Environment, Transportation & Public Safety Standing Committee Meeting Agenda

Date: Wednesday, May 29, 2024
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 have the option to participate in person or electronically.

MEMBERS:

Ward 2 – Councillor Fabio Costante (Chairperson)

Ward 3 – Councillor Renaldo Agostino

Ward 4 – Councillor Mark McKenzie

Ward 8 – Councillor Gary Kaschak

Ward 9 – Councillor Kieran McKenzie

ORDER OF BUSINESS

Item #	Item Description
1.	**CALL TO ORDER**

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 of its meeting held April 24, 2024. **(SCM 117/2024)**

4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS

5. COMMUNICATIONS

6. PRESENTATIONS AND DELEGATIONS

7. COMMITTEE MATTERS

7.1. Minutes of the Transit Windsor Working Group of its meeting held March 20, 2024 **(SCM 106/2024)**

7.2. Minutes of the Environment & Climate Change Advisory Committee of its meeting held March 19, 2024 **(SCM 107/2024)**

7.3. Essex-Windsor Solid Waste Authority Regular Board Meeting Minutes from its meeting held April 10, 2024 **(SCM 139/2024)**

7.4. Minutes of the Windsor Licensing Commission of its meeting held April 23, 2024 **(SCM 152/2024)**

8. ADMINISTRATIVE ITEMS

8.1. Local Improvement Program Implementation 2024 Update - City Wide **(S 24/2024)**

8.2. Wyandotte Street Road Diet Update Report – Wards 4, 5 & 6 **(S 146/2023)**

8.3. Bike Parking Policy - City Wide **(S 75/2023)**

8.4. Response to CQ 4-2024 – Options for Modernizing Parking Operations – City Wide **(S 46/2024)**
Clerk's Note: P&C Memo provided to members of the committee only.

8.5. Response to CQ 2-2024 Enhanced Street Sweeping Initiative – City Wide **(S 61/2024)**

8.6. Response to CQ15-2024 - Excess Soil Reuse Site Update - City Wide **(S 62/2024)**

8.7. Response to CQ 18-2024 - Little River Dyke Flood Protection System - Ward 6 **(C 59/2024)**

8.8. Pedestrian Generator Sidewalk on the North Side of Adstoll Avenue from the Sainte-Therese School Driveway Entrance to Rivard Avenue (approximately 116m) - Ward 8 **(S 63/2024)**

8.9. CQ 4-2023 and CQ 37-2023 – Electric Vehicles – City Wide **(S 64/2024)**

8.10. Red Light Camera Update – City Wide **(C 19/2024) & (AI 10/2024)**

9. TRANSIT BOARD ITEMS

10. ADOPTION OF TRANSIT BOARD MINUTES

11. QUESTION PERIOD

12. ADJOURNMENT

Item No. 3.1

Committee Matters: SCM 117/2024

Subject: Adoption of the Environment, Transportation & Public Safety Standing Committee minutes of its meeting held April 24, 2024.

Environment, Transportation & Public Safety Standing Committee Meeting

Date: Wednesday, April 24, 2024
Time: 4:30 o'clock p.m.

Members Present:

Councillors
Ward 2 - Councillor Fabio Costante (Chairperson)
Ward 3 - Councillor Renaldo Agostino
Ward 4 - Councillor Mark McKenzie
Ward 8 - Councillor Gary Kaschak
Ward 9 - Councillor Kieran McKenzie

PARTICIPATING VIA VIDEO CONFERENCE ARE THE FOLLOWING FROM ADMINISTRATION:

Sandra Gebauer, Council Assistant

ALSO PARTICIPATING IN COUNCIL CHAMBERS ARE THE FOLLOWING FROM ADMINISTRATION:

Mark Winterton, Commissioner, Infrastructure & City Engineer
Shawna Boakes, Executive Director, Operations / Deputy City Engineer
Stacey McGuire, Executive Director, Engineering / Deputy City Engineer
James Chacko, Executive Director, Parks & Facilities
Mark Spizzirri, Deputy Treasurer, Financial Planning
Phong Nguy, Manager, Contracts Facility Service Maintenance
Yemi Adeyeye, City Forester / Manager Forestry & Nature Areas
Anna Ciacelli, Deputy City Clerk

1. CALL TO ORDER

The Chairperson calls the meeting of the Environment, Transportation & Public Safety Standing Committee to order at 4:31 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 March 27, 2024.

Moved by: Councillor Gary Kaschak
Seconded by: Councillor Mark McKenzie

THAT the minutes of the Environment, Transportation & Public Safety Standing Committee meeting held March 27, 2024 **BE ADOPTED** as presented.
Carried.

Report Number: SCM 84/2024

4. REQUEST FOR DEFERRALS, REFERRALS OR WITHDRAWALS

None requested.

5. COMMUNICATIONS

None presented.

7. COMMITTEE MATTERS

7.1. Minutes of the Active Transportation Expert Panel of its meeting held March 14, 2024

Councillor Kieran McKenzie inquires about the scope of the discussion from this meeting and whether there is any intention or initiative from the committee to carry out any of that work. Shawna Boakes, Executive Director Operations, appears before the Environment, Transportation & Public Safety Standing Committee regarding the Committee Report entitled "Minutes of the Active Transportation Expert Panel of its meeting held March 14, 2024" and indicates that there was a

subsequent meeting scheduled which had to be cancelled due to lack of quorum and an email poll was to be completed regarding bike to work. The general discussion was that they are in support of these initiatives.

Councillor Kieran McKenzie indicates that with Bike to Work Day just weeks away, if it is safe to say that the City is not planning to move forward with any type of initiative this year. Ms. Boakes indicates that the meeting that was cancelled and the email poll that was to be conducted were directly related to this initiative.

Councillor Kieran McKenzie inquires whether there is an initiative for Fireworks bike parking planned again this year. Ms. Boakes indicates that the members of the committee are interested and willing to support the initiative again this year. A meeting will be planned in the next couple of weeks to discuss.

Councillor Gary Kaschak inquires if this was the first meeting of the new panels. Anna Ciacelli, Deputy Clerk and Supervisor of Council Services indicates that each of the new committees have held their first meetings and will be preparing for a second soon.

Councillor Gary Kaschak inquires whether administration anticipates that attendance and participation are going to be an issue with this committee and if there is going to be meaningful participation. Ms. Boakes indicates that there were many applicants for this committee, but the committee is one or two people short of the intended number. Administration is prepared to move forward with the committee and will address with Council Services if additional members are needed in the future.

Moved by: Councillor Kieran McKenzie
Seconded by: Councillor Gary Kaschak

Decision Number: **ETPS 993**
THAT the minutes of the Active Transportation Expert Panel meeting held March 14, 2024 **BE RECEIVED**.
Carried.

Report Number: SCM 83/2024

7.2. Minutes of the Essex-Windsor Solid Waste Authority (EWSWA) Regular Board of its meeting held February 6, 2024

Moved by: Councillor Mark McKenzie
Seconded by: Councillor Gary Kaschak

Decision Number: **ETPS 994**
THAT the minutes of the Essex-Windsor Solid Waste Authority (EWSWA) meeting held February 6, 2024 **BE RECEIVED**.
Carried.

Report Number: SCM 101/2024

8. ADMINISTRATIVE ITEMS

8.1. Response to CQ 24-2023 Regarding Minimum Standards, Vendor Warranties, and Construction Policies for Road Repair, Sewer Infrastructure, and Road Rehab Projects - City Wide

Councillor Mark McKenzie inquires what would be considered a minor adjustment. Mark Winterton, Commissioner, Infrastructure Services & City Engineer appears before the Environment, Transportation & Public Safety Standing Committee regarding the Administrative report entitled "Response to CQ 24-2023 Regarding Minimum Standards, Vendor Warranties, and Construction Policies for Road Repair, Sewer Infrastructure, and Road Rehab Projects - City Wide" and indicates that that the Provincial standards are largely based on highway construction and design. The City of Windsor is based more on urban design. When the specifications are reviewed, not every specification met the building of local roads. Ontario Provincial Standards (OPS) with exceptions, prevents outdated upgrades for the municipality.

Councillor Mark McKenzie inquires whether the City keeps records of testing. Mr. Winterton indicates that every single test is documented, charted, responded to and followed up on.

Councillor Mark McKenzie inquires whether resident complaints of quality in their neighbourhoods would be on the inspection side. Mr. Winterton indicates that the specifications and inspection are quite good, but every single batch of concrete or asphalt are not tested. There is a representative sample that is done. If there are outliers where the material fails, ideally, we catch it before the maintenance period when we can actively pursue the repair.

Councillor Mark McKenzie inquires as to how many inspectors are employed with the City of Windsor and whether that is enough staff to handle the load. Mr. Winterton indicates that there are 15 between technicians and technologists. He adds that there is an advantage to increasing that number, but that would be done as part of budget process.

Councillor Mark McKenzie inquires how an expedited construction schedule to minimize disruption is done and is it on a case-by-case basis, how that is determined. Mr. Winterton indicates that where there is work being done in a commercial corridor, they work with the heavy construction association when preparing tenders so that they know what they are bidding on which takes into account their ability to staff and union standards. The City does pay a premium for expedited projects. Our specifications are as good, if not better than any other community in Ontario and are well-positioned to be able to produce the best product that they can.

Councillor Gary Kaschak inquires about seeding or sodding after construction. Mr. Winterton responds that seed product is a better option, but weeds can creep up. Sod is instant, but if not watered, it will die. We have even offered a credit to homeowners to restore it themselves. There isn't a definitive answer, and the restoration remains a challenge.

Councillor Gary Kaschak inquires whether settlement and sinking after project completion are the responsibility of the residents after a certain period. Mr. Winterton indicates that they will respond to those settlements by providing topsoil within a reasonable time. Administration does pre and post construction photos and videos to document the condition prior to and after the work is complete. If the ground is going to settle, it will happen shortly after completion.

Moved by: Councillor Mark McKenzie
Seconded by: Councillor Renaldo Agostino

Decision Number: **ETPS 995**
THAT the report of the Commissioner of Infrastructure Services dated November 10, 2023 entitled "Response to CQ 24-2023 Regarding Minimum Standards, Vendor Warranties, and Construction Policies for Road Repair, Sewer Infrastructure, and Road Rehab Projects - City Wide" **BE RECEIVED** for information and discussion; and,

THAT the report of the Commissioner of Infrastructure Services dated November 10, 2023 entitled "Response to CQ 24-2023 Regarding Minimum Standards, Vendor Warranties, and Construction Policies for Road Repair, Sewer Infrastructure, and Road Rehab Projects - City Wide" **BE REFERRED** to the 2025 Budget Deliberation meeting to provide options to increase the quality control program; and,

THAT administration **BE REQUESTED** to conduct a thorough review of the 2025/2026 projects to determine whether there may be an opportunity to adopt an expedited schedule, including working off hours and weekends, especially on the main thoroughfares.
Carried.
Councillor Gary Kaschak voting nay.

Report Number: S 44/2024
Clerk's File: SW2024

8.2. Ad Hoc Administrative Alley Committee - City Wide

Councillor Kieran McKenzie inquires about the wording of the deliverables to support Council's goal of developing and enforcing a set of alley standards as outlined in the report, specifically on page 4 of the report in the 4th bullet point, "downtown" is limiting. He adds that alleys in other parts of the City could be considered as viable options. How important it is to keep the language exclusive to Downtown. Ms. Boakes indicates that she will have to review the Active Transportation Master Plan (ATMP) to see if there is a specific area recommended throughout the City, in which case, they can update it.

Councillor Kieran McKenzie requests that the word Downtown in the list be removed and to make it as inclusive as the ATMP language allows. Mr. Winterton indicates that that is not a problem.

Councillor Kieran McKenzie inquires about the word “will” in the last bullet point, as it is excluding potential opportunities and implies that the City would never participate in a revitalization project, and whether that word can be removed from the list. Mr. Winterton indicates that the view, when looking to majorly activated alleys as in Detroit, they were entirely funded by private development. The idea is that historically, the City does not fund that type of development.

Councillor Fabio Costante suggests that the word “will” be replaced with “may”.

Councillor Kieran McKenzie agrees.

Councillor Renaldo Agostino inquires whether the City is moving towards looking at Alleys potentially becoming neighbourhoods with the ADUs and tiny homes. Mr. Winterton responds that they are not there yet, but it is a possibility that would require a shift on how we identify alleys and possibly naming them. There is no impediment to the suggestion, but there would be planning consideration and thought to address this.

Councillor Renaldo Agostino inquires whether there is any language in the report that would impede this type of progression. Mr. Winterton responds that it wouldn’t prevent it, but there would be planning and servicing considerations to take into account.

Councillor Fabio Costante inquires whether grass alleys are considered, in the context of development charges, should the applicant be responsible to chip in to pave that alley. Mr. Winterton responds that they are open to any ideas. Grass alleys are looked at to be closed and the City paid for and initiated closing them. If an alley upgrade is sought after, typically it would be a local improvement process. But those tools are in place currently through the LIP process.

Councillor Renaldo Agostino indicates that if the City is moving towards alley development, lighting needs to be considered in order to make it liveable.

Councillor Mark McKenzie inquires as to what the biggest hurdle is to activating paved alleys. Mr. Winterton indicates that it is the will and whether there is a budget. Roads and sewers are the highest priorities. If Council wanted to activate an alley, it would be a matter of direction of Council and a funding source.

Councillor Mark McKenzie inquires whether there can be some sort of City initiative that can be investigated, in order to improve alleys with a limited budget such as providing paint and some lighting. Mr. Winterton responds that historically, the City does not provide lighting of alleys. There is an opportunity to get creative in order to activate an alley, but maintenance and ongoing operating costs associated with paving an alley need to be considered.

Councillor Kieran McKenzie inquires about best practices for safety and security features and whether it’s something that the committee could turn its attention to. Mr. Winterton indicates that when they look to upgrade the alleys, they have to look at the broader picture of the intention behind it. This committee will be including Windsor Police Service to provide feedback into what they’re trying to establish.

Councillor Fabio Costante inquires whether the Committee should formally add Windsor Police as part of this committee in terms of safety and security. Mr. Winterton responds that Windsor Police should be a part of this process.

Councillor Fabio Costante inquires whether the committee is driven by Administration without any Councillor or elected official. Mr. Winterton indicates that is the intention. It would be driven by Administration who would report back at the appropriate time and council would provide direction based on the feedback.

Moved by: Councillor Kieran McKenzie
Seconded by: Councillor Renaldo Agostino

Decision Number: **ETPS 996**
THAT the report of the Commissioner, Infrastructure Services dated April 5, 2024 entitled "Ad Hoc Administrative Alley Committee - City Wide" **BE RECEIVED** in response to Council's request for a specific proposed framework and work plan for the previously approved Alley Standards and Development Committee; and,

THAT Council **APPROVE** the development of a new Ad Hoc Alley Standards Committee as outlined in the report with the deliverables to support Council's goal of developing and enforcing a set of alley standards as amended; and,

THAT the Alley Standards Committee **REVIEW** and **CONSIDER** best practices to promote safety and security as an additional deliverable; and

THAT asset management plans **BE INCLUDED** in the analysis of activating those alley spaces; and,

THAT administration **BE DIRECTED** to report back to Council on an annual basis.
Carried.

Report Number: S 45/2024
Clerk's File: SW2024

8.3. Information regarding adding trees along the E.C. Row Expressway on the North and South sides between Walker Road and Howard Avenue - City Wide

Councillor Kieran McKenzie requests that administration elaborate on the reason why trees cannot or should not be planted on a slope. Yemi Adeyeye, City Forrester, appears before the Environment, Transportation & Public Safety Standing Committee regarding the Administrative report entitled "Information regarding adding trees along the E.C. Row Expressway on the North and South sides between Walker Road and Howard Avenue - City wide" and indicates that there are conditions where trees occur naturally on a slope, there are other conditions that pose a risk to the success of growth. There is a higher probability of the trees falling, where there is limited

access to the ditch, the soil quality is also a factor, as salt from roadways will run-off into these ditches where the trees are to be planted.

Councillor Kieran McKenzie indicates that in comparison to another tree planting project under perfect conditions, what is the financial risk to what is being contemplated here. Mr. Adeyeye indicates that there were existing trees that were planted in the proposed location, some are thriving, some are decaying, and some will soon fall. There is a potential for trees to fall into the roadway due to the slope gradient towards the road, without resolving the structural changes that need to happen for the growth of the trees.

Councillor Kieran McKenzie inquires, in reference to structural changes, that the City is suggesting that the slope itself would need to be changed. Mr. Adeyeye responds that the slope, the fence, availability of ditch and access to the ditch would need to be changed.

Councillor Kieran McKenzie inquires whether the biggest challenge is the slope as water run-off may cause issues with the soil, which may cause the trees to topple over and there is not enough room for proper drainage to potentially flatten out the slope. Mr. Adeyeye responds that is correct.

Councillor Kieran McKenzie inquires in terms of cost, if there is an opportunity to absorb the cost of this project into the tree-planting budget in future years, assuming that Council is going to continue to fund the Forestry department and tree planting initiatives. Mr. Adeyeye responds that the budget they have is to plant the trees and does not include infrastructure challenges.

Councillor Kieran McKenzie inquires whether there is a way to understand the extent of infrastructure work that would be required. James Chacko Executive Director, Parks and Facilities, appears before the Environment, Transportation & Public Safety Standing Committee regarding the Administrative report entitled “Information regarding adding trees along the E.C. Row Expressway on the North and South sides between Walker Road and Howard Avenue - City Wide” and responds that they identified the work that would be needed. Mr. Chacko indicates that If the goal of the tree planting is to resolve the sound issue, it would need to be carried through the entire stretch from Walker to Howard. The slope becomes much steeper and would cost a substantial amount.

Councillor Kieran McKenzie inquires whether that is an engineering question. Mr. Winterton responds if the idea is to adjust the grade to be able to accommodate planting, from a public safety point of view, I would not support planting trees on the EC Row Expressway right of way.

Councillor Kieran McKenzie inquires that if it was a sound barrier, would it be supported. Mr. Winterton indicates that like other sound barriers along the EC Row Expressway, a Jersey barrier is a better option. The potential to upload the EC Row Expressway should also be considered when weighing options for sound mitigation along this corridor.

Councillor Kieran McKenzie indicates that the cost to undertake this type of project has heavily influenced this council question in the first place. Trees are a much less expensive alternative to sound mitigation than building a wall.

Councillor Gary Kaschak inquires about the cost for building a jersey wall. Mr. Winterton responds that the figure of $20 million is for magnitude not for budgeting purposes.

Councillor Gary Kaschak inquires whether there have been any other considerations besides trees or barriers. Mr. Winterton indicates that the idea of trees is largely a visual barrier, but based on the research that they have available, noise mitigation would not be significant.

Councillor Gary Kaschak inquires about the installation of the sound barriers between Dominion and Huron Church. Mr. Winterton indicates that that installation pre-dates the City taking it over. They were not paid for as part of a City of Windsor contract.

Councillor Gary Kaschak inquires about the installation of the sound barriers between Lauzon to Banwell on the North side. Mr. Winterton indicates that the Forest Glade area has noise barriers, but there is mostly commercial or industrial along the corridor which would not require it.

Councillor Kieran McKenzie inquires whether there are different road materials that generate less sound that have been explored. Mr. Winterton indicates that road noise from tined concrete is typically the worst, asphalt would be less noisy. Other innovative materials that would be able to hold up to the rigors of an industrial pavement structure have not been considered but can be considered.

Moved by: Councillor Kieran McKenzie
Seconded by: Councillor Gary Kaschak

Decision Number: **ETPS 997**
THAT the report of the Commissioner, Infrastructure Services & City Engineer dated April 5, 2024 entitled “Information regarding adding trees along the E.C. Row Expressway on the North and South sides between Walker Road and Howard Avenue - City Wide” **BE RECEIVED** for information.
Carried.

Report Number: S 47/2024
Clerk’s File: SRT2024

8.4. Response to CQ 9-2024 - Deficient Roads and “Like for Like” Policy - City Wide

Councillor Gary Kaschak inquires whether the Local Improvement Policy (LIP) is the most effective way to move forward. Mr. Winterton indicates that a policy is in place for residents with roads that have no curb and gutter that want road improvements. The LIP allows a proper standard of road construction. Residents with a successful LIP, can move forward with the project.

Councillor Gary Kaschak inquires whether an LIP has been started on Jarvis Street. Mr. Winterton indicates that an LIP has been started and the intention is the road would be a municipally driven local improvement. There are some severe drainage issues there. The City would like to put in storm sewers and curbs. Through the Environmental Assessment and consultation with the residents, they had a revised cross-section.

Stacey McGuire, Executive Director, Engineering, appears before the Environment, Transportation & Public Safety Standing Committee regarding the Administrative report entitled “Response to CQ 9-2024 - Deficient Roads and “Like for Like” Policy - City Wide” and indicates that for that particular project, it is part of an overall Environment Assessment that was completed along with the extension of Wyandotte to Jarvis. The project includes a mountable curb that allows parking. It includes storm sewer, active transportation and connection between East Riverside and Tecumseh.

Councillor Gary Kaschak inquires about the extent of the EA work on that project. Mr. Winterton indicates that if Council approves the budget for that project, the EA includes all of the improvements needed.

Councillor Kieran McKenzie inquires if residents want their road improved, an approved LIP doesn’t necessarily mean there is funding allocated for resident driven LIPs. Ms. McGuire indicates that the budget item doesn’t distinguish between resident and municipal initiated. Once there is a successful LIP, it is budgeted into the next available spot within the 10 year capital budget.

Councillor Kieran McKenzie inquires when the next resident-driven LIP is going to go forward. Ms. McGuire indicates that that information is not readily available.

Councillor Kieran McKenzie inquires whether the focus has been to address areas that are currently on septic to make sure they are prepared to proceed with development over other LIPs that the residents have on their streets. Mr. Winterton responds that the policy is based on environmental and public safety concerns as a priority. However, if a resident-driven petition came in, it would be given great consideration in terms of budget. Ms. McGuire indicates that the Byng Road was intended to be City initiated and then our policy came into effect, which prioritized roads without sanitary. If Byng Road came back as resident-initiated with a signed petition, we would slot it in as soon as we can within the funding that we have. Mr. Winterton adds that the idea of how we build and prioritize local roads, the system that is in place is fairly robust.

Councillor Kieran McKenzie inquires whether there is a plan to move forward to fix residential roads. Mr. Winterton indicates that there are about 250 km of deficient roads which would exceed $300 million. The City’s annual budget for roads is $50 million. The Asset Management Plan is designed to try to address the highest impact roads. To deviate from that plan within the budget that they have, takes them away from what they are trying to achieve.

Councillor Kieran McKenzie inquires about what the risk is If the City moves to the hard surface replacement model for more roads to land in the red, than what the current policy is. Mr. Winterton responds that they have been successful in doing a mill and pave on a yellow road and that provides another 20-25 years of life. Hard surface replacement on a now deficient road, you may get 2-3 years out of it. If they stay with the plan, they are whittling away at the red roads at a slower pace than residents expect, but will be a much better life cycle.

Moved by: Councillor Kieran McKenzie
Seconded by: Councillor Mark McKenzie

Decision Number: **ETPS 998**
THAT the report of the Commissioner, Infrastructure Services & City Engineer dated April 5, 2024 entitled "Response to CQ 9-2024– Deficient Roads and "Like for Like" Policy – City Wide" **BE RECEIVED** for information.
Carried.

Report Number: S 43/2024
Clerk's File: SW2024

8.5. Traffic Signal at Tecumseh Road E and Robinet Road – Ward 7

Moved by: Councillor Kieran McKenzie
Seconded by: Councillor Renaldo Agostino

Decision Number: **ETPS 999** ETPS 987
THAT the report of the Senior Manager, Traffic Operations & Parking, dated January 12, 2024 entitled "Traffic Signal at Tecumseh Road E and Robinet Road-Ward 7" **BE RECEIVED** for information.
Carried.

Report Number: SCM 33/2024, S 7/2024, AI 3/2024 & AI 6/2024
Clerk's File: ST2024

9. TRANSIT BOARD ITEMS

None presented.

10. ADOPTION OF TRANSIT BOARD MINUTES

None presented.

11. QUESTION PERIOD

None registered.

12. ADJOURNMENT

There being no further business, the Environment, Transportation & Public Safety Standing Committee is adjourned at 6:20 o'clock p.m. The next meeting of the Environment, Transportation & Public Safety Standing Committee will be held Wednesday, May 29, 2024.
Carried.

Ward 2 – Councillor Costante (Chairperson)	Deputy City Clerk / Supervisor of Council Services

Item No. 7.1

Committee Matters: SCM 106/2024

Subject: Minutes of the Transit Windsor Working Group of its meeting held

March 20, 2024

TRANSIT WINDSOR WORKING GROUP
Meeting held March 20, 2024

A meeting of the Transit Windsor Working Group is held this day commencing at 2:30 o'clock p.m. in Room 140, 350 City Hall Square West, there being present the following members:

Bernard Drouillard
Jay Patel
Trevor Ramieri
Katie Stokes
Iain Sutcliffe

Also present are the following resource personnel:

Tyson Cragg, Executive Director, Transit Windsor
Steve Habrun, Director, Operations and Planning
Jason Scott, Manager Transit Planning
Karen Kadour, Committee Coordinator

1. Call to Order

The Committee Coordinator calls the meeting to order at 3:32 o'clock p.m.

2. Election of Chair

It is generally agreed that Tyson Cragg, Executive Director Transit Windsor be appointed Chair of the Transit Windsor Working Group.

3. Declaration of Conflict

None disclosed.

4. Training for Newly Appointed Committee Members

4.1 Health and Safety and Respectful Workplace Training

Keith Marincsak, Occupational Health and Safety Advisor provides a Presentation entitled "Occupational Health & Safety Orientation".

4.2 Orientation and Governance Training

Anna Ciacelli, Deputy City Clerk provides an overview of the governance structure for the new members of the Working Group. The document entitled "Welcome – New Members of Advisory Committees, Working Group and Expert Panels" is provided to the members.

5. Business Items

Tyson Cragg, Executive Director welcomes the members of the Transit Windsor Working Group and asks the members to introduce themselves.

5.1 Transit 101, How Transit Windsor Works

Tyson Cragg provides a Presentation entitled "Transit 101", ***attached*** as Appendix A, and the highlights of the presentation are as follows:

- Formerly the Sandwich, Windsor and Amherstburg Railway, re-named Transit Windsor in 1977.
- Governed by a 5-member Board of Directors, all City Councillors (Environment, Transportation and Public Safety Standing Committee).
- 20 routes (existing and approved), including 3 County , 1 international
- 119 buses, including 29 hybrid buses
- Annual ridership of nearly 9.5 million
- Over 50% of ridership is from the University of Windsor and St. Clair College
- The Transit Master Plan was approved by Council in 2020.
- Movement to grid system consisting of primary, secondary, and local routes.

5.2 Transit Master Plan (TMP) Overview and Progress to date
5.3 Further Initiatives under the TMP, and feedback sought

The "Transit Windsor Existing Routes and the Transit Windsor Routes after Proposed 2023 Service Plan", are ***attached*** as Appendix "B". Steve Habrun, Director Operations and Planning and Jason Scott, Manager, Transit Planning provide the following remarks:

- As Transit Windsor crosses an international border, they fall under Federal Regulations.
- The City of Windsor is the only international transit system in North America that crosses an international border.
- New service since the Masterplan was approved, includes the Route 518X, Route 418X, Route 100, Route 110, Route 200, Route 115, Route 305, Route 325, Route 335, and Route 345.

- North/south routes will have an odd number and the east/west routes will have an even number.
- Public information sessions regarding name changes to a numbered system will be held possibly at the University of Windsor and St. Clair College.
- The 418X is the only route that has been implemented. Targeting the end of June to implement the new routes along with signage.

Tyson Cragg indicates that this is an opportunity to take a cross section of riders and people who are interested in transit to get feedback on what Transit Windsor has done, and what is upcoming.

In response to a question asked by Jay Patel regarding where this information is available, Steve Habrun states that once an official implementation date for the new service has been determined, that two websites will be set up along with media releases and open houses.

Trevor Ramieri remarks that St. Clair College and the University of Windsor are working on a Welcome to Windsor project for incoming international students and, information relating to transit would be very helpful.

6. Date of Next Meeting

The next meeting will be held at the call of the Chair.

7. Adjournment

There being no further business, the meeting is adjourned at 4:33 o'clock p.m.

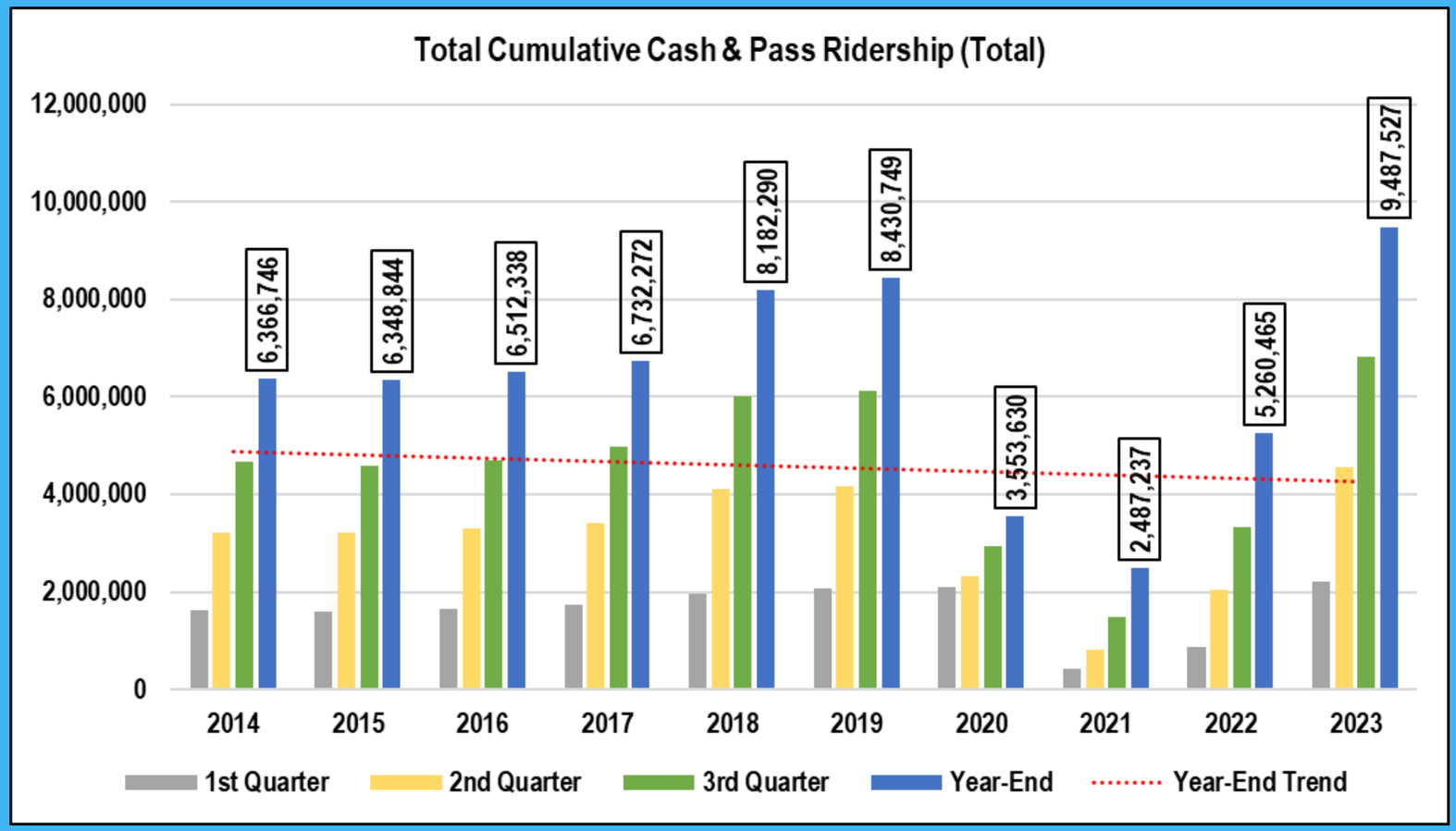
APPENDIX A

Transit 101

Facts about Transit Windsor

- Formerly the Sandwich, Windsor , and Amherstburg Railway, re-named Transit Windsor in 1977
- Governed by a 5-member Board of Directors, all City Councillors (ETPS)
- 20 routes (existing and approved), including 3 County, 1 International
- 315,000 annual service hours
- 119 buses, including 29 hybrid buses
- Annual ridership of nearly 9.5 million
- Over 50% of ridership is from UofW and St. Clair

Ridership, 2014-2023



Transit Master Plan

- Approved by Council in 2020
- Improvements in service and stop amenities (shelters, pads, etc.)
- Movement to grid system consisting of primary, secondary, and local routes
- All changes are subject to Board and Council approval, as part of the annual service planning and budget process
- Verbal update on progress to date and future initiatives

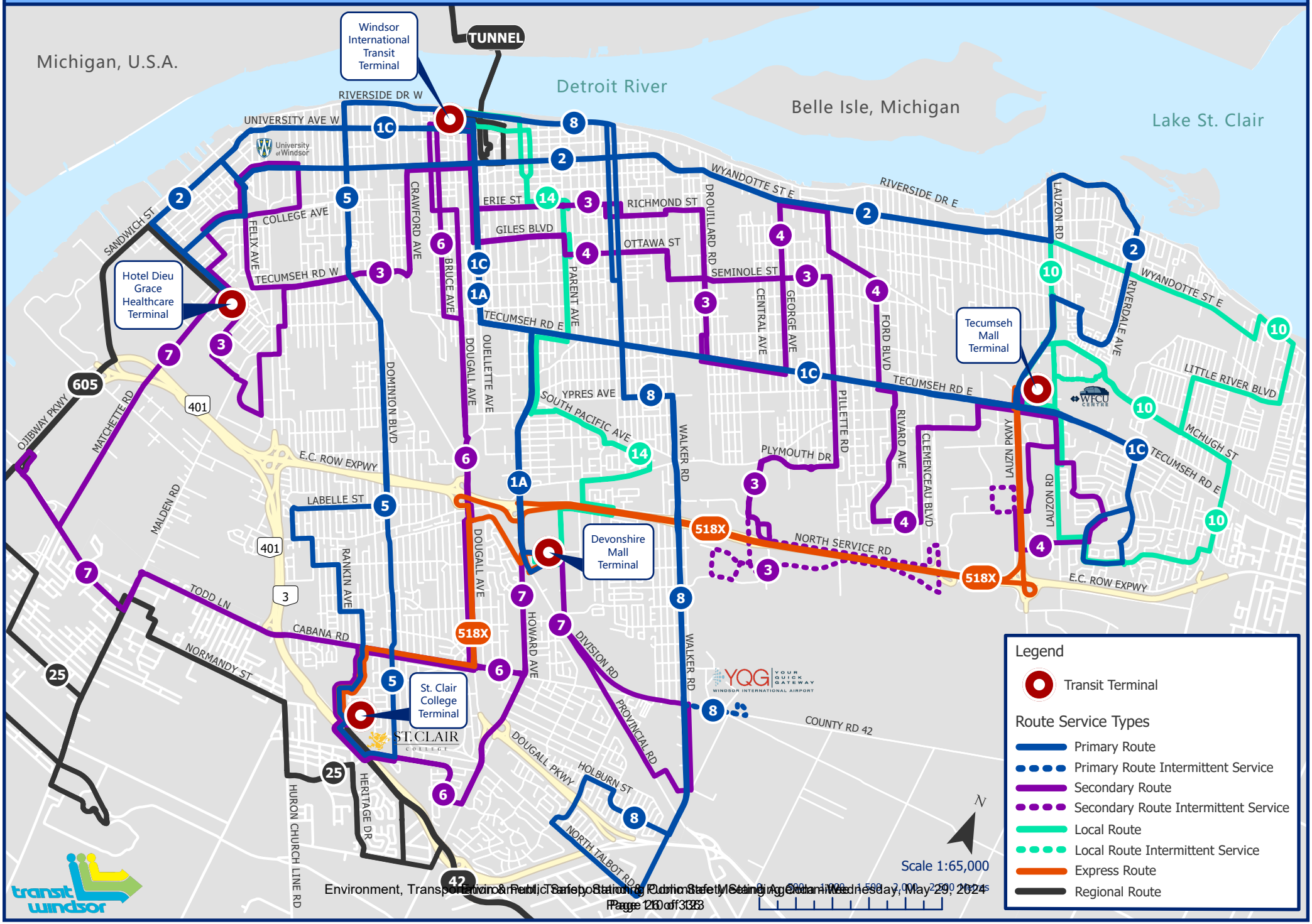
Thank-you!

Questions?

Transit Windsor Existing Routes

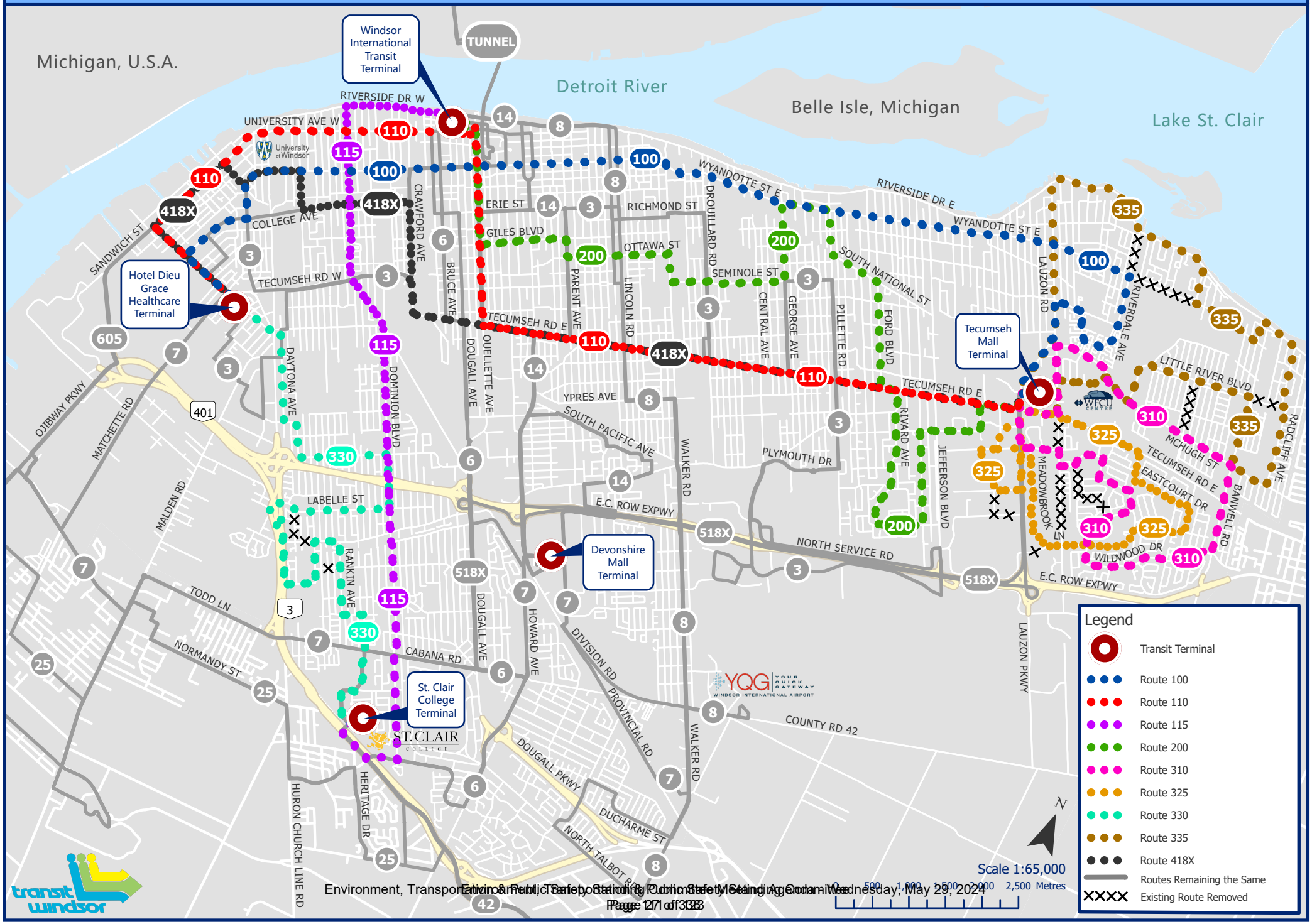
APPENDIX B

Transit Windsor
2023 Service Plan



Transit Windsor Routes After Proposed 2023 Service Plan

Transit Windsor
2023 Service Plan



Item No. 7.2

Committee Matters: SCM 107/2024

Subject: Minutes of the Environment & Climate Change Advisory Committee of its meeting held March 19, 2024

Environment and Climate Change Advisory Committee
Meeting held March 19, 2024

A meeting of the Environment & Climate Change Advisory Committee is held this day commencing at 5:00 o'clock p.m. in Room 140, 350 City Hall Square West, there being present the following members:

Councillor Kieran McKenzie, and Councillor Angelo Marignani arrive at 5:55 o'clock p.m. (following the Orientation Training)

Glory Aimufua
Frank Butler
Mike Fisher
Masoumeh Mazandarani
Jennifer Nantais
Maria Boada
Kiemia Rezagian

Also present are the following resource personnel:

Karina Richters, Supervisor Environment Sustainability & Climate Change
Barbara Lamoure, Environment & Sustainability Coordinator
Karen Kadour, Committee Coordinator

1. Call to Order

The Committee Coordinator calls the meeting to order at 5:55 o'clock p.m. and the Committee considers the Agenda being Schedule A attached hereto, matters which are dealt with as follows:

2. Declaration of Conflict

None disclosed.

3.1 Training for Newly Appointed Committee Members

Brett Bulmer, Occupational Health & Safety Advisory provides a Presentation entitled "Occupational Health & Safety Orientation".

3.2 Orientation and Governance Training

Anna Ciacelli, Deputy City Clerk provides an overview of the governance structure for the new members of the Environment and Climate Change Advisory Committee. The document entitled "Welcome – New Members of Advisory Committees, Working Groups and Expert Panels" is provided to the Members of the Advisory Committee.

4. Election of Chair

The Committee Coordinator calls for nominations from the floor for the position of Chair. Councillor Angelo Marignani nominates Councillor Kieran Mckenzie, seconded by Maria Boada. The Committee Coordinator asks Councillor Kieran McKenzie if he accepts. Councillor Kieran McKenzie accepts and assumes the Chair.

Moved by Councillor Angelo, seconded by Maria Boada,
That Councillor Kieran McKenzie **BE ELECTED** Chair of the Environment and Climate Change Advisory Committee.
Carried.

5. Business Items

5.1 Round Table Introduction

Barbara Lamoure, Environment and Sustainability Coordinator invites the Members to introduce themselves including their names and the organization they represent. The Presentation entitled "Round Table Introduction" is ***attached*** as Appendix "A" and the following remarks are provided:

The following question is asked – ***"What environmental event or issue most impacted you"*** and the following responses are provided:

- Water treatment because water is essential for life.
- Conservation of natural areas
- Biodiversity loss and habitat loss
- Waterfront and Little River Watershed, Peche Island – We are here to be stewards of the environment
- Water issues, public transportation, energy and being at the Council table for decision making
- Passionate about aligning with international and regional agreements to ensure targets are met. Wants to ensure that the City of Windsor helps to bring us to that 1.5 degree goal per the Paris Agreement and the sustainable development goals which is a great framework.
- Is impacted by every environmental issue as the environment allows us to breathe, eat and drink.

- The Environment and Climate Change Advisory Committee Mandate is reviewed along with the Committee's Duties and Responsibilities.
- Examples of previous initiatives under the Windsor Essex County Environment Committee – Climate Change Emergency, Green Speaker Series, Community outreach events – Earth Day at Malden Park.
- Discussion ensues regarding a new Logo for the Environment & Climate Change Committee and various ideas are provided, including a Request for Proposals or to collaborate with schools.
- Proposal to have strategic subcommittees to work on different initiatives.
- Suggestion for members to review the Environment, Transportation and Public Safety Standing Committee Agendas to be aware of pending environmental discussions to be heard at the Standing Committee and City Council meetings.

5.2 & 5.3 Brainstorming Session: and Discussion regarding Earth Day

Councillor Kieran McKenzie proposes that the Committee's 2024 Operating Budget and potential events/projects be discussed at the next meeting. He advises that some of the events undertaken by the previous committee included tree planting, Pat on the Back Awards and the Green Speaker Series.

In terms of Earth Day, Councillor Kieran McKenzie offers to contact staff in the Planning/Engineering Department to request a large map of the City of Windsor so people can identify where they live (using post it notes) and to indicate what is important to them.

Barbara Lamoure, passes out sticky notes and asks the members to answer the question ***"What are you environmental concerns?"*** The following remarks are provided:

What are your environmental concerns?

Walkability/active transport
- Promote active transportation
- Minimizing vehicle use
- Uptake of active transportation

- Air pollution

- Capacity building of council & staff on environmental issues
- Checklist of how policy actions impact certain SDGs/environmental issues
- Extreme temperatures
- Climate aligned finance/budgets
- Open government – environmental access to information

- Meeting city climate change goals – GHG reduction
- Increase in green energy in the area
- Changing our energy supply – cleaner/more efficient
- Community energy plan
- Other environmental related projects
- Reducing carbon footprint

- Global warming – Windsor's season changing, results of change (drought/forest fires, etc.)

- Climate justice
- Environmental justice – access to cooling centres

- Building capacity to environmental issues & its intersection with other topics
- Plastic pollution reduction
- Environmental education and outreach
- Light pollution
- Green development standards

- Embracing sustainable practices of companies in the area

- Changes in federal and provincial legislation

- Indigenous stewardship
- Indigenous engagement and reconciliation

- Water quality in Little River and the Detroit River shoreline
- Water contamination/pollution
- Stormwater financing

- 4 seasons public outdoor places for disabled people
- Children's playgrounds and their satisfaction, especially during the summer
- Urban heat islands and increasing the amount of greenery
- Sustainable urban development
- Outdoor thermal comfort

- Trees
- Move forward to implementation City Urban Forest Master Plan
- Access to green space
- Use of native plants in future planning
- Land use planning & conserving natural areas
- Habitat protection
- Habitat restoration

- Increase of green spaces & green buffers

- Proper disposal of wastes in garbage & recycling respectively (what percentage of potentially recyclable material ends up in the landfill?)
- Litter

- Biodiversity loss
- Biodiversity protection
- Species at risk
- Bird friendly city initiatives (windows, cats, education)

What can the Committee do to move the needle?

- Climate alliance finance budgets – Senator in Canada – Act to ensure that all budgets and all financial institutions will align with climate commitments. The Committee could request that Council ensure that all budgets are aligned with climate.
- Environmental training for staff and Council.
- When policy motions are put forward, create a checklist that indicates how it aligns to a certain environmental issue.

In response to a question asked by Kiemia Rezagian regarding if the committee can encourage the community to participate in a debate at Council, Councillor Kieran McKenzie responds affirmatively.

Councillor Kieran McKenzie suggests that Old Business, and New Business agenda items be added to future agendas.

Mike Fisher asks if a reading list can be provided to the Committee. Councillor Kieran McKenzie responds there are several Environmental Master Plan documents and adds that the relevant Master Plan documents will be circulated to the Committee.

6. Date of Next Meeting

The next meeting will be held on Tuesday, May 21, 2024 at 5:00 o'clock p.m.

7. Adjournment

There being no further business, the meeting is adjourned at 7:05 o'clock p.m.

Round Table Introduction

2-3 minutes per person

Introduce yourself – name and organization

Answer - what environmental event or issue most impacted you?

Environment and Climate Change Advisory Committee Mandate

The ECC receives referrals from City Administration to address specific environmental and climate change concerns from the City of Windsor. In addition, the ECC is proactive and will advise on environmental and climate change matters identified through its own initiative and will provide community education and outreach on environmental and climate change issues.

ECC will support the development of subcommittees (e.g. Youth Committee, Bird Friendly City, etc), which may include experts external to the ECC, as needed to address specific environmental and climate change initiatives.

The Environment and Climate Change Advisory Committee will report to the Environment Transportation and Public Safety Standing Committee and City Council.

ECC Duties and Responsibilities

The scope of the ECC Advisory Committee will include activities of primary responsibility for which an annual work plan will be developed, such as:

- Identify and provide expertise and input on emerging issues and where appropriate, make recommendations to Council for consideration regarding ongoing environmental/climate change concerns;
- Develop responses related to Federal and Provincial actions in public and private undertakings affecting the ecosystem to be forwarded to City Council for consideration and action;
- Discuss new, relevant, or unexplored environmental or climate change issues and propose new alternatives that may benefit the region on such matters;
- Review and provide input on the environmental and climate change implications of studies, plans, proposals and other documents as may be referred to the Committee;
- Consider long-term environmental/climate change issues and acknowledge social and intergenerational equity implications;
- Identify where studies could assist in increasing awareness of concerns and developing solutions to environmental/climate change problems;
- ECC has a delegation policy and can respond to delegate requests or issues accordingly;
- Collaborate with other organizations, committees, and agencies with similar interest in protecting and preserving the natural environment;
- Identify sponsors and partnership opportunities to support events and educational campaigns to further collaborative environmental/climate change projects;
- Champion and participate in in municipal initiatives and community activities to further the City’s objectives; and
- Flag municipal best practices and federal/provincial policies that may support the City’s environmental/climate change objectives.

Examples of previous initiatives under WECEC

- Climate Change Emergency Declaration (2019) and other Reports to Council
- Green Speaker Series – previous speakers include: Dr. David Suzuki, Elizabeth May, and Charles Montgomery
- Pat on the back awards
- Community outreach events – upcoming Earth Day at Malden Park

Windsor Essex County
ENVIRONMENT COMMITTEE

Earth Day 2024

Looking for volunteers to run the Environment and Climate Change Advisory Committee booth

10:00 am – 3:00 pm

The theme this year is sustainable mobility

For Future Consideration

Old logo:

New logo: ? Suggestions for next meeting

Brainstorming session

What are your environmental concerns ?

This information will be used to bring forward a list of 2024 priorities for consideration at the next meeting.

Brainstorming session

What can this committee do to move the needle?

This information will be used to bring forward a list of 2024 priorities for consideration at the next meeting.

Thank you for attending!

Bring any questions or suggestions to:

Barbara Lamoure – Environmental Sustainability Coordinator

Economic Development and Climate Change

350 City Hall Square, Suite 410 – D, N9A 6S1

519-255-6100 ext. 6108

blamoure@citywindsor.ca

Committee Matters: SCM 139/2024

Subject: Essex-Windsor Solid Waste Authority Regular Board Meeting Minutes from its meeting held April 10, 2024

Essex-Windsor Solid Waste Authority
Regular Board Meeting
MINUTES

Meeting Date: **Wednesday, April 10, 2024**

Time: **3:00 PM**

Location: **Essex County Civic Centre**
Council Chambers, 2nd Floor
360 Fairview Avenue West
Essex, Ontario N8M 1Y6

Attendance

Board Members:

Gary Kaschak –Chair	City of Windsor
Kieran McKenzie	City of Windsor
Jim Morrison	City of Windsor
Mark McKenzie	City of Windsor
Fred Francis	City of Windsor
Gary McNamara – Vice Chair	County of Essex
Hilda MacDonald	County of Essex
Michael Akpata	County of Essex
Rob Shepley	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
Madison Mantha	Project Lead
Teresa Policella	Executive Assistant

City of Windsor Staff:

Anne-Marie Albidone	Manager of Environmental Services
Shawna Boakes	Executive Director of Operations
Jim Leether	Manager of Environmental Services
Mark Spizzirri	Manager of Performance Management and Business Case Development

County of Essex Staff:

Melissa Ryan	Director of Financial Services/Treasurer
David Sundin	Solicitor/Interim Director, Legislative and Community Services
Sandra Zwiers	Chief Administrative Officer

Absent:

Drew Dilkens	City of Windsor (Ex-Officio)
Tony Ardovini	Deputy Treasurer Financial Planning

1. Call to Order

The Chair called the meeting to order at 3:02PM.

2. Motion to Move In-Camera

Moved by Fred Francis
Seconded by Gary McNamara

THAT the Board moved into a closed meeting pursuant to Section 239 (2) (k) of the Municipal Act, 2001, as amended for the following reason:

(k) A position, plan, procedure, criteria, or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipally or local board.

18-2024
Carried

Moved by Fred Francis
Seconded by Hilda MacDonald
THAT the EWSWA Board rise from the Closed Meeting at 3:18PM.

21-2024
Carried

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

Moved by Rob Shepley
Seconded by Fred Francis
THAT the minutes from the Essex-Windsor Solid Waste Authority Regular Meeting, dated February 6, 2024, be approved and adopted.

22-2024
Carried

5. Business Arising from the Minutes

No items were raised for discussion.

6. Waste Diversion

A. Results of Request for Proposal for Curbside Collection of Source Separated Organics for the Green Bin Program in the County of Essex

The Manager of Waste Diversion provided a summary of the report and highlighted the process that Administration followed to evaluate the Request for Proposal (RFP) submissions.

Two (2) submissions were received, Environmental 360 Solutions and Miller Waste Systems Inc. Both proposals achieved the minimum Technical Score and proceeded to the Financial Evaluation. Miller Waste Systems Inc. achieved the highest overall score and was identified as the Preferred Proponent.

Miller Waste Systems Inc. holds 31 municipal contracts in Ontario and 18 of these contracts are for source separated organics (SSO) similar to this contract.

Proponents were required to submit pricing for collection in urban settlement areas only, rural settlement areas only and provisional services which included the collection of multi-residential facilities and primary and secondary schools in both the urban and rural settlement areas in the County municipalities.

Miller Waste Systems Inc. submitted a price of $2.02 per week, per stop for urban settlement areas only which results in an estimated total cost of $5.99 million in Year 1 of the contract. Their price for rural settlement areas only was $3.30 per week, per stop. The Authority requested the provisional pricing so these services could be brought on during the contract or if there are legislative changes.

Miller Waste Systems Inc. also noted in their proposal that a discount would be provided if the collection for both urban settlement areas and rural settlement areas could commence at the same time.

There is no direct or immediate impact on the 2024 Budget. Any financial implications will be presented for approval as part of the annual budget process in the appropriate year.

The Chair asked if there were any questions.

Kieran McKenzie requested clarification on the contract extension price.

The General Manager explained that any extension beyond 5 years would be under the same terms and conditions with the exception of the price per stop, which would be negotiated.

Kieran McKenzie asked where the County would land on the decision to include rural households.

The General Manager stated that we now have a fulsome cost and will provide County Council with all the information and best practices that EXP brought forward. The direction from the County was urban settlement areas, at a minimum. This is an enhanced service.

Kieran McKenzie asked questions regarding how the collection contract aligned with the processing of the material.

The General Manager stated that the short-term processing contract is a five-year contract with a number of extensions. The processing contract will be aligned with the collection contract. The contract extensions with Seacliff Energy are at the Authority's discretion.

Kieran McKenzie asked why the evaluation committee thought that Miller's start-up plan is strong. He noted that we are absorbing a lot of the costs for public communication. He asked to what extent is Miller going to participate in the public communication.

The Manager of Waste Diversion noted that it is not a requirement of the collector to provide public education but they do have to comply with the Authority's campaigns. Both proponents had strong start-up plans but Miller had more systems in place in regards to quality control and an extensive recruitment process. They also have 18 SSO collection contracts in Ontario in the last 10 years and some of these contracts have been extended. She noted that in their submission, Miller explained typical collection issues encountered at curbside and how they deal with these issues.

Kieran McKenzie asked if Miller is operating in Southwestern Ontario.

The Manager of Waste Diversion confirmed that Miller has collection contracts in London, the Region of Waterloo and many others. She noted they have a lot of capacity and would be able to support this region.

The Chair asked if there were any other questions. There were no further questions.

The General Manager noted that the word "organics" was inadvertently omitted after the word "separated" in Recommendation number 2.

Moved by Fred Francis
Seconded by Kieran McKenzie

1. **THAT** the Authority Board award the Request for Proposals RFP 2024-02-07 for the curbside collection of source separated organics for the Green Bin Program in the County of Essex to the preferred proponent Miller Waste Systems Inc.

2. **THAT** the Authority Board authorize the Chair and General Manager to execute the Contract with Miller Waste Systems Inc. for the curbside collection of source separated organics in urban settlement areas for a

seven (7) year period with the anticipated commencement date of fall 2025. Where, the Authority reserves the right to extend the contract for two additional one-year extensions or portions of a year subject to the following process: any such extension shall be under the same terms and conditions excluding price which will be mutually agreed upon.

3. **THAT** the Authority Board authorize the General Manager to attend Essex County Council to request that the County provide a resolution by May 31, 2024 regarding the collection of processing of organic waste for households in rural settlement areas in all County Municipalities, AND

4. **THAT** the General Manager report back to the Authority Board on the Essex County Council's resolution to expand the collection and processing of organic waste to include households in rural settlement areas.

23-2024
Carried

B. Windsor Source Separated Organics Transfer Station Preferred Option

The General Manager referred to the presentation on the screen and described the layout and operations of the Windsor site and deferred to the Manager of Waste Diversion to review the Stantec report.

The Manager of Waste Diversion provided a summary of the report and stated that Stantec first had to confirm the capacity required at the Windsor site. Stantec did a scan of 14 municipal Green Bin programs in Ontario and noted that the longer the program, the more SSO was received or captured. Stantec used this information to establish the capacity for the Windsor Transfer Station over a 20-year period. At start up, the Authority should reach 6,200 tonnes per year and up to 17,000 tonnes per year over the long range.

Stantec reviewed the four options for the Fibre Material Recovery Facility (MRF) included in the Stantec report including the benefits and constraints of each option.

In Option 1 and Option 2, Stantec noted that these scenarios would not be feasible due to capacity.

It was noted by the consultant that Options 3 and 4 were both feasible but Option 4 was recommended. This option has several benefits and would also support the Authority's long-term needs for the site.

The Manager of Waste Diversion further noted that by occupying the Fibre MRF the Authority would not have a stranded asset in the middle of the site. As a result of this exercise, it was determined that Option 4 is the preferred option.

The Manager of Waste Diversion also noted that depending on the outcome of the Board on this decision, Administration would also be looking to issue an RFP to decommission the Fibre MRF equipment.

The cost for Option 4 is estimated at $4.2 million. After reviewing the estimate, Administration requested Stantec to do a review of the estimate provided by EXP. to repurpose the Container MRF and provide an opinion of probable cost review Technical Memo.

Administration also requested Stantec to look at a phased-in approach. Stantec determined that while staging was feasible from a cost standpoint it would not be the preferred option as we would reach our capacity within seven (7) years as well as potentially be exposed to higher construction costs and the inconvenience of reconstruction.

The General Manager stated that Authority Administration had met with the MECP on three occasions. The MECP has been clear that the Authority would not require a new Environmental Compliance Approval (ECA) but would require an amendment to the existing ECA. An amendment could take approximately one year. The MECP noted that they could expedite the process if the Authority submits the application as soon as possible. Since it is critical to have a transfer location in place prior to the program start up, in consultation with County Procurement, the Authority identified using Stantec for the next phase. This aligns with the Authority's procurement policy and the Canadian Free Trade Agreement (CFTA) and the urgency to get this work completed. The Authority would be meeting with Stantec to identify the staff that would be working on this project and have Stantec provide a cost.

The General Manager presented the financial implications of the project and the proposed funding.

The General Manager asked if there were any questions.

The Chair noted the report was well explained and thought out.

Mr. Morrison asked what is the comprehensive plan for leachate.

The Manager of Waste Diversion stated that the Authority is looking to handle the leachate inside the transfer station and pre-treat the leachate. She referred to the Manager of Waste Disposal.

The Manager of Waste Disposal stated that currently it is collected in an oil/grit separator, pre-treated and dumped into the municipal sanitary sewer.

Ms. Albidone noted that not a lot of leachate would be coming from this material. The intent is to clear out the material every day. The organics would not be sitting for 2-3 days and producing leachate. There won't be a lot of leachate being collected.

Kieran McKenzie asked if residents in close proximity will notice odours.

The Manager of Waste Diversion stated that odours should not be a problem. The material will be delivered daily to Seacliff Energy. The floors will be washed down. This Transfer Station will be unique in that the doors will be required to be closed when material is being dumped and the wheels of the trucks will be washed. Equipment will not be allowed to leave the area unless it is cleaned. The building will be cleaned regularly. She noted that the current Transfer Station is wide open all day and all night and is closer to residents than the new site.

Moved by Kieran McKenzie
Seconded by Jim Morrison

THAT the Board APPROVE Administration's recommendation to proceed with utilizing the Fibre MRF for the purpose of a TS-SSO for the new Green Bin Program in fall 2025.

Further, **THAT** the Board APPROVE Administration's recommendation to engage Stantec Consulting Ltd. For engineering services for detailed design and approvals to construct a TS-SSO at the Authority's Windsor site.

24-2024
Carried

C. Promotion and Education (P&E) Plan – Blue Box Transition to Producers

The Manager of Waste Diversion provided an update on the promotion and education (P&E) plan that was developed to prepare for Essex-Windsor's transition to Producers on August 28, 2024. She noted that Circular Materials indicated that P&E was not necessary for the Authority to do prior to them taking over the blue box program. Administration believes that P&E efforts should be undertaken to prepare residents for changes to their collection.

The Manager of Waste Diversion displayed the various tactics and outlined and explained each of the tactics. She noted the Authority is hosting monthly meetings with the Municipal Working Group with representatives from each of the seven County municipalities and the City of Windsor to keep them informed and provide updates on the program. The P&E plan will be promoted on the EWSWA website, social media and in the Envirotips newsletter.

The Manager of Waste Diversion stated that the tactics described had been included in the 2024 budget.

The Chair asked if there were any questions.

Mr. Francis asked if the reports could be just open to questions from the Board instead of a presentation of every report due to the reports being very thorough.

The Chair stated that he will consult with Administration regarding Mr. Francis' request about the reports.

Mr. McNamara noted that there was a news article circulating regarding a pushback by the Producers and reducing their responsibility. With the start date of transition getting closer, should be concerned about this.

The General Manager stated that the article was published by CBC. She noted that she would forward the article to the Board. She stated that they have been hearing at the various subcommittees that she and Ms. Albidone attend that the Producers are unhappy. She stated that the Producers are strongly lobbying the Province regarding the cost of the program. She provided a summary of what led to the transition of the program and how it is being conducted under the new Producer model. She does not think that our transition is in jeopardy. A significant concern is that the targets will not be reached. Circular Materials is lobbying to be the only organization that will manage the common collection system. The Authority is monitoring this and it is something that we are involved with our working groups.

Kieran McKenzie commented he is not surprised that the Producers are complaining about costs.

Moved by Fred Francis
Seconded by Gary McNamara
THAT the Board receive the report as information.

25-2024
Carried

7. Waste Disposal

A. Contract with Triple M LP. to Supply Auto Shredder Residue for Daily Cover at the Essex-Windsor Regional Landfill June 1, 2024 to May 31, 2029

Moved by Kieran McKenzie
Seconded by Fred Francis
THAT the Board approve an agreement between the EWSWA and Triple M Metal LP. (TMM) for the provision of Auto Shredder Residue for a five (5) year period commencing June 1, 2024 to May 31, 2029, at a price of $10.00 per metric tonne for a minimum of 50,000 tonnes per year to a maximum of 90,000 tonnes per year. Further, the Chair and General Manager be authorized to sign said agreement.

26-2024
Carried

8. New Business

The Board met in closed session pursuant to Section 239 (2) (k) of the Municipal Act, 2001, as amended for the following reason:

(k) A position, plan, procedure, criteria, or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipally or local board.

Discussion took place in closed session regarding the collection of blue box materials from non-eligible sources during transition of the blue box program to Producers. As a result, the following resolution was brought forward in regards to the collection of blue box materials from non-eligible sources beginning August 28, 2024 through December 31, 2025.

Moved by Fred Francis
Seconded by Hilda MacDonald

THAT the Board **APPROVE** Administration to accept the bi-weekly price of $14.43 per stop per month price from Green for Life Environmental Inc. and enter into discussions to finalize the number of stops and agreement for curbside collection of blue box materials from bi-weekly non-eligible sources beginning August 28, 2024 through December 31, 2025.

THAT the Board **APPROVE** Administration to enter into discussions with the Corporation of the City of Windsor to finalize the number of stops and agreement for curbside collection of blue box materials from weekly and night-collected non-eligible sources beginning August 28, 2024 through December 31, 2025.

27-2024
Carried

9. Other Items

The Chair commented that the new EWSWA website looks great.

10. By-Laws

A. By-Law 3-2024

Moved by Fred Francis
Seconded by Rob Shepley
THAT By-Law 3-2024, being a By-Law to Authorize the Execution of an Agreement with Miller Waste Systems Inc. for the Curbside Collection of Source Separated Organics for the Green Bin Program in the County of Essex in Urban Settlement Areas for a seven (7) year period with the anticipated commencement date of fall 2025, with the option to extend the Contract for two (2) additional, one-year extensions or portions of a year, any such

extension shall be under the same terms and conditions excluding price which will be mutually agreed upon.

28-2024
Carried

B. By-Law 4-2024

Moved by Gary McNamara
Seconded by Mark McKenzie
THAT By-Law 4-2024, being a By-Law to Authorize the Execution of an Agreement between the Essex-Windsor Solid Waste Authority and Triple M Metal LP for the Disposal of Auto Shredder Residue at the Essex-Windsor Regional Landfill.

29-2024
Carried

C. **By-Law 5-2024**

Moved by Rob Shepley
Seconded by Michael Akpata
THAT By-Law 5-2024, 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 10th day of April, 2024.

30-2024
Carried

11. Next Meeting Dates

Tuesday, May 7, 2024
Tuesday, June 4, 2024
Wednesday, July 10, 2024
Wednesday August 14, 2024 – Note: This meeting will start at 3:00PM
Wednesday, September 11, 2024
Wednesday, October 9, 2024
Tuesday, November 5, 2024
Tuesday, December 3, 2024

12. Adjournment

Moved by Rob Shepley
Seconded by Fred Francis
THAT the Board stand adjourned at 4:39PM.

31-2024
Carried

All of which is respectfully submitted.

Gary Kaschak
Chair

Michelle Bishop
General Manager

Item No. 7.4

Committee Matters: SCM 152/2024

Subject: Minutes of the Windsor Licensing Commission of its meeting held April 23, 2024

Windsor Licensing Commission

Meeting held April 23, 2024

A meeting of the Windsor Licensing Commission is held this day commencing at 9:30 o'clock a.m. in Room 522b, 350 City Hall Square West, there being present the following members:

Councillor Ed Sleiman, Chair
Councillor Renaldo Agostino
Councillor Angelo Marignani
Harbinder Gill

Regrets received from:

Jayme Lesperance

Delegations in attendance:

Trivousa Shalaby and Reham Shah regarding ***Item 6 (a)***
Nikeshkumar Vinubhai Narola regarding ***Item 7 (a)***

Also present are the following resource personnel:

Steve Vlachodimos, City Clerk and Licence Commissioner
Craig Robertson, Manager, Licensing & Enforcement, Deputy Licence Commissioner
Rory Sturdy, Supervisor of By-law Enforcement
Jeff Goldthorpe, Fire Prevention Officer
John Smith, Fire Prevention Officer
Karen Kadour, Committee Coordinator

1. Call to Order

The Chair calls the meeting to order at 9:34 o'clock a.m. and the Windsor Licensing Commission considers the Agenda being Schedule A attached hereto, matters which are dealt with as follows:

2. Disclosure of Interest

None disclosed.

3. Adoption of the Minutes

Moved by Councillor Angelo Marignani, seconded by Councillor Renaldo Agostino,

That the minutes of the Windsor Licensing Commission of its meeting held December 7, 2023 **BE ADOPTED** as presented.

Carried.

4. Requests for Deferrals, Referrals or Withdrawals

None.

5. Communications

No communications at this time.

6. Licence Transfers

Trivousa Shalaby, Transferor and Rehan Shah, Transferee appear before the Windsor Licensing Commission regarding the transfer of Taxicab Plate #034.

Craig Robertson provides the following remarks regarding the licence request:

- On January 10, 2024, transfer application and fee for taxicab plate #034 was submitted by Trivousa Shalaby
- On January 12, 2024, transferee application and proof of full-time status as a taxicab driver for Rehan Shah was submitted.
- On January 18, 2024, Trivousa Shalaby submitted a letter requesting that Plate #034 be transferred prior to the allowable terms that are provided in the Public Vehicle Licensing By-law.
- As a plate holder one is not permitted to transfer the plate within the first five years unless one has permission from the Licensing Commission.
- Administration has reviewed the applications and is prepared to recommend the transfer takes place.

Moved by Councillor Angelo Marignani, seconded by Councillor Angelo Agostino,

WLC 1/2024 That the transfer of Taxicab Plate #034 from Trivousa Shalaby to Rehan Shah **BE APPROVED** with the following conditions:

i. Rehan Shah be given thirty (30) days from the date of the approval to submit a vehicle for inspection that complies with Schedule 5 to By-law 150-2018, including a valid safety standards certification.
ii. Rehan Shah be given thirty (30) days from the date of the approval to submit a Taxicab Plate Holder application and pay the associated fee.

iii. Rehan Shan be given thirty (30) days from the date of the approval to provide verification that full compensation has been made to Trivoousa Shalaby in consideration of the transfer of Taxicab plate #034.
iv. Rehan Shah shall not lease Taxicab plate #034 for a one year period as stated I Schedule 5, Section 21.3 of Licensing By-law 150-2018.
Carried.

7. Applications/Hearings

Nikeshkumar Vinubhai Narola, Manager, 2494119 Ontario Inc. operating as Subway Sandwiches, 1115 Ouellete Avenue appears before the Windsor Licensing Commission on behalf of the licensee Harjinder Singh Grewal regarding the Hospitality Food Service Licence #23 018660.

Craig Robertson advises that the hearing being held today is to refuse a hospitality food service based on fire deficiencies that have not been corrected. Fire Prevention Officer Jeff Goldthorpe received verification from the responsible body that monitors fire extinguishers that would indicate that the owner has complied at this time with the fire deficiencies. So, at this point the Fire Department and Licensing Administration is prepared to allow renewal of the license, however, they will be subject to a penalty for noncompliance as they did not acquire their licence on time. Administration will allow the renewal of the licence subject to licence penalties under the By-law.

Fire Prevention Officer Jeff Goldthorpe advises that the reinspection fee is $169.50 to reinspect and ensure that the work has been done. He notes he will also reinspect the emergency lights and the fire extinguisher and a concern regarding an exit sign that had been removed.

Sandy Hansen adds that the administrative cost to process the application is $95.00.

Nikeshkumar Vinubhai Narcia indicates that the applicant is currently in India (returning on May 3, 2024) and adds that the deficiencies have been corrected.

Moved by Councillor Angelo Marignani, seconded by Councillor Renaldo Agostini,
WLC 2/2024 That the renewal of Hospitality Food Service Licence #23 018660 submitted by Harjinder Singh Grewal on behalf of 2494119 Ontario Inc. o/a Subway Sandwiches located at 115 Ouellette, Windsor, ON, N9A 4K1 **BE APPROVED** subject to fire inspection approval and associated fees and payment of late renewal fees to process the late application for this year within two weeks from the date of this decision.
Carried.

8. Reports and Administrative Matters

(a) Expired Application(s) for Business Licence

Moved by Councillor Angelo Marignani, seconded by Councillor Renaldo Agostino,
That the report of the Deputy Licence Commissioner dated March 21, 2024 entitled "Expired Application(s) for Business Licence" **BE RECEIVED.**
Carried.

9. In Camera

No In Camera session is held.

10. Date of Next Meeting

The next meeting will be held at the call of the Chair.

11. Adjournment

There being no further business, the meeting is adjourned at 9:50 o'clock a.m.

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 24/2024

Subject: Local Improvement Program Implementation 2024 Update - City Wide

Reference:

Date to Council: May 29, 2024
Author: Adam Mourad
Engineer II
(519) 255-6100 Ext. 6614
amourad@citywindsor.ca
Design – Engineering
Report Date: May 6, 2024
Clerk's File #: SL2024

To: Mayor and Members of City Council

Recommendation:

I. THAT Council **RECEIVE** for information this report as an annual status update on the progress of the Local Improvement Program Implementation; and,

II. THAT Council **APPROVE** the prioritization of Local Improvement Projects (LIP) presented in this report; and,

III. THAT Council **RECEIVE** for information the response to CQ 22-2024, and the attached list of outstanding LIPs in Appendix D; and,

IV. THAT given significant time that has passed since previous notice was sent and construction costs have increased since the original notice, Administration **BE DIRECTED** to issue new notices to the benefitting property owners on the 3700 Block of Byng Road notifying them of the City's intention to proceed with a City initiated Local Improvement for Curb & Gutter, Storm Sewers, Private Drain Connections, and Boulevard Restoration, such notice to include updated cost estimates and to be prepared in accordance with O. Reg. 586/06 section 6.

Executive Summary:

N/A

Background:

Local Improvement Policy Updates

Local improvement Projects (LIP's) are governed by Ontario Regulation 586/06 under the Municipal Act, 2001. Municipalities often develop policies related to the application of LIP's specific to that municipality, subject to complying with O. Reg. 586/06.

On July 8, 2019, Council endorsed the Priority Programme for Local Improvement Projects (LIPs) (report C 131/2019) through CR 317/2019. This programme identified all local roads with rural cross sections (lacking Curb & Gutters) and authorized administration to reconstruct the same through City Initiated LIPs with the benefitting property owners paying their share of the costs of new or upgraded services. Priority was given to road segments without sanitary sewers, with roads lacking curb & gutter and sanitary sewers ranking highest. As well, CR 317/2019 indicated that any Local Improvement Petitions certified prior to the adoption of the Consolidated Local Improvement Policy be allowed to proceed regardless of their position on the priority listing. A list of outstanding local improvements for consideration as future funding becomes available has been included in Appendix D.

On Aug. 24, 2020, City Council endorsed the recommendation of an updated version of the Consolidated Local Improvement Policy (report S 60/2020 and SCM 237/2020) through CR 431/2020. This consolidated and rescinded all existing local improvement policies into a single policy.

On Apr. 27, 2020, in response to CQ 3-2020, City Council endorsed through CR 136/2020 an option to fund and repay LIPs over a period of up to 20 years.

Private Works Added to the LIP Programme

In response to CQ 19-2019, City Council approved through CR 138/2020 utilizing local improvement charges to finance shoreline protection works. Further, on Oct. 30, 2023, City Council endorsed through CR 444/2023 and CR 260/2023 (report C 149/2023) a private Local Improvement Programme for residents who own their portion of the East Riverside Shorewalls along Riverside Drive as well as approving the addition of Shoreline Structures to the existing Consolidated Local Improvement Policy.

On Aug. 8, 2023, through CR 329/2023 (report S 78/2023), Council endorsed the use of O. Reg. 586/06 for the private local improvements related to decommissioning of existing septic systems to be funded under the Local Improvement Programme with the full costs of the work to be repaid over a 20 year period with appropriate interest.

CQ22-2024

On Mar. 18, 2024, Council through CQ 22-2024:
"Asks that Administration report back to Council with a list of Local Improvement Plans previously approved prior to the policy change enabling the City to initiate LIPs in areas that would serve to further City objectives and provide cost estimates for the previously approved projects for Council consideration in upcoming 2025 budget."

This report provides a status update on the local improvement programme and a response to CQ 22-2024.

Discussion:

The Local Improvement Priority Programme provides a consistent and transparent means of allocating LIP project funding and priorities and identifies existing rural cross section roads. Prior to this, LIPs were carried out on a case-by-case basis, usually initiated by the residents of the street.

The evaluation of each rural road segment is based on four main components – the sanitary sewer, storm sewer, watermain, and pavement condition. These conditions are obtained through inspection and condition data from City departments and EnWin Utilities.

The Design Division in the Engineering Department annually reviews the prioritization of all capital projects based on the presence and condition of municipal infrastructure and recommends projects to be constructed in future years. The Programme contributes to decision making relating to annual funding allocations and budgetary planning.

LIPs initiated by the City (as opposed to a petition from residents) are prioritized in accordance with the list approved by Council as funding allows, focusing on installation of new sanitary sewers to eliminate septic systems which pollute waterways and groundwater. Following approval by Council for the construction of a sanitary sewer though a City Initiated LIP, residents are provided with an opportunity to petition for additional upgrades to other municipal services (sidewalks, streetlighting, etc.), to be completed during the LIP construction. Benefitting property owners are assessed their proportionate costs for all LIP works included in the project based on the Consolidated Local Improvement Policy.

Flankage roads consisting of a majority of adjacent side yards are not subject to the LIP policy and will continue to be reconstructed under CR 8/2012 based on their inclusion in the Road Rehabilitation Programme.

Although the current Priority Program for City Initiated LIP's include only local, rural cross section roads, road segments with curb & gutters, collector roads, and arterial roads without sanitary sewers will be inventoried, rated, and may be added to the priority list in the 2025 programme update.

Projects Updates:

In 2022 and 2023, Administration continued work on projects approved from previous years, identified future project priorities, and continued to process resident initiated LIPs for consideration.

The following list categorizes priorities based on rating criteria set in the previous LIP Programme council report (report C 131-2019),

1. **Priority 1:** Sanitary Sewer LIP Projects on rural cross section local roads.

   Table 1 below identifies current Priority 1 projects in order from highest to lowest priority. Road segments with the lowest rating are the most deteriorated, and/or lacking in services and will be addressed first.

   Two groups of roads have been removed from Table 1 below and are identified in Appendix A and B. Appendix A projects would service five (5) or fewer properties and the associated benefit to cost ratio would be low. Appendix B is dependent on the extension of the Malden Road Sanitary Trunk Sewer to serve as an outlet and cannot be completed in advance. Both will be reviewed on the basis of feasibility and resident interest as they arise.

Table 1 – Priority 1 - Rural Cross Section Roads Requiring Sanitary Services

STREET	FROM	TO	IMPROVEMENT TYPE	PRIORITY RATING	WARD
JOY RD	8TH CON RD	JOY RD	CURB & GUTTER, SANITARY SEWER, SIDEWALK, STREETLIGHTS	1.90	9
RAY RD	8TH CON RD	RAY RD	CURB & GUTTER, SANITARY SEWER, STORM SEWER, SIDEWALK, STREETLIGHTS	2.10	9
WILKINSON LANE	CHIPPAWA ST.	SOUTH ST.	CURB & GUTTER, SANITARY SEWER, STORM SEWER	3.00	2
EVERTS AVE	TOTTEN ST	EVERTS AVE	CURB & GUTTER, SANITARY SEWER, SIDEWALK, STREETLIGHTS	3.20	10
MARK AVE	TOTTEN ST	MARK AVE	CURB & GUTTER, SANITARY SEWER, SIDEWALK, STREETLIGHTS	3.20	10
EVERTS AVE	TECUMSEH RD W	CAMPBELL AVE	CURB & GUTTER, SANITARY SEWER, STREETLIGHTS	3.80	10

2. **Priority 2:** Sanitary Sewer LIPs on Urban Cross Section Local Roads.

   These projects are to be identified in the 2025 Local Improvement Programme Update.

3. **Priority 3:** Sanitary Sewer LIPs on Arterial and Collector Roads.

   These projects are to be identified in the 2025 Local Improvement Programme Update.

4. **Priority 4:** Rural Cross Section LIPs (with existing sanitary sewers), as identified in Appendix C.

5. **Priority 5:** Outstanding Resident and City Initiated LIPs, as identified in Appendix D.

Completed and Active LIPs, are identified in Appendix E.

Administration will continue to follow the direction of Council and focus on improving roads with rural cross sections with no sanitary sewers according to Table 1.

This may result in the delay of successful Resident Initiated LIPs while existing priorities are completed. The timeline for completion of the existing priority projects is currently undetermined due to the number of projects and potential for appeals. As a result, Council may wish to consider reviewing successful LIPs as included in Appendix D individually from year to year which will reprioritize funding.

As per CR 317/2019, LIPs for Sanitary Sewers can proceed regardless their position on the existing priority list with a sufficient LIP petition.

3700 Block of Byng

In 2018, the City provided residents of the 3700 block of Byng Road with a notice of an intent to pass a Local Improvement Charges By-law for the construction Curb & Gutter, Storm Sewers, Private Drain Connections, and Boulevard Restoration. Residents were informed at the time that construction of this project was subject to budget approval. As this was passed under the previous local improvement policy, Administration is recommending that design of this project be allowed to proceed and that construction be prioritized as soon as funding becomes available despite its position on the new priority list. Completion of this project would close the final LIP conducted under the previous LIP policy.

Construction costs have escalated dramatically since the original notice and cost estimates sent to residents in 2018. In addition to this, many properties may have changed ownership in this time. As such, Administration recommends the benefitting residents be provided notice of the intention to move forward with this LIP including updated cost estimates and providing instructions to petition against the work, all in accordance with Section 6 of O. Reg. 586/06.

Should there be no objections or petitions against the LIP, it would be funded out of the Local Improvement Programme (7171002). It is anticipated that design could proceed as early as 2024. Existing funding in Project 7171002 is currently earmarked for Ray Road and Joy Road which are currently being opposed by residents, and expected to go before the Ontario Municipal Board (OMB) this year. Following the OMB decision, Administration will determine which projects may proceed in which order based on availability of funding and progress of design works.

Risk Analysis:

Overall risks to the programme to be considered during the prioritization of future projects, are primarily financial and economic in nature. This includes the following:

- Increased cost for future labour and materials due to typical annual inflation.

- Short-term fiscal and long-term economic impacts due to potential shortages of material and labour, delay in design and construction schedules, and decline of City revenue and unforeseen expenditures in the occurrence of future unforeseen circumstances.

- Decrease in the number of projects per year that can be funded under the current 10 year capital budget due to the above

Council has endorsed a priority programme for City initiated LIP's. As Administration moves forward with these priorities, resident initiated LIP's continue to be brought forward with uncertain frequency. These initiatives will compete for available funding. There is a benefit to constructing LIP's where residents are in support of the works (i.e. resident initiated) and City initiated LIP's carry a heightened risk of delays and administrative time due to OMB appeals as has been experienced in the case of the last 3 City initiated LIP's (Baseline, Ray and Joy Roads).

Financial Matters:

Investments in new infrastructure throughout the City of Windsor have continued to bring existing rights-of-way in line with current standards. The guide to project implementation outlined in the Priority Listing continues to be reviewed annually based on the forecasting of needs and available funding.

To date, Council has approved $20.04M funding for the construction of LIPs (including the 2024 Capital Budget).

Since the beginning of 2020 when the new LIP policy was fully implemented, approximately $8.72M has been spent through the Local Improvement Programme for construction of new services on local roads.

There is approximately $6.74M available in Project #7171002 – Local Improvement Program Infrastructure. Costs to complete the work for the Byng Road Local Improvement are anticipated to be approximately $2.4 million. Of these funds, $291,000 will be recovered from the benefitting properties, leaving a net cost to the City of $2,109,000. Therefore, there is sufficient funding available to complete the Byng Road Local Improvement as per Recommendation IV above. As noted, depending on timing, this could delay the implementation of the Ray and/or Joy Road LIP's.

The current listing of recommended budgeted projects is included in Appendix F.

As previously indicated, amounts recovered from benefitting properties may be paid through City funded payment plans which can extend from 10 to 20 years. A reasonable rate of interest, plus an percent for administrative time is applied to the outstanding annual payments. The rate of interest charged within each plan is tied to the City's cost of borrowing which can fluctuate with interest rates.

Consultations:

Kathy Buis - Financial Planning Administrator

Michael Dennis – Manager of Strategic Budget Development and Control

Pierfrancesco Ruggeri – Technologist III

Conclusion:

The Local Improvement Programme provides additional services to City residents and brings existing roads in line with current standards. The programme addresses the prioritization of projects based on the approved LIP Priority Programme with project priorities continuing to be updated on an annual basis.

Administration recommends that Council receive for information this report, and that Council approve the prioritization of sanitary sewer Local Improvement Projects (LIPs) presented in this report.

Approvals:

Name	Title
Paul Mourad	Manager of Design (Acting)
Stacey McGuire	Executive Director of Engineering / Deputy City Engineer
Mark Winterton	Commissioner, Infrastructure Services
Janice Guthrie	Commissioner, Corporate Services /City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

1 Table A: Low Density LIP Areas
2 Table B: LIP Areas Requiring Malden Road Trunk Sewer Extension
3 Table C: Rural Cross Section LIP Areas
4 Table D: Outstanding Resident and City Initiated LIP Petitions
5 Table E: Completed and In Progress LIPs
6 Table F: Recommended Local Improvements Programme

Appendix A – Low Density LIP Areas

Table A: Low Density LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
BETTS AVE	KENORA ST	BETTS AVE	1.00	10
BRISTOL ST	BRISTOL ST	MALDEN RD	1.00	1
CALIFORNIA AVE	NORTHWOOD ST	CALIFORNIA AVE	1.00	10
ELGIN ST	ELGIN ST	SECOND ST	1.00	1
KENT ST	KENT ST	SEVENTH ST	1.00	1
NICHOLS ST	NICHOLS ST	MALDEN RD	1.00	1
ORIOLE BLVD	ORIOLE BLVD	MALDEN RD	1.00	1
RICKARD AVE	MALDEN RD	RICKARD AVE	1.00	1
SECOND ST	ELGIN ST	SECOND ST	1.00	1
WENTWORTH ST	WENTWORTH ST	MALDEN RD	1.00	1
CHAPPUS ST	PERTH ST	MALDEN RD	1.20	1
ALEXANDRA AVE	SOUTH CAMERON BLVD	ALEXANDRA AVE	1.40	10
TITCOMBE RD	TITCOMBE RD	MATCHETTE RD	1.40	1
LAMBTON ST	LAMBTON ST	MALDEN RD	1.60	1
PITTSBURG ST	PITTSBURG ST	MALDEN RD	1.60	1
WENTWORTH ST	WENTWORTH ST	WERNER AVE	1.60	1
MELROSE AVE	PARKVIEW AVE	VIRGINIA AVE	1.60	6
WENTWORTH ST	WERNER AVE	WENTWORTH ST	1.80	1
WERNER AVE	WENTWORTH ST	WERNER AVE	1.80	1
ST CLAIR AVE	ST CLAIR AVE	CABANA RD W	2.00	1
BEECH AVE	CHAPPUS ST	BROADWAY ST	2.20	1
SOMME AVE	ELLROSE AVE	ARTHUR RD	2.50	5

Appendix B – LIP Areas Requiring Malden Road Trunk Sewer Extension

Table B: LIPs Requiring Malden Road Trunk Sewer Extension				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
KENT ST	KENT ST	MALDEN RD	2.70	1
LANSING ST	LANSING ST	MALDEN RD	1.70	1
GRATIOT ST	GRATIOT ST	MALDEN RD	1.00	1

Appendix C – Rural Cross Section LIPs

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
FACTORIA RD	MILLOY ST	TECUMSEH RD E	5.30	5
CADILLAC ST	SOMME AVE	CADILLAC ST	5.00	5
FACTORIA RD	ALICE ST	MILLOY ST	5.00	5
BENSETTE ST	REMINGTON AVE	LILLIAN AVE	4.80	10
BRUCE AVE	NORFOLK ST	LIBERTY ST	4.80	1
STANLEY ST	REMINGTON AVE	LILLIAN AVE	4.80	10
EDINBOROUGH ST	REMINGTON AVE	LILLIAN AVE	4.70	10
HILDEGARDE ST	REMINGTON AVE	LILLIAN AVE	4.60	10
RANDOLPH AVE	WEST GRAND CRT	NORFOLK ST	4.60	1
VANIER ST	VANIER ST	REMINGTON AVE	4.60	10
ALEXANDRINE ST	REMINGTON AVE	LILLIAN AVE	4.50	10
BYNG RD	FOSTER AVE	LAPPAN AVE	4.50	9
CAPITOL ST	REMINGTON AVE	LILLIAN AVE	4.50	10
MCKAY AVE	CURRY AVE	LABELLE ST	4.50	10
WOODLAWN AVE	E C ROW AVE E	MALCOLM ST	4.50	9
ALEXANDRINE ST	ALEXANDRINE ST	REMINGTON AVE	4.40	10
CENTRAL AVE	FAUST ST	ONTARIO ST	4.40	5
CHARLES ST	CHARLES ST	REMINGTON AVE	4.40	10
DANDURAND AVE	WEST GRAND BLVD	NORFOLK ST	4.40	1
MEIGHEN RD	TECUMSEH RD E	VIMY AVE	4.40	5
RADISSON AVE	WEST GRAND BLVD	NORFOLK ST	4.40	1
ROSSINI BLVD	SOMME AVE	GRAND MARAIS RD E	4.40	5
CHARLES ST	REMINGTON AVE	LILLIAN AVE	4.30	10
VANIER ST	REMINGTON AVE	LILLIAN AVE	4.30	10
CLOVER ST	CLAIRVIEW AVE	WYANDOTTE ST E	4.30	7
HILL AVE	SANDWICH ST	PETER ST	4.30	2
TURNER RD	LAPPAN AVE	CALDERWOOD AVE	4.30	9
ATKINSON ST	ATKINSON ST	REMINGTON AVE	4.20	10
BENSETTE ST	LILLIAN AVE	ELSMERE AVE	4.20	10
BRAZIL AVE	BRAZIL AVE	SOUTH PACIFIC AVE	4.20	10
CAPITOL ST	CAPITOL ST	REMINGTON AVE	4.20	10
PARKWOOD AVE	E C ROW AVE E	MALCOLM ST	4.20	9
PARKWOOD AVE	MALCOLM ST	SYDNEY AVE	4.20	9
RIBERDY RD	CALDERWOOD AVE	MELINDA ST	4.20	9
STANLEY ST	LILLIAN AVE	ELSMERE AVE	4.20	10
VANIER ST	LILLIAN AVE	VANIER ST	4.20	10
WOODLAWN AVE	MALCOLM ST	SYDNEY AVE	4.20	9
BYNG RD	LAPPAN AVE	CALDERWOOD AVE	4.10	9
DUFFERIN PL	ELLIOTT ST E	ERIE ST E	4.10	3
BYNG RD	MELINDA ST	LEDYARD AVE	4.10	9
CHARLES ST	LILLIAN AVE	CHARLES ST	4.10	10

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
CHURCH ST	NOTTINGHAM ST	NORFOLK ST	4.10	1
CLAIRVIEW AVE	MATTHEW BRADY BLVD	ST PAUL AVE	4.10	6
VIRGINIA PARK AVE	ROCK=--ELL BLVD	LABELLE ST	4.10	10
VIRGINIA PARK AVE	LABELLE ST	GRAND MARAIS RD W	4.10	10
BENSETTE ST	ELSMERE AVE	PARENT AVE	4.00	10
CHARLOTTE ST	CHARLOTTE ST	REMINGTON AVE	4.00	10
HILDEGARDE ST	LILLIAN AVE	ELSMERE AVE	4.00	10
MCKAY AVE	LABELLE ST	EGLINGTON ST	4.00	10
MEIGHEN RD	SOMME AVE	ST JULIEN AVE	4.00	5
MEIGHEN RD	VIMY AVE	YPRES AVE	4.00	5
MELDRUM RD	YPRES AVE	SOMME AVE	4.00	5
RIBERDY RD	MOXLAY AVE	DIVISION RD	4.00	9
STANLEY ST	ELSMERE AVE	PARENT AVE	4.00	10
CHURCH ST	WEST GRAND BLVD	NOTTINGHAM ST	3.90	1
MATTHEW BRADY BLVD	CLAIRVIEW AVE	CEDARVIEW ST	3.90	6
PRATT PL	RIVERSIDE DR E	WYANDOTTE ST E	3.90	5
WOODLAWN AVE	SYDNEY AVE	FOSTER AVE	3.90	9
RIBERDY RD	LEDYARD AVE	AIRPORT RD	3.90	9
CHARL AVE	SOUTH PACIFIC AVE	NORTH TERMINAL RD	3.80	3
BROCK ST	EDISON ST	COLLEGE AVE	3.80	2
CHURCH ST	FRONTENAC AVE	GRANADA AVE W	3.80	1
CLAIRVIEW AVE	CLOVER ST	ADELAIDE AVE	3.80	7
HILDEGARDE ST	HILDEGARDE ST	REMINGTON AVE	3.80	10
MELDRUM RD	MONS AVE	GRAND MARAIS RD E	3.80	5
ROSSINI BLVD	YPRES ST	SOMME AVE	3.80	5
RUSSELL ST	WATKINS ST	HILL AVE	3.80	2
STANLEY ST	STANLEY ST	REMINGTON AVE	3.80	10
CURRY AVE	NORFOLK ST	RICHARDIE BLVD	3.70	1
LIBERTY ST	CHURCH ST	BRUCE AVE	3.70	1
MELDRUM RD	ST JULIEN AVE	MONS AVE	3.70	5
RUSSELL ST	BROCK ST	CHIPPAWA ST	3.70	2
RUSSELL ST	HILL AVE	CHAPPELL AVE	3.70	2
WOODLAWN AVE	FOSTER AVE	WOODLAWN AVE	3.60	9
RANDOLPH AVE	GRAND MARAIS RD W	RANDOLPH AVE	3.60	1
BYNG RD	SEYMOUR BLVD	FOSTER AVE	3.60	9
BYNG RD	LEDYARD AVE	MOXLAY AVE	3.60	9
BYNG RD	MOXLAY AVE	DIVISION RD	3.60	9
MCKAY AVE	EGLINGTON ST	GRAND MARAIS RD W	3.60	10
RIBERDY RD	AIRPORT RD	MOXLAY AVE	3.60	9

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
BLISS RD	SEYMOUR BLVD	FOSTER AVE	3.50	9
ERSKINE ST	ERSKINE ST	STRABANE AVE	3.50	5
HOWARD PL	DOUGALL PKY S/B OFF RAMP	TUSON WAY	3.50	1
LAFORET ST	BABY ST	LAFORET ST	3.50	2
LANGLOIS AVE	GRAND MARAIS RD E	NORTH SERVICE RD	3.50	10
MATTHEW BRADY BLVD	TRANBY AVE	MATTHEW BRADY BLVD	3.50	6
MEIGHEN RD	ST JULIEN AVE	MONS AVE	3.50	5
PICHE ST	RYAN ST	ROSEDALE AVE	3.50	2
PICHE ST	WYANDOTTE ST W	RYAN ST	3.50	2
RIBERDY RD	MELINDA ST	LEDYARD AVE	3.50	9
VIRGINIA PARK AVE	WEST GRAND BLVD	NORFOLK ST	3.50	1
CHURCH ST	NORFOLK ST	LIBERTY ST	3.40	1
DOUGALL AVE	DARCEY ST	DOWNEY DR	3.40	1
ADSTOLL AVE	BUCKINGHAM DR	ARMSTRONG AVE	3.40	8
ATKINSON ST	REMINGTON AVE	GRAND MARAIS RD E	3.40	10
BYNG RD	CALDERWOOD AVE	MELINDA ST	3.40	9
HILDEGARDE ST	ELSMERE AVE	PARENT AVE	3.40	10
ELINOR ST	WYANDOTTE ST E	ELINOR ST	3.30	7
MENARD ST	FRANK AVE	LAPORTE AVE	3.30	6
PARKWOOD AVE	SYDNEY AVE	SEYMOUR BLVD	3.30	9
PARKWOOD AVE	SEYMOUR BLVD	FOSTER AVE	3.30	9
PARKWOOD AVE	FOSTER AVE	PARKWOOD AVE	3.30	9
BLISS RD	E C ROW AVE E	SYDNEY AVE	3.20	9
BLISS RD	SYDNEY AVE	SEYMOUR BLVD	3.20	9
CHURCH ST	BEALS ST W	MEDINA ST W	3.20	1
CHURCH ST	MEDINA ST W	FRONTENAC AVE	3.20	1
CLAIRVIEW AVE	ADELAIDE AVE	CLAIRVIEW AVE	3.20	7
ELINOR ST	MENARD ST	WYANDOTTE ST E	3.20	7
ELSMERE AVE	HILDEGARDE ST	CHARLOTTE ST	3.20	10
FRANKLIN ST	ROSSINI BLVD	BERNARD RD	3.20	5
JARVIS AVE	CASTLE HILL RD	JARVIS AVE	3.20	7
MATTHEW BRADY BLVD	MCHUGH ST	MATTHEW BRADY BLVD	3.20	6
RONALD AVE	SALINA AVE	RONALD AVE	3.20	9
DAYTONA AVE	DAYTONA AVE	TOTTEN ST	3.10	10
JOHN M ST	CLAIRVIEW AVE	MENARD ST	3.10	7
NORTHWAY AVE	ALGONQUIN ST	TOTTEN ST	3.10	10
RUSSELL ST	SOUTH ST	WATKINS ST	3.10	2
ST CLAIR AVE	TECUMSEH RD W	ALGONQUIN ST	3.10	10
TOURANGEAU RD	GRAND MARAIS RD E	ANTHONY CRT	3.10	5
CAPITOL ST	LILLIAN AVE	PARENT AVE	3.10	10
QUEEN ST	PRINCE RD	QUEEN ST	3.10	2

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
SOUTH PACIFIC AVE	TECUMSEH RD W	JANETTE AVE	3.10	3
ROSELAWN DR	DANDURAND AVE	ACADEMY DR	3.00	1
ROSELAWN DR	ACADEMY DR	MORRIS DR	3.00	1
ROSELAWN DR	MORRIS DR	LONGFELLOW AVE	3.00	1
TURNER RD	SEYMOUR BLVD	FOSTER AVE	3.00	9
TURNER RD	FOSTER AVE	LAPPAN AVE	3.00	9
WATKINS ST	RUSSELL ST	SANDWICH ST	3.00	2
LENS AVE	LOUIS AVE	MARENTETTE AVE	3.00	4
LENS AVE	MARENTETTE AVE	ELSMERE AVE	3.00	4
BLISS RD	FOSTER AVE	LAPPAN AVE	2.90	9
REGINALD ST	ELLROSE AVE	ARTHUR RD	2.90	5
TURNER RD	MOXLAY AVE	DIVISION RD	2.90	9
COUSINEAU RD	COUSINEAU RD	GOLFCOURSE CRES	2.90	1
COUSINEAU RD	GOLFCOURSE CRES	SUTHERLAND AVE	2.90	1
DAYTONA AVE	MALDEN RD	MANITOBA ST	2.90	10
DAYTONA AVE	KENORA ST	NORTHWOOD ST	2.90	10
ELINOR ST	CLAIRVIEW AVE	MENARD ST	2.90	7
HILL AVE	PETER ST	QUEEN ST	2.90	2
MELDRUM RD	SOMME AVE	ST JULIEN AVE	2.90	5
TURNER RD	CALDERWOOD AVE	MELINDA ST	2.90	9
BLISS RD	LEDYARD AVE	MOXLAY AVE	2.80	9
CHURCH ST	LIBERTY ST	BEALS ST W	2.80	1
NORTHWAY AVE	TECUMSEH RD W	ALGONQUIN ST	2.80	10
ROSELAWN DR	VIRGINIA PARK AVE	DANDURAND AVE	2.80	1
DOUGALL AVE	DOWNEY DR	DOUGALL AVE	2.80	1
MEIGHEN RD	MONS AVE	GRAND MARAIS RD E	2.80	5
MORTON DR	OJIBWAY PKY	RAMBLEWOOD DR, LASALLE	2.80	1
MORTON DR	RAMBLEWOOD DR, LASALLE	RAMBLEWOOD DR, LASALLE	2.80	1
VIRGINIA PARK AVE	NORFOLK ST	RICHARDIE BLVD	2.80	1
WOODLAND AVE	WEST GRAND BLVD	NORFOLK ST	2.80	1
BABY ST	CHIPPAWA ST	BABY ST	2.70	2
HANNA ST E	BENJAMIN AVE	PIERRE AVE	2.70	4
LONGFELLOW AVE	SOUTH CAMERON BLVD	ARCADIA ST	2.70	10
LONGFELLOW AVE	ARCADIA ST	OJIBWAY ST	2.70	10
LONGFELLOW AVE	OJIBWAY ST	NORTHWOOD ST	2.70	10
MEIGHEN RD	YPRES AVE	SOMME AVE	2.70	5
ALEXANDRINE ST	LILLIAN AVE	ALEXANDRINE ST	2.70	10
CLEMENCEAU BLVD	QUEEN ELIZABETH DR	NORTH SERVICE RD E	2.70	8
HOWARD PL	TUSON WAY	HOWARD PL	2.70	1
WOODWARD BLVD	LEDYARD AVE	MOXLAY AVE	2.70	9
WOODWARD BLVD	MOXLAY AVE	DIVISION RD	2.70	9

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
BLISS RD	LAPPAN AVE	CALDERWOOD AVE	2.60	9
BROADWAY ST	BROADWAY ST	OJIBWAY PKY	2.60	1
COUSINEAU RD	SUTHERLAND AVE	COUSINEAU RD	2.60	1
DAYTONA AVE	MANITOBA ST	KENORA ST	2.60	10
LILLIAN AVE	ALEXANDRINE ST	EDINBOROUGH ST	2.60	10
LILLIAN AVE	CAPITOL ST	CHARLES ST	2.60	10
WELLINGTON AVE	WYANDOTTE ST W	ELLIOTT ST W	2.60	3
CLAIRVIEW AVE	ELINOR ST	CLOVER ST	2.60	7
DAYTONA AVE	NORTHWOOD ST	DAYTONA AVE	2.60	10
PENANG LANE	PENANG LANE	TECUMSEH RD E	2.50	7
G N BOOTH DR	OJIBWAY PKY	G N BOOTH DR	2.40	1
LAUZON RD	FOREST GLADE DR	STELLA CRES	2.40	7
LAUZON RD	STELLA CRES	HEMLOCK RD	2.40	7
BLISS RD	CALDERWOOD AVE	MELINDA ST	2.30	9
JARVIS AVE	RIVERSIDE DR E	WYANDOTTE ST E	2.30	7
JARVIS AVE	DILLON DR	CASTLE HILL RD	2.30	7
ONTARIO ST	LAURENDEAU AVE	CENTRAL AVE	2.30	5
ONTARIO ST	CENTRAL AVE	LABADIE RD	2.30	5
RAYMOND AVE	VILLAIRE AVE	ST LOUIS AVE	2.30	6
TURNER RD	MELINDA ST	LEDYARD AVE	2.30	9
TURNER RD	LEDYARD AVE	MOXLAY AVE	2.30	9
AIRPORT RD	RIBERDY RD	AIRPORT RD	2.20	9
BLISS RD	MELINDA ST	LEDYARD AVE	2.20	9
LILLIAN AVE	CHARLES ST	GRAND MARAIS RD E	2.20	10
MORTON DR	RAMBLEWOOD DR, LASALLE	WALES AVE, LASALLE	2.20	1
MORTON DR	WALES AVE, LASALLE	QUICK AVE, LASALLE	2.20	1
MORTON DR	QUICK AVE, LASALLE	MATCHETTE RD	2.20	1
ROSELAWN DR	ROCKWELL AVE	VIRGINIA PARK AVE	2.20	1
JARVIS AVE	WYANDOTTE ST E	DILLON DR	2.10	7
CARMICHAEL RD	PRINCE RD	CARMICHAEL RD	2.00	3
CARON AVE	ELLIOTT ST W	CARON AVE	2.00	3
ROSELAWN DR	WOODLAND AVE	ROCKWELL AVE	2.00	1
CALIFORNIA AVE	CALIFORNIA AVE	CABANA RD W	1.90	1
NORTHWAY AVE	NORTHWAY AVE	CABANA RD W	1.80	1
QUEEN ST	QUEEN ST	HILL AVE	1.80	2
WERNER AVE	ARMANDA ST	WENTWORTH ST	1.80	1
MEMORIAL DR	GLADSTONE AVE	LINCOLN RD	1.80	4
COLUMBUS DR	COLUMBUS DR	NORTHWOOD ST	1.70	10
HANNA ST E	LANGLOIS AVE	BENJAMIN AVE	1.70	4
RANDOLPH AVE	CLEARY ST	NORTHWOOD ST	1.70	10
ST PATRICK'S AVE	TOTTEN ST	ST PATRICK'S AVE	1.60	10
BLISS RD	BLISS RD	DIVISION RD	1.40	9

Table C Rural Cross Section LIP Areas				
STREET	**FROM**	**TO**	**PRIORITY RATING**	**WARD**
CHAPPUS ST	MIDDLESEX ST (FUTURE RD)	PERTH ST	1.40	1
BETHLEHEM AVE	SECOND ST	MALDEN RD	1.30	1
HANDY ST	HANDY ST	FRANK AVE	1.30	6
STRATHMORE ST	GIRARDOT ST	MULFORD CRT	1.30	2
DAYTONA AVE	DAYTONA AVE	CABANA RD W	1.00	1
TITCOMBE RD	MALDEN RD	TITCOMBE RD	1.00	1
MONARCH ST	MCDOUGALL ST	MONARCH ST	0.70	10

Appendix D – Outstanding Resident and City Initiated LIPs

Table D Outstanding Resident and City Initiated LIPs					
STREET	**FROM**	**TO**	**IMPROVEMENT TYPE**	**WARD**	**Estimated Cost**
BYNG AVE*	MELINDA AVE	LEDYARD AVE	CURB & GUTTER AND STORM SEWER	9	$2,360,000
WOODLAND AVE**	WEST GRAND BLVD	NORFOLK ST	CURB & GUTTER	1	$4,870,000
RADISSON AVE**	NORLFOK ST	W GRAND BLVD	CURB & GUTTER AND STORM SEWER	1	$4,810,000

*City Initiated LIP conducted under previous policy.
**Resident Initiated LIPs conducted under current policy.

Appendix E - Completed and Active LIPs 2020-2023

Table E Completed and Active Local Improvements - 2020 to Present				
STREET	**FROM**	**TO**	**IMPROVEMENT TYPE**	**Ward**
Clemenceau Blvd.	North Service Rd.	CNR Tracks	Curb & Gutter, Storm Sewer	8
Baseline Road	7th Con.	8th Con.	Sanitary Sewer	9
Electricity Dr.	Electricity Dr.	Rhodes Dr.	Sidewalk	9
Curry Ave.	Norfolk St.	Richardie Blvd.	Curb & Gutter, Storm Sewer	1
Randolph Ave.	Cleary St.	Northwood St.	Curb & Gutter, Storm Sewer, Streetlights	10
Mark Ave.	Campbell Ave.	Algonquin St.	Sanitary Sewer	10
Matthew Brady Blvd.	Tranby Ave.	Lauzon Pkwy.	Street Lighting	6

Appendix F – Recommended 10 Year Local Improvement Programme

Table F Recommended Local Improvement Programme					
Street	From	To	Improvement Type		Ward
			Primary	Secondary	
Joy Rd.	Joy Rd.	8th Con.	Sanitary	Sidewalk, Curb & Gutter, Streetlights	9
Ray Rd.	Ray Rd.	8th Con.	Sanitary	Sidewalk, Curb & Gutter, Storm, Streetlights	9
Wilkinson Ln.	Chippewa St.	South St.	Sanitary	Curb & Gutter, Storm	2
Everts Ave.	Totten St.	Quebec St.	Sanitary	Sidewalk, Curb & Gutter, Streetlights	10

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 146/2023

Subject: Wyandotte Street Road Diet Update Report – Wards 4, 5 & 6

Reference:

Date to Council: May 29, 2024
Author: Kathy Quenneville
Active Transportation Coordinator
519-255-6100 ext. 6287
kquenneville@citywindsor.ca

Public Works - Operations
Report Date: April 3, 2024
Clerk's File #: MB/5331

To: Mayor and Members of City Council

Recommendation:

THAT report S 146/2023, "Wyandotte Street East Bikeway Reconfiguration" **BE RECEIVED** for information.

Executive Summary:

The most recent Council Directive to review the Wyandotte Street East Corridor to satisfy the Active Transportation Master Plan (ATMP) by providing cycling infrastructure along the corridor from Devonshire Road to Watson Avenue was born through multiple previous Council Reports beginning in 2016. Throughout these reports, Administration identified that the level of service for vehicular traffic on Wyandotte Street East would be negatively affected and that potential alternate routes be considered. The bike lanes that were installed on Wyandotte Street East from Glengarry to Devonshire between 2013 and 2014, did not include a road diet, nor was parking removed. These bike lanes no longer meet the recommendations in the revised Ontario Traffic Manual Book 18 (2021). The only facility that meets the recommendations for an arterial road servicing the volume of traffic currently being realized, is fully protected and/or off road facilities. In this report, the option considered was on street protected bike lanes however they are not possible in many locations throughout the corridor without significant reconstruction and/or removal of parking. While adjusting lane assignments would not require an Environmental Assessment, reconstruction (curb line changes, removal of center medians, etc.) may. And, removal of parking was not supported by the BIA.

The directive requested that Administration satisfy the ATMP. The ATMP notes that multi-modal corridors on major streets require further review to consider how they will accommodate active transportation given other competing priorities. Additionally, the ATMP notes that once studies have been completed on these major roads, it can be

determined whether bicycle facilities can be accommodated on the corridor or adjacent streets. In this case, Administration made previous recommendations that the corridor be accommodated on adjacent streets which does satisfy the recommendations in the ATMP. After further studies and review, Administration feels the previous recommendations still stand.

The previous directive did not include budget allocations. As noted in the Financial section of this report, the publically preferred option of on street protected bike lanes has both a significant initial capital cost and on-going yearly operating budget requirement. Consideration needs to be given to both if proceeding with a project of this nature.

Based on the above, Administration does not recommend the road diet and cycling facilities on Wyandotte Street East. Administration recommends the Riverside Drive corridor be the primary active transportation corridor for East/West movements with potentially some residential street facilities throughout for connections into neighbourhoods.

Background:

At the December 16, 2020 meeting of the Environment, Transportation and Public Safety (ETPS) Standing Committee, report S 155/2020 "Wyandotte Street East Corridor Review – Wards 4, 5 & 6" was brought forward with Administration recommending that it be received for information. The report concluded that reducing the number of through lanes on Wyandotte Street East, was not recommended, as an initial traffic analysis of the corridor indicated that it would cause poor levels of service.

The ETPS Standing Committee moved the Administration recommendation be received for information and it was brought to Council on January 18th, 2021, at which time Council adopted the following recommendation:

> *Decision Number: CR40/2021* ***ETPS 802***
>
> THAT Report S 155/2020 "Wyandotte Street East Corridor Review – Wards 4, 5 & 6" BE REFERRED back to Administration to narrow the focus as soon as possible, and to satisfy the Active Transportation Master Plan by providing cycling infrastructure along Wyandotte Street East; and,
>
> That in-person public meetings BE HELD once permitted, as part of a consultation process that would include residents and businesses in the subject area.

This report provides a preliminary concept design for the preferred cycling infrastructure along Wyandotte Street East, from Devonshire Road to Watson Avenue, informed by in-person and online public consultation.

Previous Reports

Report S 55/2017, "CQ56-2016 Wyandotte Street East Windsor Loop Connection," was brought before Council at its June 17, 2017 meeting. This report recommended that a functional design study be carried out for Wyandotte Street East cycling infrastructure.

Council directed that this recommendation be referred to Administration to await the completion of the Active Transportation Master Plan.

Report S 44/2018, "Bicycle Road Safety Audits - Top Cycling Collision Locations," was brought before Council at its June 4, 2018 meeting. This report provided recommendations for the four City intersections with the highest number of cyclist collisions, including one intersection in the area identified in resolution CR563/2019, Wyandotte Street East at Drouillard Road. The report identified short-term safety improvements to be implemented immediately and long-term improvements to be referred to the Active Transportation Master Plan, which was under development at the time, for consideration.

Report C 87/2020, "Lane Closures for Physical Distancing - Wyandotte BIAs" was brought before Council at its May 25, 2020 meeting. This report reviewed the potential for lane closures – either for bicycle facilities or other uses – in the Pillette Village and Olde Riverside BIAs. This report resulted in resolution CR264/2020, which was addressed with report S 95/2020, and CR265/2020, addressed with report S 155/2020.

Report S 95/2020, "Wyandotte Street East Road Narrowing - Environmental Assessment Requirements" was bought before Council at its September 14, 2020. This report responded to CR264/2020 by providing details on the environmental assessment requirements that could apply to a roadway narrowing on Wyandotte Street East. The report was received for information.

Report S 155/2020 "Wyandotte Street East Corridor Review – Wards 4, 5 & 6", was brought before the Environment, Transportation and Public Safety Standing Committee at its December 16, 2020 meeting. This report responded to CR 563/2019 and CR 265/2020 by reporting on the feasibility of a lane reduction along Wyandotte Street East to accommodate cycling facilities per the Active Transportation Master Plan recommendations and a report on other projects. Decision CR40/2021 directed Administration to narrow the focus, to satisfy the Active Transportation Master Plan by providing cycling infrastructure along Wyandotte Street East and to inform the preferred design through in-person public consultation. A copy of the report can be found in Appendix 1.

Active Transportation Master Plan - Wyandotte Street East as a Multi-Modal Corridor

The Active Transportation Master Plan (ATMP), *Walk Wheel Windsor*, was approved by Council on July 22, 2019 (CR378/2019). *Walk Wheel Windsor* identifies the entire length of Wyandotte Street as a multi-modal corridor, which includes the segment of focus in this report, between Devonshire Road and Watson Avenue. The segment from Devonshire Road to Albert Road is identified as a high to medium priority cycling facility and the remaining segment East to Watson Avenue, as a mainly low to medium priority corridor, as illustrated in Figure 1 below. Cycling facility prioritization is based on the following criteria: destination density, cycling potential, equity, commercial areas, community facilities, transit, cycling network classification, level of protection and network need.

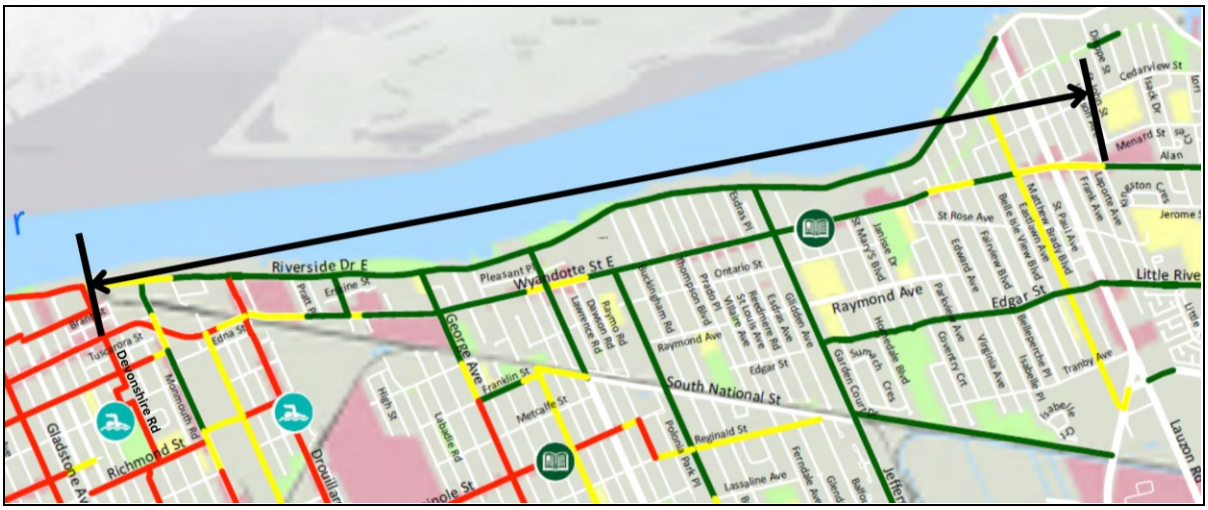


Fig. 1 – ATMP Bicycle Priority Network Map Highlighting Wyandotte St. E Multi-Modal Cycling Corridor (red – high priority, yellow – medium priority & green – low priority)

The ATMP describes multi-modal corridors as "*major streets that need further review to consider how they will accommodate active transportation given other competing priorities... Along these corridors there is a need to have an established process to consider the mobility of all modes and competing needs when implementing bicycle facilities...* ***These multi-modal corridors will require more in-depth analysis through specific corridor studies or Environmental Assessments.*** *Recognizing that these corridors serve desire lines within the bicycle network, these studies* ***can determine whether bicycle facilities can be accommodated on the corridors or adjacent streets*** ".

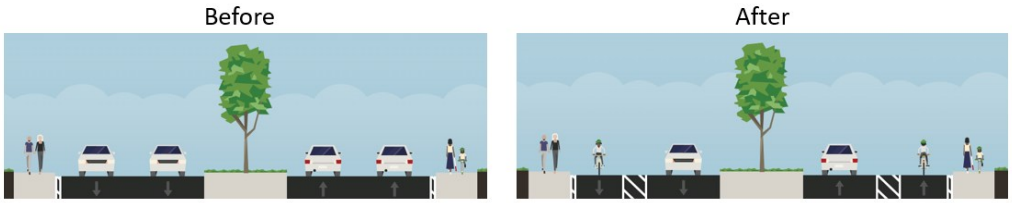
Discussion:

In proceeding with the direction of Decision CR40/2021, Administration prepared two design concepts to present for public consultation that would provide a bikeway along the Wyandotte Street East corridor.

Public Consultation

At the time that Council directed Administration to proceed with public consultation to gather feedback regarding a road diet and cycling facilities along Wyandotte, Covid-19 public gathering restrictions were in place. Therefore, following the lifting of restrictions, in-person Public Information Centres (PIC) were held on May 11th and May 18th, 2022, as well as a pop-up event at Tecumseh Mall on June 4th and 5th, 2022. At these events, background information relating to the following three cycling infrastructure design concepts for street segments along the Wyandotte Street East corridor were presented:

1. **Alternative 1**: Bikeway with Road Diet – Number of driving lanes reduced from four lanes to two, to include cycling infrastructure while maintaining on-street parking.



2. **Alternative 2:** Bikeway without Road Diet – Provision of cycling infrastructure without a reduction of through lanes. Space for the bikeway would require the removal of on-street parking.

3. **"Do Nothing"**: Leave the Wyandotte East Corridor "as is". If this approach is taken, there would still be opportunity to review the corridor to provide an alternative bikeway.

PIC attendees were asked to complete a survey either in person or online, to help inform a preferred design. Presentation materials were also available online. A total of 78 survey responses were returned through this PIC consultation.

42% (30/78) of respondents reported they do not travel by bike through the corridor, and of these respondents:

- 60% support a reduction in the number of driving lanes
- 50% support protected bike lanes
- 30% would like to keep parking available
- 23% would like to see middle turn lanes

Several open-ended comments indicated a preference for cyclists to be comfortable on Riverside Drive rather than on Wyandotte Street, that there would be less stops and therefore a more continuous cycling experience.

Administration also employed the services of a third party, Zencity, to obtain additional feedback through an online survey. The survey was made available between August and September 2022. The following are highlights of the 710 surveys returned:

- 88% of respondents travel the corridor by car, 38% of them commute to work or school through the corridor, and 55% of respondents travel through the corridor at least a few times a week.
- Alternative 1 was supported by 63% of respondents and was also chosen as the preferred option by 39% of respondents, making it the top pick out of the three

options. It is also the option respondents would want to see the most of if a mixture of alternatives was chosen.
- 52% of respondents would like bike lanes to be fully protected and not just buffered or painted bike lanes.
- Over half of respondents thought travel time during rush hour was important.
- When asked what other aspects of the corridor were important and what should be prioritized when redesigning the corridor, respondents said they'd like to see an emphasis on safety.

A copy of the PIC presentation, PIC and online survey questions, as well as the Zencity survey report may be found in Appendices 2, 3 and 4, respectively.

Preliminary Design for Preferred Roadway

Based on feedback received from public consultation, a preliminary concept design was completed reflecting preferred Alternative 1, a Road Diet that would accommodate buffered bike lanes, and which would maintain on-street parking spaces. Road Diet lane reallocation would be achieved through the removal of existing lane pavement markings and the addition of new pavement markings to reorganize driving lanes to parking lanes, bicycle lanes or continuous left turn lanes. No physical construction has been considered, however may be recommended in a final design for the roadway for safety improvements. Pedestrian facilities reflect their current condition.

The concept design changes the geometry of the existing road width by reducing the number of vehicle through lanes and including painted buffered bike lanes. To provide protected bike lanes, physical barriers such as flexible bollards, concrete curbs and planters, may be applied wherever possible in the buffer zone located between the vehicle through lanes and bike lanes to increase cyclist comfort and safety. However, the presence of driveways, transit stops, and special parking needs prevent the use of physical barriers in those locations.

The following road segment example in Figure 2 below illustrates the existing road condition, as well as the Alternative 1 Road Diet design. The complete preliminary design of the bikeway is provided in Appendix 4.

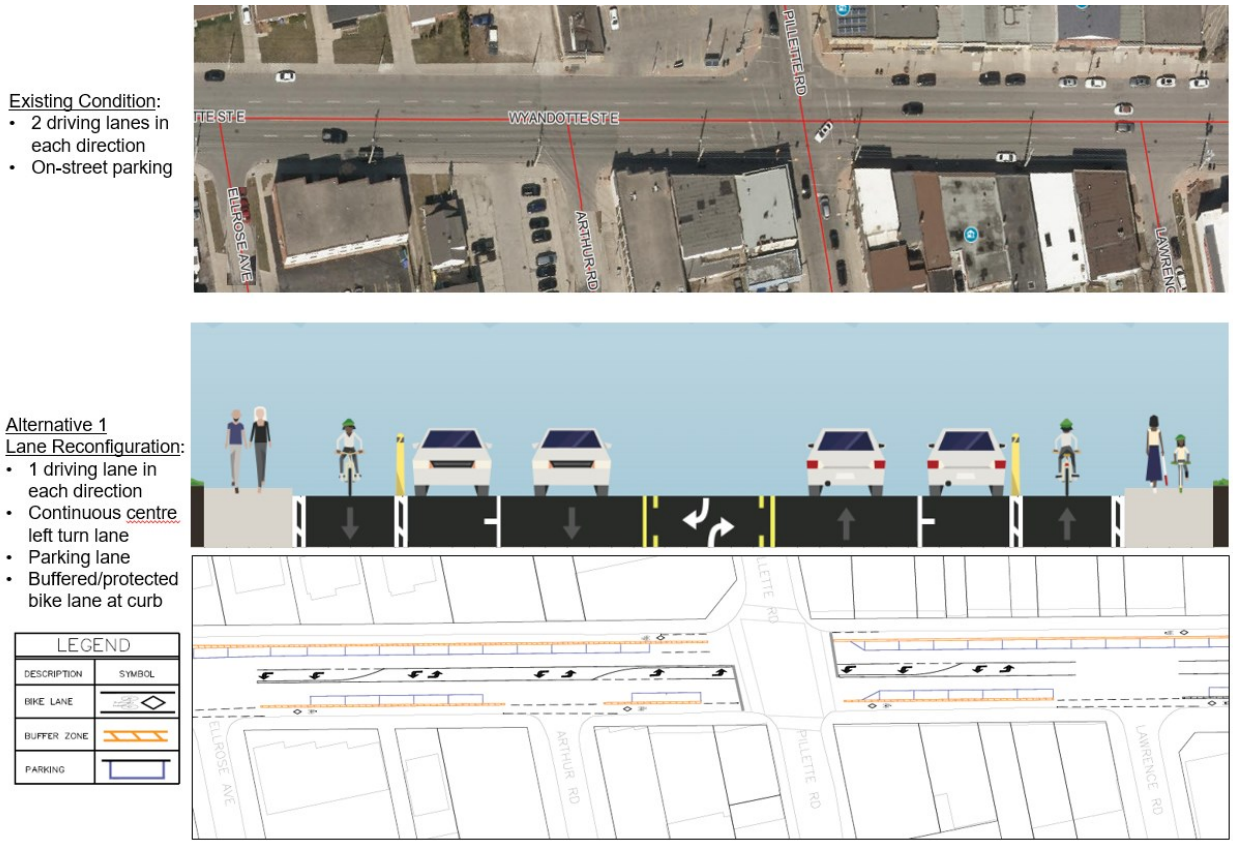


Fig. 2 - Example of Wyandotte Street Lane Reconfiguration – Ellrose Ave. to Lawrence Rd.

The annual daily traffic volumes measured along the roadway between 2015 and 2020 ranged between 19,000 and 21,700 vehicles. At these volumes, and with the existing speed limit of 50 km/h, the recommended Ontario Traffic Manual (OTM) Book 18 bikeway along this corridor should include physically protected barriers between cyclists and vehicles, or an off-road bike facility in the boulevard. However, due to the existing width of the road and right-of-way, the only option would be on-road bike facilities for a quick build project.

By placing the bike lane at the curb and installing physical barriers between cyclists and traffic or parked cars, a dedicated space is created for the exclusive use of cyclists which provides them with a greater sense of safety. However, it would not be possible to provide protected bike lanes through the use of physical barriers along a significant length of the roadway, due to the presence of a large number of driveways and cross-streets.

Where barriers may be applied, consideration must also be made for the associated on-going operation and maintenance costs, which would be significantly higher than standard painted buffered bike lanes. Damaged barriers would need to be purchased and replaced, and personnel and specialized equipment would be required for year-round maintenance of the bike lane, including winter control and sweeping.

The U.S. Department of Transportation Federal Highway Administration (FHWA) Road Diet Informational Guide, suggests that "*while Road Diets can improve safety and accommodate motorized and non-motorized transportation modes along a corridor, they may not be appropriate or feasible in all locations*." The guide states that in order to determine if a Road Diet is appropriate, a feasibility study should be completed, with consideration for a number of factors including roadway function, traffic flow (level of service), traffic volume (daily and peak), driveway density and access control, transit routes, number and design of intersections, parallel roadways, turning volumes, among a number of others. Although Wyandotte Street East has been identified in the Active Transportation Master Plan as a multi-modal corridor in the City's cycling network, the following factors, at a minimum, require careful consideration before deciding to implement a Road Diet to include a bikeway along the busy arterial road.

- **Vehicle Level of Service**

  Level of Service (LOS) defines how well vehicle traffic flows along a street or road, and not only considers travel time and peak hour traffic, but also turning movements and queues at intersections. A high LOS means traffic flows easily and low LOS indicates there is congestion.

  A preliminary traffic study completed for the Wyandotte Street East corridor was included in the report S 155/2020 and was presented at the Environmental, Transportation & Public Safety Standing Committee (found in Appendix 1 of this report). The study looked at traffic flow and turning counts at signalized intersections for existing conditions and those anticipated with a Road Diet. Results indicated that a Road Diet would decrease peak AM and PM hour LOS for vehicles travelling along a number of segments of the roadway, in both east and westbound directions. This decreased LOS was also anticipated in segments of the road where there was already an existing poor LOS.

  Based on the results of the 2020 corridor review, the report concluded that a road diet was not recommended.

- **Traffic Volume – Average Daily and Peak Hour Traffic**

  The US DOT FHWA Road Diet Informational Guide recommends that roadways with the following criteria may be good candidates for a Road Diet:

  - Average Daily Traffic (ADT) of 20,000 or less vehicles per day (vpd)
  - 750 vehicles per hour (vph) or less, per lane, per direction at peak travel times

  These threshold values serve as guidance for decision-makers to assess whether a Road Diet is a viable option for a roadway and which have been adopted by the City of Mississauga, as well as in a number of U.S. jurisdictions.

  If the ADT exceeds 20,000 vpd, it is recommended that a detailed feasibility study be completed to determine if the roadway is a good candidate for a Road

Diet. Also, if peak hour volumes exceed 875 vph, Road Diet feasibility is less likely and a reduction in arterial LOS would be expected during the peak period.

The City of Windsor's most recently measured ADT volumes for the roadway between Walker Road and St. Rose Avenue from 2015 to 2020 fell between 19,000 and 21,700 vpd. Also, analysis of 2022 weekday traffic volume for the road segment between Ellrose Avenue and Dawson Road, surrounding the Pillette Road intersection, resulted in an ADT of over 23,000 vpd and the peak hour traffic at over 890 vph per lane in each direction. These findings suggest that the Wyandotte Street East corridor is likely not a suitable candidate for a Road Diet, as both the daily and peak volumes exceed the industry recognized threshold values.

Furthermore, the corridor is expected to experience even more significant traffic volumes as a result of the residents moving into multiple multi-unit developments slated for construction in the near future.

- **Parallel Roadways**

Road Diets can cause the diversion of traffic to parallel routes and also shift travel to local streets as "cut-through" traffic. The closest arterial road to Wyandotte Street is Riverside Drive. Riverside Drive and the local streets surrounding Wyandotte Street will most likely receive traffic diverted from a reduced lane Wyandotte Street, since the next east-west arterial road is Tecumseh Road East, which lies more than 2 km to the south.

The Riverside Drive Vista project is being completed in the same northeastern area of the City, and includes on-road buffered bike lanes. As noted in the Vista Project Environmental Assessment (EA), its intention is to reduce vehicle speed, reduce traffic volume and divert traffic from Riverside Drive to other parallel routes, improve safety and make Riverside Drive into a Scenic Drive. The EA states that the "*...most important element of traffic diversion is to provide Wyandotte Street East with the capacity and operational characteristics to attract and accommodate through traffic diverted from Riverside at an acceptable level-of-service*." A decrease in the number of driving lanes along Wyandotte, will create a challenge in meeting this EA objective as there is currently a significant volume of traffic along both Riverside Drive and Wyandotte Street along the segments intended for the Wyandotte Street bikeway, as shown in Table 1 below.

Table 1: Annual Average Daily Traffic (AADT) measurements (2015-2020)

Walker Rd. to St. Rose Ave. Segment	AADT Range (vehicles/day)
Riverside Drive	15,000 – 17,000

Wyandotte Street	19,000 – 21,700

With an anticipated decrease in LOS along the length of Wyandotte Street associated with a Road Diet, traffic would likely be diverted to side streets and to the closest east-west arterial, which is Riverside Drive, rather than further south to Tecumseh Road. This would be in conflict with the intentions of the Riverside Drive Vista Project.

Construction to complete Phase 2A of the Riverside Drive Vista project began in September 2023. Associated road closures will occur intermittently between Ford Boulevard and St. Rose Avenue through 2024, 2025 and 2026. Construction on the next phase of the project, between Ford Boulevard and Strabane Avenue, is anticipated, based on the 2024 10-year capital budget, to begin as early as 2030 with an additional three (3) to four (4) years of construction. Therefore, there will be a significant amount of time where additional construction-related traffic volume will be diverted to Wyandotte Street from Riverside Drive.

- **Transit**

The Transit Windsor "Crosstown 2" route, which runs along this segment of Wyandotte Street East, has a 10 - 15 minute stop frequency at peak time and experiences high ridership at the majority of its 51 transit stops along this corridor. Buses would be required to encroach the cycling lane at transit stops, and the shared cycling/bus lane of the preferred bikeway would essentially act as a bus bay, where additional time would be required to exit the shared lane into traffic in the only vehicle through lane, and this could increase route time. This would be similar to transit stops along Wyandotte Street in the downtown area, as shown in Figure 3 below. Additionally, buses parked to load and unload may sit for several minutes, depending on riders needs (e.g. wheelchair and bicycle loading/unloading), which could force cyclists into the roadway, creating a safety risk.

Fig. 3 – Transit bus encroaching bike lane on Wyandotte St. & Aylmer Ave.

The transit industry recommends the use of vehicle through lanes for transit stops, due to the above noted difficulties with ingress and egress into and out of a shared bus/bike lane. This could be addressed by the addition of special "pop-

up" ramps, or more permanent transit islands, as illustrated in Figure 4 below. However, these transit accommodations would significantly increase the cost of the bikeway. The installation of permanent transit islands could also present road drainage issues, requiring the addition or relocation of catch basins, significantly increasing the scope and cost of this project. Traffic flow would also be impacted as buses would be continuously stopping in the only vehicle through lane.

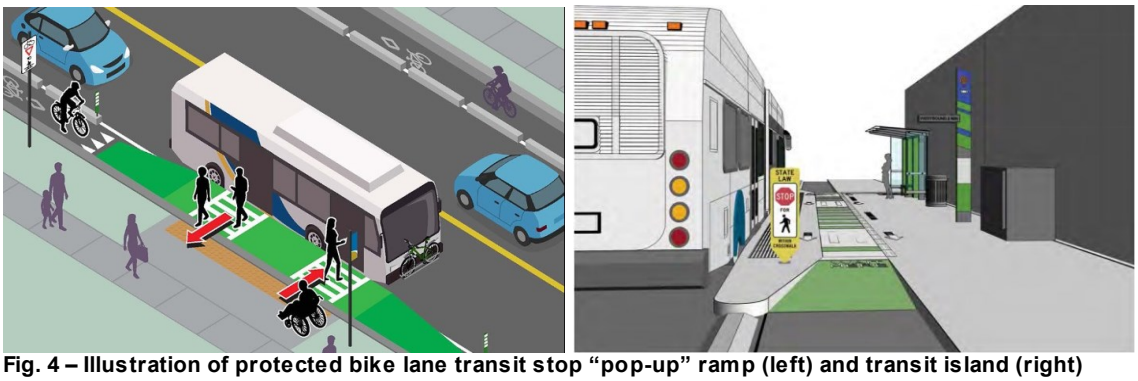


Fig. 4 – Illustration of protected bike lane transit stop "pop-up" ramp (left) and transit island (right)

- **Emergency Response Vehicles**

As reported by Windsor Fire and Rescue Services (WFRS), the current call volume along Wyandotte Street East and surrounding neighbourhoods is significant and the only other nearby east-west arterial is Riverside Drive. With a single through lane in each direction, there is concern that an anticipated increase in traffic density along the corridor, combined with protective barriers in place, will leave limited space for motorists to yield the right of way to fire response vehicles. Consequently WFRS response times may be increased. This challenge would also extend to other emergency response vehicles.

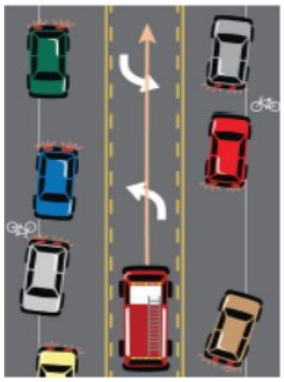


Fig. 5 – Emergency vehicles using bi-directional left turnlane

A U.S. Department of Transportation publication "Road Diet Mythbusters – Road Diets and Emergency Response: Friends, Not Foes" provides case studies where road diets actually improved emergency response time. This improvement was attributed to the presence of a two-way turn centre lane that "*provides a predictable path for emergency vehicles*" to travel, as illustrated in Figure 5. However, on Wyandotte Street East, there are a number of centre medians present along much of the length of the road, and the length of available centre left turn lanes would be limited. Protective barriers could not be placed along segments with centre medians, as they would pose challenges for other vehicles to yield to emergency response vehicles, since the bike lane is the only available space for them to maneuver into.

- **Number of Driveways**

  Volumes and patterns of turning vehicles should also be assessed when considering the feasibility of a Road Diet. There are approximately 201 driveways and business accesses along the 6.2 km length of roadway, averaging 32 driveways per kilometer. Additionally, the corridor features 13 signalized and 33 un-signalized intersections. Although the 2020 traffic study determined anticipated turning counts at signalized intersections, the presence of driveways and un-signalized intersections will introduce additional turning movements, further impacting the roadway Level of Service (LOS). Moreover, these turns may cause issues if motorists attempt to use two-way left turn lanes to access driveways that are opposite each other.

  Turns into and out of driveways, business accesses, and side streets also represent a high density of conflict points for cyclists along the bikeway, and protective barriers cannot be placed within these areas.

- **Pedestrian Facilities**

  This report specifically focuses on the inclusion of cycling facilities within the existing Wyandotte Street East roadway. A review of existing pedestrian facilities for potential improvements, particularly at intersections, may also be considered in a detailed design. However, implementation of these improvements could significantly increase the required budget for the project and will only be considered when funding is available.

Other considerations in the implementation of a bikeway on Wyandotte Street East:

Other Active Transportation Projects in the Queue

Designs have been completed for two projects which have been identified by the ATMP as priority bikeways, and which are key connections to facilities being built within the next two years. These projects, as well as connections to bikeways that are existing and in-progress are shown in Figure 6.

1. Shepherd Avenue local street bikeway (high priority)
   - Between Janette Avenue and Kildare Road
   - Connects with:
     i. In-progress Victoria Street local street bikeway - University Ave. to Shepherd St. (high priority);
     ii. Existing bike lanes along Gladstone Ave. and Lincoln Rd.; and
     iii. In-progress Kildare Rd. local street bikeway -Ottawa St. to Tecumseh Rd. E. (high-medium priority)
   - Estimated cost: $1,000,000

- The construction of this project was dependent on funding received from the National Active Transportation Fund, and the City was notified in early 2023 that their bid to obtain a grant was denied. Therefore, the project has been put on hold.

2. Walker Road, Munsee Street, Turner Road and Seneca Street multi-use trail (medium-low priority)
    - Connects with:
        i. In-progress Kildare Rd. local street bikeway (high priority)
        ii. Existing bike lanes on Seminole St.
    - Estimated cost: > $550,000

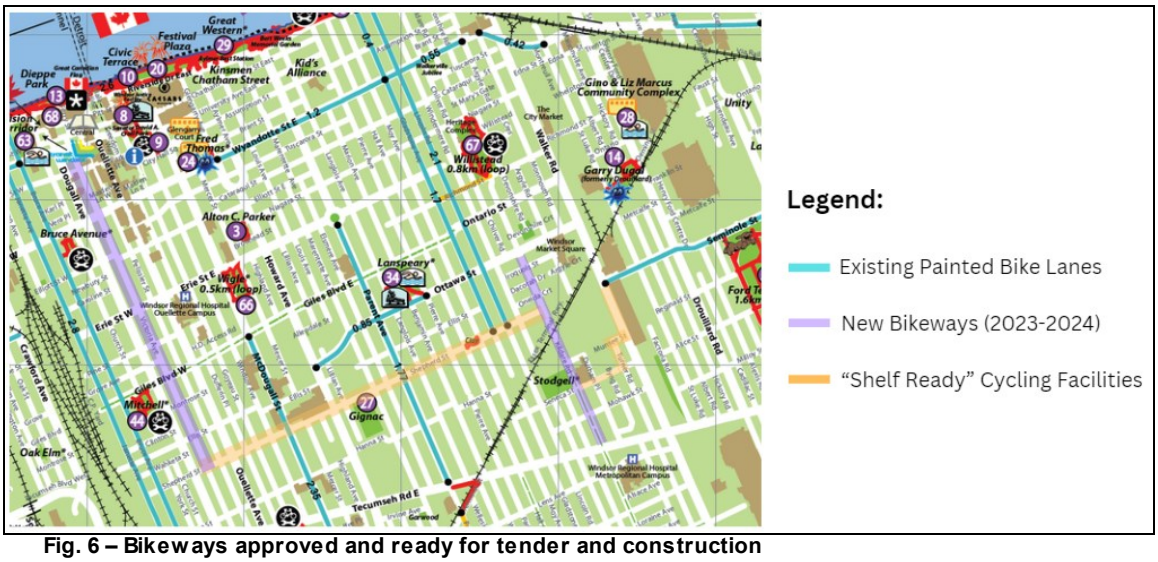


Fig. 6 – Bikeways approved and ready for tender and construction

Additionally, a third project addresses a gap in the existing pathway that runs along Grand Marais Road East, between Walker Road and Central Avenue:

3. Grand Marais Multi-Use Pathway (MUP)
    - 100 m in length
    - Estimated cost: $100,000

These projects are shelf ready for tender and construction. Since the City is unable to offset costs of the bikeways through the National Active Transportation Fund program, and there is currently no grant program funding available to leverage additional funding, Administration would be required to pull funds forward from the Bikeways Development budget in future years in order to complete them. More detail regarding anticipated project costs and funding may be found in the Financial Matters section below.

In addition to larger projects noted above, Administration is working on preliminary plans for a number of other ATMP identified high priority network connections, and which would also require funding. Below are a just a few examples of existing bikeways that would be connected:

- Riverfront Trail/University Ave. bike lanes to Sandwich Town bike lanes and multi-use trail leading to the Gordie Howe International Bridge.
- Ottawa St. bike lanes to future Shepherd St. local street bikeway
- Multi-use trail on Matchett Rd. to bike lanes on Prince Rd.
- Bike lanes on Rose St. to Hawthorne Dr. cycle tracks

Operational Impacts

There are several operational impacts associated with the installation of protective barriers within bike lane buffer zones. The roughly 2 m wide protected bike lanes would require specialized equipment made specifically for maintaining narrow lanes. Currently, the City of Windsor does not have the equipment needed for street sweeping and snow clearing on these protected bike lanes. Therefore, operational funding will be required for the maintenance of the protected bike lanes. Whether this work is performed by additional City staff with equipment that is yet to be purchased, or by contractors, additional ongoing funding will be required.

There will also be ongoing maintenance costs to annually replace damaged barriers, and for planting, watering, and repair of damaged planters, if decorative planters are used as physical barriers.

Additional resources would be required for annual repainting of new bike lane markings and painted lines on the roadway along the corridor placed to delineate the bike lane, buffer zones, conflict areas and lane demarcation through intersections. The coloured thermoplastic coating applied in conflict areas, such as intersections, major driveways and transit stops would need reapplication every 5 years. New bikeway signage would also be installed, per OTM Book 18 guidelines, and these signs would need to be inspected and replaced as required.

The addition of bike lanes and physical barriers along the corridor could also affect the level of service of curbside waste and recycling collection. Additional time would be required by collectors to walk through the parking and bike lanes, and if in place, some barriers such as concrete curbs may pose a potential trip hazard for collectors.

Also, Transit Windsor noted they would require an increase in operational funding to maintain the route's current LOS, if their LOS decreases due to increased route travel time resulting from a shared bus/bike lane at transit stops.

Maintenance Costs

Ongoing maintenance associated with the project, such as the replacement of signs, pavement markings, purchase and replacement of damaged protective separators, and for street sweeping and snow clearing, will incur new ongoing costs not reflected in the current operating budget. With a final design, a more detailed cost estimate for annual maintenance will be required, along with the identification of a source of funds.

Road Diet Alternatives

If the provision of a bikeway through a Road Diet is not feasible along the length of the Wyandotte Street East corridor, there are a number of options that could address public concerns regarding speeding, safety and to add a key east-west route to the cycling network in the area.

1. **Focus on Pedestrian Safety and Traffic Calming on Wyandotte**

   The top concern of survey respondents was the need for safety along Wyandotte Street, with perceived issues of speeding vehicles. However, a review of daily speed data measured from April 30, 2021, to April 30, 2022, along the corridor between Drouillard Road and Lauzon Road revealed the following:

   Average speed: 45 km/h
   Average 85th percentile speed: 59 km/h

   This data, as well as the resulting average weekday speeds, shown in Figure 7, provide insights into the actual speed behavior of vehicles along the corridor. It appears that the majority of speeding along the corridor occurs during the late evening and early morning hours, specifically between 7:00 p.m. and 6:00 a.m., additionally, the average speed throughout all hours remains below 50 km/h. Given this information, solutions to address speeding concerns should be tailored to target these non-peak hours, particularly during the early morning and late evening.

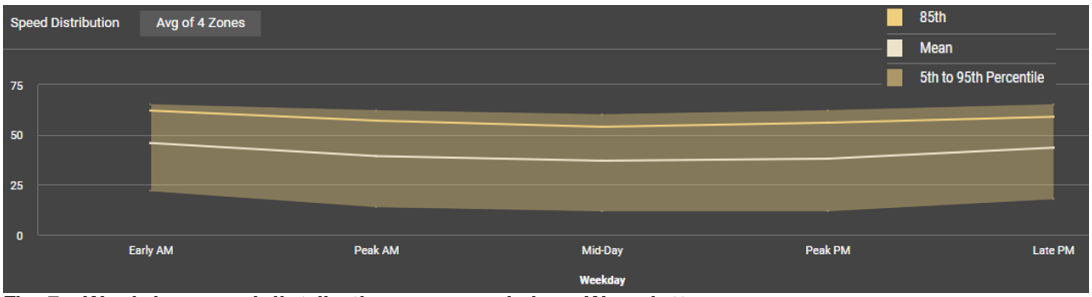


Fig. 7 – Weekday speed distribution measured along Wyandotte

Collision data was also reviewed for two areas along Wyandotte Street East: from Glengarry Avenue to Devonshire Road, where there are currently painted bike lanes adjacent to on-street parking, and the segment that is the subject of this report, between Walker Road and Lauzon Road. Table 2 compares the vehicle collisions and those collisions involving cyclists of both segments.

Table 2: Collision data collected along Wyandotte Street East from 2020 to 2023

	Glengarry Ave. to Devonshire Rd.	Walker Rd. to Lauzon Rd.
Total length of roadway (km)	1.7	5.5
4-Year total number of collisions	374	574
Number of collisions per km	227	105

	2020	2021	2022	2023	Total

Glengarry to Devonshire	Total Collisions	71	98	89	116	374
	Collisions Involving Cyclists	2	9	4	3	18
	Cyclist Collisions per km	1.2	5.5	2.4	1.8	
	% of Collisions Involving Cyclists	3%	9%	4%	3%	5%
Walker to Lauzon	Total Collisions	106	117	165	186	574
	Collisions Involving Cyclists	4	5	5	3	17
	Cyclist Collisions per km	0.7	0.9	0.9	0.5	
	% of Collisions Involving Cyclists	4%	4%	3%	2%	3%

The four-year data reveals that the presence of painted bike lanes without protection or buffer zones between Glengarry Avenue and Devonshire Road fails to enhance cyclist safety. This section records a higher number of collisions compared to the segment between Walker Road and Lauzon Road. This underscores the notion that improperly implemented bike lanes may exacerbate safety concerns rather than mitigate them. It's important to note in our analysis that the upcoming proposed stretch will lack full protection. The installation of on-road, unprotected bike lanes has not yielded the anticipated safety benefits for cyclists. Given the constrained opportunity to integrate protected bike lanes east of Walker Road, there's a possibility of a decline in cyclist safety.

While traffic calming measures aim to improve safety for all road users, it's important to note that arterial roads like Wyandotte Street require a different approach compared to local streets. Arterial roads are designed to accommodate large volumes of traffic, and while safety is a priority, there's a delicate balance between implementing traffic calming measures and maintaining the flow of traffic. Some of the traffic calming and safety options the City is considering:

- Reducing lane width through line painting (center and lane dividers)
- Automated Speed Enforcement in Community Safety Zones (Council has approved the BIA areas as Community Safety Zones)
- Speed radar feedback signs
- Coordination with Windsor Police for targeted enforcement
- Administration is investigating other technology available and working with Windsor Police of a few options

2. Bike Facility on Riverside

Until the next phase of the Riverside Vista project can be completed, which could begin in 2030, a multi-use pathway could be constructed in the existing right of way along Riverside Drive to provide a bikeway that would bridge the gap between the existing painted bike lanes ending at Strabane Avenue and the buffered bike lanes that will end at Ford Boulevard upon completion of the Riverside Vista Phase 2A currently under construction. Bridging this gap would provide a continuous east-west bikeway along the City's waterfront, from the Ganatchio Trail at the City's eastern border, along Riverside Drive, to the

Riverfront Trail, through Sandwich Towne, to the Gordie Howe International Bridge and to the Windsor-LaSalle border west of the bridge. The addition of this pathway would also enhance two tourist routes, the Trans Canada Trail and the Waterfront Trail.

A pathway along Riverside would address some of the challenges noted in this report associated with placing bike lanes along Wyandotte Street. Notably, with few driveways, there are significantly less conflict points between vehicles and cyclists, as well as fewer signals, vehicle turning movements, and lower traffic volume. Furthermore, being off-road, it would provide an AAA (All Ages and Abilities) bikeway that is comfortable to cyclists of all levels.

This pathway could be constructed within the same timeframe as the completion of the Vista Phase 2A bike lanes. However, it is estimated that this interim solution would come at a cost of approximately $1.2 million.

3. Revisit Wyandotte Street as a Multi-Modal Corridor

The ATMP emphasized that when addressing the provision of a bikeway in multi-modal corridors, in-depth studies are necessary to determine if *"bicycle facilities can be accommodated on the corridors or adjacent streets"*.

In Report S 155/2020 "Wyandotte Street East Corridor Review – Wards 4, 5 & 6, Administration provided a number of options that addressed the complexity of the corridor and the unlikelihood of a full corridor Road Diet to accommodate a bikeway. Depending on the characteristic of the roadway along various segments, a combination of "Quick Win" and long-term options were provided in the form of:

- On-road bike lanes with removal of travel lanes (Road Diet)
- On-road bike lanes with removal of on-street parking
- Road reconstruction (one small segment)
- Nearby alternate routes

Where it was not likely that cycling facilities could be placed along Wyandotte Street, the report noted that "as an alternative to providing bicycle lanes on Wyandotte Street East itself, an alternate route could be provided on a local street bikeway between Westminster Boulevard and Riverdale Avenue using Ontario Street, St. Rose Avenue, Watson Avenue, and Jerome Street." These Local Street Bikeways are calmer, have significantly less traffic than a busy arterial and they are considered AAA bikeways, meaning they are more comfortable for cyclists of all ages and abilities.

The report noted that this route was a good candidate for acceleration, as well as other bikeway projects on some north-south roads that intersect Wyandotte Street in the section identified for review.

Risk Analysis:

The introduction of a bikeway along Wyandotte Street East through the implementation of a Road Diet, may create a number of financial, operational and community risks, The introduction of a bikeway along Wyandotte Street East through the implementation of a Road Diet, may create a number of financial, operational and community risks, such as:

- The provision of a roadway that operates over capacity.
- Using future year Bikeways Development funds to complete this project could prevent Administration from completing other bikeway projects that are currently "shelf ready" for tender and construction, or others that have been identified as having a higher priority by Walk Wheel Windsor.
- The provision of a bikeway that may not be supported by some in the community who oppose the changes necessary to build active transportation facilities.
- The provision of a bikeway that may not be fully utilized if it is not considered comfortable for users of all ages.
- The provision of a bikeway that is not fully utilized or sustainable, if funding and resources are not provided for its operation and maintenance needs.

The risks of not implementing a bikeway along the corridor:

- Falling short of mode share targets set in the Active Transportation Master Plan and Community Energy Plan; the key principles of which were approved by City Council.
- The provision of an active transportation network that is underutilized due to a lack of connectivity, rider comfort and/or lack of suitability.
- The provision of an active transportation network that falls short of providing accessibility to affordable transportation options for those experiencing high equity needs.

The magnitude of these risks as well as the appropriate mitigation strategies would depend on the specifics of a comprehensive multi-modal traffic and feasibility study that should be completed prior to a final detailed design.

Climate Change Risks

Climate Change Mitigation:

In Council Report S 155/2020, carbon dioxide emissions for the preferred Road Diet design were calculated based on estimated fuel consumption provided by Synchro 10 traffic analysis software. It was estimated that with the addition of cycling infrastructure and a reduction in the number of driving lanes, there would be an initial increase in congestion and associated carbon dioxide emissions, 5% greater than the "Do Nothing" scenario by 2030.

Providing safe cycling routes encourages the use of bicycles as a zero emission alternative to vehicles. The Walk Wheel Windsor plan identified the priority routes for cycling infrastructure. The prioritization was based on an objective, systematic, GIS-based methodology which include 10 criteria for the cycling network. This report

highlights a number of shelf ready projects that have higher priority rankings within the Walk Wheel Windsor Plan, providing more cycling facilities faster will allow more riders to cycle safer and reduce transportation emission faster.

Climate Change Adaptation:

As climate change presents more global and local threats, some forms of active transportation may provide an alternative mode of travel, where other methods of travel may not be available or accessible. Warmer winter temperatures may also encourage year-round cycling.

Financial Matters:

Administration has provided costs associated with the public preferred Road Diet design, Alternative 1, which includes protected bike lanes and on-street parking. The total estimated capital cost, as well as the estimated ongoing annual maintenance costs are summarized in tables 3 and 4 below.

INSTALLATION CAPITAL COSTS:

Table 3:

CAPITAL COST SUMMARY:	Road Diet with Protected Bike Lanes	Funding Source
INITIAL INSTALLATION:		
Engineering - Design	$ 147,233	Bikeway Development Project OPS-014-07
Signals	$ 49,200	Bikeway Development Project OPS-014-07
Painting	$ 306,593	Bikeway Development Project OPS-014-07
Protected Lane Treatments	$ 387,175	Bikeway Development Project OPS-014-07
Signage	$ 113,730	Bikeway Development Project OPS-014-07
Non-Refundable HST Costs	$ 2,591	Bikeway Development Project OPS-014-07
Contingency	$ 171,340	Bikeway Development Project OPS-014-07
Total Capital Installation Cost	**$ 1,177,861**	
EQUIPMENT:		
Sweeper Unit	$ 309,368	Fleet Additions Project OPS-022-07
Trailer	$ 10,000	Fleet Additions Project OPS-022-07
Non-Refundable HST Costs	$ 5,621	Fleet Additions Project OPS-022-07
Total Equipment Capital Cost	**$ 324,989**	

Included in the table 3 cost estimates: physical separators, road line painting and markings, coloured thermoplastic conflict zone and bus bay markings, thermoplastic bike symbols and bus stop markings, and signal realignment.

The initial installation of the bike lanes in the option above would require capital funding from the Bikeway Development Program budget, OPS-014-07. There is approximately $1.3M in available funding in the Bikeway Development Project at the time of writing this

report. The 2024 approved 10-year capital plan for Bikeway Development includes the following budget allocations:

2024	2025	2026	2027 to 2030	2031	2032	2033
$ 400,000	$ 400,000	$ 400,000	$ 100,000/yr	$ 600,000	$281,000	$670,000

Currently, there would be $1.0M in future funding available for pre-commitment, as pre-commitment of funding is limited to 5-years inclusive of the current year (2025 through 2028).

The estimated cost of other "shelf-ready" bikeway development projects include:

Shepherd Ave. Local Street Bikeway (Janette to Kildare)	$ 1,000,000
Walker/Munsee/Turner/Seneca MUT	> $ 550,000
Grand Marais Trail Connection	$100,000

Funding Summary:

Available funding in Bikeway Development Program	$1,300,000
Funding available for pre-commitment of future funds	$1,000,000
Less: Potential bikeway project estimates:	
Wyandotte Street East	($1,177,861)
Shepherd Ave. Local Street Bikeway	($1,000,000)
Walker / Munsee / Turner / Seneca MUT	>($ 550,000)
Grand Marias Trail Connection	($ 100,000)
Funding Shortage	**> $ (527,861)**

In order to complete the entire length of the Wyandotte Street East bikeway as presented in this report, available funding would not cover the other shelf ready projects. Currently, there are no known active transportation grant programs available to leverage funds to offset project costs. Administration would have to rely on leveraging bikeways projects where applicable through approved road reconstruction and resurfacing projects, as well as defer to the budget approval process to request additional funding for other bikeway or ATMP work required.

Bikeways Development funds are also to be utilized for other aspects of ATMP implementation, including the provision of end of trip facilities, education, engagement and promotion. Therefore, there would be no funding available for these non-project related aspects of the ATMP for the next five years.

In addition to the capital cost of installation of the bike lanes, there would also be capital cost requirements for the purchase of a specialty sweeper and trailer. The cost of the sweeper and trailer is approximately $325,000 including non-refundable HST costs. This is not included in the $1,177,861 estimate listed in the above therefore would require to be funded from a different source.

ONGOING ANNUAL MAINTENANCE COSTS:

As outlined in Table 4 below, annual maintenance cost estimates include winter control and sweeping of protected bike lanes, re-painting of lines and pavement markings, replacement of damaged separators, maintenance of decorative planters used as attractive separators in locations such as BIAs, rental of specialized equipment, and additional operational staff.

In order to maintain bollards and other protective measures in place year-round, specialized equipment will be needed for debris and snow removal. For debris removal, the city would be required to purchase a new sweeper and trailer that would be added to the corporate fleet as a dedicated unit, with an annual rental of the units charged to Environmental Services. Environmental Services would also require an additional operator to perform required sweeping services related to the new protected bike lanes, as there is currently no capacity to perform enhanced services with existing staff. As for winter control, the city will need to engage contracted services since it currently lacks the appropriate equipment for snow removal.

Table 4:

ONGOING ANNUAL MAINTENANCE COSTS:	Road Diet with Protected Bike Lanes
Enhanced Winter Control Services (contracted service)	$ 265,000
Replacement of damaged flex bollards	$ 36,347
Sweeping (internal forces)	$ 77,174
Line painting & pavement markings (internal forces)	$ 59,119
Planter Maintenance (internal forces)	$ 6,178
Non-refundable HST Costs	$ 4,664
Street Sweeper and Trailer	$ 117,495
Street Sweeper Operator	$ 89,000
Total Ongoing Annual Maintenance Costs	**$ 654,977**
Removal and installation of flex bollards annually (winter season)	$ 78,000

ADDITIONAL CAPITAL REQUIREMENT:

Should Council support proceeding with the project, application of thermoplastic conflict zones, bus bay markings, bus stop markings, and bike symbols will be required on a 5-year application cycle. Application of thermoplastic would be funded from an existing capital program for pavement markings, OPS-007-16. A funding increase would be required in 2029 and every 5-years thereafter. The present value cost estimate related to the Wyandotte East thermoplastic installations is $199,240. Administration would develop the required capital budget using an inflationary factor of approximately 3%, which equates to a 2029 budget requirement of $231,000. Funds from the overall Traffic

Operations capital works budget can be redirected to fund the thermoplastic application going forward.

Consultations:

Stacey McGuire – Executive Director of Engineering
Adam Mourad – Engineer II, Engineering
Jim Leether – Administrator, Waste Collection Contracts & Operations
Phong Nguy – Manager of Contracts, FS Maintenance
Roberta Harrison – Coordinator, Maintenance Operations
Ian Day – (A) Senior Manager, Traffic Operations & Parking Services
Bill Kralovensky – Coordinator, Parking Services
Karina Richters – Supervisor, Environmental Sustainability & Climate Change
James Chacko – Executive Director, Parks & Facilities
Jason Scott – Manager of Transit Planning, Transit Windsor
Barry Horrobin – Director of Planning & Physical Resources, Windsor Police Service
Stephen Laforet – Fire Chief, Windsor Fire and Rescue Service
Mike Dennis – Manager, Strategic Capital Budget Development & Control

Conclusion:

The Wyandotte Street East bikeway option preferred through public consultation, which includes a Road Diet where the number of driving through lanes would be reduced to accommodate buffered bike lanes and protective barriers added wherever possible, while also maintaining on-street parking, would enhance the City's cycling network by providing a key east-west connection.

Despite the desirability to have a protected bikeway along the entire roadway, initial assessments suggest it may not be achievable through a Road Diet. A 2020 traffic study indicated that a Road Diet would negatively impact the level of service (LOS) in a number of segments, with implementation not being recommended. Recent measurements of daily and peak road volumes also indicate that a Road Diet is likely not feasible, based on recognized threshold values. Increased traffic on Wyandotte would force vehicles onto Riverside Drive, potentially undermining the goals of the Vista project.

There are alternative viable options that can be explored to provide a key east-west bikeway within the corridor, catering to the needs of users by offering cycling facilities that are safer and more comfortable than those on a busy arterial road. However, Administration is not recommending that these options be prioritized over other higher-priority projects that are ready for construction. The Active Transportation Expert Panel can provide input regarding the prioritization of future projects, including bikeways in this corridor, as well as others identified in the Active Transportation Master Plan. In the interim, Council has recently approved funding for the application of traffic calming measures to immediately address safety and speeding concerns along the roadway.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator
Shawna Boakes	Executive Director of Operations
Mark Winterton	(A) Commissioner of Infrastructure Services
Janice Guthrie	Commissioner of Finance and City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Gignac		
Councillor Sleiman		
Councillor M. McKenzie		
Brian Brown	University of Windsor	
Lori Newton	Bike Windsor Essex	

Appendices:

1 Report S 155/2020 "Wyandotte Street East Corridor Review – Wards 4, 5 & 6",
2 Wyandotte St E Corridor Review-PIC Boards
3 Wyandotte St E PIC Comment Form and Online Survey
4 Windsor Road Diet Survey September 2022
5 Wyandotte St E Bikeway Preferred Design

Subject: Wyandotte Street East Corridor Review - Wards 4, 5 & 6

Reference:

Date to Council: December 16, 2020
Author: Jeff Hagan
Transportation Planning Senior Engineer
519-255-6267 ext 6003
jhagan@citywindsor.ca
Planning & Building Services
Report Date: November 17, 2020
Clerk's File #: Z2021

To: Mayor and Members of City Council

Recommendation:

THAT report S 155/2020, "Wyandotte Street East Corridor Review," **BE RECEIVED** for information.

Executive Summary:

As directed by Council (CR563/2019 & CR265/2020), this report provides information on:

- The feasibility of a lane reduction on Wyandotte Street East between St. Luke Road and Lauzon Road, and

- Projects in the planning stages that can be accelerated to reduce active transportation pressures along Wyandotte Street East.

To determine the feasibility of a lane reduction for the identified section of Wyandotte Street East, a corridor review was carried out. The conclusions of the review are as follows:

- Reducing the number of lanes for through traffic on Wyandotte Street East is not recommended as it would cause poor levels of service and high amounts of delay and congestion.

- Maintaining status quo (not reducing lanes but also not providing cycling facilities along the corridor) will perpetuate poor and marginal levels of service already present at certain points along the corridor. With moderate traffic growth, operations will worsen.

- Turning lanes at certain points – particularly the westbound right turn lane on Wyandotte Street East at Devonshire – can be removed without worsening traffic operations.

The following projects were identified as potential candidates for acceleration:

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Ontario / St. Rose / Jerome Local Street Bikeway	Medium / Low (varies by segment)	Initial Planning	Yes	Priority is based on the Wyandotte Street East multi-modal corridor.
St. Luke Road	Medium	Initial Planning	Yes	A bikeway connection at Wyandotte & St. Luke will help to facilitate bike travel into and out of Ford City, but will be of limited benefit for east-west travel along the corridor.
Westminster Avenue	Medium / Low (varies by segment)	Initial Planning	Potentially - See notes	Between Wyandotte Street and Ontario Street or Raymond Street could be accelerated to provide a neighbourhood connection. Providing a new pedestrian and cyclist crossing on the VIA line (as envisioned by the ATMP) to connect further south will require negotiations with the railway and is likely not viable as a short-term project.

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Jefferson Boulevard	Low (in the vicinity of Wyandotte Street East)	Initial Planning	Potentially - See notes	The ATMP identifies Jefferson Boulevard as a future AAA ("all ages and abilities") cycling route. As an interim measure, painted bicycle lanes (non-AAA) could be provided on Jefferson by removing on-street parking. Providing a AAA cycling facility on Jefferson is likely a longer-term project.
Matthew Brady Boulevard	Medium	Initial Planning	Yes	Currently a signed cycling route (non-AAA). Can be upgraded to a local street bikeway (AAA).
Riverdale Avenue	Low	Initial Planning	Potentially - See notes	Currently a signed cycling route (non-AAA). The ATMP identifies Riverdale for a future AAA cycling route. A preliminary review indicates that a multi-use trail can be accommodated on the east side of Riverdale.

Background:

At its November 18, 2019 meeting, Council passed the following resolution:

> ***CR563/2019 DHSC 103***
>
> *That Report No. 20 of the Windsor BIA Advisory Committee - Lane reduction on Wyandotte indicating:*
>
> *That Administration BE REQUESTED to report back on the feasibility of lane reduction on Wyandotte Street East from St.*

Luke to Lauzon Road in light of the passing of the Active Transportation Master Plan by City Council.

At its May 25, 2020 meeting, Council passed the following resolution:

CR265/2020

That administration BE DIRECTED to report back on other projects in the queue or in the planning stages, that could be accelerated along with any implications, to help alleviate some of the active transportation pressures that the subject neighbourhood is enduring in the area of Wyandotte Street East, including the possibility of lane reductions from 4 lanes to 3.

This report provides the information requested in both resolutions.

The portion of Wyandotte Street East referred to in resolution CR563/2019 goes through the Riverside and Pillette Village BIAs (as well as the Ford City BIA, not referred to in the May 4, 2020 resolution). A map of the area referred to in this resolution is provided as Figure 1.

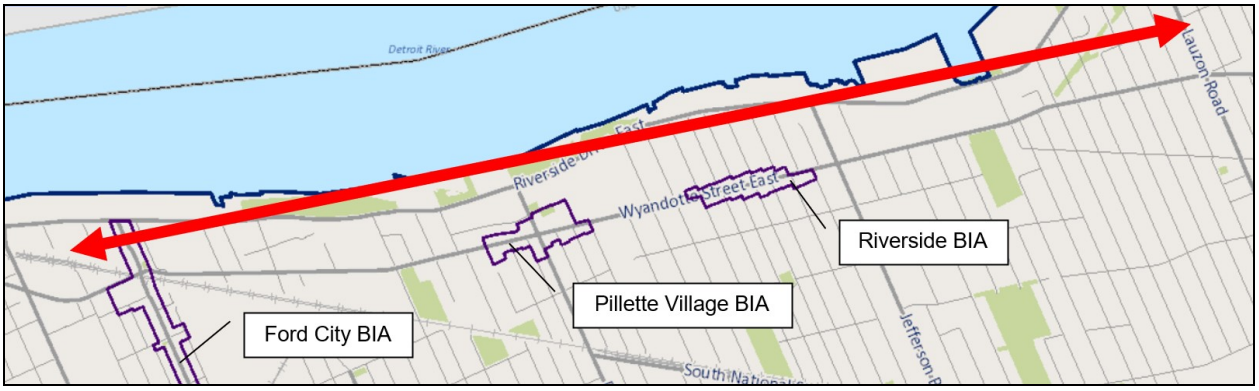


Figure 1: Wyandotte Street East (St. Luke Ave. To Lauzon Rd.)

Previous Reports

Report S 55/2017, “CQ56-2016 Wyandotte Street East Windsor Loop Connection,” was brought before Council at its June 17, 2017 meeting. This report recommended that a functional design study be carried out for Wyandotte Street East cycling infrastructure. Council directed that this recommendation be referred to Administration to await the completion of the Active Transportation Master Plan.

Report S 44/2018, “Bicycle Road Safety Audits - Top Cycling Collision Locations,” was brought before Council at its June 4, 2018 meeting. This report provided recommendations for the four City intersections with the highest number of cyclist collisions, including one intersection in the area identified in resolution CR563/2019 (Wyandotte Street East at Drouillard Road). The report identified short-term safety improvements to be implemented immediately and long-term improvements to be referred to the Active Transportation Master Plan (under development at the time) for consideration.

Report C 87/2020, “Lane Closures for Physical Distancing - Wyandotte BIAs” was brought before Council at its May 25, 2020 meeting. This report reviewed the potential for lane closures – either for bicycle facilities or other uses – in the Pillette Village and Olde Riverside BIAs. This report resulted in resolution CR264/2020, which was addressed with report S 95/2020 (discussed below), and CR265/2020 (provided above), which is addressed with this report.

Report S 95/2020, “Wyandotte Street East Road Narrowing - Environmental Assessment Requirements” was bought before Council at its September 14, 2020. This report responded to CR264/2020 by providing details on the environmental assessment requirements that could apply to a roadway narrowing on Wyandotte Street East. The report was received for information.

Report S 145/2020, “Windsor Municipal Heritage Register Update,” was brought before the Development and Heritage Standing Committee at its November 16, 2020 meeting. Report S 145/2020 recommended a number of updates to the Windsor Municipal Heritage Register, including adding the Wyandotte Street/Drouillard Road rail overpass structure to the Register. Should Council adopt this recommendation, Council approval would be required before demolition of the structure. As of the date of this report, report S 145/2020 has not yet come before Council.

Walk Wheel Windsor (Active Transportation Master Plan)

The Active Transportation Master Plan, *Walk Wheel Windsor*, identifies Wyandotte Street East as a Regional Spine in the cycling network. Except for a short section at St. Luke Road, Wyandotte Street East between St. Luke Road and Lauzon Road is identified as low to medium priority for cycling infrastructure, as shown in Figure 2.

Figure 2: Bicycle Priority Network Map Excerpt (Red: High Priority, Yellow: Medium Priority, Green: Low Priority)

As shown in Figure 3, bicycle lanes are provided along certain segments of Wyandotte Street East in the area of interest, but not through the Ford City BIA, Pillette Village BIA, or the Olde Riverside BIA.

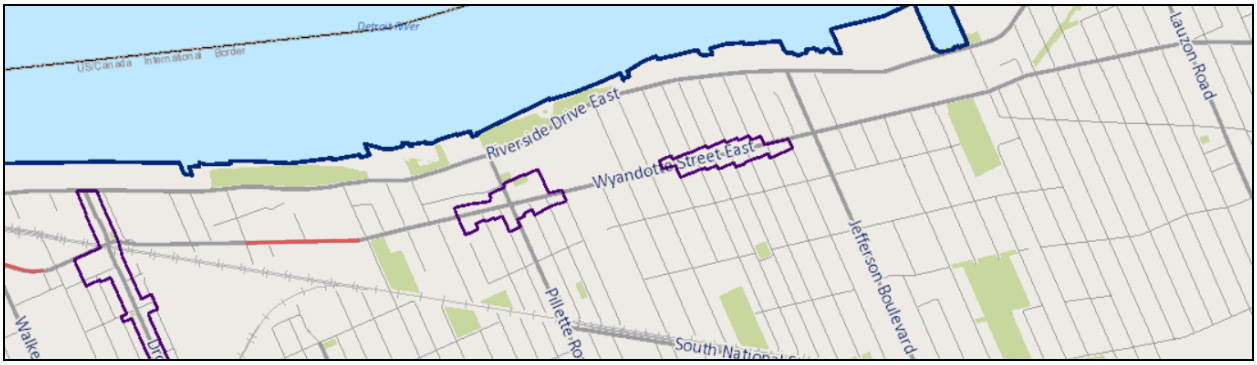


Figure 3: Existing Bicycle Lanes – Wyandotte Street East (Red)

The ATMP identifies Wyandotte Street East as a multi-modal corridor. The ATMP provides the following description:

> ***Multi-Modal Corridors***
>
> *The proposed bicycle network includes several multi-modal corridors, which are major streets that need further review to consider how they will accommodate active transportation given other competing priorities. [...] Along these corridors there is a need to have an established process to consider the mobility of all modes and competing needs when implementing bicycle facilities. These streets are some of Windsor's main travel corridors, serving a variety of vehicle types and modes while playing an important role in the City's transportation system.*
>
> *These multi-modal corridors will require more in-depth analysis through specific corridor studies or Environmental Assessments. Recognizing that these corridors serve desire lines within the bicycle network, these studies can determine whether bicycle facilities can be accommodated on the corridors or adjacent streets. As growth occurs within Windsor, additional corridors, or segments of identified corridors, may be designated as multi-modal corridors requiring additional study.*
>
> *It is important to note that as part of a complete and connected bicycle network that meets the needs of all users, there is still a place for complementary, non-AAA facilities such as painted bicycle lanes.*

Discussion:

Lane Reductions on Wyandotte Street East

To determine the feasibility of lane reductions on Wyandotte Street East, a corridor review was carried out.

Details of this review are provided in Appendix 1. The key points from the review are summarized below:

- Under existing conditions, traffic operations are already poor or marginal at some locations along the corridor.

- Reducing the number of through lanes on Wyandotte Street East in the study area will have a significant effect on traffic operations along the corridor, causing poor operations of the corridor as a whole.

- Even with the existing number of through lanes, traffic operations along the corridor are expected to significantly worsen with even moderate growth in traffic volumes.

- The westbound right turn lane on Wyandotte Street East at Devonshire Road can be eliminated without significant impacts to traffic operations. The elimination of this turning lane would allow a new segment of bicycle lane on Wyandotte Street, which would close a gap in the cycling network, as shown in Figure 4.

- The eastbound left turn lane on Wyandotte Street East at George Street is not required for intersection capacity; however, actually eliminating this turning lane is likely not possible without reconstructing Wyandotte Street East at the intersection and along the eastbound and westbound approaches.

- Windsor Fire & Rescue Service & Windsor Police Service both indicated that a reduction in the number of lanes on Wyandotte Street East may negatively affect emergency response and may increase response times.

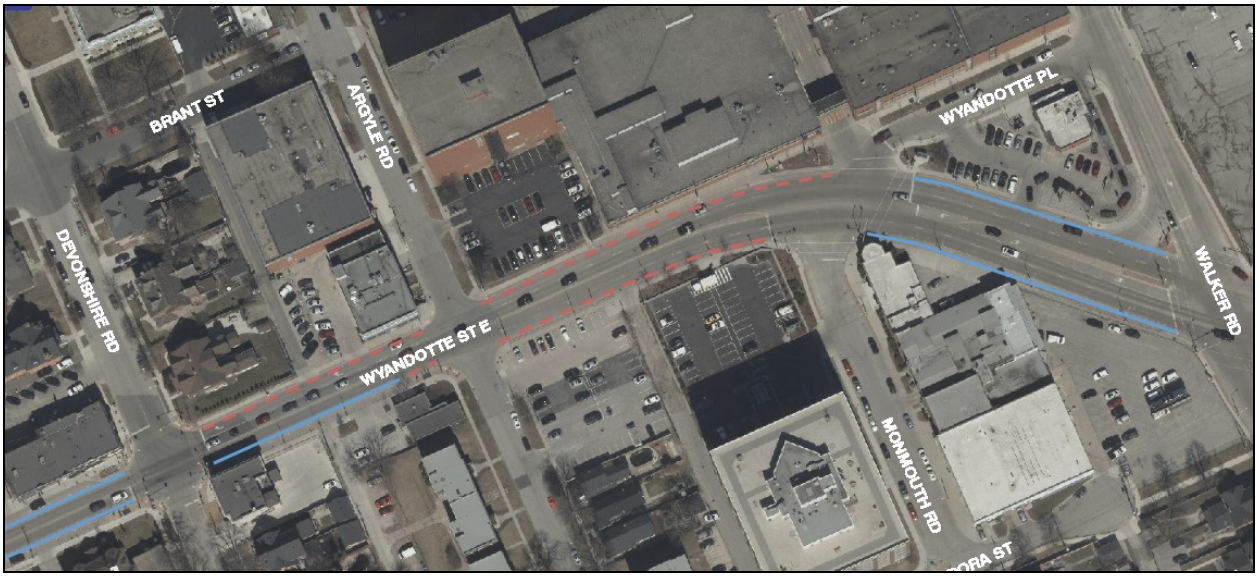


Figure 4: Potential New Bicycle Lanes, Devonshire to Monmouth (solid blue: existing bicycle lanes, dashed red: proposed bicycle lanes)

Next Steps – Wyandotte Street East Corridor

While removing travel lanes is likely unfeasible along most of the Wyandotte Street East corridor, other options are available for most of the corridor to accommodate east-west cyclist travel. Figure 5 provides a summary of the high-level options that appear most promising for each segment of the corridor.

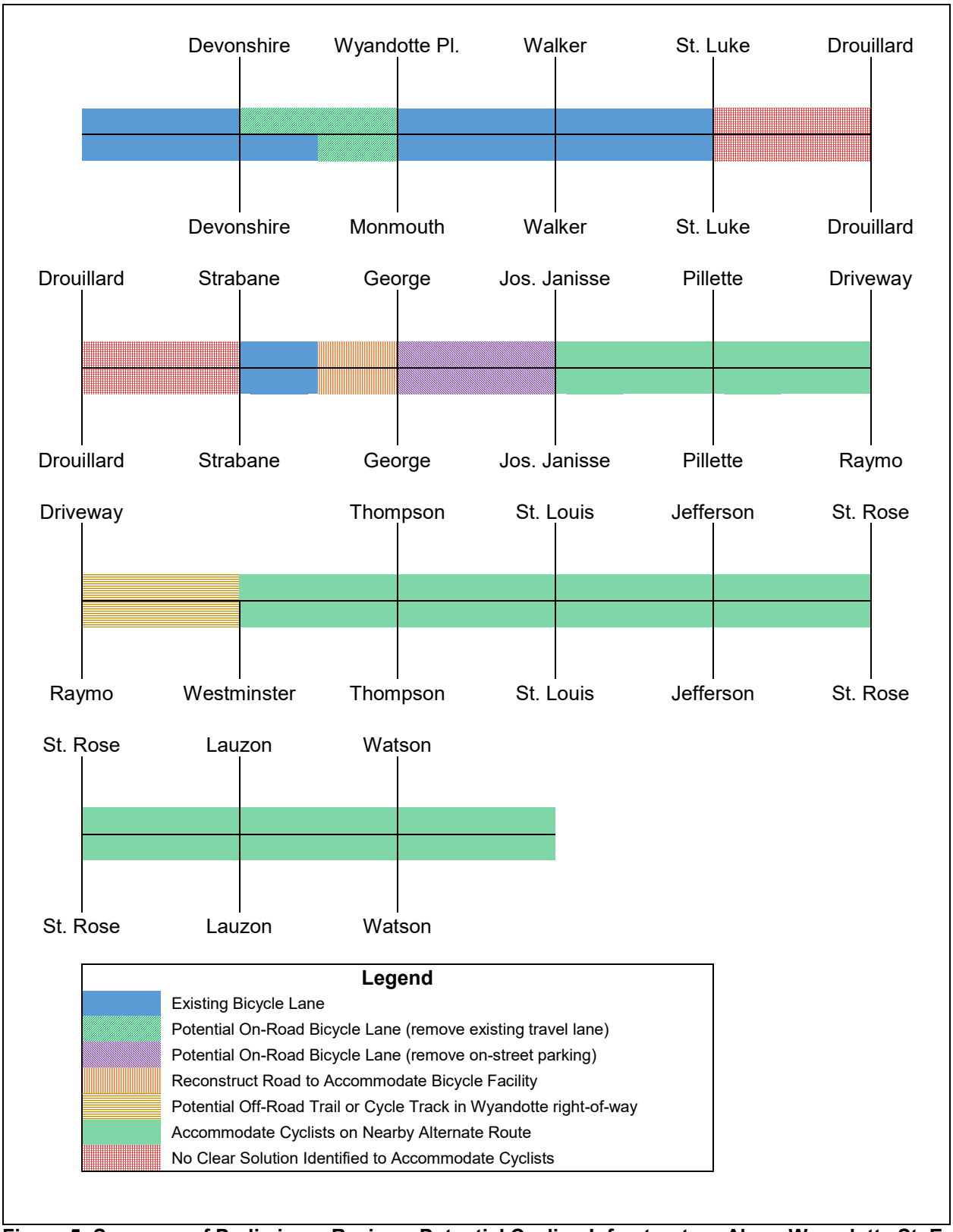


Figure 5: Summary of Preliminary Review - Potential Cycling Infrastructure Along Wyandotte St. E. Corridor

These options can be divided into several broad categories:

- **Potential "Quick Wins"**
    - These are segments where there are no significant obstacles to constructing the cycling infrastructure. Design and implementation can proceed right away, subject to funding and prioritization against other projects.
- **Longer-term Projects**
    - These are segments where a preliminary preferred solution is apparent, but it requires road reconstruction, property acquisition, or there are other factors that would make implementation of the solution in the short term difficult.
- **Major Barriers**
    - These are segments where no preferred solution is apparent, and cycling facilities will likely not be possible until significant barriers are addressed.

Potential "Quick Wins" – Wyandotte Corridor

The following projects are potential "quick wins:"

- **Devonshire to Monmouth:** bicycle lanes can be constructed along this segment to eliminate a gap in the cycling network, as shown in Figure 4. This can be accomplished by removing the westbound right turn lane on Wyandotte Street at Devonshire Road and realigning the remaining lanes.
- **Westminster to East of Watson:** the road network in this area allows a convenient alternate route, generally following Ontario Street, St. Rose Avenue, and Jerome Street, as shown in Figure 6.
    - This route would connect directly to a park (Riverside Baseball Park) and five schools (F.J. Brennan CHS, Corpus Christi Catholic Middle School, Dr. David Suzuki PS, St. Rose CES & Riverside SS) and likely be of benefit for students of two additional nearby schools (Princess Elizabeth PS & École élémentaire catholique Georges-P.-Vanier).
    - A preliminary review suggests that a local street bikeway (also called a bicycle priority street or bicycle boulevard) would be suitable for the route, except for the portion of the route through Riverside Baseball Park, which would be a multi-use trail. A summary of the key features of a local street bikeway is provided in Appendix 2.
    - This route would connect to future cycling routes already proposed in the Active Transportation Master Plan, including:
        - Westminster Boulevard
        - Jefferson Boulevard

        - Matthew Brady Boulevard
        - Riverdale Avenue
    - An additional future connection to the Ganatchio Trail via Isabelle, not currently envisioned in the ATMP, would also be beneficial for ensuring continuous cycling routes in the area.

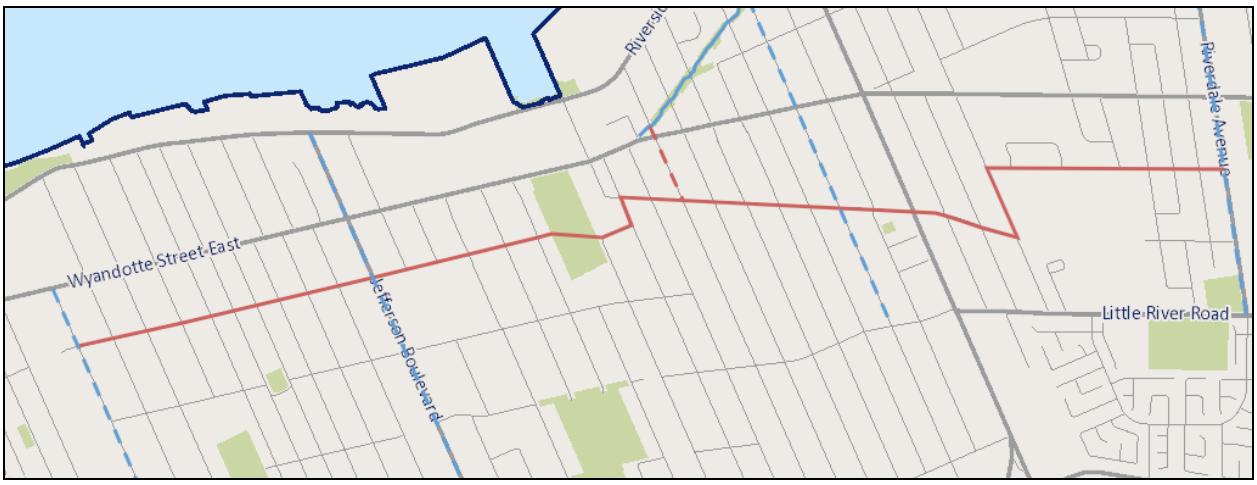


Figure 6: Potential Ontario/St. Rose/Jerome Local Street Bikeway (Red) and Connecting Cycling Routes (Blue)

Longer-Term Projects – Wyandotte Corridor

The following projects are locations where a preferred alternative is apparent, but road reconstruction or property acquisition are needed to allow the cycling facility to be constructed:

- **George to Jos. Janisse:** Currently, bicycle lanes on Wyandotte Street East end just west of George Street. With the existing right-of-way width, there is no available space in the boulevard to accommodate cycling infrastructure, as shown in Figure 7.
    - Road reconstruction, and likely property acquisition, would be needed to accommodate cycling infrastructure along Wyandotte Street through the George Avenue intersection.
    - East of George Avenue to Jos. Janisse Avenue, bicycle lanes can be accommodated by eliminating on-street parking; however, bicycle lanes on this segment would likely be of limited value without connections to the cycling network east and west of this segment.
- **Jos. Janisse to Westminster:** in most of the Pillette Village BIA, providing cycling facilities in the Wyandotte Street East right-of-way would likely be impossible without removing on-street parking, which would cause significant impacts to local businesses. Options to provide a nearby cycling route along Pleasant Place should be evaluated in further detail; all options for this alternate route would require property acquisition.

Figure 7: Wyandotte Street East at George Avenue

Major Barriers – Wyandotte Corridor

One segment of the corridor has been identified as a major barrier:

- **St. Luke to Strabane:** this portion of Wyandotte includes the VIA Rail underpass at Drouillard Road.
    - The rail bridge, as well as the retaining walls on the approaches to the Wyandotte/Drouillard intersection, represent a significant barrier to providing cycling infrastructure along the Wyandotte Street right-of-way. Addressing the bridge, abutments, and retaining walls will be needed to accommodate cycling facilities along this segment of Wyandotte Street.
    - A 2018 bicycle road safety audit previously presented to Council (report S 44/2018 “Bicycle Road Safety Audits – Top Cyclist Collision Intersections”) recommended an alternate route around the Wyandotte/Drouillard intersection (shown in Figure 8) as an interim solution until the rail underpass and associated retaining walls can be replaced.
    - Other than Riverside Drive, the road network layout in this area does not allow for any other alternate east-west routes without significant out-of-way travel.
    - Administration is currently planning to develop design alternatives to address this intersection in 2021, with a target of construction in 5 to 7 years.

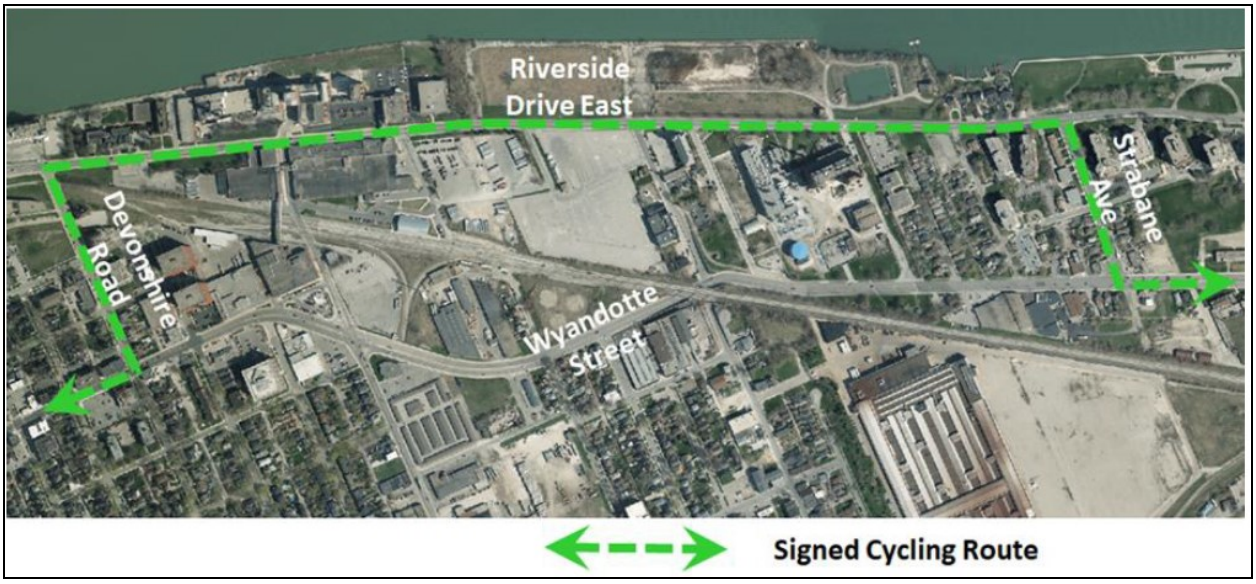


Figure 8: Alternate Route around Wyandotte/Drouillard Intersection (Report S 44/2018)

Other Active Transportation Projects

The Active Transportation Master Plan identifies a number of other future cycling routes in this area. The cycling network prioritization map from the ATMP is attached as Appendix 3. Routes crossing or near the Wyandotte Street East corridor are summarized in Table 1.

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Riverside Drive Bicycle Lanes	Low	Varies by section	No	Bicycle lanes are being built out as per the Riverside Drive Vista EA. Construction generally requires utility relocation and road reconstruction; accelerating the project quicker than the current schedule is likely not feasible.
Ontario / St. Rose / Jerome Local Street Bikeway	Medium / Low (varies by segment)	Initial Planning	Yes	Priority is based on the Wyandotte Street East multi-modal corridor.

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Walker Road Multi-modal Corridor	High / Medium / Low (varies by segment)	Initial Planning	No	Walker Road is also identified as a multi-modal corridor with a number of issues to be resolved before a bikeway can be designed and constructed.
St. Luke Road	Medium	Initial Planning	Yes	A bikeway connection at Wyandotte & St. Luke will help to facilitate bike travel into and out of Ford City, but will be of limited benefit for east-west travel along the corridor.
Drouillard Road	High	Initial Planning	No	The rail bridge and retaining walls at the Wyandotte/Drouillard intersection present a major barrier to connecting a bikeway to Wyandotte Street along Drouillard Road in the short term.
George Avenue	High / Medium / Low (varies by segment)	Initial Planning	No	Connecting this segment to a bikeway on Wyandotte Street is likely a longer-term project (see discussion under *"Longer Term Projects – Wyandotte Street East"* above)
Pillette Road	Low	Initial Planning	No	Extending existing bicycle lanes on Pillette Road will require upgrades to the VIA Rail grade crossing.

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Westminster Avenue	Medium / Low (varies by segment)	Initial Planning	Potentially - See notes	Between Wyandotte Street and Ontario Street or Raymond Street could be accelerated to provide a neighbourhood connection. Providing a new pedestrian and cyclist crossing on the VIA line (as envisioned by the ATMP) to connect further south will require negotiations with the railway and is likely not viable as a short-term project.
Jefferson Boulevard	Low (in the vicinity of Wyandotte Street East)	Initial Planning	Potentially - See notes	The ATMP identifies Jefferson Boulevard as a future AAA (“all ages and abilities”) cycling route. As an interim measure, painted bicycle lanes (non-AAA) could be provided on Jefferson by removing on-street parking. Providing a AAA cycling facility on Jefferson is likely a longer-term project.
Matthew Brady Boulevard	Medium	Initial Planning	Yes	Currently a signed cycling route (non-AAA). Can be upgraded to a local street bikeway (AAA).

Route	ATMP Priority	Status	Good Candidate for Acceleration?	Notes
Riverdale Avenue	Low	Initial Planning	Potentially - See notes	Currently a signed cycling route (non-AAA). The ATMP identifies Riverdale for a future AAA cycling route. A preliminary review indicates that a multi-use trail can be accommodated on the east side of Riverdale.

Risk Analysis:

There are moderate resource risks associated with accelerating any of the identified projects, since this will have the effect of "de-prioritizing" other projects identified as high priority in the Active Transportation Master Plan.

Climate Change Risks

Climate Change Mitigation:

Carbon dioxide emissions for each scenario were forecasted based on estimates of fuel consumption provided by *Synchro 10* traffic analysis software. For the Wyandotte Street East corridor, carbon dioxide emissions are mainly a function of two factors:

- **Vehicle volume:** the Active Transportation Master Plan provides targets for non-auto mode share.
    - It is unlikely that the Active Transportation Master Plan's non-auto mode share targets will be achieved without providing the Regional Spine cycling route through this area.
- **Congestion:** traffic congestion tends to increase emissions, due to increased acceleration and braking in congested conditions.
    - Reducing the number of through lanes on Wyandotte Street East tends to increase congestion along the corridor significantly.

The net effect of these two factors can be seen in Table 2 and Table 3. Important limitations on the estimates should be noted:

- The analysis only considers emissions during the weekday AM and PM peak hours ("rush hour"). However, these tend to be the most significant periods for overall emissions, since vehicle volumes and emissions per vehicle both tend to be highest during "rush hour" conditions.

- The analysis only considers emissions along the Wyandotte Street East corridor between Devonshire and Watson. Most vehicles travelling the corridor will be on trips that begin and end outside the analysis area; these emissions outside the analysis area are not considered in the estimates.

- The analysis assumes no change to average vehicle efficiency over time.

Table 1: Carbon Dioxide Emission Estimates

Year	Carbon Dioxide Emissions During Weekday AM and PM Peak Hours (tonnes of CO_2 per year)		
	Do Nothing	Provide Bicycle Infrastructure on Wyandotte Street by Removing Through Lanes	Provide Bicycle Infrastructure Without Removing Through Lanes (e.g. alternate routes, in-boulevard cycling facilities)
	4-lane Wyandotte St., Status Quo Mode Share	2-lane Wyandotte St., ATMP Target Mode Share	4-lane Wyandotte St., ATMP Target Mode Share
2020	2,374	3,218	2,374
2030	2,528	2,635	2,085
2040	2,763	2,613	2,065

Table 2: Percent Change in Carbon Dioxide Emissions

Year	Change in Carbon Dioxide Emissions Relative to 2020 "Do Nothing" Conditions		
	Do Nothing	Provide Bicycle Infrastructure on Wyandotte Street by Removing Through Lanes	Provide Bicycle Infrastructure Without Removing Through Lanes (e.g. alternate routes, in-boulevard cycling facilities)
	4-lane Wyandotte St., Status Quo Mode Share	2-lane Wyandotte St., ATMP Target Mode Share	4-lane Wyandotte St., ATMP Target Mode Share
2020	0%	36%	0%
2030	6%	11%	-12%
2040	16%	10%	-13%

The "do nothing" alternative is associated with steady growth in carbon dioxide emissions over time as moderate background growth in traffic causes increases in congestion along the corridor.

Converting existing through lanes to cycling infrastructure is associated with a sharp increase in emissions initially due to increased congestion. Over time, emissions will decrease as the ATMP non-auto mode share targets are achieved and the volume of motor vehicles decreases; however, even by 2040, emissions will still remain above 2020 "do nothing" levels.

Providing a convenient, comfortable east-west regional spine cycling using alternate routes or in-boulevard cycling facilities (as appropriate for each segment) will allow the increase in non-auto mode share envisioned in the ATMP without the increased

emissions associated with the increased congestion caused by reducing the number of lanes. The net effect is a moderate decrease in emissions over time.

The Community Energy Plan 2017 supports the implementation of the Active Transportation Master Plan (Strategy 10); this strategy was reaffirmed as a priority 1 mitigation action in the Acceleration of Climate Change Actions in response to the Climate Change Emergency Declaration (report S 18/2020).

Climate Change Adaptation:

An increase in the number of summer days with temperatures above 30° Celsius has the potential to decrease the attractiveness of cycling as a transportation mode.

Typically, using local streets and park trails for cycling routes provides opportunities for urban greening. This urban greening can provide shade and mitigate urban heat island effects in ways that are often not available for cycling facilities along arterial roads and in “main street” areas.

Warmer winter temperatures may also encourage more year-round cycling activities.

Financial Matters:

No expenditures are associated with the report recommendations.

A number of bikeway projects were identified as candidates for potential acceleration. Should Council direct that any of these projects proceed as high priority projects, Administration will develop detailed cost estimates as part of the design process.

Construction of these projects will be subject to approval as per Purchasing By-law 93-2012, as amended.

Consultations:

Dwayne Dawson, Operations

Shawna Boakes, Traffic Operations

Fahd Mikhael & Anna Godo, Engineering

Heidi Baillargeon, Parks

Karina Richters, Environmental Sustainability and Climate Change

Chris Carpenter, Legal

Michael Cooke & Kristina Tang, Planning

John Lee & Andrea DeJong, Windsor Fire & Rescue Services

Barry Horrobin, Insp. Andrew Randall, Sgt. Craig Judson & Sgt. Morgan Evans, Windsor Police Service

Ryan Lemay, Essex-Windsor EMS

Conclusion:

Based on the results of the corridor review, reducing the number of through lanes on Wyandotte Street East between St. Luke Road and Lauzon Road is not recommended.

Other options to provide an east-west regional spine cycling route through this area will be pursued in keeping with the Active Transportation Master Plan, previously endorsed by Council.

As an alternative to providing bicycle lanes on Wyandotte Street East itself, an alternate route could be provided on a local street bikeway between Westminster Boulevard and Riverdale Avenue using Ontario Street, St. Rose Avenue, Watson Avenue, and Jerome Street. This project is a good candidate for acceleration, should Council so choose, as are bikeway projects on certain north-south roads that cross Wyandotte Street in the section identified for review.

Planning Act Matters:

N/A

Approvals:

Name	Title
John Revell	Chief Building Official
Mark Winterton	City Engineer
Shelby Askin Hager	City Solicitor
Onorio Colucci	Chief Administrative Officer

Notifications:

Name	Address	Email
Councillor Holt		
Councillor Sleiman		
Councillor Gignac		
Windsor BIA Advisory Committee		
Windsor Bicycling Committee		
Lisa Milec Chair Walkerville BIA		chair.wbia@gmail.com
Shane Potvin Chair Ford City BIA		fordcitybia@gmail.com
Bridget Scheuerman Executive Director Pillette Village BIA & Olde Riverside BIA		bscheuerman@cogeco.ca
Eric Nadalin Manager, Chronic Disease & Injury Prevention Windsor Essex County Health Unit		enadalin@wechu.org
Ashleigh Atkinson Health Promotion Specialist – Healthy Schools Windsor Essex County Health Unit		aatkinson@wechu.org

Name	Address	Email
Todd Awender Superintendent of Education - School Development and Design Greater Essex County District School Board		todd.awender@publicboard.ca
Penny King Executive Superintendent of Business Windsor-Essex Catholic District School Board		penny_king@wecdsb.on.ca
Luigi Baggio Principal F.J. Brennan Catholic High School	910 Raymo Rd Windsor ON N8Y 4A6	
Dean Favero Principal Corpus Christi Catholic Middle School	910 Raymo Rd Windsor ON N8Y 4A6	
Kerry Green-Duren Principal Dr. David Suzuki Public School	6320 Raymond Ave Windsor ON N8S 1Z9	
Ian Drago Principal St. Rose Catholic Elementary School	871 St. Rose Ave Windsor ON N8S 1X4	
Tony Omar Principal Riverside Secondary School	8465 Jerome St Windsor ON N8S 1W8	
Residents with recent related service requests *(list provided to Clerks)*		

Appendices:

1 Traffic Analysis - Wyandotte St E Corridor
2 Bicycle Priority Streets (Ontario Traffic Manual Excerpt)
3 Cycling Network Prioritization (*Walk Wheel Windsor* Excerpt)

INTER-OFFICE MEMO

TO: **Mayor and Members of Council**

FROM: **Jeff Hagan, Transportation Planning Senior Engineer**

DATE: **November 17, 2020**

SUBJECT: **Results of Traffic Analysis**

Wyandotte Street East Corridor Review

Introduction

Wyandotte Street East has been identified as a candidate for reduction of through lanes to accommodate bicycle lanes along Wyandotte Street. To determine whether this lane reduction is feasible, a corridor review was carried out using *Synchro 10* traffic analysis software.

Existing Lane Configurations are shown in Figure 1 (following the body of the memo). Lane configurations with lane reductions are shown in Figure 2.

Traffic Volumes

Existing traffic volumes used for analysis were obtained from recent traffic counts at intersections along the corridor, adjusted to reflect a common 2020 horizon year.

Traffic growth forecasts for future conditions were based on the following assumptions:

- **Diversion from Riverside Drive:** as a result of traffic calming measures included in the Riverside Drive Vista Improvement Project, 20% of traffic travelling Riverside Drive between Walker Road and Lauzon Road was assumed to divert to Wyandotte Street.
- **Background Growth:** an annual traffic growth rate of 0.5% per year was assumed. This rate is in line with recent historical trends, and reflects a moderate degree of intensification in the area as well as a moderate amount of build-out of the undeveloped lands along Wyandotte Street East to the east of the study area.
- **Mode Share:** non-auto (cyclist, transit, pedestrian) mode share was assumed as follows:
    - **2020 Existing:** 8.3% non-auto mode share (as per the Active Transportation Master Plan – mature neighbourhoods)
    - **2040 Ultimate:** 22% non-auto mode share (as per the Active Transportation Master Plan – mature neighbourhoods)
    - **2030 Interim:** 17.4% non-auto mode share
    - **Scenarios where an east-west Regional Spine cycling facility is not provided:** 8.3% non-auto mode share (i.e. existing status quo)

Analysis Results

Analysis was carried out using the *Highway Capacity Manual* methodology for evaluating urban streets as implemented in the *Synchro 10* software package.

Using this methodology, Wyandotte Street East is a Class III Arterial based on the characteristics of the street. Level of Service ranges for a Class III Arterial are summarized in Table 1.

Table 1: Level of Service Descriptions (Source: Highway Capacity Manual)

Level of Service	Average Travel Speed	Description
A	> 50 km/h	Free flow, traffic stream is unrestricted
B	> 39 – 50 km/h	Reasonably free flow, traffic stream slightly restricted
C	> 28 – 39 km/h	Stable flow, freedom to maneuver is noticeably restricted
D	> 22 – 28 km/h	Approaching unstable flow, freedom to maneuver is more limited
E	> 17 – 22 km/h	Unstable flow, operating at capacity
F	≤ 17 km/h	Forced or breakdown flow

2020 Arterial Operations

2020 arterial operations are summarized in Table 2 and Table 3. In all results tables, colour coding is based on speed:

- green: free flow (50 km/h)
- red: stopped (0 km/h)

In the weekday AM peak hour under existing conditions, the arterial performance of Wyandotte Street East in the peak direction (westbound) was satisfactory overall, though with marginal conditions at isolated points (approaching Lauzon Road, approaching Pillette Road, and from approaching Walker Road into Walkerville, i.e. through Devonshire Rd.).

In the weekday PM peak hour under existing conditions, the arterial performance of Wyandotte Street East in the peak direction (eastbound) was satisfactory - though approaching marginal conditions - overall. Poor operations were noted through Walkerville (i.e. Devonshire Rd. through Walker Rd.), and marginal operations were noted approaching the lane drop at Watson Ave.

With the addition of traffic diverted from Riverside Drive (and no changes to signal timings), the overall travel time along the corridor increases, but the overall level of service does not change from existing conditions (weekday AM: LOS C; weekday PM: LOS D). In the weekday AM peak hour, approaching Pillette Road, operations degrade from marginal (LOS E) to poor (LOS) and from satisfactory (LOS D) to marginal (LOS E) approaching Watson Road. In the weekday PM peak hour, the level of service for individual approaches did not change.

Optimizing intersection splits at intersections with critical movements will address some, but not all, of the issues noted in existing conditions or that are exacerbated with the diversion of traffic from Riverside Drive. In the weekday AM peak hour, these signal timing adjustments improved operations to the point that the total travel time along the corridor was equal to that of existing operations. In the weekday PM peak period splits improve total travel time somewhat, but overall travel time through the corridor is still somewhat higher than for existing conditions.

With the reduction of lanes to allow for cycling facilities along the corridor (and re-optimization of intersection splits), arterial operations for motor vehicles are worsened. In the weekday AM peak hour, overall operations are marginal (LOS E) with marginal or poor (LOS E/F) operations for certain segments. In the weekday PM peak hour, overall operations are poor (LOS F) with marginal or poor (LOS E/F) operations for most segments.

Table 2: 2020 Weekday AM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Westbound)

Scenario	**2020 Existing**				**2020 with Diversion**				**2020 with Diversion & Lane Reductions**			
Description	Volumes: existing Lane Configurations: existing Signal Timings: existing				Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service
Watson Ave	23.7	0.17	25.2	D	25.7	0.17	23.3	D	25.8	0.17	23.2	D
Lauzon Rd	51.6	0.29	20.6	E	53.9	0.29	19.7	E	68.4	0.29	15.5	F
St. Rose Ave	78.8	0.92	41.9	B	81.0	0.92	40.8	B	103.7	0.92	31.8	C
Jefferson Blvd	66.8	0.80	43.1	B	66.8	0.80	43.1	B	78.1	0.80	36.9	C
St. Louis Ave	34.4	0.38	40.0	B	34.6	0.38	39.8	B	70.1	0.38	19.6	E
Thompson Blvd	24.8	0.25	36.1	C	25.4	0.25	35.2	C	117.9	0.25	7.6	F
Raymo Rd	49.1	0.52	37.9	C	49.7	0.52	37.4	C	102.5	0.52	18.1	E
Pillette Rd	44.0	0.24	19.7	E	43.6	0.24	19.9	E	202.8	0.24	4.3	F
George Ave	55.8	0.66	42.3	B	57.8	0.66	40.8	B	61.7	0.66	38.2	C
Strabane Ave	49.2	0.54	39.8	B	51.1	0.54	38.3	C	49.8	0.54	39.3	B
Drouillard Rd	60.1	0.62	37.1	C	60.3	0.62	36.9	C	127.1	0.62	17.5	E
Walker Rd	94.4	0.55	20.8	E	71.6	0.55	27.5	D	72.0	0.55	27.3	D
Monmouth Rd	18.4	0.12	23.9	D	21.7	0.12	20.3	E	22.4	0.12	19.7	E
Devonshire Rd	34.3	0.22	23.1	D	41.6	0.22	19.0	E	50.9	0.22	15.6	F
Total	**685.4**	**6.27**	**33.0**	**C**	**684.8**	**6.27**	**33.0**	**C**	**1153.2**	**6.27**	**19.6**	**E**

Table 3: 2020 Weekday PM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Eastbound)

Scenario	2020 Existing				2020 with Diversion				2020 with Diversion & Lane Reductions			
Description	Volumes: existing Lane Configurations: existing Signal Timings: existing				Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service
Devonshire Rd	172.7	0.19	3.9	F	281.8	0.19	2.4	F	239.2	0.19	2.8	F
Monmouth Rd	38.1	0.22	20.8	E	37.3	0.22	21.2	E	37.3	0.22	21.2	E
Walker Rd	41.2	0.12	10.7	F	36.1	0.12	12.2	F	35.8	0.12	12.3	F
Drouillard Rd	55.5	0.55	35.4	C	56.6	0.55	34.8	C	109.6	0.55	17.9	E
Strabane Ave	51.0	0.62	43.7	B	51.3	0.62	43.4	B	99.0	0.62	22.5	D
George Ave	47.4	0.54	41.3	B	47.3	0.54	41.4	B	87.8	0.54	22.3	E
Pillette Rd	70.3	0.66	33.6	C	74.7	0.66	31.6	C	309.3	0.66	7.6	F
Raymo Rd	25.9	0.24	33.4	C	26.1	0.24	33.2	C	37.1	0.24	23.3	D
Thompson Blvd	44.7	0.52	41.6	B	44.9	0.52	41.4	B	161.5	0.52	11.5	F
St. Louis Ave	24.2	0.25	37.0	C	24.4	0.25	36.7	C	54.9	0.25	16.3	E
Jefferson Blvd	32.6	0.38	42.2	B	32.9	0.38	41.9	B	49.5	0.38	27.8	D
St. Rose Ave	68.8	0.80	41.9	B	68.9	0.80	41.8	B	189.3	0.80	15.2	F
Lauzon Rd	95.0	0.92	34.8	C	105.7	0.92	31.2	C	195.9	0.92	16.9	E
Watson Ave	48.3	0.29	22.0	E	55.1	0.29	19.2	E	49.0	0.29	21.6	E
Total	**815.7**	**6.30**	**27.8**	**D**	**943.1**	**6.30**	**24.0**	**D**	**1655.2**	**6.30**	**13.7**	**F**

2030 Arterial Operations

2030 arterial operations are summarized in Table 4 and Table 5.

With existing lane configurations, by 2030, overall weekday AM peak hour operations remain satisfactory (LOS C) with marginal (LOS E) operations on certain segments. In the weekday PM peak hour, overall operations will degrade from satisfactory in 2020 (LOS D) to marginal in 2030 (LOS E) with several segments experiencing marginal or poor operations (LOS E/F).

Operations with reduced lane widths are improved in 2030 compared to 2020, since the increased non-auto mode split outweighs the effect of background growth in motor vehicle volumes. However, certain segments along the corridor remain operating marginally (LOS E) or poorly (LOS F) in both the weekday AM and PM peak hours.

Table 4: 2030 Weekday AM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Westbound)

Scenario	**2030 with Diversion**				**2030 with Diversion & Lane Reductions**			
Description	Volumes: background plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service
Watson Ave	25.8	0.17	23.2	D	24.0	0.17	24.9	D
Lauzon Rd	54.5	0.29	19.5	E	55.9	0.29	19.0	E
St. Rose Ave	80.9	0.92	40.8	B	94.3	0.92	35.0	C
Jefferson Blvd	66.8	0.80	43.1	B	74.9	0.80	38.5	B
St. Louis Ave	34.7	0.38	39.7	B	53.4	0.38	25.8	D
Thompson Blvd	25.5	0.25	35.1	C	73.1	0.25	12.2	F
Raymo Rd	49.8	0.52	37.3	C	57.5	0.52	32.3	C
Pillette Rd	43.4	0.24	19.9	E	127.3	0.24	6.8	F
George Ave	57.8	0.66	40.8	B	61.4	0.66	38.4	B
Strabane Ave	51.4	0.54	38.1	C	49.4	0.54	39.6	B
Drouillard Rd	60.3	0.62	36.9	C	96.8	0.62	23.0	D
Walker Rd	73.3	0.55	26.8	D	71.7	0.55	27.4	D
Monmouth Rd	20.2	0.12	21.8	E	20.6	0.12	21.4	E
Devonshire Rd	42.9	0.22	18.5	E	39.9	0.22	19.8	E
Total	**687.3**	**6.27**	**32.9**	**C**	**900.2**	**6.27**	**25.1**	**D**

Table 5: 2030 Weekday PM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Eastbound)

Scenario	**2030 with Diversion**				**2030 with Diversion & Lane Reductions**			
Description	Volumes: 2030 background plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: 2030 background plus diversion from Riverside Drive, ATMP target mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service
Devonshire Rd	349.6	0.19	1.9	F	210.4	0.19	3.2	F
Monmouth Rd	40.8	0.22	19.4	E	32.5	0.22	24.4	D
Walker Rd	80.9	0.12	5.4	F	32.1	0.12	13.7	F
Drouillard Rd	57.3	0.55	34.3	C	88.3	0.55	22.3	E
Strabane Ave	51.5	0.62	43.3	B	71.1	0.62	31.3	C
George Ave	47.3	0.54	41.4	B	59.0	0.54	33.2	C
Pillette Rd	76.7	0.66	30.8	C	269.9	0.66	8.7	F
Raymo Rd	26.3	0.24	32.9	C	34.4	0.24	25.2	D
Thompson Blvd	45.4	0.52	41.0	B	127.6	0.52	14.6	F
St. Louis Ave	24.7	0.25	36.2	C	33.6	0.25	26.6	D
Jefferson Blvd	33.8	0.38	40.7	B	48.2	0.38	28.6	D
St. Rose Ave	69.3	0.80	41.6	B	151.3	0.80	19.0	E
Lauzon Rd	105.5	0.92	31.3	C	163.5	0.92	20.2	E
Watson Ave	57.6	0.29	18.4	E	45.6	0.29	23.3	D
Total	**1066.7**	**6.30**	**21.2**	**E**	**1367.5**	**6.30**	**16.6**	**E**

2040 Arterial Level of Service

2040 arterial level of service operations are summarized in Table 6 and Table 7.

With existing lane configurations, 2040 overall operations are satisfactory (LOS C) in the weekday AM peak hour and marginal (LOS E) in the weekday PM peak hour. Certain individual segments in both peak hours experience marginal (LOS E) or poor (LOS F) operations, with operations in these segments generally worse than in 2030.

With reduced motor vehicle lanes to accommodate bicycle facilities, operations in 2040 have degraded significantly compared to 2030. Overall level of service for the corridor in 2040 is satisfactory (LOS D) in the weekday PM peak hour and marginal (LOS E) in the weekday PM peak hour. Certain segments in both peak hours operate marginally (LOS E) or poorly (LOS F).

Table 6: 2040 Weekday AM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Westbound)

Scenario	**2040 with Diversion**				**2040 with Diversion & Lane Reductions**			
Description	Volumes: 2040 background plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: 2040 background plus diversion from Riverside Drive, ATMP target mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed [km/h]	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed [km/h]	Arterial Level of Service
Watson Ave	26.4	0.17	22.6	D	23.7	0.17	25.2	D
Lauzon Rd	55.7	0.29	19.0	E	55.6	0.29	19.1	E
St. Rose Ave	81.1	0.92	40.7	B	93.4	0.92	35.4	C
Jefferson Blvd	67.0	0.80	43.0	B	74.7	0.80	38.6	B
St. Louis Ave	35.0	0.38	39.3	B	52.3	0.38	26.3	D
Thompson Blvd	26.1	0.25	34.3	C	68.8	0.25	13.0	F
Raymo Rd	50.2	0.52	37.0	C	57.1	0.52	32.6	C
Pillette Rd	54.9	0.24	15.8	F	122.8	0.24	7.1	F
George Ave	57.9	0.66	40.8	B	61.6	0.66	38.3	C
Strabane Ave	51.9	0.54	37.7	C	49.4	0.54	39.6	B
Drouillard Rd	60.8	0.62	36.6	C	94.7	0.62	23.5	D
Walker Rd	76.7	0.55	25.6	D	71.7	0.55	27.4	D
Monmouth Rd	20.7	0.12	21.3	E	20.0	0.12	22.0	E
Devonshire Rd	49.1	0.22	16.1	E	39.3	0.22	20.2	E
Total	**713.5**	**6.27**	**31.7**	**C**	**885.1**	**6.27**	**25.5**	**D**

Table 7: 2040 Weekday PM Peak Hour Arterial Level of Service - Wyandotte Street East Peak Direction (Eastbound)

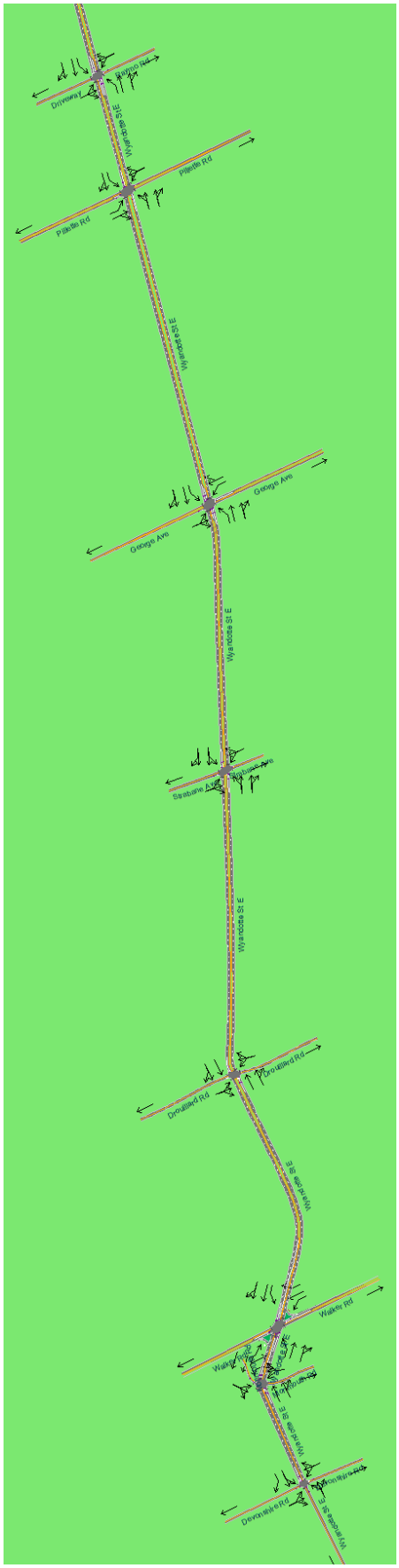
Scenario	**2040 with Diversion**				**2040 with Diversion & Lane Reductions**			
Description	Volumes: existing plus diversion from Riverside Drive, existing mode split Lane Configurations: existing Signal Timings: splits optimized at intersections with critical movements				Volumes: 2040 background plus diversion from Riverside Drive, ATMP target mode split Lane Configurations: lanes reduced to accommodate bike facility Signal Timings: splits optimized at intersections with critical movements			
Cross Street	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service	Travel Time (s)	Dist (km)	Arterial Speed (km/h)	Arterial Level of Service
Devonshire Rd	379.1	0.19	1.8	F	210.4	0.19	3.2	F
Monmouth Rd	37.3	0.22	21.2	E	32.5	0.22	24.4	D
Walker Rd	68.9	0.12	6.4	F	32.1	0.12	13.7	F
Drouillard Rd	58.1	0.55	33.9	C	88.3	0.55	22.3	E
Strabane Ave	51.8	0.62	43.0	B	71.1	0.62	31.3	C
George Ave	47.3	0.54	41.4	B	59.0	0.54	33.2	C
Pillette Rd	84.8	0.66	27.8	D	269.9	0.66	8.7	F
Raymo Rd	26.6	0.24	32.5	C	34.4	0.24	25.2	D
Thompson Blvd	46.1	0.52	40.3	B	127.6	0.52	14.6	F
St. Louis Ave	25.1	0.25	35.7	C	33.6	0.25	26.6	D
Jefferson Blvd	34.6	0.38	39.8	B	48.2	0.38	28.6	D
St. Rose Ave	69.8	0.80	41.3	B	151.3	0.80	19.0	E
Lauzon Rd	107.8	0.92	30.6	C	163.5	0.92	20.2	E
Watson Ave	59.2	0.29	17.9	E	45.6	0.29	23.3	D
Total	**1096.5**	**6.30**	**20.7**	**E**	**1367.5**	**6.30**	**16.6**	**E**

Conclusions

Overall, lane reductions to accommodate bike facilities will increase travel times in the weekday AM and PM peak hours for the Wyandotte Street East corridor, causing some segments to operate poorly.

Even with existing lane configurations, operations are already marginal or poor for certain segments, especially in the weekday PM peak hour. Vehicle travel times are expected to increase in these segments over time, due to traffic diversion from Riverside Drive as well as general background traffic growth.

Figure 1: Existing Lane Configuration



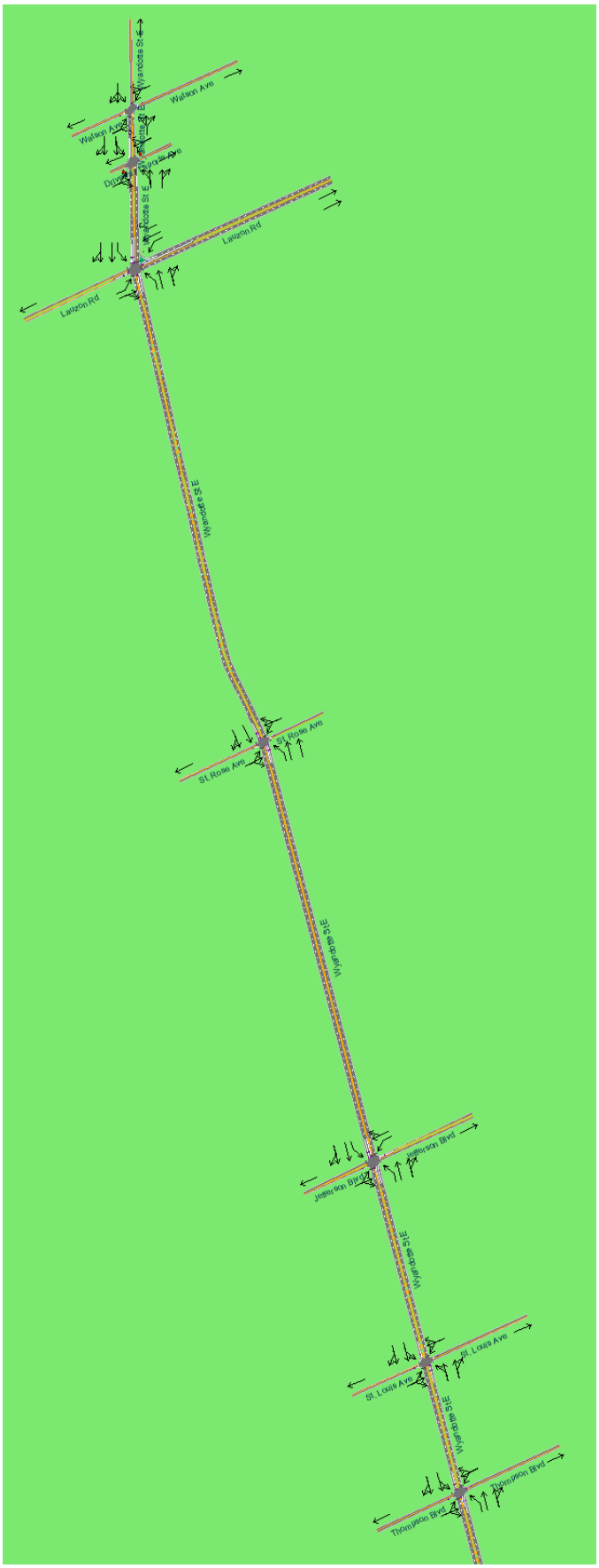
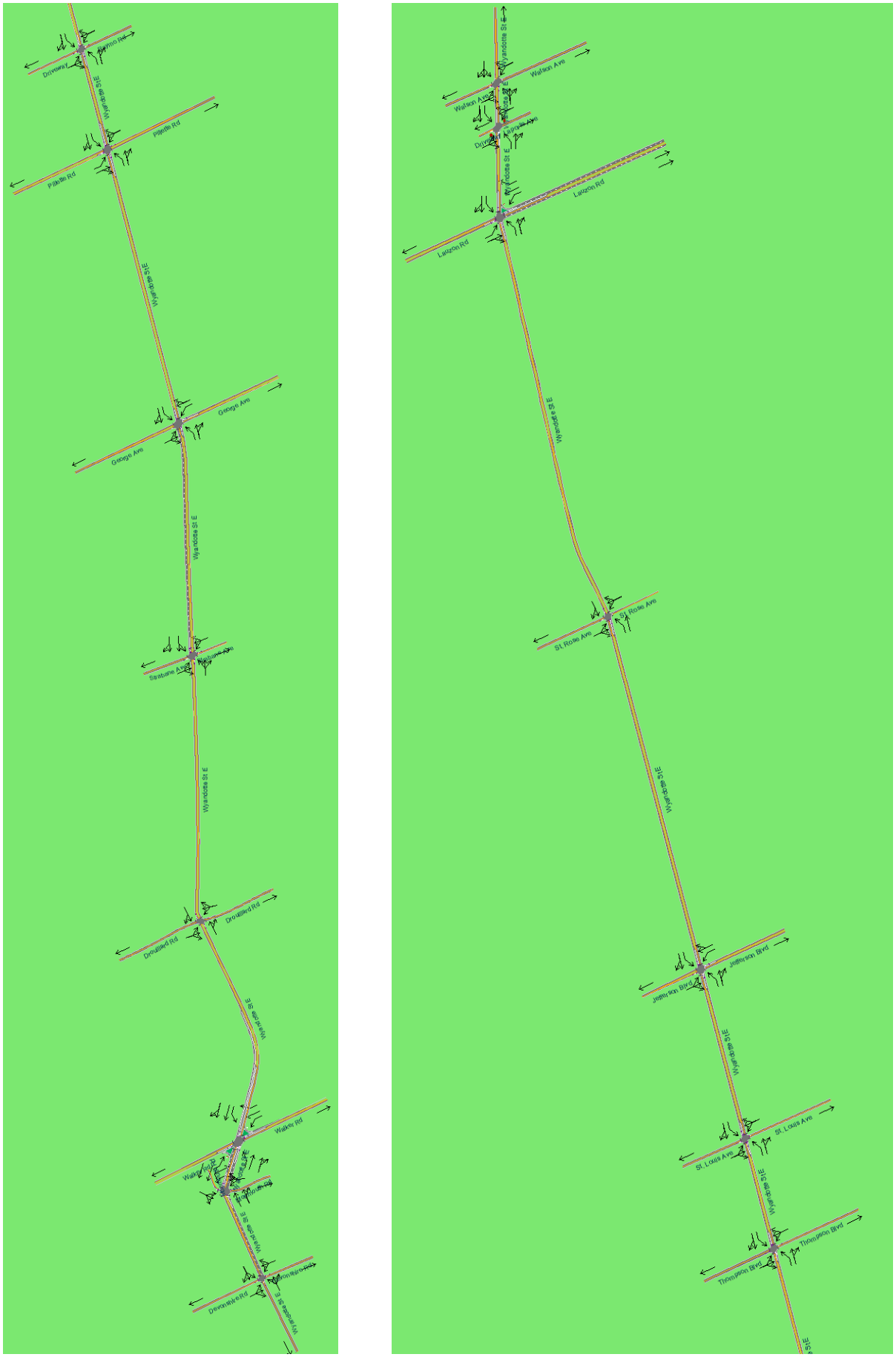


Figure 2: Lane Configuration with Reduced Through Lanes for Bicycle Facility



5.1 Bicycle Priority Streets

In some areas, particularly residential neighbourhoods, design treatments can be used to create 'Bicycle Priority Streets', which are often referred to as 'Bicycle Boulevards' or 'Local Bicycle Streets'.

Bicycle Priority Streets are typically low-volume, low-speed streets that have been optimized for bicycle travel through treatments such as traffic calming, traffic reduction, signage, pavement markings and intersection crossing treatments. These treatments allow through movements for cyclists while discouraging similar through trips by non-local motorized traffic.

Figure 5.1 illustrates a variety of design elements which may be considered by practitioners when designing a bicycle boulevard. Some of the design elements, such as signage and pavement markings are already an integral part of on-road bicycle facilities such as signed bicycle routes and bicycle lanes. Practitioners should refer to the appropriate subsection within **Section 4** for design guidance. The other design elements discussed below are context sensitive and should be considered based on the unique set of site characteristics of the corridor.

Traffic Reduction on bicycle boulevards may be achieved through the implementation of culs-de-sac to restrict through motorized traffic while still providing through access for non-motorized traffic.

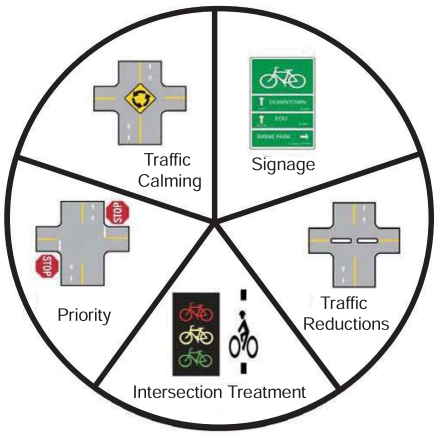
Intersection Treatments such as bike boxes, advanced stop bars, bicycle actuated signals, cross-rides and refuge islands can improve a cyclist's ability to cross a major roadway more comfortably and safely.

Priority given to travel on Bicycle Boulevard through the use of pavement markings as well as stop and yield signs on intersecting roadways.

Traffic Calming measures such as roundabouts, speed tables, road diets and reduced speed limits aim to reduce the speed and volume of motor vehicle traffic on a particular roadway. However, consideration must be given to ensure traffic calming designs do not adversely affect cyclists (refer to **Section 5.1.1** for design guidance).

Figure 5.2 illustrates the implementation of these design elements within a typical Bicycle Priority Street.

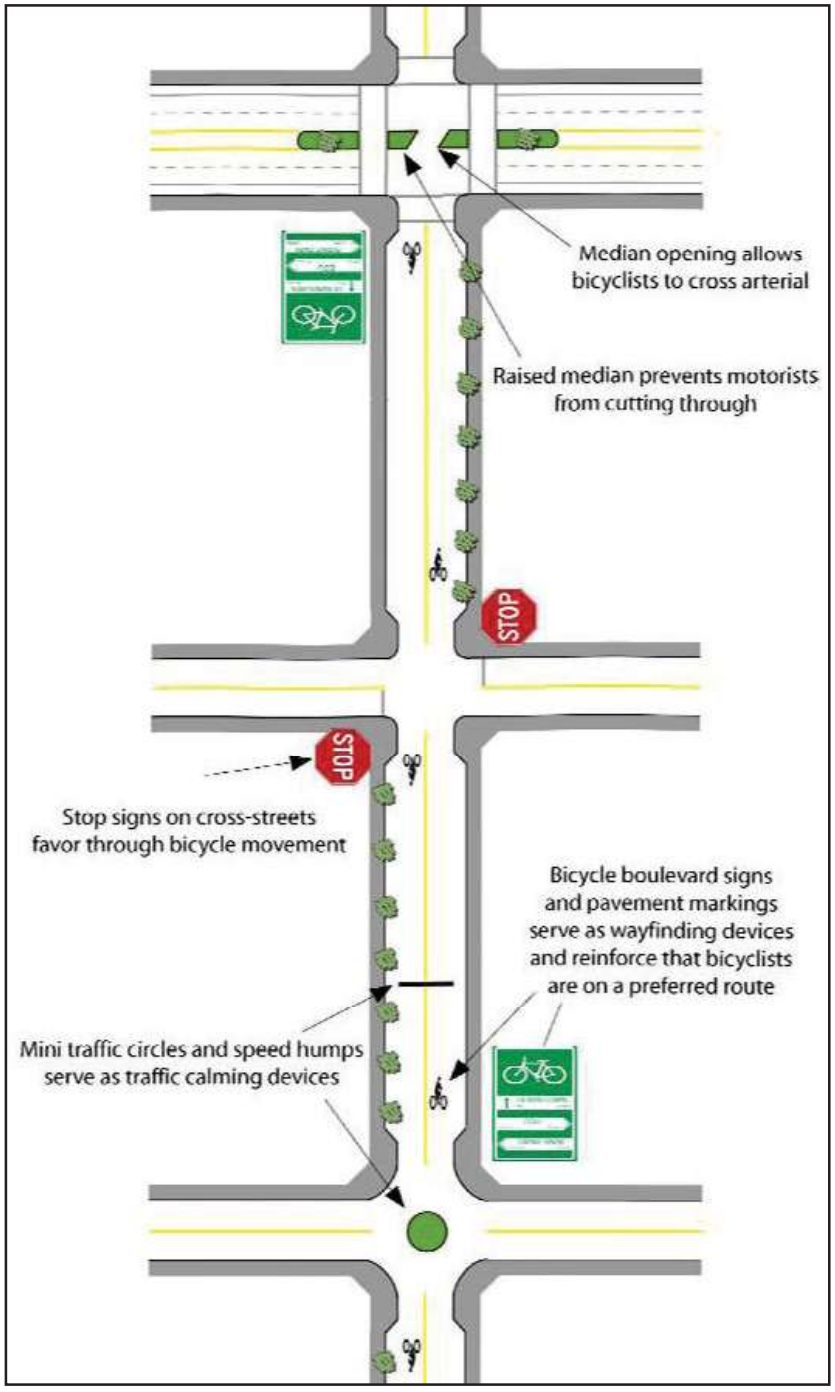
Figure 5.1 – Bicycle Priority Street Design Elements



Source: IBPI Fundamentals of Bicycle Boulevard Planning & Design, 2009

Figure 5.2 – Design Elements on a Typical Bicycle Priority Street

(Signs not directly related to the bicycle facility, including some stop signs, have been omitted for clarity)



Source: IBPI Fundamentals of Bicycle Boulevard Planning & Design, 2009

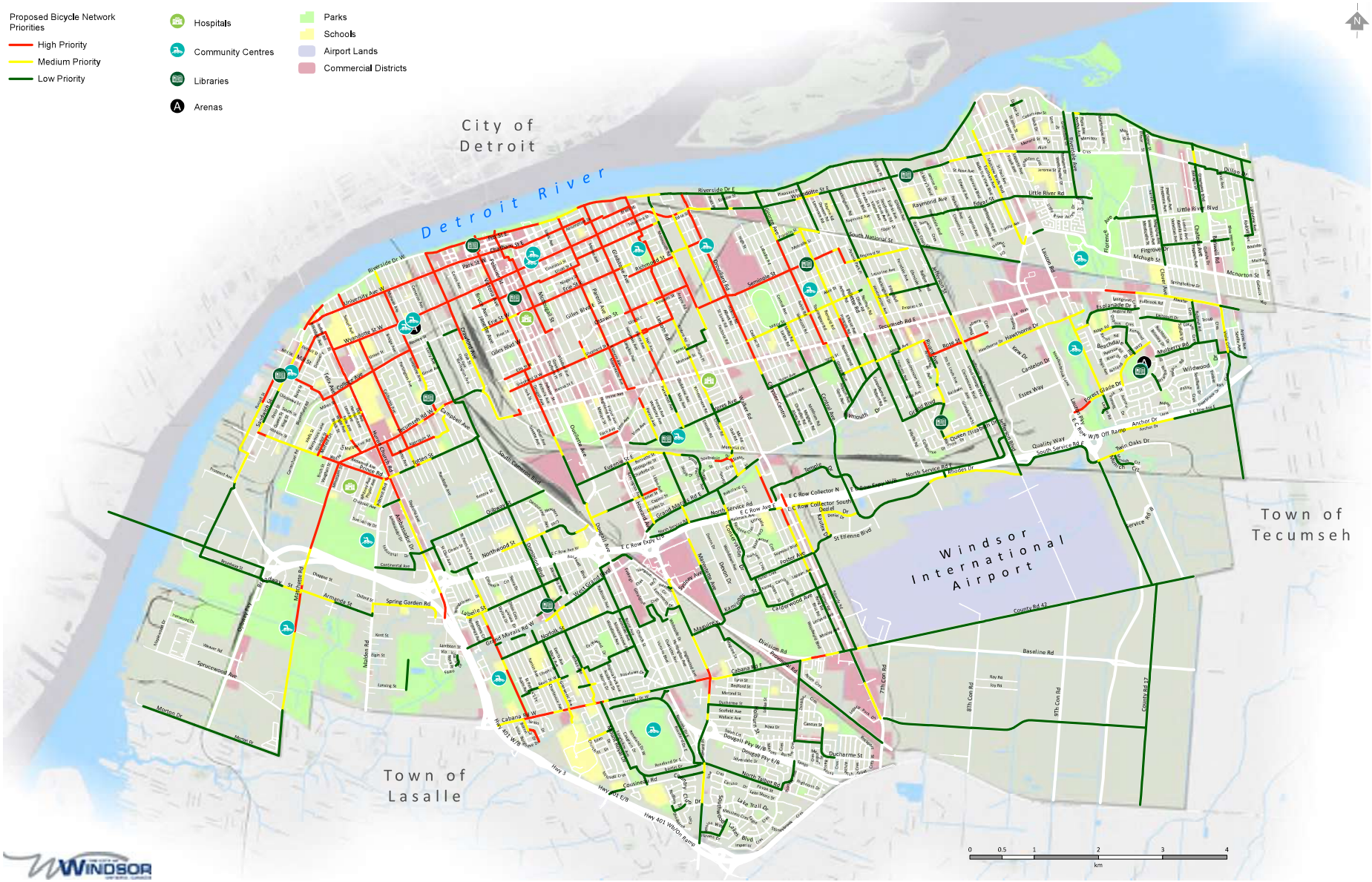


FIGURE 33 - CYCLING NETWORK PRIORITIZATION RESULTS

Wyandotte Street East Corridor Review

Devonshire Road to Watson Avenue

Public Information Centre #1

Slides can also be found online

https://tiny.one/wyandotteplan

Meeting Purpose

We're here today to:

- Get your feedback on design alternatives for **Wyandotte Street East from Devonshire Road to Watson Street**
- Find out your priorities for the Wyandotte Street East corridor

Project Background

What have we been directed to do?

- In 2019 and 2020, Council asked City staff:
  - To review the feasibility of a road diet on Wyandotte Street East (St. Luke to Lauzon Road)
  - To find active transportation projects along the corridor that could be accelerated

- In 2020, City staff reported back to Council on the feasibility of a Wyandotte road diet.
  - In response, Council directed City staff to prepare design concepts for cycling infrastructure on Wyandotte Street East

What have we heard so far?

- We've heard your concerns about:
  - Speeding
  - Road safety and collisions
  - Lack of cycling infrastructure
  - Keeping existing on-street parking, especially in commercial areas
- We've heard that you have conflicting priorities for Wyandotte Street East:
  - Some stakeholders want traffic volumes reduced significantly
  - Some stakeholders want Wyandotte Street East to stay a convenient commuting route for drivers

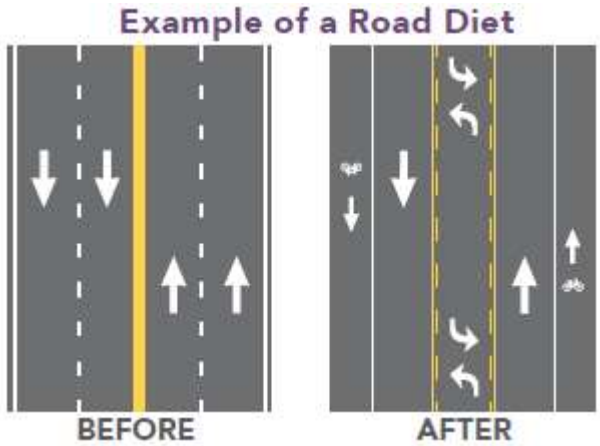
What is a Road Diet?

A road diet is a reduction in the number of travel lanes on a street and reallocation of this width for other purposes, such as:

- Turning lanes
- On-street parking
- Bike infrastructure
- Pedestrian space
- Green space

Road diets can:

- Reduce speeding
- Reduce collision frequency and severity
- Encourage cycling
- Increase separation between traffic and pedestrians

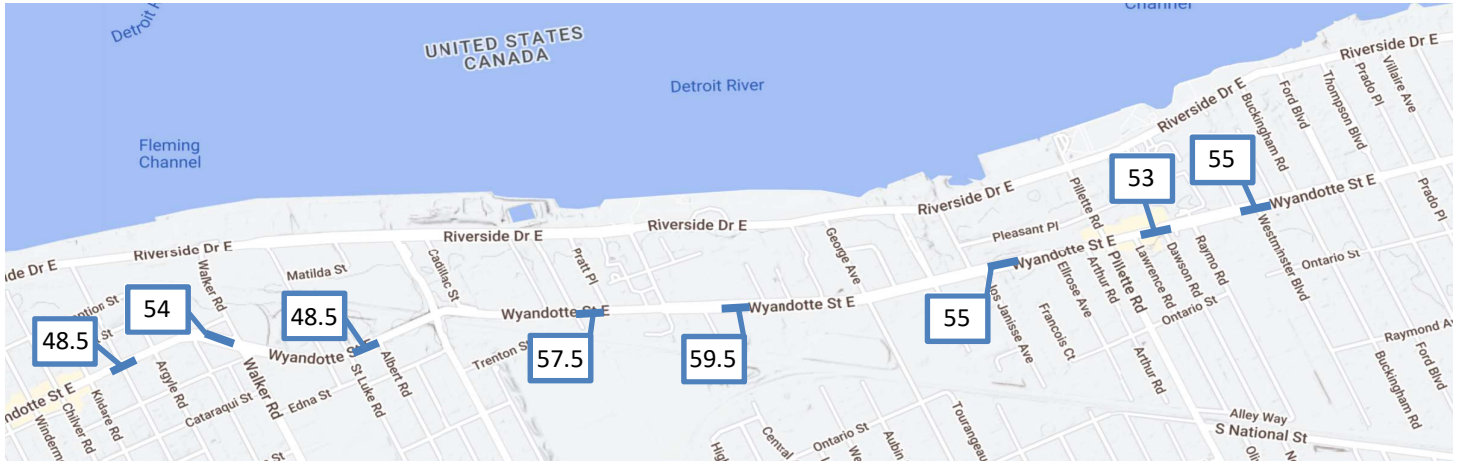


Existing Conditions - Speed

Most sections of the corridor have operating speeds higher than the speed limit (50 km/h).

Highest speed sections:

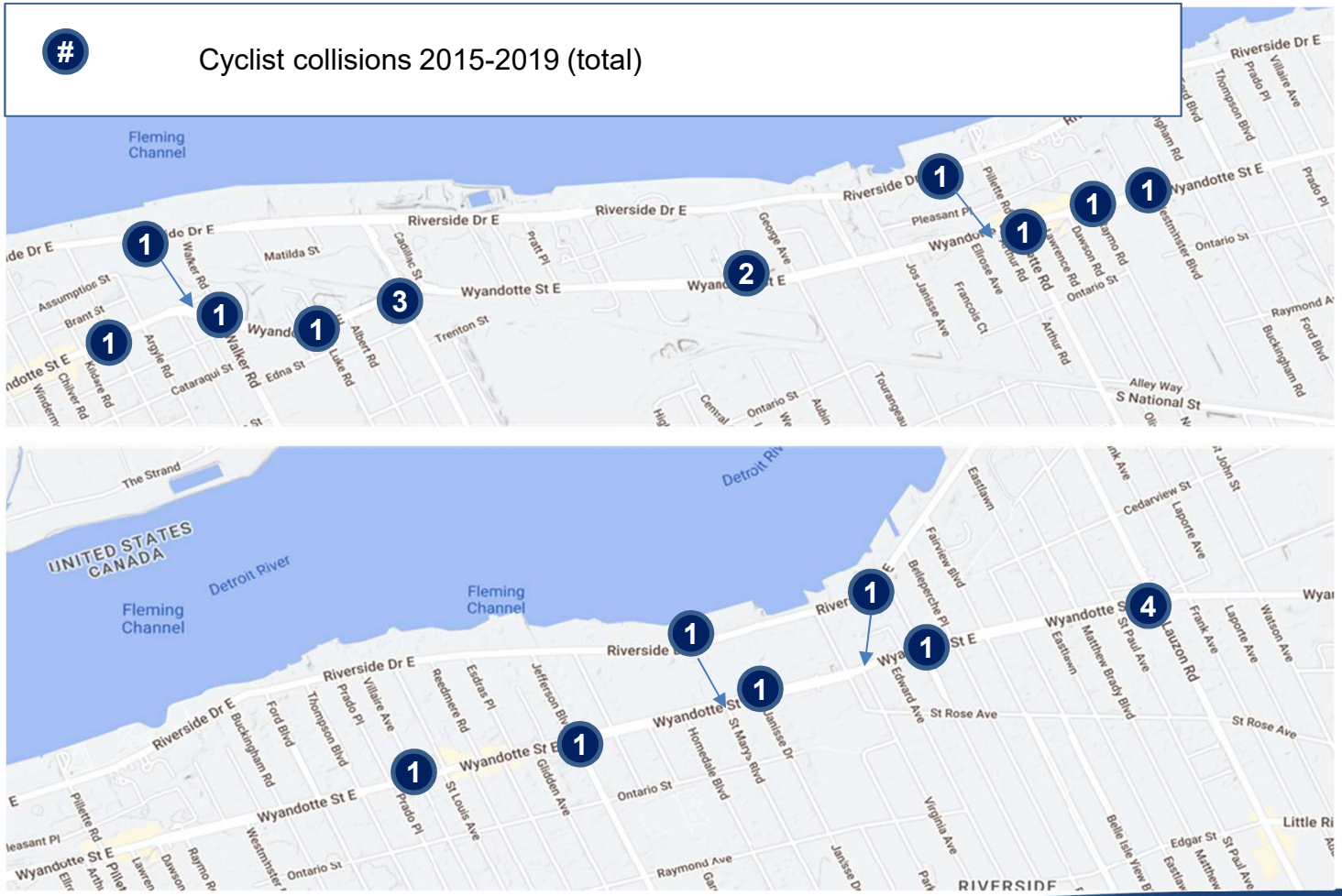
- Drouillard to George
- Jefferson to Lauzon



Existing Conditions – Road Safety

Existing Conditions – Road Safety

Cyclist collisions 2015-2019 (total)



Rush Hour Traffic – Weekday Mornings

Without a road diet:

- Traffic flows well along most of the corridor
- There are bottlenecks and congestion east of Lauzon Road, at Pillette, and west of Walker Road.
- Over time, traffic growth will increase delay along the corridor. Wyandotte at Pillette will approach capacity.

With a road diet:

- Initially, travel time along the corridor increases by 8 minutes and new bottlenecks are created.
- Over time, traffic flow improves as some drivers switch to cycling and transit.

Weekday AM Peak Hour		Westbound Arterial Level of Service (A to F)					
Wyandotte Street		Without Road Diet ("Do Nothing" & Alternative 2)			With Road Diet (Alternative 1)		
From	To	2020	2030	2040	2020	2030	2040
Riverdale Ave	Watson Ave	D	D	D	D	D	D
Watson Ave	Lauzon Rd	E	E	E	F	E	E
Lauzon Rd	St. Rose Ave	B	B	B	C	C	C
St. Rose Ave	Jefferson Blvd	B	B	B	C	B	B
Jefferson Blvd	St. Louis Ave	B	B	B	E	D	D
St. Louis Ave	Thompson Blvd	C	C	C	F	F	F
Thompson Blvd	Raymo Rd	C	C	C	E	C	C
Raymo Rd	Pillette Rd	E	E	F	F	F	F
Pillette Rd	George Ave	B	B	B	C	B	C
George Ave	Strabane Ave	C	C	C	B	B	B
Strabane Ave	Drouillard Rd	C	C	C	E	D	D
Drouillard Rd	Walker Rd	D	D	D	D	D	D
Walker Rd	Monmouth Rd	E	E	E	E	E	E
Monmouth Rd	Devonshire Rd	E	E	E	F	E	E
Overall		**C**	**C**	**C**	E	**D**	**D**
Total Travel Time (Watson to Devonshire)		**11 minutes**	**11 minutes**	**12 minutes**	**19 minutes**	**15 minutes**	**15 minutes**

Rush Hour Traffic – Weekday Afternoons

Without a road diet:

- Traffic flows well along most of the corridor
- There are bottlenecks and congestion west of Walker Road and east of Lauzon Road
- Over time, traffic growth will increase delay along the corridor. Wyandotte at Pillette will approach capacity.

With a road diet:

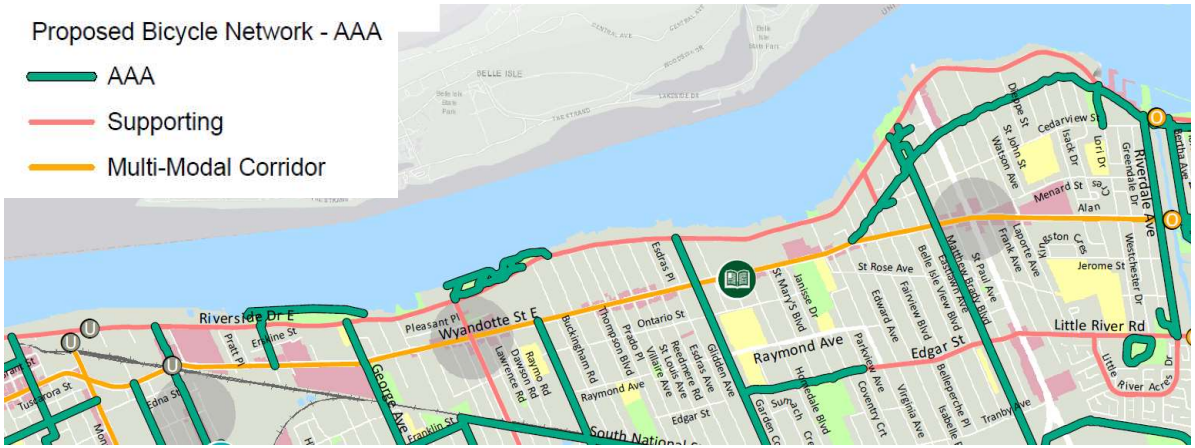
- Initially, travel time along the corridor increases by 12 minutes and new bottlenecks are created.
- Over time, traffic flow improves as some drivers switch to cycling and transit.

Weekday PM Peak Hour		Eastbound Arterial Level of Service (A to F)					
Wyandotte Street		Without Road Diet ("Do Nothing" & Alternative 2)			With Road Diet (Alternative 1)		
From	To	2020	2030	2040	2020	2030	2040
Lincoln Rd	Devonshire Rd	F	F	F	F	F	F
Devonshire Rd	Monmouth Rd	E	E	E	E	D	D
Monmouth Rd	Walker Rd	F	F	F	F	F	F
Walker Rd	Drouillard Rd	C	C	C	E	E	E
Drouillard Rd	Strabane Ave	B	B	B	D	C	C
Strabane Ave	George Ave	B	B	B	E	C	C
George Ave	Pillette Rd	C	C	D	F	F	F
Pillette Rd	Raymo Rd	C	C	C	D	D	D
Raymo Rd	Thompson Blvd	B	B	B	F	F	F
Thompson Blvd	St. Louis Ave	C	C	C	E	D	D
St. Louis Ave	Jefferson Blvd	B	B	B	D	D	D
Jefferson Blvd	St. Rose Ave	B	B	B	F	E	E
St. Rose Ave	Lauzon Rd	C	C	C	E	E	E
Lauzon Rd	Watson Ave	E	E	E	E	D	D
Overall		**D**	**E**	**E**	**F**	**E**	**E**
Total Travel Time (Devonshire to Watson)		**16 minutes**	**18 minutes**	**18 minutes**	**28 minutes**	**23 minutes**	**23 minutes**

Existing Cycling Infrastructure

Future Cycling Infrastructure

Wyandotte Street East is a **Multi-Modal Corridor** in the Active Transportation Master Plan, *Walk Wheel Windsor*



The proposed bicycle network includes several multi-modal corridors, which are major streets that need further review to consider how they will accommodate active transportation given other competing priorities. […] These streets are some of Windsor's main travel corridors, serving a variety of vehicle types and modes while playing an important role in the City's transportation system.

These multi-modal corridors will require more in-depth analysis through specific corridor studies or Environmental Assessments. Recognizing that these corridors serve desire lines within the bicycle network, these studies can determine whether bicycle facilities can be accommodated on the corridors or adjacent streets.

[…]

It is important to note that as part of a complete and connected bicycle network that meets the needs of all users, there is still a place for complementary, non-AAA facilities such as painted bicycle lanes.

(Excerpt – *Walk Wheel Windsor* Final Report)

Alternative Approaches

Alternative	Description
"Do Nothing"	Take no action – leave the Wyandotte Street East corridor as-is.
1 – Bikeway with road diet	Reduce the number of through lanes on Wyandotte Street East to reduce speeds while also providing space for bikeway infrastructure.
2 – Bikeway without road diet	Provide an east-west bikeway without reducing the number of through lanes on Wyandotte Street East. Space for the bikeway is provided by other means, such as removing on-street parking.

Alternative Approaches

Alternative	Auto Level of Service (Weekday PM peak hour)	Cyclist Level of Service	Pedestrian Level of Service	Vehicle Speeds	On-Street Parking	Can be Implemented Along Entire Corridor?
"Do Nothing"	2020: D 2030: E 2040: E	**F**	C to E	No change from existing conditions	No change from existing conditions	Yes
1 – Bikeway with road diet	**2020: F** 2030: E 2040: E	A ("all ages and abilities" options) or C (non-AAA options)	B to E (varies along corridor)	Moderate reductions	Affected in some options – see design concepts	Yes
2 – Bikeway without road diet	2020: D 2030: E 2040: E	C to E (varies along corridor)	D to E (varies along corridor)	No change from existing conditions	**All on-street parking removed**	**No**

These alternatives can take different forms along the corridor.

The future design of Wyandotte Street can be one of these alternatives for the entire corridor or a mixture of different alternatives in different sections.

Key Map

Section A

Undivided without existing on-street parking

Section B

Divided without existing on-street parking

Section C

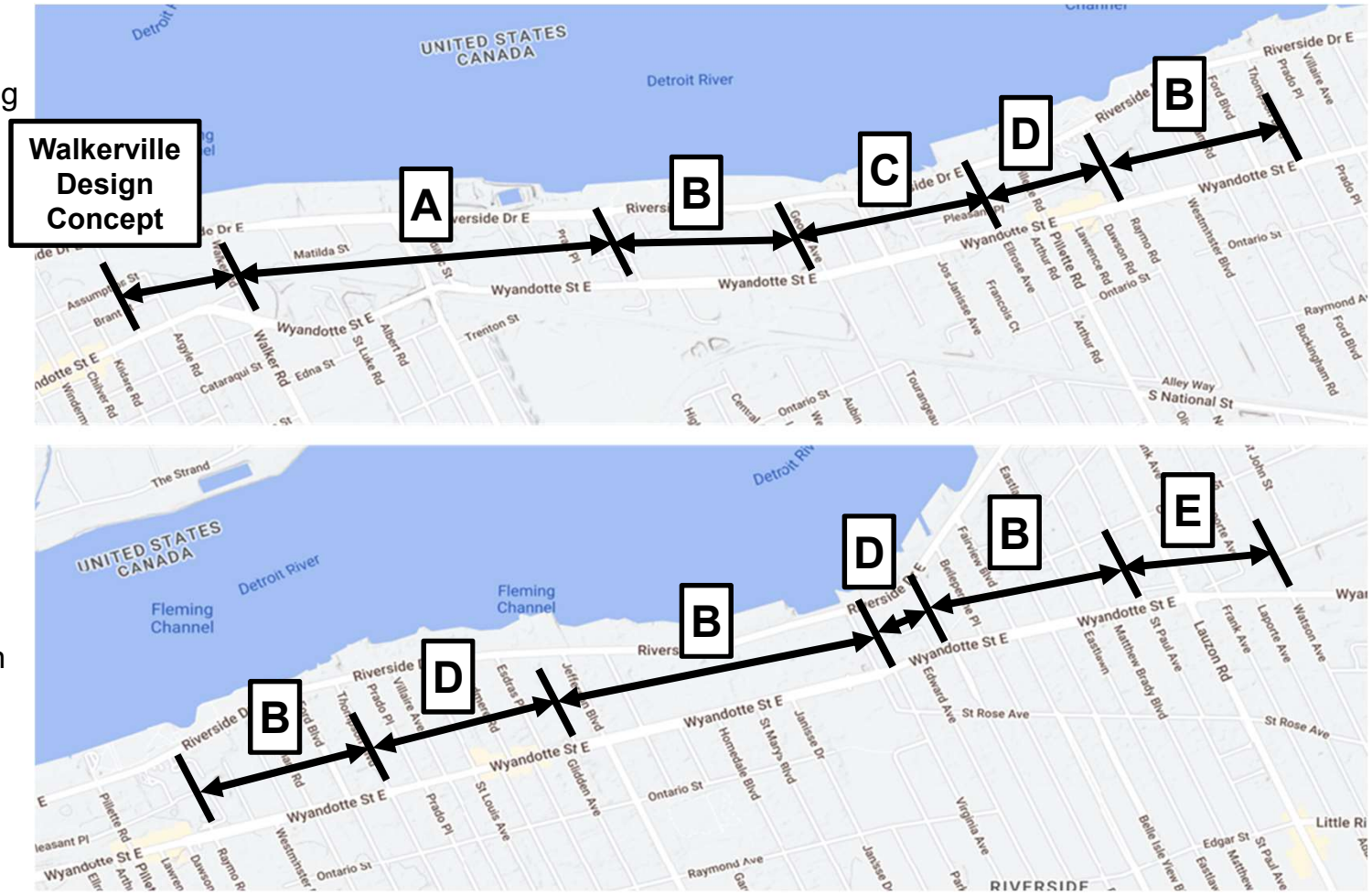
Divided with existing on-street parking

Section D

Undivided with existing on-street parking on both sides

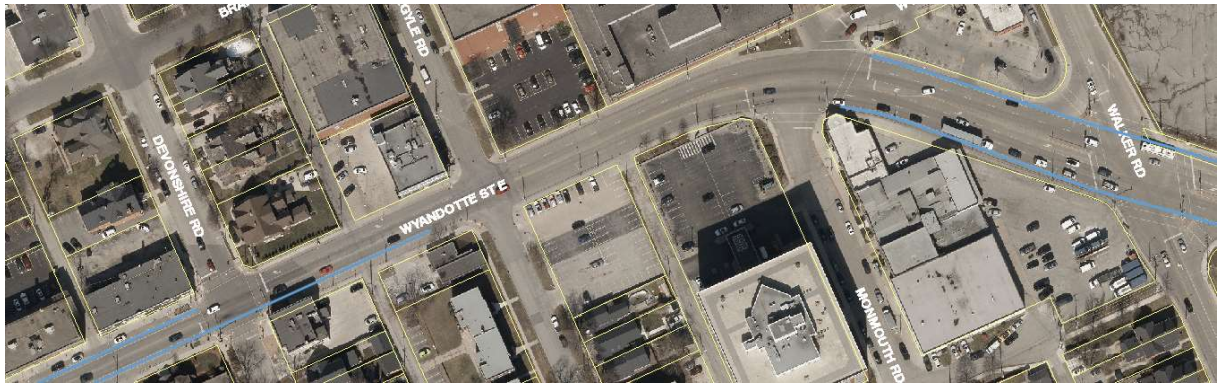
Section E

Undivided with existing on-street parking on one side

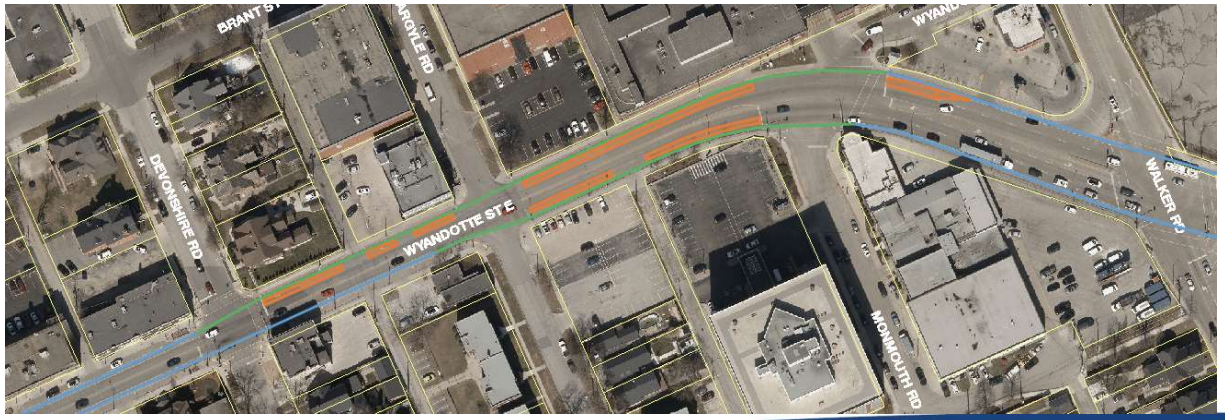


Walkerville Design Concept

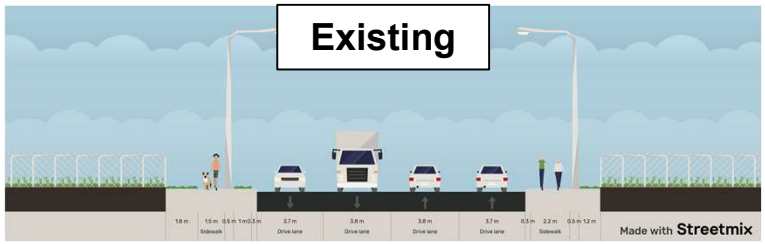
Existing: gap in bike lanes (blue) from Devonshire/ Argyle to Monmouth.



Proposed: close gap with protected bike lanes (green & orange) by reducing the number of general purpose lanes.

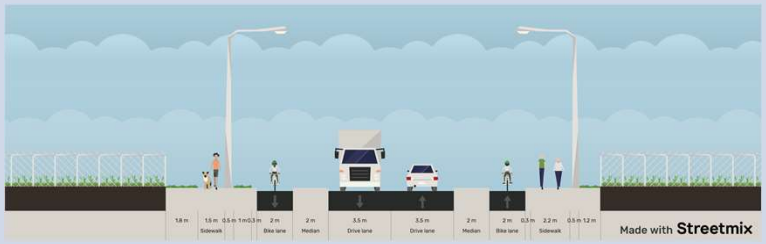
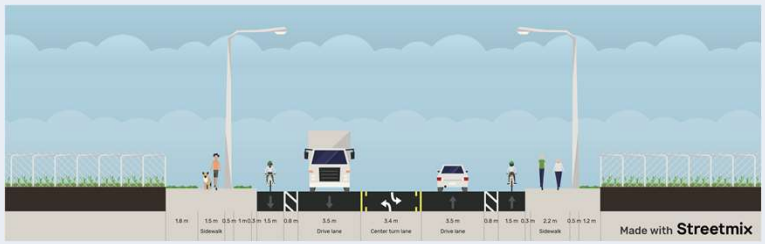


Alternative Design Concepts

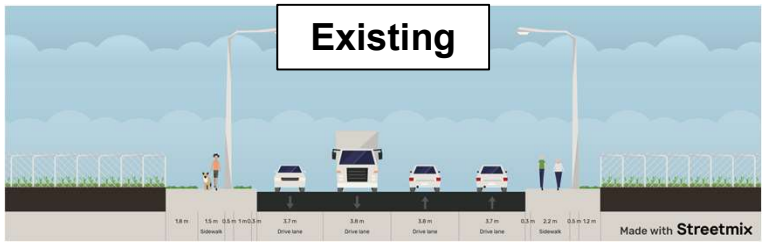


Section A: Undivided Wyandotte without On-street Parking (Example: East of Belleview)

- 4 travel lanes
- No cycling infrastructure
- No on-street parking

Options for Alternative 1: Bikeway With Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 2 travel lanes • Protected bicycle lanes (AAA) • No on-street parking	A	C
	• 2 travel lanes • Two-way left turn lane • Buffered bicycle lanes (non-AAA) • No on-street parking	C	E

Alternative Design Concepts

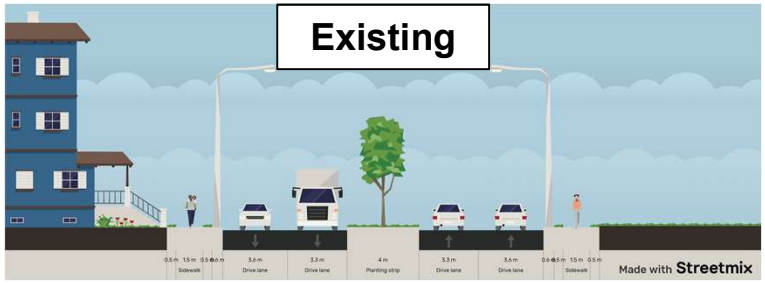


Section A: Undivided Wyandotte without On-street Parking (Example: East of Belleview)

- 4 travel lanes
- No cycling infrastructure
- No on-street parking

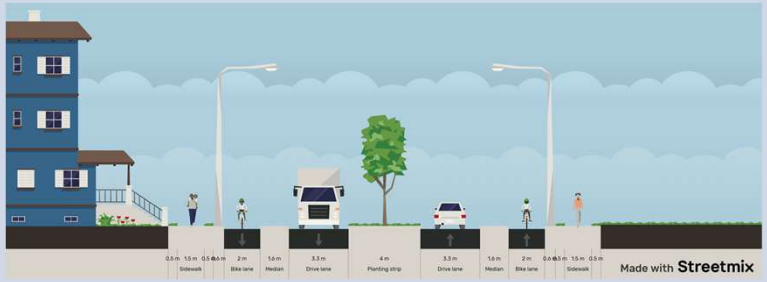
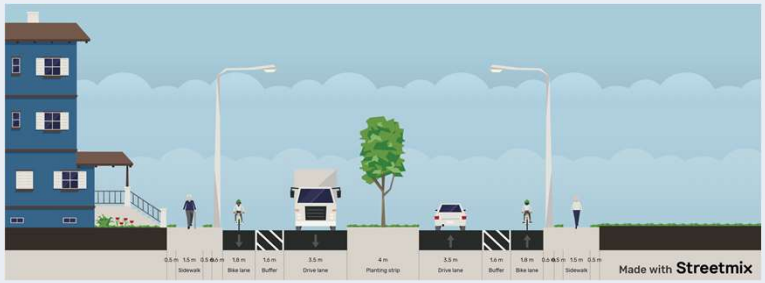
Options for Alternative 2: Bikeway Without Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
No options available with current roadway width		N/A	N/A

Alternative Design Concepts

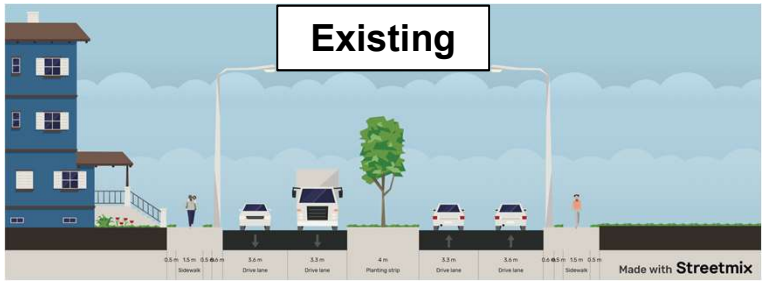


Section B: Divided Wyandotte Without On-street Parking (Example: West of Westminster)

- 4 travel lanes with median
- Left turn lanes at intersections
- No cycling infrastructure
- No on-street parking

Options for Alternative 1: Bikeway With Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 2 travel lanes with median • Left turn lanes at intersections • Protected bicycle lanes (AAA) • No on-street parking	A	E
	• 2 travel lanes with median • Left turn lanes at intersections • Buffered bicycle lanes (non-AAA) • No on-street parking	C	E

Alternative Design Concepts

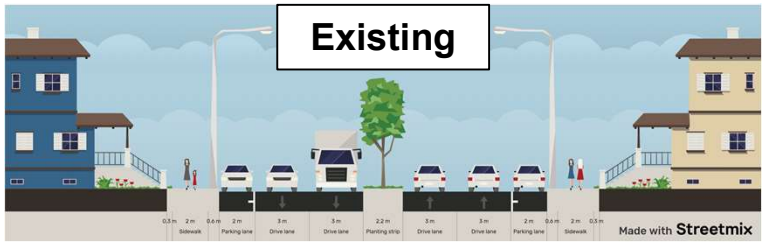


Section B: Divided Wyandotte Without On-street Parking (Example: West of Westminster)

- 4 travel lanes with median
- Left turn lanes at intersections
- No cycling infrastructure
- No on-street parking

Options for Alternative 2: Bikeway Without Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
No options available with current roadway width		N/A	N/A

Alternative Design Concepts

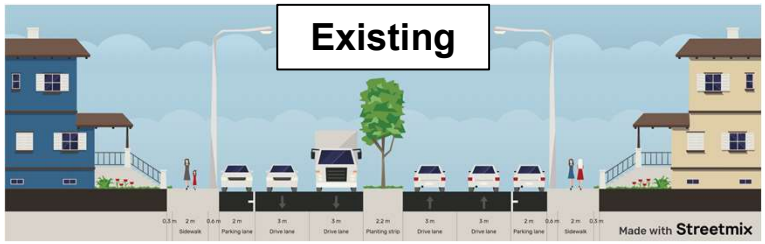


Section C: Divided Wyandotte with On-street Parking (Example: East of Rossini)

- 4 travel lanes (substandard width) and median
- Left turn lanes at intersections
- No cycling infrastructure
- On-street parking on both sides (substandard width)

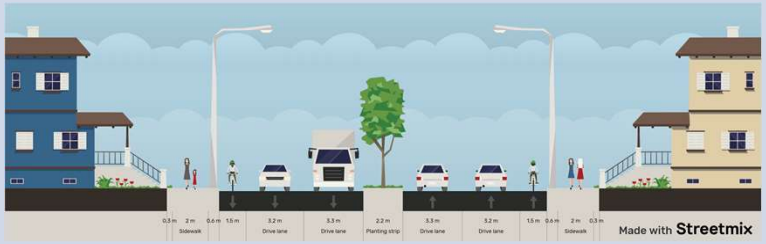
Options for Alternative 1: Bikeway With Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 2 travel lanes with median • Left turn lanes at intersections • Protected bicycle lanes (AAA) • On-street parking on both sides	A	B

Alternative Design Concepts

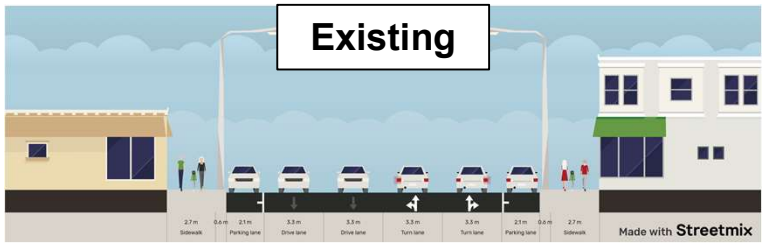


Section C: Divided Wyandotte with On-street Parking (Example: East of Rossini)

- 4 travel lanes (substandard width) and median
- Left turn lanes at intersections
- No cycling infrastructure
- On-street parking on both sides (substandard width)

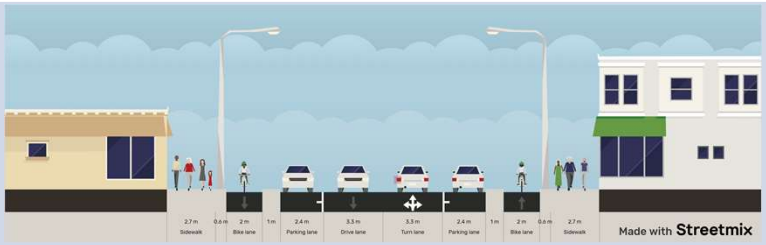
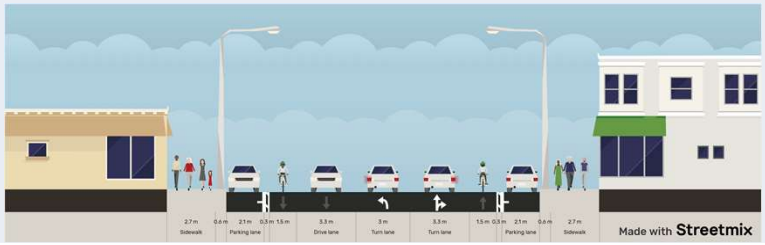
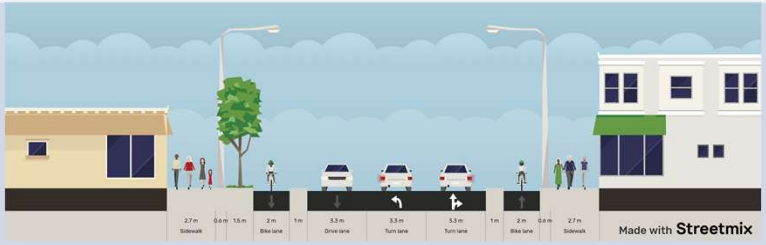
Options for Alternative 2: Bikeway Without Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 4 travel lanes • Painted bicycle lanes (non-AAA) • On-street parking is removed	E	D

Alternative Design Concepts

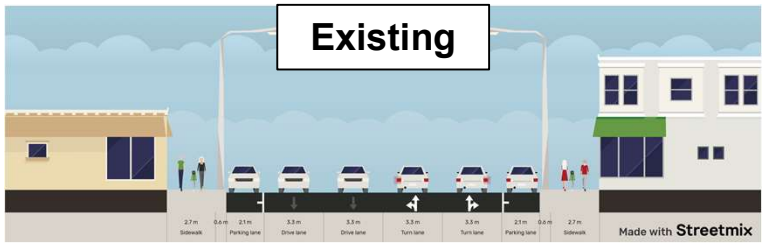


Section D: Undivided Wyandotte with On-street Parking Both Sides (Example: East of Pillette)

- 4 travel lanes
- No cycling infrastructure
- On-street parking on both sides

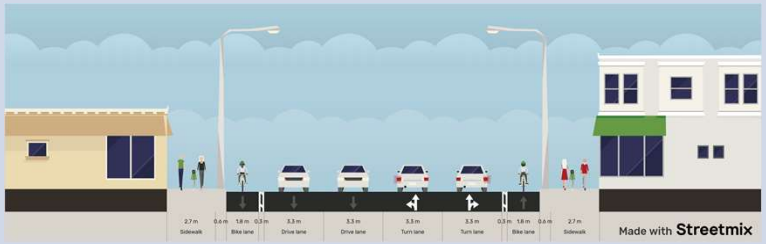
Options for Alternative 1: Bikeway With Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 2 travel lanes • Left turn lane only at major intersections • Protected bicycle lanes (AAA) • On-street parking on both sides • Parking removed where required for left turn lane	A	B
	• 2 travel lanes • Left turn lane • Painted bicycle lanes (non-AAA) • On-street parking on both sides	C	C
	• 2 travel lanes • Left turn lane • Protected bicycle lanes (AAA) • On-street parking is removed	A	C

Alternative Design Concepts

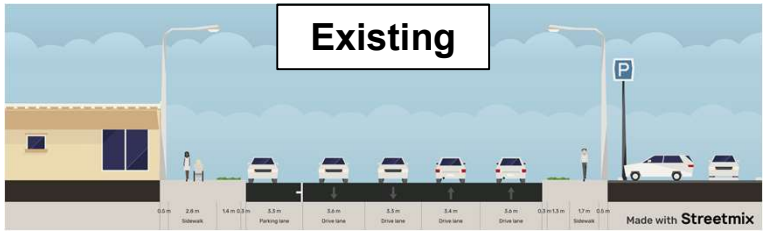


Section D: Undivided Wyandotte with On-street Parking Both Sides (Example: East of Pillette)

- 4 travel lanes
- No cycling infrastructure
- On-street parking on both sides

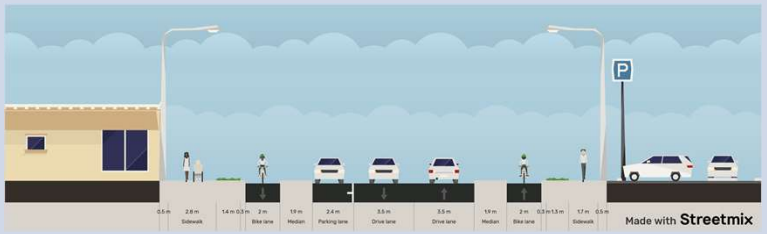
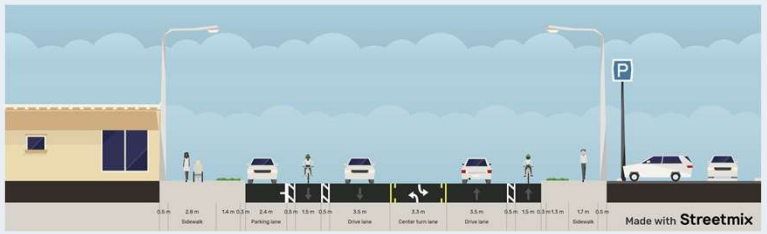
Options for Alternative 2: Bikeway Without Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 4 travel lanes • Buffered bicycle lanes (non-AAA) • On-street parking is removed	C	D

Alternative Design Concepts

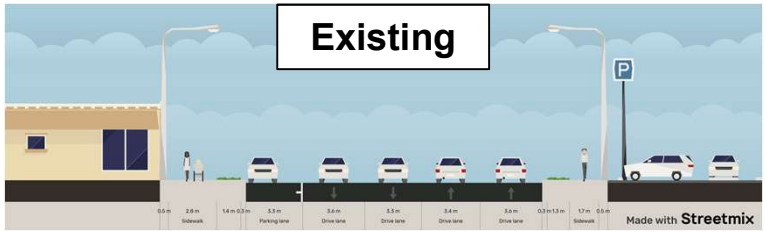


Section E: Undivided Wyandotte With On-street Parking on One Side (Example: East of Frank)

- 4 travel lanes
- No cycling infrastructure
- On-street parking on one side

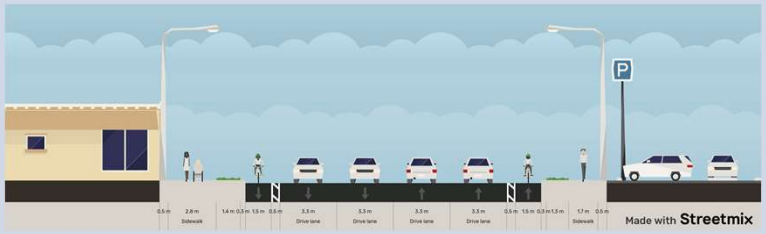
Options for Alternative 1: Bikeway With Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 2 travel lanes • Protected bicycle lanes (AAA) • On-street parking on one side	A	North Side: D South Side: B
	• 2 travel lanes • Two-way left turn lane • Buffered bicycle lanes (non-AAA) • On-street parking on one side	North Side: C South Side: D	North Side: E South Side: C

Alternative Design Concepts



Section E: Undivided Wyandotte With On-street Parking on One Side (Example: East of Frank)

- 4 travel lanes
- No cycling infrastructure
- On-street parking on one side

Options for Alternative 2: Bikeway Without Road Diet	Description	Cyclist Level of Service	Pedestrian Level of Service
	• 4 travel lanes • Buffered bicycle lanes (non-AAA) • On-street parking is removed	C	North Side: E South Side: D

Next Steps

Stakeholder feedback
- Please provide comments by June 15, 2022

Develop a recommended design

Public Information Centre #2
- Planned: Fall 2022

Report to Environment, Transportation & Public Safety Standing Committee

Council Approval

Wyandotte Street East Corridor Review

Devonshire Road to Watson Avenue

Please provide comments by June 15, 2022

transportation@citywindsor.ca

or

https://tiny.one/wyandottesurvey

Comment Form
Wyandotte Street East Corridor Review
Public Information Centre #1

What's your relationship to the study area? Please indicate all that apply to you:

	I live in or near the corridor		I work or go to school in the or near the corridor
	I own residential property in or near the corridor		I'm a customer of businesses in the corridor
	I own commercial property in or near the corridor		I commute along the corridor by bike
	I own a business in or near the corridor		I commute along the corridor by personal motor vehicle

Are you providing comments on behalf of a business or organization? If so, which one(s)?

Do you travel by bike along the corridor?

	Yes
	No

If yes, what are the biggest issues you encounter when cycling along the corridor?
If no, what would make you more likely to cycle along the corridor?

Which part(s) of the corridor are most important to you?

Do you have any comments about the alternative concepts?

Do you have any additional comments?

Do you want to be added to the project notification list?

	Yes
	No

Name	
Address	
Phone Number	
Email Address	

Personal Information is being collected under the Municipal Freedom of Information and Protection of Privacy Act. This information will be used for the purpose of gathering feedback for completing the Wyandotte Street East Corridor Review. Questions about this collection may be directed to Awele Nwaesei, Transportation Planning Coordinator, at (519) 255-6267 ext. 6831 or transportation@citywindsor.ca

Zencity Online Survey

We would like to hear from Windsor residents about city programs & services in order to ensure we are meeting the needs of our community. Your answers will help us deliver better services to our community. Your participation is greatly appreciated, and all answers are confidential.

1. **What is your relation to the city of Windsor? (select all that apply)**
    a. I live in Windsor
    b. I work in Windsor
    c. I own a business in Windsor
    d. I frequently visit Windsor
    e. None of the above

Part 1 - Currently usage of Wyandotte Street East

2. **Do you travel through Wyandotte Street East as part of your commute to work or to school?**

    a. It's part of my commute to work
    b. It's part of my commute to school
    c. No

3. **How often do you travel through Wyandotte Street East?**
    a. At least once a weekday
    b. A few times a week
    c. Around once a week
    d. A few times a month
    e. Every once in a while

4. **How do you usually travel through Wyandotte Street East? (select all that apply)**
    a. By foot
    b. By car
    c. By public transportation
    d. By bike
    e. Other:___

Part 2 - Preferences and prioritizations

5. The City of Windsor is in the process of redesigning Wyandotte Street East and would like to hear from you about your priorities for this process.

6. **To what extent are the following aspects about Wyandotte Street East important to you? (question group, scale: 1 - Not At All Important, 5 - Very Important)**
    a. Travel time during rush hour for drivers
    b. Ease of use and safety for pedestrians

E. info@zencity.io
W. https://zencity.io

c. Ease of use and safety for bikers
d. On-street parking

7. Are there other aspects about Wyandotte Street East that are important to you? [open ended, optional]

8. **The City is considering three alternative options for increasing bike lanes in the corridor. (question group)**
   a. **Alternative 1 involves reducing the number of through lanes on Wyandotte Street East to reduce speeds while also providing space for bikeway infrastructure. To what extent do you support or oppose this option?**
      i. Strongly Support
      ii. Somewhat Support
      iii. Somewhat Oppose
      iv. Strongly Oppose
   b. **Alternative 2 involves providing an east-west bikeway without reducing the number of through lanes on Wyandotte Street East. Space for the bikeway will be provided by other means, such as removing on-street parking.To what extent do you support or oppose this option?**
      i. Strongly Support
      ii. Somewhat Support
      iii. Somewhat Oppose
      iv. Strongly Oppose
   c. **Alternative 3 involves leaving the Wyandotte Street East corridor as it currently is. To what extent do you support or oppose this option?**
      i. Strongly Support
      ii. Somewhat Support
      iii. Somewhat Oppose
      iv. Strongly Oppose

9. **Overall, which of the suggested options do you prefer?**
   a. Alternative 1 - Reduce the number of lanes and some parking options to provide a bikeway
   b. Alternative 2 - Remove all parking to provide a bikeway
   c. Alternative 3 - Leave the corridor as it currently is

10. **The future design of Wyandotte Street East can be one of the alternatives for the entire corridor or a mixture of different alternatives in different sections. Which of the suggested options do you prefer?**
    a. Have one alternative for the entire corridor
    b. Have a mixture of different alternatives in different sections

11. **If a mixture of different alternatives was chosen, to what extent would you like to see each of the alternatives in the corridor? (Question group, scale: 1 - Not At All, 5 - To a Large Extent)**
    a. Alternative 1 (reduced lanes to provide a bikeway)
    b. Alternative 2 (remove all parking to provide a bikeway)
    c. Alternative 3 (no changes)

12. **What level of protection would you like to see for the proposed bike lanes in the corridor?**
    a. Protected bike lanes (all ages and abilities)
    b. Buffered bike lanes (not all ages and abilities)
    c. Painted bike lanes (not all ages and abilities)
    d. I don’t want bike lanes added to the corridor

E. info@zencity.io
W. https://zencity.io

13. **What is the most important thing for the City to take into account when redesigning the Wyandotte Street East? (optional, open-ended)**

Part 3 - Demographics

1. **Which postal code do you currently live in? [open ended]**

2. **How old are you?**
    a. 17 or younger
    b. 18 to 24
    c. 25 to 34
    d. 35 to 44
    e. 45 to 54
    f. 55 to 64
    g. 65 or older
    h. Prefer not to say

3. **Do you identify as...?**
    a. Male
    b. Female
    c. Prefer to self-describe

4. **[if "prefer to self-describe"] Please state the gender you identify as. [open ended]**

5. What were the ethnic or cultural origins of your ancestors? (select all that apply)
    a. First Nations, Métis, or Inuk (Inuit)
    b. North American (non-native)
    c. Caribbean
    d. Latin, Central, or South American
    e. European
    f. Middle Eastern, North African, or West Central Asian
    g. South or East African
    h. South Asian
    i. East or Southeast Asian
    j. Oceanian or Pacific Islander
    k. Prefer not to answer
    l. Other:_____

6. **Can we count on your feedback in the future? If so, please enter your email below. We might use it to ask for your opinion in the future, but your responses will remain confidential. [optional]**

Thank you very much for sharing your feedback with us! Do you want to sign up for the city newsletter?

Please email transportation@citywindsor.ca


zencity
Wyandotte Street East Road Diet Survey
Windsor, CA
August – September 2022

Executive Summary

88% of respondents travel the corridor by car. 38% of them commute to work or school through the corridor. 55% of respondents travel through the corridor at least a few times a week.

Safety and ease of use for pedestrians and bikers in Wyandotte East Street was top priority for all respondents.

Alternative 1 (to reduce lanes and some parking in order to reduce speed and create space for a bikeway) was supported by 63% of respondents and was also chosen as the preferred option by 39% of respondents, making it the top pick out of the three options. It is also the options respondents would want to see the most of if a mixture of alternatives was chosen.

For the bike lanes, 52% of respondents would like there to be protected bike lanes and not just buffered or painted bike lanes.

When asked what other aspects of the corridor were important to respondents and what the city should take into account when redesigning the corridor, respondents mentioned they'd like to see an emphasis on safety.

The structure of the report

01. Methodology	The sample, distribution method, and the research tools
02. Current usage	How do respondents currently use Wyandotte Street East ?
03. Preferences and suggestions	What is important to respondents when it comes to redesigning Wyandotte Street East? Which of the alternatives do respondents support and prefer?

Summary

01

Methodology

Methodology

710 sample survey of Windsor adults, 18+

Respondents recruited online

Fielded August 11th – September 11th, 2022

Survey was conducted in English and Arabic

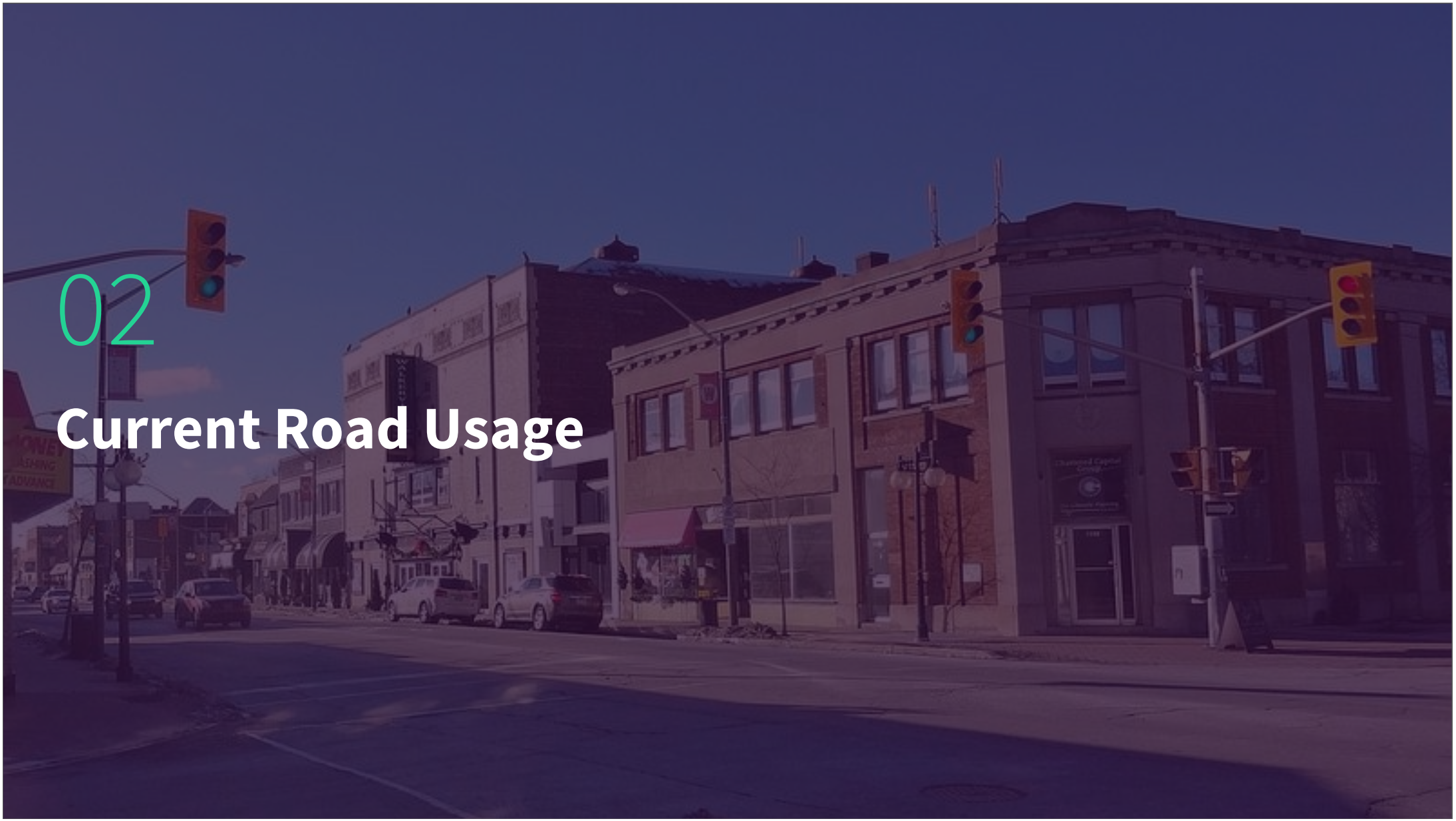
Data was weighted to represent the population in Windsor

Methodology – how we ensure the sample is statistically valid

- 710 respondents were recruited online between August 11th and September 11th, 2022, using targeted ads on various platforms (e.g., social media, apps for Android and IOS) as well as online survey panels.

- Using data from the Census Bureau, this survey employed quotas to match the distribution of race, ethnicity, age, and gender in Windsor, ensuring that the sample represents the entire city.

- To make sure our sample is representative, a technique called rake-weighting was used to balance out any remaining differences between the makeup of the survey respondents and the community. This process serves as a statistical safeguard against any demographic group being overrepresented or underrepresented in the final score calculations by giving overrepresented groups a lower weight and underrepresented groups a higher weight in the analysis.



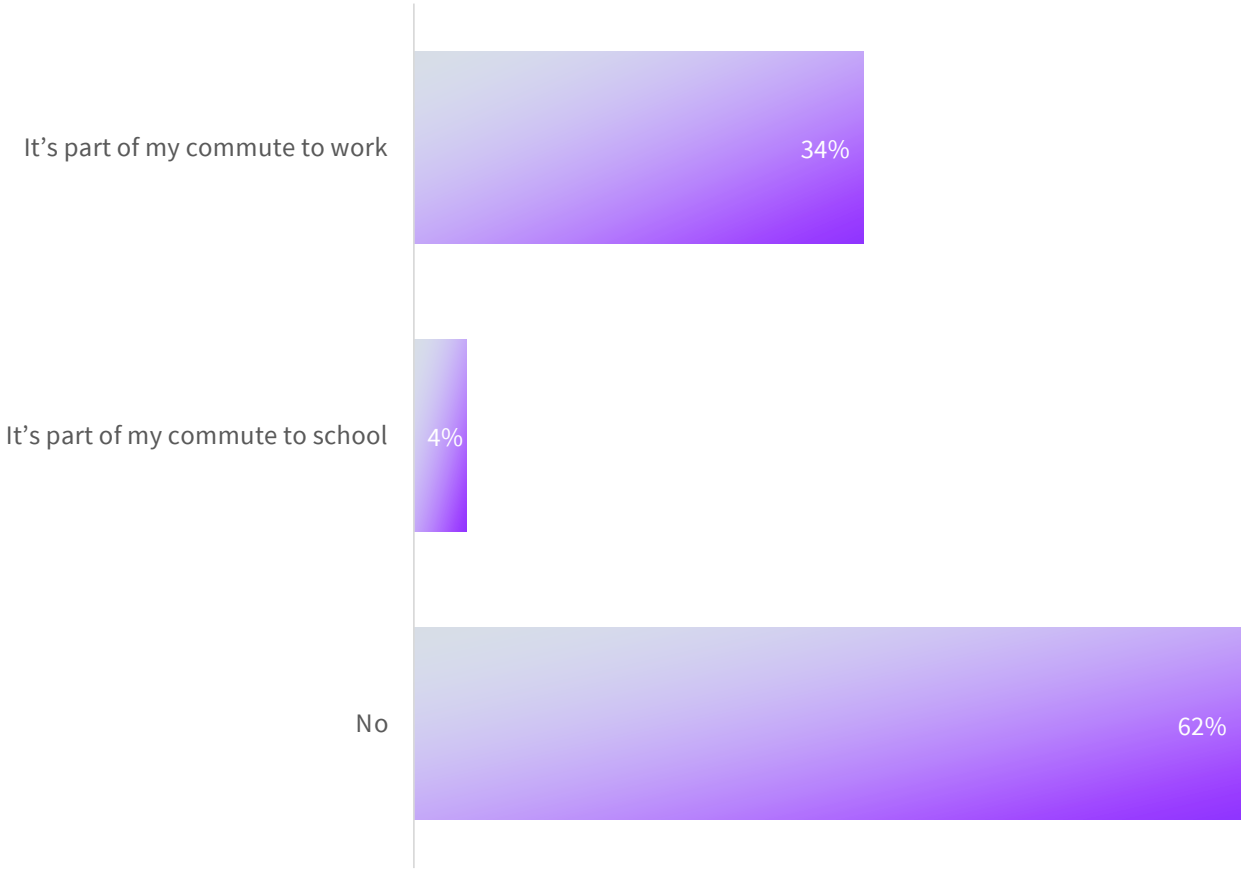
02

Current Road Usage

Commuters: 34% of survey respondents travel through Wyandotte Street East on their commute to work and 4% commute through the street on their way to school. Respondents aged 18-34 were more likely than other groups to commute.

From this point on, "commuters" will refer to those who commute through the corridor both to school and to work.

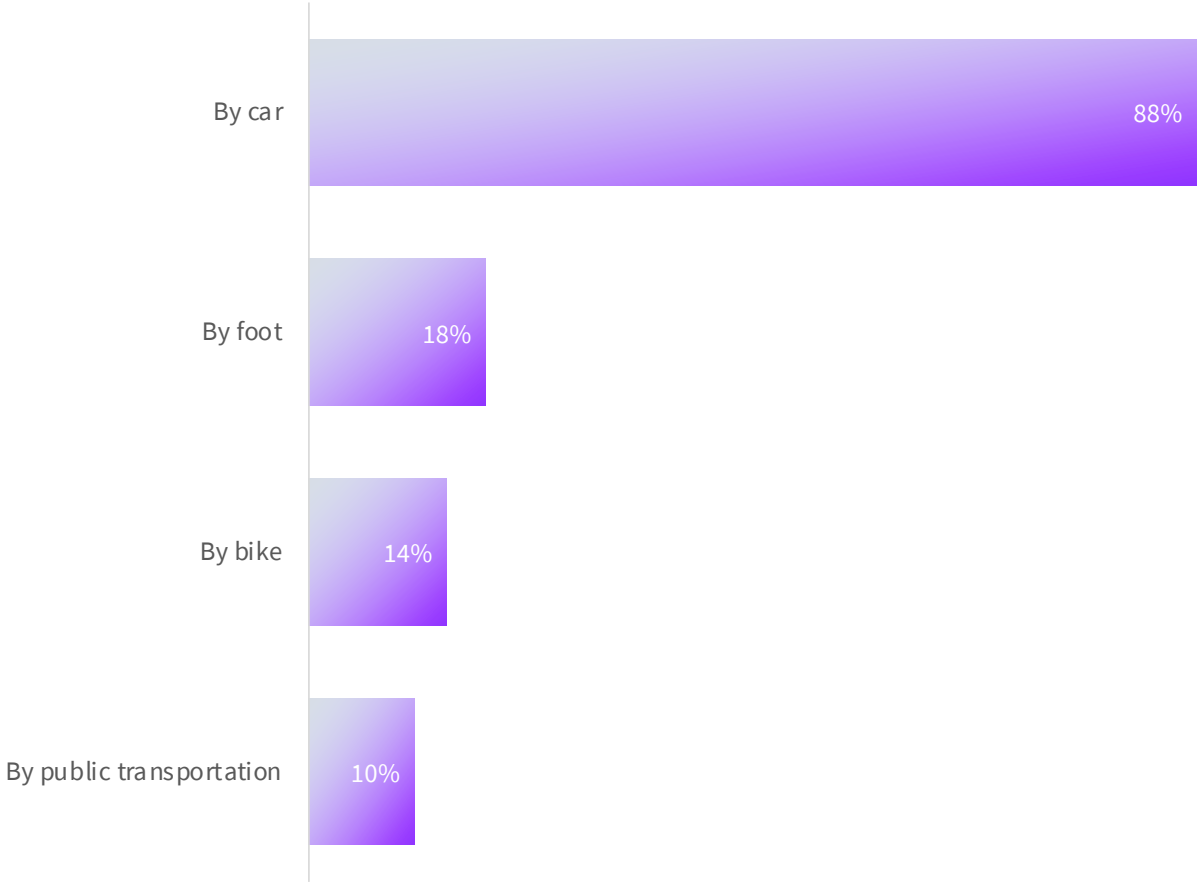
Question: Do you travel through Wyandotte Street East as part of your commute to work or to school?



Demographic Group	% of commuters
18-34	53%
35-54	38%
55+	28%
Women	33%
Men	43%

Travel method: 88% of survey respondents travel through Wyandotte Street East by car. Other modes of transportation are usually used by less than 20% of respondents.

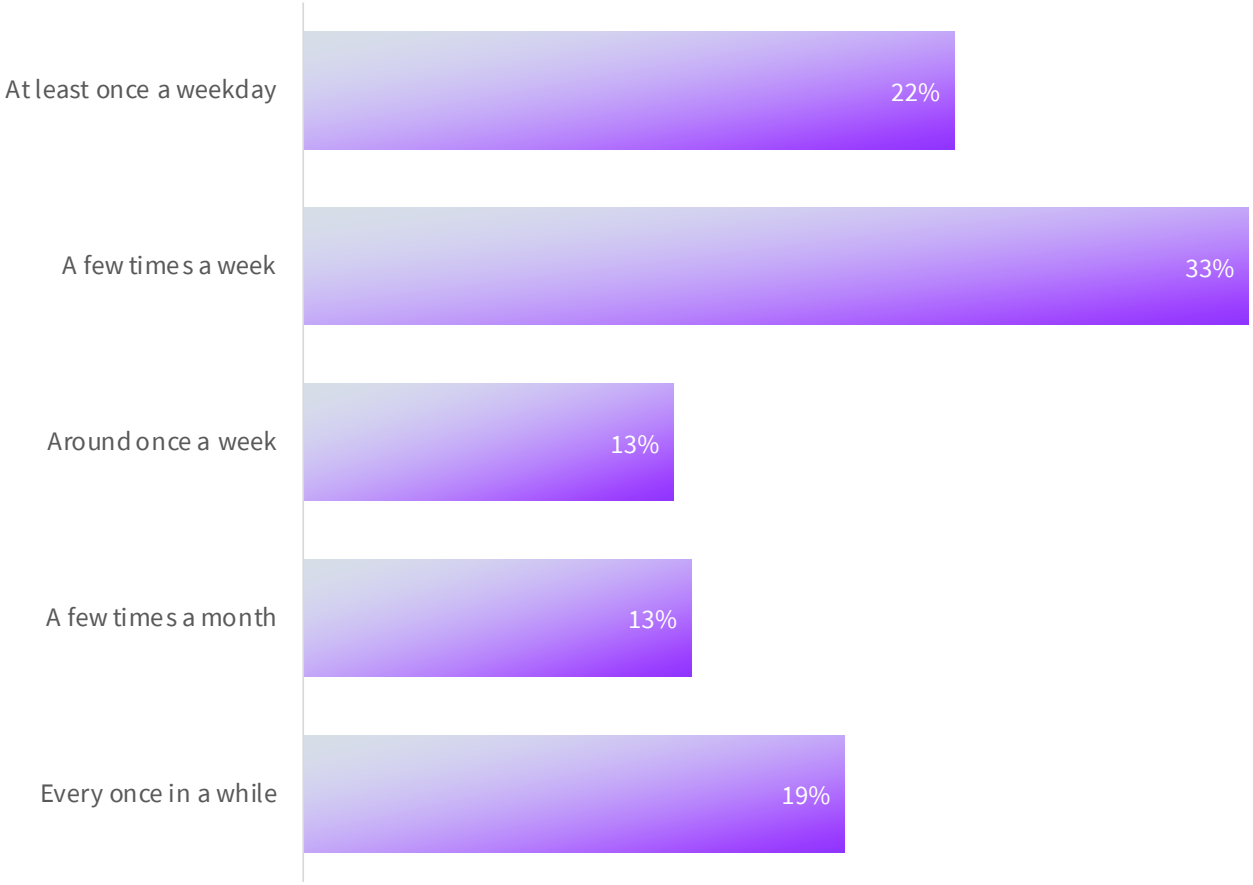
Question: How do you usually travel through Wyandotte Street East?



Demographic Group	Main ways of travelling
18-34	By car (83%) By foot (23%)
35-54	By car (88%) By foot (19%)
55+	By car (91%) By foot (13%)
Commuters	By car (84%) By foot (25%)
Non-Commuters	By car (90%) By foot (13%)

Travel frequency: 55% of survey respondents travel through Wyandotte Street East at least a few times a week, and an additional 26% travel through it at least a few times a month. Frequency of use is most significantly a factor of if respondents travel through the corridor as part of their commute.

Question: How often do you travel through Wyandotte Street East?

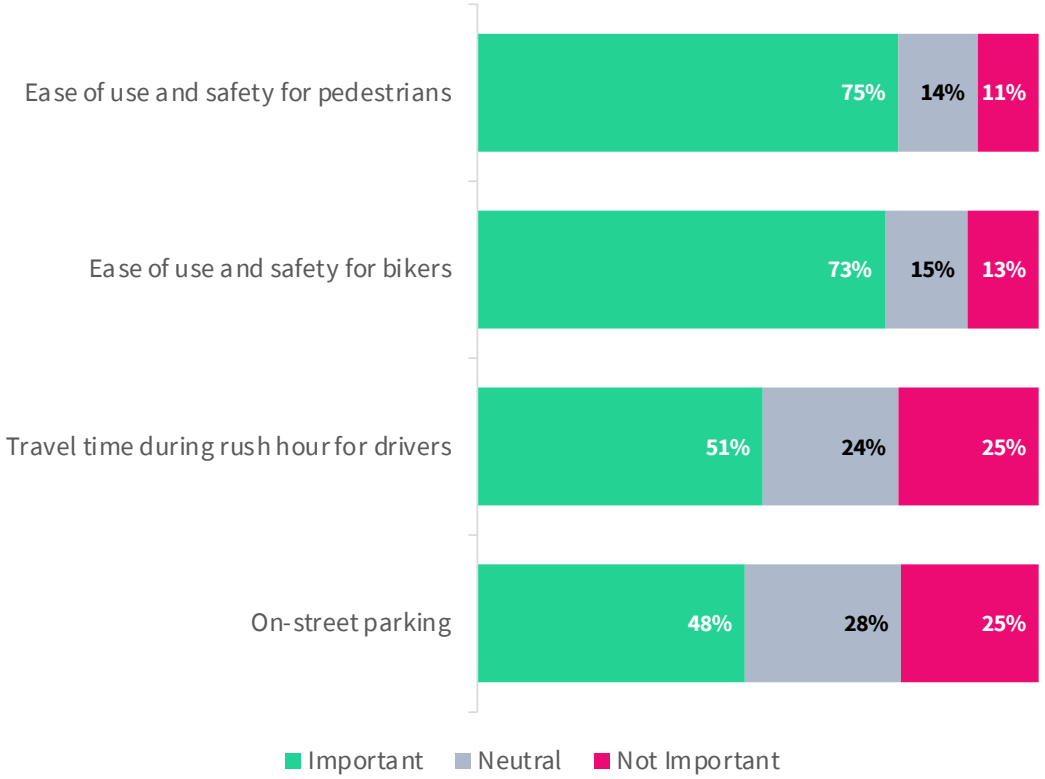


Demographic Group	% that travel at least a few times a week
18-34	67%
35-54	54%
55+	49%
Commuters	**91%**
Non-Commuters	**34%**
By car	54%
By foot	79%
By bike	86%
By public transportation	66%

03 Preferences

Importance of aspects: Respondents across all analyzed groups were significantly more likely to prioritize ease of use and safety for pedestrians and bikers over travel time and on-street parking. Travel time and parking was still important to many respondents - half the respondents still thought travel time during rush hour was important and just under half felt on-street parking was important.

Question: To what extent are the following aspects about Wyandotte Street East important to you?

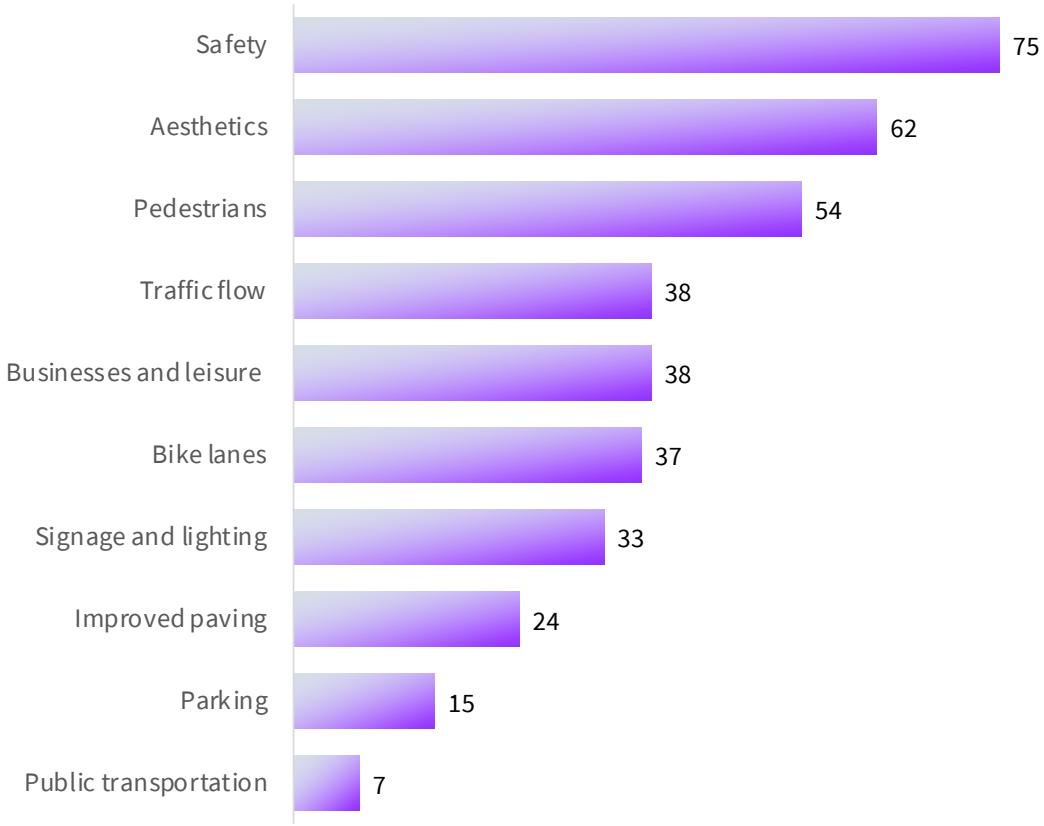


Demographic Group	Pedestrian safety	Biker safety	Travel time	Parking
18-34	76%	75%	56%	49%
35-54	77%	74%	56%	42%
55+	73%	70%	43%	50%
Commuters	71%	72%	61%	47%
Non-Commuters	77%	73%	45%	48%
By car	75%	73%	51%	48%
By foot	85%	82%	36%	39%
By bike	84%	88%	42%	33%
By public transportation	89%	90%	54%	43%

The aspect that was most important to each group is highlighted in green

Open ended responses – additional aspects: Safety of all users was one of the main aspects that respondents mentioned, as well as the aesthetics of the corridor.

Question: Are there other aspects about Wyandotte Street East that are important to you? (n=287)



"Reducing car speed by reducing road width, physically buffered bike lanes, and pedestrian safety."

"Stop the cars from speeding. We call it the Wyandotte Speedway

"More traffic calming needed near Bellagio and Wyandotte E. Kids are crossing street to catch buses etc"

"Beautification of the street and store fronts."

"Traffic flow through major intersections could be better. The intersections can be perilous to both pedestrian and vehicular traffic."

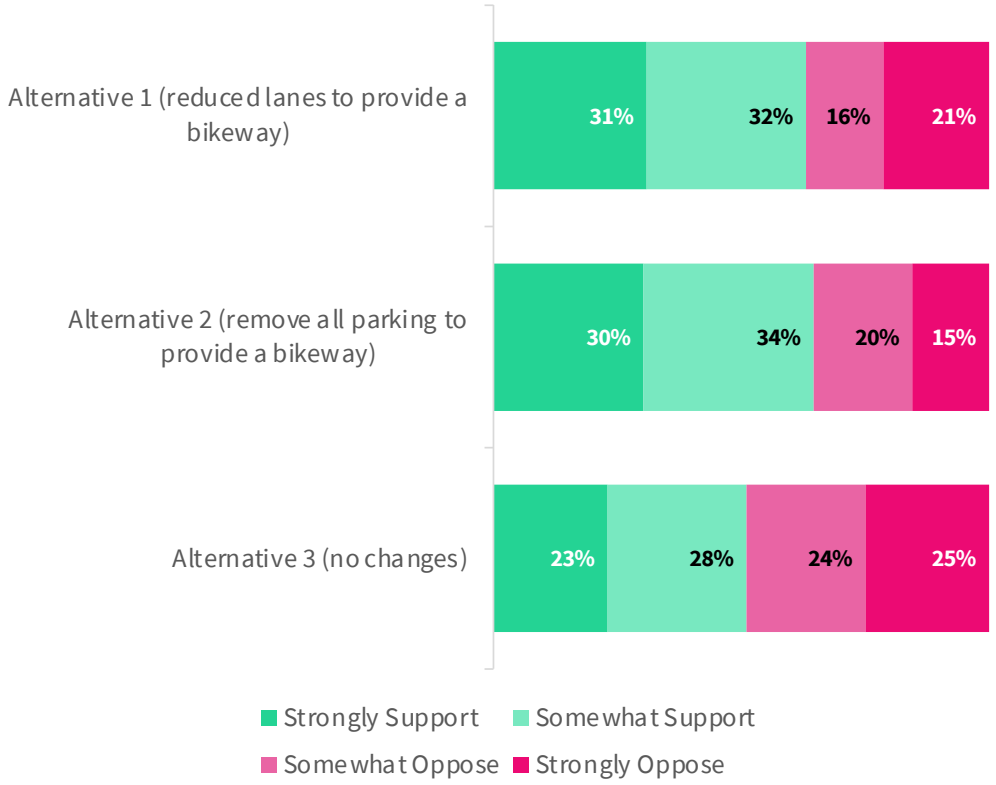
"Small businesses that are thriving"

"More bike paths and parking for cars"

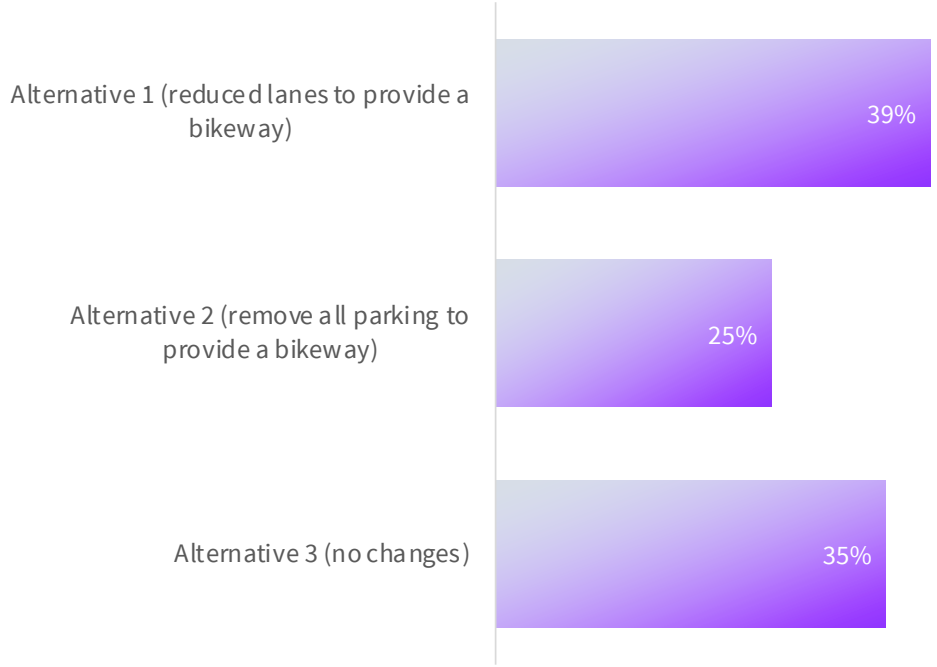
"Wyandotte, from Pilette to Lauzon is a disgrace to drive on. It's crumbling apart, and seems to get exponentially worse after every winter."

Alternatives : Alternatives 1 and 2 both received more overall support from respondents. When asked which option they preferred, almost 40% of respondents preferred alternative 1, making alternative 1 the only option that was both highly supported and a top preference of many respondents.

Question: To what extent do you support or oppose each option?



Question: Overall, which of the suggested options do you prefer?



Alternatives : While some respondents showed more support for alternative 2 than for alternative 1, support for alternative 1 was high across all groups, and all analyzed groups chose it as their top preference.

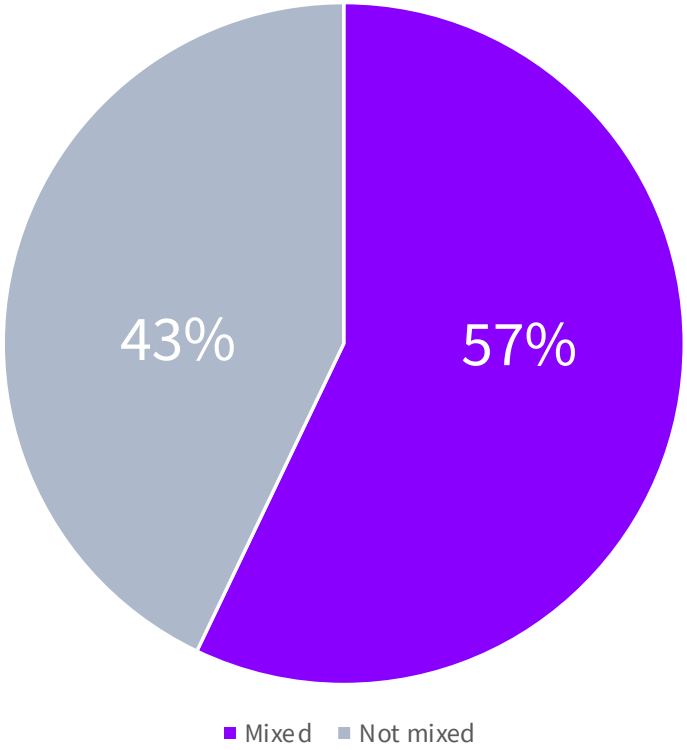
Support and preference of each alternative by group

		Age			Commuters		Most frequent transportation method			
		18-34	35-54	55+	Commuters	Non-commuters	By car	By foot	By bike	By public transporta-tion
% that support	**Alternative 1** (reduced lanes to provide a bikeway)	67%	61%	**63%**	57%	**67%**	61%	**79%**	**83%**	77%
	Alternative 2 (remove all parking to provide a bikeway**)**	**74%**	**62%**	62%	**72%**	60%	**63%**	74%	72%	**84%**
	Alternative 3 (no changes)	54%	50%	49%	53%	50%	53%	30%	29%	44%
% that prioritize	**Alternative 1** (reduced lanes to provide a bikeway)	**36%**	**42%**	**41%**	**38%**	**41%**	**38%**	**58%**	**59%**	**57%**
	Alternative 2 (remove all parking to provide a bikeway**)**	30%	25%	22%	29%	23%	25%	26%	29%	24%
	Alternative 3 (no changes)	34%	33%	37%	33%	37%	37%	16%	12%	18%

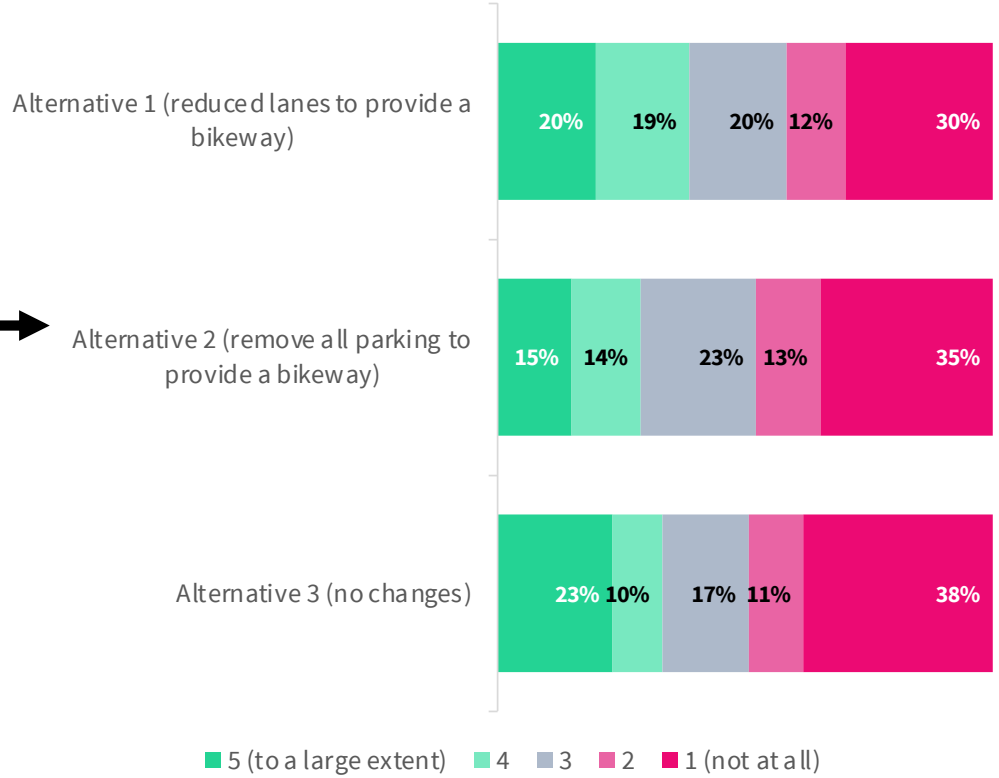
The alternative that was more supported and most prioritzie by each group is highlighted in green

Mix of alternatives: A bit over half the respondents would prefer a mixture of different alternatives. If there was a mixture of alternatives, respondents would most like to see alternative 1 in the corridor.

Question: Which of the suggested options do you prefer?



Question: If a mixture of different alternatives was chosen, to what extent would you like to see each of the alternatives in the corridor?



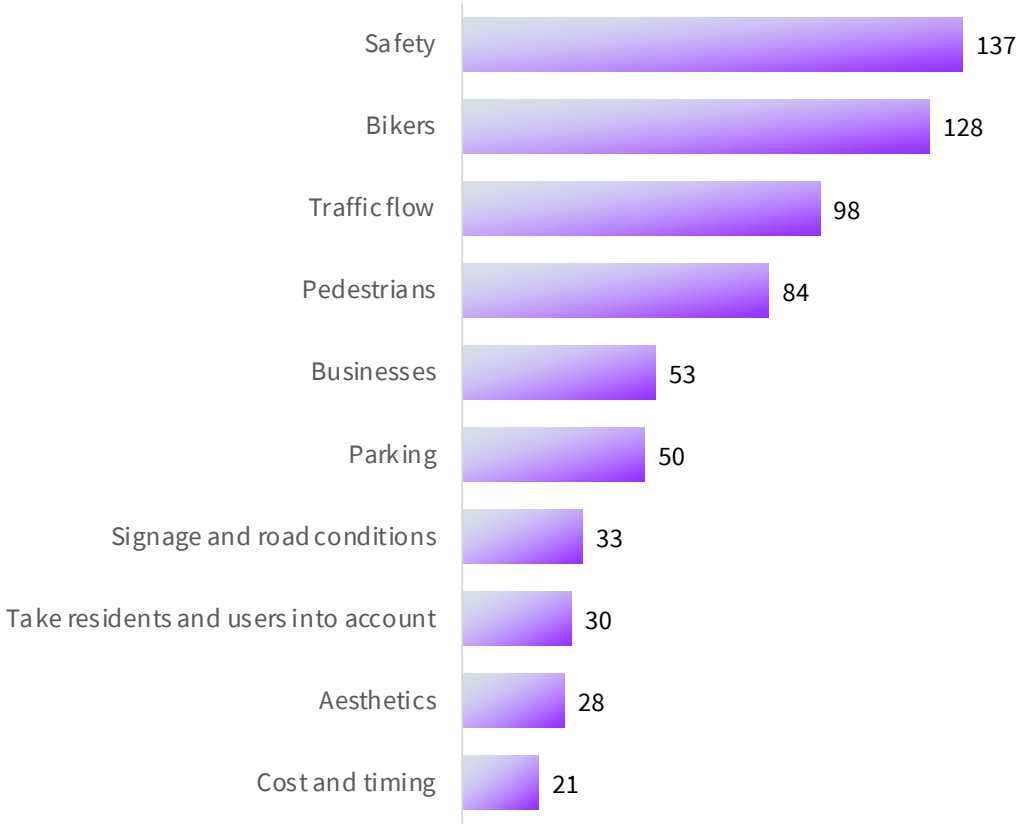
Bike protection: Over half the respondents would like the proposed bike lanes to be protected rather than just buffered or painted. Protected bike lanes were the top preference across all demographic groups.

Question: What level of protection would you like to see for the proposed bike lanes in the corridor?

Demographic Group	Top two preferences
18-34	Protected (60%) No bike lanes (14%)
35-54	Protected (48%) Painted (26%)
55+	Protected (50%) No bike lanes (24%)
Commuters	Protected (45%) Painted (22%)
Non-Commuters	Protected (56%) No bike lanes (20%)
By car	Protected (50%) No bike lanes (22%)
By foot	Protected (64%) Painted (18%)
By bike	Protected (61%) Buffered (17%)
By public transportation	Protected (69%) Painted (14%)

Open ended responses – most important thing: Respondents continued to say that they would like safety to be taken into account when redesigning the corridor. Many also mentioned that they would like bikers to be taken into account.

Question: What is the most important thing for the City to take into account when redesigning the Wyandotte Street East? (n=428)



"Safety of bikers and pedestrians. Cut down the car noises. Cars travel too fast."

"It's a busy street for cars and pedestrians mostly, plus bikes too. They all need to be able to travel safely."

"Bikes are not safe anywhere in Windsor. We need dedicated bike lanes that people can not drive in"

"Why do bike lanes have to be on busy streets? Why not have cars on the major roadways and have bikes 1 block off major thoroughfares? There is less vehicle traffic, less carbon monoxide to breath, less chance of accidents which would suite all levels of cyclists."

"Reducing lanes will only increase traffic which isn't consive to bike safety either. Removing parking spaces will have a negative affect on small businesses in the area."

"Pedestrian and bicycle friendly infrastructure. Protected bikes are key. Studies have shown increase sales for business, less congestion on roads, better for overall health."

"Don't remove very much street parking. There are a lot of businesses that would suffer because of it."

"Make it safe and people will use it instead of Riverside for cycling. Do not punish local businesses by removing parking"

04

Summary

Summary

Commuters

38% commute to work or school

Method of transportation

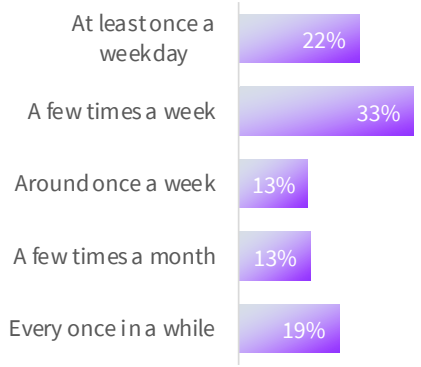
By car (88%)

By foot (18%)

By bike (14%)

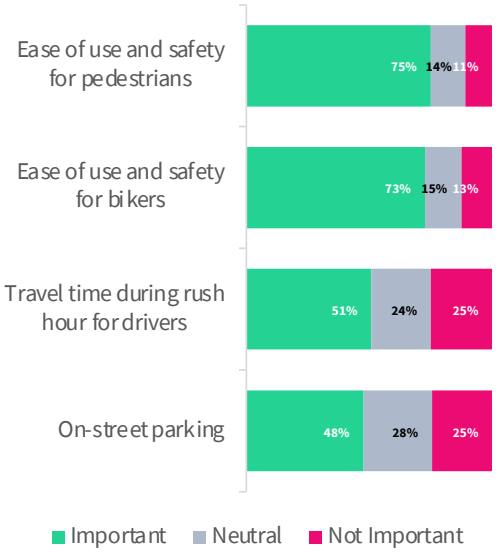
Frequency of use

55% go through at least once a week



Frequency of use is mostly dependent on commute

Top important aspects



Summary

Road Alternatives

Alternative 1
(reduced lanes to provide a bikeway)

Supported by 63%
prefered by 39%

Alternative 2
(remove all parking to provide a bikeway**)**

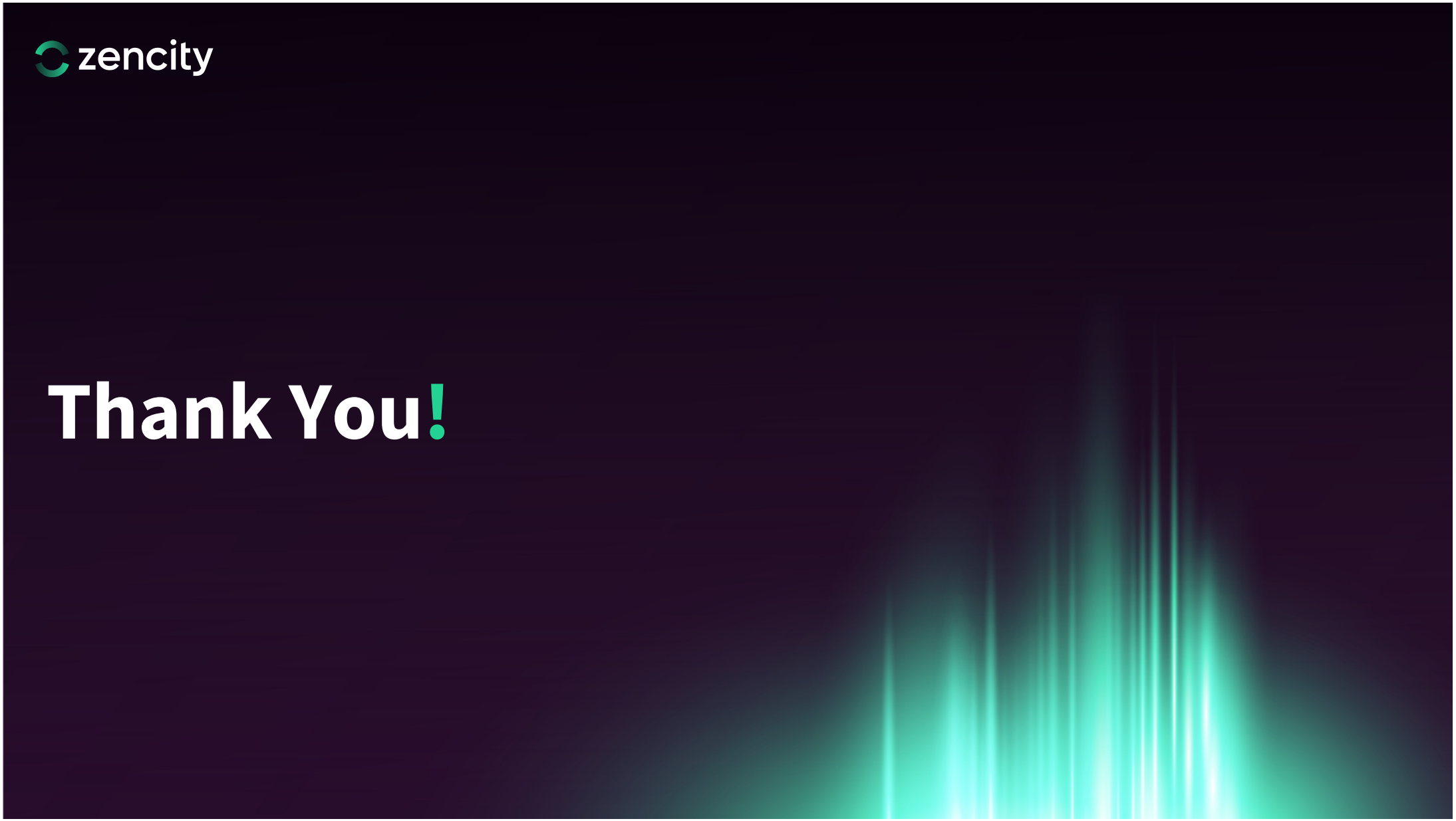
Supported by 64%
prefered by 25%

Alternative 3
(no changes)

Supported by 51%
prefered by 35%

Bike lane protection

52% would like the bike lanes to be fully protected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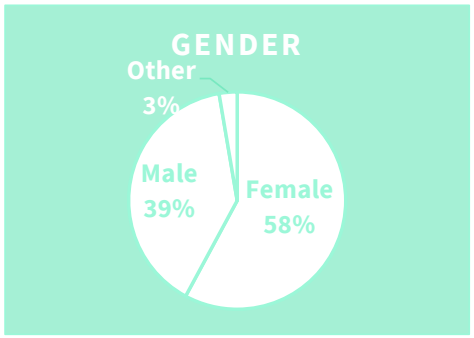
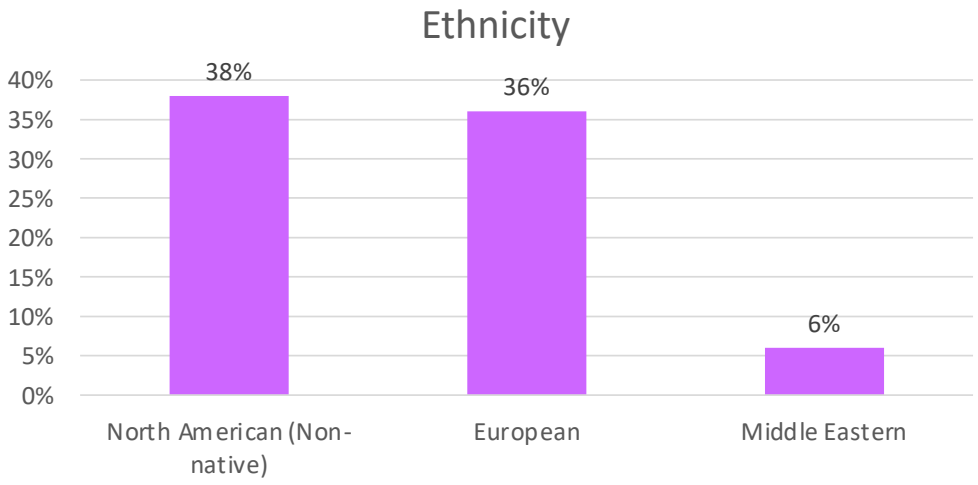
Thank You!

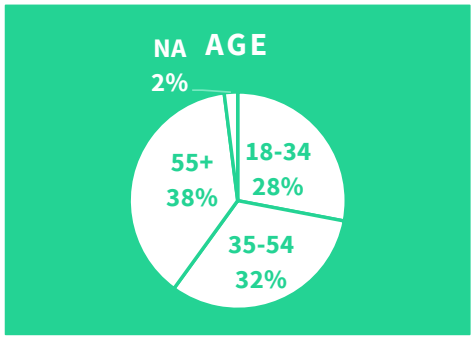
Survey respondents demographics – age, gender, ethnicity

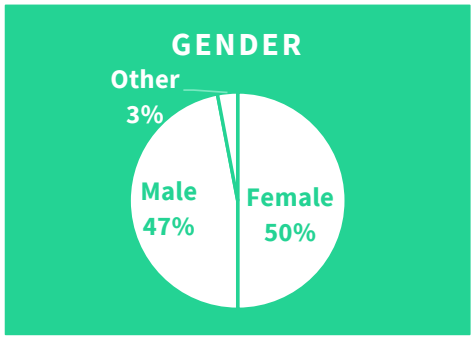
Unweighted demographics – the original sample

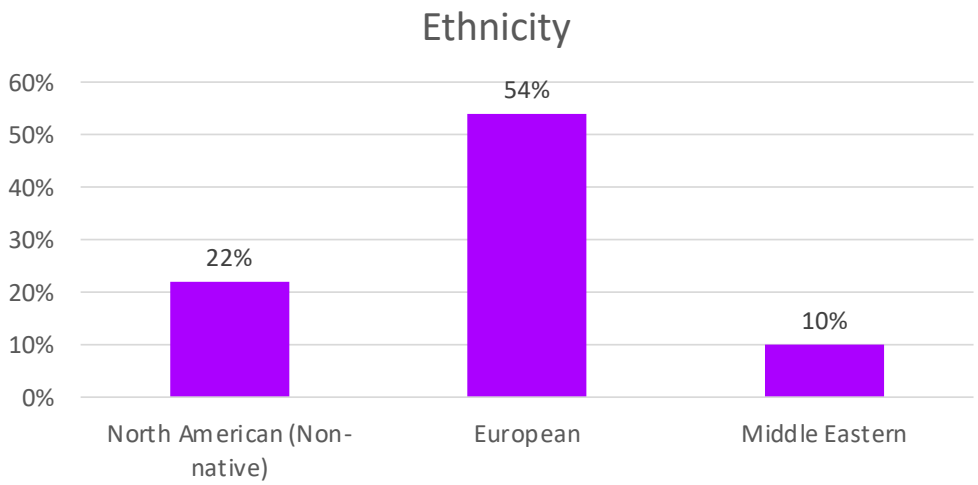




Weighted demographics – representative of the population







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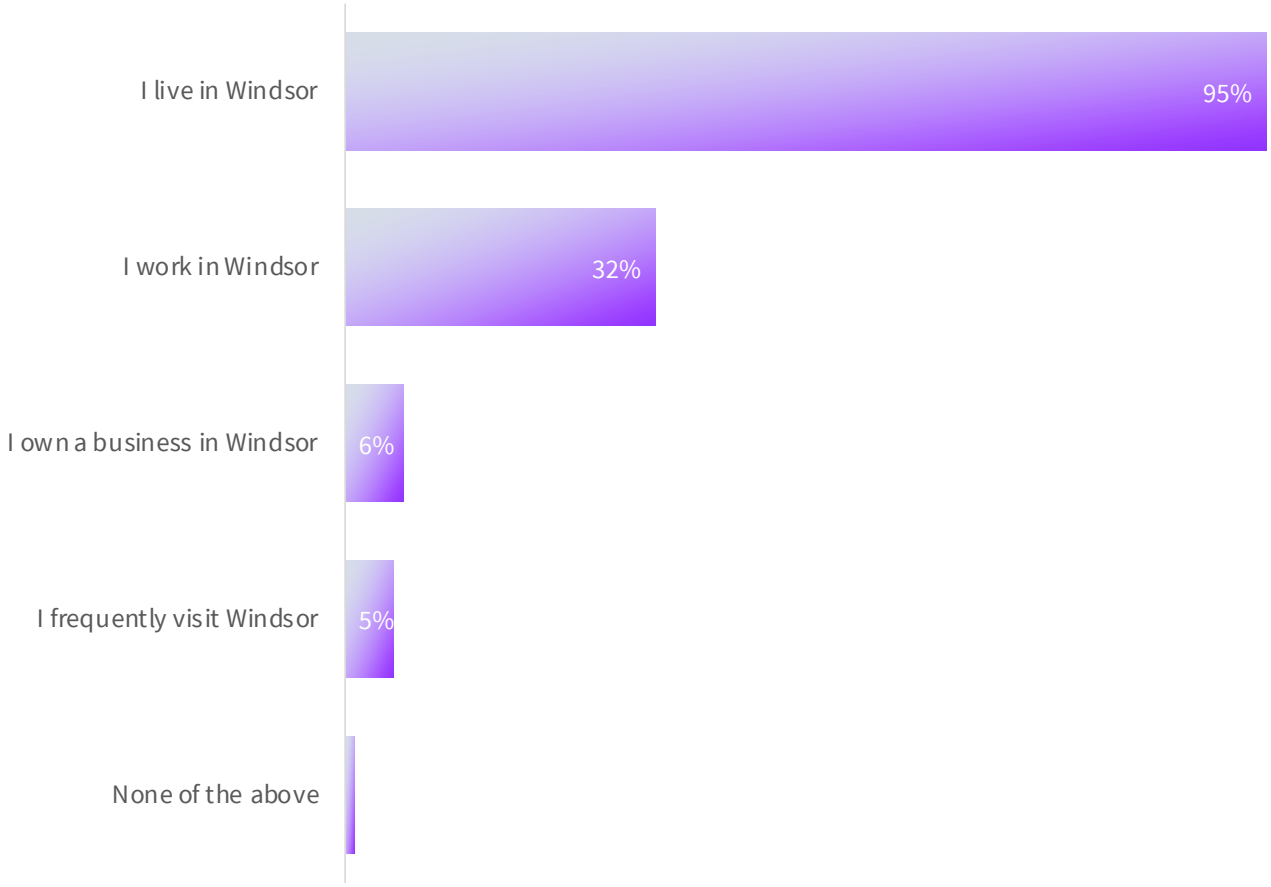
Connection to Windsor: Almost all survey respondents live in Windsor, and about a third work in the city.

Question: What is your relation to the city of Windsor?

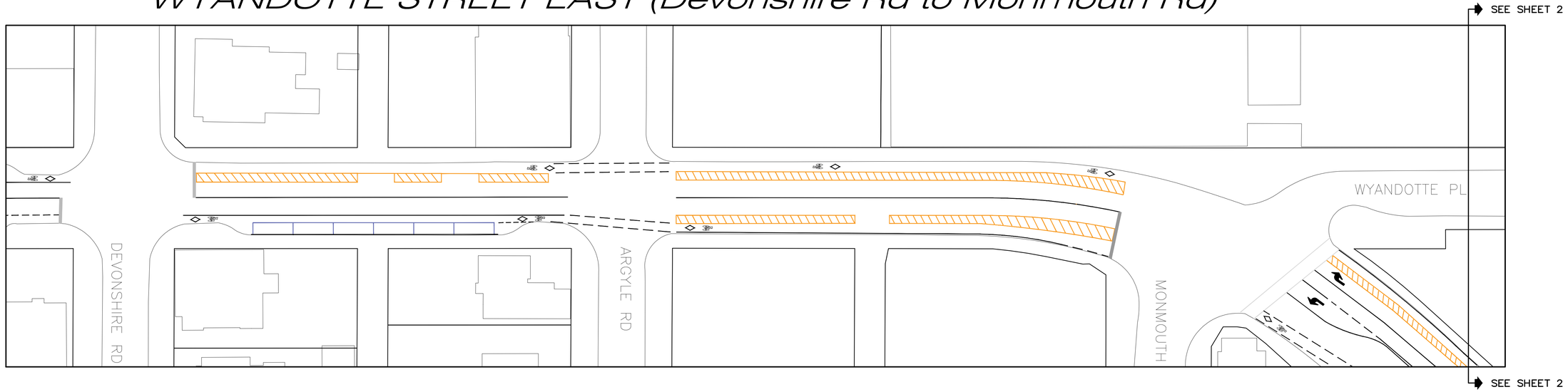


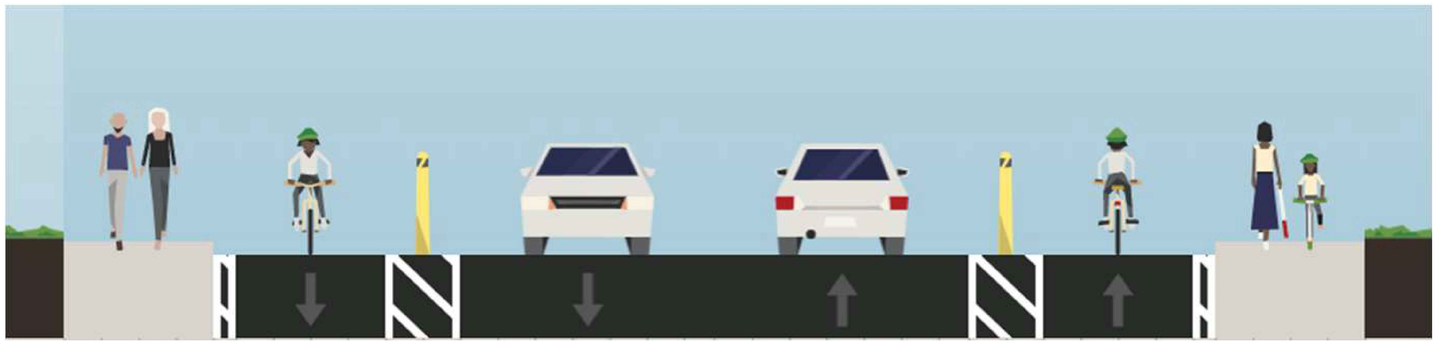
Links

Link to survey

Link to open-ended responses

WYANDOTTE STREET EAST (Devonshire Rd to Monmouth Rd)





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BUFFER ZONE	
PARKING	

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1.	ISSUED FOR APPROVAL	APRIL/23	

ISSUED FOR TENDER DATE : ,

ISSUED FOR CONSTRUCTION DATE : ,

AS CONSTRUCTED DATE : ,

SCALES

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HORIZONTAL 1 : 400

DATE DRAWN: APRIL 2023

DRAWN BY: G.P

CHECKED: P. UBENE

DESIGN: K.QUENNEVILLE

CHECKED:

CHRIS NEPSZEY, P.Eng.
CITY ENGINEER

THE CORPORATION OF THE CITY OF WINDSOR
ENGINEERING DEPARTMENT

2023 ROAD REHABILITATION PROGRAM

WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO MONMOUTH RD

TENDER No. 1

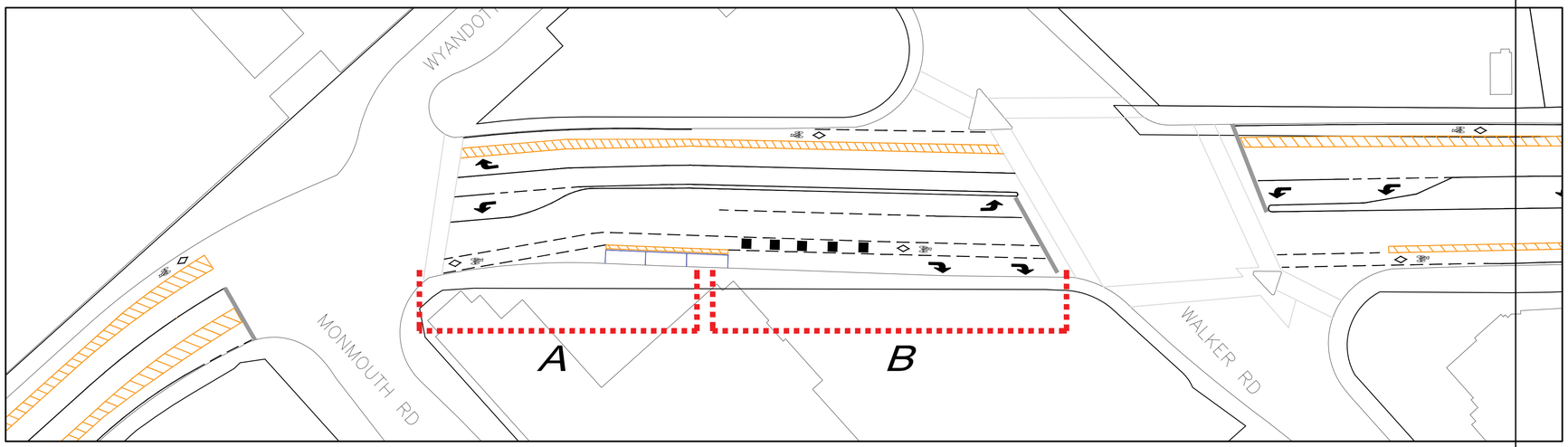
ACCOUNT No. 1

DRAWING No. ,

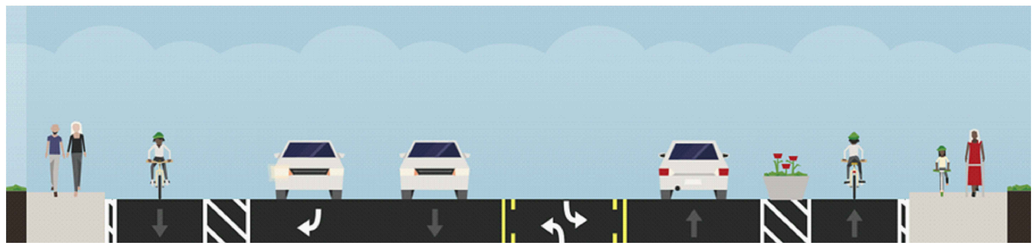
SHEET 1 OF ,

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

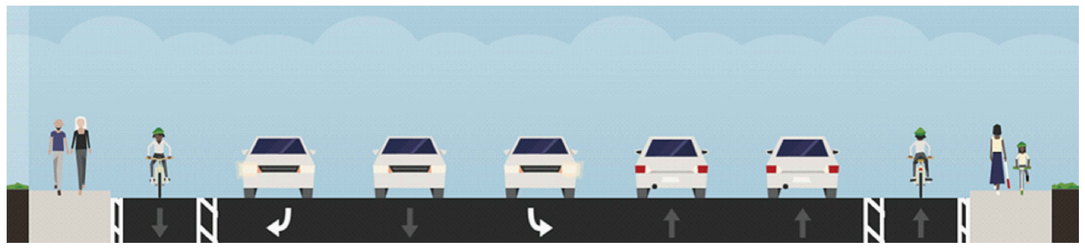
WYANDOTTE STREET EAST (Monmouth Rd to Walker Rd)



CROSS -SECTION A



CROSS -SECTION B



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2023 ROAD REHABILITATION PROGRAM

WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

ACCOUNT No. 1

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SHEET 2 OF ,

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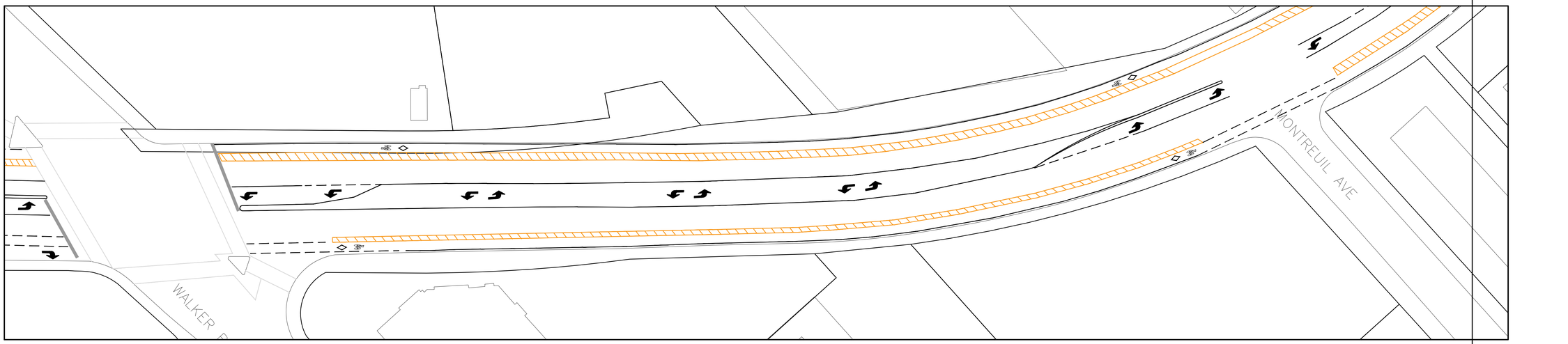
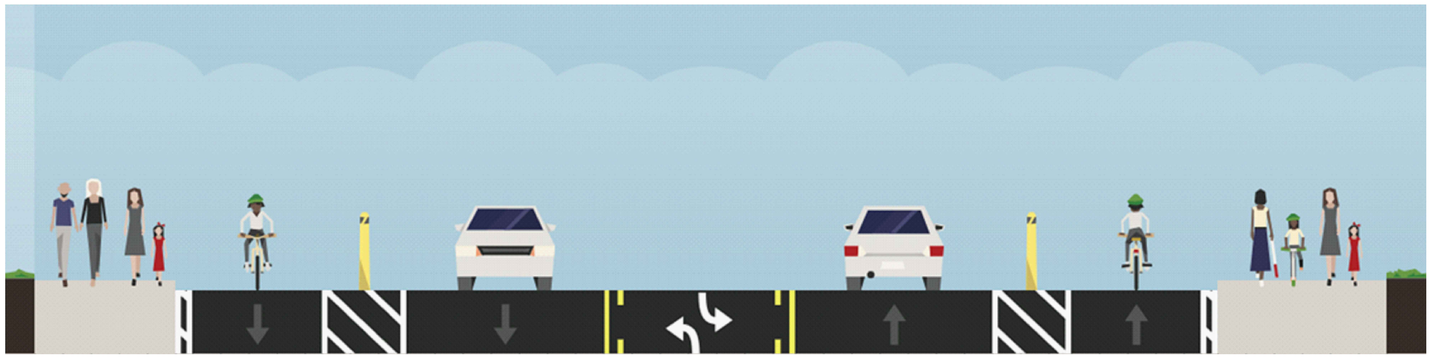
WYANDOTTE STREET EAST (Walker Rd to Montreuil Ave)





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DATE DRAWN: APRIL 2023
DRAWN BY: G.P
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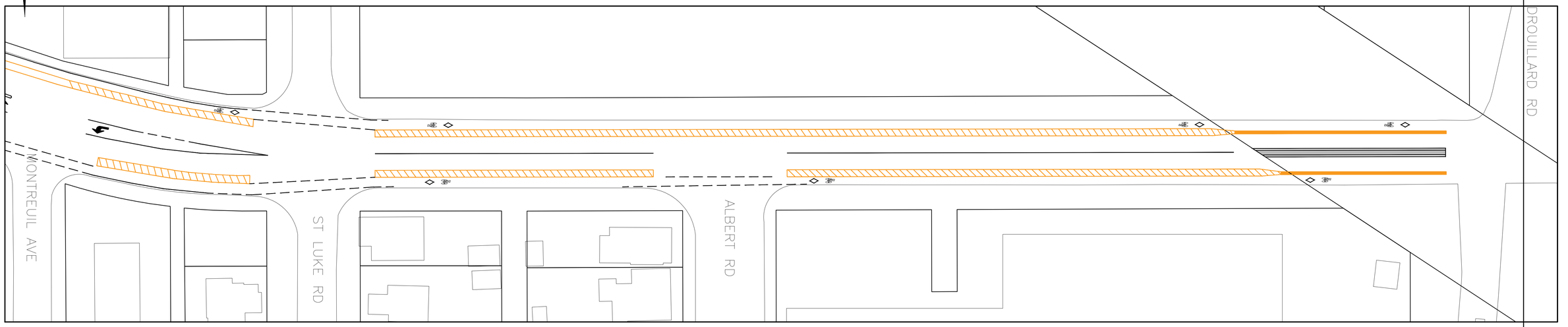
2023 ROAD REHABILITATION PROGRAM

WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

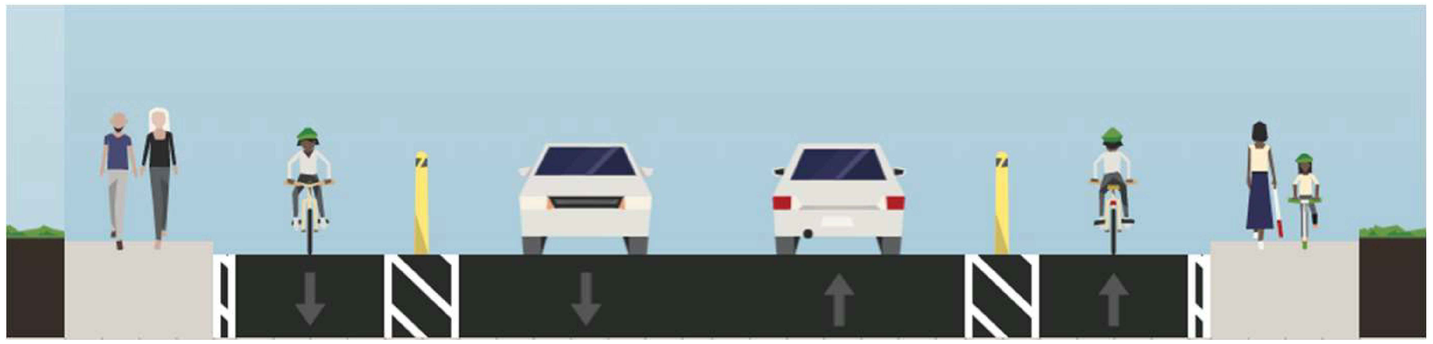
TENDER No. 1
ACCOUNT No. 1
DRAWING No. ,
SHEET 3 OF ,

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (St Luke to Droullard Rd)



WYANDOTTE STREET EAST (St Luke to Droullard Rd)



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ENGINEERING DEPARTMENT

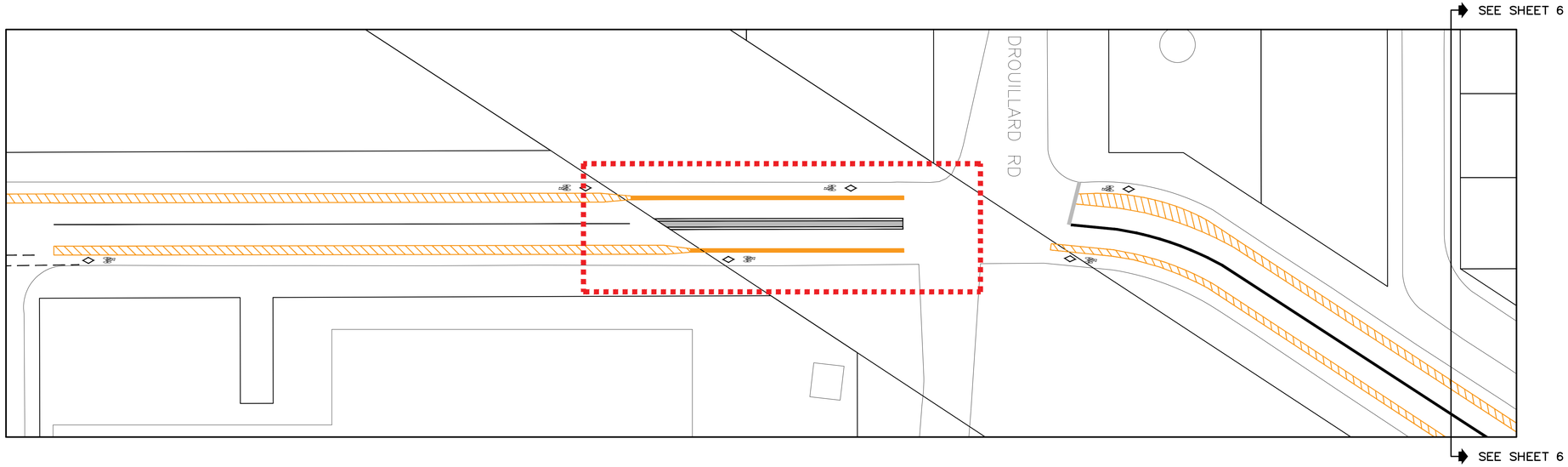
2023 ROAD REHABILITATION PROGRAM

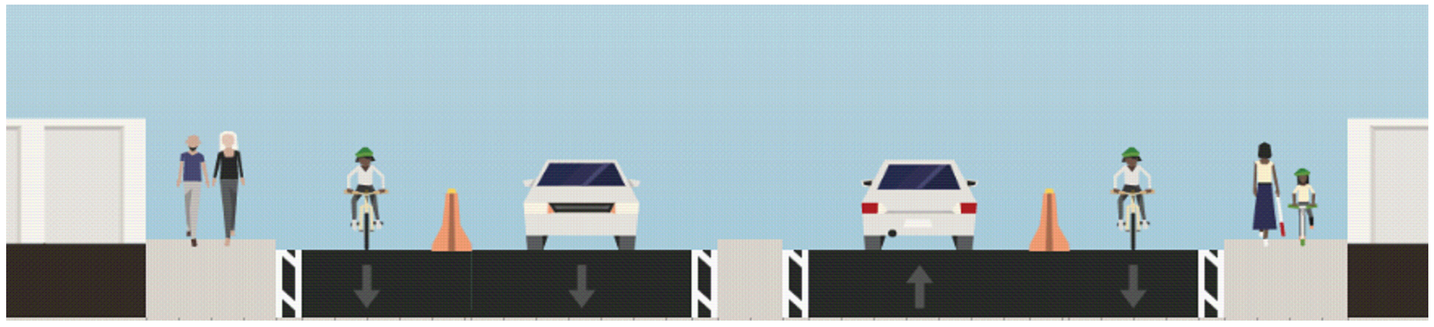
WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 4 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Train Underpass at Drouillard Rd Contn'd)





LEGEND	
DESCRIPTION	SYMBOL
BIKE LANE	
BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
1.	ISSUED FOR APPROVAL	APRIL/23	

ISSUED FOR TENDER DATE :

ISSUED FOR CONSTRUCTION DATE :

AS CONSTRUCTED DATE :

SCALES

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HORIZONTAL 1 : 400

DATE DRAWN: APRIL 2023

DRAWN BY: G.P

CHECKED: P. UBENE

DESIGN: K.QUENNEVILLE

CHECKED:

CHRIS NEPSZEY, P.Eng.
CITY ENGINEER

THE CORPORATION OF THE CITY OF WINDSOR
ENGINEERING DEPARTMENT

2023 ROAD REHABILITATION PROGRAM

WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

ACCOUNT No. 1

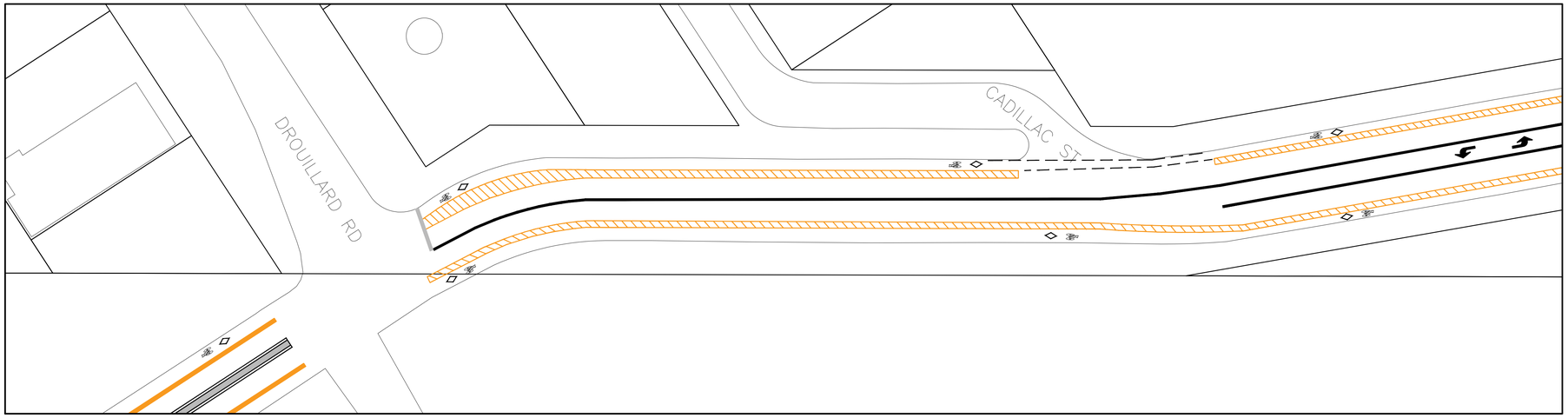
DRAWING No. ,

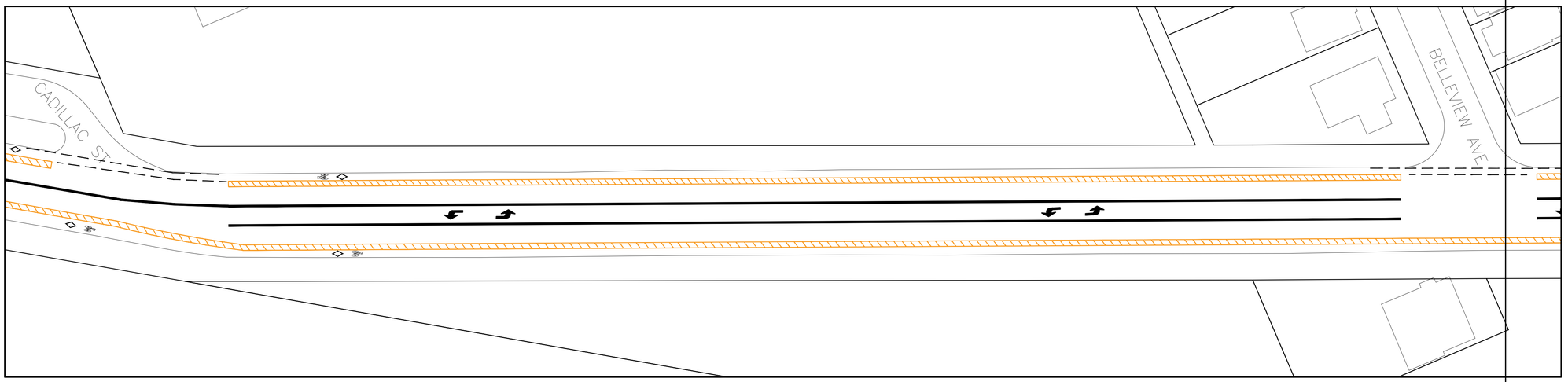
SHEET 5 OF ,

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

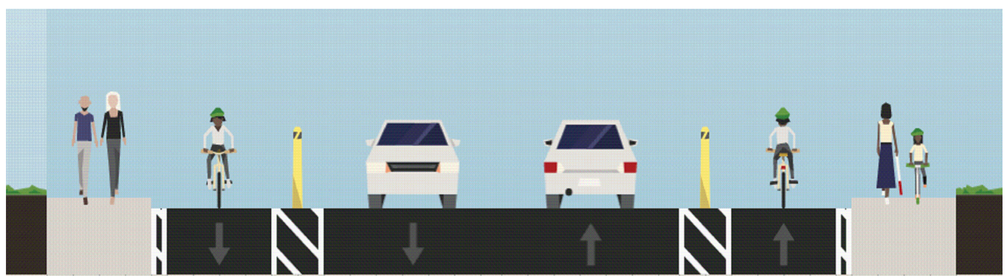
WYANDOTTE STREET EAST (Droullard Rd to Belleview Ave)

LEGEND	
DESCRIPTION	SYMBOL
BIKE LANE	
BUFFER ZONE	
PARKING	

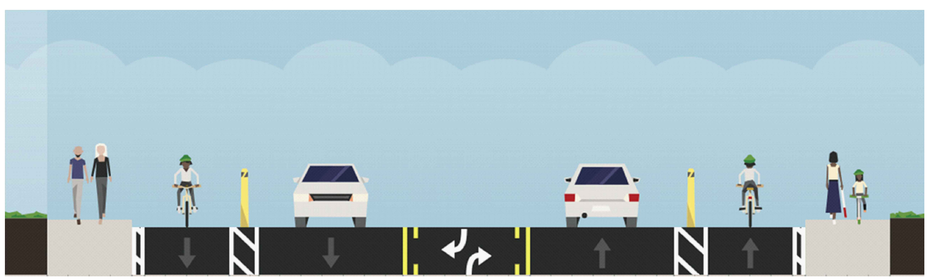




(Droullard Rd to Cadillac)



(Cadillac to Belleview Ave)



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SCALES

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HORIZONTAL 1 : 400

DATE DRAWN: APRIL 2023
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WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 6 OF .

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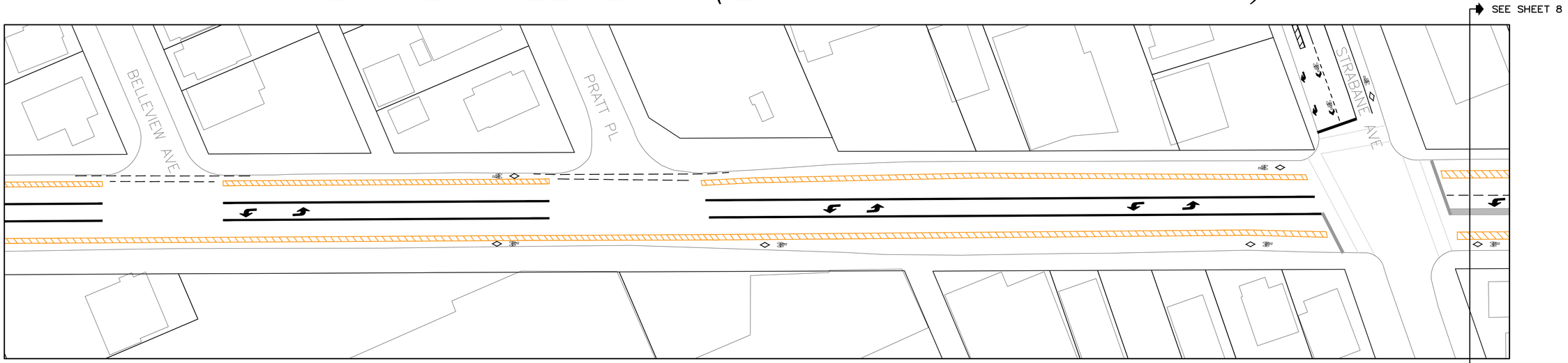
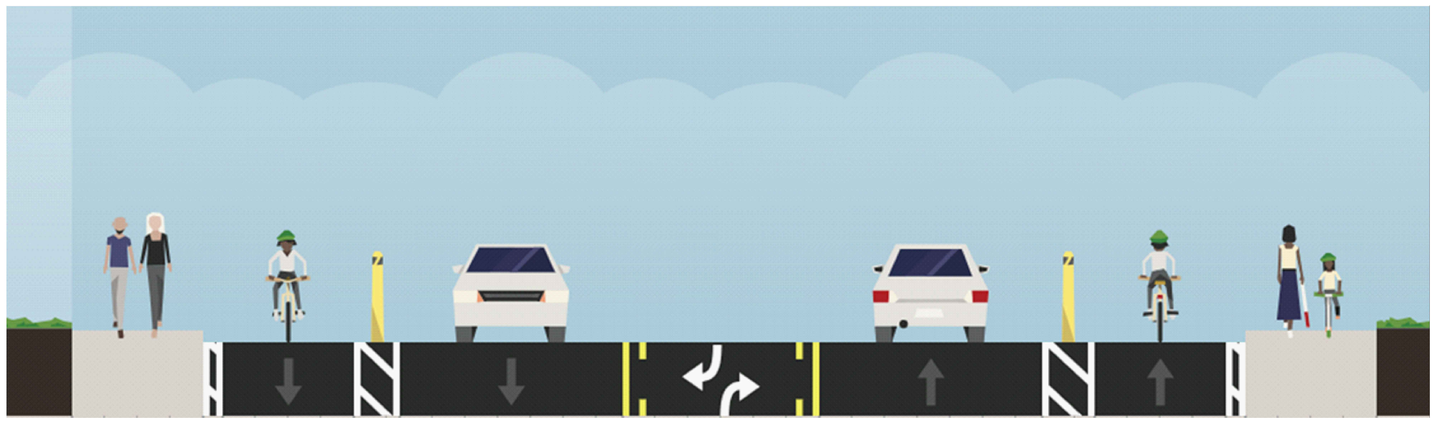
WYANDOTTE STREET EAST (Belleview Ave to Strabane Ave)





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BIKE LANE	
BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
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SCALES

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HORIZONTAL 1 : 400

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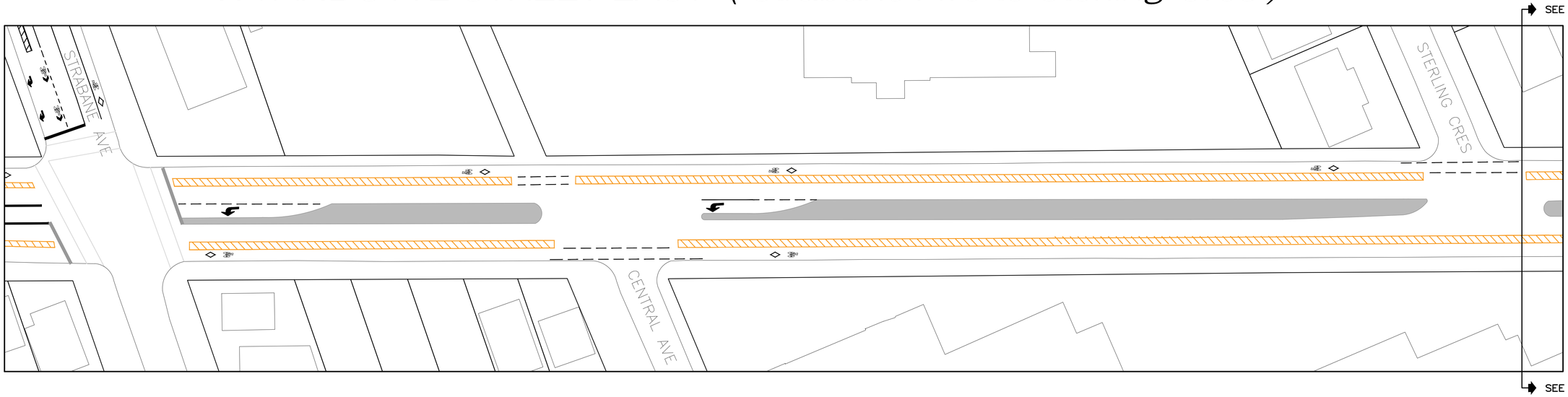
WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 7 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Strabane Ave to Sterling Cres)



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BIKE LANE	
BUFFER ZONE	
PARKING	

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HORIZONTAL 1 : 400

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DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

ACCOUNT No. 1

DRAWING No. .

SHEET 8 OF .

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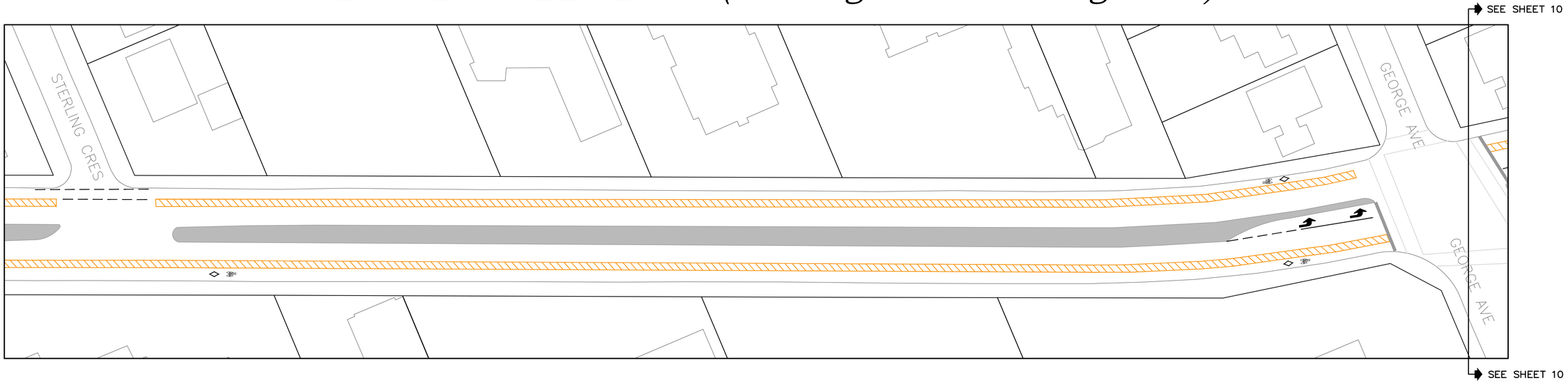
WYANDOTTE STREET EAST (Sterling Cres to George Ave)



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BIKE LANE	
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WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

ACCOUNT No. 1

DRAWING No. .

SHEET 9 OF .

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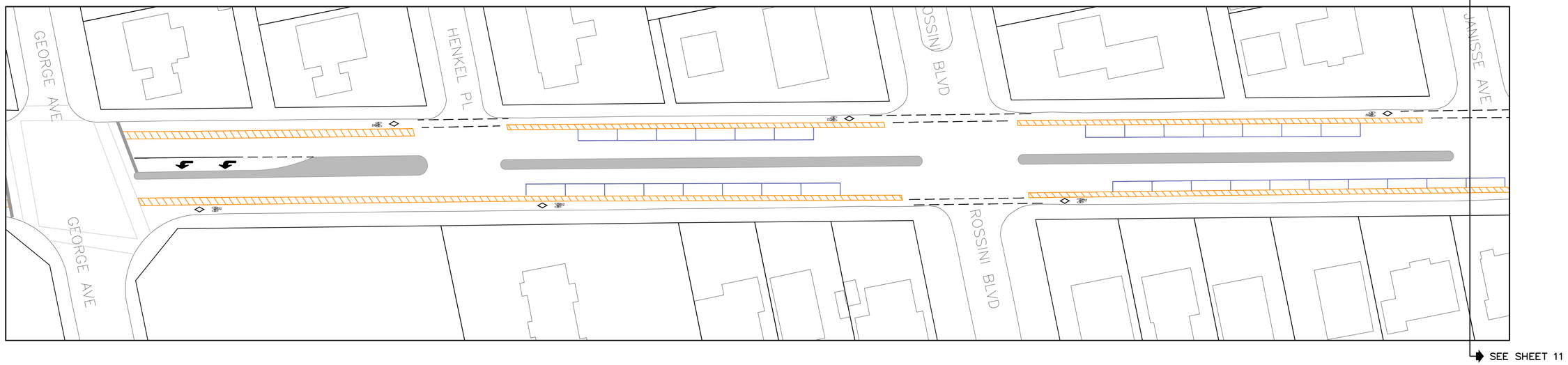
WYANDOTTE STREET EAST (George Ave to Janisse Ave))



WYANDOTTE STREET EAST (George Ave to Henkel PL)

OPTION 1

WYANDOTTE STREET EAST (Henkel PL to Janisse Ave)

OPTION 2

LEGEND

DESCRIPTION	SYMBOL
BIKE LANE	
BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
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WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

ACCOUNT No. 1

DRAWING No. .

SHEET 10 OF .

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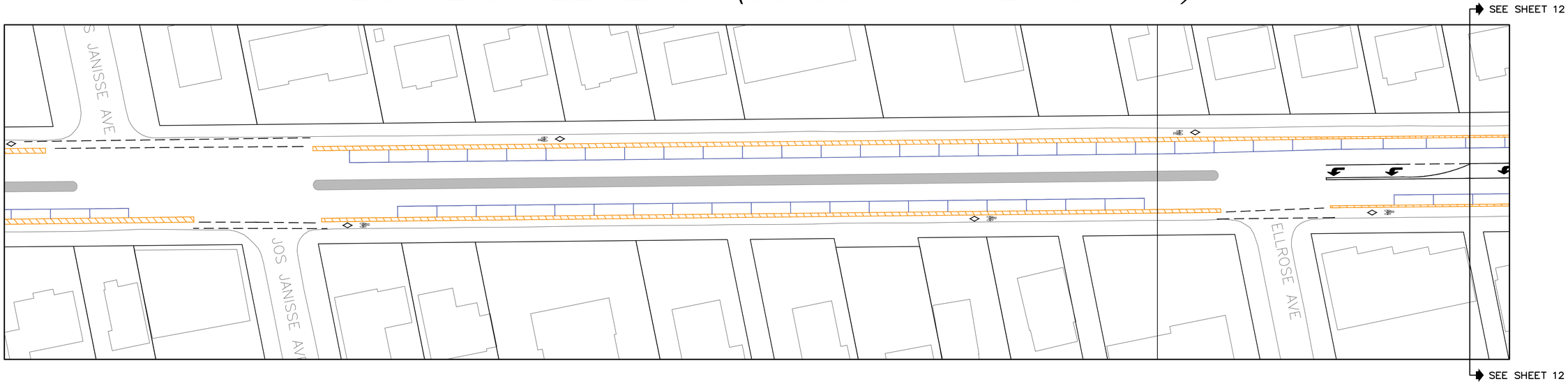
WYANDOTTE STREET EAST (Janisse Ave to Ellrose Ave)



OPTION 1

OPTION 2

LEGEND	
DESCRIPTION	SYMBOL
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BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
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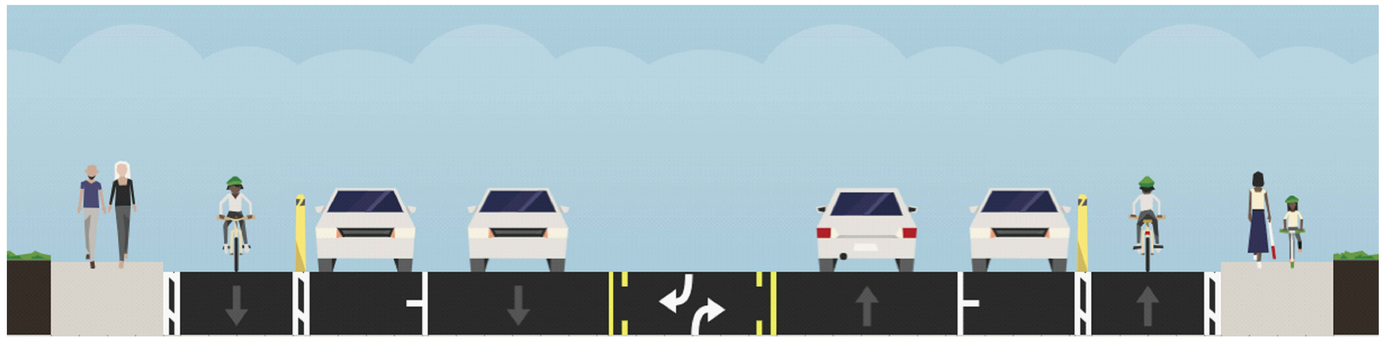
WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 11 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Ellrose to Dawson)



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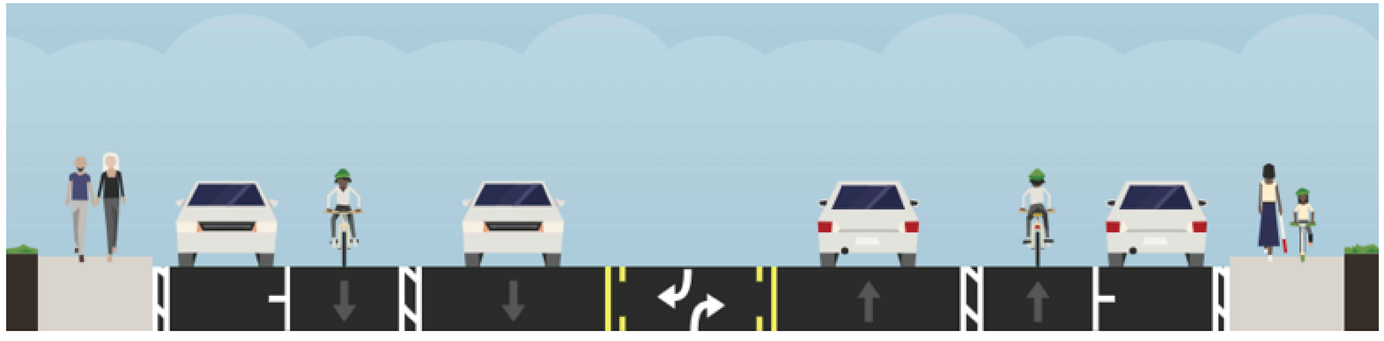

OPTION 2

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DESCRIPTION	SYMBOL
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BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
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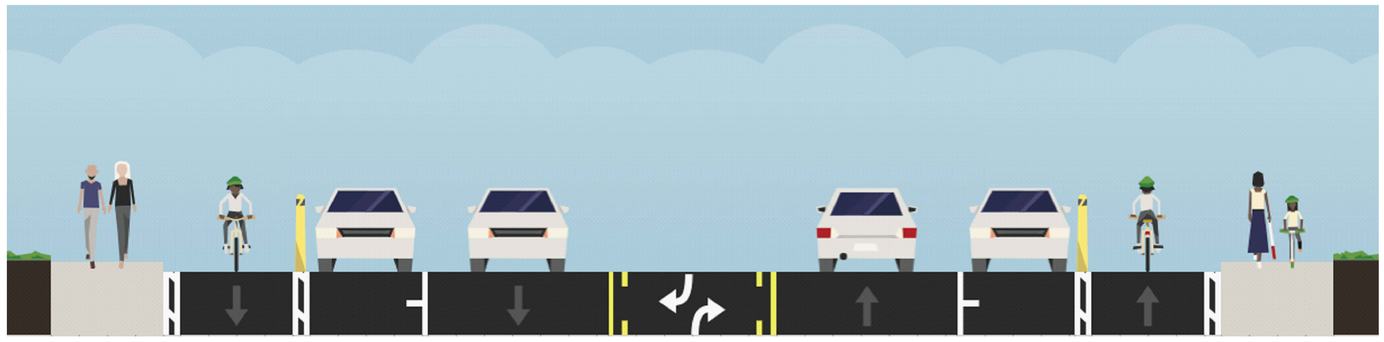
WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 12 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Ellrose to Dawson)



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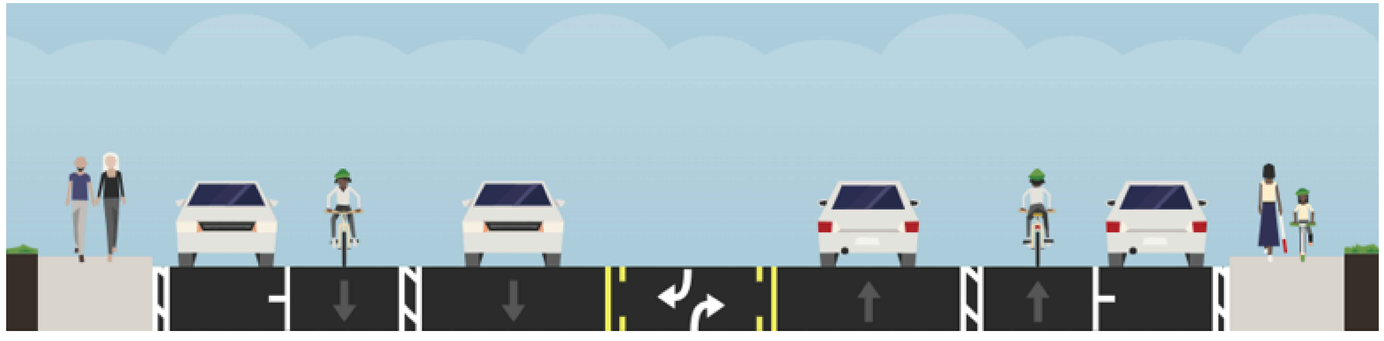

OPTION 2

LEGEND	
DESCRIPTION	SYMBOL
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BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
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DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1
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SHEET 12 OF .

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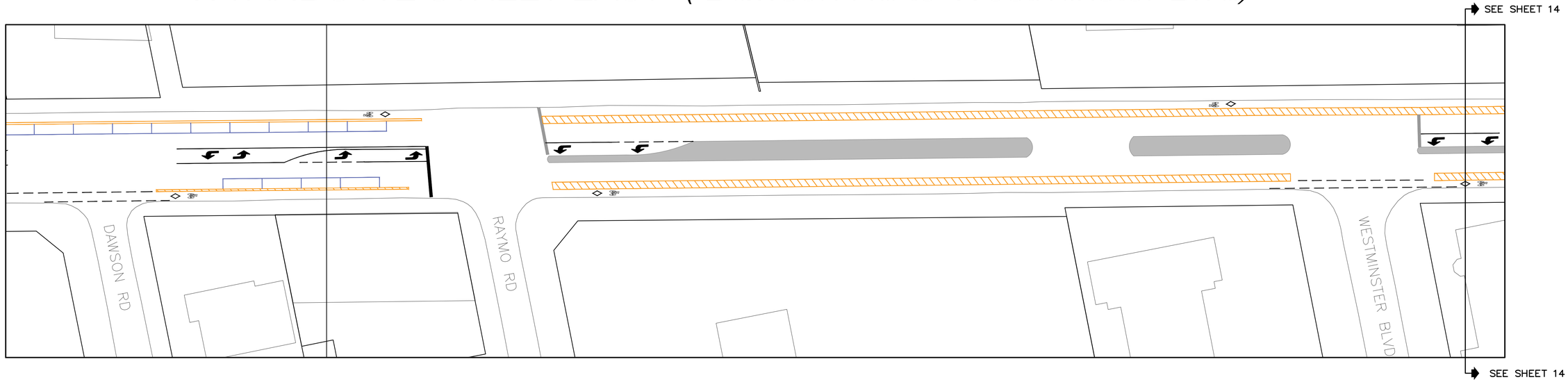
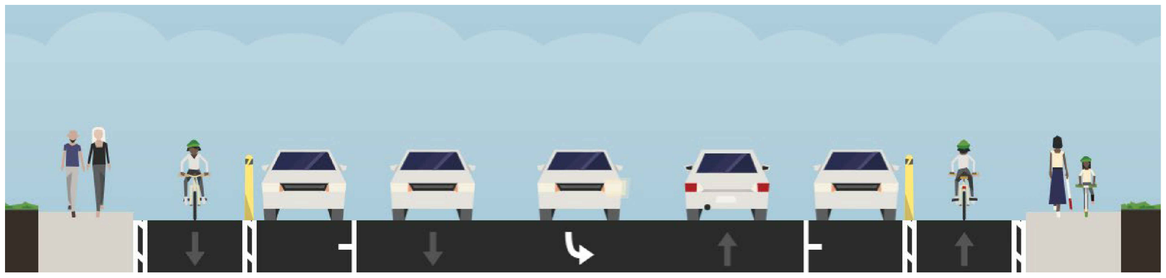
WYANDOTTE STREET EAST (Dawson Rd to Westminster Blvd)



WYANDOTTE STREET EAST (Dawson Rd to Raymo Rd)



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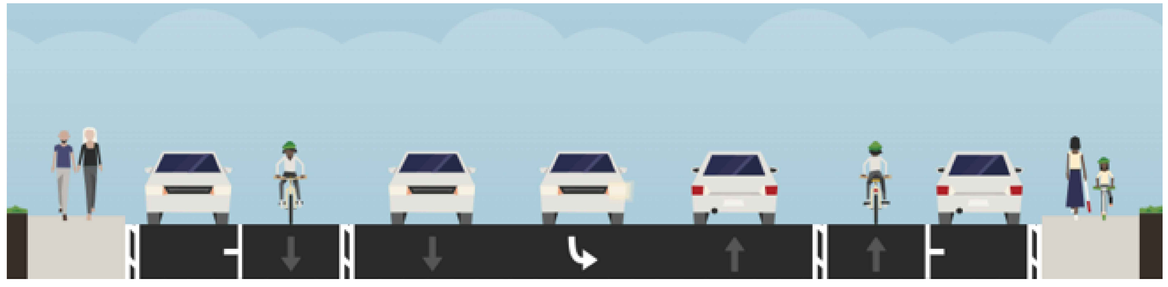

OPTION 2

WYANDOTTE STREET EAST (Raymo Rd to Westminster Blvd

LEGEND	
DESCRIPTION	SYMBOL
BIKE LANE	
BUFFER ZONE	
PARKING	

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TENDER No. 1
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SHEET 13 OF .

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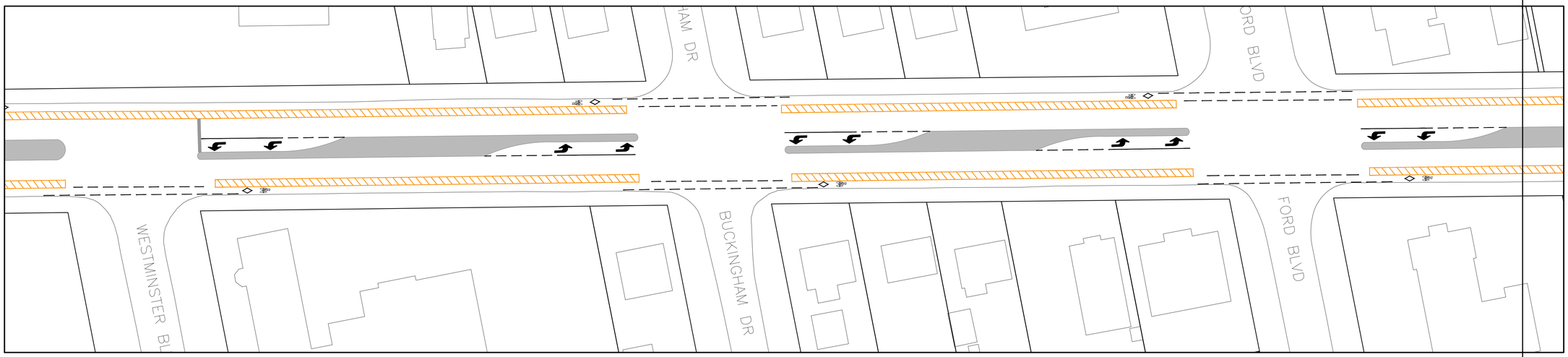
WYANDOTTE STREET EAST (Westminster Blvd to Ford Blvd)



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DRAWING No. .
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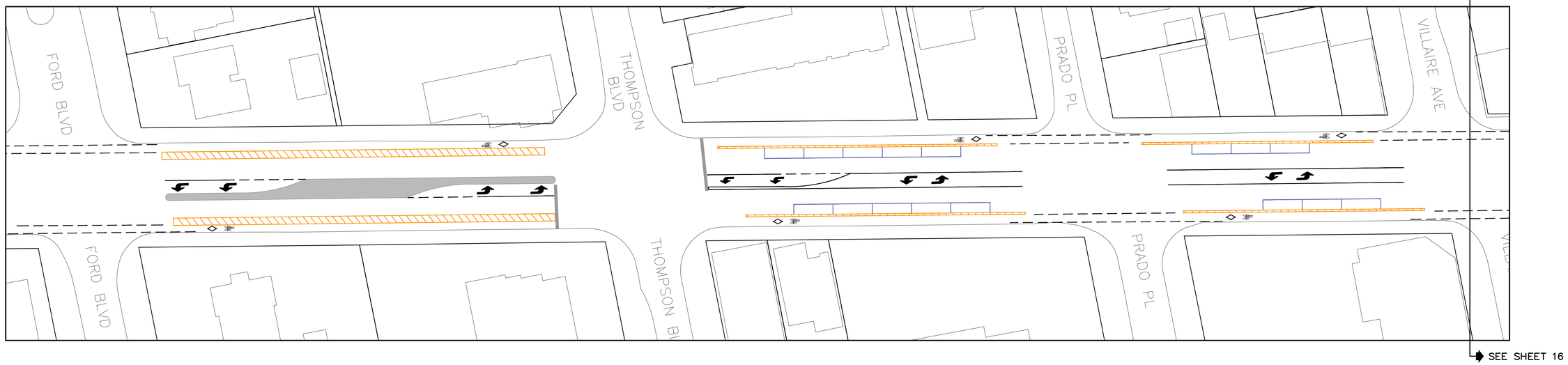
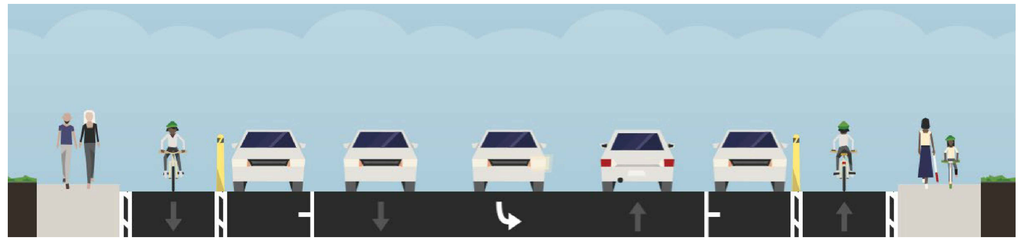
WYANDOTTE STREET EAST (Ford Blvd to Villaire Ave)



WYANDOTTE STREET EAST (Ford Blvd to Thompson Blvd)

WYANDOTTE STREET EAST (Thompson Blvd to Villaire Ave)



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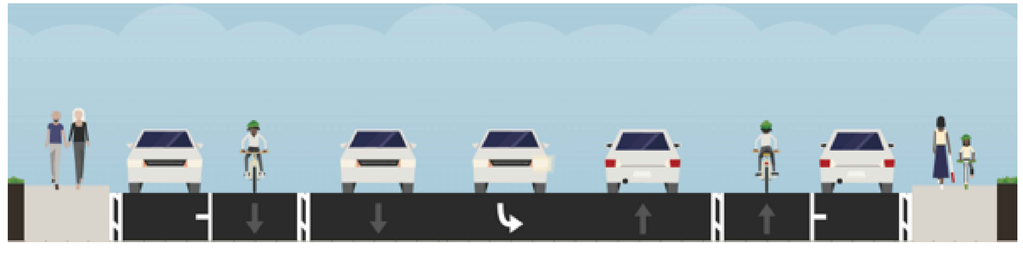

OPTION 2

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DESCRIPTION	SYMBOL
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PARKING	

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DEVONSHIRE ROAD TO WATSON AVENUE

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DRAWING No. .
SHEET 15 OF .

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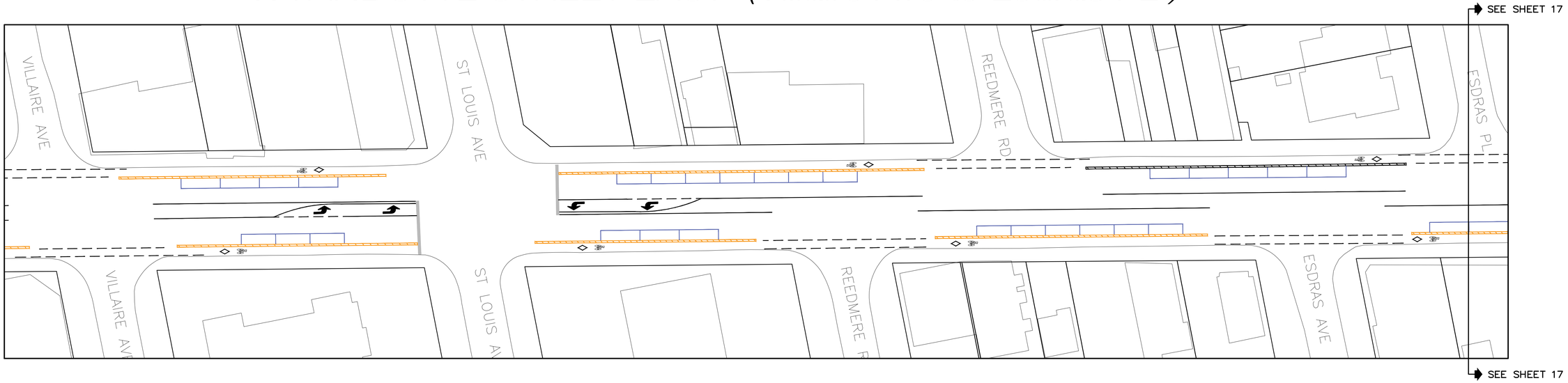
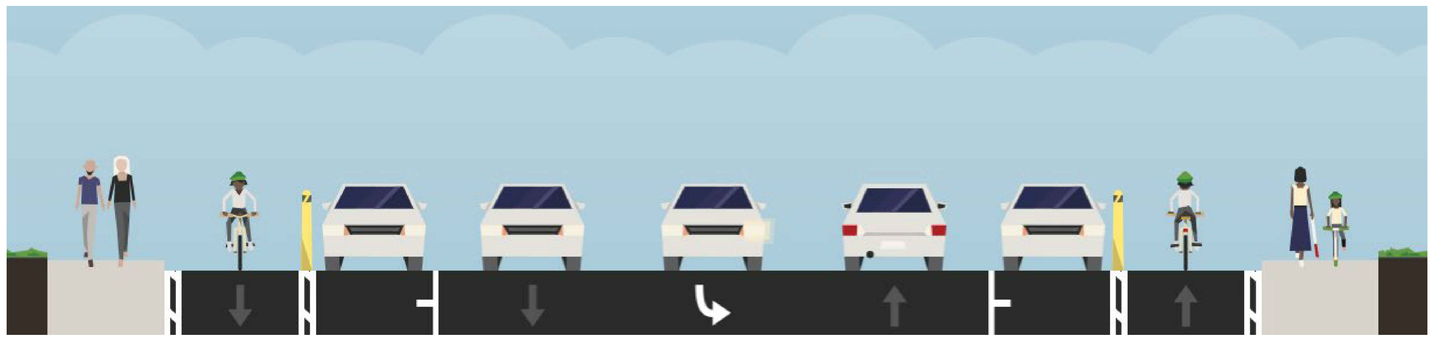
WYANDOTTE STREET EAST (Villaire Ave to Esdras PL)





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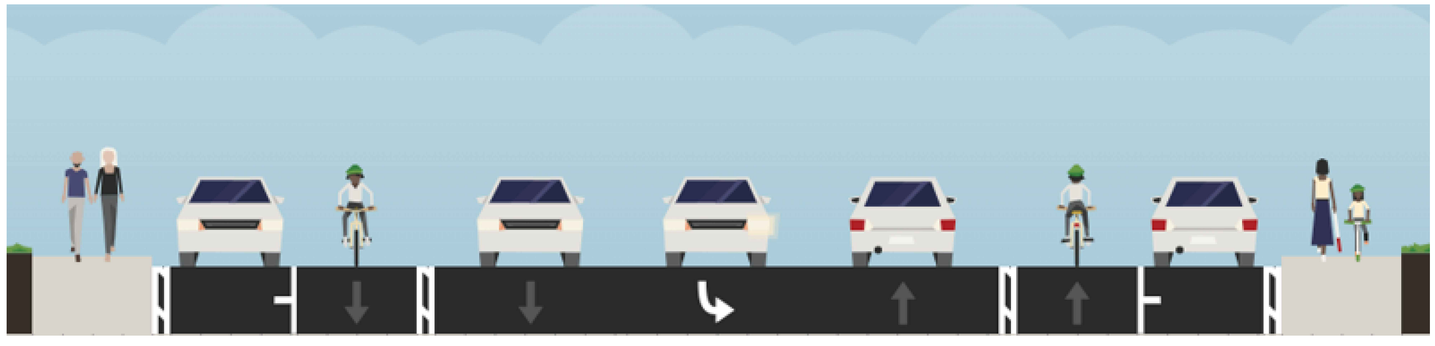

OPTION 2

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ENGINEERING DEPARTMENT

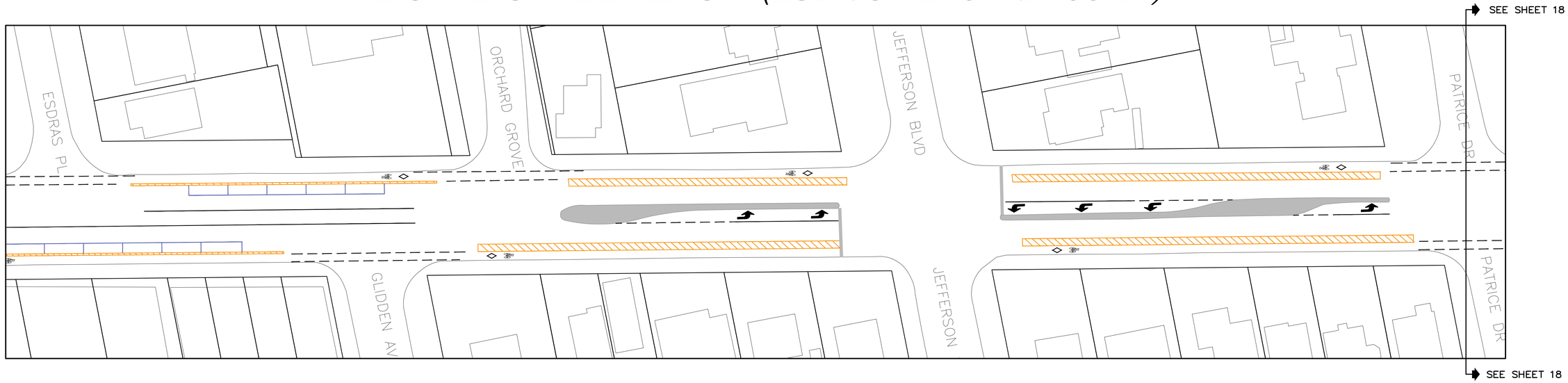
2023 ROAD REHABILITATION PROGRAM

WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

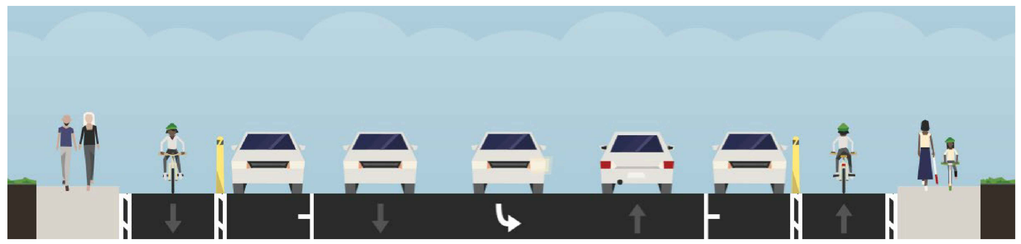
TENDER No. 1
ACCOUNT No. 1
DRAWING No. .
SHEET 16 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Esdras PL to Patrice Dr)



WYANDOTTE STREET EAST (Esdras Dr to Orchad Grove)



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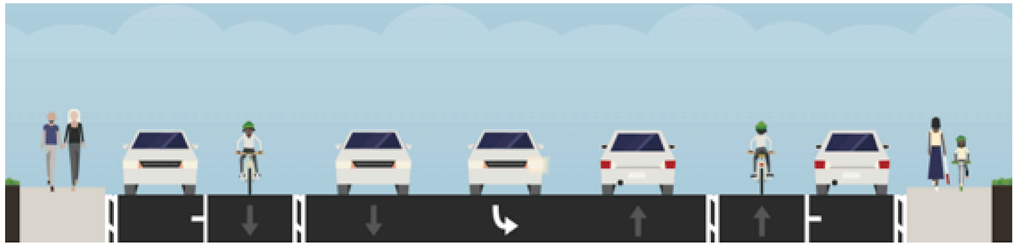

OPTION 2

WYANDOTTE STREET EAST (Orchad Grove to Patrice Dr)

LEGEND	
DESCRIPTION	SYMBOL
BIKE LANE	
BUFFER ZONE	
PARKING	

No.	REVISIONS	DATE	INIT.
1.	ISSUED FOR APPROVAL	APRIL/23	

ISSUED FOR TENDER DATE :

ISSUED FOR CONSTRUCTION DATE :

AS CONSTRUCTED DATE :

SCALES

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HORIZONTAL 1 : 400

DATE DRAWN: APRIL 2023
DRAWN BY: G.P
CHECKED: P. UBENE
DESIGN: K.QUENNEVILLE
CHECKED:

CHRIS NEPSZEY, P.Eng.
CITY ENGINEER

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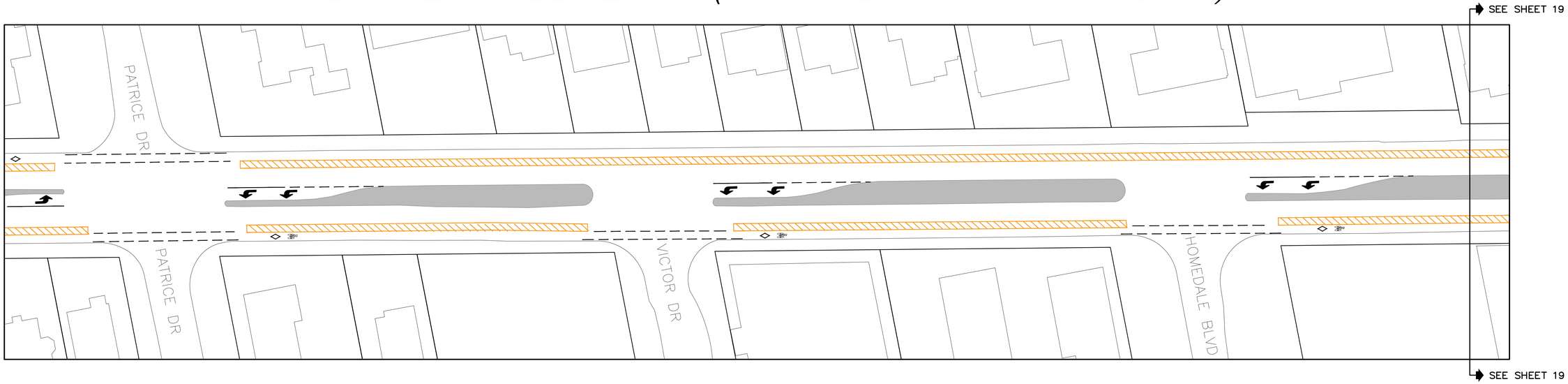
SHEET 17 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Patrice Dr to Homedale Dlvd)



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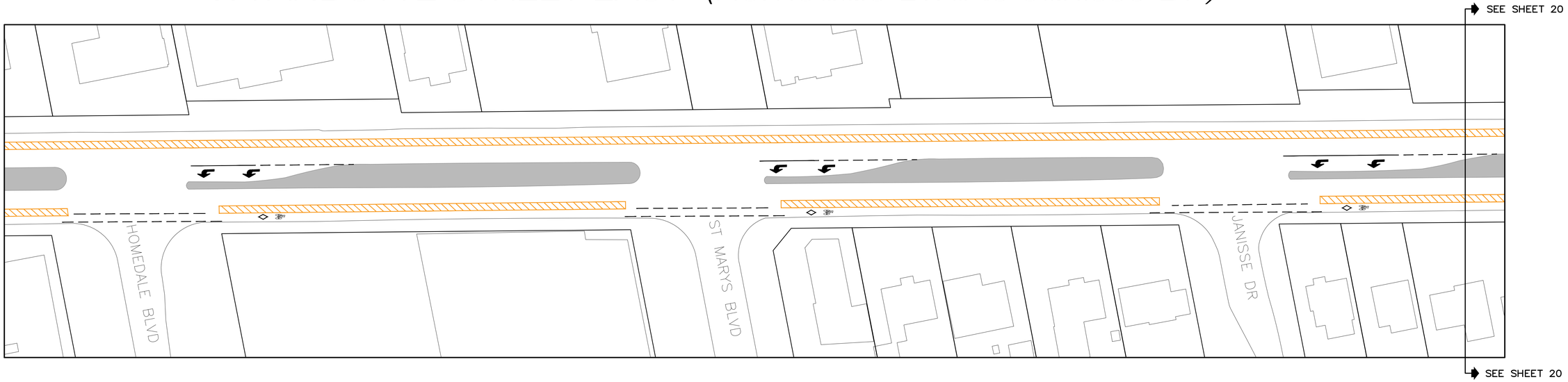
SHEET 18 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Homedale Blvd to Janisse Dr)



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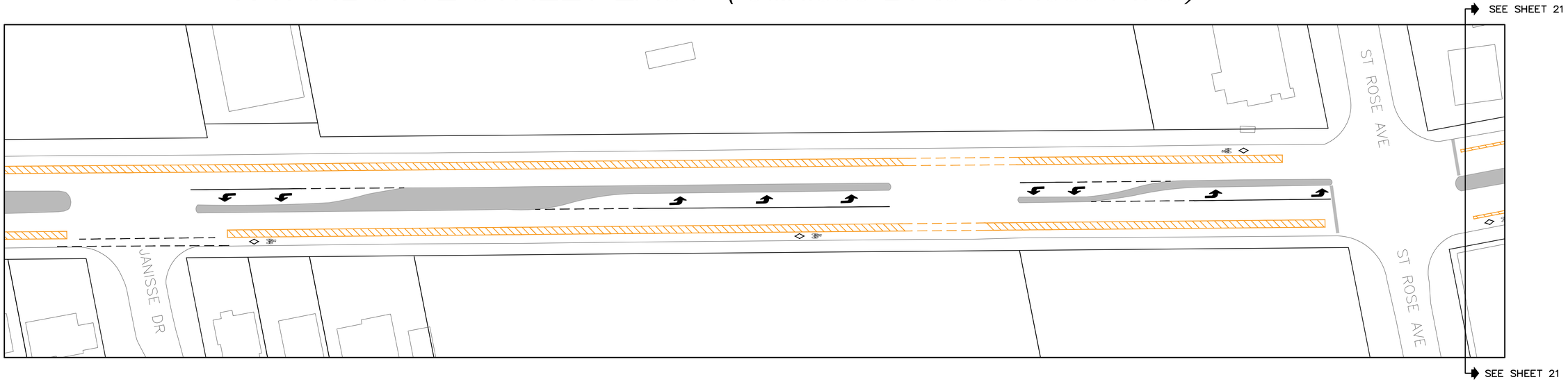
May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Janisse Dr to St Rose Ave)



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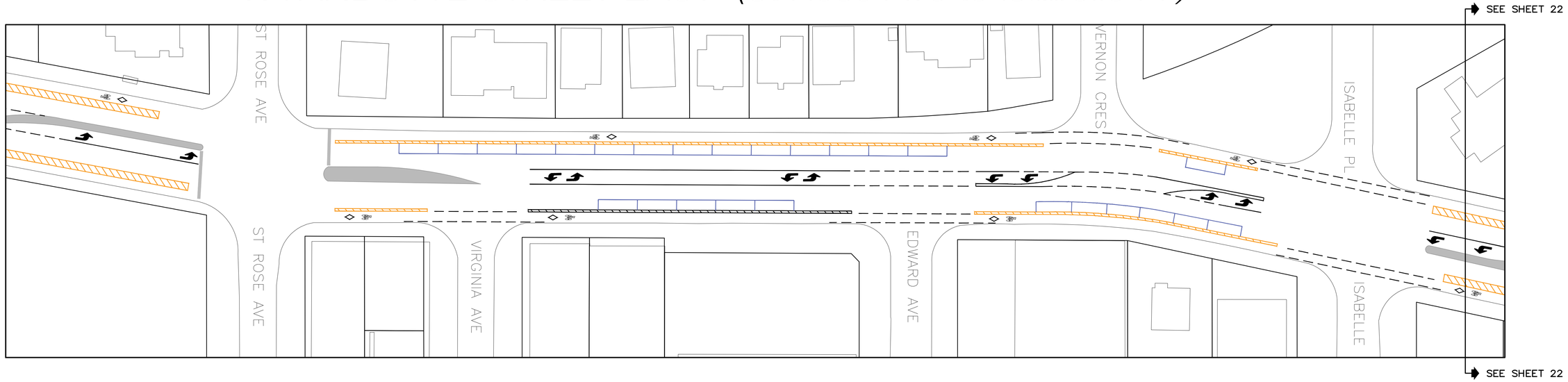
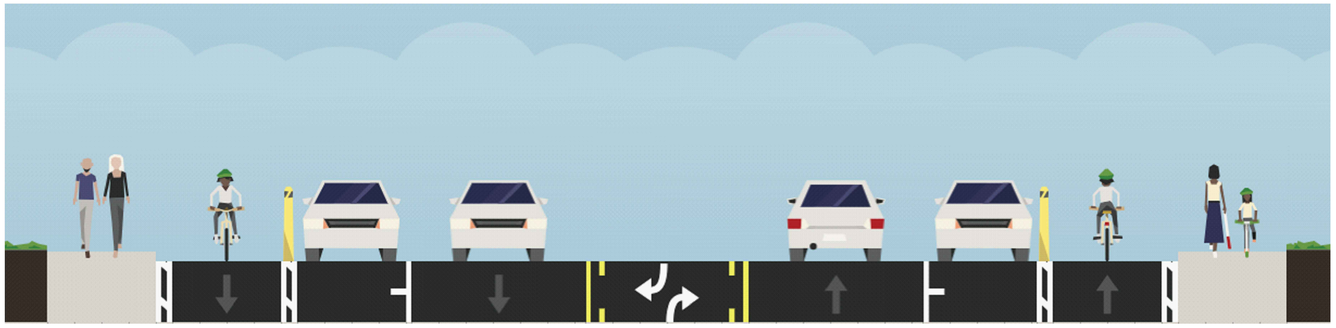
SHEET 20 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (St Rose Ave to Isabelle Pl)





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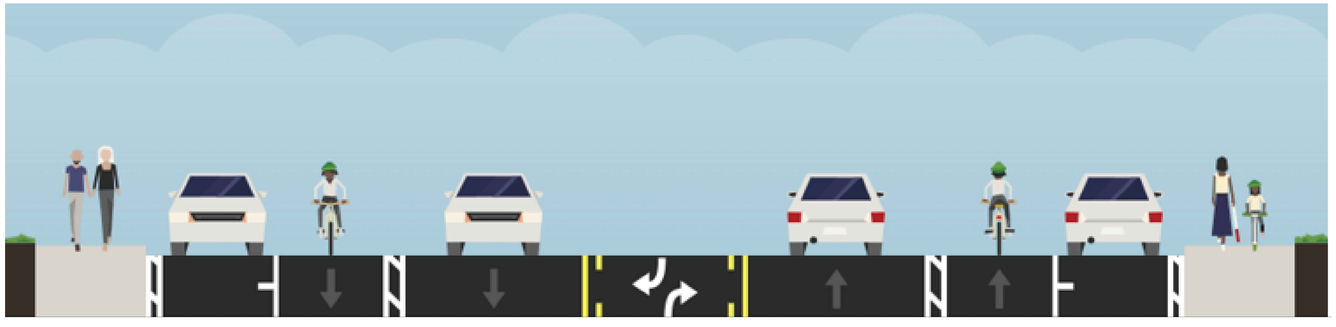

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DEVONSHIRE ROAD TO WATSON AVENUE

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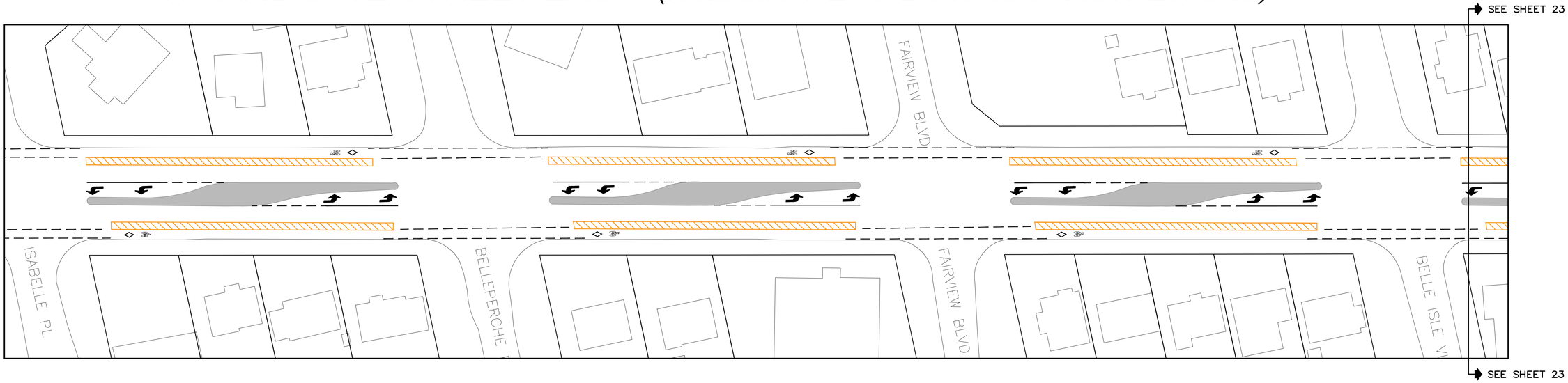
DRAWING No. .
SHEET 21 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Isabelle PL to Belle Isle View Blvd to)



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WYANDOTTE STREET EAST CORRIDOR REVIEW
DEVONSHIRE ROAD TO WATSON AVENUE

TENDER No. 1

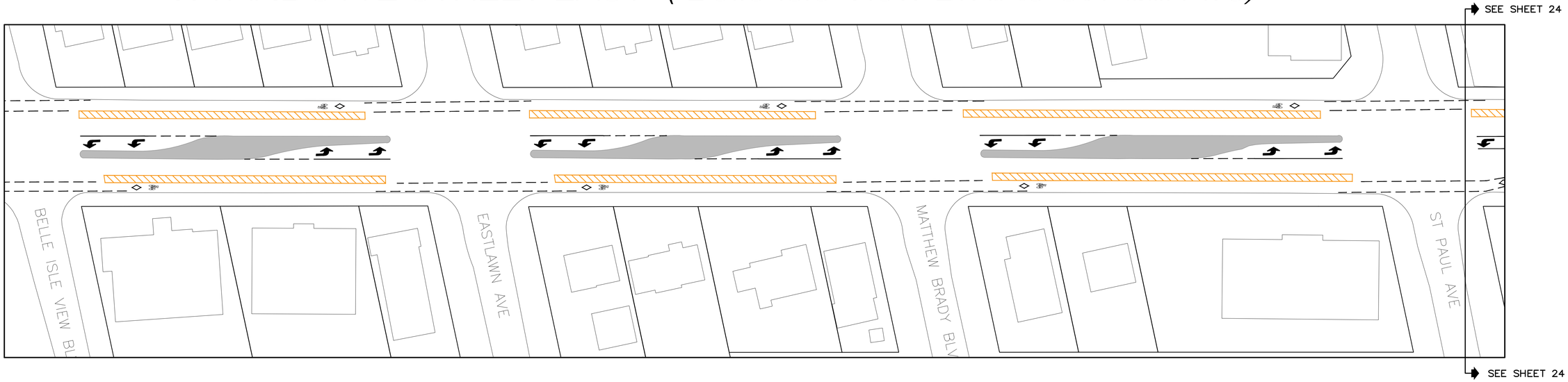
ACCOUNT No. 1

DRAWING No. .

SHEET 22 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (Belle Isle View Blvd to St Paul Ave)



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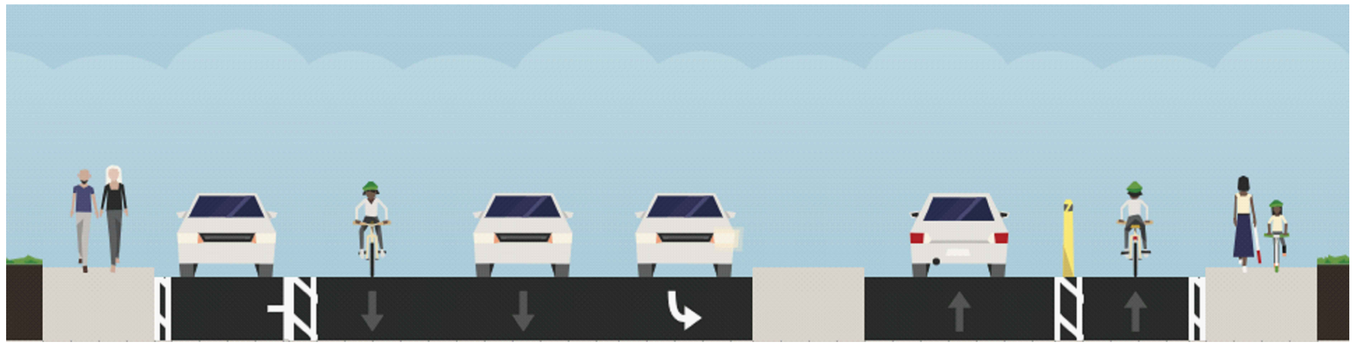
SHEET 23 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

WYANDOTTE STREET EAST (St Paul Ave to Frank Ave)



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SHEET 24 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

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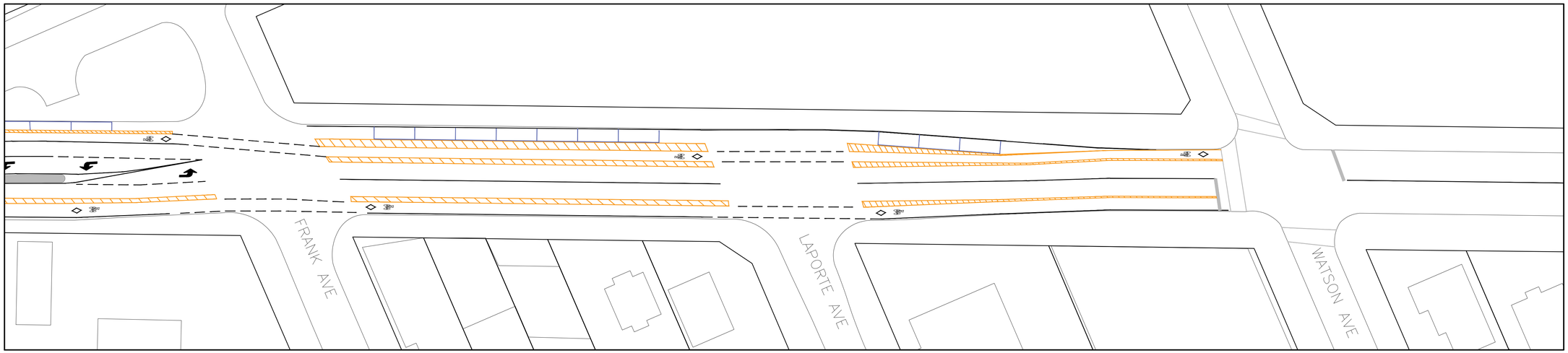

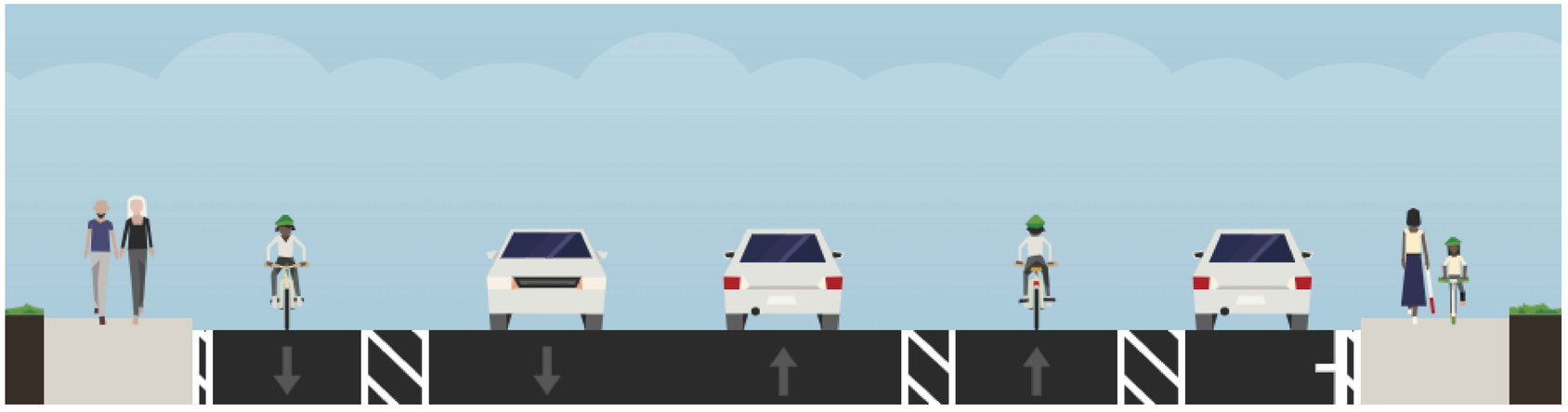

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TENDER No. 1
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SHEET 25 OF .

May 13, 2024 - 4:04pm C:\Users\benson\AppData\Local\Temp\AcPublish_22852\S-x Wyandotte St East.dwg

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 75/2023

Subject: Bike Parking Policy – City Wide

Reference:

Date to Council: May 29, 2024
Author: Chris Gerardi
Policy Analyst
519 255 6100 ext. 6830
cgerardi@citywindsor.ca

Public Works - Operations
Report Date: November 9, 2023
Clerk's File #: ST2023

To: Mayor and Members of City Council

Recommendation:

THAT report S 75/2023, "Bike Parking Policy", **BE RECEIVED** for information; and,

THAT the existing Policy for Bicycle Parking on Public Property **BE RESCINDED** and **BE REPLACED** with the Bike Parking Policy and associated attachments as appended in report S 75/2023; and,

THAT Administration **REPORT BACK** to the Environment, Transportation and Public Safety Standing Committee on the costs to retro-fit existing facilities, to meet the new Bike Parking Policy requirements, including identifying priorities and funding requirements which would be required for installation and maintenance.

Executive Summary:

N/A

Background:

The City of Windsor Policy for Bicycle Parking on Public Property from 2004 is the most recent guiding document for bicycle parking standards within Windsor. The requirement for a new Bicycle Parking Policy was identified as part of the Active Transportation Master Plan:

A Bicycle Parking Policy framework was presented to the Windsor Bicycling Committee and bike parking subcommittee in April 2021 and an update on development was presented in November 2021. A detailed Standards and Guidelines document has been created to help provide more clarity on what is considered good practice for providing bicycle parking for administration, developers and the public. The Bike Parking Policy has been developed with a number of procedures to address a variety of items such as

temporary bicycle parking at special events, bicycle parking in the public right-of-way and at City facilities.

ACTION 3B.1: DEVELOP AND IMPLEMENT A BIKE PARKING POLICY
The City should develop a bike parking policy to outline criteria for bicycle parking in the public right-of-way (including bicycle corrals as noted in Action 3B.4) and at public facilities (as noted in Action 3B.3), as well as to support businesses in existing developments to retrofit existing buildings to provide bicycle parking and other amenities, such as storage and change room facilities to support employees' cycling to work year-round. Adding these facilities would likely require a reallocation of existing motor vehicle parking to bicycle parking.

A framework for the Bicycle Parking Policy was presented and endorsed by the Windsor Bicycling Committee with the following direction:

1. *That the broad objectives articulated in the Bike Parking Policy Framework **BE ENDORSED;** and,*
2. *That within that the Framework, that Administration **BE REQUESTED** to develop specific proposals for Council to consider capital incentives to promote investments in end of trip bike parking facilities to promote stronger commuter cycling adoption; and,*
3. *That Crime Prevention through Environmental Design (CPTED) principles **CONTINUE** to be a point of emphasis as the Bike Parking policy be developed; and,*
4. *That the City of Windsor **BE REQUESTED** to create minimum bike parking capacity requirements for City Parks and to follow CPTED principles when determining where to locate bike parking facilities with the view to encourage park users to bike to parks; and,*
5. *That the City of Windsor **BE REQUESTED** to continue to embed consideration for bike parking facilities where appropriate in terms of land use and site design; and,*
6. *That consideration **BE AFFORDED** to provide bike parking facilities for a variety of bicycles; and,*
7. *That the City of Windsor **BE REQUESTED** to increase the required number of bike parking spaces (minimum) for all future developments; and,*
8. *That the implementation of a Bike Parking policy for the Sandwich South Lands that align with the goal of the Active Transportation Master Plan **BE SUPPORTED;** and,*
9. That the Bike Parking Policy **BE REVISITED** every four years commensurate with the term of City Council.

At the Windsor Bicycling Committee meeting held on December 13 2022, the Policy was presented and the direction was given that:

*That the proposed Draft Bike Parking Policy **BE SUPPORTED**.*

Report S 75/2023 will speak to the directions related to bicycle parking on City of Windsor property.

Policy and Procedures

The Bicycle Parking Policy development process considered all of the requirements outlined in the ATMP and per Council Direction. The proposed Bicycle Parking Policy is comprised of three procedures and a standards and guidelines document. The following are proposed:

0. Policy – Bicycle Parking
1. Bicycle Parking Standards and Guidelines
2. Procedure – Bicycle Parking at City Facilities and Buildings
3. Procedure – Bicycle Parking in the Public Right-of-Way
4. Procedure – Temporary Bicycle Parking for Events

Standards and Guidelines

The Bicycle Parking Standards and Guidelines are created to help form the foundation of the policy and provide information on important aspects of selecting the most appropriate infrastructure for bicycle parking spaces. The guidelines cover the following information:

- Goals and objectives of bicycle parking storage
- Definitions of long and short term bicycle parking
- Accessibility
- Design of bicycle parking spaces; size, materials, installation, spacing
- Security

The Crime Prevention through Environmental Design (CPTED) Principles were a point of emphasis to form the standards and guidelines. Windsor Police was consulted and CPTED principles are applied by including the following requirements in the policy:

- Bike parking will be located in a well-lit location where it is oriented to be highly visible to both pedestrians and nearby passing vehicular traffic. The less a bicycle area is set back from a roadway or well travelled pedestrian route, the more “visually accountable” the outcome which elevates theft deterrence.

- Bike parking should be visible from the main entrance of a building; sight lines should be clear from varying angles towards the bicycle parking area.

- Every attempt should be made to locate the bike parking within 15 meters of the main entrance of a building and within a fully unobstructed view of the corridor.

- Bicycle rack styles should be used which allow the bike to be locked with the frame and at least one other wheel using a U-lock

Table 1 – Summary of Short-Term and Long-Term Bicycle Parking

Component	Short-Term Bicycle Parking	Long-Term Bicycle Parking
Typical length of time	Between a few minutes and a few hours	Several hours, overnight
Typical Locations, Uses	Commercial/Retail, Libraries, Parks, Community Centres, etc.	Residential, Employment & Transit Stations
Typical Users	Visitors	Residents, Employees, Bicycle & Ride Commuters
Accessibility/Availability & Security	Easy access, available to the public. Should be located close to a building entrance for the sake of convenience. Reliant on public exposure and natural surveillance.	Secured access, requires registration and the use of a key device. Actively monitored by CCTV and/or by security staff.
Types of infrastructure	Bicycle Racks (on-street, and on private or public property) Post and Ring Bicycle Racks On-street Bicycle Corrals (sets of bicycle racks installed within a parking lane at an intersection)	Bicycle Lockers – Individual lockers that can store 1 bicycle. Bicycle Cages – Caged & sheltered enclosures, typically attached to offices and/or multi-unit dwellings. Bicycle Rooms – Rooms within buildings specifically for bicycle parking. Secured Parking Areas – A separate building or an extension dedicated to bicycle parking.
Weather Protection	Optional: Can be provided in the form of bicycle shelters or awnings.	Required.

Procedure – Bicycle Parking at City Facilities and Buildings

Bicycle parking at City facilities and buildings outlines the locations where bike parking should be provided or increased throughout Windsor. These areas, other than within the right-of-way, include parks, libraries, pools, offices, community centers and arenas. Bicycle parking should be provided for short term and long-term use depending on the location as outlined in the procedure.

Bicycle parking needs will be assessed according to the intensity and type of use to be serviced. At minimum, bicycle parking should be provided in quantities as outlined in the Zoning By-Law update for bicycle parking, covered through this report.

End-of-trip facilities will be important to encourage cycling as well as provide important services to cyclists when they reach their destinations. These end-of-trip facilities should include access to drinking water, shower and change stations, washrooms, bicycle repair stations and e-bike charging stations if required. The requirement for a particular type of end-of-trip facility will depend on the City facility or building as outlined in the procedure.

Transit terminals will also benefit with an increase in bicycle parking, particularly long-term bicycle parking. These spaces will be provided in accordance with the Bicycle Parking Standards and Guidelines.

Procedure – Bicycle Parking in the Public Right-of-Way

Bicycle parking within the City right-of-way should follow the Standards and Guidelines identified through the Policy. Increased bicycle parking should be provided in commercial corridors with high pedestrian and cyclist traffic, where vehicle parking is typically provided by on-street parking. These areas in the City of Windsor fall within the BIAs.

Post and Ring Program

The Post and Ring Program in the public right-of-way procedure outlines the requirements for placement of bicycle racks in the public right-of-way. BIAs or other privately funded groups can deviate from the standards to include changes to the lettering and cap provided they fund the difference between the City Standard and their selection. Examples of post and ring bicycle parking is provided in Figure 1.

Figure 1: Post and Ring Bike Racks in Walkerville, Windsor ON
Location: South-East Corner of Wyandotte and Lincoln Rd.

The need for bicycle parking in the right-of-way outside of BIAs is seen as limited. Most commercial corridors with high pedestrian and cyclist traffic are located within one of the City's BIAs. Where feasible, business owners should provide bike parking on private property. However, outside of the BIA Implementation of the post and ring program will require applicants to apply for encroachment agreements.

Creation of a City wide, fully funded, Post and Ring Program was considered. The cost to inspect, maintain and replace Post and Ring racks can be extensive. They can be hit by motor vehicle collisions and are often targeted for vandalism and theft. Currently, this maintenance is paid for out of BIA funds which are limited. Should Council choose to consider adopting a city wide, fully funded, Post and Ring program, Administration could report back to Council on the estimated funding for both installation and maintenance.

If a program were created to service just the areas outside the BIAs, that would create an inconsistent level of service where the BIAs are paying for something that businesses outside the BIAs are receiving for free. Since the need for right-of-way bicycle parking outside BIAs is seen as minimal, it would be simpler to encourage private property bicycle parking and, where warranted, rely on encroachment agreements.

The cost of an encroachment application is currently $899.60 plus the current annual fee of $99.50. The Right-of-Way Division in the Engineering Department will evaluate the application to determine if bicycle parking is warranted and provide a pre and post-installation inspection and then yearly inspections to ensure on-going compliance with City standards.

For the life of the encroachment, the applicant will be responsible to provide a Certificate of Insurance in the Applicant's legal name confirming the Applicant has required insurance coverage. The Certificate of Insurance must be satisfactory in form and content to the City's Risk Management Division, and must contain an endorsement naming "The Corporation of the City of Windsor" as an additional insured with a 30-day cancellation notice requirement.

Bicycle Corrals

A Bike Corral Program is outlined in the procedure with details on application. Bike Corrals are used as a method to provide bicycle parking in greater quantities in the traditional auto on-street parking lane, along the curb. Corrals can be installed seasonally within an existing automobile parking spot or intersection corner if it does not pose any sight line or transit concerns. Examples of bicycle corrals are provided in Figure 2 and Figure 3.

Figure 2 (LEFT): Bicycle Corral in New York City & Figure 2 (RIGHT): Bicycle Corral in Portland

Sources: https://nyc.streetsblog.org/2020/02/14/after-years-of-neglect-dots-bike-corral-program-is-back/
https://www.portlandoregon.gov/transportation/article/481528

Bicycle corrals provide more parking than the Post and Ring Program. However, since there is a need to remove on-street parking to accommodate Bicycle corrals and a need to fund the maintenance and seasonal installation and removal of bicycle corrals, corrals should be limited to situations were the Post and Ring Program is unable to meet the Bicycle parking needs of the area. For those same reasons bicycle corrals in the ROW will be limited to BIAs.

- If a BIA requests a Bicycle corral, locations will be reviewed by administration to determine whether bicycle corrals are able to be safely implemented. Bicycle corrals will be useful in areas of the city with high pedestrian or cyclist traffic and should be placed in a visible location to encourage a passerby to use them.

Bicycle corrals should not be in areas which will obstruct:

- Bus stops
- Access to fire hydrants
- Turning bus movements
- Locations of manholes and sewer valves
- Parking meters

Required spacing and buffers are outlined in the Public Right-of-Way Procedure. Additional barriers may be provided to provide an increased physical separation from a travel lane.

The Bike corral warrant process first determines that private side bike parking and the Post & Ring Program is unable to meet the need for Bike Parking in the area. City staff and the BIA will work together to choose a suitable location, free from obstruction and agreeable to both parties. City staff will preform the installation, maintenance, and removal of bike corrals. The added cost associated with maintenance and removal of the bicycle corral will be paid for by the BIA.

Procedure – Temporary Bicycle Parking for Events

Temporary or event bicycle parking can be very useful and beneficial to a community in many ways including:

- Reducing the number of motor vehicles trips for an event and help with the parking demand, saving space.
- Reducing the need for cyclists to find a random location to lock their bikes when there are not enough racks in the right-of-way.
- Promoting the use of cycling to travel to special events, providing an enjoyable experience.
- Decreasing the number of people walking around their bicycles and special events.

Temporary event bicycle parking may be provided by event organizers for their special events in Windsor. Temporary bicycle racks which are portable and modular are required for event attendees to park their bicycles. A bike parking sign should be placed in a visible area indicating available bike parking. Private event coordinators will be responsible to provide their own staff and/or volunteers to monitor and provide a valet service for event attendees who wish to use the temporary bicycle parking.

Risk Analysis:

N/A

Climate Change Risks

Climate Change Mitigation:

Increased and strategically placed bicycle parking because of the Bicycle Parking Policy has the potential to decrease greenhouse gas emissions as people opt to use bicycles to travel to their destinations as opposed to using a vehicle. This shift from personal motor vehicles to other travel modes is an important element to achieving the greenhouse gas reduction targets identified in the Community Energy Plan.

Climate Change Adaptation:

As climate change presents more global and local threats, a shift to active transportation will become more sustainable and necessary. Including the new Bicycle Parking Policy within the City of Windsor is a right step towards climate change adaptation. A decrease in the number of days per year with temperatures below -10 degrees Celsius is likely to increase the attractiveness of cycling as a year-round travel mode, which will increase the demand for strategic bicycle parking.

Financial Matters:

There is no immediate financial impact to receiving this report and approving the proposed policy.

As laid out in this report, the responsibility of bicycle parking will vary depending on the location. The budgets related to bicycle parking are spread across different City departments.

As the City's bicycle parking infrastructure is expanded across the City, there will be upward pressure on existing operating and capital budget allotments to fund the construction and on-going maintenance of the added bicycle parking. Departments will be required to update existing capital plans on a project-by-project basis as needed to meet the requirements set out in the new policy. Departments will also be required to develop and identify operating budget impacts for the ongoing maintenance required that can be presented to Council for consideration as new facilities are installed.

Current City practices related to providing bicycle parking at City facilities and buildings are generally compliant with the proposed policy and therefore the impact to existing capital budgets should be minimal. As transit facilities, buildings and parks are renovated and rehabilitated it is standard to install short term bicycle parking, as is adding bicycle parking during streetscaping projects. The current budgetary gaps will relate to the long-term bicycling parking both in terms of availability and long-term bicycle parking as well as the security needs laid out in appendix B.

Once the Policy is adopted, Administration will assess existing City facilities and their bicycle parking. A report will be prepared to outline the cost to retrofit these existing facilities with bike facilities to meet the revised policy requirements. The report will also identify priorities and funding requirements which would be required for implementation and maintenance.

Currently, all bicycle parking in the Public Right-of-Way is located within the BIAs. Construction and ongoing maintenance costs are the responsibility of those BIAs.

Outside the BIAs, bike parking in the Public Right-of-Way will be addressed through encroachment agreements. Interested property owners could follow the City of Windsor existing encroachment application process to install Bicycle Parking in the ROW fronting the owner's property. The property owner will bear the cost of application, installation, and maintenance of the Bicycle Parking to City of Windsor Standards.

Consultations:

Barry Horrobin, Inspector Jennifer Crosby, Windsor Police Service

Michelle Staadegaard, Manager of Culture and Events

Dave Nicholls, Manager of Parks Operations

Karina Richters, Supervisor Environment Sustainability & Climate Change

Jamie Scott, Manager Facilities Operations

Adam Pillon, Manager of Right-of-Way

Sandy Mio, Technologist III

Roberta Harrison, Coordinator Maintenance

Alex Vucinic, Manager of Purchasing & Risk Management

Greg Atkinson, Manager of Development Planning / Deputy City Planner

Neil Robertson, Manager of Urban Design / Deputy City Planner

Laura Ash, Project Lead, Parks Development

Natasha Gabbana, Senior Manager of Asset Planning

Michael Dennis, Manager of Strategic Budget Development and Control

Conclusion:

The existing Bicycle Parking Policy on Private Property from 2004 requires an update to include more guidelines and procedures on bicycle parking at City Facilities and Buildings, in the right-of-way and temporarily for special events. Crime Prevention through Environmental Design principles have been used throughout the development of an updated Bicycle Parking Policy which includes all the updated procedures.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator – Public Works
James Chacko	Executive Director of Parks & Facilities
Ray Mensour	Commissioner, Community Services
Shawna Boakes	Executive Director of Operations/ Deputy City Engineer
Mark Winterton	Commissioner, Infrastructure Services (A)
Janice Guthrie	Commissioner, Finance & City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

Appendix A 0. Policy – Bicycle Parking
Appendix B 1. Bicycle Parking Standards and Guidelines
Appendix C 2. Procedure – Bicycle Parking at City Facilities and Buildings
Appendix D 3. Procedure – Bicycle Parking in the Public Right-of-Way
Appendix E 4. Procedure – Temporary Bicycle Parking for Events

THE CORPORATION OF THE CITY OF WINDSOR
POLICY

Service Area:	**Office of the Commissioner of Infrastructure Services**	Policy No.:	
Department:	**Public Works Operations**	Approval Date:	
Division:	Transportation Planning	Approved By:	
		Effective Date:	**On Approval**
Subject:	**Bicycle Parking Policy**	Procedure Ref.:	
Review Date:		*Pages:*	Replaces:
Prepared By:	R. Toufeili, Policy Analyst C. Gerardi, Policy Analyst		Date:

1. POLICY

1.1. This policy governs the implementation of bicycle parking for the Corporation of the City of Windsor.

2. PURPOSE

2.1. The purpose of this policy is to provide Administration and the general public with a framework on how bicycle parking will be implemented in order to support active transportation throughout the City of Windsor.

3. SCOPE

3.1. This policy covers:
- **3.1.1.** bicycle space requirements and standards;
- **3.1.2.** bicycle parking at City facilities and buildings;
- **3.1.3.** bicycle parking in the right-of-way;
- **3.1.4.** temporary bicycle parking for events; and,
- **3.1.5.** bicycle parking to support transit facilities.

3.2. This policy should be utilized in coordination with the City's Active Transportation Master Plan and the Bicycle Parking on Public Property Policy.

4. RESPONSIBILITY

4.1. Council has authority to approve implementation of bicycle parking under this policy and is responsible for approving amendments to this policy.

4.2. Administration is responsible for carrying out this policy as follows:

4.2.1. The City Engineer and the Commissioner of Economic Development and Innovation are corporate leads for all transportation and associated public safety programs and are responsible for initiating amendments to the Bicycle Parking Policy.

4.2.2. The Transportation Planning Senior Engineer is responsible for:

4.2.2.1. Overseeing implementation of this policy,

4.2.2.2. Bringing forward bicycle parking plans before Council for approval,
4.2.2.3. Recommending operating and capital budget expenditures related to bicycle parking, and
4.2.2.4. Recommending amendments to this policy to Council.

5. GOVERNING RULES AND REGULATIONS

5.1. This policy will be implemented in accordance with the following bicycle parking guidelines and procedures:
- **5.1.1.** Bicycle Parking Standards and Guidelines
- **5.1.2.** Bicycle Parking at City Facilities and Buildings
- **5.1.3.** Bicycle Parking in the Public Right-of-Way
- **5.1.4.** Temporary Bicycle Parking for Events

5.2. Where there are existing bicycle parking deficiencies as it relates to this policy, Council may put forward locations to be prioritized and brought to compliance in steps over a period of time.

6. RECORDS, FORMS AND ATTACHMENTS

6.1. Records for this policy shall be prepared and retained in accordance with Records Retention By-Law 21-2013, as amended.

6.2. Attachments:
- **6.2.1.** Attachment 1: Bicycle Parking Standards and Guidelines
- **6.2.2.** Attachment 2: Procedure – Bicycle Parking at City Facilities and Buildings
- **6.2.3.** Attachment 3: Procedure – Bicycle Parking in the Public Right-of-Way
- **6.2.4.** Attachment 4: Procedure – Temporary Bicycle Parking for Events

Bicycle Parking Standards and Guidelines

1.0 Introduction

The Bicycle Parking Policy Guidelines provides information on the expected standards of short-term and long-term bicycle parking spaces. These guidelines are intended to serve developers and City Administration in selecting the appropriate bicycle parking racks for bicycle parking on private property and in the public right-of-way.

1.1 Bicycle Parking Guidelines Goals and Objectives

- Provide increased community connectivity by facilitating bicycle storage for cyclists throughout the city;
- Promoting active transportation by increasing secure bicycle parking;
- Increasing convenience for cyclists as new developments are built;
- Creating a culture shift through increased and secured bicycle parking.

2.0 Definitions

The following definitions are applicable to this policy, and are included in zoning by-law 8600:

Bicycle parking space means an area used for the parking of an operable *bicycle*.

Short-term bicycle parking space means a *bicycle parking space* for the use by visitors of a *building.* These spaces are located within 15 m of, and is visible from, the main entrance of the *building* the *bicycle parking space* is intended to serve.

Long-term bicycle parking space means a *bicycle parking space* for the use by occupants or tenants of a *building.* These are located within a *building* or sheltered *structure* with a secure means of access.

Figure 1 - Short-Term to Long-Term Bicycle Parking
Source: Association of Pedestrian and Bicycle Professionals

A summary of components for short-term and long-term bicycle parking is shown in **Table 1**. Further details are provided in the next sections of the Policy

Table 1 – Summary of Short-Term and Long-Term Bicycle Parking

Component	Short-Term Bicycle Parking	Long-Term Bicycle Parking
Typical length of time	Between a few minutes and a few hours	Several hours, overnight
Typical Locations, Uses	Commercial/Retail, Libraries, Parks, Community Centres, etc.	Residential, Employment & Transit Stations
Typical Users	Visitors	Residents, Employees, Bicycle & Ride Commuters
Accessibility/Availability & Security	Easy access, available to the public. Should be located close to a building entrance for the sake of convenience. Reliant on public exposure and natural surveillance.	Secured access, requires registration and the use of a key device. Actively monitored by CCTV and/or by security staff.
Types of infrastructure	Bicycle Racks (on-street, and on private or public property) Post and Ring Bicycle Racks On-street Bicycle Corrals (sets of bicycle racks installed within a parking lane at an intersection)	Bicycle Lockers – Individual lockers that can store 1 bicycle. Bicycle Cages – Caged & sheltered enclosures, typically attached to offices and/or multi-unit dwellings. Bicycle Rooms – Rooms within buildings specifically for bicycle parking. Secured Parking Areas – A separate building or an extension dedicated to bicycle parking.
Weather Protection	Optional: Can be provided in the form of bicycle shelters or awnings.	Required.

Sources: the Association of Pedestrian and Bicycle Professionals (APBP), City of Toronto, Seattle Department of Transportation (SDOT)

3.0 Short-Term Bicycle Parking

Short-term bicycle parking is primarily meant to be used by the visitors of a building.

3.1 Accessibility

The following accessibility criteria should be used when providing short-term parking spaces:

- Placement on the ground floor of the building location; free of stairs or obstacles to access
- In close proximity to the building entrance; within 15 meters
- Way-finding signage should be provided to help guide cyclists to the space

3.2 Design

The following should be provided as part of the design for a bicycle rack used for short-term bicycle parking:

- Supports the bicycle upright without putting stress on the wheels
- Allows locking of the bicycle frame along with one or two wheels through the use of a U-lock
- Is securely anchored to the ground
- Resists, cutting, bending and deformation

3.2.1 Size

A bicycle parking space parked horizontally should have minimum dimensions of 1.8 meters in length, 0.6 meters of width and 1.9 meters of vertical clearance from the ground. For bicycles parked in a vertical position the required space is 0.6 metres by 1.2 metres with a vertical dimension of 1.9 metres.

3.2.2 Materials

Materials for bicycle racks should be long lasting and strong. The following criteria should apply to the materials used for the bicycle racks:

- Industrial grade materials or galvanized steel should be used
- Wood, materials with the potential to rust should be avoided
- Malleable or materials which are easily bent should be avoided
- The outer surface should be smooth in order to prevent any damages or scratches to the bicycle
- Avoid materials that weaken when welded to prevent broken racks and theft

3.2.3 Installation

Bicycle racks should be secured and installed properly using the options and as detailed in Table 2 below:

Note: It is highly recommend that all racks be on concrete pads.

Table 2 – Anchoring Surfaces and Methods

Surface	Rack Base	Anchoring Methods	Notes
Concrete (sidewalk, pad, poured footing, or non-post-tensioned floor)	Embedded leg	Embed (dig post hole, support rack temporarily, fill hole with concrete, allow to set, remove temporary support)	Suitable for new sidewalk construction. Permanent. Difficult to replace when damaged.
	Surface flange, flat-bar base, or base frame.	Wedge anchor bolt Tamper-proof spike Industrial adhesive	Suitable for new or existing sidewalk. Easy to replace when damaged. Should not be installed over most vaulted sidewalks. Stainless steel flanges recommended to prevent rust stains on concrete.
Concrete post-tensioned floor	Flat-bar base	Industrial adhesive	Post-tensioned concrete floors should not be drilled.
Asphalt	Embedded leg	Provide a concrete footing, proceed as above	Do not anchor directly into asphalt.
	Surface flange		
	Base rail or frame	Landscape nails (6” to 12” long spikes, typically 1/4” to 3/8” in diameter)	Drill pilot hole through asphalt using hammer drill and masonry bit. Drive nails with sledgehammer.
Unpaved	Embedded leg	Provide a concrete footing, proceed as above	Do not anchor directly into ground.
	Surface flange		
	Base rail or frame	Landscape nails	Drive nails with sledgehammer.

Adapted from APBP Bicycle Parking Guidelines

3.2.4 Spacing

When bicycle racks are installed they require adequate space to manoeuver. **Table 3,** adapted from *City of Toronto Guidelines for Design and Management of Bicycle Parking Facilities* and *City of Mississauga Bicycle Parking Zoning By-Law Directions*, outlines the requirements for spacing when selecting the location and design of bicycle parking. Furthermore, **Figures 2 to 5** is shown below on these requirements.

Table 3 – Bicycle Parking Spacing Requirements

Situation	Requirements
Distance between rack and wall/obstacle	- Minimum **0.45 m** if bicycles parked parallel to obstacle; - Minimum **2.5 m** if bicycles parked perpendicular to obstacle and rack has double-sided access; - Minimum **0.6 m** if bicycles parked perpendicular to obstacle and rack has single-sided access (side facing wall would not accommodate bicycles).
Aisle width	- Preferred spacing: **1.8 m** for typical bicycle racks this leaves approximately 4.2 m between racks, however this spacing will differ depending on the design of the rack.
Space between rack ends (linear series of racks placed end to end)	- **0.9m** for maximum parking capacity.
Distance between rack and wall, curb or other obstacle	- Minimum **1.5 m** for racks perpendicular to wall or other obstacle - Minimum **0.7m** for racks parallel to wall, or other obstacle
Distance between individual racks	- Minimum **2.5 m** for racks parallel to wall, or other obstacle or racks (3.5 m preferred in areas with high bicycle parking turnover). - Minimum **1.0 m** for racks perpendicular to wall or other obstacle.
Vertical bicycle racks and clearances	- Horizontal bicycle parking: **1.9 m** minimum clearance - Stacked bicycle parking: minimum **1.2 m** vertical clearance required - Vertically bicycle parking: **1.9 m** minimum height and **1.2 m** minimum length
Special Considerations	- In locations where trailers, cargo bikes and long bikes frequent (ex. grocery stores, parks, schools) the portions of the bicycles racks on the ground should have an additional **0.9m** of in-line clearance.

Adapted from City of Toronto Guidelines for Design and Management of Bicycle Parking Facilities and Mississauga Bicycle Parking Zoning By-Law Directions

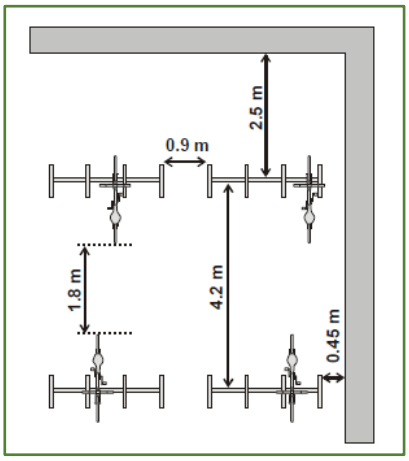

Figure 2 - Spacing for Multi-Bicycle Racks

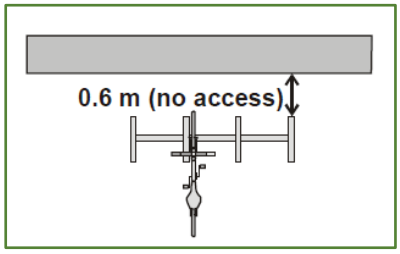

Figure 4 - Spacing for racks with single sided access

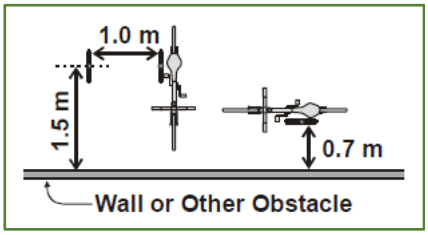

Figure 3 - Spacing required for different orientations

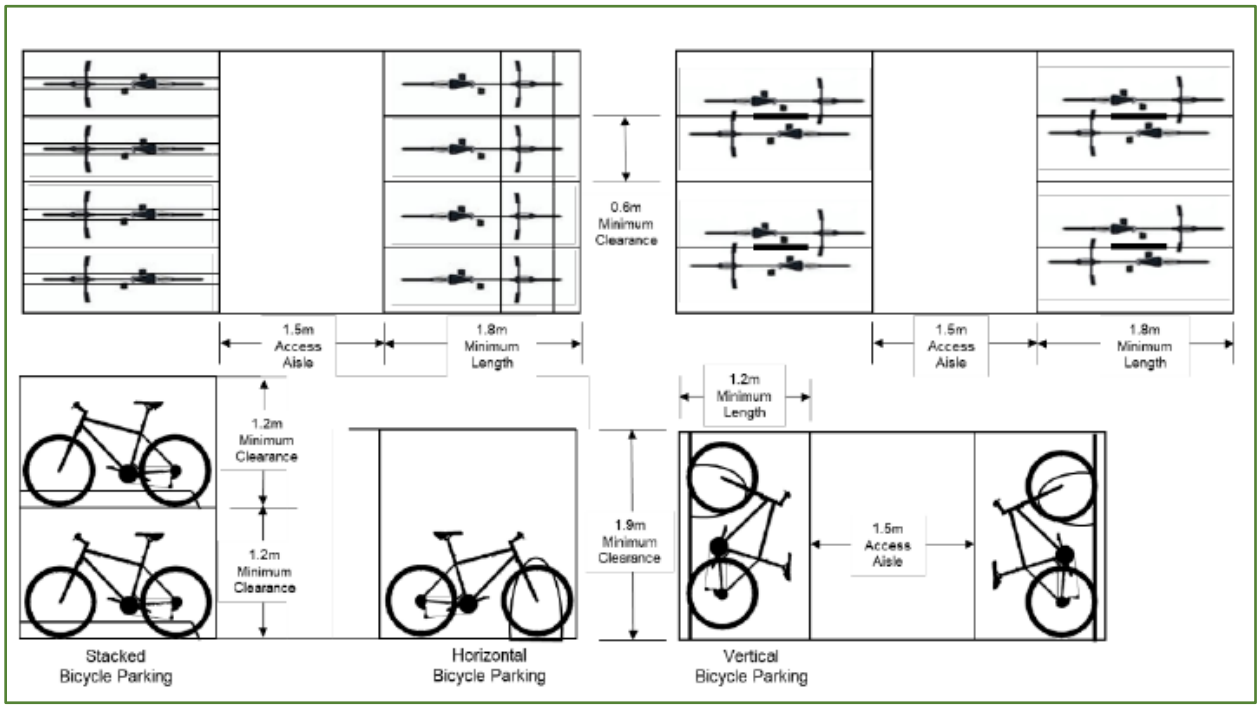

Figure 5 - Vertical clearances for varying bicycle spaces

3.3 Security

Security is required in order to prevent theft, with the following requirements:

- Areas where spaces are placed should be well lit and visible
- Spaces should be anchored and installed as per section 3.2.3 to ensure that they can not be easily damaged or moved
- Locking mechanisms do not need to be provided with or on the rack however the rack should allow for locking of the bicycle frame along with one or two wheels through the use of a U-lock

3.4 Additional Considerations

The following are additional considerations when providing short-term bicycle parking and racks in the city:

- Placing the space in a sheltered area for weather protection
- Long-term bicycle parking measures can apply for short-term use if increased shelter and security is preferred (section 4.0)

3.4.1 The following bicycle racks are preferred based on meeting important performance criteria:

- *Post and Ring*: this is a common style of bicycle rack which is less prone to unintended perpendicular parking.
- *Inverted U*: also called staple or loop bicycle rack, this rack has two points of ground contact and can be installed in series to create a larger parking area.
- *Wheelwell-secure*: this cradles one wheel and contains bicycles wells, however it doesn't not accommodate as many bicycle types as the inverted U and post and ring style racks.

4.0 Long-Term Bicycle Parking

Long-term bicycle parking is primarily meant to be used by the occupants or tenants of a building. This includes building residents and routine users within a workplace. Long-term bicycle parking may also be used by visitors. This parking provides a more secured and sheltered space for cyclists to park their bicycles in comparison to short-term bicycle parking.

Some common examples of long-term bicycle parking include:

- Room within a residential building or workplace;
- Secure enclosures within a parking garage or lot;
- Bicycle lockers in front of a workplace; and,
- Bicycle lockers at a transit center.

4.1 Accessibility

The following accessibility criteria should be used when providing long-term parking spaces:

- Free of any major obstacles to access; ground floor preferred
- Way-finding signage should be provided to help guide cyclists to the space as they may not always be in obvious locations based on limited space availability at the site
- The space should be in good condition and simple to operate
- Should be placed in areas which do not create a blind spot for motor vehicles on the site

4.2 Design

4.2.2 Bicycle Lockers

The following are considerations for bicycle lockers:

	Description
Locking Mechanism	Control Access Systems: - Keys - Electronic Keypad

	- Swipe Cards - Coin Operated - Bluetooth Technologies - Personal Locks
Models	- Secure durable lockers are made of materials which are long lasting and durable. These should withstand regular use and intense weather conditions. Models which are specifically designed for long-term bicycle parking should be used. - Transparent panels can be placed on the lockers if surveillance of locker contents is desired. - Models may be stackable if desired based on available space and demand.
Installation	- Bicycle Lockers should be installed on a level surface. - Sufficient clearance is required for locker doors. - Concrete surfaces are ideal, however surfaces should be selected and matched to the model requirements. Anchor bolts should be used to fix lockers into place. - Bicycle Lockers are best placed away from sidewalks and areas with high pedestrian traffic.

4.2.3 Bicycle Cages

The following are considerations for bicycle cages:

	Description
Locking Mechanism	Control Access Systems: - Key - Swipe Cards or Pass
Models	- Racks are installed within the cage and bicycles are further locked to these racks - Smaller cages are preferred to limit the number of people with access to one cage - Made of tight and strong mesh or perforated metal sheets, with access through a solid door
Installation	- Can be installed in or outside of a building/parking garage - Bicycle racks must be firmly secured to the ground or vertical structures - A single cage of 5.6 m x 5.4 m can accommodate approximately 20 bicycles. A cage of this size occupies the same area as two car parking spaces.

4.2.4 Indoor Bicycle Storage

The following are considerations for indoor bicycle storage spaces through a parking garage or bicycle rooms:

	Description
Locking Mechanism	Controlled Access Systems: - Keys - Electronic Keypad - Swipe Cards - Bluetooth Technologies
Models	- Indoor storage can be provided in a parking garage; typically on the ground floor level to facilitate access for cyclists and to minimize interactions with vehicles in the parking garage. Bicycle cages or lockers can be provided within the garage.

	- A room within a building can be used to provide secure parking spaces; typically on the ground floor or near an elevator to facilitate access. Multiple rooms can be provided.
Installation	- Bicycle racks must be firmly secured within the area - Reserving an area in the bicycle room for self-serve bicycle repair and maintenance will add an additional level of service to the facility; features can include a bicycle stand, basic tools and/or an air pump.

4.3 Security

The following methods may be applied in order to provide secure and controlled access to long-term bicycle parking for users:

- Keyed, smartcard or Bluetooth access to the parking space
- Attendant overseeing the spaces and allowing people to access
- Leased space based on agreement with the property owners or managers
- Coin operated spaces

In addition, long-term bicycle parking spaces are not always placed in high traffic or visibility areas and it is advised that security cameras be placed in order to monitor the spaces.

THE CORPORATION OF THE CITY OF WINDSOR
PROCEDURE

Service Area:	**Office of the Commissioner of Infrastructure Services**	Procedure No.:	
Department:	**Public Works Operations**	Approval Date:	
Division:	Transportation Planning	Approved By:	
		Effective Date:	**On Approval**
Subject:	**Bicycle Parking at City Facilities and Buildings**	Policy Ref.:	Bicycle Parking Policy
		Pages:	Replaces:
Prepared By:	R. Toufeili, Policy Analyst C. Gerardi, Policy Analyst		Date:

1. PURPOSE

1.1. This procedure is intended to provide details for implementation of the Bicycle Parking Policy when providing bicycle parking at City facilities and buildings.

2. SCOPE

2.1. This procedure provides details and outlines requirements for providing bicycle parking at City of Windsor facilities and buildings.

3. RESPONSIBILITY

3.1. Responsibility for implementing this procedure is outlined in the Bicycle Parking Policy.

4. PROCEDURE

4.1. Bicycle parking should be provided at all City facilities and buildings including;
- **4.1.1.** Parks and splash pads;
- **4.1.2.** Libraries and art galleries;
- **4.1.3.** Pools (outdoor and indoor);
- **4.1.4.** City Hall and administrative offices;
- **4.1.5.** Community centers;
- **4.1.6.** Arenas and skating rinks;
- **4.1.7.** Transit terminals; and,
- **4.1.8.** Municipal parking lots and garages.

4.2. Short-Term and Long-Term Bicycle Parking

Bicycle parking may be provided for short-term and long-term use based on the facility type. All facilities, other than parks, splash pads and pools, should accommodate long-term bicycle parking. **Table 1** outlines the recommended requirements for short-term and long-term bicycle parking based on the City Facility.

Table 1 – Recommended Bicycle Parking Requirements for City Facilities

City Facility	Short-Term	Long-Term
Parks and Splash Pads	X	
Libraries and Art Galleries	X	X
Pools (Outdoor and Indoor)	X	X
City Hall and Administrative Offices	X	X
Community Centers	X	X
Arenas and Skating Rinks	X	X
Transit Terminals and Stops	X	X
Municipal City Parking Lots and Garages		X

Bicycle parking needs will be assessed according to the intensity and type of use to be serviced. At minimum, bicycle parking spaces should be provided in quantities as outlined in Zoning By-Law 8600. The capacity of the rack or spaces should be consistent with the bike parking needs in the area.
Multiple unit bike racks will be used if required to meet the bike parking needs of the area, subject to the approval of the manager of Urban Design & Community Development, in BIAs, and areas designed Civic Image, Schedule G; of the City's Official Plan only.

Per section 4.0 of the Bicycle Parking Standards and Guidelines, "Long-term bicycle parking is primarily meant to be used by the occupants or tenants of a building. This includes building residents and routine users within a workplace. Long-term bicycle parking may also be used by visitors."

Long term parking space users at these facilities will primarily be targeted to City employees.

Short-term bicycle parking should be provided near active areas such as playgrounds, splash pads, washrooms, organized sports fields or courts. It is also ideal to include temporary bike parking near public event spaces, picnic areas and scenic overlook points.

4.3. End-of-Trip Facilities

End-of-trip facilities are provided in order to provide increased convenience and reinforces the importance of bicycle parking. **Table 2** Outlines the ancillary

facilities which may be implemented at City facilities and buildings and the appropriate locations where they may be provided.

Table 2 – End-of-Trip Facilities for City Facilities and Buildings

End-of-trip Facility	Location
Water Fountains/Access to Drinking Water	- Parks and splash pads - Libraries and art galleries - Pools (outdoor and indoor) - City Hall and administrative offices - Community centers - Arenas and skating rinks
Shower and Change Stations	- Pools (outdoor and indoor) - City Hall and administrative offices - Community centers - Arenas and skating rinks
Washrooms	- Parks and splash pads - Libraries and art galleries - Pools (outdoor and indoor) - City Hall and administrative offices - Community centers - Arenas and skating rinks
Bicycle Repair Stations	- Parks and splash pads - Libraries and art galleries - Pools (outdoor and indoor) - City Hall and administrative offices - Community centers - Arenas and skating rinks
Electric Charging Station	- For consideration on a case-by-case basis.

4.4. Transit Terminals and Stops

4.4.1. Bicycle parking should be provided to support transit facilities. Long-term bicycle parking should be provided at transit terminals including the following locations:

4.4.1.1. Tecumseh Mall Bus Terminal

4.4.1.2. Downtown Bus Terminal

4.4.1.3. The Windsor Aquatic Center

4.5. Parking spaces (short-term and long-term) are to be provided in accordance with the Bicycle Parking Standards and Guidelines.

THE CORPORATION OF THE CITY OF WINDSOR
PROCEDURE

Service Area:	**Office of the Commissioner of Infrastructure Services**	Procedure No.:	
Department:	**Public Works Operations**	Approval Date:	
Division:	Transportation Planning	Approved By:	
		Effective Date:	**On Approval**
Subject:	**Bicycle Parking in the Public Right-of-Way**	Policy Ref.:	Bicycle Parking Policy
		Pages:	Replaces:
Prepared By:	R. Toufeili, Policy Analyst C. Gerardi, Policy Analyst		Date:

1. PURPOSE

1.1. This procedure is intended to provide details for implementation of the Bicycle Parking Policy when providing bicycle parking in the public right-of-way.

2. SCOPE

2.1. This procedure provides details and outlines requirements for providing bicycle parking in the public right-of-way. Furthermore, this procedure outlines the process for the implementation of bicycle corrals in the public right-of-way.

3. RESPONSIBILITY

3.1. Responsibility for implementing this procedure is outlined in the Bicycle Parking Policy; and furthermore,

3.2. The Manager of Urban Design and Community Development is responsible for ensuring that the post and ring program is coordinated with the appropriate parties, such as BIAs, and increasing bicycle parking within the right-of-way where streetscaping is implemented.

4. PROCEDURE

4.1. Bicycle parking may be provided within the right-of-way through the general post-ring program or using bike corrals. Increased bicycle parking is encouraged in high pedestrian traffic areas such as in the Business Improvement Areas or near bus stops.

4.2. Bicycle parking may be provided using the Bicycle Corral Program in this procedure. This should be implemented to increase the availability of bicycle parking in the right-of-way where there is limited space in the boulevard and there is sufficient space available on-street.

4.3. Post and Ring Program

Post & ring style bike racks and multiple unit bike racks will be the City Standard on public-right-of-ways and on public property throughout the City of Windsor and will be powder coated steel with raised lettering that reads "City of Windsor". Raised lettering may not be available for multiple unit bike racks, however, consideration should be given to customizing these units in some way. The rack selection should follow the principles outlined in the Bicycle Parking Standards and Guidelines.

4.3.1. The bike rack must be durable and low maintenance. Factors such as metal gauge, welding type and finish are key indicators of durability. The bike rack should be rust resistant, vandalism resistant, and resistant to noticeable wear from normal use. The preferred finish is powder coated steel.

4.3.2. The bike rack must be competitively priced while meeting the security, capacity, appearance and maintenance requirements expressed in the bike parking policy. The cost should be compared on a per bike capacity.

4.3.3. A BIA or other privately funded group may choose to exceed the price limit, if they agree to fund the difference between the city standard and any proposed modifications to the bike rack. Proposed modifications can include changes to lettering, and cap only. As indicated above, a galvanized finish may be considered. The BIA or other privately funded group will be expected to fully fund the additional expenses specific to the BIA such as BIA name, logo and powder coating finish. Any proposed modifications are subject to the approval of the Manager of Urban Design & Community Development and the Executive Director of Operations.

4.3.4. Bicycle parking spaces should be placed following the principles outlined in the Bicycle Parking Standards and Guidelines.

4.3.5. A minimum 6ft pedestrian clearance will need to be maintained.

4.4. Post and Ring Program Warrant Process

In BIAs, the need for Bike Parking is determined by the BIAs themselves. As long as their requests are compliant with City Standards, their requests should be accommodated.

Outside of BIA's the Guidelines to install Bike Parking is as follows.

4.4.1. Parties will be required to apply for encroachment agreements.

4.4.2. Parties will be responsible for purchase, installation and maintenance of the bike rack.

4.4.3. Not to be installed were bike parking on private property could be provided.

4.4.4. Limited to areas were vehicle parking is typically provided by on-street parking.

4.4.5. The program is not meant to provide parking for private residences, residential areas are excluded.

4.4.6. If existing City provided bike parking in the immediate area is unable to accommodate Bike Parking demands.

4.5. Bike Corral Program

Bike Corrals are used as a method to provide bicycle parking in greater quantities in the traditional auto on-street parking lane, along the curb. Corrals can be installed seasonally within an existing automobile parking spot or intersection corner if it does not pose any sight line or transit concerns.

The rack selection should follow the principles outlined in the Bicycle Parking Policy.

4.5.1. The bicycle corral should be located as close as possible to the entrances of high demand locations.

4.5.2. Bicycle corrals may be placed on street corners provided they do not create any safety or operational issues, as street corners provide a number of benefits. Placing corrals on corners will provide greater visibility benefits for pedestrians and improve access for cyclists.

4.5.3. Bicycle corrals should be placed on main streets as opposed to side streets in order to increase visibility and convenience for cyclists to reach their destination.

4.5.4. Bicycle corrals should not be located in areas which will obstruct:

- Bus stops
- Access to fire hydrants
- Turning bus movements
- Locations of manholes and sewer valves
- Parking meters

4.5.5. Bicycle racks should be securely bolted to the ground to avoid theft or vandalism. Principles outlined in the Bicycle Parking Standards and Guidelines should be used to select the appropriate rack types and installation methods.

4.5.6. Racks should be placed in a method which provides a sufficient buffer for the bicycle from the vehicular travel lane. A minimum 5 foot maneuvering zone should be provided on either end of the bicycle in order to provide cyclists with space to orient themselves. Racks can be angled to increase the available space at the ends of the bicycles.

4.5.7. A physical barrier may be placed between the corral and vehicle travel lane.

4.6. Bike Corral Program Warrant Process

Bike Corrals should be considered after it has been determined that private side bike parking and the Post & Ring Program is unable to meet the need for Bike Parking in the area. Due to the need to remove on-street parking, and added cost associated with maintenance and removal, Bike Corrals should be limited to BIAs. Only post & ring style bike racks should be considered outside of BIAs.

THE CORPORATION OF THE CITY OF WINDSOR
PROCEDURE

Service Area:	**Office of the Commissioner of Infrastructure Services**	Procedure No.:	
Department:	**Public Works Operations**	Approval Date:	
Division:	Transportation Planning	Approved By:	
		Effective Date:	**On Approval**
Subject:	**Temporary Bicycle Parking for Events**	Policy Ref.:	Bicycle Parking Policy
		Pages:	Replaces:
Prepared By:	R. Toufeili, Policy Analyst C. Gerardi, Policy Analyst		Date:

1. PURPOSE

1.1. This procedure is intended to provide details for implementation of the Bicycle Parking Policy when providing temporary bicycle parking for public events.

2. SCOPE

2.1. This procedure provides details and outlines requirements for providing temporary bicycle parking at special events within Windsor for event organizers to access.

3. RESPONSIBILITY

3.1. Responsibility for implementing this procedure is outlined in the Bicycle Parking Policy.

4. PROCEDURE

4.1. Temporary event bicycle parking may be provided by event organizers for their special events in Windsor. Temporary bicycle racks which are portable and modular are required for event attendees to park their bicycles. A bike parking sign to place in a visible area indicating available bike parking.

4.2. Private event coordinators will be responsible to provide their own staff and/or volunteers to monitor and provide a valet service for event attendees who wish to use the temporary bicycle parking.

4.3. Temporary event bike parking racks shall be placed in a location which does not obstruct any entrances or walkways for pedestrians.

4.4. Temporary event bike parking should be placed in areas of high visibility to promote active transportation, such as near event entrances or admissions tents.

4.5. Bikes shall be kept secure and be monitored by administering staff or volunteers.

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 46/2024

Subject: Response to CQ 4-2024 – Options for Modernizing Parking Operations – City Wide

Reference:

Date to Council: May 29, 2024
Author: Bill Kralovensky
Coordinator, Parking Services
(519) 255-6247 ext. 6103
bkralovensky@citywindsor.ca

Public Works - Operations
Report Date: April 25, 2024
Clerk's File #: ST2024

To: Mayor and Members of City Council

Recommendation:

THAT City Council **RECEIVE** report S46/2024, "response to CQ 4-2024 – Options for Modernizing Parking Operations" **FOR INFORMATION**; and further,

Whereas on February 2, 2024, the 2024 10-year Capital Plan was approved via Mayoral Directive MD05-2024 and subsequently City Council **SUPPORTS** improvements to parking meters as outlined in Option 1 which requires additional capital funding of $144,745.04, be it further resolved:

THAT the City Treasurer **BE DIRECTED** to transfer funding in the amount of $144,745.04 from the On-Off Street Parking Reserve Fund 138 to the Parking Equipment Replacement Project 7135001; and further,

THAT Council **DIRECT** Administration as to which, if any, additional parking revenue sources identified in the report to implement; and further,

THAT if required, the 2024 Fees and Charges By-Law be updated to reflect any changes to parking fees.

Executive Summary:

N/A

Background:

On Monday, January 15, 2024, Councillor Agostino asked the following Council Question:

CQ 4-2024:

> *Asks that Administration look into removing parking meters across the city and replacing them with modern technology. I would like to know the costs of upgrading our system and the savings we could realize or any additional revenue sources.*

This report is provided in response to CQ 4-2024.

Discussion:

The City of Windsor's current parking meter system primarily relies on traditional coin and card payments. However, these methods have become increasingly outdated in the era of digital transactions. In early 2018, the City entered into an agreement with Passport Canada for a mobile Pay-for-Parking app. After months of making a Windsor based zone system, this app was put for public use at both meters and in lots, in December of 2018. Since then 750,000 transactions have been recorded. The percentage number of app transactions to cash and or payment card continues to grow each month. The 2023 breakdown of the revenue earned through the app versus cash/debit/credit at meters and lots is as follows:

Payment Method	Percentage	Amount
Credit/Debit Cards	15%	$321,977
Cash Deposits	58%	$1,224,593
App Payments	27%	$561,697
Total Revenue	**100%**	**$2,108,267**

The City currently has 1,440 coin, and app payment operated on-street meters. These are in use between Walker Rd to the east to Huron Church to the west, Tecumseh Rd northerly to Riverside Dr. Given the shift towards digital payments, the following changes are proposed to align the City's parking management practices with current trends.

Proposed Changes:

App-Only System on Streets

Implementing an app-only payment system for street parking will encourage users to transition to digital payments, reducing the need for physical cash handling and maintenance. Cash and card users would be directed to use parking lots and garages.

Handheld and Mobile Licence Plate Recognition (LPR) Technology

The current industry standard is what is known as LPR, License Plate Recognition technology. Either a handheld device, or mobile vehicle mounted, reader scans a vehicle's license plate, and processes this plate to see the validity of the current parking area. This technology works for parking payments as well as permit parking locations. This technology will be expanded to include permit areas, residential and pay for parking, to widen in customer service and satisfaction. A trial of handheld LPR devices to enforce parking regulations more effectively and efficiently is currently being undertaken since March, 2024. If successful, this technology will be expanded to vehicle-mounted LPR systems, which will promote further cost reductions and enhanced customer service, and be funded from the Parking equipment replacement capital program, Project OPS-001-13.

Meter Head Retention

Existing meter heads will remain in place as parking space number identifiers. These are currently in use with the app, and located on the street side of each meter head, (Figure A below) and will remain until such time as we are in the position to rezone parking areas.

Figure A.

Vehicle mobile LPR will handle the larger zone areas, allowing the removal of individual space numbers. Each vehicle will be identified by its license plate number. Coin slots will be blocked and the internal electronics will be disabled to prevent coin payments.

Updated Pay and Display Machines

Pay and Display machines, currently used in the City's off street parking lots, will replace individual space meters, and be centrally located within a city block of on street pay for parking areas. One (1) machine will be able to replace up to twenty (20) individual meters. These newer-style and most recent up to date technology, Pay and

Display machines may be installed within restructured streets and new pay-for-parking areas if Council so chooses. However, due to costs for this hardware, it is recommended that for street parking areas, the city remain with app-only purchases. For example, to replace Ouellette Ave. meters with new single location Pay & Display machines, at 1 unit per block, per side of traffic, would require 22 new technology machines. The price per unit is $8,720 excluding HST. Installing the Pay & Display machines on Ouellette Ave would currently cost $191,840 excluding HST plus additional cost for associated infrastructure (i.e. electrical power hookups). Other associated costs are discussed further in the Financial Matters section below. Pay and Display, dashboard presented tickets, would be phased out over time as vehicle-mounted LPR systems are installed, enhancing cost reductions and promoting further customer service enhancements.

Pros and Cons of Parking Modernization

Modernizing the city's parking system to be cashless, app-based, and utilizing smart meters can have several pros and cons including the following:

Pros:

1. Convenience: Using the App offers greater convenience for users, who can easily pay for parking using their smartphones without needing to carry coins.
2. Efficiency: Smart meters cover multiple spots and reduce the number of physical individual meters required, making the system more streamlined and easier to manage as well as requiring less maintenance.
3. Dynamic Pricing: Modern systems can allow for dynamic pricing based on demand, time of day, or special events, which can optimize parking space utilization and potentially increase revenue.
4. Data Collection: Digital systems can collect valuable data on parking patterns.
5. Accessibility: The App offers features such as reminders and notifications thereby enhancing the user experience.
6. Security: A cashless system reduces the temptation of theft and vandalism of cash containing meters and vault intrusions of Pay and Display hardware.
7. Keeping up with changing industry standards: Typical municipal comparator cities throughout the Province are adapting to more modern technologies, such as these mentioned in this report.

Cons:

1. Digital Divide: Not all residents and visitors may have access to smartphones or be comfortable with using the App style payment methods to pay, potentially excluding some demographics. Currently, in the Downtown core area, there are 22 defined privately owned parking lots consisting of approximately 1,037 parking

spaces that may be utilized by customers wishing to continue to pay by traditional means.

2. Privacy Concerns: The collection of data through digital systems raises concerns about privacy and the security of personal information. While the technology is Payment Card Industry (PCI) compliant, hardware can be tampered with.

3. Dependence on Technology: System outages or technical issues can disrupt the parking system and inconvenience users. If a system outage lasts too long in duration, the City will lose revenue.

4. Implementation Costs: The initial investment in modernizing the parking system can be significant, including costs for new meters, software and enforcement technology upgrades.

5. Resistance to Change: There may be resistance from residents and visitors who are accustomed to the traditional parking system, requiring a concentrated effort to educate and persuade them about the benefits of the new system.

Options for Moving Forward

Option #1: Immediate cessation of cash payments at all metered street parking

This is the swiftest and most cost-efficient of the three options presented in this report. Parking Maintenance staff can convert the meters by placing stickers over the coin acceptance slots, over one weekend. These parking spots are already listed in the Passport app and can be utilized immediately as the meter poles would remain for space number indicators. As the right of ways are upgraded where these meters exist, poles will be removed and replaced with larger zone sizes and indicated with signage throughout these areas where individual space numbers will no longer be required. This will enable Parking Services and Signs and Markings to efficiently incorporate new zones. While current handheld LPR devices can be utilized immediately, these devices are less efficient and require more labour-intensive efforts as the enforcement officers are required to snap a photo of each licence plate with the device. Mobile LPR units would be acquired, installed, and put into operation as soon as possible to improve enforcement efficiency. The City's collaboration with Windsor Police Services on outstanding fines and stolen vehicle detection programs will be significantly improved through the use of mobile-mounted LPR technology, enabling the scanning of a greater number of legally parked vehicles. Delivery and installation are the unknown inhibitors to a quick start of mobile LPR. Through the communications department, social media tutorials can be taped and posted to guide customers on the new processes for parking payments. These tutorials would also address the locations where cash payments will still be accepted for those wishing to do so.

Option #1 would also allow for different pay-for-parking time models as fees can be structured for different reasons i.e.: time of day, day of week, sponsored parking, discounted parking, etc.

Option 1 – estimated time to implement: 1 month from approval.

Table 1 - Option 1 – Estimated Costs and Funding:

Purchase	Price / Unit (Excluding HST)	Quantity	Cost (Excluding HST)	Funding Source
Stickers to close meters	$1.99	1,500	$2,985.00	Transfer from the On-Off Street Parking Reserve Fund 138 to the Parking Equipment Replacement Project 7135001
Mobile LPR Cameras and software including hardware, installation, and extended warranty	$44,955.47	3	$134, 866 .41	
Annual Licencing and Support for LPR cameras			$6,893.63	
TOTAL ESTIMATED 1ST YEAR UP FRONT COST			**$144,745.04**	

Administration's preferred option is Option #1. Option #1, the immediate cessation of cash payments at all metered street parking is the fastest and most economical solution among the available options. The simple installation of stickers over coin slots during a single weekend allows for an instant transition without substantial downtime or disruption.

This option, with the aid of educational tutorials uploaded to social media and local news outlets will aid customers in the switch from coin-operated street meters.

Option #2: Phased-in approach to new technology Pay-and-Display machines

This option would entail remapping the current parking zone structure and installing new signage in the affected areas appropriately for customer notification. The app provider would also be required to assist in the zone renumbering to ensure that these new zone numbers are available for use. Option 2 would require mobile LPR set up prior to engaging, as this option would result in an increase in the size of the zones that existing officers would be required to patrol without the current individual meter indicating a "No Payment" flash for the officer to see. Officers would have to check each license plate in a zone by hand to see if the vehicle was in fact in contravention. All efforts will be made to strategically place hardware near current power sources to reduce costs, but this option may not always be available. All improvements listed in Option 1 above also apply to Option 2, just over a longer implementation time frame. If current budget funding models are insufficient, Administration will bring a recommendation back to Council detailing a proposed funding plan.

Option 2 – estimated time to implement: 1-year from approval.

Table 2 - Option 2 – Estimated Costs and Funding:

Purchase	Price Per Unit (Excluding HST)	Quantity	Cost (Excluding HST)	Funding Source
APP zone signage plus installation labour and materials	$462.33	**3** per city block **144** blocks = 432 signs	$199,726.56	On-Off Street Parking Reserve Fund 138
New Technology Pay and Display Machines	$8,720.00	**1** per city block **144** blocks = 144 machines	$1,255,680.00	On-Off Street Parking Reserve Fund 138
Mobile LPR Cameras and software including hardware, installation, and extended warranty	$44,955.47	3	$134, 866 .41	On-Off Street Parking Reserve Fund 138
Annual Licencing and Support for LPR cameras			$6,893.63	On-Off Street Parking Reserve Fund 138, 1st year Annual operating budget increase required
Infrastructure Connection – Power Source Prep	$105	Per 400 meters 144 – 400 meter sections *ESTIMATED*	$42,000 / section $6,048,000 total	On-Off Street Parking Reserve Fund 138
Infrastructure Connection – Machine Hook Up	$5,000	144 machines	$720,000	On-Off Street Parking Reserve Fund 138

Option #3: Status quo with gradual hardware upgrades

In this option, the status quo would be maintained and upgrades of current hardware would occur as areas are renewed by either street or sidewalk upgrades. The costs would be the same as Option #2 above but would occur gradually over time. This option allows for necessary parking infrastructure upgrades to be completed simultaneously as street repairs are undertaken, thus lowering infrastructure costs.

Option 3 – estimated time to implement: As resources permit and projects occur.

Implementation Plan

If approved, the modernization project implementation can begin immediately following the news release, with exact timelines to be determined based on the Option chosen and the LPR trial phase results. Administration recommends implementation of all changes simultaneously to minimize disruption and consolidate the period of public adjustment.

A news release along with social media tutorials would be issued to inform the public about the upcoming changes, emphasizing the benefits of the modernized system.

The accompanying confidential memo to Council details the impact that modernizing parking operations will have on current staff.

Additional Parking Revenue Sources

CQ 4-2024 also requested any additional parking revenue sources be identified. Listed below are additional parking revenue sources that, if Council so chooses, can be implemented. Council may select any, all or none of the following:

1. Increased time of enforcement at meters by the hour. Each hour of extra enforcement time will add approximately $118,000 in revenue. Council may choose the amount, if any, of extra enforcement time.

2. Parking lot Flat Fee can be raised from the current $3.00 to $5.00 per hour. This change is expected to add approximately $92,000 in revenue.

3. Parking lot flat fee for lots that do not currently have an after six p.m. flat fee. Currently, six off-street lots in various BIA areas do not have this fee added and will bring an estimated $8,850 of additional revenue.

4. Lot 22, Aquatic Centre area, all-day fee. The current fee is $5.00 per day and falls below the per-hour rate. This rate is requested to be increased to $10.00 per day with a total increase of approximately $52,000.

5. Over Stay Fee. Several complaints consistently received are that the meter times are sometimes not long enough for business and or pleasure outings. A $5.00 overstay fee is suggested. Once a maximum stay period has been passed, an option to extend will be offered. The $5.00 fee, plus the hourly rate for the amount of time needed will be added. This increase is unquantifiable at this time.

6. Sunday enforcement. Currently, there are no parking fees or any parking enforcement on Sundays. All current fees and regulations could be added on Sundays. If all 52 Sundays throughout the year were added this would bring in an estimated $267,000 in revenue.

7. Riverfront Parking Lots. Currently, there are several parking lots along Riverside Drive, stretching from the Ambassador Bridge easterly to Sandpoint Beach, which have no fees for use. Pay and Display machines can be added to these lots and the revenues could be used for the maintenance and upgrading of these locations. Estimated revenue increases resulting from this change are not quantifiable at this time.

8. Extension of Pay-for-Parking areas. Currently, the Pay-for-Parking areas border Walker Rd. westerly to Huron Church and Tecumseh Rd. northerly to Riverside Drive. These boundaries could be extended to other parking locations in both the east and west ends of the city. Estimated revenue increases resulting from this change are not quantifiable at this time.

Risk Analysis:

One of the primary concerns is public resistance to the shift to an app-only system. This resistance may be particularly pronounced among individuals who are less tech-savvy or prefer traditional payment methods. To mitigate this risk, it is essential to provide clear communication about the benefits of the new system and offer support to help users adapt to the changes.

Technical issues also pose a significant risk, as the implementation of new technologies such as handheld and mobile LPR devices and app-based payment systems can be prone to glitches, connectivity problems, and software bugs.

Data security is another concern, given the increased reliance on digital payments. Protecting user information and payment details from potential data breaches or cyber-attacks requires stringent security measures and regular monitoring. These security measures are dictated to the City through the Payment Card Industry, and all vendors must provide their proof of PCI compliance. With on the street payment transaction hardware, corporate staff must ensure and document regular checks that no visible tampering or signs of security breaches have infiltrated revenue processing devices. Compliance and regulatory issues related to digital payments and data privacy must be carefully managed to avoid legal complications and ensure user trust in the system.

A heavy dependence on technology for parking management increases the vulnerability to system failures, which can disrupt operations and enforcement. Developing rapid response protocols in place will help mitigate this risk.

Equity concerns may arise due to the app-only system, particularly for individuals without access to smartphones or digital payment methods.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

Option 1 for the immediate cessation of cash payments at all metered street parking is the quickest more cost effective option for modernizing parking operations. As outlined above in Table 1, the estimated first year up-front cost of implementation is $144,745.04. The estimated funding required for option 1 would be transferred from the On-Off Street Parking Reserve Fund 138 to the Parking Equipment Replacement Project 7135001 as there are currently no capital funding allocations approved for this implementation. Operating funding for the annual licencing and support costs for the LPR cameras will be referred to the 2025 operating budget. An increase in operating expenses for On-Off Street Parking results in a decreased transfer of net revenues to the On-Off Street Parking Reserve Fund 138.

Option 2 for the full modernization plan will incur additional costs for new zone signage, LPR equipment and licensing fees, and the purchase and installation of updated Pay and Display machines. The cost of implementing a full modernization plan is estimated above, Option 2, in Table 2. More detailed cost estimates can be provided upon the completion of a LPR trial phase. Funding for all modernization costs would be provided from the Parking Equipment Replacement Project OPS-001-13, which is funded from the On-Off Street Parking Reserve Fund 138. The current 10-year capital plan for Project OPS-001-13 includes annual funding allotments for equipment replacement of $110,000 in 2024 (approved) with annual capital budget allotments increasing each year, up to $129,010 in 2033.

Any additional funding required to implement a modernization plan would need to be funded from additional transfers from the On-Off Street Parking Reserve Fund 138 to the Parking Equipment Replacement Project OPS-001-13. Ongoing annual operating costs associated with the LPR equipment would require an increase in the On-Off Street Parking operating budget. Administration will submit future operating budget requests for approval. Administration will also include funding for modernization as required in the 2025 capital budget submission for On-Off Street Parking as well as the 10-year reserve projections. The balance in the On-Off Street Parking Reserve Fund as at December 31, 2023 is $2,212,820.

Additional revenues generated provide additional funding which would be deposited to the On-Off Street Parking Reserve annually, net operating revenue. This additional revenue could provide additional funding required to implement modernization of the equipment as outlined in this report.

The Parking Operations division is deemed commercial for the purposes of HST collection and payment, and therefore, non-refundable HST costs are not applicable. The City receives a 100% credit of any HST paid.

Consultations:

Rob Slater, Executive Initiatives Coordinator

Conclusion:

The modernization of the City's parking operation will result in improved efficiency in parking enforcement and revenue collection, increased convenience for users through app-based payments, and the adoption of modern technology in parking management. Total app-only payment systems will further streamline enhancements to software such as curbside, off-street lot, and garage parking space availability and reservations. Additionally, current scofflaw and stolen vehicle detection programs, in conjunction with Windsor Police Services, will be further enhanced with mobile-mounted LPR as more legally parked vehicles can be scanned.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator – Public Works
Ian Day	(A) Senior Manager Traffic Operations and Parking Services
Shawna Boakes	Executive Director of Operations
Mark Winterton	(A) Commissioner, Infrastructure Services and City Engineer
Janice Guthrie	Commissioner, Finance and City Treasurer
Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 61/2024

Subject: Response to CQ 2-2024 Enhanced Street Sweeping Initiative – City Wide

Reference:

Date to Council: May 29, 2024
Author: Anne-Marie Albidone
Manager, Environmental Services
519-974-2277 ext. 3123
aalbidone@citywindsor.ca
Public Works - Operations
Report Date: May 8, 2024
Clerk's File #: SW2024

To: Mayor and Members of City Council

Recommendation:

THAT the report of the City Engineer dated May 8th, 2024 in response to CQ 2-2024 regarding an enhanced street sweeping initiative **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

At the January 15, 2024 Council meeting, Councillor Marignani requested the following:

CQ 2-2024 - Asks administration to report back on an enhanced street sweeping initiative. The Public Works department to develop and implement a comprehensive street sweeping plan including increase frequency in coverage in areas prone to flooding.

This report serves as a response to CQ 2-2024.

The current street sweeping program in the City of Windsor includes a target service level of 3 passes per year for all residential streets, and 8 passes per year for all arterial/collector streets. As previously reported to Council, the target levels for residential streets have not been met for the last 5 years. While targets for arterials and collector roads have been met, in recent years residential streets have received only 2 passes per year. This report will evaluate an enhanced street sweeping program that would, at minimum, address established target service levels.

Discussion:

The council question specifically requested increased service in flood prone areas of the city. The Sewer Master Plan's Short-Term Solutions Report, section 5.2.5, recommends enhanced maintenance practices. One of the recommendations is "*Increased street cleaning frequency in areas with identified concerns for sewer and/or catchbasin clogging*" In order to determine these areas, Administration reviewed 311 reported flooding calls from 2016 to 2023. Figure 1 illustrates the areas that indicated flooding, either on the road, property, or basement, to 311 from 2016 to 2023. The data is dispersed across the city with no truly defined areas as being 'flood prone'. Therefore, Administration has reviewed opportunities to increase service levels across the city.

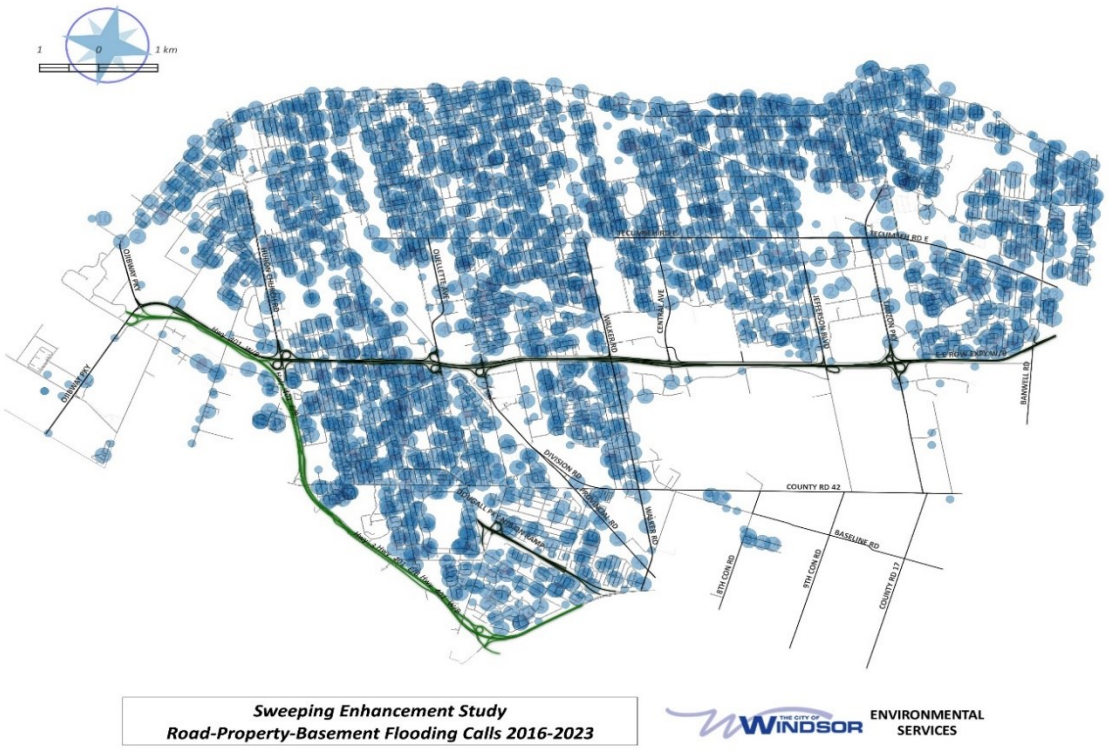

Figure 1: Road, property or basement flooding calls received by 311 from 2016 to 2023.

As illustrated in previous reports, the current dedicated fleet and staffing levels are insufficient to provide the targeted level of service for residential streets. This is particularly true in the first sweep of the year (spring) when all the debris from the winter has accumulated, as well as in the fall after the majority of leaves have fallen.

There are approximately 1,975 km of paved residential roadway in the City of Windsor. Each road requires 2 passes in order to sweep both sides of the road. Therefore, one full sweep of the city would involve completing 3,950 km (assuming average debris) in approximately 12 weeks or approximately 329 km per week.

During the heaviest debris (spring/fall) GPS data indicates that the productivity levels are approximately 1.72 km/hr (taking into consideration standard down time for travel,

breaks, inspections and repairs). Based on the productivity level, this would require 191.28 hours (329 km / 1.72 km/hr) of sweeping per week, to complete a full cycle. However, the reality is that it is rare to have 4 sweepers available all week, due to equipment issues or staffing issues. If 3 sweepers were available 10 hours per day for 6 days/week, 180 hours could be completed per week, leaving us short 11.28 hours per week, or approximately 136 hours over a 12-week period. It is clear that the service needs to be supplemented with other equipment during these times to complete the service level targets.

It is challenging to develop an enhanced street sweeping initiative with the existing fleet and staffing levels. Any enhancement would need to come from additional equipment and staffing. In addition to fleet augmentation, Administration is also in the process of reviewing route optimisation technology that will assist in maximizing sweeping route times, minimizing fuel consumption and providing real-time analytics to identify trends, optimize schedules and allocate resources effectively.

Council is reminded, as part of the Stormwater Financing Study LOS, it identified a street sweeper and 2 FTE as increased service levels. As such, funding is being recommended as part of the Stormwater LOS increase in 2025 for the purchase of a new vehicle with 2 FTE being funded in the 2026. The delay in funding for the 2 FTE is due to the time lapse between ordering the truck, and when it would be ready to use. The recommended Stormwater LOS increases will be brought forward to council in the fall for approval as part of the Stormwater update. To be clear, should the LOS allocation be approved, it will serve to reach the established target levels of three sweeping cycles per year for residential roads. This in and of itself could be viewed as an enhancement as the department has not met service level targets for the last 5 years.

Although street sweeping initiatives will assist in some reduction of street flooding, Administration cautions that it will not eliminate street or basement flooding. To be clear, even the doubling of the existing street sweeping fleet would not eliminate flooding. The greatest impact of street sweeping is in sewer maintenance and wastewater treatment costs.

Risk Analysis:

Failure to increase our ability to meet the established target service levels will contribute to increased street flooding, increased sewer maintenance issues, and increased sewage treatment costs. Street sweeping not only contributes to a positive City image but is an important component in reducing on street flooding and sewer maintenance.

Increasing in-house services would give the city the greatest flexibility as units can be deployed or reassigned in the most optimal scenario since the department has an established 6 days a week operation both on day and night shifts. Contracted services are typically more restrictive, or have a premium charge for afternoon, night, or weekend shifts.

Climate Change Risks

Climate Change Mitigation:

In 2023, the City's street sweepers accounted for 156 tonnes of greenhouse gas emissions. Adding another street sweeper is expected to increase ghg emissions by an additional 50 tonnes.

Increased street sweeping to meet or enhance the existing level of service would provide additional benefit for cyclists. Miscellaneous materials that collect along road edges can reduce rideability and comfort for cyclists and can lead to an increase in tire punctures. Cycling is a zero emissions method of transportation.

Climate Change Adaptation:

The City of Windsor climate change projections indicate both an increase in annual precipitation amounts as well as an increase in the intensity of extreme precipitation events. Material gathered on top of catch basins can slow drainage of roadways leading to ponding or flooding of roads. Materials that manage to get through catch basins may lead to blockages within the sewer system, leading to a decrease in sewer capacity. These issues may be reduced with increased street sweeping.

Providing additional street cleaning during fall may also promote tree health, as diseased leaves can be collected and reduce the risk of spread. In addition, leaf debris on roadways is one reason residents may oppose a tree on their property as they identify the additional work required to clean leaf litter on the right-of-way. Additional street sweeping may show additional support to the residents for maintaining trees in the right-of-way.

Financial Matters:

All street sweeping operations are currently funded from the Sanitary Sewer Surcharge budget. Starting in 2025, the funding for street weeping operations will shift to the stormwater budget, along with other stormwater related expenditures, and will be funded from the more appropriate Stormwater Financing Fee. The proposed stormwater budget includes a recommendation for one additional street sweeper is being recommended for 2025, with 2 FTE being recommended for 2026. The addition of a sweeper and 2 FTE will allow Administration to meet the set targets of 3 residential cycles per year. Any increases above the current LOS increase for street sweeping may require the reprioritization of other Stormwater funded initiatives in the Stormwater budget. As with all services, street sweeping LOS will be reviewed annually and recommendations brought forward to City Council for their consideration.

Consultations:

Carrie McCrindle, Financial Planning Administrator – Engineering
Cindy Becker, Financial Planning Administrator – Public Works

Ian Wilson, Water & Wastewater Engineer

Karina Richters, Supervisor Environmental Sustainability & Climate Change

Yemi Adeyeye, City Forester

Kathy Quenneville, Active Transportation Coordinator

Conclusion:

Street sweeping enhancement can only occur with the addition of resources. The current established fleet and FTE are insufficient to meet the established target of 3 full sweeping cycles per year for all residential streets. The addition of one sweeper and two FTE would increase service to the residential target level of 3 cycles per year. In order to further enhance that service, a second sweeper and 2 additional FTE would be required.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator – Public Works
Shawna Boakes	Executive Director of Operations
Mark Winterton	(A) Commissioner of Infrastructure Services, City Engineer
Janice Guthrie	Commissioner, Finance and City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 62/2024

Subject: Response to CQ15-2024 - Excess Soil Reuse Site Update - City Wide

Reference:

Date to Council: May 29, 2024
Author: Sarah Meneses
Environmental Compliance Coordinator
(519) 255-6100 ext. 6336
smeneses@citywindsor.ca
Design – Engineering
Report Date: May 9, 2024
Clerk's File #: El2024

To: Mayor and Members of City Council

Recommendation:

I. That City Council **RECEIVE** the response to CQ 15-2024 for information.

Executive Summary:

N/A

Background:

At the March 18, 2024 meeting of City Council, Councillor Fred Francis asked the following question, CQ 15-2024:

> *Asks that Administration provide a status report regarding the excess soil/earth project from 2021. This is important as it can save some money when we take projects to tender.*

The following information is provided in response to Council Question 15-2024.

In December 2019, the Ontario Ministry of Environment, Conservation and Parks (MECP) introduced Ontario Regulation 406/19 On Site and Excess Soil Management (the Regulation), under the Environmental Protection Act. This Regulation provides rules and requirements for the reuse and management of excess soil from construction projects.

The Regulations were phased in over time, as follows:

- January 1, 2021: Reuse Rules, including risk based standards, waste designation and approvals

- January 1, 2023: Testing, tracking, and registration (some exemptions apply)

- January 1, 2025: restrictions on landfilling soils.

A business case was completed by the University of Windsor's Masters of Business students in August 2021 discussing the development of a beneficial reuse site in the City of Windsor that can serve the purpose of accepting soil from nearby construction projects. The report explored several considerations related to creating this site.

Discussion:

The sole responsibility for regulatory compliance with the Regulation lies with Project Leaders, defined as the person or persons who are ultimately responsible for making decisions relating to the planning and implementation of the project. Responsibility and liability can no longer be transferred to a third party contractor. This means that the City is ultimately responsible for the management of excess soils created by our projects.

The Regulation promotes the beneficial reuse of excess soils which can lead to environmental benefits. By encouraging the classification and reuse of soils that meet environmental standards, the Regulation supports the reduction of waste and the conservation of natural resources.

The Regulation requires Project Leaders to assess and classify soil based on its environmental quality in order to determine the potential for reuse and/ or the need for landfill disposal. To ensure soils are properly classified and managed during construction, the Regulation outlines the following requirements for any projects that will generate excess soil:

1. Preparation of an Assessment of Past Uses
2. Preparation and implementation of Sampling & Analysis Plan
3. Preparation of a Soil Characterization Report
4. Preparation of Excess Soil Destination Assessment Report
5. Submittal of Notice on Registry
6. Development and implementation of a tracking system

It should be noted that there are several exemptions to the above noted requirements, such exemptions based on volume of excess soil or the property type as well as moving excess soils from one infrastructure project to another. A majority of city projects would not qualify for such exemptions at this time.

Since its implementation, the Regulation has had significant impacts on City projects primarily through increased project costs to complete planning requirements and delays while trying to secure appropriate reuse sites. Based on a review of the Engineering

department projects in 2023, the City generated over 100,000 cubic metres of excess soil suitable for reuse and over 1,000 cubic metres of excess soil that required landfill disposal. The management of the excess soil generated from a City project is reflected in tender unit prices related to excavation; in fact it has been estimated that the excavation costs between 2019 and 2023 have increased by almost three times. In addition, excess soil registry fees have increased approximately 500% in 2024.

Establishing a dedicated reuse site or multiple reuse sites for managing excess soils can yield substantial benefits, including:

- improve the value of land for sale/ readiness of the site for construction upon sale,
- reduce excess soil planning requirements,
- eliminate the onus on the contractor to secure applicable reuse sites and in turn decrease costs in tenders associated with excavation of excess soils,
- provide savings related to trucking, dumping and tipping fees, diesel, and labour, and
- create jobs related to the management of the reuse site(s).

Based on the above, and as supported by the business case completed, Administration has created a committee to review the potential of establishing a City owned reuse site(s) comprised of support staff from Engineering, Real Estate Services, Planning, Operations and Parks. The committee will report back with recommendations on next steps and funding.

Risk Analysis:

As this is an informational report to Council, there are no significant or critical risks associated with the recommendations in this report.

There are risks associated with non-compliance of these regulations, such as imposing compliance orders and penalties against the Corporation and even potential prosecution.

The establishment of a committee to review the potential for City owned reuse site(s) has the potential to mitigate the escalation of construction costs currently observed through tender results that are directly attributable to the Regulation.

Climate Change Risks

Climate Change Mitigation:

The recommendations related to this Council Report do not facilitate Climate Change Mitigation in a material way.

Client Change Adaption:

The recommendations related to this Council Report do not facilitate Climate Change Adaptation in a material way.

Financial Matters:

There are no costs related to this Council Report. The committee will consider financial impacts, if any, of sites identified such as land acquisition, direct costs related to the Regulation, potential savings from construction projects, trucking and gas, testing, loss of use of a site, recreation opportunities and associated user fees, etc and report the same to Council for direction at a later date.

Consultations:

Jane He – Engineer III – Construction Standards Lead

Shawna Boakes – Executive Director of Operations

Conclusion:

The above information is provided in response to Council Question 15-2024.

Planning Act Matters:

N/A

Approvals:

Name	Title
Paul Mourad	Manager of Design (Acting)
Stacey McGuire	Executive Director of Engineering / Deputy City Engineer
Mark Winterton	Commissioner of Infrastructure Services / City Engineer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: C 59/2024

Subject: Response to CQ 18-2024 - Little River Dyke Flood Protection System - Ward 6

Reference:

Date to Council: May 29, 2024
Author: Tom Graziano
Engineer III / Drainage Superintendent
(519) 255-6257 ext. 6490
tgraziano@citywindsor.ca
Development - Engineering
Report Date: May 10, 2024
Clerk's File #: SW2024

To: Mayor and Members of City Council

Recommendation:

I. THAT the report titled Response to CQ 18-2024 - Little River Dyke Flood Protection System **BE RECEIVED** for information.

Executive Summary:

N/A

Background:

On Monday, March 18, 2024, Councillor Gignac asked:

CQ 18-2024

> *That Administration provide an update on the Little River flood control plan progress and how we are monitoring encroachments along the berm and waterway.*

This report is provided in response to CQ 18-2024.

The Little River Dyke Flood Protection System (the Dyke) consists of a series of earth dykes and/or retaining wall systems along both sides of the Little River from McHugh Street to its outlet at the Detroit River to provide protection to the adjacent lands from flooding due to overtopping of the banks of the Little River in extreme storm events.

The Dyke was the result of the Little River Drainage Report that was completed in 1983. The report was subsequently adopted by the City through By-Law 7635 and in accordance with the provisions of the Drainage Act. Between 1982 and 1986, the City, in partnership with Essex Region Conservation Authority (ERCA), implemented the improvements noted in the report. The improvements were constructed under six contracts, including the installation of the steel retaining walls and reconstruction of the dyke.

On July 8, 2019, City Council authorized CR352/2019 as follows:

I. *That City Council AUTHORIZE Administration to RETAIN a consultant in accordance with Purchasing By-law 93-2012, to undertake a topographic survey of the Little River Dyke Flood Protection System to identify the extent of obstructions, encroachments and damage to the dyke system, to prepare tender documents and to provide project administration and inspection for the work required.*

II. *That City Council AUTHORIZE the City Engineer to expend to an upset limit of $250,000 (plus taxes) for costs related to retaining a consultant pursuant to Recommendation I. All costs to be charged to Project ID # 7141019, Little River Steel Retaining Walls.*

III. *That the Chief Administrative Officer and City Clerk BE AUTHORIZED to sign the construction contract based on the tendering results pursuant to Recommendation I and II, subject to the amount being within the project budget, satisfactory in form to the City Solicitor, in financial content to the Chief Financial Officer and City Treasurer and in technical content to the City Engineer. All costs to be charged to Project ID # 7141019, Little River Steel Retaining Walls.*

IV. *That City Council DIRECT Administration to notify all property owners between Riverside Drive and Little River Road, abutting the east and west sides of the Little River Municipal Drain ("Little River") to remove obstructions identified in the consultant's report from the top of the dyke to the water's edge and from within the channel within 90 days of receipt of notification. That items approved by Essex Region Conservation Authority ("ERCA") and City Engineer as shown on Appendix "D" – Permitted Items (the "Permitted Items"), may be allowed to remain. Any new items installed in this area would need to be in accordance with the provisions of By-Law 7635 and in compliance with the Drainage Act. In addition, prior to placing any future items in this area, detailed designs for such items will need the approval by ERCA and the City Engineer.*

V. *In the event that the property owners do not remove obstructions as requested, that Administration BE AUTHORIZED to cause the removal of the obstructions in accordance with the provisions of the Little River Drain Dyke Repair By-Law 7635 and Section 80(1) and Section 80(2) of the Drainage Act.*

VI. That City Council DIRECT Administration to notify all property owners between Little River Road and McHugh Street, abutting City-owned land located on the west side of Little River to either:

(a) remove existing obstructions from the City-owned land within 90 days of receipt of notification; or

(b) enter into an temporary easement agreement with the City in accordance with Recommendation VII below.

VII. THAT APPROVAL BE GIVEN to grant temporary easements in favour of the abutting property owners between Little River Road and McHugh Street (the "Property Owners") over the City-owned lands legally described as Part Lot 134, Concession 1, designated as Parts 2 to 46, inclusive, on Plan 12R-9244 (the "Easement Lands") in accordance with the following terms and conditions:

(a) Easement Price: $1.00;

(b) Easement Term: Twenty-five (25) years from the date of registration of the easement;

(c) City shall be responsible for the cost of registration of the easements, in an amount not to exceed $5,000, plus HST, if applicable, to be charged to Project ID # 7141019, Little River Steel Retaining Walls;

(d) Property Owners shall be required to retain their own lawyer to complete the transaction on their behalf and shall pay all costs associated therewith;

(e) The Temporary Easement will indicate that Property Owners can only maintain Permitted Items, as approved by ERCA and the City Engineer, within the Easement Lands and that said Property Owners are responsible to maintain the Permitted Items in good repair and free of hazards, including ensuring they are cleared of snow, ice and other debris;

(f) The Temporary Easement will grant said Property Owners the right to access the Easement lands;

(g) The Temporary Easement will require the Property Owners to be responsible for the maintenance of the Easement Lands, including grass cutting;

(h) Any new items installed in this area would need to be in accordance with the provisions of By-Law 7635 and in compliance with the Drainage Act. In addition, prior to placing any future items this area, detailed designs for such items need to be approved by ERCA and the City Engineer; and

(i) Throughout the term of the Easement, Property Owners are to maintain general liability insurance on an annual basis, in an amount not less than $2,000,000 per occurrence, naming The Corporation of the City of Windsor as an additional insured, and to include cross liability and 30 days' notice of cancellation, or any other insurance in any other amount and/or with any other requirements that the City may reasonably require. The Property Owners agree to provide proof of same, but failure by the City to demand proof or full compliance is not to be construed as a waiver of the Property Owners' obligation.

VIII. That the Chief Administrative Officer and the City Clerk BE AUTHORIZED to sign any required written documents satisfactory in form and content to the City Solicitor with respect to the temporary easements and that the transactions BE COMPLETED electronically pursuant to By-Law 366-2003 and that the City Solicitor or designate BE AUTHORIZED to sign any documents related to the completion of a real estate transaction.

IX. That City Council DIRECT Administration to establish an inspection and maintenance program for Little River between Riverside Drive East and Via Rail Tracks that will consist of:

(a) A yearly visual inspection, a detailed survey inspection every other year and maintaining natural changes as required to comply with By-Law 7635; all survey and maintenance work to be funded from future Capital Works Budget; and

(b) The removal of any obstructions and repair of breaches in the system in compliance with By-Law 7635 and pursuant to Section 80(1) and Section 80(2) of the Ontario Drainage Act.

On April 27, 2020, Council appointed a drainage engineer, via CR143/2020, to undertake a topographic survey of the Little River Dyke Flood Protection System to identify the extent of obstructions, encroachments and damage to the dyke system, to prepare tender documents and to provide project administration and inspection for the work required.

In 2021, property owners were sent letters explaining that the City will be taking measures to restore the design elevations of the Dyke along the Little River from Riverside Drive to Bayswater Crescent. The letter stated that unauthorized encroachments and obstructions were to be removed by the property owners at their

own cost prior to the City's work, failing which they would be disposed of by the City's contractor at the time of the City's work with the removal costs assessed to the properties as a charge on their municipal tax bill. The letters were specific to each property with specific instruction and pictures of the subject encroachments and obstructions.

The drainage engineer is preparing construction drawings and specifications to tender the Dyke restoration project. Administration intends to tender the work in the fall of this year for construction during the winter of 2024/2025.

Discussion:

After giving property owners an opportunity to remove items identified in the letters, a few have complied, while others have not. Another letter will be sent to property owners this summer 2024 reminding them of the 2021 letter, updating them on the proposed start of construction, and what to expect in the coming months.

As part of the construction in the winter of 2024/2025, dyke elevations will be restored and all obstructions will be removed. Fences will be reinstated with new 1.2m high chain-link fence, and any stairs that were approved as part of By-law 7635 will remain and be repaired if required. If property owners wish to install any other items, they must be reviewed and approved by the City Engineer and ERCA prior to the start of constructoin, and a permit will be issued.

Once the project is complete, the Dyke will be inspected periodically to ensure that new unauthorized items are not placed within the dyke limits. If unauthorized obstructions are observed, the property owner will be directed to remove them, and if they don't comply, the City will have them removed at the property owner's expense.

Risk Analysis:

Encroachments, or obstructions, cause hydraulic deficiencies in the Little River channel by restricting flow. With the current obstructions and breaches, there is a risk of flooding depending on the severity of a storm event.

Rising water levels could have enough force to lift obstructions in the Little River channel and carry them downstream, possibly causing damage as they float freely downstream. This could impact the bridges located at Little River Road, Wyandotte Street East and Riverside Drive. In addition to possibly damaging the bridges, obstructions could butt up against the bridges, creating a damming effect and leading to further flooding upstream.

A flood could result in damage to any of the surrounding properties, especially those that abut the dyke system. However, under the worst circumstances there is a possibility that up to 6,000 homes located within the Little River floodplain could be impacted.

The removal of obstructions and repair of breaches will return the system to the design level of service and reduce the risk of flooding.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

The dyke elevations were determined and set in the 1980s to reduce the risk of overland flooding from the Little River channel. Windsor's climate change projections include an increase in annual precipitation and in intensity of extreme storm events, both of which have the possibility of impacting the water levels in the Little River. In addition, climate change modelling for the great lakes predicts a wider variation in water levels (i.e. higher high water levels and lower lows). Reinstating and maintaining the dyke will reduce the risk of overland flooding from the Little River.

Financial Matters:

There are no financial consequences arising from this response to CQ 18-2024. Funding for the project has been provided in the capital budget (ENG-001-13).

Consultations:

N/A

Conclusion:

Construction to restore the design elevations of the top of dykes along the Little River is planned to take place in the Winter of 2024/2025. Residents will be notified in advance of the work occurring.

Planning Act Matters:

N/A

Approvals:

Name	Title
Patrick Winters	Manager of Development
Stacey McGuire	Executive Director of Engineering / Deputy City Engineer
Mark Winterton	City Engineer
Wira Vendrasco	City Solicitor
Dana Paladino	Commissioner of Corporate Services

Name	Title
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 63/2024

Subject: Pedestrian Generator Sidewalk on the North Side of Adstoll Avenue from the Sainte-Therese School Driveway Entrance to Rivard Avenue (approximately 116m) - Ward 8

Reference:

Date to Council: May 29, 2024
Author: Rajan Ray
Engineer II
(519) 255-6257 ext. 6168
rray@citywindsor.ca
Design - Engineering
Report Date: 5/9/2024
Clerk's File #: SW2024

To: Mayor and Members of City Council

Recommendation:

I. THAT Council **APPROVE** the construction of a Pedestrian Generator Sidewalk on the north side of Adstoll Avenue from the Sainte-Therese School Driveway Entrance to Rivard Avenue as proposed in this report; and further,

II. THAT the estimated cost of $ 61,938 **BE CHARGED** to the Pedestrian Safety Improvement Project (Project No. 7045034); and further,

III. THAT Council **PRE-APPROVE** and **AWARD** the Tender related to this project, provided that the Tender amount is within the approved budget, pursuant to the Purchasing By-Law 93-2012 and amendments thereto; and further,

IV. THAT the CAO and the City Clerk **EXECUTE** an agreement with the low bidder, provided that the Tender amount is within the approved budget, with said contract being satisfactory in form to the City Solicitor, in technical content to the City Engineer, and in financial content to the City Treasurer.

Background:

A request was received from Councillor Gary Kaschak to investigate the need for a new sidewalk on the north side of Adstoll Avenue to provide a connection between Buckingham Avenue and Rivard Avenue to improve safety for children walking to the school.

The City's Pedestrian Generator Policy created in 2007 and updated in 2024 allows for the construction of sidewalks on local roads and school approach streets, at no cost to the residents. Administration undertook a review of the above request to determine if the subject area would qualify under the policy.

Discussion:

Pedestrian Generator Sidewalk Policy:

The definition of a Pedestrian Generator Sidewalk is contained within the Pedestrian Generator Sidewalk Policy adopted by CR 120/2024 on March 18, 2024, and reads as follows:

1.2 A Pedestrian Generator Sidewalk and related pedestrian facilities may be warranted where any of the following conditions exist:
- 1.2.1 It is located on a route leading to significant pedestrian destination(s);
- 1.2.2 It serves more than the abutting properties, including institutional and parkland access;
- 1.2.3 Where separation of pedestrians from vehicles is lacking in the road cross-section in the community;
- 1.2.4 It is requested or endorsed by the significant pedestrian operator; or
- 1.2.5 It would be inequitable to charge the full cost of the sidewalk to the abutting property owners.

The evaluation below is based on the above definition confirming that this section qualifies as a Pedestrian Generator Sidewalk.

1. The proposed sidewalk is on a route that leads to the following pedestrian generating locations all within 1 kilometer of the Adstoll and Rivard intersection:

   Heavy Pedestrian Generators:
   Saint Therese Catholic School

   Moderate Pedestrian Generators:
   Windsor Community Housing Corporation
   Freshco Tecumseh and Rivard

2. The proposed sidewalk would connect from the driveway entrance of Sainte Therese Catholic School to Rivard Avenue. The south side of Adstoll Avenue has an existing sidewalk from Buckingham Avenue to Rivard Avenue. However the roadway section between the school entrance and Buckingham Avenue to the west, has a rural cross section with no existing curbs and gutter. Administration does not recommend extending the sidewalk in this location due to drainage issues and pedestrian safety concerns.

3. Adstoll Avenue is considered a school approach street as it provides pedestrian access to Sainte Therese Catholic School.

4. The pavement width on Adstoll Avenue is 8.5 meters and carries two-way traffic (40KM/hr speed limit) with a parking lot located on the north side. The students coming from the school do not have any sidewalk unless they cross to the south side of Adstoll Avenue at Rivard Avenue. The pedestrians from the community housing residence have to walk to the south side of Adstoll to walk all the way to Buckingham Avenue. There is no existing physical space on the north side for pedestrians to travel that is separate from vehicles which increases the probability of a pedestrian-vehicle conflict.

5. The French Catholic School Board, has submitted a letter of support for the construction of this sidewalk to ensure the safety of the students and residents while travelling to Saint Therese Catholic School. This letter is attached as Appendix A.

6. This sidewalk would serve the whole community of the project location, as shown above. Thus, it would be inequitable to charge the abutting property owners for this project.

Administration has determined that this section of Adstoll Avenue qualifies under the Pedestrian Generator Sidewalk Policy, as established by CR 120/2024.

Risk Analysis:

Associated risks to the City resulting from the undertaking of this project include risks typical of construction projects, such as bodily injury, property damage, and matters arising from violations of the Occupational Health and Safety Act. These risks will be transferred to the successful Contractor through the contract entered into with the City. As part of the contract with the successful Contractor, the Contractor will be required to provide proof of insurance to the City, as well as indemnify the City from any claims which may arise from their work during or after construction.

Providing a sidewalk in this location would reduce the risks associated with pedestrians/students having to travel down Adstoll Avenue and crossing the road mid-block, especially at peak traffic times.

Climate Change Risks:

N/A

Financial Matters:

The required estimated funds are outlined below.

EXPENSES	
Estimated Sidewalk Construction Budget	$ 38,000
Non-Recoverable HST	$ 1,938
Engineering/Inspection/Geomatics/Soils	$ 12,000
Contingency	$ 8,000
TOTAL EXPENSES	**$ 61,938**

Costs associated with this project will be charged to Project 7045034 - Pedestrian Safety Improvements which has been established to address projects based on warrant and priority analysis. There is currently $355,735 in available funding which will be sufficient for this project to proceed if approved.

Consultations:

Kathy Buis – Financial Planning Administrator

Michael Dennis – Financial Manager of Asset Planning

Paul Mourad – Engineer III – Design Standards Lead

Conclusion:

Administration recommends that Council approve the construction of the proposed Adstoll Avenue sidewalk presented in accordance with the Pedestrian Generator Sidewalk Policy (CR 120/2024).

Planning Act Matters:

N/A

Approvals:

Name	Title
Paul Mourad	Manager of Design (Acting)
Stacey McGuire	Executive Director of Engineering / Deputy City Engineer
Mark Winterton	Commissioner of Infrastructure Services
Wira Vendrasco	City Solicitor
Dana Paladino	Commissioner of Corporate Services

Name	Title
Janice Guthrie	Commissioner of Finance and City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

1 Letters of Support from Conseil Scolaire Catholique Providence (French Catholic Board)

2 Proposed Pedestrian Generator Sidewalk, Adstoll Avenue from Saint Therese Catholic School driveway to Rivard Avenue - schematic drawing

ÉCOLE ÉLÉMENTAIRE CATHOLIQUE
Sainte-Thérèse

October 6, 2023

To the attention of Mr. Gary Kaschak
Ward 8 Councillor, City of Windsor,

School safety is of utmost importance as a school administrator and for a school community at large. However, concerns have been raised by parents and staff members from École élémentaire catholique Sainte-Thérèse, as well as from community members. These concerns include the lack of a crossing guard and school crosswalk behind the school at the Kiss & Ride exit point, the lack of a school area and zone on Tecumseh Road and on Adstoll, as well as a reduced speed for a school zone.

School crossing guards play an important role in securing the lives of our students and their families. Unfortunately, for a second year in a row, our request for a crossing guard at the exit of the Kiss & Ride on Adstoll has been denied. We kindly ask that this decision be revisited.

Many of our students and families are walking to and from school via the Adstoll school access point. Given there are no sidewalks on the North side of the road, students are forced to cross to the South side in order to walk home safely. The absence of trained crossing guards at this exit point is forcing the school administration to act as crossing guards to assist children crossing the road safely which detracts from their primary duties. I have heard from countless parents and have seen for myself the dangers. As such, many other families are opting to drive instead of walking, which in turn results in vehicular congestion and increased dangers during peak hours. It is imperative that this crossing become safe with the help of trained crossing guards and a school crosswalk.

Furthermore, we are requesting the establishment of a school area (including initial warning signs) and of a school zone (with reduced speeds) in and around our school, on Tecumseh Road and Adstoll. According to the City of Windsor School Neighbourhood Policy (May 2016, page 19) "[t]he HTA does allow a municipality to reduce speed limits in school zones. (...) A lower operating speed has been shown to reduce the severity of collisions and provides additional time for drivers as well as non-motorized users to avoid potential collisions."

In closing, student safety is very much on the minds of all parents, school staff and administration. The safety of children needs to be everyone's priority; as such, we implore you and the City of Windsor's council to act on these concerns by implementing our requests. We look forward to hearing from you and working together to ensure school safety.

Sincerely.

Mélanie Moir
Principal of É.é.c. Sainte-Thérèse

Jean-Paul Gagnier
Superintendent of Education, CscProvidence

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Proposed Concrete Sidewalk on North Side of Adstoll Avenue

LOCATION OF WORK

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: S 64/2024

Subject: CQ 4-2023 and CQ 37-2023 – Electric Vehicles – City Wide

Reference:

Date to Council: May 29, 2024
Authors: Cole Nadalin
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And

Rob Slater
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Report Date: May 10, 2024
Clerk's File #: SW2024

To: Mayor and Members of City Council

Recommendation:

1. THAT City Council **RECEIVE** the following information in response to CQ 4-2023 and CQ 37-2023;
2. THAT based on the content and discussion of this Report, City Council **DIRECT** Administration to develop a "Policy for Municipal Electric Vehicle (EV) Charging Stations";
3. THAT in an effort to support the expansion of EV charging station infrastructure throughout the municipality, that City Council **DIRECT** Administration continue to explore proposed projects facilitating third-party ownership of EV charging stations in municipally-owned parking lots and garages;
4. THAT City Administration **PROVIDE SUPPORTS** in the installation of privately-owned EV Charging Infrastructure for residential, commercial, and municipally-owned properties through:
    a. The support and facilitation of third-party ownership of EV charging infrastructure in municipally-owned parking lots and garages on municipally-owned properties; and
    b. Exploring amendments to the Zoning By-law for new residential development; and

c. Exploring amendments to Zoning By-law for new multi-residential and non-residential development

Executive Summary:

N/A

Background:

At the meeting of City Council on February 13, 2023, Councillor McKenzie (Ward 4) asked CQ 4-2023 as follows:

> *"Asks that Administration develop a report and policy for Council on the feasibility of Electric Vehicle Charging Stations be installed to all current and future municipally owned parking lots and garages."*

At the meeting of Council on December 11, 2023, Councillor Agostino (Ward 3) asked CQ 37-2023 as follows:

> *"Asks that Administration report back on EV charging - How will cars in our neighbourhoods, especially those who don't have driveways or garages, charge their electric vehicles? If you park on the street how do you charge your car?"*

This report addresses both of the aforementioned CQ's.

Discussion:

The Municipality's Role in Providing for EV Charging

The question raised by Councillor Agostino regarding how residents in neighborhoods without private driveways or garages can (or will be able to) charge their electric vehicles is not unique to our City alone; it is a concern shared by virtually every urban area globally. As cities around the world are increasingly embracing electric vehicles as part of a broader move towards sustainability and reducing carbon emissions, governments are also grappling with the challenges of providing accessible charging infrastructure.

In densely populated urban environments, where many residents rely on street parking due to a lack of private parking facilities, the need for convenient and efficient EV charging becomes more critical. A practical solution necessitates action by various levels of government and the private sector. A multifaceted approach is required, involving municipal actions, policy changes, and public-private collaborations. This was highlighted in Council Report S 147/2020 that provided Council with information regarding the necessary policy and/or bylaw changes, along with best practices, to allow for both new and existing buildings to prepare for electric infrastructure to support the transition to electric vehicles.

In December 2023, the Federal Government announced "Canada's Electric Vehicle Availability Standard (regulated targets for zero-emission vehicles)". Auto manufacturers and importers must meet annual ZEV ("Zero Emission Vehicle") sales

targets starting in 2026, with a gradual increase to 100% by 2035. This phased-in approach aims for a zero-emission future.

Other significant highlights relevant to the Councillor's question include:

1. **Charging Infrastructure Development**: The Government of Canada has allocated over $1.2 billion to support the deployment of more charging stations across the country. This includes funding for over 43,000 chargers, aiming to double the number of public charging stations.[1] The Corporation was a recipient of funding for its 11 public stations through the associated Zero Emissions Vehicle Infrastructure Program (ZEVIP).
2. **Credit System for Compliance**: The regulations include a credit system for manufacturers, with provisions for early action credits (EACs) for ZEV sales in model years 2024 and 2025. There are also credits for investments in fast-charging infrastructure, encouraging private sector investment in charging stations. These stations must be opened between January 1, 2024, and December 31, 2027.[2]

Together, these initiatives are poised to dramatically expand Canada's public EV charging network. The government's financial commitment lays the groundwork for a comprehensive charging infrastructure, while the credit system motivates the private sector, particularly auto manufacturers, to invest in and expand the charging network. This dual approach ensures not just an increase in the quantity of charging stations, but also an enhancement in their quality and accessibility, making electric vehicles a more viable option for a broader segment of the population.

In the short-term, to support this transitions, the City can:

- **Enter into Public-Private Partnerships**: The City can collaborate with private entities to establish charging infrastructure in public areas, such as municipal parking lots.
- **Implement Policies**: The City can enact policies that promote the installation of charging stations in new construction.

However, in the long-term, the challenges faced by EV owners without private charging access are likely to be addressed through technological advancements. The responsibility of meeting EV consumers' core needs, including longer battery range and quicker charge times, mainly lies with the automotive industry and technology developers. Key advancements in EV technology, especially in battery and charging

[1] Environment and Climate Change Canada. (2023). Canada's Electric Vehicle Availability Standard (regulated targets for zero-emission vehicles). Retrieved January 16, 2024, from https://www.canada.ca/en/environment-climate-change/news/2023/12/canadas-electric-vehicle-availability-standard-regulated-targets-for-zero-emission-vehicles.html

[2] Ibid.

systems, are essential to overcome the obstacles for those without private charging solutions.

Current technological advancements under development or investigation include:

Longer Battery Range: Efforts are being made to develop batteries that offer ranges of 500 miles or more per charge, drastically reducing the frequency of charging.[3]

- **Faster Charging Technology**: Innovations in ultra-fast charging batteries allow for charging times that are minutes instead of hours, bringing convenience to public charging similar to refueling at gas stations.[4]
- **Wireless and Over-the-Air Charging**: Future technologies may allow for charging vehicles parked on the street without physical cable connections, using methods like Wi-Fi or ultrasound.[5]
- **Portable Charging Solutions**: Development of portable or mobile chargers is underway to enable on-the-spot charging in areas without established charging stations.[6]
- **Battery Swapping**: Partnerships to integrate Modular Battery Swapping technology into electric vehicles may ultimately offer a solution for a fully charged battery in under five minutes. The ability to swap an EV's battery would address common concerns such as charging time and battery lifespan as well as reduce range anxiety.[7]

While municipalities play a supportive role in establishing infrastructure and policy frameworks for EV charging, the responsibility to meet consumer demands for extended range and faster charging primarily rests with the automotive industry and technology innovators.

As noted in Council Report S 147/2020, a multifaceted approach involving municipal actions, policy changes, and public-private collaborations are required to promote the widespread adoption of EVs, especially in urban areas where residents may not have access to private charging facilities. However, the long-term solution to challenges such as range anxiety and charging convenience hinges on technological advancements driven by the automotive industry and technology developers. Cooperative efforts between municipal governments and the private sector are essential in navigating the transition to widespread adoption of EVs.

EV Charging Stations in Municipal Lots and Garages

[3] Dave Nichols, "The Future of EV Batteries," *GreenCars*, August 2023, https://www.greencars.com/greencars-101/the-future-of-ev-batteries.
[4] Ibid.
[5] Ibid.
[6] Ibid.
[7] https://www.stellantis.com/en/news/press-releases/2023/december/stellantis-and-ample-establish-partnership-to-leverage-ample-s-modular-battery-swapping-technology-for-use-in-stellantis-electric-vehicles

The question put forward by Councillor McKenzie questions the feasibility of installing EV charging facilities in all current and future municipal lots and garages. As the preliminary source of information, the Corporation's currently operating network of EV charging stations was examined.

2022 Municipal EV Charging Stations Pilot Project

The 2019 Federal Budget announced $130 million over five years (2019-2024) to deploy a network of zero-emission vehicle (ZEV) refuelling stations (level 2 and higher) in localized areas where Canadians live, work, and play.

In June 2019, Natural Resources Canada (NRCan) introduced the Zero Emission Vehicle Infrastructure Program (ZEVIP) to support the deployment of electric vehicle (EV) chargers and hydrogen refuelling stations across Canada. The first phase of the ZEVIP targeted public places and on-street/curbside charging locations.

With the ambition of leading the community by example, through CR447/2019 Council authorized the Asset Planning Department's Energy Initiatives Unit (EIU) to submit an application to the ZEVIP toward a pilot project. Primary intentions of this pilot project were the assessment of costs, collection of data regarding station use, and the potential for greenhouse gas emissions avoidance.

This application was approved for funding and an agreement was signed in July 2020 to support the installation of eleven (11) level 2, dual-connector electric vehicle charging stations. NRCan's contribution of $110,000 ($10,000 per dual-connector EV station) joined $250,000 allocated from the Corporation's Energy Reserve (Fund 188) to satisfy remaining capital project costs of equipment, installation, and commissioning.

The City of Windsor's electricity distribution company, EnWin Utilities Ltd. contributed $22,000 in-kind toward utility connection, administration, and accounts activation. A third-party sponsor, Atura Power, later added funding totalling $91,818.15 toward the project's forecasted operational costs (electricity and network fees [$18,363.63 per year, over five years]).

RFP 13-21 (March 2021) awarded the project to Precise ParkLink Inc. (Toronto, Ontario) with equipment supplied by ChargePoint, Inc. (Campbell, California) and employed subcontracted civil and electrical works by Amico Infrastructures Inc. (Oldcastle, Ontario). The "Municipal EV Charging Stations Pilot Project" was completed and began serving the community in April 2022.

Considerations for the Installation of EV Charging Infrastructure

1.) Technology selection

In selecting a technology, the EIU endeavoured to serve the greatest population of zero-emission and low-emission vehicles. Electric vehicles are represented by three categories:

Battery Electric Vehicle (BEV)	Plug-in Hybrid Electric Vehicle (PHEV)	Hybrid Electric Vehicle (HEV)
Powered solely by an electric battery with no gasoline engine parts i.e. zero emissions.	Has both a gasoline tank and a charging port, and can utilize electric vehicle charging stations.	A vehicle that uses an electric motor to assist a gasoline engine.
Can be served by municipal EV charging stations.	Can be served by municipal EV charging stations.	Cannot be served by any EV charging stations.

In applying for EV charging station funding through the ZEVIP, support for both level 2 and level 3 technologies was available. A comparison of level 2 and level 3 stations (equipment only) is described in the table below:

Technology	Level 2	Level 3
Electrical output	Approximately 7 kW AC current	Approximately 60 kW DC current
Range	Approximately 30 km of range per hour of charging	Approximately 250 km of range per hour of charging
Equipment cost	Approximately $9,000 for municipal dual-connector*	Approximately $47,000 for municipal dual-connector*

* 2019 costs considered

Based on the capital equipment cost and estimated installation and operating costs of level 3 stations, it was determined that the application could pursue:

1.) up to 11 level 2 EV charging stations
2.) up to two level 3 EV charging stations
3.) one level 3 and up to four level 2 EV charging stations

In the interest of greatest city-wide impact, ten strategic and unique locations, destinations, and points of interest throughout the municipality were selected for 11 level 2 EV charging stations.

2.) Site selection

In determining suitable locations for EV charging stations, the availability of electricity is paramount. The electricity distribution company (EnWin Utilities Ltd.) must have capacity available within the station's locality and the ability to deliver electricity to the site.

A particular site's probability of driver utilization is also an important consideration. The locations below were chosen based on the likelihood that drivers would reside in the immediate location for one hour or longer e.g. viewing/participating in a sporting event, visiting a park or venue, etc.

	Property	Address
1	Windsor International Aquatic & Training Centre	401 Pitt Street West
2	Capri Pizzeria Recreation Complex	2555 Pulford Street
3	Downtown Parking Garage 2	406 Pelissier Street
4	Municipal Parking Lot 10 (City Hall Square)	445 City Hall Square West
5	Municipal Parking Lot 35 (Via Italia)	1031 Elsmere Avenue
6	Municipal Parking Lot 4-1 (Walkerville)	1319 Lincoln Road
7	Mic Mac Family Fun & Sports Park	1125 Prince Road
8	WFCU Centre; two stations	8787 McHugh Street
9		
10	Windsor International Airport	3200 County Road 42
11	Windsor Public Library - John Muir Branch	363 Mill Street

Additional sites were considered and determined less suitable based primarily on impedances to electrical connection and associated infrastructure cost.

3.) Operating costs

a. Electricity cost and annual fees

Operating costs in the form of electricity delivered to the EV charging stations include monthly commodity ($/kwh), delivery, and regulatory charges determined by EnWin Utilities Ltd. To-date, the average monthly commodity cost of electricity based on driver use of the combined eleven EV charging stations is considered negligible at approximately $2,100/month.

Vendor fees associated with the EV charging stations include an annual Commercial Network Service Plan required to facilitate networking and owner access to data ($1,052 per connector, per five-year term) and an optional extended warrantee ($2,620 per station, per five years).

b. Damage/vandalism

From the first EV charging station activation in April 2022 to date, the Corporation has experienced one instance of vandalism (metal theft), one instance of accidental damage (vehicle impact to infrastructure), and three instances of naturally occurring damage (normal wear-and-tear). These types of loss are not covered under the EV charging station vendor warrantee and were absorbed by the Corporation.

Where a charging handle, cable, or head unit are damaged, the replacement cost to the Corporation is approximately $6,800 in parts and labour. Where a complete system replacement is required (not including civil works), the cost to the Corporation is $9,800 in parts and labour.

Based on the first year of operation, it is forecasted that the cost of an extended warrantee will not be justified when compared to unanticipated repair costs. Should damage or vandalism to the sites increase, this will be re-evaluated.

c. Cost to drivers

A primary goal of the Municipal EV Charging Stations Pilot Project is to assess the community's need for a distributed network of charging infrastructure. In the interest of collecting the upper limit of user uptake, these EV charging stations offered free charging to EV drivers for the first year of operation (April 2022 – 2023).

In consultation with the region's network of electric vehicle owners, EV Society Windsor-Essex, it was determined that a cost of between $1.00 and $2.00 per hour of charging would be suitable based on the alternative cost of home charging. This prospective cost to drivers was contingent upon regular maintenance of the locations by the Corporation to ensure safe and reliable operation.

Upon completion of the first free-of-charge year of operation in April 2023, the Energy Initiatives Unit began evaluating the impact of introducing a cost to drivers. The EIU is currently consulting with other Ontario municipalities to determine the effects upon usage and resulting impacts to corporate and community greenhouse gas emissions avoidance if a cost to drivers is introduced. While the user uptake of the municipally-owned charging stations has been significant (averaging approximately 500 charging sessions per month), the average charging time of 2.5 hours at a rate of $1.50 per hour would result in negligible revenue (approximately $1,875 monthly).

4.) Safety/security

Selected sites for EV charging stations are electrically connected either to an onsite facility through the building's electrical panel or coupled directly to the local utility's electrical distribution network via a utility pole. Interior access to electrical panels is locked by facility staff, and exterior equipment is secured inside a locked enclosure to prevent unauthorized access and the potential for harm.

Because the EV stations must network to provide their operational status to system owners and EV drivers, install software updates, and facilitate payments, unauthorized external access to the corporate network was considered a significant risk. This was mitigated by selecting equipment which does not require connection via Ethernet or WiFi, and instead communicates separately over 4G LTE mobile connection.

5.) Availability of parking

Ontario's Bill 123, the Reserved Parking for Electric Vehicle Charging Act, 2019 stipulates that "*No person shall park a vehicle in an electric vehicle charging station that is identified by a sign that satisfies the prescribed requirements unless the vehicle is an electric vehicle and the vehicle is attached to the station's charging equipment.*"

Such an infraction carries a fine of $125 to the driver of a non-electric vehicle, but also means that the installation of EV charging stations at existing properties will reduce the number of spaces available to drivers of traditional internal combustion engine vehicles.

Ontario's market share of zero-emissions vehicles stands at 6.9 per cent, making up 31.5 per cent of all ZEV registrations in Canada.

Average cost of EV stations

Site-specific requirements generate the greatest variance in EV charging station cost. Where direct connection to a facility's existing electrical panel and utility meter is not possible, an exterior enclosure and cable trenching/directional drilling to a utility pole connection add to the installation cost.

Observed costs of the municipal EV charging stations pilot project (11 level-2, dual-connector commercial charging stations; 2021):

Average capital cost of a building-connected EV charging station:	$29,470
Average capital cost of a utility pole connected EV charging station*:	$41,807

*Exclusive of connection services and fees provided in-kind by EnWin Utilities Ltd.

ices and fees provided in-kind by EnWin Utilities Ltd.

Operating costs include annual vendor fees to support mobile network service and electricity costs of commodity, regulatory, and delivery:

Average annual operating cost of one EV charging station*:	$1,581
Average annual operating cost of eleven EV charging stations*:	$17,391

*Based on first year of operation, not considering unanticipated maintenance and City of Windsor employee salaries for administration

In the event of catastrophic damage to the EV charging station through vehicle impact, vandalism, or natural disaster, a full system replacement may be required. Where civil and electrical infrastructure remain intact:

Cost of EV charging station replacement (system only)*:	$9,800

*Exclusive of HST

Municipalities pursuing the installation and operation of an electric vehicle charging network are largely dependent on federal funding programs, as they are generally considered infrastructure and do not fully recover their lifecycle cost. For-profit third-parties exist for EV charging station network expansion, though affordability of vehicles themselves is currently hindering rapid growth.

Recommended measures to enhance EV charging infrastructure within the community are described below.

1.) Third-party ownership opportunities:

The Corporation currently has insufficient resources, both in personnel and budget to administrate, operate, and maintain an electric vehicle charging network. However, the City is able to utilize its position as a municipality holding public properties to drive local network expansion with minimal added resource requirements.

In April 2022 as the first stations in the municipal network were becoming operational, the Corporation began exploring opportunities to host third-party owned and operated electric vehicle charging stations on Corporately owned properties. A pilot project is currently under development in cooperation with the joint venture of major Canadian telecom and electric vehicle charging station vendor to install two privately owned and operated electric vehicle charging stations in Windsor's Legacy Park and riverfront parking lots 5 (Dieppe Gardens) and 34 (Great Western Park).

Appendix A provides a presentation of the proposed pilot project partnership, and Appendix B portrays a draft agreement developed in collaboration with the potential joint-partnership.

These stations are expected to be operational in Q3 2024, and this pilot project will serve to further specify the internal and external requirements of third-party operators locating electric vehicle charging stations within municipal parking lots and parking garages. Pending their successful implementation and operation, Administration could pursue similar agreements to lease municipal parking spaces at public properties in the interest of increasing the number of publicly available electric vehicle charging stations throughout the City of Windsor.

2.) Examination of a Policy which includes:

a. Amendment to Zoning By-law/Site Plan Control/Approval Process for new residential development

Both the Federal and Provincial Governments are aggressively pursuing measures to improve housing availability for Canadians. The City of Windsor's strong support for new residential development as described in the 2021 *Windsor Works Economic Development Strategy* presents an opportunity to increase requirements for electric vehicle charging infrastructure while demonstrating the municipality's commitment to greenhouse gas emissions reduction.

At minimal added cost to construction, an amendment to the Corporation's Zoning By-law for new residential development can mandate that all new detached, semi-detached, and townhomes be required to have roughed-in electrical infrastructure for the later installation of an electric vehicle charging station. This inexpensive addition of a dedicated circuit breaker, electrical cable, and its termination in a garage/driveway is a simple measure which allows the municipality to state that 100 per cent of new homes constructed in the City of Windsor are "EV charging station ready".

b. Amendment to Zoning By-law/Site Plan Control/Approval Process for new multi-residential and non-residential development

Throughout the course of the pilot project, the City's Energy Initiatives Unit has fielded many inquires toward additional EV charging infrastructure from citizens residing in multi-residential properties. Electric vehicle owners living in apartment complexes and condominiums are often required to travel specifically to charge their vehicles because infrastructure does not exist at their place of residence.

As compared to the average cost of a stand-alone EV station, the cost of installing a building-connected EV charging station is considerably less than when a direct utility connection is required, particularly in new construction where parking is being constructed, conduit is already being laid to the building's electrical room to supply electricity to parking lot lighting. When also subtracting the EV station equipment cost (as this is not proposed as a requirement and will likely be borne by a third-party owner/operator) the addition of dedicated EV charging station infrastructure is considered to be of minimal added cost.

Examples of other Ontario municipalities who have taken this approach include:

a) Kitchener: Mandatory; *20% (non-residential is 17.5%) of parking spaces required for multiple dwellings shall be designed to permit the future installation of electric vehicle supply equipment.*

b) *Whitby: Optional; At least 20% of parking spaces are equipped with electric vehicle charging stations. All remaining spaces are designed to enable future charging station installation.*

c) Toronto: *Mandatory; Residential: For each dwelling unit with a residential parking space, provide an energized outlet or full Electric Vehicle Supply Equipment (EVSE) capable of providing Level 2 charging; AND in multi-unit apartments or townhomes with shared, common onsite residential parking spaces: each residential parking space, excluding visitor parking, shall include an adjacent energized outlet capable of providing Level 2 charging or higher to the parking space, either dedicated to the parking space or using an Energy Management System.*

Mandatory; Residential and Non-residential Uses: Parking spaces must be equipped with an energized outlet, which is clearly marked and identified for electric vehicle charging: (A) all residential parking spaces provided for dwelling units located in an apartment building, mixed use building, multiple dwelling unit building, excluding visitor parking spaces, must include an energized outlet capable of providing Level 2 charging or higher to the parking space; and, (B) in cases other than those set out in (A) above, 25 percent of the residential and non-residential parking spaces in a building must include an energized outlet capable of providing Level 2 charging or higher.

Toward the development of an EV Policy, Administration could consider the impact of requiring new multi-residential and non-residential developments to achieve a minimum of 10 per cent “roughed-in” EV parking spaces with infrastructure for later installation of an owned or third-party EV charging station (circuit breakers and conduit to a concrete pedestal). This recommendation could also be applicable to future municipal parking lots and parking garages constructed by the Corporation.

Individuals in existing developments who are considering a plug-in hybrid or electric vehicle are encouraged to approach their building owner(s) with a request for one or more electric vehicle charging stations. Privately owned, existing non-residential and multi-residential properties are generally considered outside the applicability of zoning or by-law amendments to require EV charging stations.

Risk Analysis:

Investing substantial funds in municipal infrastructure for electric vehicles carries inherent risks due to the swift pace of technological advancements in this sector. A primary concern is that the infrastructure being installed today might soon become obsolete or insufficient as technology rapidly evolves.

The evolving nature of EV technology, particularly in the areas of batteries and charging systems, further compounds this risk. Improvements in battery technology are leading to longer ranges and quicker charging times, potentially reducing the need for an extensive network of charging stations or altering their required specifications significantly. Such advancements could quickly make today's charging infrastructure less relevant or even obsolete. Furthermore, the emergence of alternative technologies like battery swapping and wireless or over-the-air charging could drastically alter the infrastructure requirements for EVs.

Climate Change Risks

Climate Change Mitigation:

The Government of Canada has set ambitious federal targets for zero-emission vehicles. Proposed federal regulations would require that at least 20 percent of new light-duty vehicles offered for sale be zero-emission vehicles for the 2026 model year, increasing annually to at least 60 percent by 2030, and 100 percent for 2035.

Increasing the percentage of low carbon vehicles is also a significant component of the Provincial Government's target of reducing emissions by 12 megatons carbon dioxide equivalent (CO_2e) greenhouse gas emissions from current levels by 2030. The *Powering Ontario's Growth* plan also sees substantial investment in power generation, energy storage, and electricity transmission infrastructure to meet the growing needs of Ontarians through 2040.

In 2022, transportation emissions accounted for 42% of our Community's greenhouse gas emissions, while 34% of the Corporate greenhouse gas emissions are attributed to the City's fleet including transit buses. Supporting the transition to electric vehicles is a significant strategy required to reduce these emissions. The development of charging infrastructure is critical to the promote the transition to electric vehicles both Corporately and within the Community.

Increasing the availability of EV charging stations within the community supports numerous corporate and community goals for the City of Windsor:

- Corporate Climate Action Plan (CCAP): The CCAP aligned the corporate fleet replacement target with the provincial target of 15% of non-transit fleet by 2041.
- Community Energy Plan (CEP): The 2017 CEP includes a target participation rate of 10% of all light duty cars and trucks to be alternate fuel (or electric) by 2041. However, the 2020 Acceleration of Climate Changes Actions in response to the Climate Change Emergency Declaration recommending increasing this target to 30%.
- Active Transportation Master Plan
- Corporate Energy Management Plan
- Windsor Works Economic Development Strategy

Since their activation in April 2022, the municipality's 11 EV charging stations have dispensed more than 180 megawatt-hours of electricity through over 13,000 charging sessions.

Climate Change Adaptation:

N/A

Financial Matters:

To-date, the municipal electric vehicle charging stations pilot project has been considered a success with 1,043 unique users and 6,962 charging sessions in 2023. However, future installations of EV Charging Stations in municipal garages and lots, and the municipality's role in providing this service, must consider the following:

- Operating & Capital infrastructure needs (acquire, maintain, repair, replace)
    - Appropriate budget's need to be put in place for the initial installation, maintenance, utilities, and the eventual replacement of units. As identified, the cost of EV charging infrastructure installation can vary considerably based on the servicing required at the point of installation with the average cost in the range of $30,000 - $45,000 per unit, inclusive of annual operating costs.
    - Staffing needed to manage the infrastructure – either through in-house program administration or via contract management of a third-party provider.
- User fees and fines administration
    - While the municipality could look to develop a model whereby the rates for EV charging would cover the aforementioned costs, it is likely that a full-cost recovery model would result in a rate that is higher than the average market rate resulting in subsidy being provided by the general tax base for this program. Rates would need to be determined based on industry best-practice.
    - The Corporation has observed repeated instances of a small number of drivers occupying EV charging spaces significantly longer than required to charge their vehicles. For corporately owned and operated EV charging stations, fines for non-compliance to the Parking By-law, along with any other penalties imposed for overstaying in an EV charging space would require administration and collection.

There is currently no dedicated funding in place for corporately-owned EV charging stations in public lots or garages. The current 11 dual-port charging station implemented under the ZEVIP pilot program are managed by the Asset Planning department, under sponsorship of Atura Power. Administration recommends the development of a "Policy for Municipal Electric Vehicle (EV) Charging Stations" which will include consideration of the Corporation's ownership and management of existing and future City of Windsor EV charging stations, inclusive of both location determination, operational and capital cost requirements, and fees and fines, in municipally-owned public lots and garages.

Consultations:

Angela Marazita – Fleet Manager

John Revell – Chief Building Official
Denise Wright – Manager, Real Estate Services
Karina Richters – Supervisor, Environment, Sustainability & Climate Change
Alex Vucinic – Manager, Purchasing

Conclusion:

The challenge of providing accessible electric vehicle charging in urban areas without private parking is essentially a global concern. The Federal Government's "Canada's Electric Vehicle Availability Standard" and initiatives like the allocation of over $1.2 billion for charging infrastructure development, along with a credit system for auto manufacturers, are pivotal steps towards expanding Canada's public EV charging network. These efforts, complemented by local actions such as public-private partnerships and policy implementation, are important in addressing the near-term needs for charging infrastructure. However, the long-term resolution of issues like range anxiety and charging convenience largely depends on technological innovations in the automotive sector.

Municipalities play a supportive role, but the advancement and widespread adoption of electric vehicles by those without ready access to charging infrastructure at home will ultimately depend on the ability of the automotive industry and technology innovators to deliver vehicles equipped with batteries that offer extended range and quicker charging capabilities compared to those offered today.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cole Nadalin	Supervisor, Energy Contracts
Kristan Karam	FPA – Asset Planning
Sokol Aliko	Manager, Energy Initiatives
Natasha Gabbana	Senior Manager, Asset Planning
Rob Slater	Executive Initiatives Coordinator
Shawna Boakes	Executive Director of Operations and Deputy City Engineer
Wira Vendrasco	(A) City Solicitor
Mark Winterton	Commissioner of Infrastructure Services and City Engineer (A)
Dana Paladino	(A) Commissioner, Corporate Services
Janice Guthrie	Commissioner of Finance and Chief Financial Officer
Janice Guthrie for Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

THE CITY OF WINDSOR ONTARIO, CANADA

Council Report: C 19/2024

Subject: Red Light Camera Update – City Wide

Reference:

Date to Council: February 26, 2024
Author: Ian Day
Senior Manager Traffic and Parking (A)
519-255-6247 x 6053
iday@citywindsor.ca

Public Works - Operations
Report Date: February 9, 2024
Clerk's File #: ST/13765

To: Mayor and Members of City Council

Recommendation:

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to execute the agreement with TraffiPax LLC to provide work and services related to the installation and maintenance of ten (10) additional red light camera systems, satisfactory in form to the City Solicitor, in technical content to the City Engineer and in financial content to the CFO and City Treasurer; and,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to execute **the** agreement with the City of Toronto to utilize the resources of the Joint Processing Centre (JPC) for ten (10) additional red light camera systems, satisfactory in form to the City Solicitor, in technical content to the City Engineer and in financial content to the CFO and City Treasurer.

Executive Summary:

N/A

Background:

At the meeting of City Council on February 25, 2019, Councillor Costante asked CQ5-2019 as follows:

"Asks that administration report back on implementing red light cameras and photo radars, including what other municipalities have these installed, pros and cons of implementation and costs of implementation. ST: 2019 February 25, 2019."

An initial report SCM 401/2019 S 165/2019 was presented at Council on November 18, 2019. At the meeting, Council directed administration to prepare additional information, CR574/2019 ETPS 720:

"That administration BE REQUESTED to provide a report related to reviewing the potential locations for the use of red light cameras, and automated speed enforcement including location and quantity recommendations and that this information, when it is available BE BROUGHT FORWARD for Council's consideration."

At the meeting of Council on May 25, 2020 CR259/2020 directed Administration as follows:

"That Administration **PROCEED** to engage the Ontario government in discussion regarding the implementation of red light cameras in the City of Windsor and utilize the Joint Municipal Processing Centre operated by the City of Toronto; and,

That Administration **BE REQUESTED** to issue a letter of intent to the Ministry and to report back with recommended funding options related to the potential one-time implementation costs and other related matters; and,

That Administration **APPLY** to the Ministry of Transportation to obtain an amendment to Ontario Regulation 277/99 and be added to the list of designated Municipalities under this program; and,

That Administration **ENTER INTO AN AGREEMENT** with both the City of Toronto to use the Joint Municipal Processing Centre and with the vendor approved by the City of Toronto for installation and maintenance of the equipment.

Discussion:

The City of Windsor's first Red Light Camera (RLC) system was activated on January 1, 2022 with a total of 10 systems coming online by the end of February 2022.

Red Light Camera systems were deployed at the following intersections:

1. Wyandotte Street East @ Goyeau
2. Wyandotte Street @ Ouellette Avenue
3. Howard Avenue @ EC Row E/B Off Ramp
4. University Avenue West @ Crawford Avenue
5. McHugh Street @ Clover Avenue
6. Giles Blvd @ Ouellette Avenue
7. Seminole Street @ Central Avenue
8. Erie Street East @ Goyeau Street
9. Huron Church Road @ Tecumseh Road West
10. Eugenie Street East @ McDougall Avenue

These locations were chosen based on a review of the five-year history of collisions for both side impact collisions and rear end collisions, and through consultation with Windsor Police and the vendor.

The key reasons why municipalities have installed Red Light Cameras are to change driver behaviour, reduce angled collisions, and increase safety. At this time, Administration has not completed a fulsome analysis of the reduction of collisions at these locations versus others around the City. Industry best practice is to review the three or five-year collision history immediately prior to the installation of a new traffic control measure and compare it against the three or five-year collision history occurring at this same location immediately following the installation of the control measure. At this time, the cameras have only been installed for two years. Anecdotally, the number of collisions at these locations appear to have reduced for side impact and not significantly increased for rear end types.

At this time, Administration would recommend increasing the number of cameras in the City of Windsor. Many other Municipalities have significantly increased the number of cameras after initial pilot programs. While the City of Windsor has not had the cameras running long enough to complete a fulsome analysis, the analysis of the other Municipalities supports the success of the program in general.

At this time, there are 296 signalized intersections in the City, therefore we have camera enforcement at only 3% of the intersections. The locations are spread out to a point that many drivers can alter their routes to the point that they never have to drive through one of the 10 cameras. Hence, those drivers are still behaving in a manner that they did prior to the initial installation. With 10 additional cameras, the saturation of cameras would increase to 6% of the signalized intersections. The higher the saturation levels, the higher the chance that a driver is required to drive through at least one of the locations with a camera and therefore changing their behaviour.

The location of the new cameras will be selected through careful consideration and analysis of current collision data, a review with Windsor Police, and based on installation limitations as set out by the vendor.

Consultation with Provincial Offences has confirmed that there is capacity internally to process the additional tickets that will need processing with the addition of 10 more Red Light Cameras.

The 2022 Provincial Offences Annual Report indicated during the first year of the program there were 5,318 tickets issued with revenue and expenses listed as follows;

YTD RLC Revenue Received	$822,823
YTD RLC Expenses	$214,085
Net	$608,738

Note that this net revenue figure includes expenses directly related to the RLC program and does not include shared operating expenses such as staffing costs, office supplies, etc.

In 2023 RLC tickets increased to 6,141 with revenue and expenses as follows:

RLC Revenue Received	$1,224,201
RLC Expenses	$215,063
Net	$1,009,138

The increase in revenue from 2022 to 2023 can largely be explained by the delay between the issuing of the ticket and the payment of the ticket. That is to say, even though the Red Light Camera system became fully operational in February 2022, payment of the corresponding fines would have been delayed by several months. The 2023 numbers represent a full 12 months of consistent fine payments.

Administrative Penalty (AP) Process

The AP program is an emerging approach to dealing with minor provincial offence violations for vehicle owner contraventions detected using camera systems and other municipal bylaws such as parking. A municipally operated AP program removes these minor charges from the Provincial Offences Court stream to a system that is fair, effective, efficient, and is managed by the municipality.

The Province has adopted Legislation that provides municipalities authority under the APS Program to deal with owner type offences including: Automated Speed Enforcement, Red Light Cameras, Streetcar Cameras and School Bus Camera charges.

An AP process moves these types of disputes out of the court system and gives municipalities the discretion to resolve tickets at a screening review. A person who disagrees with the decision of the screening officer can request a hearing before a hearing officer. Typically, an AP program can provide a more effective, automated, standalone system where most all elements are controlled by the municipality, without the need to rely upon the availability of judicial officers. The system is not limited by capacity but rather easily expandable should the need arise.

Currently, the City of Windsor's red light camera program is being operated through the Provincial Offense Act (POA) process. The dispute rate of RLC charges is less than regular ticket dispute rates (40%+) as there are no demerit points associated with convictions, and because the evidence provided by the Joint Processing Centre is so clear that they are typically not worth fighting. As a result, operating the RLC program through the POA process has been efficient, and administering and prosecuting these tickets has been at no additional cost to the POA program.

The City of Windsor already has a fully functioning Administrative Municipal Penalty (AMP) process in place through our Parking Enforcement division. AMP and AP are very similar in nature, with only a few minor changes that would need to be made to things like security and training. The City's current POA agreement with municipal partners is such that the City is sharing approximately 50% of expenses for the red light cameras but we are also sharing approximately 50% of the revenue as well. This was

determined at the inception of the program because it was on a pilot basis, it was simple, and it reduced the risk of any potential losses.

At this time, no other Municipality has transitioned their red light camera program over to the AP process. Some are currently in the process of transitioning their Automated Speed Enforcement (ASE) programs over to AP. Generally, Municipalities have noted that the quantity of ASE tickets was overwhelming the POA court system, while the number or red light camera tickets was manageable with existing staff compliments.

Currently the City has 2 years remaining in our initial 5 year contracts. Prior to the expiration of the 5 year contracts, Administration will prepare a report to Council that will advise on the feasibility of moving to an AP system, including what, if any, additional staff or other costs would be required, the potential impact it could have on the POA program, and the feasibility of keeping the administration and prosecution of RLCs within the POA program.

Risk Analysis:

There is a risk that revenue may not offset the costs. To date, the revenue received by Provincial Offences has exceeded any costs, and there have been no additional resources expended to administer the program and prosecute the RLCs. There are options available to the City in order to mitigate this, in the chance that it happens. Cameras can be relocated to other locations within the City, if it is determined that the decline of revenue is due to a specific location. The City is also able to terminate the agreements; however, this option would come with a cost. To date, no Municipality has reported a loss on their red light camera program.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

As per Council Report 172/2020, there is no up front cost associated with the implementation of the Red Light Camera program. The costs are monthly and are based on the number of cameras installed at that time. The costs are expected to be offset by revenue.

The costs for the program would be paid for through operating dollars within the Provicial Offences budget. Expenses and revenues will be managed and shared appropriately with the other Municipalities based on the existing Inter-Municipal Court Services agreement.

Consultations:

Rosa Scalia, Financial Planning Administrator – POA

Conclusion:

Administration recommends increasing the number of red light cameras in 2024.

Planning Act Matters:

N/A

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator – Public Works
Shawna Boakes	Executive Director of Operations
Mark Winterton	(A) Commissioner, Infrastructure Services and City Engineer
Chris Carpenter	Manager, Provincial Offences
Wira Vendrasco	City Solicitor
Dana Paladino	(A) Commissioner, Corporate Services
Joe Mancina	Chief Administrative Officer

Notifications:

Name	Address	Email

Appendices:

Subject: Additional Information to Report C 19/2024 – Red Light Camera Update – City Wide

Reference:

Date to Council: May 29, 2024
Author: Ian Day
Senior Manager Traffic and Parking (A)
519-255-6247 x 6053
iday@citywindsor.ca

Public Works - Operations
Report Date: May 9, 2024
Clerk's File #: ST/13765

To: Mayor and Members of City Council

Additional Information:

Recommendation:

THAT report AI 10/2024 "Additional Information to Report C 19/2024 – Red Light Camera Update" **BE RECIEVED** for information; and,

THAT Council **SUPPORT** the installation and maintenance of ten (10) additional red light camera systems as per Administrations recommendations; and,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to amend the agreement with TraffiPax LLC to provide work and services related to the installation and maintenance of ten (10) additional red light camera systems, satisfactory in form to the City Solicitor, in technical content to the City Engineer and in financial content to the City Treasurer; and,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to amend the agreement with the City of Toronto to utilize the resources of the Joint Processing Centre (JPC) for ten (10) additional red light camera systems, satisfactory in form to the City Solicitor, in technical content to the City Engineer and in financial content to the City Treasurer; and,

THAT the Chief Administrative Officer and City Clerk **BE AUTHORIZED** to sign any agreement or document required to effect ten (10) additional red light camera systems, satisfactory in form to the City Solicitor, in technical content to the City Engineer and in financial content to the City Treasurer.

Executive Summary:

N/A

Background:

Administration prepared a report to Council February 26, 2024 titled Red Light Camera Update – City Wide.

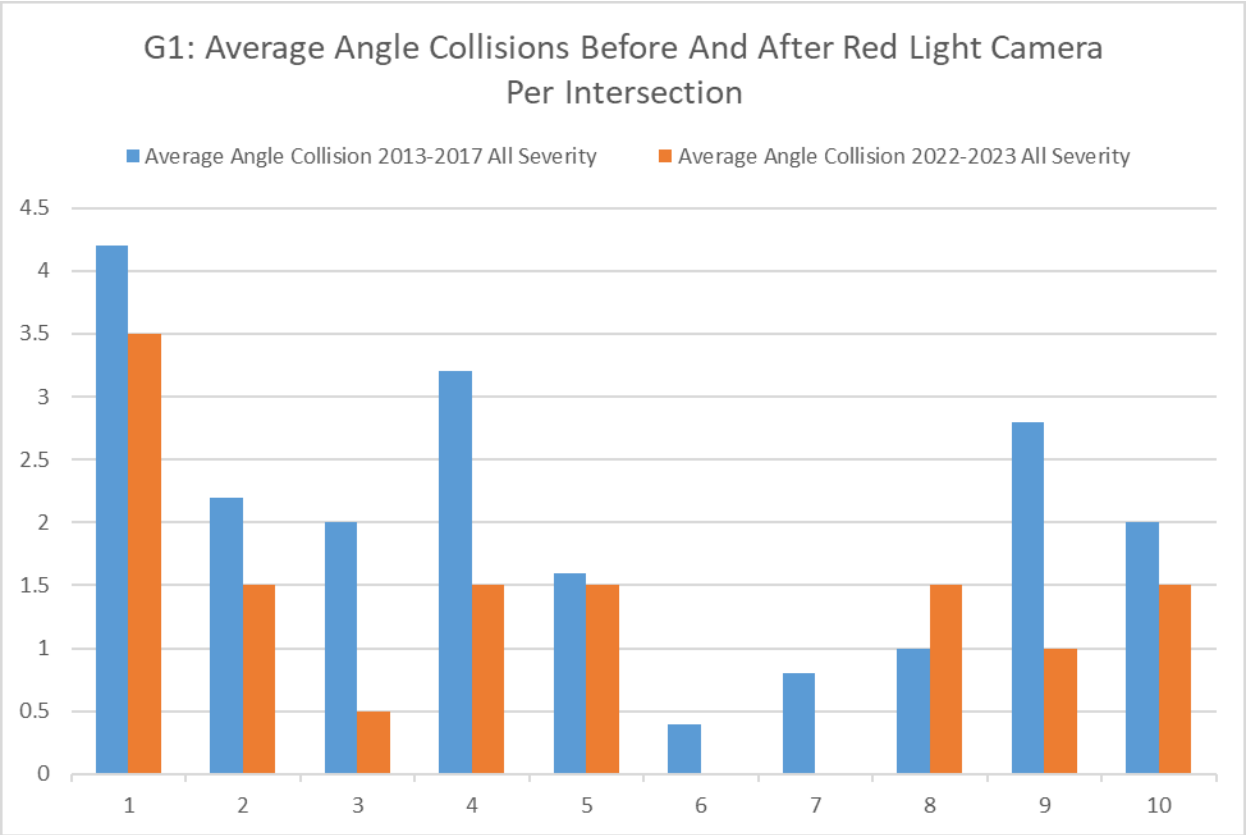
Council Decision CR76/2024 directed "That the report of the Senior Manager of Traffic And Parking dated February 9, 2024 entitled "Red Light Camera Update – City Wide" BE REFERRED to a future Environmental, Transportation and Public Safety Standing Committee Meeting for further review and consideration."

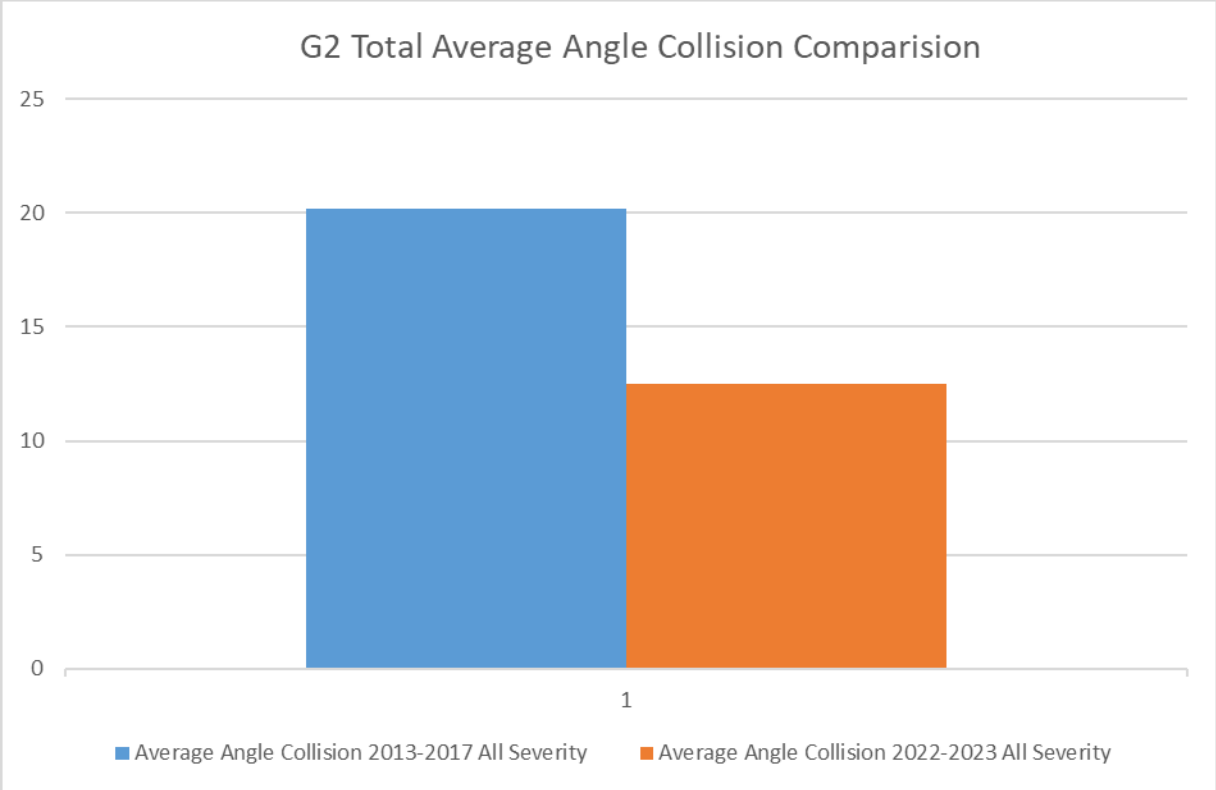
Discussion:

The City of Windsor's first Red Light Camera (RLC) system was activated on January 1, 2022 with a total of 10 systems coming online by the end of February 2022. At the present time, all RLC tickets issued in the City of Windsor are processed by the Joint Processing Center administered by the City of Toronto. Traffipax LLC is currently the approved vendor to supply, install and maintain RLC systems in Ontario.

The key reasons why municipalities have installed Red Light Cameras are to change driver behaviour, reduce angled collisions, and increase safety. At this time, Administration has completed a preliminary analysis of the reduction of collisions at the 10 pilot locations containing red light cameras. Industry best practice is to review the three or five-year collision history immediately prior to the installation of a new traffic control measure and compare it against the three or five-year collision history occurring at this same location immediately following the installation of the control measure. At this time, the cameras have only been installed for two years.

While industry standards recommend accident data is more accurately reviewed in 5-year increments, initial data indicates that the red light cameras have been effective at reducing angled collisions at the 10 pilot intersections by 38% overall since their installation. (Graphs 1 and 2)

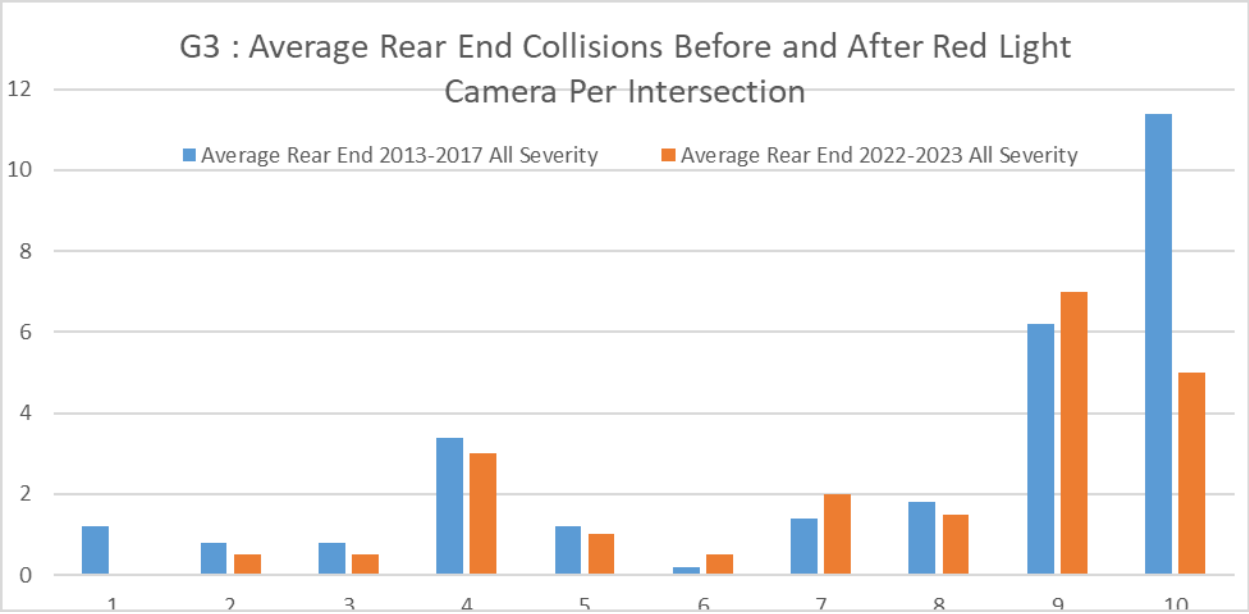


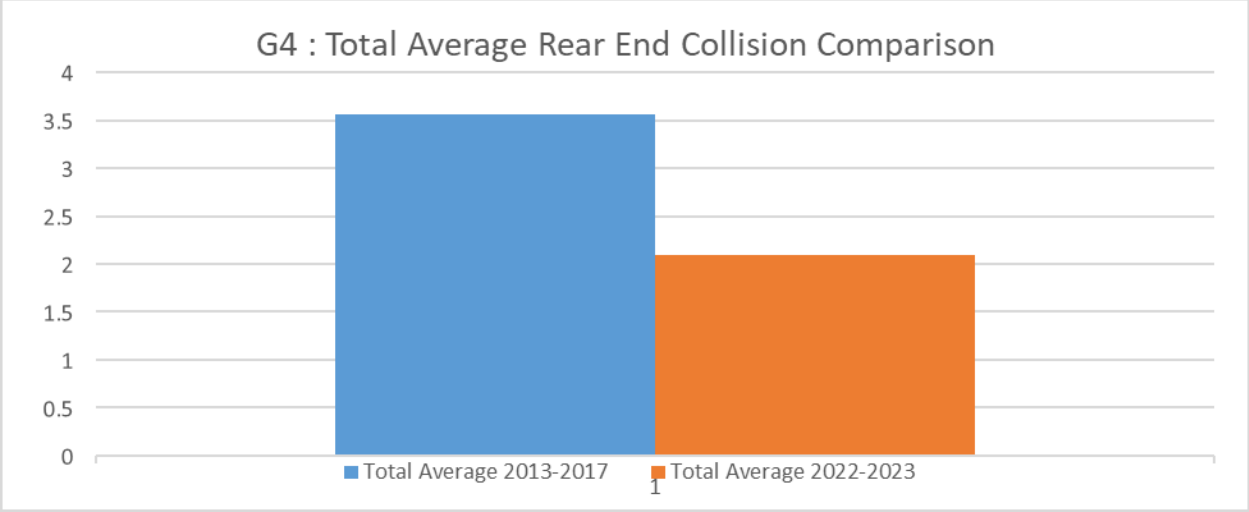


Windsor's results are similar to the York Region who had an initial installation of 20 red light cameras in 2011 and reported a 48% decrease in angled collisions after their 2-

year pilot. The region of Waterloo reported a decrease of 27% in right angle collision since the inception of their RLC program of 16 cameras in 2005. The original 2-year RLC Enforcement Pilot Project conducted by the Ontario Ministry of Transportation from 2000 to 2002 had 6 participating municipalities (Toronto, Hamilton, Ottawa, and the regions of Peel, Waterloo and Halton) and 48 camera sites. The results of this pilot program showed an average decrease of 21% in angled collisions. These results are similar in comparison with experiences in other regions in terms of right-angled collisions.

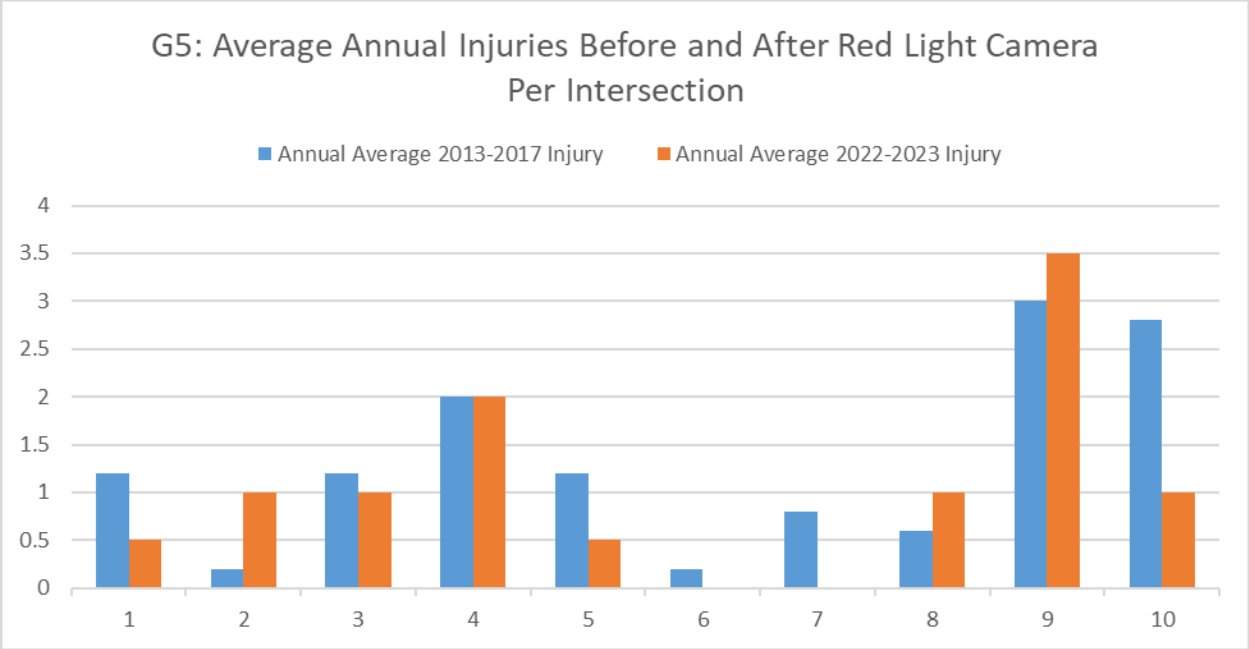
Initial Data for rear end collisions for the Windsor pilot area showed isolated intersections where there was an increase in the number of rear end collisions but overall, there was a reduction of 41% in rear end collisions. (Graphs 3 and 4)

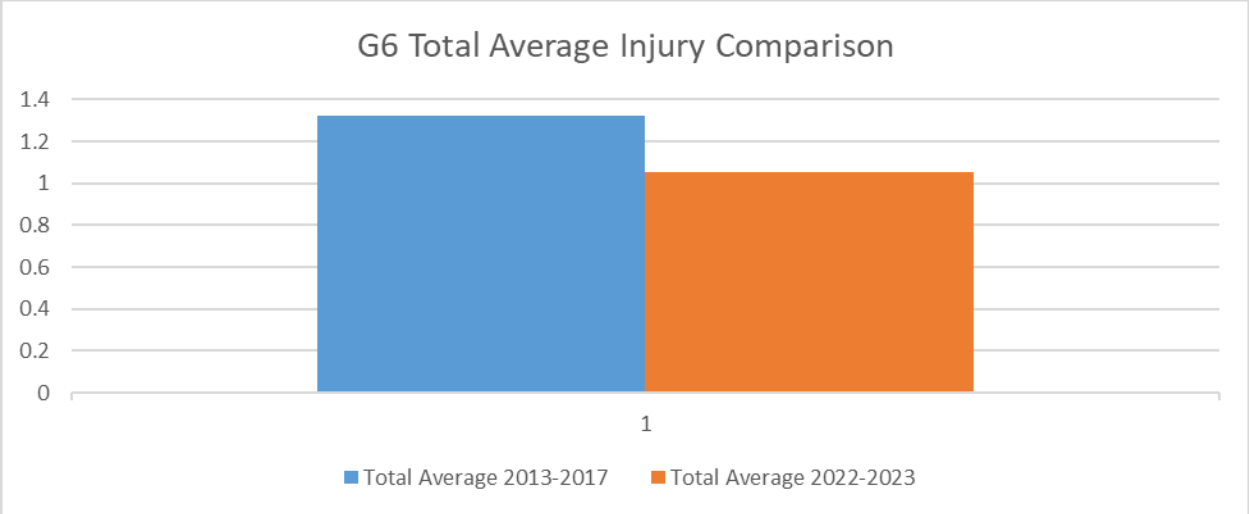




Although these results are atypical when compared to other municipalities, the reduction may be contributed to the extensive education program carried out before and during the RLC implementation.

Red light cameras have been effective in increasing safety by reducing the number of injuries at the intersections with red light cameras. Initial data shows that red light cameras have been effective at reducing the total number of injuries by 20.5%. (Graphs 5 and 6).





These results are similar to the City of London which saw a drop of 34% in injuries in the first 2 years of their RLC program (2013-2014), Toronto 23% decrease in injuries (2008-2014), and Hamilton 48% reduction (2019-2021)

Based on the significant safety improvements, Administration would recommend increasing the number of cameras in the City of Windsor. Many other municipalities have significantly increased the number of cameras after initial pilot programs. While the City of Windsor has not had the cameras running long enough to complete a fulsome analysis, the analysis of the other municipalities supports the success of the program in general.

Risk Analysis:

There is a risk that revenue may not offset the costs. To date, the revenue received by Provincial Offences has exceeded any costs, and there have been no additional resources expended to administer the program and prosecute the RLCs. There are options available to the City in order to mitigate this, in the chance that it happens. Cameras can be relocated to other locations within the City, if it is determined that the decline of revenue is due to a specific location. The City is also able to terminate the agreements; however, this option would come with a cost. To date, no municipality has reported a loss on their RLC program.

Climate Change Risks

Climate Change Mitigation:

N/A

Climate Change Adaptation:

N/A

Financial Matters:

As per Council Report 172/2020, Follow Up on the Financial Implications of Red Light Cameras and Automated Speed Enforcement Programs in the Windsor Essex Provincial Offences Act Agreement, there is no up front cost associated with the installation of new cameras, the installation costs are born by the vendor, TrafficPax LLC and built into the monthly fees. Monthly fees for the cameras are as per the original schedule of fees shown in the previous report (Appendix A). The costs are expected to be fully offset by revenue.

The costs for the program would be paid for through operating dollars within the Provicial Offences budget. Expenses and revenues will be managed and shared appropriately with the other municipalities based on the existing Inter-Municipal Court Services agreement.

Consultations:

Rosa Scalia, Financial Planning Administrator – POA

Conclusion:

Administration recommends increasing the number of RLCs in 2024 by 10 units, to bring Windsor's total to 20 RLCs.

Planning Act Matters:

N/A.

Approvals:

Name	Title
Cindy Becker	Financial Planning Administrator – Public

Name	Title
	Works
Shawna Boakes	Executive Director of Operations
Mark Winterton	(A) Commissioner, Infrastructure Services and City Engineer
Chris Carpenter	Manager, Provincial Offences
Wira Vendrasco	City Solicitor
Dana Paladino	(A) Commissioner, Corporate Services
Janice Guthrie	Commissioner, Finance and City Treasurer
Janice Guthrie for Joe Mancina	Chief Administrative officer

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