Vehicle Design Criteria for Future City Vehicle Fleet Purchases

Lead Agency/Department	Fleet
	Transit Windsor
	Windsor Fire Rescue Service
	Purchasing
Strategic Priorities	1D: Failing to Yield at Intersections
Addressed	2A: Vulnerable Road Users

As the operator of a significant fleet of vehicles, the City of Windsor has the opportunity to directly reduce the likelihood of its own vehicles being involved in a fatal or major injury collision by developing and implementing safety-related criteria for use when purchasing vehicles. In doing so, Windsor may be able to indirectly influence other fleet operators – e.g. other major Windsor employers or other municipalities – to adopt similar measures and provide an indirect safety benefit beyond its own vehicle fleet.

The Fleet Review Committee (a staff committee chaired by the Executive Director of Operations, with representatives from several City departments) reviews and approves standard vehicle features for various vehicle categories in the City fleet, from compact cars to large trucks.

The current list of vehicle standard features includes some safety-related items (e.g. ABS brakes), but does not include measures such as:

- Air bags
- Vehicle features that reduce the likelihood of severe injury in a pedestrian collision
- Collision warning or lane departure warning systems
- Back-up cameras (all vehicles) or 360 degree camera systems (large trucks)

This initiative would entail recommending that the Fleet Review Committee:

- Explore additional safety-related features that could be added to the current list of vehicle standard features, and
- Consider the development of lists of additional safety-related features that could be used, as
 appropriate, in requests for proposals. This would allow vendors to receive preferential consideration
 for bids that would provide greater than the minimum level of safety.

Special considerations with this initiative:

 By Council-approved charter, vehicle standard features must be approved by the Fleet Review Committee, which has the authority to approve or deny new standard features.



Requiring additional safety features has the potential to increase the cost of vehicle purchases. This
increase in cost may be in excess of the value of the desired safety feature itself, since vehicle options
are often bundled in option packages.

Initiatives Considered But Not Recommended

Install Pavement Edge Rumble Strips at Select Locations

Lead Agency/Department	N/A – not recommended
Strategic Priorities	1A: Vehicle Speeds
Addressed	

Pavement edge rumble strips are lines of grooves along the edge of the travelled portion of the roadway that discourage roadway departure collisions by alerting drivers when they go onto the shoulder of the road. An example is shown in Figure 8.



Figure 8: Pavement Edge Rumble Strip Example (Source: FHWA)

Pavement edge rumble strips can create some of the same issues as transverse rumble strips:

- They can be difficult for cyclists to traverse.
- Water and ice can pond in the grooves.
- Cutting rumble strips into the road surface can reduce pavement life.

Noise tends to be less of an issue for pavement edge rumble strips than for transverse rumble strips, since transverse rumble strips are not driven over during normal operation of the roadway.

This initiative would entail identifying locations to install pavement edge rumble strips as a pilot program. The top candidates for this program would be locations with high speeds, paved shoulders, and a history of roadway departure collisions.



Develop a Cell Phone App to Address Inattentive Driving

Lead Agency/Department	To be determined
Strategic Priorities	1C: Inattentive Driving
Addressed	

This initiative would entail developing a mobile app that could address inattentive driving by one or more methods, such as:

- Locking out the mobile device while the vehicle is in motion
- Monitoring device use while in motion and providing positive feedback to well-behaved drivers

Since there are existing apps that perform similar functions, further investigation to determine the need for a "made in Windsor" app should be done before proceeding on this initiative.

Require Helmets for all E-Scooter Riders

Lead Agency/Department	Transportation Planning
Strategic Priorities	2A: Vulnerable Road Users
Addressed	

When the e-scooter pilot was approved by Council in 2019, Council was provided with the option to require helmets for all e-scooter riders, which it ultimately chose not to implement.

This initiative would entail reversing that previous decision and amending Traffic By-law 9148 to require helmets for all e-scooter riders. Issues with this initiative:

- It would involve reversing a recent decision of Council, and
- It has the potential for major impacts on the operations of BIRD Canada or other future scooter share service providers.



Council Report: S 13/2022

Subject: Pillette Road (Tecumseh to Plymouth) Traffic Calming - Wards 5 & 8

Reference:

Date to Council: July 27, 2022

Author: Jeff Hagan

Transportation Planning Senior Engineer

519-255-6100 ext 6003 jhagan@citywindsor.ca Planning & Building Services Report Date: May 30, 2022

Clerk's File #: ST/13863

To: Mayor and Members of City Council

Recommendation:

THAT Report S 13/2022, "Pillette Road (Tecumseh to Plymouth) Traffic Calming Plan" **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

Pillette Road was identified as a candidate for traffic calming based on two resident service requests received in February 2019. These service requests followed shortly after a collision at the intersection of Pillette Road and Grand Marais Road where a vehicle struck a house on the east side of the intersection.

In response to these service requests, Administration collected speed and volume data on Pillette Road and conducted a traffic calming review. Pillette Road was confirmed to meet the speed and volume criteria for traffic calming. A petition form (required under the 2015 Traffic Calming Policy, which was in effect at the time) was provided to the original requestor; the completed petition was returned in July 2019.

Following the receipt of the completed petition, a warrant/prioritization review was carried out for the full traffic calming project area (Tecumseh Road East to Plymouth Drive).

Based on its prioritization score relative to other traffic calming project locations, Pillette Road was not prioritized immediately for traffic calming plan development.

In June 2020, based on its score relative to other projects, Pillette Road moved forward for traffic calming plan development.

Other Reviews

Prior to the 2019 traffic calming request, a sight line review and an all way stop warrant review were carried out at the Pillette Road and Grand Marais Road intersection in response to resident requests. These reviews found:

- An all-way stop is not warranted for the intersection.
- There are no view obstructions due to hedges, fences, or other fixed objects.
 - A view obstruction due to illegal parking south of the intersection was noted during the review; this issue was addressed by Parking Enforcement.

Discussion:

Development of the traffic calming plan took a number of key factors into account, as summarized in Table 1.

Table 1: Key Issues and Design Constraints

Factor	Details	Notes	
Key Issues for 7	Key Issues for Traffic Calming		
Traffic Speed	 Speed limit: 50 km/h Average speed: 58-59 km/h 85th percentile speed: 65-67 km/h 	These results indicate a high degree of speeding.	
Traffic Volumes	 South of Tecumseh Road: 7,500 vehicles per day South of Grand Marais Road: 3,950 Target maximum traffic volume (Class 1 Collector): 6,000 vehicles per day 	These results indicate moderately high volumes for a street of this classification.	
Collision History (2014-2018)	 Tecumseh to Somme: 1.4 collisions per year Somme to Plymouth: 0.6 collisions per year 	The collision history on Pillette Road is in keeping with other similar streets.	

Factor	Details	Notes		
Key Design Cor	Key Design Constraints			
Road Classification	Pillette is a Class 1 Collector road	Pillette Road is intended for relatively high volumes of traffic.		
		Displacement of traffic onto nearby local streets would not be a desirable outcome.		
Heavy Trucks	Pillette Road is a truck route (8:00 am to 6:00 pm)	The traffic calming plan should accommodate heavy truck traffic.		
Transit	 Existing: transit route (Central 3) on Pillette Road for entire study area Future (Transit Master Plan): transit route (future route 56) on Pillette Road – Tecumseh to Grand Marais 	The traffic calming plan should accommodate transit buses along its entire length, as well as bus turning movements at the Pillette & Grand Marais intersection.		
Cycling	 Existing: no cycling infrastructure Future (Active Transportation Master Plan): connector bikeway, non-AAA ("all ages and abilities), low priority 	The traffic calming plan should be compatible with future cycling infrastructure.		

The traffic calming plan that was developed and presented to the public at the June 17, 2021 online public meeting included the following features:

- Roadway narrowing (Adstoll to Grand Marais)
- Reduced intersection corner radius (Grand Marais & Pillette intersection)
- Landscaped median islands (Grand Marais to Plymouth)
- Extended on-street parking areas
- Pedestrian crossover Pillette Road between Somme Avenue and Adstoll Avenue

This plan can be seen in Appendix A.

Based on resident feedback received at and following the meeting, additional traffic calming measures were added to the plan:

Radar speed feedback signs

The plan presented to residents for the project approval poll can be seen in Appendix B. The estimated construction cost of this plan is \$408,385.

Approval Poll

An approval poll of residents and business owners in the project area was carried out from December 3, 2021 to January 31, 2022 (extended from an original deadline of December 23, 2021). Respondents were invited to contact 311 or complete an online survey form.

Residents were notified of the approval poll by a variety of methods:

- Two mailouts to all property owners and tenants in the project area (December 3, 2021 & January 13, 2022)
- Two rounds of social media posts, geo-targeted on the postal codes for the project area (December 2021 & January 2022)
- Notification signs posted on Pillette Road (4 signs total, placed at the ends and midpoint of the project area)

The results of the survey are summarized in Table 2. As noted, the minimum level of support was not reached; therefore, it is recommended that the traffic calming plan not be implemented.

Table 2: Survey Results

Criteria	Minimum Required	Received	Criteria Met?
Response rate	50% (125 out of 250 households & commercial properties)	18% (44 out of 250)	No
Level of support	60% of respondents voting "yes"	70% "yes" (31 out of 44 responses)	Yes
Overall	Both Criteria Above Are Met		No

An additional 38 responses were received from people outside the project area. Of these responses, 74% (28 responses) were in favour of the traffic calming plan. These responses from outside the project area are not included in Table 2.

Respondents were able to provide additional comments. The most frequent issues raised in the comments:

Concerns about speeds on Pillette Road

- Concerns about specific recent collisions
- Difficulty crossing Pillette Road as a pedestrian
- Requests for traffic calming on other streets in Windsor

Next Steps

Because approval poll did not achieve the minimum level of support to proceed, Pillette Road between Tecumseh Road East and Plymouth Drive will not be eligible for rereview for permanent traffic calming for 3 years, as per the process in the Traffic Calming Policy.

For the most recent traffic calming project brought before Council (Drouillard Road), Administration recommended waiving the policy to allow the traffic calming plan to be constructed, despite a low response rate. The Drouillard Road traffic calming study was affected by a number of special concerns that do not apply to the Pillette Road study:

- Previous relevant consultations: the Drouillard Road traffic calming project
 was within the area of the Ford City Community Improvement Plan (CIP). The
 CIP underwent significant public consultation and had a high level of support
 from residents and property owners along Drouillard Road. One of the
 recommendations of the CIP was traffic calming for Drouillard Road.
 - For Pillette Road, there were no prior consultations, studies, master plans, etc., recommending traffic calming.
- Extenuating circumstances involving community groups: Ford City
 Neighbourhood Renewal (FCNR) was instrumental in initiating requests for traffic
 calming on Drouillard Road and circulating the resident petition. However, FCNR
 disbanded due to a loss of funding shortly after the public information centre for
 the project; because of this, FCNR who had been a major conduit for project
 information to residents was inactive by the time of the resident approval
 survey.
 - For Pillette Road, similar circumstances did not occur.
- Pandemic impacts: the resident approval poll for Drouillard Road took place at the height of pandemic restrictions, which raised concerns that these circumstances may have reduced the response rate.
 - For Pillette Road, these concerns were addressed by different means, including multiple mailouts to property owners and tenants, geo-targeted social media posts, and placing signs on Pillette Road advising residents of the approval survey.

There are other initiatives that are available or in process to address speeding on Pillette Road or other concerns identified in resident comments:

- Residents may still initiate petitions under the Parking Control Changes Policy for any or all of the new on-street parking recommended as a speed control measure in the Traffic Calming Plan (north of Somme Avenue and between Grand Marais Road East and Plymouth Drive). If a petition with sufficient support is received, these on-street parking changes could be installed.
- The pedestrian crossover identified in the traffic calming plan for Pillette Road near Somme Avenue & Adstoll Road continues to meet warrant. The intersection of Pillette Road and Grand Marais Road East also meets warrant for a pedestrian crossover.
 - Based on the short distance between these two locations, installation of a pedestrian crossover would only be recommended at one of them.
 - Pillette Road at Grand Marais Road East is #24 in the priority list for a pedestrian crossover, ranked against other warranted locations City-wide.
- A traffic calming study for Grand Marais Road East (Plymouth Drive to Pillette Road) was initiated recently based on resident request. Traffic calming on this section of Grand Marais Road East, if implemented, has the potential to reduce cut-through traffic on Pillette Road as well. Grand Marais Road East is currently #1 in the prioritization list for development of a traffic calming plan.

Risk Analysis:

Not proceeding with the traffic calming plan on Pillette Road would create a moderate reputation risk to the City, since no action would be taken for a street with an identified speeding issue. This risk is mitigated by the other approaches available to address speeding and cut-through traffic on Pillette Road, described above under "Next Steps."

Proceeding with the traffic calming plan on Pillette Road by waiving the Traffic Calming Policy would also create a moderate reputation risk to the City, since the funding required would reduce the number of traffic calming concerns on other streets in the City that could be addressed.

Climate Change Risks

Climate Change Mitigation:

No action is recommended by this report.

Climate Change Adaptation:

No action is recommended by this report.

Financial Matters:

No expenditures are recommended by this report.

The estimated capital cost to implement the traffic calming plan shown in Appendix B is \$408,385. Sufficient funds are available in the Traffic Calming Initiatives capital project (7069022) to fund these works; however, this would reduce funds available for other traffic calming projects that met the support criteria.

Consultations:

Staff Consultation

The following departments were consulted during the development of the traffic calming plan:

- Operations
- Traffic Operations
- Operations Maintenance
- Parks
- Windsor Fire Rescue Services
- Windsor Police Service
- Transit Windsor

Public Consultation

Key points of public consultation were as follows:

- Public information centre (online): June 17, 2021
 - Notification for the public information centre was by mailout to all property owners and tenants in the project area and geo-targeted social media posts.
 - Presentation boards and the meeting recording were posted to the City website
- Two mailouts to all property owners and tenants in the project area (December 3, 2021 & January 13, 2022)
- Two rounds of social media posts, geo-targeted on the postal codes for the project area (December 2021 & January 2022)
- Notification signs posted on Pillette Road (4 signs total, placed at the ends and midpoint of the project area)

Conclusion:

Based on a lack of resident support, the traffic calming plan for Pillette Road between Tecumseh Road East and Plymouth Drive is not recommended for construction.

Other options to address concerns received by Plymouth Drive have been identified. Initiatives that require resident support (e.g. on-street parking changes or other neighbourhood traffic calming projects) will be brought forward for approval as resident support is obtained. Initiatives that are City-led will be brought forward for approval based on priority relative to other projects.

Planning Act Matters:

N/A

Approvals:

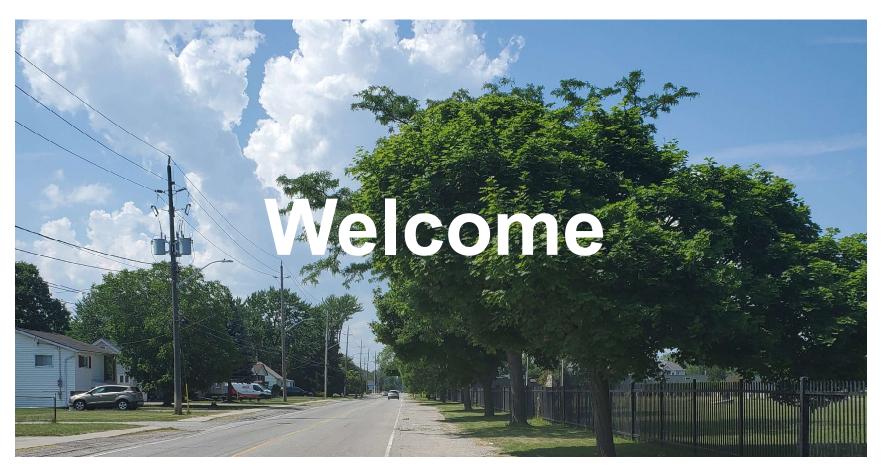
Name	Title
John Revell	Chief Building Official
Josie Gualtieri	Financial Planning Administrator
Jelena Payne	Commissioner of Economic Development and Innovation
Chris Nepszy	Commissioner of Infrastructure Services and City Engineer
Joe Mancina	Commissioner of Corporate Services and Chief Financial Officer
Onorio Colucci	Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Sleiman		
Councillor Kaschak		
Project area property owners, tenants and survey respondents		
(list provided to Clerks)		

Appendices:

- 1 Appendix A: Presentation Materials June 17, 2021 Public Meeting
- 2 Appendix B: Approval Poll Letter (including Final Traffic Calming Plan)



Pillette Road Traffic Calming

June 17, 2021 – Public Information Centre

6:30 PM - 8:30 PM



An Introduction to Traffic Calming

Traffic calming on City roads is governed by the City of Windsor Traffic Calming Policy

The objectives of the traffic calming policy are to:

- Alter driver behaviour
- Improve conditions for non-motorized road users
- Reduce negative effects of motor vehicle use

Traffic calming projects are the implementation of mostly physical measures to:

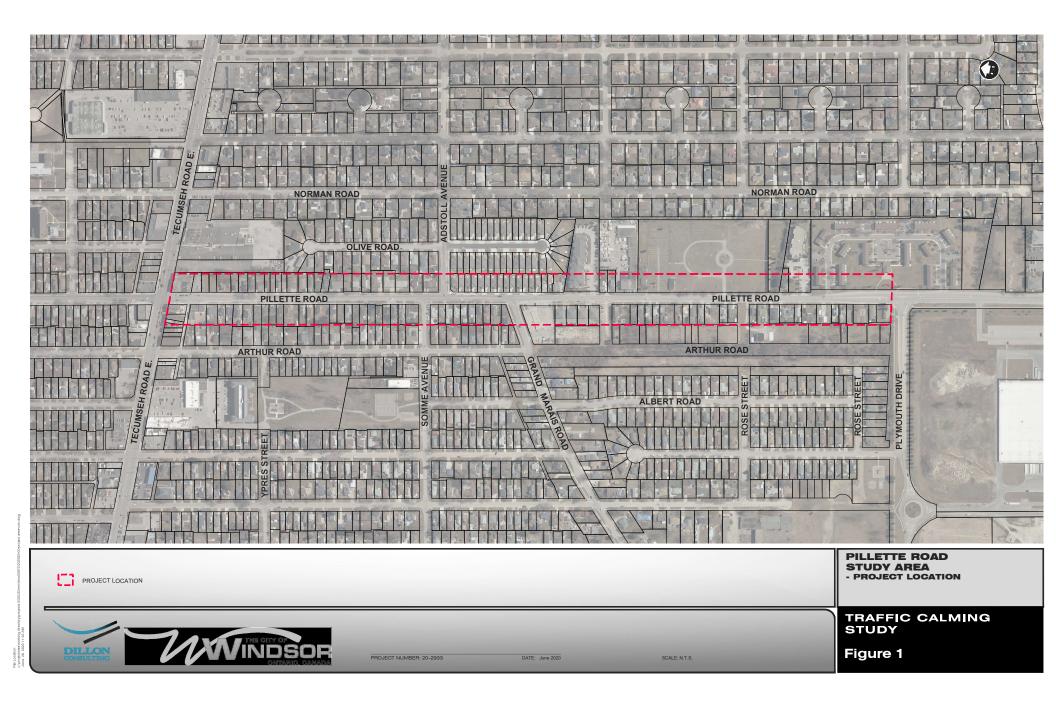
- Reduce vehicle speeds
- Reduce cut-through traffic volumes
- Improve pedestrian comfort

The purpose of this public information centre is to present the study findings to the public, identify possible solutions and obtain feedback to incorporate into the final traffic calming plan









Pillette Road – Background & Key Issues

Collision History (2014-2018):

- 1.4/year between Tecumseh Road and Somme Avenue
- 0.6/year between Somme Avenue and Plymouth Drive

Traffic Volumes:

- 7,500 vehicles/day south of Tecumseh Road; 3% trucks during the day
- 3,950 vehicles/day south of Grand Marais Road; 9% trucks during the day

Vehicle Speeds (south of Grand Marais Road):

Speed	Average	85 th Percentile
Limit	Speed	Speed
50 km/h	58-59 km/h	65-67 km/h

 The data indicates that travel speed is the primary factor to be mitigated through traffic calming



Pillette Road / Grand Marais Road (looking southeast)



Pillette Road (looking south)



Pillette Road Traffic Calming

Pillette Road – Factors Considered in Identifying

Measures

Trucks and Buses

- Pillette Road is a designated truck route throughout the study area
- Transit Windsor buses operate along Pillette Road throughout the study area. Transit Windsor's proposed bus route changes would remove service south of Grand Marais Road
- The need to accommodate trucks and buses limits the ability to apply vertical measures (e.g., speed humps)

Cycling

- The following cycling corridors were identified in the 2019 Active Transportation Master Plan (ATMP):
 - "All Ages and Abilities" (AAA) bicycle corridor along Somme Avenue / Adstoll Avenue
 - Nearby AAA corridors parallel to Pillette Road to the west (Francois Road) and the east (Westminster Avenue / Princess Avenue)
 - Pillette Road identified as part of "supporting network" as a longer-term measure; most of the study area would require substantial road reconstruction to accommodate dedicated bicycle facilities
 - The proposed traffic calming measures do not include bicycle facilities but have considered the feasibility of including them at a later date in conjunction with more extensive road reconstruction



Existing Bus Network

Proposed Bus Network



Excerpt from Figure 27 of Windsor's ATMP



Pillette Road – Potential Traffic Calming Solutions

Potential traffic calming solutions along Pillette Road include:

- Constructing a "Type C" pedestrian crossover (PXO) on Pillette Road between Somme Avenue and Adstoll Avenue
 - Provides controlled crossing opportunity for pedestrians and users of future AAA cycling facility
 - Narrowing the roadway between Adstoll Avenue and Grand Marais Road; reducing corner radius at Grand Marais Road
 - Reduces overall pavement width to encourage slower travel speeds
 - Improves sight distance for traffic turning from Grand Marais Road onto Pillette Road
- Constructing landscaped median islands along Pillette Road between Grand Marais Road and Plymouth Road
 - Reduces the optical width of the street to encourage slower travel speeds
 - Deflection of travel lanes around island to reinforce the need for slower travel speeds
 - · Provides an opportunity for additional landscaping along corridor
- Extending areas where parking is allowed adjacent to the roadway
 - Additional side friction to encourage slower travel speeds
 - Provides additional short-term parking for residents living along Pillette Road

The estimated construction cost is approximately \$385,000.



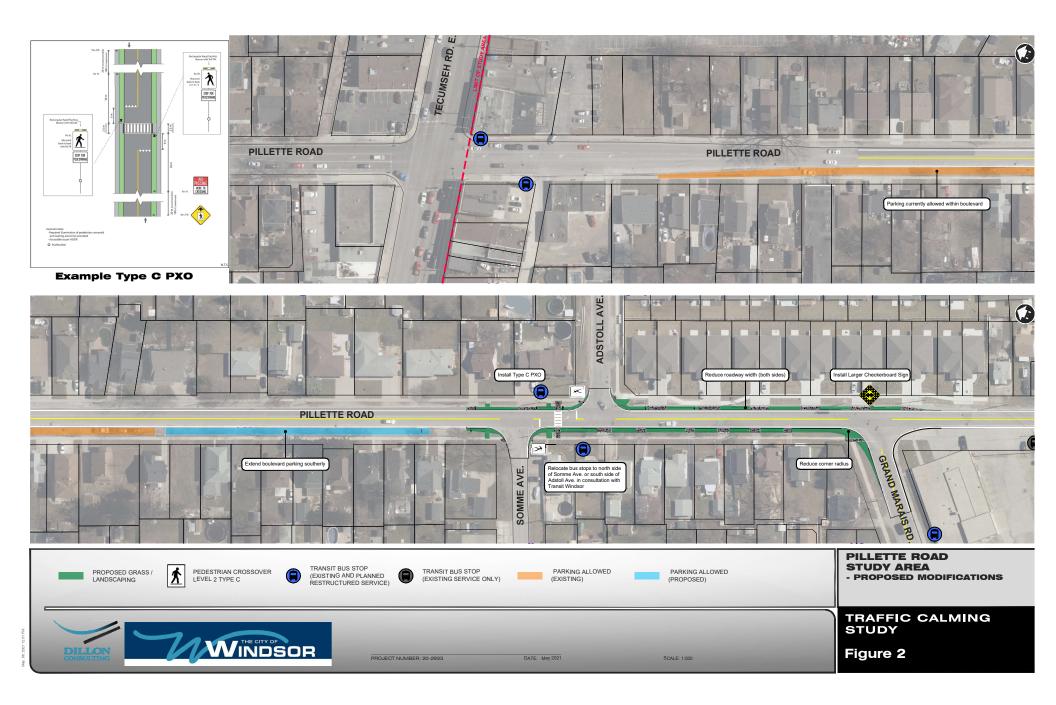
Wyandotte Street East/Chilver Road (looking southeast)

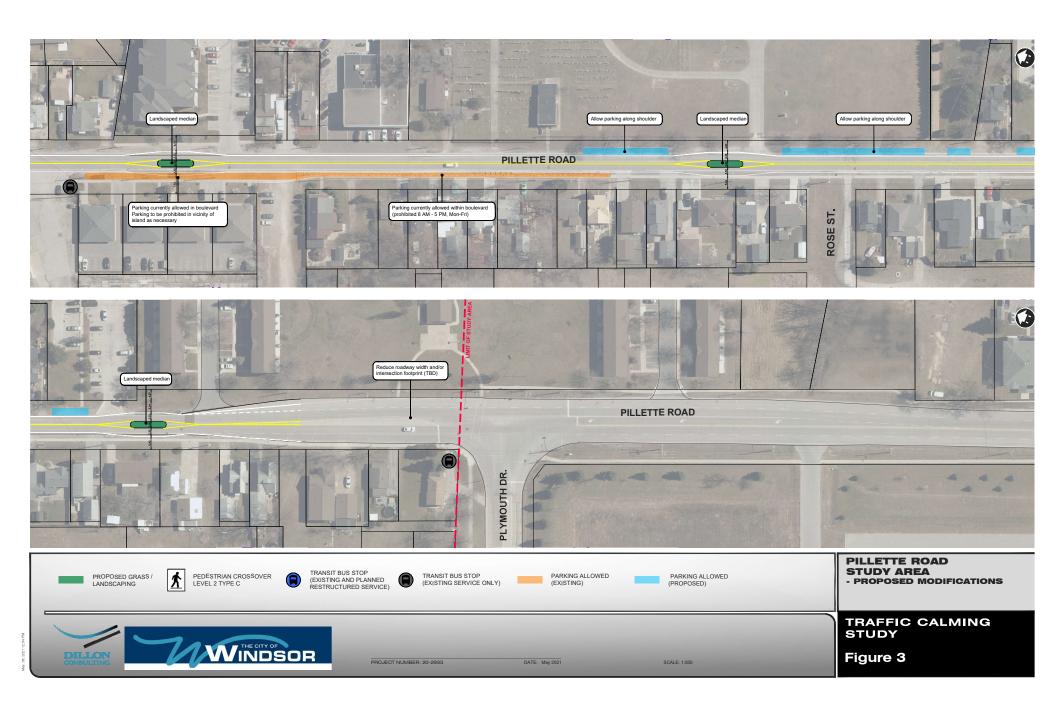


Rousseaux Street in Hamilton, Ontario (Courtesy of Google Maps)



Pillette Road Traffic Calming





Pillette Road – Next Steps

- Review feedback from area residents and stakeholders
 - Feedback deadline: July 16, 2021
- Finalize the traffic calming plan
- Consult the study (survey) area (one vote per household or commercial property)
 - In order to approve the finalized traffic calming plan:
 - A minimum 50% of all properties in the survey area must respond and
 - At least 60% of all respondents to the survey must support the plan
- Should the survey pass, the traffic calming plan would move forward for Council approval and implementation
 - Anticipated construction: Summer 2022 (subject to Council approval)



Pillette Road Study (Survey) Area Limits





Pillette Road Traffic Calming

Comments need to be received by July 16, 2021 Comments can be sent to the City of Windsor through 311, or via e-mail at: transportation@citywindsor.ca





TRANSPORTATION PLANNING

January 13th, 2022

RE: APPROVAL POLL – DEADLINE EXTENDED Traffic Calming Plan – Pillette Rd (Tecumseh Rd to Plymouth Dr)

Dear Resident,

We heard your concerns about the traffic safety on Pillette Road. As a result a Public Information Centre (PIC) was held to present a draft traffic calming plan to the public for feedback on Thursday June 17, 2021. At that meeting we heard that radar speed feedback signs were important to the public. We have added radar speed feedback signs as a traffic calming measure and placed them at two locations based on the cut through traffic. Below are the main features for traffic calming:

Traffic Calming Features			
 Pedestrian Crossover in between Somme Ave and Adstoll Ave 	 Extending areas where parking is allowed 		
Soffifie Ave and Adstol Ave allowed			
 Landscape Medians in between Install a larger Checkerboard Sign 			
Grand Marais Rd and Plymouth Dr • Install Radar Speed Feedback Signs			
Total Estimated Cost for Traffic Calming: \$408,384.59			

The plan will be brought forward to Council for consideration if the required level of residential approval described below is reached:

• A minimum of 50% of the households and commercial properties must respond within the polling area, and from this 60% must indicate their support for the Traffic Calming Plan.

Project related information including this document will be maintained on the City website at www.citywindsor.ca, search word: traffic calming.

To determine the level of support, we are asking neighbourhood residents and property owners to respond by calling 311 and;

- Identify that you are calling about the Pillette Road traffic calming plan
- Provide your name and address
- Indicate whether you support the traffic calming plan

The City's 311 Call Centre is open from 8:00 a.m. to 5:00 p.m., Monday to Friday. The survey will be open until **January 31, 2022**. (Only one vote per household will be considered).

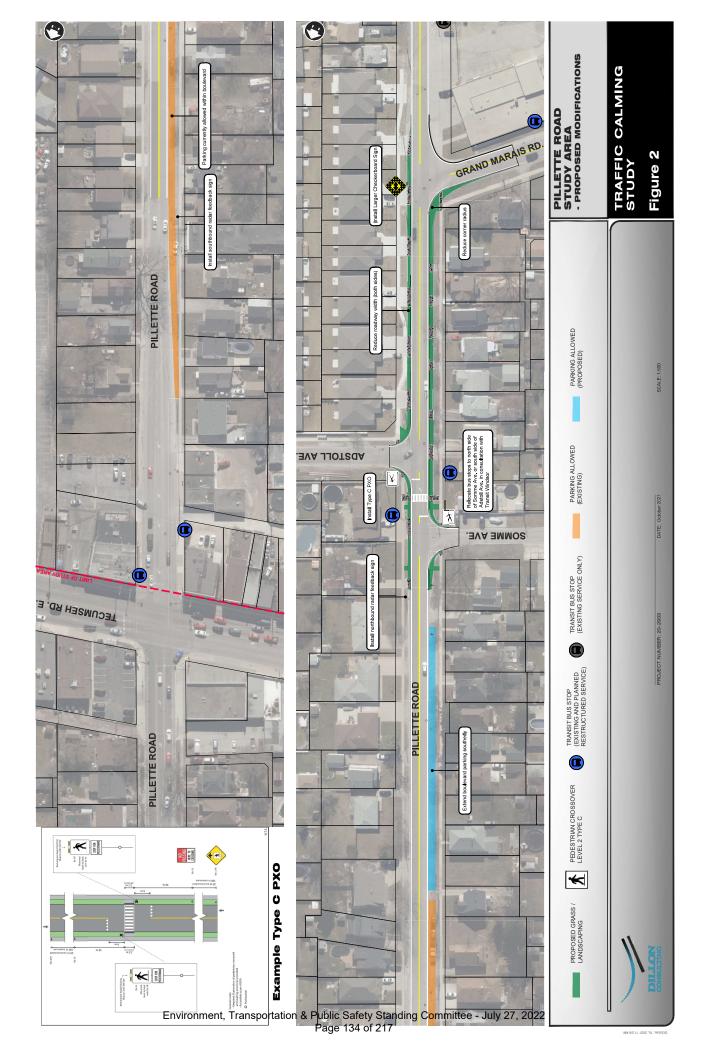
If you would like to submit your response online, please visit our online survey at https://tinyurl.com/surveypillette.

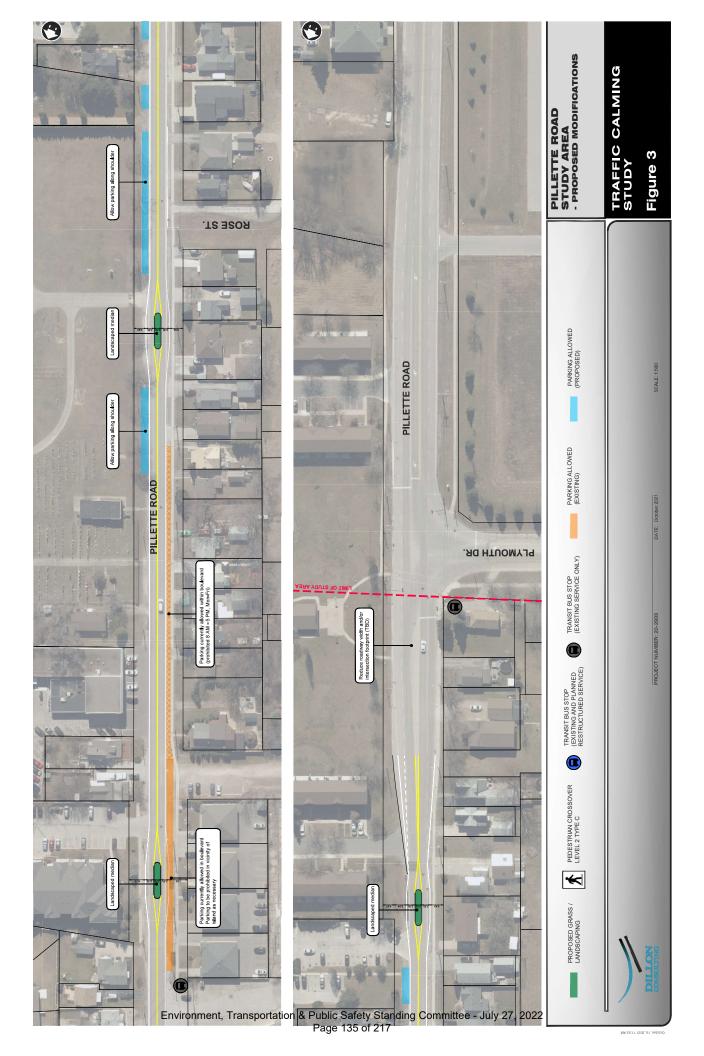
If you have further comments or questions on this project please do not hesitate to contact Awele Nwaesei, Transportation Planning Coordinator, at 519-255-6267, ext. 6831 at your convenience.

Yours truly,

Jeff Hagan, P. Eng, PTOE Transportation Planning Senior Engineer JH/an Attachment

C.c. Chief Building Official







Council Report: C 121/2022

Subject: The Contributory Pension Plan for Employees of Transit Windsor - Actuarial Valuation as at December 31, 2021 - City Wide

Reference:

Date to Council: July 27, 2022

Author: Dan Seguin

Deputy Treasurer - Financial Accounting and Corporate Controls

519-255-6100 ext 1663 dseguin@citywindsor.ca Financial Accounting Report Date: July 27, 2022

Clerk's File #: MT2022

To: Mayor and Members of City Council

Recommendation:

THAT the Environment, Transportation & Public Safety Standing Committee sitting as the Transit Windsor Board of Directors and City Council:

- I. **APPROVE** the Actuarial Valuation of the Contributory Pension Plan for Employees of Transit Windsor as at December 31, 2021; and,
- II. **ACKNOWLEDGE** the forwarding of the Actuarial Valuation as at December 31, 2021 to the Office of the Superintendent of Financial Institutions and to the Canada Revenue Agency by the Deputy Treasurer Financial Accounting and Corporate Controls, as the Plan Administrator and as per legislation.

Executive Summary:

N/A

Background:

This report provides the information required for approval of the Actuarial Valuation of the Transit Windsor Contribution Pension Plan for Employees as at December 31, 2021.

Pension benefits for employees of Transit Windsor are accrued under two separate and distinct pension plans: the frozen Transit Windsor Pension Plan and OMERS. Benefits for service up to December 31, 1999, are frozen under the Transit Windsor Pension Plan, while benefits for service from January 1, 2000, are provided under OMERS.

The frozen Transit Windsor Pension Plan is a defined benefit plan, based on career earnings, and was originally regulated by the Province of Ontario. On January 1, 1996, the frozen plan was transferred to the federal jurisdiction under the authority of the Office of the Superintendent of Financial Institutions Canada (OSFI). The transfer was a direct result of a Labour Board decision that deemed Transit Windsor to be a federal employer. The transfer to federal jurisdiction triggered a requirement to provide OSFI with a valuation report and the first report was filed effective January 1, 1996. The initial valuation did not reflect any funding deficits.

The market value of Transit Windsor's Pension Plan assets is valued at approximately \$34.41 million compared to \$31.77 million one year ago. This value is based on the audited financial statements for 2021.

In an effort to reduce funding volatility for plan sponsors, the federal government introduced the use of properly structured Letters of Credit (LOC) to satisfy solvency payments up to a limit of 15% of the Plan liabilities. The impact of this change allows for more flexibility in terms of meeting annual solvency deficit requirements.

LOCs provide an alternative means for plan sponsors to satisfy their funding obligations in a secure fashion that does not compromise benefit security. The value of the LOC is never put into the Plan; rather it is held by the trustee for instances such as bankruptcy, wind-up, or other extenuating circumstances, at which time the LOC would be called and deposited into the Plan to discharge the Plan's liabilities. Since the LOC is held by the City, the bank would look to the City for reimbursement of the amount of the LOC. All LOC funding must be renewed by December 31 (the fiscal year-end of the Pension Plan) with the documents in place by December 15.

Since 2011, and prior to December 31st of each year, the Transit Windsor Board of Directors and Windsor City Council had approved the update and renewal of the LOC in accordance with the requirements of the Pension Benefits Standards Act, 1985, satisfactory in content to the City Treasurer and in form to the City Solicitor. As part of the LOC increase presented to City Council on March 25, 2018, authority was delegated to the CAO to approve future adjustments to the Letter of Credit, which may be required, in order to fund the Transit Windsor pension deficit up to the maximum allowable amount of 15% of plan liabilities as determined by the annual Actuarial Valuation, and in consultation with the Executive Director of Transit Windsor and the City Treasurer. Where such approval is given, City Council would be advised as part of the next annual pension report.

The current amount of the LOC is \$4,890,005, and has been applied in respect of a portion of the minimum required solvency special payments, which are due over the period beginning January 1, 2011 to December 31, 2021. The amount is considered a notional draw upon the City's overall Line of Credit limit of \$100 million. The historical increases to the LOC, as approved by the Transit Windsor Board and City Council, have automatic annual renewals unless the City of Windsor advises not to renew.

Discussion:

The Office of the Superintendent of Financial Institutions (OSFI) requires that the attached Actuarial Valuation of Transit Windsor's Pension Plan be filed with OSFI no later than six months after the Plan's year-end. This valuation establishes the monthly special payments, if any, that are required to fund the solvency deficit. The Plan is subject to annual valuations until such time that the solvency ratio exceeds 1.20, after which valuations will be required every three years.

Transit Windsor's actuaries, Mercer Canada, have now finalized the 2022 funding obligations arising from the 2021 valuation of Transit Windsor's Pension Plan. Based on this valuation, the special payments required in 2022 to cover the Plan's funding deficit are summarized below.

	2022 Actual Funding Requirements	2022 Peliminary Funding Requirements (based upon 2021 funding requirements)	2021 Funding Requirements (based on the final 2020 valuation)
Employer Current Service Costs	\$0	\$100,000	\$100,000
Special Payments			
- Going Concern	\$0	\$0	\$0
- Solvency	\$0	\$0	\$0
Total Special Payments*	\$0	\$0	\$0
Estimated minimum employer contribution	\$0 (contribution holiday)	\$100,000	\$100,000
Estimated maximum employer contribution (only if the plan were to be wound up)	\$2,667,000	\$2,567,000	\$6,759,000

As indicated above, the asset value of the Plan has increased to \$34.41 million primarily due to market gains. Accordingly, the minimum employer contribution, based on a solvency valuation for 2021 is now \$nil.

The above chart also indicates the estimated maximum employer contribution of \$2,667,000 (less amounts already contributed in 2022), which excludes the face value of the Letter of Credit and represents the theoretical amount that would need to be paid if the Plan were to be wound up. As the Plan is ongoing in nature, there is no requirement to fund this amount; however, Council should be aware that if the Plan were to be wound-up, transferred, or should legislation change, this full amount may be callable and require funding at some point in the future.

Administration will continue to work with our pension consultant to explore efficient methods of administering the pension fund.

Risk Analysis:

The Office of the Superintendent of Financial Institutions (OSFI) requires that the attached Actuarial Valuation of the Transit Windsor's Pension Plan be filed with OSFI no later than six months (June 30th) after the Plan's year-end. The Deputy Treasurer – Financial Accounting and Corporate Controls, as the Plan Administrator, has filed the report to meet this deadline; however, still requires approval of the report. Failure to file the report in a timely manner would result in an audit by OFSI and any further action they deem appropriate.

Since 2011, a decision to fund the solvency deficit by way of draws upon the LOC has been recommended. While use of the LOC is the preferred methodology, should the market value fall, Transit Windsor would be required to fully fund the amount that was previously covered by the Letter of Credit. Of further note, should the Plan be wound up or transferred to another pension, the amount secured by way of the LOC would need to be fully funded to The Plan and would require an actual cash outlay to be completed by the City.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

Plan Position as at December 31, 2021

As noted in the audited Financial Statements of the Pension, the market value of the Plan's solvency assets as at December 31, 2021, is \$34,411,000. As the actuarial report was completed based on unaudited financial statements, the market value referenced in this report is taken from the audited financial statements. The following chart highlights the balances for the most recent 3-year period:

	December 31, 2021	December 31, 2020	December 31, 2029
Market Value of Assets	\$34,411,000	\$31,766,000	\$34,774,000
Face Value of letter of credit	\$4,890,000	\$4,890,000	\$4,890,000
Solvency Liabilities	\$36,678,000	\$38,229,000	\$37,466,000
Adjusted Solvency Ratio	106.6%	95.4%	105.3%

The Asset Value increased from December 2020 to December 2021 primarily due to market gains. At December 31, 2021, plan liabilities were \$36,678,000. These amounts also fluctuate annually based on a number of factors, which can include interest rates, expected future benefit costs, and changes in life expectancy calculations.

Plan Contributions

As outlined in the discussion section, as a result of the 3 year average solvency position for the Plan, the required minimum contribution into the Transit Windsor Pension Plan in 2022 is \$0.

2022 Planned Contributions				
Current Service Cost Solvency Special Total Payment				
Monthly Amount	\$0	\$0	\$0	
Annual Payment	\$0	\$0	\$0	

As of July 2022, Transit Windsor has funded \$50,000 current service cost, based on the estimated payment requirements from the 2020 valuation. Due to the 2021 valuation, which has identified that the solvency ratio is over 105%, a contribution holiday can be taken.

The 2020 Actuarial Valuation has resulted in a \$0 special payment requirement for 2022 and therefore no additional allocation of the LOC is required.

Transit Windsor's 2022 operating budget has been established with \$155,956 to fund plan payments as well as other LOC administrative costs. Any surplus in this account will be reported in the year-end variance report to City Council.

Planned contributions for 2023 will be based upon the 2022 funding requirements until such time as the valuation report for December 31, 2022 is completed. Consistent with previous years, a preliminary valuation will be received in early 2023 and later confirmed in June 2023.

No additional draw on the LOC is required at this time.

Year LOC Established	Established LOC Amount	LOC drawn on and included in Face Value of Pension Plan to fund Solvency Deficit
2011	\$728,796	\$728,796
2012	\$1,025,232	\$1,025,232
2013	\$1,323,612	\$1,323,612
2014	\$772,360	\$772,360
2015	\$335,450	\$335,450
2016	\$193,950	\$193,950
2017	\$154,536	\$154,536
2018	\$510,000	\$280,069
2019	\$0	\$76,000
2020	(\$153,931)	\$0
2021	\$0	\$0
2022	\$0	\$0
Total as of December 31, 2022	\$4,890,005	\$4,890,005
2023 LOC Projection	\$0	\$0

Total Projected LOC for December 2023	\$4,890,005	\$0
Maximum Allowable (15% of plan liabilities at December 31, 2021)	\$5,501,700	

Fees

There are fees associated with issuing the Letter of Credit, which cannot be paid from the fund and are included in the Transit Windsor operating budget as follows:

- BMO (Plan Trustee) Annual administration fee of \$5,000 and approximately \$500 for annual tax preparation fees.
- Bank of Nova Scotia (Issuer) 1% fees would be applied on all outstanding balances.

It should be noted that the estimates of the surplus funds as noted above exclude the impacts of any fees associated with the LOC. Any such fees would serve to reduce the final surplus amount.

Consultations:

Kathy Buis, Financial Planning Administrator, Transit Windsor

Vince Grillo, Manager Treasury & Cash Management Taxation & Financial Projects, City of Windsor

Mercer (Canada) Limited

Conclusion:

It is not uncommon for federally regulated plans, such as Transit Windsor's Pension Plan, to experience funding deficits. This report transmits the actuarial valuation of the frozen Transit Windsor Pension Plan as at December 31, 2021, and provides information that no additional funding is required as the Letter of Credit already established will cover the required employer contribution.

Planning Act Matters:

N/A

Approvals:

Name	Title
Dan Seguin	Deputy Treasurer – Financial Accounting

Name	Title
Chris Nepszy	Commissioner of Infrastructure Services
Janice Guthrie	On behalf of Commissioner of Corporate Services, CFO, City Treasurer
Onorio Colucci	Acting Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2021



CONTRIBUTORY PENSION PLAN FOR EMPLOYEES OF TRANSIT WINDSOR

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2021

June 2022

Office of the Superintendent of Financial Institutions Registration Number: 57108

Canada Revenue Agency Registration Number: 0353821

Note to reader regarding actuarial valuations:

This valuation report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future. If maintained indefinitely, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date. The content of the report may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission. All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used, or relied upon without reference to the report as a whole.

To prepare the results in this report, actuarial assumptions are used to model a single scenario from a range of possibilities for each valuation basis. The results based on that single scenario are included in this report. However, the future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be significant or material. Different assumptions or scenarios within the range of possibilities may also be reasonable, and results based on those assumptions would be different. Furthermore, actuarial assumptions may be changed from one valuation to the next because of changes in regulatory and professional requirements, developments in case law, plan experience, changes in expectations about the future, and other factors.

The valuation results shown in this report also illustrate the sensitivity to one of the key actuarial assumptions, the discount rate, and the sensitivity to three adverse scenarios. We note that the results presented herein rely on many assumptions, all of which are subject to uncertainty, with a broad range of possible outcomes, and the results are sensitive to all the assumptions used in the valuation.

Should the Plan be wound up, the going concern funded status and solvency financial position, if different from the wind-up financial position, become irrelevant. The hypothetical wind-up financial position estimates the financial position of the Plan assuming it is wound up on the valuation date. Emerging experience will affect the wind-up financial position of the Plan assuming it is wound up in the future. In fact, even if the Plan were wound up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security, and/or benefit-related issues should not be made solely on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic, and societal factors, including financial scenarios that assume future sustained investment losses.

Funding calculations reflect our understanding of the requirements of the [legislation], the Income Tax Act, and related regulations that are effective as of the valuation date. Mercer is not a law firm, and the analysis presented in this report is not intended to be a legal opinion. You should consider securing the advice of legal counsel with respect to any legal matters related to this report.

Contents

1.	Summary of	f results	1
2.	Introduction		2
3.	Valuation re	esults – Going concern	5
4.	Valuation re	esults – Hypothetical wind-up	8
5.	Valuation re	esults – Solvency	10
6.	Minimum fu	nding requirements	11
7.	Maximum e	ligible contributions	13
8.	Actuarial op	inion	15
Аp	pendix A:	Prescribed disclosure	16
Ap	pendix B:	Plan assets	20
Аp	pendix C:	Methods and assumptions – Going concern	22
Ap	pendix D:	Methods and assumptions – Hypothetical wind-up and solvency	27
Ap	pendix E:	Membership data	31
Ap	pendix F:	Summary of plan provisions	36
Ap	pendix G:	Plausible adverse scenarios	42
Αp	pendix H:	Employer Certification	45

Summary of results

	31.12.2021	31.12.2020
Going Concern Financial Status		
Market value of assets	\$34,411,000	\$31,770,000
Going concern funding target	\$26,014,000	\$26,387,000
Funding excess (shortfall)	\$8,397,000	\$5,383,000
Funded ratio	132%	120%
Hypothetical Wind-up Financial Position		
Wind-up assets (including letter of credit)	\$39,101,000	\$36,460,000
Wind-up liability	\$36,678,000	\$38,229,000
Wind-up excess (shortfall)	\$2,423,000	(\$1,769,000)
Wind-up ratio	107%	95%
Funding Requirements in the Year Following the Valuation ¹		
Total current service cost	\$0	\$0
Expense allowance	\$100,000	\$100,000
Total	\$100,000	\$100,000
Minimum special payments	\$0	\$0
William Special payments	ΨΟ	ΨΟ
Estimated minimum employer contribution (before allowable contribution holiday)	\$100,000	\$100,000
Estimated minimum employer contribution (if contribution holiday taken)	\$100,000	\$100,000
Estimated maximum eligible employer contribution	\$2,567,000	\$6,759,000
Next required valuation date	31.12.2022	31.12.2021

¹ Provided for reference purposes only. Contributions must be remitted to the Plan in accordance with the Minimum Funding Requirements and Maximum Eligible Contributions sections of this report.

Section 2 Introduction

To Transit Windsor:

At the request of Transit Windsor, we have conducted an actuarial valuation of the Contributory Pension Plan for Employees of Transit Windsor (the "Plan"), sponsored by Transit Windsor (the "Company"), as at the valuation date, December 31, 2021. We are pleased to present the results of the valuation.

Purpose

The purpose of this valuation is to determine:

- The funded status of the Plan as at December 31, 2021 on going concern, hypothetical wind-up, and solvency bases;
- The minimum required funding contributions from 2022, in accordance with the Pension Benefits Standards Act (the "Act"); and
- The maximum permissible funding contributions from 2022, in accordance with the Income Tax Act.

The information contained in this report was prepared for the internal use of the Company, and for filing with the Office of the Superintendent of Financial Institutions and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report will be filed with the Office of the Superintendent of Financial Institutions and with the Canada Revenue Agency. This report is not intended or suitable for any other purpose.

In accordance with pension benefits legislation, the next actuarial valuation of the Plan will be required as at a date not later than December 31, 2022, or as at the date of an earlier amendment to the Plan depending on any funding implications.

Terms of Engagement

In accordance with our terms of engagement with the Company, our actuarial valuation of the Plan is based on the following material terms:

- It has been prepared in accordance with applicable pension legislation and actuarial standards of practice in Canada.
- As instructed by the Company, the going concern discount rate reflects a margin for adverse deviations of 0.80% per year.
- We have reflected the Company's decisions for determining the solvency funding requirements, summarized as follows:
 - The same plan wind-up scenario was hypothesized for both hypothetical wind-up and solvency valuations.

- Although permissible, no benefits were excluded from the solvency liabilities.
- The solvency financial position was determined on a market value basis, adjusted in accordance with the regulations to the Pension Benefits Standards Act.

See the Valuation Results – Solvency section of the report for more information.

Events since the Last Valuation at December 31, 2020

Pension Plan

There have been no special events since the last valuation date.

This valuation reflects the provisions of the Plan as at December 31, 2021. The Plan has not been amended since the date of the previous valuation, and we are not aware of any pending definitive or virtually definitive amendments coming into effect during the period covered by this report. The Plan provisions are summarized in Appendix F.

Assumptions

We have used the same going concern valuation assumptions and methods as were used for the previous valuation.

A summary of the going concern methods and assumptions is provided in Appendix C.

The hypothetical wind-up and solvency assumptions have been updated to reflect market conditions at the valuation date. A summary of the hypothetical wind-up and solvency methods and assumptions is provided in Appendix D.

Regulatory Environment and Actuarial Standards

There have been no changes to the Act or the relevant regulations that impact the funding of the Plan.

OSFI has published a new *Instruction Guide for the Preparation of Actuarial Reports for Defined Benefit Pension Plans* (the "Guide") in November 2021. The revisions detailed in the Guide apply to actuarial valuations as at December 31, 2021 or after. The changes are reflected in this report.

Subsequent Events

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent to the valuation date that, in our opinion, would have a material impact on the results of the valuation as at December 31, 2021.

Since the valuation date, there have been significant fluctuations in the financial markets, including an increase in yields on fixed income and an increase in actual and expected short-term inflation, which may have led to a variation of the funded position of the Plan after the valuation date. Our valuation reflects the financial position of the Plan as of the valuation date and does not take into account any experience after the valuation date.

On September 14, 2021, the Actuarial Standards Board published a revised version of Section 3500 of the Standards of Practice on Pension Commuted Values effective from

February 1, 2022. The revised standards will affect implied rates of inflation used in the Standard and affirmed that the select and ultimate non-indexed rate cannot be less than zero. From the effective date, the revised standards will affect the assumptions used to value liabilities for benefits assumed to be settled through a lump sum transfer. There is no financial impact to the Plan related to these changes.

Impact of Case Law

This report has been prepared on the assumption that all claims on the Plan after the valuation date will be in respect of benefits payable to members of the Plan determined in accordance with the Plan terms and that all Plan assets are available to provide for these benefits. It is possible that court and regulatory decisions and changes in legislation could give rise to additional entitlements to benefits under the Plan and cause the results in this report to change. By way of example, we bring your attention to the following decisions:

- The Ontario Court of Appeal's 2003 decision in Aegon Canada Inc. and Transamerica
 Life Canada versus ING Canada Inc. restricted the use of original plan surplus where two
 or more pension plans were merged.
- The Supreme Court of Canada's 2004 decision in *Monsanto Canada Inc. versus* Superintendent of Financial Services upheld the requirement, with retroactive effect, to distribute surplus on partial plan wind-up under the *Pension Benefits Act (Ontario)*.

Although these decisions dealt with Ontario legislation, it is possible that they could have application to other provinces where the underlying language in the *Pension Benefits Act* (Ontario) is similar to language in the legislation of other provinces.

We are not in a position to assess the impact that such decisions or changes could have on the assumption that all plan assets on the valuation date are available to provide for benefits determined in accordance with the Plan terms. If such a claim arises subsequent to the date of this report, the consequences will be dealt with in a subsequent report. We are making no representation as to the likelihood of such a claim.

Valuation results – Going concern

Financial Status

A going concern valuation compares the relationship between the value of Plan assets and the present value of expected future benefit cash flows in respect of accrued service, assuming the Plan will be maintained indefinitely.

The results of the current valuation, compared with those from the previous valuation, are summarized as follows:

	31.12.2021	31.12.2020
Assets		
Market value of assets	\$34,411,000	\$31,770,000
Going concern funding target		
Active members	\$1,405,000	\$2,382,000
Pensioners and survivors	\$24,597,000	\$23,913,000
Deferred pensioners	\$12,000	\$92,000
Total	\$26,014,000	\$26,387,000
Funding excess (shortfall)	\$8,397,000	\$5,383,000

The going concern funding target includes a provision for adverse deviations.

Reconciliation of Financial Status

Funding excess (shortfall) as at previous valuation	\$5,382,000				
Interest on funding excess (shortfall) at 4.70% per year	\$253,000				
Expected funding excess (shortfall)	Expected funding excess (shortfall)				
Net experience gains (losses)					
Investment return	\$3,396,000				
• Indexation	(\$210,000)				
• Mortality	(\$167,000)				
• Retirement	(\$267,000)				
• Expenses	\$8,000				
Total experience gains (losses)		\$2,760,000			
Net impact of other elements of gains and losses	\$2,000				
Funding excess (shortfall) as at current valuation	\$8,397,000				

Current Service Cost

The current service cost is an estimate of the present value of the additional expected future benefit cash flows in respect of pensionable service that will accrue after the valuation date, assuming the Plan will be maintained indefinitely.

The Plan was frozen December 31, 1999 and effective January 1, 2000, pension benefits are earned under OMERS. Since additional benefits do not accrue under the Plan after that date, there is no current service cost for future benefits.

The current service cost during the year following the valuation date, compared with the corresponding value determined in the previous valuation, is as follows:

	2022	2021
Total current service cost excluding expense allowance	\$0	\$0
Expense allowance	\$100,000	\$100,000
Total estimated employer's current service cost	\$100,000	\$100,000

Discount Rate Sensitivity

The following table summarizes the effect on the going concern liabilities and current service cost shown in this report of using a discount rate that is 1% lower than that used in the valuation.

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Going concern funding liabilities	\$26,014,000	\$28,670,000

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Current service cost		
Total current service cost	\$100,000	\$100,000

Plausible Adverse Scenarios

The financial impact on the going concern results of plausible adverse scenarios that would pose threats to the Plan's future financial condition is presented in Appendix G.

Valuation results – Hypothetical wind-up

Financial Position

When conducting a hypothetical wind-up valuation, we determine the relationship between the respective values of the Plan's assets and its liabilities assuming the Plan is wound up and settled on the valuation date, assuming benefits are settled in accordance with the Act and under circumstances consistent with the hypothesized scenario on the valuation date. More details on such scenario are provided in Appendix D.

The hypothetical wind-up financial position as of the valuation date, compared with that at the previous valuation, is as follows:

	31.12.2021	31.12.2020
Assets		
Market value of assets	\$34,411,000	\$31,770,000
Face value of the letter of credit	\$4,890,000	\$4,890,000
Termination expense provision	(\$200,000)	(\$200,000)
Wind-up assets	\$39,101,000	\$36,460,000
Present value of accrued benefits for:		
Active members	\$2,611,000	\$4,588,000
 Pensioners and survivors 	\$34,047,000	\$33,503,000
Deferred pensioners	\$20,000	\$138,000
Total wind-up liability	\$36,678,000	\$38,229,000
Wind-up excess (shortfall) – including letter of credit	\$2,423,000	(\$1,769,000)
Wind-up excess (shortfall) – excluding letter of credit	(\$2,467,000)	(\$6,659,000)

Wind-up Incremental Cost

The wind-up incremental cost is an estimate of the present value of the projected change in the hypothetical wind-up liabilities from the valuation date until the next scheduled valuation date, adjusted for the benefit payments expected to be made in that period.

The hypothetical wind-up incremental cost determined in this valuation, compared with the corresponding value determined in the previous valuation, is as follows:

	31.12.2021	31.12.2020
Number of years covered by report	1 year	1 year
Total hypothetical wind-up liabilities at the valuation date (A)	\$36,678,000	\$38,229,000
Present value at the valuation date of projected hypothetical wind-up liability at the next required valuation plus expected benefit payments until the next required valuation (B)	\$36,554,000	\$38,122,000
Hypothetical wind-up incremental cost (B – A)	(\$124,000)	(\$107,000)

The incremental cost is not an appropriate measure of the contributions that would be required to maintain the windup position of the Plan even if actual experience is exactly in accordance with the going concern valuation assumptions. For example, the expected return on plan assets (based on the going concern assumptions) is greater than the discount rate used to determine the hypothetical wind-up liabilities.

Discount Rate Sensitivity

The following table summarizes the effect on the hypothetical wind-up liabilities shown in this report of using a discount rate that is 1% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%	
Total hypothetical wind-up liability	\$36,678,000	\$41,458,000	

Valuation results – Solvency

Overview

The Act also requires the financial position of the Plan to be determined on a solvency basis. The financial position on a solvency basis is determined in a similar manner to the Hypothetical Wind-up Basis, except for the following:

Exceptions	Reflected in valuation based on the terms of engagement
The circumstance under which the Plan is assumed to be wound up could differ for the solvency and hypothetical wind-up valuations.	The same circumstances were assumed for the solvency valuation as were assumed for the hypothetical wind-up valuation
The benefit rate increases coming into effect after the valuation date can be reflected in the solvency valuation.	Not applicable.

Under the Federal pension legislation, the minimum funding requirements on a solvency basis are based on an alternative solvency basis under which the solvency deficiency and the resulting solvency special payments are based on an average solvency ratio determined over three years (current year plus the previous two) subject to prescribed adjustments. The determination of the solvency deficiency on that basis is detailed in Appendix A. The unadjusted solvency deficiency at the current valuation is presented below.

Financial Position

The financial position on a solvency basis is the same as the financial position on the Hypothetical Wind-up basis shown in the previous section. The solvency ratio is 106.6%, compared to 95.4% at the previous valuation.

Minimum funding requirements

The Act prescribes the minimum contributions that the Transit Windsor must make to the Plan. The minimum contributions in respect of a defined benefit component of a pension plan are comprised of going concern current service cost and special payments to fund any going concern or solvency shortfalls.

There is a going concern excess and the solvency assets exceed 105% of the solvency liabilities. Under these circumstances, the Act does not require the employer to contribute to the Plan until after the lesser of the going concern excess, and the amount by which the solvency assets exceeds 105% of the solvency liabilities, has been applied towards the employer's current service cost. The determination of the amounts described above is shown in Appendix A.

Once such amount has been so applied, monthly employer current service cost contributions must resume. On the basis of the assumptions and methods described in this report, the rule for determining the minimum required employer monthly contributions, as well as an estimate of the employer contributions, from the valuation date until the next required valuation are as follows:

	Employer's contribution rule		Estimated employer's contributions		
Period beginning	Explicit monthly expense allowance	Minimum monthly special payments	Monthly expense allowance	Amount which can be used to reduce current service contribution ²	Minimum monthly contributions
January 1, 2022	\$8,333	\$0	\$8,333	\$8,333	0

The development of the minimum special payments is summarized in Appendix A.

Other Considerations

Differences between Valuation Bases

There is no provision in the minimum funding requirements to fund the difference between the hypothetical wind-up and solvency shortfalls, if any.

In addition, although minimum funding requirements do include a requirement to fund the going concern current service cost, there is no requirement to fund the expected growth in the hypothetical wind-up or solvency liability after the valuation date, which could be greater than the going concern current service cost.

11

² Notwithstanding the funding excess in the Plan, the terms of the Plan or collective agreement may require the Company to make current service cost contributions

Timing of Contributions

Required contributions must be remitted monthly, not later than 30 days after the end of the period to which they apply. Outstanding contributions will accrue with interest.

Retroactive Contributions

The Company must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following the valuation date. This contribution, along with an allowance for interest, is due immediately following the date this report is filed.

Any over-contributions made prior to filing this report may be used to reduce the contributions otherwise required to be made following the filing of this report.

Payment of Benefits

The Act imposes certain restrictions on the payment of lump sums from the Plan when the solvency ratio revealed in an actuarial valuation is less than one.

The Directives of the Superintendent provide that the amount of the initial transfer cannot exceed the "transfer value" (i.e. the commuted value of the pension benefit multiplied by the plan's "transfer ratio"), where the transfer ratio is the solvency ratio determined in the most recent actuarial report of the plan.

Where the plan's transfer ratio is less than one, the full commuted value can be transferred, subject to prescribed conditions:

- the plan administrator remits to the fund the amount by which the commuted value exceeds the transfer value (i.e. the "transfer deficiency"), or
- the transfer deficiency for any individual transfer is less than 20% of the Year's Maximum Pensionable Earnings for that year, provided that the sum of all individual commuted values transferred on this basis since the valuation date of the most recent actuarial report does not exceed 5% of the assets of the plan at that valuation date.

Where the full amount of the commuted value is not transferred, the transfer deficiency must be transferred on the earlier of five years from the date the commuted value of the pension benefit was calculated; and the date on which the solvency ratio of the plan is determined to be at least 1.00.

The administrator must comply with the prescribed requirements applicable to the payment of lump sums from the Plan, including the applicable Directives of the Superintendent in relation to portability transfers and annuity purchases.

Letters of Credit

Minimum funding requirements in respect of solvency deficiencies that otherwise require monthly contributions to the pension fund may be met, in the alternative, by establishing an irrevocable letter of credit subject to the conditions established by the Act. Required solvency special payments in excess of those met by a letter of credit must be met by monthly contributions to the pension fund.

Maximum eligible contributions

The *Income Tax Act* (the "ITA") limits the amount of employer contributions that can be remitted to the defined benefit component of a registered pension plan.

In accordance with Section 147.2 of the ITA and *Income Tax Regulation* 8516, for a plan that is underfunded on either a going concern or on a hypothetical wind-up basis, the maximum permitted contributions are equal to the employer's current service cost, including the explicit expense allowance if applicable, plus the greater of the going concern funding shortfall and hypothetical wind-up shortfall.

For a plan that is fully funded on both going concern and hypothetical wind-up bases, the employer can remit a contribution equal to the employer's current service cost, including the explicit expense allowance if applicable, as long as the surplus in the plan does not exceed a prescribed threshold. Specifically, in accordance with Section 147.2 of the ITA, for a plan that is fully funded on both going concern and hypothetical wind-up bases, the plan may not retain its registered status if the employer makes a contribution while the going concern funding excess exceeds 25% of the going concern funding target.

Notwithstanding the above, any contributions that are required to be made in accordance with pension benefits legislation are eligible contributions in accordance with Section 147.2 of the ITA and can be remitted.

Schedule of Maximum Contributions

The Company is permitted to fully fund the greater of the going concern and hypothetical wind-up shortfalls determined without the letter of credit (\$2,467,000), as well as make current service cost contributions. The portion of this contribution representing the payment of the hypothetical wind-up shortfall can be increased with interest at 2.86% per year from the valuation date to the date the payment is made, and must be reduced by the amount of any deficit funding made from the valuation date to the date the payment is made.

Assuming the Company contributes the greater of the going concern and the hypothetical wind-up shortfall determined without the letter of credit of \$(2,467,000) as of the valuation date, the rule for determining the estimated maximum eligible annual contributions, as well as an estimate of the maximum eligible contributions until the next valuation, are as follows:

	Employer's contribution rule		Estimated employ	er's contributions
Year beginning	Monthly current service cost	Monthly expense allowance	Deficit Funding	Monthly current service cost including expense allowance
2022	\$0	\$8,333	N/A	\$8,333

Actuarial opinion

In my opinion, for the purposes of the valuations,

- The membership data on which the valuation is based are sufficient and reliable.
- The assumptions are appropriate.
- The methods employed in the valuation are appropriate.

This report has been prepared, and my opinion given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the Pension benefit Standard Act.

Chad Spence

Fellow of the Canadian Institute of Actuaries Fellow of the Society of Actuaries

June 28, 2022

Date

Appendix A

Prescribed disclosure

Definitions

The Act defines a number of terms as follows:

Defined Term	Description	Result
Going concern excess (deficit)	Amount by which the going concern assets exceed (are below) the going concern liabilities	\$8,397,000
Unfunded liability	The amount by which the going concern deficit of a plan determined at the valuation date exceeds the present value of going concern special payments of the plan established in respect of periods after the valuation date	\$0
Going concern provision for	Present value of expected future passive investment management expenses	
expenses	 Included in funding target (liabilities) 	\$524,000
	Included in current service cost	\$0
	Present value of expected future administration expenses	
	 Included in funding target (liabilities) 	\$0
	Included in current service cost	\$100,000
Going concern	Present value of margin for adverse deviations	
margin for adverse	Included in funding target (liabilities)	\$1,827,000
deviations	Included in current service cost	\$0
Going concern special payment	A special payment made in respect of an unfunded liability	\$0
Solvency Liabilities	Liabilities that relate to defined benefit provisions and which are determined on the basis that the plan is terminated	\$36,678,000
Solvency Assets	Market value of the assets that relate to the defined benefit provisions of a plan minus the estimated expense of the winding-up of the plan	\$39,101,000
Solvency Ratio	Ratio of the solvency assets to the solvency liabilities, excluding those solvency assets and solvency liabilities that are attributable to benefits that are paid by means of an annuity, other than a revocable annuity, or an insurance contract	106.6%

Defined Term	Description	Result
Average Solvency Ratio	Arithmetic average of the solvency ratios at the valuation date, the prior valuation date and the prior second valuation date adjusted as prescribed for special payments, contribution holidays, amendments and transfer of assets	102.4%
Adjusted Solvency Asset Amount	Amount determined by multiplying the average solvency ratio by the amount of the solvency liabilities	\$37,573,000
Solvency excess (deficiency)	Amount by which the adjusted solvency asset amount exceeds (is below) the solvency liabilities	\$895,000
Solvency special payment	A special payment made in respect of a solvency deficiency	\$0

Timing of Next Required Valuation

In accordance with the Act and the Superintendent's Directives, an actuarial report must be prepared annually except where the solvency ratio disclosed in the most recent actuarial report filed under subsection 12(3) of the Act was 1.20 or greater.

Accordingly, the next valuation of the Plan will be required as of December 31, 2022.

Special Payments

Going Concern Basis

No special payments are required.

Solvency Basis

In accordance with the Act and regulations, the solvency excess (deficiency) is defined as the amount by which the adjusted solvency asset amount exceeds (is below) the solvency liabilities. For this purpose, the adjusted solvency asset amount is determined by multiplying the average solvency ratio by the amount of the solvency liabilities. The average solvency ratio, adjusted solvency asset amount and solvency excess (deficiency) are determined as follows:

Determination of Average Solvency Ratio

	31.12.2019	31.12.2020	31.12.2021
Solvency assets			
Market value of assets	\$34,778,000	\$31,770,000	\$34,411,000
Termination expense provision	(\$200,000)	(\$200,000)	(\$200,000)
Solvency assets (A)	\$34,578,000	\$31,570,000	\$34,211,000
Present value of special payments made (contribution holiday) (B)	\$0	\$0	\$0
Letter of Credit (C)	\$4,890,000	\$4,890,000	\$4,890,000
Solvency assets adjusted for special payments (contribution holiday) and letter of credit (D = A + B + C)	\$39,468,000	\$36,460,000	\$39,101,000
Solvency liabilities (E)	\$37,466,000	\$38,229,000	\$36,678,000
Adjusted solvency ratio (D / E)	105.3%	95.4%	106.6%
Average solvency ratio (F)			102.4%

Calculation of adjusted solvency asset amount and solvency excess (deficiency)

	31.12.2021	31.12.2020
Average solvency ratio (F)	102.44%	100.89%
Solvency liabilities (E)	\$36,678,000	\$38,229,000
Adjusted solvency asset amount (E x F)	\$37,573,000	\$38,569,000
Solvency excess (deficiency)	\$895,000	\$340,000

Since there is a solvency excess at December 31, 2021, no solvency special payment is required.

Determination of Amount which Can Be Used to Reduce Current Service Contribution

The Act does not require the employer to contribute to the Plan until after the lesser of the going concern excess, and the amount by which the solvency assets exceed 105% of the solvency liabilities, has been applied towards the employer's current service cost. The determination of such amounts is as follows:

	31.12.2021
Going concern excess (A)	\$8,397,000
Solvency assets (B)	\$39,101,000
Solvency liabilities × 1.05 (C)	\$38,511,900
Maximum amount which can be used to reduce Current Service Contribution = Min (A, $B-C$), not less than \$0	\$589,100

Notwithstanding this calculation, the terms of the Plan or collective agreement may require the Company to make current service cost contributions.

Letter of Credit

The Company has secured letters of credit in the amount of \$4,890,005 as at January 1, 2021. From this amount, a cumulative total of \$4,890,005 has been applied in respect of a portion of the minimum required solvency special payments due over the period beginning January 1, 2011 and ending December 31, 2021. As such, there is no remaining face amount that can be applied in respect of future years' special payments.

In accordance with the Act, a plan sponsor may use a letter of credit to fund solvency special payments, up to 15% of solvency liabilities. Accordingly, the maximum face value of the aggregate of all letters of credit secured in lieu of making solvency deficiency payments to the Plan may not exceed \$5,501,700 (15% x \$36,678,000) as at December 31, 2021.

Appendix B Plan assets

The pension fund is held by Sun Life Financial. In preparing this report, we have relied upon fund statements prepared by Sun Life Financial without further audit. Customarily, this information would not be verified by a plan's actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy.

Reconciliation of Market Value of Plan Assets

The pension fund transactions since the last valuation are summarized in the following table:

	2021
December 31	\$31,770,000
PLUS	
Company's contributions	\$92,000
Investment earnings	\$5,032,000
	\$5,124,000
LESS	
Pensions paid	\$2,085,000
Administration fees	\$123,000
Investment management fees	\$283,000
	\$2,491,000
December 31	\$34,403,000
Gross rate of return ³	16.46%
Rate of return net of expenses ⁴	15.46%

The market value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Market value of invested assets	\$34,403,000	\$31,770,000
In-transit amounts		
Company's contributions	\$8,000	\$0
Adjusted market value of assets	\$34,411,000	\$31,770,000

³ Assuming mid-period cash flows.

⁴ Assuming mid-period cash flows.

We have tested the pensions paid, the lump sums paid, and the contributions for consistency with the membership data for the Plan members who have received benefits or made contributions. The results of these tests were satisfactory.

Investment Policy

The plan administrator has adopted a statement of investment policy and procedures. This policy is intended to provide guidelines for the manager(s) as to the level of risk that is consistent with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The plan administrator is solely responsible for selecting the Plan's investment policies, asset allocations, and individual investments.

The constraints on the asset mix and the actual asset mix at the valuation date are provided for information purposes:

	Investment Policy Target	Actual asset Mix as at December 31, 2021
Public equity	30.0%	15.0%
Bonds	30.0%	16.8%
Private equity	15.0%	20.4%
Infrastructure	22.5%	23.8%
Real Estate	22.5%	19.0%
Cash and economic leverage	(20.0%)	5.0%
	100%	100%

Because the Plan's assets (which are invested in accordance with the above investment policy) are not matched to the Plan's liabilities (which tend to behave like long bonds), the Plan's financial position will fluctuate over time. These fluctuations could be significant and could cause the Plan to become underfunded or overfunded even if the Company contributes to the Plan based on the funding requirements presented in this report.

Appendix C

Methods and assumptions – Going concern

Valuation of Assets

For this valuation, we have used the market value of assets adjusted for in-transit amounts.

Going Concern Funding Target

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions, if any, and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going concern valuation, we have continued to use the unit credit actuarial cost method. Under this method, we determine the present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date. This is referred to as the funding target. For each individual plan member, accumulated contributions with interest are established as a minimum actuarial liability.

The funding excess or funding shortfall, as the case may be, is the difference between the market or smoothed value of assets and the funding target. A funding excess on a market value basis indicates that the current market value of assets and expected investment earnings are expected to be sufficient to meet the cash flows in respect of benefits accrued to the valuation date as well as expected expenses – assuming the plan is maintained indefinitely. A funding shortfall on a market value basis indicates the opposite – that the current market value of the assets is not expected to be sufficient to meet the plan's cash flow requirements in respect of accrued benefits, absent additional contributions.

As required under the Act, a funding shortfall must be amortized over no more than 15 years through special payments. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

The actuarial cost method used for the purposes of this valuation produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial cost method provides an effective funding target for a plan that is maintained indefinitely.

Current Service Cost

No employer current service cost is required, as effective December 31, 1999 the plan was frozen. Pension benefits for service after January 1, 2000 are provided under OMERS.

Actuarial Assumptions – Going Concern Basis

The present value of future benefit payment cash flows is based on economic and demographic assumptions. At each valuation we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The table below shows the various assumptions used in the current valuation in comparison with those used in the previous valuation.

Assumption	Current valuation	Previous valuation
Discount rate:	4.70%	4.70%
Explicit expenses:	\$100,000	\$100,000
Inflation:	2.00%	2.00%
ITA limit / YMPE increases:	3.00%	3.00%
Pensionable earnings increases:	N/A	N/A
Post-retirement pension increases (for benefits indexed at 75% x CPI less 1%):	0.50%	0.50%
Post-retirement pension increases (for benefits indexed at 75% x CPI less 2%):	0.00%	0.00%
Retirement rates:	Age-related table	Age-related table
Termination rates:	Age-related table	None
Mortality rates:	100% of the rates of the 2014 Private Sector Canadian Pensioners Mortality Table (CPM2014Priv)	100% of the rates of the 2014 Private Sector Canadian Pensioners Mortality Table (CPM2014Priv)
Mortality improvements:	Fully generational using CPM Improvement Scale B (CPM-B)	Fully generational using CPM Improvement Scale B (CPM-B)
Disability rates:	None	None
Eligible spouse at retirement:	80%	80%
Spousal age difference:	Male 3 years older	Male 3 years older

The assumptions are best estimate with the exception that the discount rate includes a margin for adverse deviations, as shown below.

Age and Service Related Tables

Members are assumed to retire in accordance with the following rates:

- 50% of members retire at the later of age 55 and 30 years of continuous service
- 10% of remaining members retire each year thereafter
- 100% of remaining members retire at age 65

Rationale for Assumptions

A rationale for each of the assumptions used in the current valuation is provided below.

Discount Rate

We have discounted the expected benefit payment cash flows using the expected investment return on the market value of the fund net of fees and less a margin for adverse deviations.

The discount rate is comprised of the following:

- An <u>assumed investment return</u> based on estimated returns for each major asset class that are
 consistent with market conditions on the valuation date on the expected time horizon over which
 benefits are expected to be paid, and on the target asset mix specified in the Plan's investment
 policy, subject to the 5.75% limit established in OSFI guidance. Consistent with market
 observable and available data, the assumed investment return is a gross return for all assets.
- An <u>active investment management expense provision</u> of 20 bps. We have assumed that these fees would be offset by an equivalent additional return resulting from active investment management.
- An <u>assumed passive investment management expense provision</u> which represents the hypothetical fees for passive investment management of assets, based on estimated fees charged by index managers for balanced mandates.
- A <u>margin for adverse deviations</u> of 0.80% as per the terms of engagement.

The discount rate was developed as follows:

Assumed investment return	5.75%
Additional returns for active investment management	0.20%
Active investment management expense provision	(0.20%)
Assumed passive investment management expense provision	(0.25%)
Margin for adverse deviations	(0.80%)
Net discount rate	4.70%

Explicit Expenses

The assumption is based on the average amount of non-investment expenses over the last 3 years.

Inflation

The inflation assumption is based on the mid-point of the Bank of Canada's inflation target range of between 1% and 3%.

Income Tax Act Pension Limit and Year's Maximum Pensionable Earnings

The assumption is based on historical real economic growth and the underlying inflation assumption.

Post-Retirement Pension Increases

The assumption is based on the Plan formula and inflation assumption above.

Retirement Rates

Due to the size of the Plan, there is no meaningful retirement experience. The assumption is based on the Plan provisions and our experience with similar plans and employee groups.

Termination Rates

Use of a different assumption would not have a material impact on the valuation

Mortality Rates

The assumption for the mortality rates is based on the Canadian Pensioners' Mortality (CPM) study published by the Canadian Institute of Actuaries in February 2014.

Due to the size of the Plan, specific data on plan mortality experience is insufficient to determine the mortality rates. It was determined to use the CPM mortality rates from the private sector without adjustment after considering plan-specific characteristics, such as the type of employment, the industry experience, the pension and employment income for the plan members, and data in the CPM study.

There is broad consensus among actuaries and other longevity experts that mortality improvement will continue in the future, but the degree of future mortality improvement is uncertain. Two mortality improvement scales were recently published by the Canadian Institute of Actuaries (CIA) and may apply to Canadian pension valuations:

- The Canadian Pensioners Mortality (CPM) study published in February 2014 included CPM Improvement Scale B (CPM-B).
- A report released by the Task Force on Mortality Improvement on September 20, 2017 includes an analysis of the rate of mortality improvement for the Canadian population

Mortality Rates

and provides for mortality improvement scale MI-2017 to be considered for the purpose of reflecting future mortality improvement in Canadian actuarial work, while acknowledging that it might be appropriate to use alternative mortality improvement assumptions to reflect the nature of the work.

The CIA Committee on Pension Plan Financial Reporting published a revised version of the Educational Note on the Selection of Mortality Assumptions for Pension Plan Valuations on December 21, 2017. The Educational Note indicates that given the publication of the CPM-B and MI-2017 improvement scales and the similar data sets used in their development, it may be appropriate to use either scale in the absence of credible information to the contrary, such as the publication of a successor scale by the CIA.

COVID-19 has impacted mortality rates globally. Statistics Canada reported excess mortality in 2020 and 2021 for the general Canadian population and other peer countries globally have also seen excess mortality over the course of the pandemic. Mortality experience for the plan has been reflected up to the date of the valuation. We have not adjusted the expected mortality rates for Plan members after the valuation date. The long-term implications of the pandemic on mortality rates is unclear as at the date of this report. Credible plan specific experience and relevant broader observed mortality trends after the report date will be reflected in future valuations.

For the current valuation, we have continued to use the CPM-B scale, which is a reasonable outlook for future mortality improvement.

Based on the assumption used, the life expectancy of a member age 65 at the valuation date is 21.9 years for males and 24.3 years for females.

Disability Rates

Use of a different assumption would not have a material impact on the valuation.

Eligible Spouse

The assumption is based on an industry standard for non-retired members (actual status used for retirees).

Spousal Age Difference

The assumption is based on an industry standard showing males are typically 3 years older than their spouse.

Appendix D

Methods and assumptions – Hypothetical wind-up and solvency

Hypothetical Wind-up Basis

The Canadian Institute of Actuaries requires actuaries to report the financial position of a pension plan on the assumption that the plan is wound up on the effective date of the valuation, with benefits determined on the assumption that the pension plan has neither a surplus nor a deficit.

To determine the actuarial liability on the hypothetical wind-up basis, we have valued those benefits that would have been paid had the Plan been wound up on the valuation date, with all members fully vested in their accrued benefits.

The Standards of Practice of the Canadian Institute of Actuaries require that the scenario upon which the hypothetical wind-up valuation is based be postulated. OSFI expects this scenario to be based on a reasonable expectation of the most likely situation that would lead to the plan terminating at the valuation date or, if all such scenarios are equally unlikely, on the scenario with the highest liabilities. The circumstances in which the Plan wind-up is assumed to have taken place are as follows:

- The employer's business is discontinued on the valuation date
- The employer's business continues its operation.

It should be noted, however, that there are no benefits under the plan contingent upon the circumstances of the plan wind-up or contingent upon other factors. The postulated scenario has no impact on the benefits payable. No benefits payable on plan wind-up were excluded from our calculations. The plan wind-up is assumed to occur in circumstances that maximize the actuarial liability.

Upon plan wind-up, members are given options for the method of settling their benefit entitlements. The options vary by eligibility and by province of employment, but in general, involve either a lump sum transfer or an immediate or deferred pension.

The value of benefits assumed to be settled through a lump sum transfer is based on the assumptions described in Section 3500 – *Pension Commuted Values* of the Canadian Institute of Actuaries' Standards of Practice applicable for December 31, 2021.

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of purchasing annuities.

However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. In accordance with the *Canadian Institute* of

Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates on and after December 31, 2021 and no later December 30, 2022 (the "Educational Note"), we have assumed that an appropriate proxy for estimating the cost of such purchase is using the yield on the long-term Government of Canada Real Return bonds, reduced by 0.4%.

The Educational Note provides guidance on estimating the cost of annuity purchases assuming a typical group of annuitants. That is, no adjustments for sub- or super-standard mortality are considered. However, it is expected that insurers will consider plan experience and certain plan-specific characteristics when determining the mortality basis for a particular group. The Educational Note states that the actuary would be expected to make an adjustment to the regular annuity purchase assumptions where there is demonstrated substandard or super-standard mortality or where an insurer might be expected to assume so. In such cases, the actuary would be expected to make an adjustment to the mortality assumption in a manner consistent with the underlying annuity purchase basis. Given the uncertainty surrounding the actual mortality basis that would be typical of a group annuity purchase, it is reasonable to assume that there is a range of bases that can be expected not to be materially different from the actual mortality basis. Therefore, an adjustment to the regular annuity purchase assumptions would be warranted when the plan's assumed basis falls outside that range.

In this context, we have determined that no adjustment to the mortality rates used in the regular annuity purchase assumptions is required.

We have not included a margin for adverse deviations in the solvency and hypothetical windup valuations.

The assumptions are as follows:

Form of Benefit Settlement Elected by Member			
Lump sum:	70% of non-pensioners under age 55 and with less than 30 years of service		
Annuity purchase:	All remaining members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension.		
Basis for Benefits Assu	med to be Settled through a Lump Sum		
Mortality rates:	100% of the rates of the 2014 Canadian Pensioners Mortality Table (CPM2014) with fully generational improvements using CPM Scale B		
Interest rate:	2.30% per year for 10 years, 3.40% per year thereafter		
Indexation rate for benefits indexed at 75% of CPI less 2%:	0.00%		
Indexation rate for benefits indexed at 75% of CPI less 1%:	0.13%		
Basis for Benefits Assu	med to be Settled through the Purchase of an Annuity		
Mortality rates:	100% of the rates of the 2014 Canadian Pensioners Mortality Table (CPM2014) with fully generational improvements using CPM Scale B		
Adjustment to mortality rates:	No adjustment		
Interest rate:	2.86% per year based on a duration of 11.53 years determined for the liabilities assumed to be settled through the purchase of an annuity.		
Indexation rate for benefits indexed at 75% of CPI less 2%:	0.75% per year		
Indexation rate for benefits indexed at 75% of CPI less 1%:	1.75% per year		
Retirement Age			
Maximum value:	Members are assumed to retire with a 50% probability at the age that maximizes the value of their entitlement from the Plan and a 50% probability at the member's earliest unreduced age in accordance with applicable legislation and based on the eligibility requirements that have been met at the valuation date		

Final average earnings:

Same as for going concern valuation Family composition:

Termination expenses: \$200,000

To determine the hypothetical wind-up position of the Plan, a provision has been made for estimated termination expenses payable from the Plan's assets in respect of actuarial and administration expenses that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

In addition, termination expenses also include a provision for transaction fees related to the liquidation of the Plan's assets and for expenses that may reasonably be expected to be paid by the pension fund under the postulated scenario between the wind-up date and the settlement date. It was assumed for this purpose that the termination process would extend over a two-year period.

Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

In determining the provision for termination expenses payable from the Plan's assets, we have assumed that the plan sponsor would not be solvent on the wind-up date. We have also assumed, without analysis, that the Plan's terms as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the Plan.

Although the termination expense assumption is a best estimate, actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.

Incremental Cost

In order to determine the incremental cost, we estimate the hypothetical wind-up liabilities at the next valuation date. We have assumed that the cost of settling benefits by way of a lump sum or purchasing annuities remains consistent with the assumptions described above. Since the projected hypothetical wind-up liabilities will depend on the membership in the Plan at the next valuation date, we must make assumptions about how the Plan membership will evolve over the period until the next valuation.

We have assumed that the Plan membership will evolve in a manner consistent with the going concern assumptions as follows:

- Members terminate, retire, and die consistent with the termination, retirement, and mortality rates used for the going concern valuation.
- The Income Tax Act pension limit, and the Year's Maximum Pensionable Earnings increase in accordance with the related going concern assumptions.

Solvency Basis

In determining the financial position of the Plan on the solvency basis, we have used the same assumptions and methodology as were used for determining the financial position of the Plan on the hypothetical wind-up basis.

The solvency position is determined in accordance with the requirements of the Act.

Appendix E Membership data

Analysis of Membership Data

The actuarial valuation is based on membership data as at December 31, 2021, provided by Transit Windsor.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, pensionable service, contributions accumulated with interest, and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments, and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

If the data supplied are not sufficient and reliable for its intended purpose, the results of our calculation may differ significantly from the results that would be obtained with such data. Although Mercer has reviewed the suitability of the data for its intended use in accordance with accepted actuarial practice in Canada, Mercer has not verified or audited any of the data or information provided.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

	31.12.2021	31.12.2020	
Active Members			
Number	26	37	
Proportion of males	69.2%	64.9%	
Total annual frozen pension	\$99,644	\$167,971	
Average annual frozen pension	\$3,832	\$4,540	
Average years of pensionable service	5.6	6.5	
Average age	57.6	57.1	
Accumulated contributions with interest	\$344,478	\$584,190	
Deferred Pensioners			
Number	1	3	
Proportion of males	0%	0%	
Total annual pension	\$897	\$6,223	
Average annual pension	\$897	\$2,074	
Average age	62.4	62.4	
Pensioners and Survivors			
Number	204	200	
Proportion of males	73.0%	73.0%	
Total annual lifetime pension	\$1,944,414	\$1,904,915	
Average annual lifetime pension	\$9,531	\$9,525	
Average age	72.8	72.7	
Supplemental Pension			
Number	43	45	
Proportion of males	93.0%	97.8%	
Total annual pension	\$141,547	\$153,732	
Average annual pension	\$3,292	\$3,416	
Average age	61.8	62.1	
Special Additional Supplemental Pension			
Number	7	9	
Proportion of males	100%	100%	
Total annual pension	\$13,190	\$17,122	
Average annual pension	\$1,884	\$1,902	
Average age	58.0	58.6	

	31.12.2021	31.12.2020	
Annuity certain only			
Number	4	N/A	
Proportion of males	75%	N/A	
Total annual pension	\$15,690	N/A	
Average annual pension	\$3,923	N/A	
Average remaining guarantee period	8.9	N/A	

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

	Actives	Deferred Pensioners	Pensioners and survivors	Annuity Certain Remaining Only	Total
Total at 31.12.2020	37	3	200	0	240
New entrants					0
Terminations:					
 Not vested 					0
 Transfers/lump sums 	(2)	(1)			(3)
Deferred pensions					0
Deaths	(1)		(11)	4	(8)
Retirements	(8)	(1)	9		0
Beneficiaries			6		6
Total at 31.12.2021	26	1	204	4	235

The distribution of the active members by age and continuous service as at the valuation date is summarized as follows:

	Years of Continuous Service							
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
Under 35								
35 to 39								
40 to 44						1		1
						N/A		N/A
45 to 49								
50 to 54					5		1	6
					\$1,139		N/A	\$1,487
55 to 59					3	1	5	9
					\$1,319	N/A	\$6,947	\$4,569
60 to 64					3	1	6	10
					\$604	N/A	\$7,137	\$4,804
65 +								
Total					11	3	12	26
					\$1,042	\$2,465	\$6,732	\$3,832

The distribution of the inactive members by age as at the valuation date is summarized as follows:

	Pensioners ar	nd Survivors	Supplementa	ary Pension	Special Additional Supplemental Pension		
Age	Number	Average Pension	Number	Average Pension	Number	Average Pension	
< 50							
50 – 54							
55 – 59	7	7,805	7	2,710	7	1,884	
60 – 64	38	9,104	36	3,405			
65 – 69	45	9,778					
70 – 74	40	10,288					
75 – 79	22	10,192					
80 – 84	26	10,594					
85 – 89	16	8,903					
90 – 94	8	5,341					
95 – 99	1	N/A					
100 +	1	N/A					
Total	204	9,531	43	3,292	7	1,884	

Appendix F

Summary of plan provisions

Mercer has used and relied on the plan documents, including amendments and interpretations of plan provisions, supplied by Transit Windsor. If any plan provisions supplied are not accurate and complete, the results of any calculation may differ significantly from the results that would be obtained with accurate and complete information. Moreover, plan documents may be susceptible to different interpretations, each of which could be reasonable, and the results of estimates under each of the different interpretations could vary.

This valuation is based on the plan provisions in effect on December 31, 2021. Since the previous valuation, the Plan has not been amended.

The following is a summary of the main provisions of the Plan in effect on December 31, 2021. This summary is not intended as a complete description of the Plan.

Background	The Plan became	effective December 4, 1964.

Benefits are based on a set formula and are entirely paid for by the

Company.

The Plan was frozen for future service accruals effective December 31, 1999. Pension benefits for service after January 1, 2000 are

earned under the OMERS pension plan.

Eligibility for Membership

Participation in the plan was automatic for all employees who were members of Division 616 of the Amalgamated Transit Union and all employees in a clerical, secretarial or supervisory position within the Company. Full time employees became members on the first day of work at a probationary rate of pay. Part time employees became members when they satisfied the minimum legislated requirements for eligibility.

No new members are permitted to join the plan on and after January 1, 2000.

Employee Contributions

Prior to July 1, 1995:

- 5.0% of Annual Plan Compensation less 1.8% or the applicable CPP contribution percentage of the portion of such Annual Plan Compensation on which CPP contributions are determined July 1, 1995 to January 1,1998
- 5.0% of Annual Plan Compensation less the required CPP contributions (determined on the basis CPP contributions rules in 1995)

January 1, 1998 to January 1, 2000

4.0% of Annual Plan Compensation

On and after January 1, 2000

• No member contributions to the Plan are required or permitted Member contributions are subject to limits imposed by the Income Tax Act (Canada). Interest on employee contributions is credited based on rates of return declared by the Company up to December 31, 1987 and for each Plan year commencing January 1, 1988, using a rate equal to the average of the month end yields reported for CANSIM Series V122515 for the immediately preceding plan year. Voluntary member contributions are not permitted.

Retirement Dates

Normal Retirement Date

• The normal retirement date is the first day of the month coincident with or next following the member's 65th birthday.

Early Retirement Date

 If a member has been in the Plan for at least two years, the member may choose to retire as early as age 55.

Normal Retirement Pension

a. In respect of service prior to May 3, 1971, the amount shown opposite the member's name in Schedule A of the Plan

PLUS

b. In respect of service from May 3, 1971 to June 30, 1995, 50% of aggregate member contributions made during the period

PLUS

c. In respect of service from January 1, 1987 to June 30, 1995, 50% of additional member contributions that are deemed to have been made during that period if the CPP offset applicable to the member's contribution formula remained at 1.8%

PLUS

d. In respect of service from July 1, 1995 to February 28, 1997, for each year 1.25% of the first \$10,000 of Annual Plan Compensation plus 1.50% of the next \$25,000 plus 2.00% of any excess

PLUS

e. In respect of service from March 1, 1997 to December 31, 1997, for each year 1.20% of the first \$35,000 of Annual Plan Compensation plus 2.00% of any excess

PLUS

f. In respect of service from January 1, 1988 to December 31, 1999, for each year 2.00% of Annual Plan Compensation

Effective January 1, 1998 the plan was amended to upgrade benefits earned in the period from January 1, 1992 to December 31, 1997 under paragraphs b, c, d and e above using 1997 Annual Plan Compensation.

Early Retirement Pension

If a member retires early, the member will be entitled to a pension that is calculated the same way as for a normal retirement. The basic pension payable, however, will be reduced depending on the particular early retirement provision of the Plan under which the member retired.

"30 and Out"

A member who has completed at least 30 years of continuous service on his early retirement date will receive the following benefits, unreduced:

- Basic Pension: a monthly pension commencing on his early retirement date equal to the member's accrued monthly lifetime pension
- Supplemental Pension: a monthly pension commencing on his early retirement date equal to \$20 multiplied by his pensionable service (maximum of 30 years of pensionable service). The supplemental pension is payable until the earlier of the member's death or normal retirement date.
- Special Additional Supplemental Pension: a monthly pension commencing on his early retirement date equal to \$40 multiplied by his pensionable service earned after January 1, 1996. The special additional supplemental pension is payable until the earlier of the member's death or age 60.
- Only the basic pension is subject to the indexing increases described below.

"55 and 10"

 A member who has attained age 55 and completed at least 10 years of continuous service on his early retirement date will receive the following benefits, reduced in accordance with the following table:

Age at Pension Commencement	Early Retirement Factor
65	1.00
64	0.94
63	0.88
62	0.82
61	0.76
60	0.70
59	0.66
58	0.62
57	0.58
56	0.54
55	0.50

Early Retirement Pension Continued

- Basic Pension: a monthly pension commencing on his early retirement date equal to the member's accrued monthly lifetime pension, multiplied by the applicable early retirement factor.
- Supplemental Pension: a monthly pension commencing on his early retirement date equal to \$20 multiplied by his pensionable service (maximum of 30 years of pensionable service), multiplied by the applicable early retirement factor. The supplemental pension is payable until the earlier of the member's death or normal retirement date.
- Special Additional Supplemental Pension: a monthly pension commencing on his early retirement date equal to \$40 multiplied by his pensionable service earned after January 1, 1996, multiplied by the applicable early retirement factor.
 The special additional supplemental pension is payable until the earlier of the member's death or age 60.
- Only the basic pension is subject to the indexing increases described below.

"55 and 2"

A member who has attained age 55 and completed at least 2 years of continuous service on his early retirement date will receive a basic pension commencing his early retirement date equal to the member's accrued monthly lifetime pension, actuarially reduced.

The basic pension is subject to the indexing increases described below.

Indexation of Pension Benefits

Pension benefits payable under the Plan are indexed to increases in the CPI as follows:

For employees who retired prior to January 1, 1989:

pension benefits indexed annually at 75%xCPI – 2%

For employees who retire on or after January 1, 1989

- pension benefits accrued for service prior to January 1, 1987 are indexed annually at 75%xCPI – 2%
- pension benefits accrued for service on or after January 1, 1987 are indexed annually at 75%xCPI – 1%
- Benefits are indexed starting from the date of vested termination or from the date of retirement. Any indexation increases are implemented as of April 1 of each year.

Disability Benefits and Retirement

If a member became totally and permanently disabled as defined in the Plan before December 31, 1999 and is in receipt of disability income benefits under the Disability Income Plan of the Company, he will continue to accrue benefits under this Plan up to December 31, 1999 using the earnings related formula in effect at the date the member became disabled, with the level of earnings at that time.

If a member became totally and permanently disabled before March 31, 1998 (or, if the member has 10 or more years of continuous service and became totally and permanently disabled on or after March 31, 1998 and prior to December 31, 1999) and subsequently recovers from his disability to the extent that he no longer qualifies for benefits under the Disability Income Plan, but is still unable to return to work with the Company, he may retire early under the Plan. If the member has not attained age 55, the applicable early retirement reduction factor will be the tabular factor in the Plan assuming the member is age 55. No supplemental benefit is payable where early disability retirement occurs prior to the earlier of age 55 or 30 years of continuous service.

Maximum Pension

The total annual pension payable from the Plan upon retirement, death or termination of employment cannot exceed the lesser of:

2% of the average of the best three consecutive years of total compensation paid to the member by the Company, multiplied by total pensionable service; and

\$3,245.56 or such other maximum permitted under the Income Tax Act, multiplied by the member's total pensionable service.

The maximum pension is determined at the date of pension commencement.

Death Benefits

Pre-retirement:

• If a member dies prior to retirement, the death benefit payable will be equal to the Commuted Value of his accrued pension plus a refund of any Excess Contributions. A subsidized death benefit may be available to the member's surviving spouse.

Post retirement:

• If a member dies prior to retirement, the death benefit payable will be equal to the Commuted Value of his accrued pension plus a refund of any Excess Contributions. A subsidized death benefit may be available to the member's surviving spouse.

Termination Benefits

A deferred lifetime pension equal to the accrued pension, adjusted to reflect any excess contributions.

Deferred pensions are payable commencing at age 65, however; a member may elect to receive an actuarially reduced pension as early as age 55.

 In lieu of a deferred pension, a member may transfer the commuted value of the pension into another retirement vehicle in accordance with the applicable provincial legislation.

Appendix G

Plausible adverse scenarios

In this Appendix, the financial impact on the Plan's going concern results (i.e., going concern financial position at the valuation date and current service cost from the valuation date to the next valuation date) of plausible adverse scenarios that would pose threats to the Plan's future financial condition is summarized in the following tables for the following risks:

- Interest rate risk an immediate parallel decrease in market interest rates of 20 basis points;
- Deterioration of asset values an immediate decrease of 7.5% in the market value of non-fixed income assets; and
- Longevity risk Longevity risk, that life expectancy from the valuation date at age 65 for a male and a female would increase by 1.6 years and 1.4 years, respectively.

	Going Concern	Plausible Adverse Scenario Results as at 31.12.2021				
Scenario	Valuation Results as at 31.12.2021	Interest Rate Risk	Deterioration of Asset Values	Longevity Risk		
Going Concern Financial Status						
Market value of assets	\$34,411,000	\$35,321,000	\$31,830,000	\$34,411,000		
Going concern funding target	\$26,014,000	\$26,510,000	\$26,014,000	\$26,837,000		
Funding excess (shortfall)	\$8,397,000	\$8,811,000	\$5,816,000	\$7,574,000		
Estimated Employer's Current Service Cost including expense allowance and Provision for Adverse Deviation						
2022	\$100,000	\$100,000	\$100,000	\$100,000		

The balance of this Appendix provides details of the plausible adverse scenarios selected and the determination of the impact on the going concern results.

Interest Rate Risk

The purpose of this scenario is to illustrate the sensitivity of the Plan's going concern results to the potential that interest rates will be lower than expected. For this purpose, we have assumed an immediate parallel decrease in market interest rates underlying fixed income

investments, where fixed income investments include the following categories as shown in the investment policy summarized in Appendix B.

Using a methodology consistent with the one used to determine the going concern discount rate, we have determined that a parallel decrease in market interest rates of 80 basis points would have a non-trivial probability (between 1 in 10 and 1 in 20) of occurring within the year following the valuation date. For purpose of this scenario, we have assumed that such a decrease in market interest rates would occur immediately on the valuation date and would have the following impact on the value of assets and going concern assumptions:

Defined Term	Description
Market value of assets	The decrease in market interest rates has been assumed to affect only the market value of the fixed income investments. The decrease is assumed to have occurred immediately on the valuation date.
Discount rate assumption	It was assumed that the decrease in market interest rates affects only the expected return on assets for the fixed income portion of assets. The same margin for adverse deviations was used The discount rate assumption was therefore decreased from 4.70% to 4.50%.
Other assumptions	Except as mentioned above, all assumptions used were the same as those used for this valuation. In particular, the discount rate used to value benefits assumed to be settled through a lump sum was not changed.

Deterioration of Asset Values

The purpose of this scenario is to illustrate the sensitivity of the Plan's going concern results to a deterioration of asset values. For this purpose, we assumed an immediate reduction in the market value of the Plan's non-fixed income assets, where non-fixed income investments include the following categories as shown in the investment policy summarized in Appendix B.

Using a methodology consistent with the one used to determine the going concern discount rate, we have determined that a decrease of 7.5% in the market value of value of non-fixed income assets would have a non-trivial probability (between 1 in 10 and 1 in 20) of occurring within the year following the valuation date. For purpose of this scenario, we have assumed that such a decrease would occur immediately on the valuation date and would have the following impact on the value of assets and going concern assumptions:

Market value of assets	The decrease in the market value of the non-fixed income portion of assets is assumed to have occurred immediately on the valuation date.
Going concern assumptions	This scenario is assumed to have no impact on the assumptions used for this valuation.

Longevity Risk

The purpose of this scenario is to illustrate the sensitivity of the Plan's going concern results to the potential that pension plan members will live longer than expected. For this purpose, we have determined that a plausible adverse scenario would be to assume that future mortality improvements⁵ will be in line with the average improvements experienced by the Canadian population⁶ over the most recent 15-year period available, with uniform improvement rates for all future years but varying by age⁷ and gender.

⁵ i.e. starting one year after the valuation in this context

 $^{^{\}rm 6}$ Based on Canadian population experience from the Hum Mortality Database from 2002 to 2016

⁷ improvement rates below age 45 are set to those at age 45

Appendix H

Employer Certification

With respect to the Report on the Actuarial Valuation for Funding Purposes as at December 31, 2021 of the Transit Windsor, I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the Company's engagement with the actuary described in Section 2 of this report, particularly the decision to include a margin of 0.80% in the discount rate used to perform the going concern valuation.
- A copy of the official plan documents and of all amendments made up to December 31, 2021 was provided to the actuary and is reflected appropriately in the summary of plan provisions contained herein.
- The Company has secured a letter of credit in the amount of \$4,890,005.
- The asset information summarized in Appendix B is reflective of the Plan's assets.
- The membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to December 31, 2021
- All events subsequent to December 31, 2021 that may have an impact on the Plan have been communicated to the actuary.

June 28, 2022	Lansagui	
Date	Signed	
	Dan Seguin	
	Name	



Mercer (Canada) Limited 255 Queens Avenue, Suite 2400 London, Ontario N6A 5R8 www.mercer.ca

Copyright © 2022 Mercer (Canada) Limited. All rights reserved.



Council Report: C 122/2022

Subject: The Contributory Pension Plan for Employees of Transit Windsor - Audited Financial Statements for the year ended December 31, 2021 - City Wide

Reference:

Date to Council: July 27, 2022

Author: Dan Seguin

Deputy Treasurer - Financial Accounting and Corporate Controls

519-255-6100 ext 1663 dseguin@citywindsor.ca Financial Accounting Report Date: July 8, 2022 Clerk's File #: MT2022

To: Mayor and Members of City Council

Recommendation:

THAT the Environmental, Transportation & Public Safety Standing Committee sitting as the Transit Windsor Board of Directors and City Council:

- I. **APPROVE** the Audited Financial Statements as at December 31, 2021, of the Contributory Pension Plan Fund for Employees of Transit Windsor; and,
- II. ACKNOWLEDGE that the audited financial statements have been filed with the Office of the Superintendent of Financial Institutions Canada (OSFI) by the Deputy Treasurer - Financial Accounting and Corporate Controls, as the Plan Administrator and as required by legislation.

Executive Summary:

N/A

Background:

The Contributory Pension Plan for the Employees of Transit Windsor is a defined benefit plan established to provide pension benefits to all employees of Transit Windsor who meet the eligibility requirements as specified in the plan document. The Plan is registered with the Canada Revenue Agency (CRA) under the Federal Pension Benefits Standards Act (PBSA). The Plan is also a registered pension trust as defined in the Income Tax Act and as such is not subject to income taxes. The Plan was frozen as at December 31, 1999.

Although Federal legislation does not require an independent audit of pension plans, the Board's resolution, T.W. 2702/97, adopted on April 10, 1997, directed:

That a separate, independent audit of the plan be conducted, and that the audited statements be submitted annually to the Board for acceptance.

Discussion:

KPMG has finalized its audit of the Contributory Pension Plan Fund for Employees of Transit Windsor for the year ending December 31, 2021. The Transit Windsor Pension Review Committee has reviewed the audit report and approved the audited statements as submitted at their annual meeting held on June 17, 2022.

The Independent Auditors' Report (attached) *states* "In our opinion, the accompanying financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as at December 31, 2021, and its changes in net assets available for benefits for the year then ended in accordance with the financial reporting provisions of the Federal Pension Benefits Standards Act."

The fund now stands with the market value of assets of \$34,407,000 in comparison to \$31,766,000 at December 31, 2020.

The Audited Financial Statements now require the approval of the Transit Windsor Board of Directors.

Risk Analysis:

Federal legislation requires that, if a plan does conduct an audit, the audited statements must be filed with OSFI by June 30th. In order to meet the required deadline, the Plan Administrator has filed the financial statements before the deadline with the understanding that an amendment can be made if there are any concerns or changes required by the Transit Windsor Board of Directors. Accordingly, the audited financial statements have been filed by the required deadline.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

The auditing fee of \$4,400 plus HST was funded from the frozen Transit Windsor Pension plan.

The pension plan is fully funded on a going concern basis, but would have a deficit (excluding existing Letter of Credit) if it were to be wound up at this time. Federal pension regulations require this notional wind-up deficit to be funded. The City of Windsor has complied with these additional funding requirements through special contributions over the past several years as well as by way of provision of a Letter of Credit. Full details relative to the actuarial status of the fund will be forthcoming in a separate report.

Consultations:

Kathy Buis, Financial Planning Administrator, Transit Windsor

Transit Windsor Pension Review Committee

KPMG (Cynthia Swift, CPA, CA Hon. B. Comm.)

Conclusion:

According to the auditor's report, the attached financial statements present fairly, in all material respects, the net assets available for benefits of the Fund and the changes in net assets.

Planning Act Matters:

N/A

Approvals:

Name	Title
Dan Seguin	Deputy Treasurer – Financial Accounting and Corporate Controls
Chris Nepszy	Commissioner, Infrastructure Services
Janice Guthrie	On behalf of Commissioner, Corporate ServicesCFO/City Treasurer
Onorio Colucci	Acting Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

Transit Windsor Pension - Audited Financial Statements as at December 31, 2021

Financial Statements of

THE CONTRIBUTORY PENSION PLAN FUND FOR EMPLOYEES OF TRANSIT WINDSOR

And Independent Auditors' Report thereon

Year ended December 31, 2021



KPMG LLP 618 Greenwood Centre 3200 Deziel Drive Windsor ON N8W 5K8 Canada Tel 519-251-3500 Fax 519-251-3530

INDEPENDENT AUDITORS' REPORT

To the Administrator of the Contributory Pension Plan Fund for Employees of Transit Windsor

Opinion

We have audited the fund financial statements of the Contributory Pension Plan Fund for Employees of Transit Windsor (the Plan), which comprise:

- the statement of net assets available for benefits as at December 31, 2021,
- the statement of changes in net assets available for benefits for the year then ended,
- and notes to the financial statements, including a summary of significant accounting policies.

(Hereinafter referred to as the "financial statements")

In our opinion, the accompanying financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as at December 31, 2021, and its changes in net assets available for benefits for the year then ended in accordance with the financial reporting provisions of the Federal Pension Benefits Standards Act.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Financial Statements" section of our auditors' report.

We are independent of the Plan in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



Page 2

Emphasis of Matter – Financial Reporting Framework

We draw attention to Note 2 in the financial statements, which describes the applicable financial reporting framework and the purpose of the financial statements.

As a result, the financial statements may not be suitable for another purpose.

Our opinion is not modified in respect of this matter.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the financial reporting provisions of the Federal Pension Benefits Standards Act and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Plan's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Plan or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Plan's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

 Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.



Page 3

- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of
 expressing an opinion on the effectiveness of the Plan's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Plan's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Plan to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the
 planned scope and timing of the audit and significant audit findings, including any
 significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants, Licensed Public Accountants

Windsor, Canada June 17, 2022

KPMG LLP

(Registration Number 353821)

Statement of Net Assets Available for Benefits (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021, with comparative information for 2020

	2021	2020
Assets		
Investments (notes 4 and 10) Employer contributions receivable	\$ 34,403 8	\$ 31,770
	34,411	31,770
Liabilities		
Accrued liabilities	4	4
Net assets available for benefits	\$ 34,407	\$ 31,766
See accompanying notes to financial statements. On behalf of the Pension Plan Administrator:		

(Registration Number 353821)

Statement of Changes in Net Assets Available for Benefits (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021, with comparative information for 2020

	2021	2020
Increase in net assets:		
Investment income (note 5)	\$ 3,664	\$ 722
Change in fair value:		
Change in net unrealized gains (losses)	1,368	(1,551)
Employer contributions	100	67
Commodity tax rebates on expenditures	7	9
	5,139	(753)
Decrease in net assets:		
Benefit payments (note 6)	2,208	2,056
Administrative expenses (note 7)	290	199
	2,498	2,255
Increase (decrease) in net assets	2,641	(3,008)
Net assets available for benefits, beginning of year	31,766	34,774
Net assets available for benefits, end of year	\$ 34,407	\$ 31,766

See accompanying notes to financial statements.

(Registration Number 353821)

Notes to Financial Statements (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

1. Description of the Plan:

The Contributory Pension Plan for Employees of Transit Windsor ("the Plan") is a defined benefit plan established to provide pension benefits to all employees of Transit Windsor ("the Sponsor") who meet the eligibility requirements as specified in the plan document. The Plan is a registered pension plan under the Federal Pension Benefits Standards Act (PBSA), registration number 57108 and is registered with Canada Revenue Agency (CRA), registration number 353821. The Plan is a registered pension trust as defined in the Income Tax Act and, accordingly, is not subject to income taxes.

The Plan was frozen as at December 31, 1999 with all pension benefits for service on or after January 1, 2000 being provided through the Ontario Municipal Employees Retirement System.

2. Basis of preparation:

(a) Basis of presentation:

The Plan has prepared these financial statements in accordance with Canadian accounting standards for pension plans excluding pension obligations and any resulting surplus or deficit.

In selecting or changing accounting policies that do not relate to its investment portfolio or pension obligations, Section 4600 requires the Plan to comply (on a consistent basis) with either International Financial Reporting Standards ("IFRS") in Part I of the Chartered Professional Accountants of Canada ("CPA Canada") Handbook - Accounting or Canadian accounting standards for private enterprises in Part II of the CPA Canada Handbook - Accounting. The Plan has chosen to comply on a consistent basis with IFRS.

These financial statements are prepared in accordance with the financial reporting provisions of the Federal Pension Benefits Standards Act.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

2. Basis of preparation (continued):

(a) Basis of presentation (continued):

The purpose of these financial statements is to assist the Administrator of the Contributory Pension Plan for Employees of Transit Windsor in meeting its obligations under the Federal Pension Benefits Standards Act.

As a result, these financial statements may not be suitable for another purpose.

These financial statements of the Plan do not purport to show the adequacy of the Plan's assets to meet its pension obligation. Such an assessment requires additional information, such as the Plan's actuarial reports and information about the Company's financial health.

(b) Basis of measurement:

The financial statements have been prepared on the historical cost basis, except for investments and derivative financial instruments which are measured at fair value through the statement of changes in net assets available for benefits.

(c) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Plan's functional currency.

(d) Use of estimates and judgements:

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the statement of net assets and the reported amounts of changes in net assets available for benefits during the year. Actual results may differ from those estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future years affected.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

3. Significant accounting policies:

(a) Foreign currency:

Transactions in foreign currencies are translated into Canadian dollars at the exchange rate at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated into Canadian dollars at the exchange rate at that date.

Foreign currency differences arising on retranslation are recognized in the statement of changes in net assets available for benefits as investment income.

(b) Income recognition:

Investment income is recorded on an accrual basis and includes interest income, dividends and changes in fair value including net realized gains (losses) on sale of investments.

(c) Financial assets and financial liabilities:

(i) Financial assets:

Financial assets are recognized initially on the trade date, which is the date that the Plan becomes a party to the contractual provisions of the instrument. Upon initial recognition, attributable transaction costs are recognized in the statement of changes in net assets available for benefits as incurred.

The Plan derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Plan neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control of the financial asset.

On derecognition of a financial asset, the difference between the carrying amount of the asset and consideration received is recognized in the statement of changes in net assets available for benefits as investment income.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

3. Significant accounting policies (continued):

- (c) Financial assets and financial liabilities (continued):
 - (ii) Financial liabilities:

All financial liabilities are recognized initially on the trade date at which the Plan becomes a party to the contractual provisions of the instrument.

The Plan derecognizes a financial liability when its contractual obligations are discharged, cancelled or expired.

(iii) Derivative financial instruments:

Derivative financial instruments are recognized initially at fair value and attributable transaction costs are recognized in the statement of changes in net assets available for benefits as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and all changes are recognized immediately in the statement of changes in net assets available for benefits.

Financial assets and liabilities are offset and the net amount presented in the statement of net assets available for benefits when, and only when, the Plan has a legal right to offset the amounts and it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(d) Fair value measurement:

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.

As allowed under IFRS 13, Fair Value Measurement ("IFRS 13"), in Part I of the CPA Handbook, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Plan uses closing market price as a practical expedient for fair value measurement.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

3. Significant accounting policies (continued):

(d) Fair value measurement (continued):

When available, the Plan measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's-length basis.

If a market for a financial instrument is not active, then the Plan establishes fair value using a valuation technique. Valuation techniques include using recent arm's-length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analyses and option pricing models.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e., the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets.

All changes in fair value, other than interest and dividend income and expense, are recognized in the statement of changes in net assets available for benefits as part of the change in net unrealized gains.

Fair values of investments are determined as follows:

Pooled funds are valued at the unit values supplied by the pooled fund administrator, which represent the Plan's proportionate share of underlying net assets at fair values determined using closing market prices.

(e) Net realized gain on sale of investments:

The net realized gain on sale of investments is the difference between proceeds received and the average cost of investments sold.

(f) Income taxes:

The Plan is a registered pension plan, as defined by the Income Tax Act (Canada) and, accordingly, is not subject to income taxes.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

4. Investments:

During 2003, the Sponsor transferred a significant portion of the Fund's investments and related investment management responsibilities to OMERS. The Plan continues to have certain investments operated by Sun Life Financial. Sun Life Financial assists the Plan in managing contributions into the Plan and the payment of benefits. The breakdown of investments at fair value and cost are as follows:

	2021					2020		
	Fa	air value		Cost	F	air value		Cost
Sun Life Pooled Funds: Cash equivalents Investments managed by OMERS	\$	693 33,710	\$	693 31,065	\$	499 31,271	\$	499 29,994
-	\$	34,403	\$	31,758	\$	31,770	\$	30,493

5. Investment income:

	2021	2020
Sun Life Pooled Funds: Cash equivalents Investments managed by OMERS	\$ 1 3,663	\$ 3 719
	\$ 3.664	\$ 722

6. Benefit payments:

	2021	2020
Retirement benefit payments Death benefit payments Termination benefit payment	\$ 2,085 103 20	\$ 2,056 - -
	\$ 2,208	\$ 2,056

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

7. Administrative expenses:

	2021	2020
Investment management fees Audit fees Consulting and actuarial fees Administrative fee	\$ 190 3 92 5	\$ 87 3 104 5
	\$ 290	\$ 199

8. Related party transactions:

The Plan defines its key management personnel as the Company's Board of Directors and other members of senior executives responsible for planning, controlling and directing the activities of the Plan. The Plan has not paid for services provided by key management personnel.

9. Capital risk management:

The main objective of the Plan is to sustain a certain level of net assets in order to meet the pension obligations of the Sponsor, which are not presented or discussed in these specified purpose financial statements. The Plan's assets are invested primarily with the Ontario Municipal Employees Retirement Board ("OMERS"). The OMERS Fund is subject to the regulations of the Ontario Municipal Employees Retirement System Act and the Pension Benefits Act (Ontario). The OMERS Fund includes investments in a variety of different asset classes including interest bearing investments, Canadian and non-Canadian equity investments and real estate investments. Increases in net assets are a direct result of investment income generated by investments held by the Plan and contributions into the Plan by the Sponsor. Employer contributions are based on the results of actuarial valuations for the Plan filed with the Office of the Superintendent of Financial Institutions Canada and the Canada Revenue Agency. The main use of net assets is for benefit payments to eligible Plan members. The Plan is required to file financial statements with the Office of the Superintendent of Financial Institutions Canada annually.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

9. Capital risk management (continued):

The funding requirements of the Plan are set out in the most recently filed funding valuation report that was prepared as at December 31, 2020. That valuation revealed an excess on a going-concern basis of \$5,383 (December 31, 2019 valuation - \$8,092), resulting in a going-concern funding ratio of 120% (December 31, 2019 valuation - 131%). On a solvency basis, the valuation revealed a shortfall of \$1,769 (December 31, 2019 valuation – excess of \$2,002) or a ratio of 95.0% (December 31, 2019 valuation - 105.3%). As a result of changes to federal pension regulations in 2010, solvency funding requirements are based on 3-year average solvency ratios. Further changes to federal pension regulations in 2012 expanded the ability to use letters of credit to secure solvency deficiencies as an alternative to cash contributions. The effective date of the next required actuarial valuation to be performed by Mercer (Canada) Limited, the Plan's actuary, is December 31, 2021.

10. Financial instruments:

(a) Fair values:

The fair values of investments and derivatives are as described in notes 3(d). The fair values of other financial assets and liabilities, being contributions receivable and accrued liabilities, if any, approximate their carrying values due to the short-term nature of these financial instruments.

Fair value measurements recognized in the statement of net assets are categorized using a fair value hierarchy that reflects the significance of inputs used in determining the fair values.

- Level 1 unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs for assets and liabilities that are not based on observable market data.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

10. Financial instruments (continued):

(a) Fair values (continued):

The following table illustrates the classification of the Plan's financial instruments using the fair value hierarchy as at December 31:

	2021 Level 2	2020 Level 2
Sun Life Pooled Funds: Cash equivalents	\$ 693	\$ 499
Investments managed by OMERS	33,710	31,271
	\$ 34,403	\$ 31,770

(b) Associated risks:

(i) Market price risk:

Market price risk is the risk that the value of an instrument will fluctuate as a result of changes in market prices, whether those changes are caused by factors specific to an individual investment, its issuer or all factors affecting all instruments traded in the market. As all of the Plan's financial instruments are carried at fair value with fair value changes recognized in the statement of changes in net assets available for benefits, all changes in market conditions will directly result in an increase (decrease) in net assets. Market price risk is managed by the Plan through construction of a diversified portfolio of instruments traded on various markets and across various industries.

(ii) Liquidity risk:

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations as they fall due. The Plan maintains an investment policy, as approved by the Administrator, which contains asset mix guidelines which assist to ensure that the Plan is able to liquidate investments to meets its pension benefit or other obligations.

(Registration Number 353821)

Notes to Financial Statements (continued) (in thousands of dollars unless otherwise stated)

Year ended December 31, 2021

10. Financial instruments (continued):

- (b) Associated risks (continued):
 - (iii) Foreign currency risk:

Foreign currency risk is the risk that the value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Plan primarily invests in financial instruments and enters into transactions denominated in various foreign currencies, other than its measurement currency. Consequently, the Plan is exposed to risk that the exchange rates of the various currencies may change in a manner that has an adverse effect on the value of the portion of the Plan's assets or liabilities denominated in currencies other than the Canadian dollar.

(iv) Credit risk:

Credit risk is the risk that an issuer or counterparty will be unable or unwilling to meet a commitment that it has entered into with the Plan. Credit risk is generally higher when a non-exchange traded financial instrument is involved because the counterparty for non-exchange traded financial instruments is not backed by an exchange clearing

(v) Interest rate risk:

Interest rate risk is the risk that the market value of the Plan's investments will fluctuate due to changes in market interest rates. To properly manage the Plan's interest rate risk, appropriate guidelines on the weighting and duration for the bonds and other fixed income investments are set and monitored. The Plan's investments in fixed income are sensitive to interest rate movements.



Council Report: S 84/2022

Subject: Change to the Transit Windsor War Veteran's Transit Pass Program - City Wide

Reference:

Date to Council: July 27, 2022 Author: Tyson Cragg Executive Director 519-944-4141 ext 2232

Transit Windsor Report Date: July 4, 2022 Clerk's File #: MT2022

tcragg@citywindsor.ca

To: Mayor and Members of City Council

Recommendation:

That the Environment, Transportation and Public Safety Standing Committee, sitting as the Transit Windsor Board of Directors, and City Council **APPROVE** the change to the War Veteran's Transit Pass Program to state the following eligibility criteria:

- Canadian or Allied Veterans who actively served in a deployed combat or peacekeeping role (i.e. Korean War, Afghanistan, Cyprus, etc.), and must provide proof of service (spouses are not eligible); and,
- Must be a permanent resident of the City of Windsor.

Executive Summary:

N/A.

Background:

At the May 12, 2005 Transit Windsor Board of Director's meeting, resolution T.W. 3614/05 approved the War Veteran's Transit Pass Program as follows:

War veterans are eligible to receive a lifetime Transit Windsor transit pass for unlimited use on the conventional city service (Tunnel Bus services excluded) in the City of Windsor. The following veterans, residing in the City of Windsor, are eligible:

 Canadian or Allied veterans who participated in active service during WWII

- Canadian or Allied veterans who participated in active service during the Korean War
- Canadian or Allied veterans who participated in active service during the Vietnam War.

The policy is attached (Appendix A) for your reference.

Discussion:

The development of the War Veteran's Transit Pass Program was a gesture of respect and acknowledgement to the brave men and women who served in the armed forces through personal sacrifice and commitment to our community, and to Canada. The eligibility criteria is currently limited to Canadian and Allied veterans who served in World War II, the Korean War, and the Vietnam War. This eligibility criteria currently disqualifies veterans who may have served in other armed conflicts or peacekeeping missions such as Afghanistan, Cyprus, Kosovo, etc. Given that Canadian Armed Forces members have served in a variety of other combat and peacekeeping missions in the past 50 years, it is appropriate to update the policy to reflect the full range of deployed service in theatres of war and other armed conflicts.

Administration is recommending the approval of a change to the current policy to update the eligibility criteria for a Lifetime War Veteran's Transit Pass. The new eligibility criteria will be as follows:

 Canadian or Allied veterans who actively served in a deployed combat or peacekeeping role (ie. Korean War, Afghanistan, Cyprus, etc.) and, must provide proof of service (spouses are not eligible) and, must be a permanent resident of the City of Windsor.

The recommended revision is captured in Appendix B. The revision to the current policy would allow us to honour our veterans and would not disqualify anyone who served our country, regardless of which conflict or peacekeeping mission they served in.

Risk Analysis:

N/A.

Financial Matters:

In 2014, there were a reported 526 registered War Veterans with this lifetime bus pass. As of the report date, there are currently 19 registered War Veterans that hold the lifetime bus pass. Based on a usage report for the period of December 2021 to the report date, only eight (8) of the Veterans have been using the pass. Using the Affordable Pass Program rate of \$51.40 for a 30-day pass, the annual cost for the eight (8) passes that are currently being used is \$4,934.40. The cost to expand the eligibility criteria cannot be quantified at this time, but would represent a very small impact to overall revenues.

Consultations:

David Calibaba, Sales & Marketing Manager, Transit Windsor

Conclusion:

Transit Administration recommends the approval of the change as detailed within this report. Incentive programs help support transit growth initiatives and build a stronger public transit system. The approval of the recommended change to the policy to open up the program to all permanent residents of the City of Windsor who served our country, would showcase our commitment to recognizing and honouring these men and women, regardless of where they served.

Planning Act Matters:

N/A.

Approvals:

Name	Title
Tyson Cragg	Executive Director, Transit Windsor
Christopher Nepszy	Commissioner, Infrastructure Services
Janice Guthrie	On behalf of Commissioner, Corporate Services CFO/City Treasurer
Onorio Colucci	Chief Administrative Officer (A)

Notifications:

Name	Address	Email

Appendices:

- 1 Current Policy
- 2 Recommended Policy Veteran's Pass



Veterans Pass Policy

POLICY

Authority:		Policy No:	TW 47/2014
Department:	Corporate	Approval date	September 9, 2014
Division:	Transit Windsor	Approved by	Board of Directors
		Effective date	May 13, 2005
Subject:	Veterans Pass Policy	Procedure Ref:	
		Pages	Replaces TW 3614/05
			Date:

1. PURPOSE:

It is the policy of Transit Windsor to recognize the Korean World War II and Vietnam Veterans with the Canadian Armed Forces and Allied Forces by providing these veterans with a free lifetime pass and to provide free service to any person in military uniform on D-Day (June 6), Raid on Dieppe (August 19) and Veterans' Day ((November 11).

2. SCOPE:

This procedure applies to all employees.

3. **RESPONSIBILITY:**

It is the responsibility of all management to enforce the policy and to monitor compliance with this policy and its procedures.

To provide a procedure for employees responsible for fares or fare collection to comply with in regards to allowing veterans to ride for free.

PROCEDURE

4. The Transit Windsor Board of Directors approved a War Veteran Transit Pass Program and free rides to those in military uniform on specified days to recognize the commitment to our community and to Canada through service in the armed forces.

Transit Windsor was deemed to be a federal employer for labour relations and where both provincial and federal legislations govern the policy, Transit Windsor employees will be held to the federal standards. Accordingly the following related documents are applicable.



Veterans Pass Policy

POLICY

Authority:		Policy No:	TW 47/2014
Department:	Corporate	Approval date	
Division:	Transit Windsor	Approved by	
		Effective date	
Subject:	Veterans Pass Policy	Procedure Ref:	
		Pages	

1. PURPOSE:

It is the policy of Transit Windsor to recognize the Korean World War II and Vietnam Veterans with the Canadian Armed Forces and Allied Forces by providing these veterans with a free lifetime pass and to provide free service to any person in military uniform on D-Day (June 6), Raid on Dieppe (August 19) and Remembrance Day (November 11).

2. SCOPE:

This procedure applies to all employees.

3. **RESPONSIBILITY:**

It is the responsibility of all management to enforce the policy and to monitor compliance with this policy and its procedures.

To provide a procedure for employees responsible for fares or fare collection to comply with in regards to allowing veterans to ride for free.

PROCEDURE

4. The Transit Windsor Board of Directors approved a War Veteran Transit Pass Program and free rides to those in military uniform on specified days to recognize the commitment to our community and to Canada through service in the armed forces.

Approval is subject to the following eligibility criteria:

• Canadian or Allied Veterans who actively served in a deployed combat or peacekeeping role (ie. Korean War, Afghanistan, Cyprus, etc.) and,

- Must provide proof of service (spouses are not eligible) and,
- Must be a permanent resident of the City of Windsor.

Transit Windsor was deemed to be a federal employer for labour relations and where both provincial and federal legislations govern the policy, Transit Windsor employees will be held to the federal standards. Accordingly the following related documents are applicable.