

Community Input

for the 2018 City of Windsor

ACTIVE TRANSPORTATION PLAN



A compilation of data on cycling in Windsor from thousands of local cyclists.

Research and analysis done for the love of cycling.



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About this document

This document has been prepared to provide community input for the City of Windsor's 2018 Active Transportation Plan. The recommendations and data provided here have been generated through consultations with the cycling community in Windsor and Essex County. The scope of this report covers cycling only; we do not have the data or resources to provide more than cursory comments or recommendations on public transit or pedestrian travel.

To facilitate locating information, this report was developed using the same numbering as the following document used in the Request for Proposal process: **148-17, Addendum 2, RFP Active Transportation Master Plan Consultant aug 28 2017**. This document is best viewed online where readers will find links to many relevant surveys, reports, studies and documents.

The data, comments and recommendations contained in this document have been collected from many hours of in person consultation including but not limited to the following local sources and surveys;

- [2016 Bike Lane Study](#)
- [2016 Community Cycling Survey](#) - 567 respondents
- [2017 Rolling Summit](#) (paper survey) - 83 respondents
- [2017-2018 Active Transportation Cycling Survey](#) - 200+ respondents
- In-person comments collected at monthly community meetings (2017) - 180 people
- Comments received through Bike Windsor Essex [social media](#) and [website](#)
- In-person comments collected at community events (Bike Rodeos, Open Streets, Bike Valets, Community Rides) - thousands reached

About Bike Windsor Essex

Bike Windsor Essex is a non-profit cycling advocacy and education organization operating in Windsor and Essex County.

We offer the following services:

- Advocating for safe cycling infrastructure and all things cycling
- Cycling data collection, tracking and analysis
- Can-Bike training (the only certified Can-Bike instructors in the region)
- Wrench-up Classes (how to fix and maintain your bike)
- Ride With Confidence Classes (the rules of the road)
- Earn-a-Bike program
- Weekly Community Rides
- Bike Valet Service for festivals and community events
- Bike Rodeos to teach kids safe cycling
- Downtown Bike Kitchen for do-it-yourself bike repair and maintenance

We partner with:

- Share the Road Cycling Coalition and Share the Road Essex County
- County Wide Active Transportation System (CWATS), Detroit Greenways Coalition
- CAA Southwestern Ontario, Windsor Detroit Bridge Authority
- Ontario Trillium Foundation, Ministry of Tourism Culture & Sport & Ministry of Transportation

About this document	2
About Bike Windsor Essex	2
7.2 Review the existing conditions in the City:	5
7.2.2.1 Obtain an inventory and condition ratings where available of sidewalks, cycle facilities, multi-use trails, transit stops, bike racks and other related facilities.).....	5
7.2.2.2 Identify discontinuities & barriers that may include railways, high volume arterial roadways & intersections, existing bridges, etc.	7
7.2.2.3 Identify issues regarding road & multi-use trail interface and crossing	8
7.2.2.4 Identify major generators or destinations of cycle travel for both commuter and recreational use, include event travel where deemed appropriate.	9
7.2.3 Develop and undertake a public survey identifying key perceived and physical barriers to active transportation.....	10
7.3 Develop the City's Active Transportation Master Plan	12
7.3.1 Using City provided base mapping, create and set up an appropriate GIS database and mapping layers (with appropriate City departments)	12
7.3.2 Integrating the Transit Windsor Service Delivery Review; this will be developed concurrently and requires coordination.	12
7.3.3 Establish active transportation connections between park facilities as recommended in the Parks Master Plan.....	12
7.3.4 Establish network linkages with neighbouring communities and jurisdictions as appropriate.	14
7.3.5 The ATMP will also serve the function of updating the Bicycle Use Master Plan and the network plan contained therein.	15
7.3.6 The cycling network for the balance of the Sandwich South transfer lands was drafted with the Lauzon Parkway Environmental Assessment and will be considered.	18

7.3.7 Identify the required network connectivity19

7.3.8 Identify primary and secondary networks for cycling and pedestrians with convenient connections to the network being identified in the Transit Service Delivery Review in progress.19

7.3.9 Recommend a set of pedestrian and cycling design standards (in consultation with Transit Standards currently under development) for planning, design and operation of same. Develop city/municipal standards where conditions and/or opportunities require a local solution. This may include the following elements but not limited: intersection treatments, treatments at bridges/overpasses, signage (including wayfinding), lighting levels, end of trip facilities such as bicycle parking, lockers and showers.19

Notes on bicycle parking20

7.3.10 Based on the review of City master plans, policies, procedures, and bylaws21

7.3.11 This study will make recommendations to amend Schedule F: Roads and Bikeways of the Official Plan.....22

7.3.12 Recommend supporting programs, activities and awareness campaigns that optimize the use of shelf-ready solutions where available.24

7.4.4 Recommend monitoring and progress reporting activities.....26

Monitoring.....26

Progress Reporting26

Address closing the gap in the Windsor Loop on Wyandotte Street East from George Avenue to Clairview Avenue.27

SUMMARY OF RECOMMENDATIONS **30**

REFERENCES.....33

7.2 Review the existing conditions in the City:

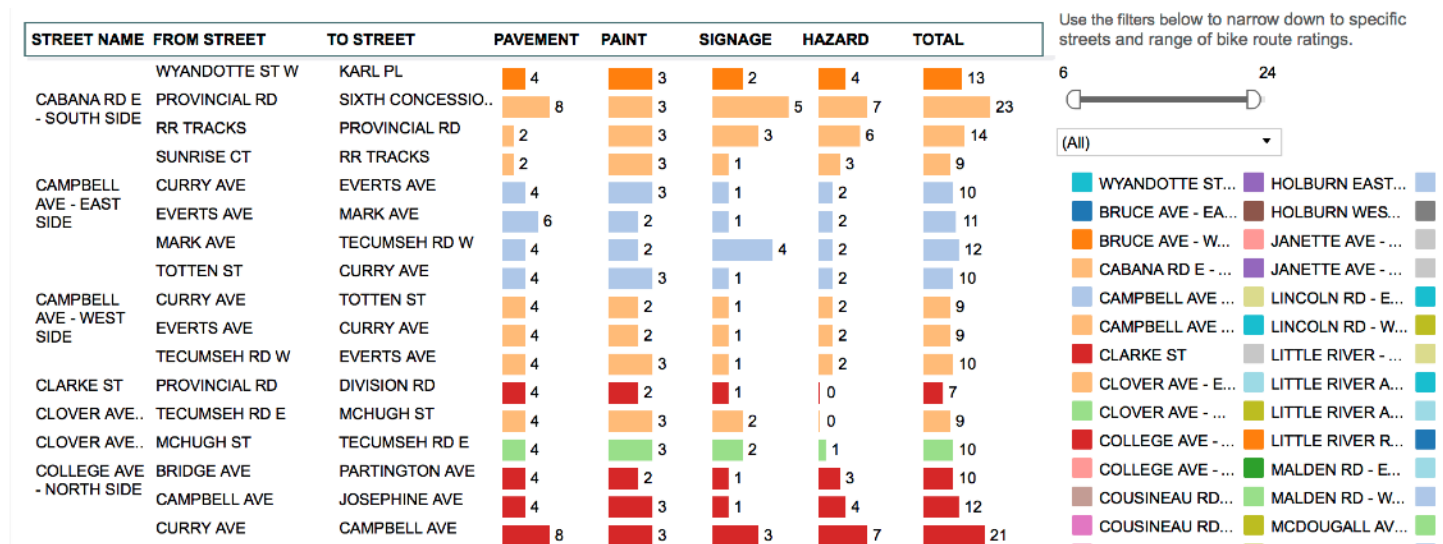
7.2.2.1 Obtain an inventory and condition ratings where available of sidewalks, cycle facilities, multi-use trails, transit stops, bike racks and other related facilities.)

Bike Windsor Essex produced a major study of the physical conditions of existing on-road bike lane infrastructure in the City of Windsor from September to December of 2016. The purpose of this analysis was to establish a baseline and provide a snapshot of the quality and integrity of **on-road bike lanes** in the City. Trails and off-street routes and were not included.

The following elements were evaluated;

- the pavement condition within the bike lane,
- the condition and frequency of signage,
- the presence and condition of bike lane paint (striping) and bicycle-related pavement symbols,
- hazards to cyclists in and around the bike lane.

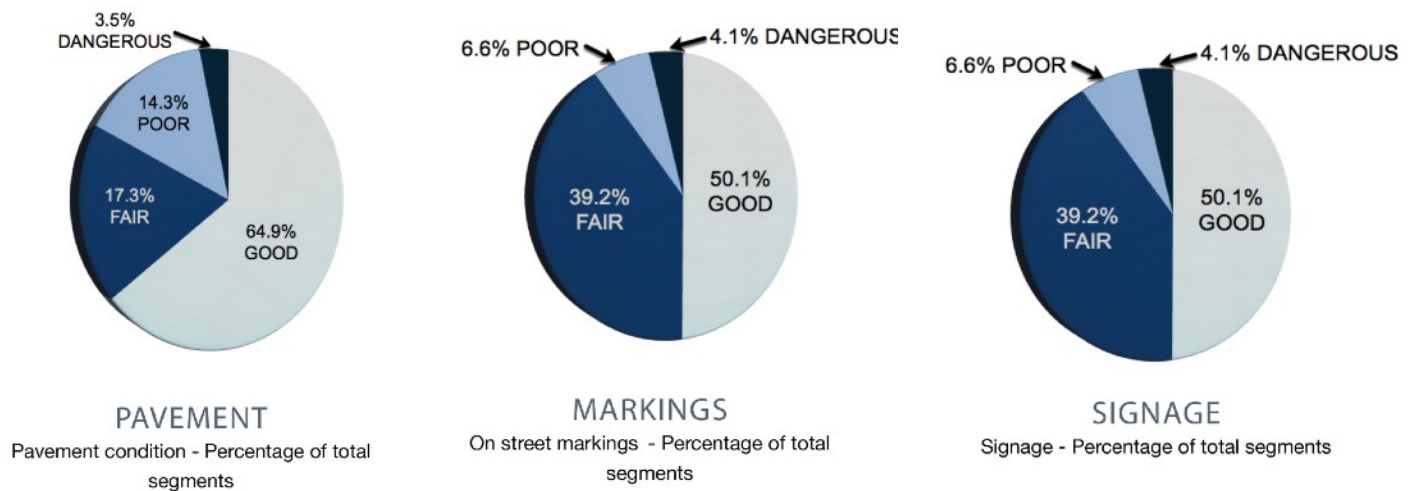
Segment by segment results as well as **video capture** of each of the almost 500 segments are available on our interactive public dashboard at www.tiny.cc/winbikelanes



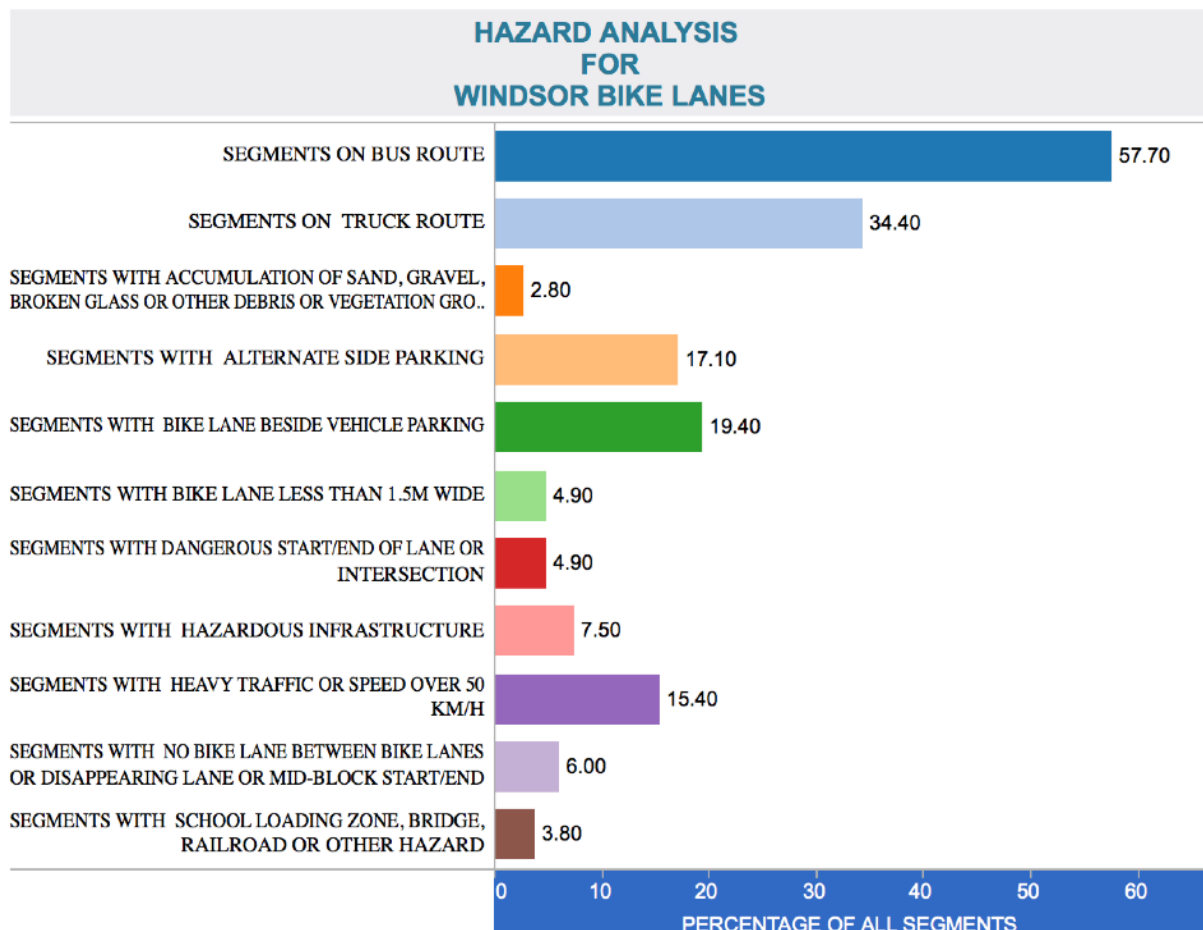
Screenshot of [interactive public dashboard](http://www.tiny.cc/winbikelanes)

The purpose of this study was to provide a snapshot in time of the quality and integrity of Windsor bike lanes; however, after data analysis and community input, we learned that many of the complaints associated with on-road bike lanes lay not so much in the bike lane but at intersections and the start and end of cycling infrastructure. While there are bike lanes with crumbling pavement and aging paint, most complaints were that bike lanes disappeared just before dangerous intersections or ended mid block, leaving the confused cyclist to suddenly and unexpectedly find themselves in the car lane. The lack of connected cycling infrastructure is the top complaint we hear from the cycling public.

High level results of 2016 Bike Lane Assessment



Results of hazards on all on-road bike lane in the City of Windsor as of December 2016.



Recommendations

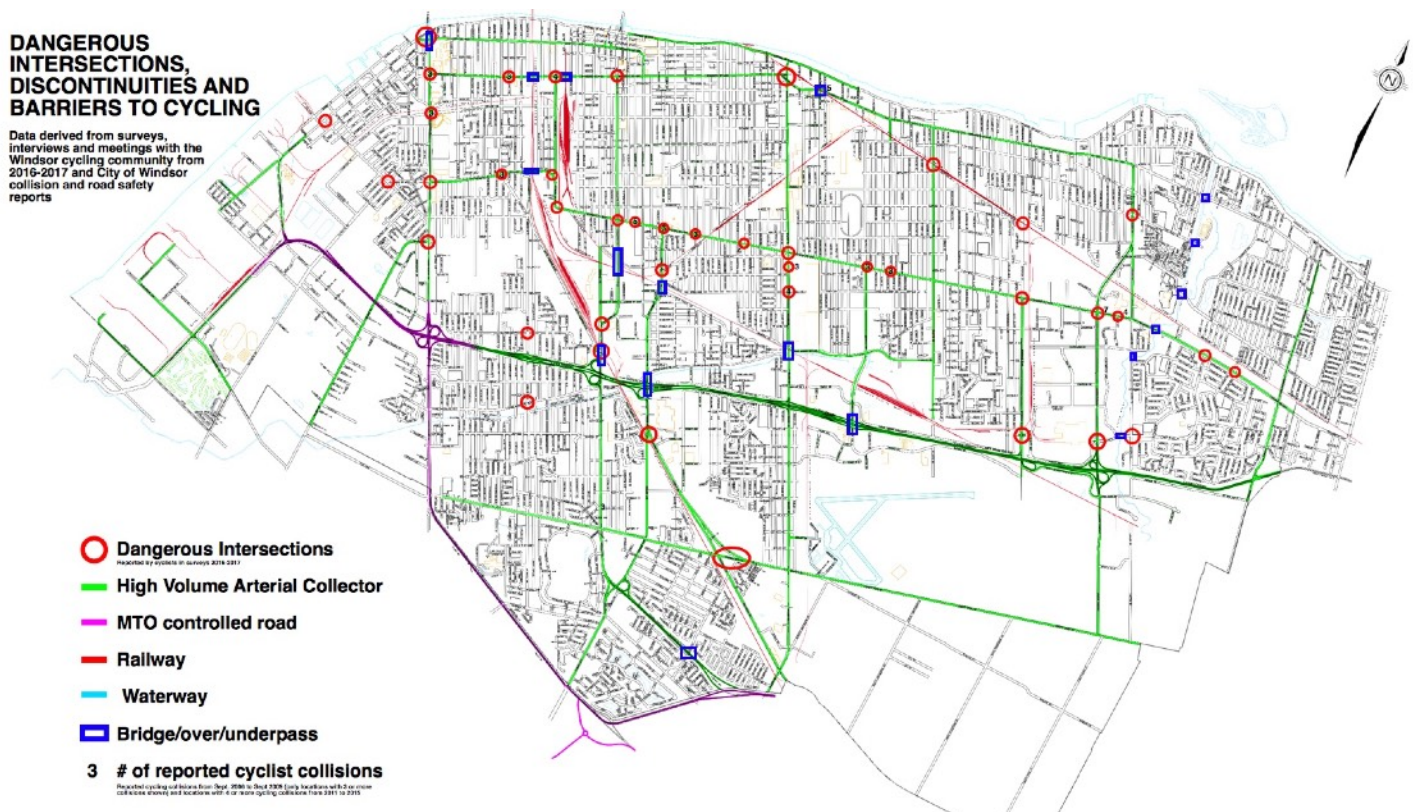
1. Review problem intersections and employ existing best practices to redesign intersections to reduce conflict between bicyclists, other vulnerable road users and vehicles. Consider low cost fixes such as bike boxes, intersection crossing markings, painted facilities or other treatments that have proved successful in other jurisdictions.

7.2.2.2 Identify discontinuities & barriers that may include railways, high volume arterial roadways & intersections, existing bridges, etc.

Bike Windsor Essex has distilled the comments and data collected in several recent studies and surveys and developed a map of discontinuities & barriers to cyclists in Windsor. The map also highlights intersections throughout the city that cyclists have identified as dangerous or difficult. Sources for the data visualized on this map include:

- 2017 Rolling Summit Survey
- 2017-2018 Active Transportation Cycling Survey
- 2012 Road Safety Report – City of Windsor
- 2013 Road Safety Report – City of Windsor

A full sized (30MB) PDF of this map is available to download [HERE](#)

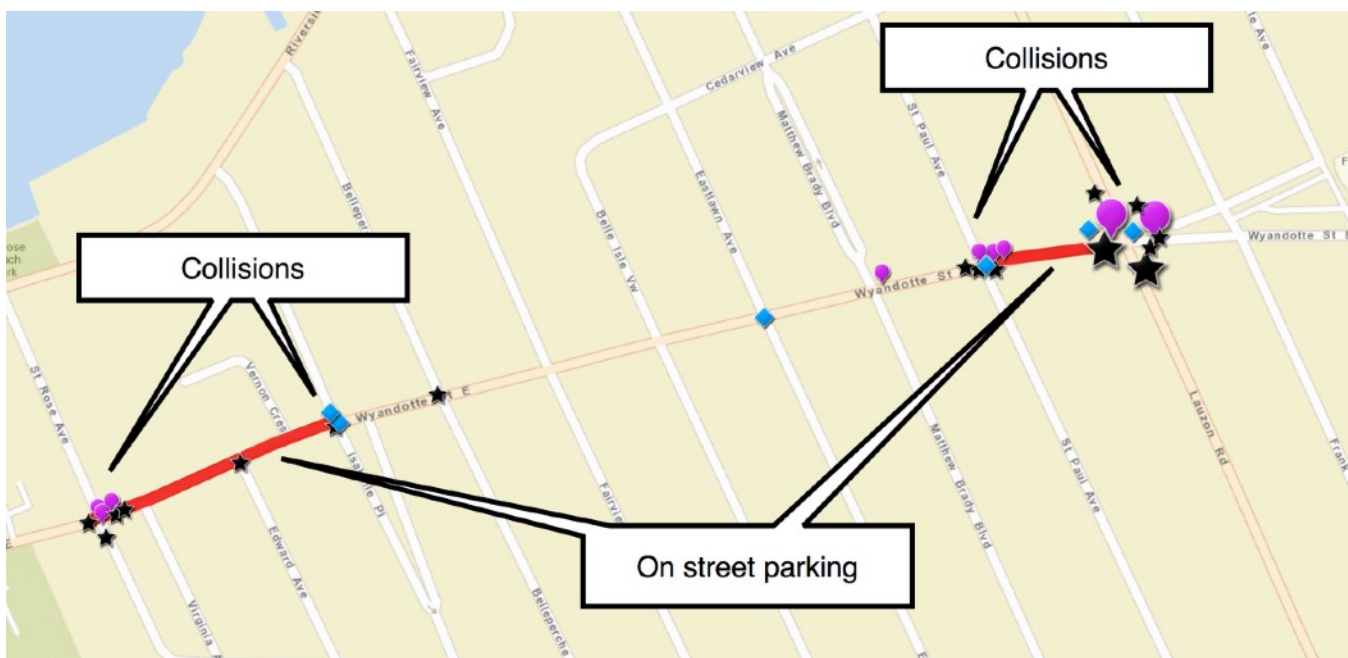


Windsor is experiencing an epidemic of cyclists riding illegally on sidewalks; a symptom of the lack of cycling infrastructure on some of Windsor's higher volume streets. Further, one City Councillor has been pushing to [make sidewalk cycling legal](#) in Windsor. The two most often cited locations for sidewalk cycling are **high volume arterial collectors** and **downtown core streets with no cycling infrastructure**. Education for drivers and cyclists and enforcing the rules of the road will help, but the provision of safe, direct, connected cycling infrastructure that addresses the difficulties in crossing Windsor's railroads and high volume roads (especially Tecumseh Road) will significantly improve the current situation.

7.2.2.3 Identify issues regarding road & multi-use trail interface and crossing challenges, conflicts between the different types of traffic, multi-use trail and sidewalk conflicts, mid-block crossings, major driveway conflicts.

We have insufficient data to provide a comprehensive answer; however, we can offer a few observations from our data analysis and from our community consultations.

Bike Windsor Essex mapped the data provided in the City of Windsor's [Road Safety Reports](#) and the results show that collisions are much more likely to happen at the start of on-street parking as shown in this sample on Wyandotte Street East. We recommend that some areas may benefit from the removal of on-street parking adjacent to stop signs and intersections to improve bicycle visibility. Where it merits, replace the vehicle parking with a bike corral.



Windsor has added more cycling infrastructure in 2017 than in many previous years yet we are still seeing few of the “interested but concerned” group cycling, except on park trails. We believe this is largely due to the lack of (real or perceived) safe cycling infrastructure on main roads.

Type of on road cycling infrastructure	NONE	1-5	6-10
Number of protected bike lanes	X		
Number of separated bike lanes	X		
Number of buffered bike lanes		1 (2017)	
Number of painted bike lanes	X		
Number of bike boxes at intersections	X		
Number of intersections with directional paint	X		

7.2.2.4 Identify major generators or destinations of cycle travel for both commuter and recreational use, include event travel where deemed appropriate.

2 University campuses	Wyandotte in Walkerville
St Clair College Campus	Herb Gray Trail
Riverfront Trail	Ganatchio Trail - Little River Corridor
Festival Plaza	Downtown Core
Gordie Howe Bridge (future)	All Business Improvement Areas
Chrysler Assembly Plant	Malden Park
Ciociaro Club	East Riverside Park
Rhodes Drive Industrial Park	Shopping Malls

Bike to school

Elementary and high schools should be on a list of priority cycling destinations; however, many schools lack active routes to school plans, lack adequate bicycle parking, and school boards do not encourage cycling. Rather, the school boards and the City build and promote “kiss and ride” drop-off zones. The resulting traffic chaos at many schools has neighbourhoods up in arms and has made riding a bicycle near schools during opening and closing times a very real danger.

Recommendations

1. Actively promote commuter cycling to the University of Windsor, St. Clair College and secondary and elementary schools, and assist these institutions in the purchasing and siting of bicycle parking.
2. Work with business and the community to encourage the use of bike valets at major events (some cities make bike valets mandatory at large events).
3. Work with the local school boards and the Health Unit of Windsor and Essex County to collaborate on a regional application to the [Ontario Safe Routes to School Program](#).

7.2.3 Develop and undertake a public survey identifying key perceived and physical barriers to active transportation.

Bike Windsor Essex Cyclist surveys

In the fall of 2016, Bike Windsor Essex undertook a community cycling survey, delivered online and in person. More than 500 people responded to the survey. Respondents ranged in age from 18 to 72, 53% were male and 47% were female.

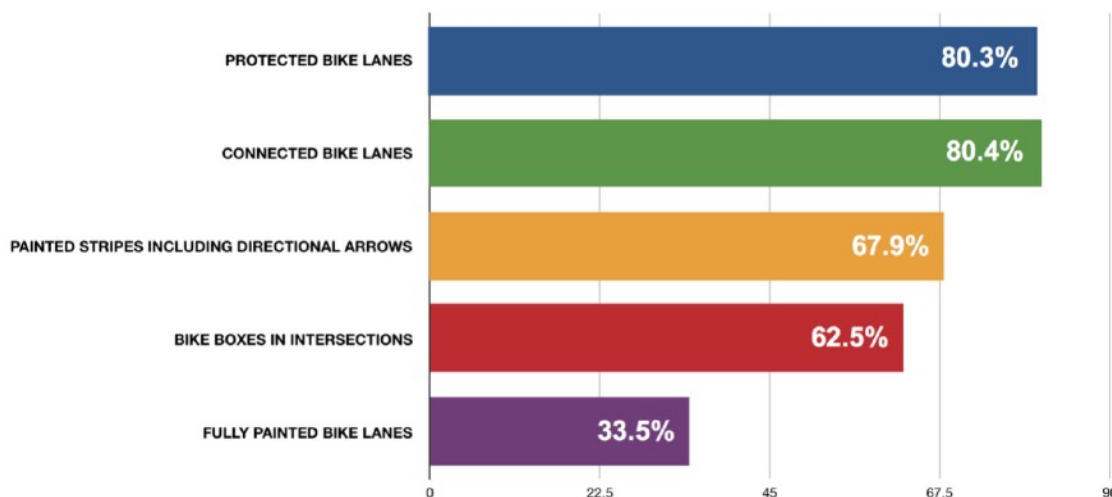
[HERE are the survey results](#)

In November of 2017, Bike Windsor Essex posted an on-line survey that asked the public questions designed to inform the 2017 Active Transportation Plan.

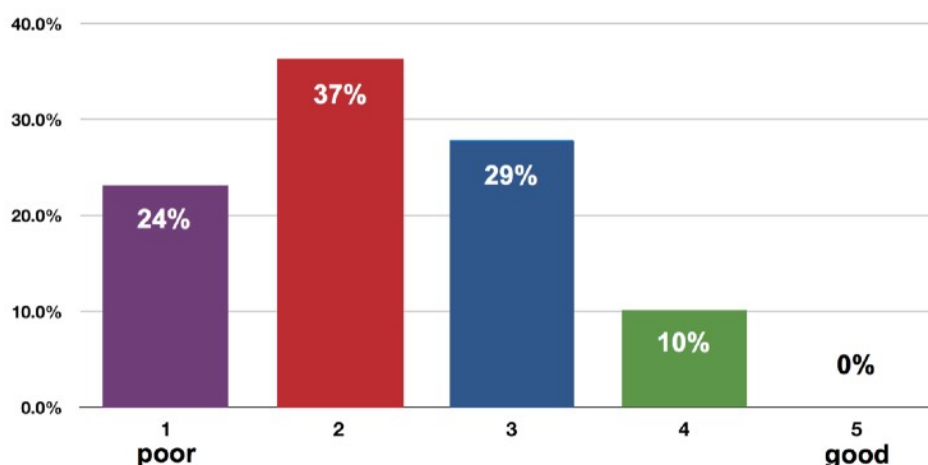
[HERE are the survey results](#)

Here is a small sample of the questions asked in the 2017 survey:

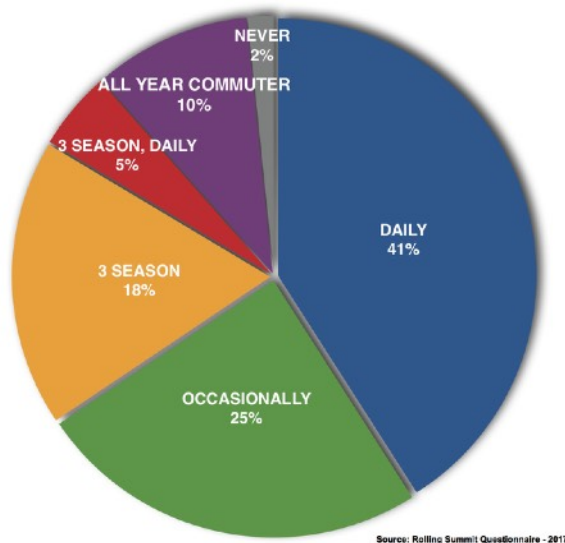
To encourage you and your neighbours to ride, what do you believe is needed?



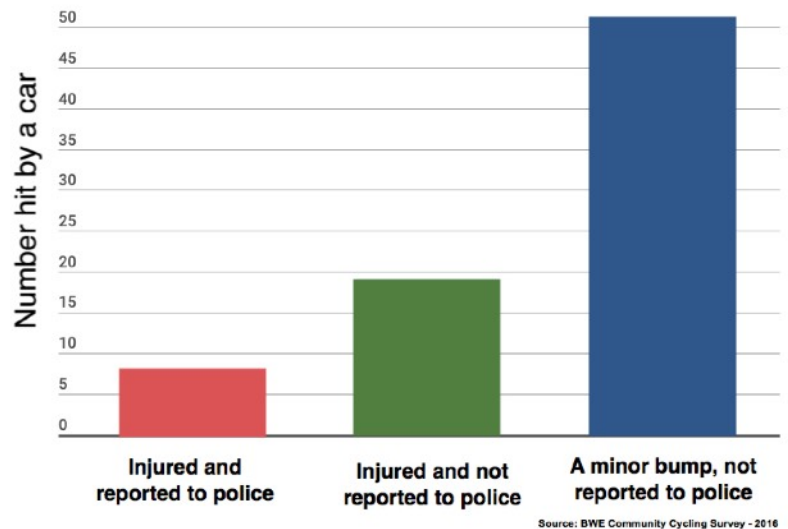
On a scale of 1 - 5, how bike friendly do you find Windsor?



How often do you ride your bike?



21% of cyclists surveyed had been hit by a car



The detailed results and data from these surveys is available on request.

Cycling Groups, Clubs and Bike Shops

Bike Windsor Essex is a cycling advocacy and education organization that works on behalf of all cyclists and would-be bike riders, however there are numerous other cycling organizations in the city that could provide an even more detailed picture of the state of Windsor cycling today and needs for the future. These groups include but are not limited to:

Groups and Clubs

Windsor Bicycling Committee - Committee of Council

Eastside Riders Cycling Club - <http://www.eastsideriders.net>

Ciociaro Cycling Club - <http://ciociarocyclingclub.com>

Windsor Eats - Sponsors the largest biweekly ride in the city - <https://www.facebook.com/Windsor-Slow-Ride-927668210581085/>

Windsor Slow Ride - <https://www.facebook.com/Windsor-Slow-Ride-927668210581085/>

[The Windsor Bike Kitchen](#) - Bike Windsor Essex Community Bike Hub

Local Bike Shops

Infinity Cycle - <http://www.infinitycycles.ca>

City Cyclery - <http://citycyclery.ca>

Ambassador Cycle - <https://abikes.com>

Cycle Culture - <http://www.cycle-culture-shop.com>

Bicycle World - <http://www.bicycleworld.ca/>

7.3 Develop the City's Active Transportation Master Plan

Development of the plan will include the identification of citywide municipal cycling, transit and walking networks that cohesively interact to support active modes of transportation as a viable alternative for both utilitarian and recreational travel. This activity include but not be limited to the following:

7.3.1 Using City provided base mapping, create and set up an appropriate GIS database and mapping layers (with appropriate City departments)

Recommendation - that the City of Windsor make any geo-referenced mapping arising from this Active Transportation Plan available to the public through their [Open Data Portal](#).

7.3.2 Integrating the Transit Windsor Service Delivery Review; this will be developed concurrently and requires coordination.

We have insufficient data in this area to comment except to make the following recommendation: that Transit Windsor stop the current practice of locking bus mounted bike racks from December 15 - March 15 and provide year-round access to bus bike racks to ensure those who rely on cycling also have access to a transit option 365 days a year.

7.3.3 Establish active transportation connections between park facilities as recommended in the Parks Master Plan.

The [Parks and Recreation Master Plan](#) (Rediscover our Parks) makes some excellent recommendations regarding opportunities to leverage a green corridor from the Ojibway Shores Complex, Herb Grey Parkway trail, etc. If accomplished, and if cycling infrastructure is thoughtfully incorporated within the greenways, an outstanding recreational route on the outskirts of the city will be created.

Given that Windsor's recreational trail system is much more developed than the City's on-road commuting cycling infrastructure, we recommend that Strategic Direction #6: **“ensuring that the linkages to and from parks, as well as between parks”** within the more densely populated areas should be a primary area to concentrate new cycling infrastructure construction in the near term. The Parks Master Plan describes the need for a connected system of parks best in the section titled “Greenway system and BUMP”;

*“As new opportunities arise through infrastructure development, subdivision planning, and expansion into Sandwich South, there is a need to secure parcels of land that will accommodate the goals and objectives of linking the east and west ends of the city **through an interconnected bike route; preferably through a parkland.**”*

*The public consultation process strongly identified that the community holds trails for walking and cycling in high regard. The need for better connectivity to trails as well as between various open spaces was also valued as **the most important amenity in the future of parks.** Trails provide*

alternate and active transportation opportunities for all residents to commute to desired destinations as well as provide a leisurely means to exercise either individually or in groups. Most significantly trails and greenways provide access to the riverfront and other trail-based recreation found throughout the city.

“The city has many popular trails including the Grand Marais Trail, Little River Corridor, Ganatchio and Clairview Trails and the Riverfront Trails. A lack of connectivity between these trails is one of the greatest challenges. Another deficiency in the trail system identified in the public consultation was the lack of a formal trail connection from the South Windsor Planning District to the urban core and the Riverfront. Currently, through BUMP those connections rely heavily on the existing road infrastructure.”

The following recommendations from the Parks and Outdoor Recreation Master Plan (*Connectivity, Strategic Direction #6, page 128*) are endorsed by Bike Windsor Essex because implementation will lead to a connected and comfortable cycling network and they echo the recommendations and requests we hear from many of our members and the general public. (*NOTE: park-to-park routes cannot always replace bike lanes for commuter cyclists).

RECOMMENDATIONS from the Parks Master Plan

- *Identify, prioritize and establish new trails to improve connectivity throughout the city.*
- *Collaborate with Transportation Planning to update the "B.U.M.P." to promote trail connections for neighbourhoods.*
- *To review opportunities to provide cyclists with safe routes through or adjacent to parkland instead of along major traffic routes.*
- *To review and discuss options with the railways on routes which may be abandoned in the future to provide opportunities for recreational multi use-trails and commuter cyclists.*
- *Strengthen all north-south connections to the Detroit River.*
- *Work with and establish partnerships to obtain formal access for the development of recreational trails where appropriate on non-city owned lands, e.g., Devonwood, utility corridors and private land parcels.*
- *Include environmental considerations in the planning of major new trails through natural areas, and design trails to minimize environmental impacts.*
- *Develop trail heads and staging areas with the appropriate amenities for users including; wayfinding and interpretation.*
- *Amend the "Adopt-a-Park Policy" to include an 'Adopt-a-Trail' Program.*
- *Prepare and "Adopt-a-Trail" management plan that builds upon methods used in other jurisdictions' best practice models.*
- *Update design standards on well used trails through areas with high environmental values to keep people on trails and to protect the resources.*

*“Similar to the legislation from 2005 that designated that the Golden Horseshoe communities (including Toronto) establish a Greenbelt to ensure a sustainable environment for agriculture, while helping to curb urban sprawl, Council along with the local Provincial Government, should investigate the option for similar legislation to assist in the formal **establishment of a “greenbelt” through the Sandwich South Lands to connect eastern and western parks** with the City of Windsor Greenway System”*

Source: Windsor Parks and Outdoor Recreation Master Plan 2015



Recommendations

1. Implement the recommendations from the Parks and Outdoor Recreation Master Plan (*Connectivity, Strategic Direction #6, page 128*)
2. Ensure reasonable and on-going funding to properly maintain bike lanes and trails.
3. Establish a “greenbelt” through the Sandwich South Lands to connect eastern and western parks as development occurs.

7.3.4 Establish network linkages with neighbouring communities and jurisdictions as appropriate.

We have insufficient data in this area to make a comprehensive comment; however, residents in Tecumseh and LaSalle - east and west of the City of Windsor - have been vocal in requesting better and safer connectivity for cycling between our communities. Many college and university students living outside Windsor report that they have no choice but to use a car to get to school due to a lack of connecting transit/cycling services and infrastructure.

7.3.5 The ATMP will also serve the function of updating the Bicycle Use Master Plan and the network plan contained therein.

The [Bicycle Use Master Plan](#) was developed prior to 2001 and has never been updated. While the routes merit review, many of its objectives remain relevant. Further, the majority of the recommendations contained in the BUMP have not yet been accomplished. The following table lists the 42 recommendations from the 2001 BUMP and the status of each.

#	RECOMMENDATION	COMPLETED?
1	1. Complete those sections of the Primary Network identified on Map 5* (recommended Primary Cycling Network) as achievable within five years.	NO
2	2. Complete those sections of the Secondary Network identified on Map 6 as achievable within five years.	? 95% signed routes. match against trail map
3	3. Complete those sections of the Primary Network identified on Map 5 as achievable in the longer term (years 5 through 20).	NO
4	4. Complete those sections of the Secondary Network identified on Map 6 as achievable in the longer term (years 5 through 20)	
5	Establish a full time Cycling Coordinator position in the Traffic Engineering Department. The primary responsibility of this individual is to implement the BUMP.	NO
6	6. Add the appropriate criteria to the Strategic Roadway Improvement Program (STRIP) and Roadway Improvement Management System (RIMS) to include Primary Network connections.	UNKNOWN
7	7. Continue to develop other off-road trails through parks that were not identified in the BUMP.	YES
8	8. Construct every road as a bicycle friendly roadway.	NO
9	9. Commit annual funds to the implementation of the BUMP.	PARTIAL
10	10. Develop safe cycling skills in children.	NO
11	11. Teach adult cyclists their rights and responsibilities.	NO
12	12. Teach motorists how to more effectively share the road with cyclists.	NO
13	13. Work with the Ministry of Transportation to develop and implement bicycle safety strategies.	UNKNOWN
14	Encourage the "share the road" bumper sticker campaign being conducted by the Windsor Bicycling Committee to continue.	YES
15	15. Lead through example by:	
	• improving cycling access to City Hall through the provision of additional secure bicycle parking facilities plus shower and change facilities;	PARTIAL
	• providing cycling skills programs such as CAN-BIKE through Parks & Recreation programs;	NO
	• promoting cycling tourism by continuing to provide route mapping information such as the Trails and Facilities Map both in print and potentially on a website.	YES
16	16. Improve bicycle routes to transit centres.	NO
17	17. Increase bicycle parking at transit centres.	NO
18	18. Work with Transit Windsor to expand the provision of bicycle racks mounted to Transit Windsor buses.	YES

STATUS OF RECOMMENDATIONS FROM WINDSOR BICYCLE USE MASTER PLAN (2001)

#	RECOMMENDATION	COMPLETED?
19	19. Promote the use of cycling and transit.	NOT EVIDENT
	• create an incentive program for employees who cycle to work;	NO
	• compensate employees who choose to use their own bicycles for City business, just as it compensates employees who drive their motor vehicles for City business;	NO
	• make CAN-BIKE training courses available to City staff on staff time, to minimize the risk associated with using a bicycle during the workday and to enhance the cycling skills necessary to commute safely by bicycle;	NO
	• continue to encourage special events such as Bike-to-Work Week; and	YES - WBC initiative
20	20. Conduct a Bicycle Parking Inventory.	UNKNOWN
21	21. Increase the amount and quality of bicycle parking facilities by:	
	• proactively installing short and long-term bicycle parking in the public right-of-way;	PARTIAL
	• promoting commuter cycling to the University of Windsor, St. Clair College, plus secondary and elementary schools, and assist these institutions in the purchasing and siting of bicycle parking;	NO
	• developing partnerships with businesses to sponsor the installation of bicycle parking facilities;	NO
	• funding, on an annual basis, a post-and ring (or similar) bicycle parking program to provide facilities in areas where there is an identified demand;	UNKNOWN
	• initiate the cycling awareness, cycling transit and end-of-trip recommendations as identified in Chapter 4; and	NO
	• adopting the bicycle parking location guidelines described in the BUMP;	YES?
	• actively encouraging innovative bicycle parking facility designs, such as covered bicycle sheds in existing motor vehicle parking spaces; and	NO
	• working with community cycling associations to create permanent relationships for the provision of temporary, long-term bicycle parking at special events.	NO
	• construct the cycling network generally in keeping with the phasing illustrated on Maps 5 and 6.	NO
22	22. Work with private businesses to promote bicycle commuting.	NO
23	23. Create bonus provisions in Windsor's planning policies to encourage developers to provide showers, change space and bicycle parking above the minimum requirements.	NO
24	24. That Council adopt the BUMP, thereby committing the City of Windsor to the implementation of its recommendations.	PARTIAL
25	25. That the City of Windsor commit annual funding to:	
26	26. That the City, during road resurfacing or rehabilitation projects, consider the BUMP recommendations prior to proceeding.	PARTIAL

STATUS OF RECOMMENDATIONS FROM WINDSOR BICYCLE USE MASTER PLAN (2001)

#	RECOMMENDATION	COMPLETED?
27	27. That the City of Windsor establish the position of Cycling Coordinator in the Traffic Engineering Department to oversee cycling related issues and to coordinate implementation of the BUMP.	NO
28	28. That the Windsor Bicycling Committee continue in its current role, and assist staff in confirming priorities for implementation of the BUMP.	PARTIAL
29	29. That the City adopt a cycling network implementation process similar to that outlined in Figure 6.1.	UNKNOWN
30	30. That the Traffic Engineering Department and the Cycling Coordinator prioritize individual bikeway projects on an annual basis. The results of this exercise should be documented in a report to Council outlining the progress in implementing the BUMP, and the plan for both network development and programming for the upcoming year.	NO
31	31. That staff review the costing of each route at the appropriate time through a more detailed planning and design exercise in keeping with the process identified in Figure 6.1.	UNKNOWN
32	32. That the City commit, as a minimum, annual funding in the order of \$200,000 for BUMP management and cycling awareness initiatives. This would include the annual salary of the Cycling Coordinator, seasonal contract staff, network promotion, special event costs, and partial costs associated with the preparation of safety and education materials.	NO
33	33. That the responsibility for pavement surface maintenance for on-road cycling network facilities be assigned to the City's Road Operations Division of the Public Works Department.	YES
34	34. That the responsibility for off-road bikeway facilities outside the road rights-of-way be assigned to the City's Parks and Recreation Department and include surface maintenance and snow/debris removal.	YES
35	35. That maintenance of on-road and off-road bikeway pavement markings and signage be the responsibility of the Traffic Engineering Department.	YES
36	36. That the City of Windsor budget \$10,000 a year for the next 20 years to develop and implement a bicycle parking program.	UNKNOWN - Not listed separately in budget
37	37. That the responsibility for developing and managing this program be assigned to the City's new Cycling Coordinator.	NO
38	38. That the City investigate costs and suppliers for post-and-ring stands.	UNKNOWN
39	39. That the City commit annual funding to implement BUMP over 20 years.	PARTIAL
40	40. That the City investigate public and private sector funding programs to assist in implementing the BUMP.	UNKNOWN
41	41. That the City, through the Traffic Engineering Department, establish a cycling data collection program.	NOT EVIDENT
42	42. That Transportation Engineering, through the Bicycle Coordinator, report annually to Council and the Windsor Bicycling Committee on the BUMP implementation progress and priorities for the upcoming year.	NO
	*See Appendix	

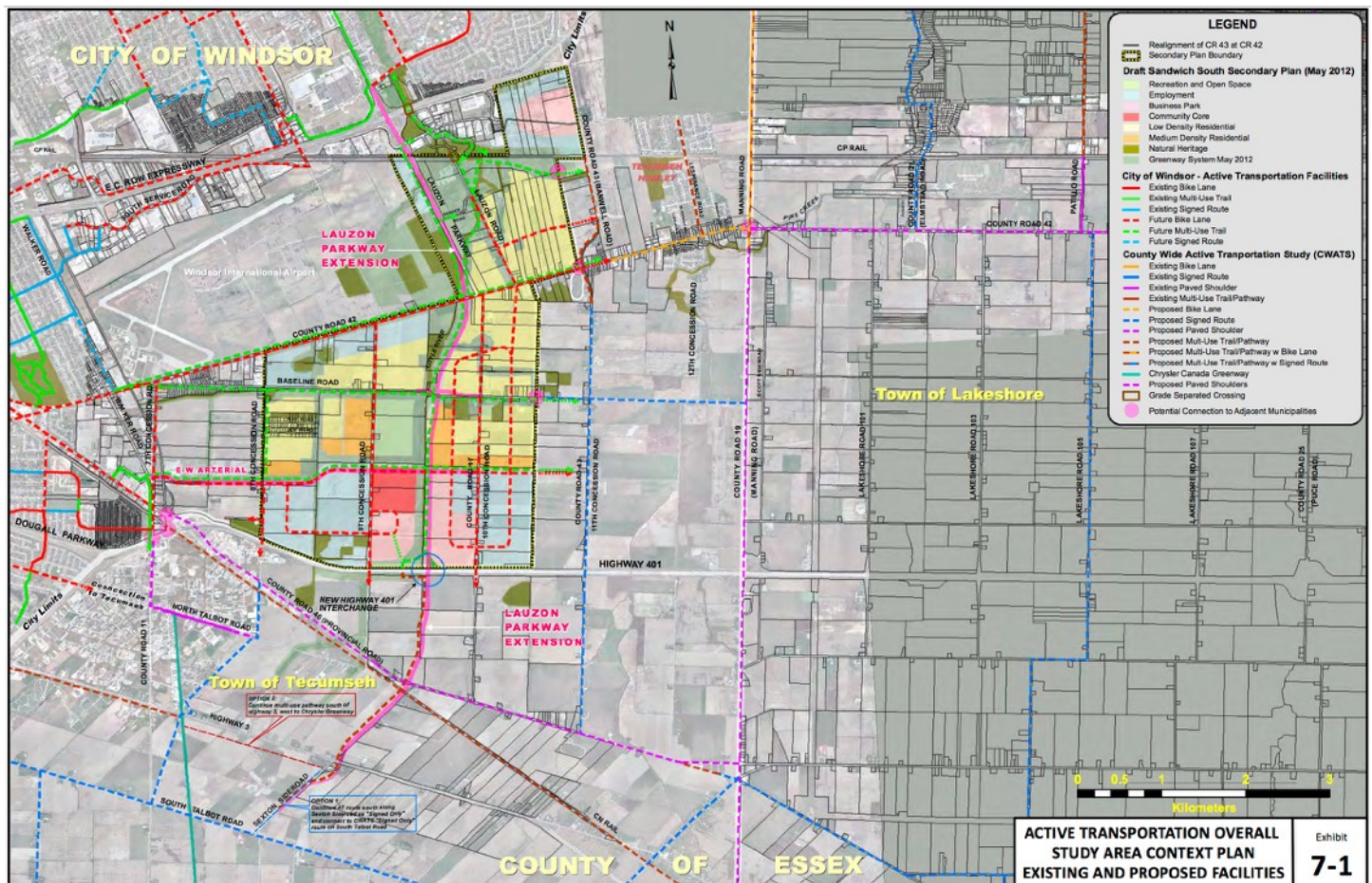
Recommendation - Include the unfinished recommendations from the BUMP as recommendations in the 2018 Active Transportation Plan, having updated and improved them, if necessary.

7.3.6 The cycling network for the balance of the Sandwich South transfer lands was drafted with the Lauzon Parkway Environmental Assessment and will be considered.

We propose the City concentrate on connecting bike lanes in the highly populated parts of town before beginning work in the unpopulated sprawl. If we build from the downtown core and radiate outward toward the suburbs, the City will reap the benefit of providing infrastructure for the most users more quickly.

Recommendation - plan and schedule new cycling infrastructure in the following order:

1. Connect bike lanes that stop at intersections then begin again
 2. Connect existing bike lanes where short connections can be made
 3. Build new bike lanes in the downtown core and connect them to existing lanes
 4. Build new infrastructure using population density as a priority
 5. Develop cycling linkages to and from parks, as well as between parks
 6. Develop Greenway connections
 7. Build AT infrastructure as new development happens in the Sandwich South transfers lands.
- Changes to the Official Plan and other policies and guidelines to include Complete Streets and Active Transportation should ensure that the infrastructure is of high quality.



7.3.7 Identify the required network connectivity

We have insufficient resources to provide detailed network connectivity recommendations; however, below are some high level proposals we would like to see guiding network development decisions.

Recommendations

1. Prioritize connecting existing bike infrastructure, both on road bike lanes and multi-use trails. Place the highest priority on existing gaps that drop the cycle lane through intersections.
2. Develop a minimum grid of cycling infrastructure within and through the downtown core.
3. When possible, avoid locating bike lanes in the door zone of parked cars; consider placing bike lanes adjacent to the curb.
4. Provide physically separated bicycle facilities on busy streets where motor vehicle volumes or speeds are high.
5. Use sharrows only as a last resort option
6. Eliminate the use of wide sidewalks as “Shared Pathways” unless they are painted and include clear, visible signage. (i.e. Lauzon Parkway). This is unsuitable cycling infrastructure that further encourages sidewalk cycling and creates a danger for cyclists.

7.3.8 Identify primary and secondary networks for cycling and pedestrians with convenient connections to the network being identified in the Transit Service Delivery Review in progress.

No comment from Bike Windsor Essex

7.3.9 Recommend a set of pedestrian and cycling design standards (in consultation with Transit Standards currently under development) for planning, design and operation of same. Develop city/municipal standards where conditions and/or opportunities require a local solution. This may include the following elements but not limited: intersection treatments, treatments at bridges/overpasses, signage (including wayfinding), lighting levels, end of trip facilities such as bicycle parking, lockers and showers.

We have searched the city’s website in an attempt to locate cycling design standards without success, so we are not aware of any existing standards. The best and most comprehensive design standards we have reviewed and recommend come from the [City of London \(UK\)](#). These design standards cover much more than a small city like Windsor will require and are geared to the UK rules of the road, however they contain one element that many other standards do not - a set of 20 Guiding Principals written in clear language that *“... are geared towards learning from what has been done well in the past and tackling the reasons why many previous attempts to deliver good cycling infrastructure have fallen short.”*

A few of our favourite Guiding Principals from London’s Cycling Design Standards are:

- Cyclists need space separated from volume motor traffic
- Routes must flow
- Trials can help achieve change
- Routes and schemes must take account of how users actually behave. If they do not, they will be ignored

It concerns us that the maintenance of built AT infrastructure is not mentioned in the RFP or in many of the City's plans. When active transportation corridors are not maintained, many people don't cycle and those that do are not safe on the roads. Further, a commitment to winter maintenance of major active transportation facilities is needed if the City is to achieve a goal of more walking and cycling trips by making them year-round transportation choices.

Recommendations

1. Develop a set of design standards that incorporate some of the most progressive best practices, for example; the [City of Ottawa's Street Design Toolkit](#) and the [City of Toronto's Complete Streets Guidelines](#) and the [City of Vancouver's Transportation Design Guidelines](#).
2. Develop a coordinated and meaningful City-wide (preferably County-wide) wayfinding plan for streets as well as trails. Provide a directory of services/facilities on signage and wayfinding, including distances to main attractions and connections. Coordinate with other wayfinding efforts such as Transit Windsor, Trans Canada Trail, etc. Provide clear and concise wayfinding to real destinations. The addition of arrows and metre/kilometre distances would be very helpful.
3. Establish winter control guidelines for on road cycling infrastructure
4. Limit 'Share the Road' signs replacing it with signage that is direct such as "[bicycle symbol] May Take the Lane"

Notes on bicycle parking

We are unaware of any public, covered bicycle corrals or bicycle parking structures in the city. Two bicycle lockers have been provided downtown, however they are not used because a) many cyclists are unaware of them and b) they are too small to fit even a standard sized ladies bicycle.

Recommendations:

1. Invest in covered, high-density, secure and low cost bicycle parking at main transport hubs and selected high traffic locations. Make racks or lockers from high quality materials and firmly secured and located in an easily accessed, well-lit area.
2. Create some secure, paid, long-term parking located in a separate, access controlled area such as the ground floor of the Pelissier Street parking garage and adjacent to the Windsor Bike Kitchen.
3. Adopt innovative bicycle parking facility designs, such as covered bicycle corrals in existing vehicle parking spaces on the street.
4. Partner with Windsor Police and cycling organizations to implement [project 529 garage](#) reduce bike theft

Location: Ann Arbor, MI —>



7.3.10 Based on the review of City master plans, policies, procedures, and bylaws and informed by the background review undertaken, propose amendments to existing and/or propose the development of new policies, procedures, standards and by-laws that support the objectives of the Active Transportation Master Plan.

Adopt Complete Streets Policies

We understand that it is not reasonable to provide cycling infrastructure on every street; however, adoption of Complete Streets policies will move the City toward a more well-functioning street network that supports all users. Adopting Complete Streets policies will subsequently inform many of the City's existing policies, procedures and by-laws and ensure they support a network of cycling routes that feel comfortable for people of all ages and abilities (AAA).

Recommendations

1. Adopt a city wide Complete Streets policy and to ensure that it is adopted and followed consistently, we recommend the City also develop [Complete Streets Guidelines](#) to provide a comprehensive and holistic approach for how our streets are design or re-designed.
2. Create bonus provisions in Windsor's planning policies to encourage developers to provide showers, change space and bicycle parking above the minimum requirements.
3. Develop level of service standards for the maintenance and operations of cycling facilities.



Source: Global Street Design Guide

7.3.11 This study will make recommendations to amend Schedule F: Roads and Bikeways of the Official Plan.

Cycling Network Policies (section 7 - Infrastructure) as they exist now:

7.2.4 Cycling Network Policies		
CYCLING	7.2.4.1	Council shall require all proposed developments and infrastructure undertakings to provide facilities for cycling movement and parking wherever appropriate.
BIKEWAY DEFINITION	7.2.4.2	For the purpose of this Plan, the Bikeway is a planned network of on and off road cycling facilities.
BIKEWAY DEVELOPMENT	7.2.4.3	Council shall provide for the development of Bikeways by:
		(a) Designating Bikeways on Schedule F: Roads & Bikeways;
		(b) Implementing, monitoring and updating the cycling master plan;
		(c) Providing for the construction and maintenance of both on and off-road cycling facilities;
		(d) Ensuring that the design of Bikeways compliments and connects with the Recreationway and neighbouring communities;
		(e) Ensuring that all new development proposals and infrastructure undertakings include extensions and improvements to Bikeways; and
		(f) Ensuring that Bikeways are installed concurrently with other transportation infrastructure developments.
CYCLING MASTER PLAN	7.2.4.4	Council shall require the implementation, monitoring and updating of a cycling master plan that:
		(a) Addresses the engineering, education, enforcement and encouragement of commuter and recreation cycling within Windsor;
		(b) Provides principles, policies and strategic plans which address commuter and recreation cycling needs from a comprehensive perspective including the integration with other transportation modes and facilities; and
		(c) Identifies priorities for new Bikeways and Recreationways.
SAFETY	7.2.4.5	Council shall encourage the separation of cyclists and pedestrians wherever possible to avoid potential conflicts.

Windsor's Official Plan does make use of directive language in planning for cycling, however some of it appears to be selectively ignored. Since this is a planning document, it is appropriate that much of the language concentrates on new development but the vast majority of bikeways are/will be on existing roadways.

Complete Streets

We could not locate a single instance of the term "complete streets" anywhere in the Official Plan. We propose that Windsor adopt, at a minimum, Complete Streets policies which include a clear statement of intent that multiple users "shall" or "must" be included in all transportation projects. In 2012, in the Chief Coroner for Ontario's [Cycling Death Review](#) and the [Pedestrian Death Review](#), the top recommendation was directed toward the Ministry of Transportation (MTO) and MMAH that a Complete Streets approach be adopted in the redevelopment of existing communities and the creation of new communities. We should expect no less in Windsor.

Active Transportation

We could find only 2 instance of the term “Active Transportation” in the entire Official Plan and these only focused on new development and a small section of the commercial sector.

Schedule F - Roads & Bikeways

SCHOOL ACTIVE TRANSPORTATION PLANS

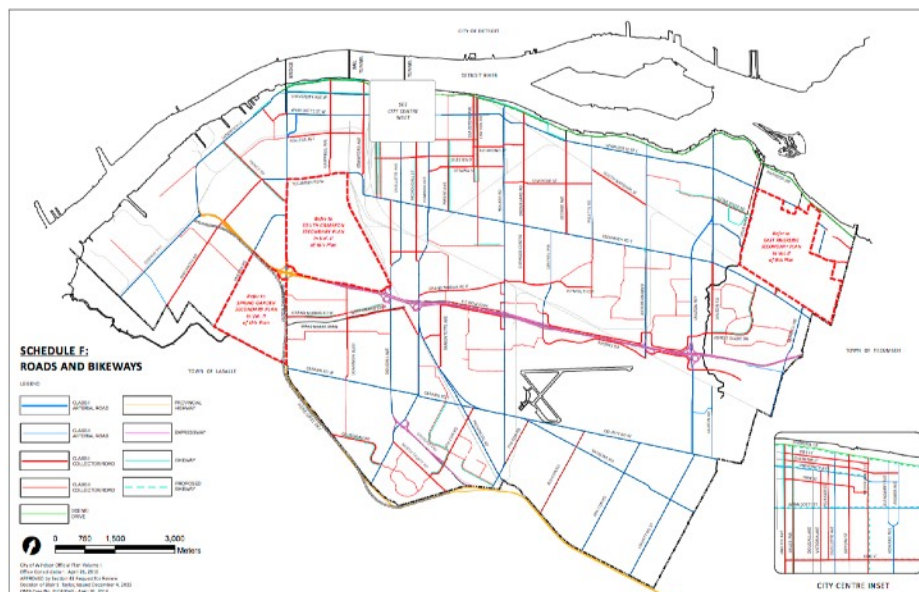
7.2.2.27 Council shall require that school boards implement active transportation plans for new or refurbished schools that include:

- (a) Safe walking routes including new sidewalk connections, street crossing improvements and other pedestrian infrastructure within the school property or municipal road allowance fronting the school property;
- (b) Appropriate way finding signage where necessary; and
- (c) Sufficient bicycle parking facilities for all students.

LAND USE AND TRANSPORTATION

7.2.2.18 Council shall recognize the link between land use and transportation systems by:

- (a) Focusing office development and high-density employment and high density residential in areas which have access to transit and pedestrian amenities;
- (b) Encouraging commercial and employment uses within 400 metres to 800 metres of residential areas to promote the use of active transportation and to promote transit service.



The Map in Schedule F - Roads and Bikeways does not reflect either the existing or proposed bikeways in the City and should be updated.

Recommendations

1. Adopt Complete Streets policies which include a clear statement of intent that multiple users “shall” or “must” be included in all transportation projects.
2. Update the map in Schedule F - Roads and Bikeways to reflect the existing and proposed roads and bikeways

7.3.12 Recommend supporting programs, activities and awareness campaigns that optimize the use of shelf-ready solutions where available.

In order to create safe roads for everyone, we need not only better infrastructure but also better, consistent and on-going education for all road users. Education and, to a lesser degree, enforcement, are essential and presently missing elements in Windsor’s cycling landscape. Like other cities across Ontario, the City is seeing a significant increase in cycling but Windsor’s lack of (real and perceived) safe cycling infrastructure has resulted in an explosion in sidewalk cycling.

With no cycling classes taught in local schools, Bike Windsor Essex began training Can-Bike certified instructors in 2016 to deliver safe cycling classes, workshops and rodeos to children, youth, adults and municipal police. We were one of only four cycling education providers from across the province invited to a Minister’s Roundtable (MTCS) to discuss provincial cycling education standards (more to be announced at the Ontario Bike Summit in 2018). We are currently focused on getting cycling training in the schools and are reviewing two school programs, Hamilton’s New Hope [Ride Smart](#) program and Peterborough’s [Pedal Power](#) program.

Examples of ticketable offences under the HTA*

ride two on a bike	\$110
disobey stop sign or fail to stop	\$110
improper (or no) arm signal to indicate turns or stops	\$110
improper bicycle lighting	\$110
fail to stop at a red light	\$325
careless operation of bicycle or vehicle	\$490

HTA offences, fines, and demerit points for drivers*

insufficient passing distance (drivers must leave 1 metre)	\$110 + 2 points
opening car door into traffic (cyclists or vehicles)	\$365 + 3 points
distracted driving	\$490 + 3 points

*Fine amounts listed are inclusive of provincial set fines and all additional fees.

sidewalks are for walking
Cycling should almost never be mixed with pedestrian traffic on sidewalks. The only exception is for children (typically under the age of 11) who may lack the necessary skills to operate a bike on a roadway with motor vehicle traffic.
It is almost always safer for a cyclist to ride on the street than on a sidewalk.

To stay safe on the roads, always let pedestrians proceed first when they cross your path, and walk your bike in crosswalks.

fines, not demerit points
Cyclists do not receive demerit points on their driver’s licence for tickets issued while riding their bicycle.

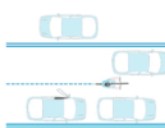
Find legal resources: Bike Windsor Essex has further information about bikes, the law, and your rights and responsibilities as a cyclist, at www.bikewindsoresex.com (website is in English).

Cycle safely

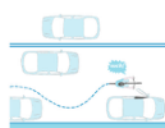
pay attention
Pay attention in traffic, as drivers and pedestrians might not see you. Stay alert for hazards like potholes, cars changing lanes, or car doors opening into your lane. Do not use headphones while riding your bike. Respect other road users.

watch for pedestrians
Pedestrians are the most vulnerable road users. Stop at pedestrian crosswalks and always be respectful.

ride in a predictable, straight line
If you ride confidently and predictably in a straight line, other road users will be able to recognize your behaviour and give you room to ride. Do not swerve in and out of traffic or construction zones - it is your right to take up as much space as you need.
Ride a metre away from parked cars to avoid riding into a car door in the event someone opens it without looking first. Always check over your left shoulder before changing lanes.



✓ keep a good distance from parked cars.



✗ resist the temptation to ride into gaps.

Bike Windsor Essex has developed a Safe Cycling Guide to Windsor and Essex County (in partnership with Cycle Toronto) that is distributed widely across the region. Currently available in English, this year the guide will be published in French, Spanish, Arabic and three other languages (tbd) and will be available at no cost through our website, local libraries, etc.

Bike Windsor Essex launched a very popular #bikegangsofwindsor billboard campaign - attempting to normalize cycling, that will run for its third year in 2018 showcasing local autoworkers, women on bikes, students, kids, etc. - all on bicycles.



Bike Windsor Essex volunteers and staff participate in numerous organized rides, grassroots community events with local New Canadian groups, poverty reduction organizations, area residents, Police, Health Unit, University of Windsor and St. Clair College, to teach and promote safe cycling. Our Fall Get Lit! pop-up campaign has put hundreds of sets of lights on bicycles for free as days become shorter.

We have a physical space in the City's downtown core (University and Pelissier) where part-time staff run a do-it-yourself community bike shop called the [Windsor Bike Kitchen](#). Here, they teach basic bike mechanics and train volunteer mechanics. This includes an Earn-a-Bike program for New Canadians and those experiencing poverty. We sit on the City's bike share committee and a bike rental pilot will be launched in Spring 2018 in anticipation of an eventual City-wide bike share.

Recommendations

1. Join with community organizations to obtain corporate sponsorship and government grants to maintain and expand programs, activities and awareness campaigns.
2. Provide support and funding to continue and expand community safety education being provided to residents by Bike Windsor Essex.
3. Encourage local school boards to fund and implement programs like Hamilton's New Hope [Ride Smart](#) program and Peterborough's [Pedal Power](#) program.
4. Use funds raised from Windsor Police annual bike action to fund safety and awareness campaigns.

7.4.4 Recommend monitoring and progress reporting activities.

Monitoring

Changing from a car-centric world to one that accommodates all road users can require making difficult choices and trade-offs. We understand that cost is a constraint to data gathering and monitoring and that any investment in data gathering needs to be proportionate and address the project outcomes cost-effectively. However, we believe it is vital that Windsor establish a program of active transportation monitoring to establish a baseline from which changes can be measured. A consistent and ongoing data collection program can aid in informing priorities, make the case for continued investment and identify where new infrastructure is needed.

Recommendations

1. Monitor project outcomes and document and share lessons learned. Where possible, measuring the performance of streets should be done before, during and after street projects are built.
2. Purchase and install bike counters to conduct bike counts on an ongoing basis and establish a cycling data collection program.
3. Establish a protocol to track cycling collisions.

Data collection, monitoring, progress reporting and improved community consultation will add significant workload to the Transportation Planning Department's stretched resources.

Recommendation:

Establish a full time Active Transportation Planner position, reporting directly to the Deputy City Engineer or City Engineer. Hire an experienced individual whose primary responsibility would be to implement the recommendations contained in the new 2018 Active Transportation Plan.

We further recommend that traffic calming issues and projects NOT be included in the duties of this position except to provide expert consultation to the individuals handling the traffic calming files.

Progress Reporting

The City of Windsor could greatly improve community support of infrastructure projects if they considered Bike Windsor Essex, neighbourhood renewal groups, BIAs and other stakeholders to be partners in planning. These groups could be the City's greatest ally. Lack of true community consultation leads to wasted funds constructing infrastructure that isn't supported or is under-used.

Community groups and cycling advocates have been begging the City to be more open and transparent about recommendations, budgets and plans for changes to the cycling network, and to engage in community consultation that is more than "ear service".

Recommendations

1. That the City implement and regularly update short-term network improvement strategies to address gaps and deficiencies in the network, **in consultation** with residents, advocacy groups, businesses, and other stakeholders. Do not wait until decisions have been made to consult with stakeholders.

2. Provide the public with short and long range plans and a list of cycling infrastructure to be developed/upgraded in the next year. To accomplish this and reach a wide range of stakeholders without many hours of public meetings, we recommend a regularly updated web presence similar to the City of Winnipeg's "[Improving and expanding the network](#)" page.



Chevrier Walk Bike Project

Study Design Construction

Buffered bike lanes will be constructed on Chevrier Boulevard from Waverley Street to Pembina Highway and a multi-use path on the



West Alexander Pedestrian and Cycling Corridor

Study Design Construction

In September 2015, the City of Winnipeg initiated a public engagement process to receive input on the West



Downtown Bike Lane System

Study Design Construction

The study created a design for a two-way protected bike lane on Garry Street. Construction for the Main Street crossing took place in



Keewatin Street Pathway

Study Design Construction

An off-street pathway will be built along Keewatin Street from Burrows Avenue to Inkster Boulevard.

Source: Screenshot from the City of Winnipeg's "[Improving and expanding the network](#)" page

Address closing the gap in the Windsor Loop on Wyandotte Street East from George Avenue to Clairview Avenue.

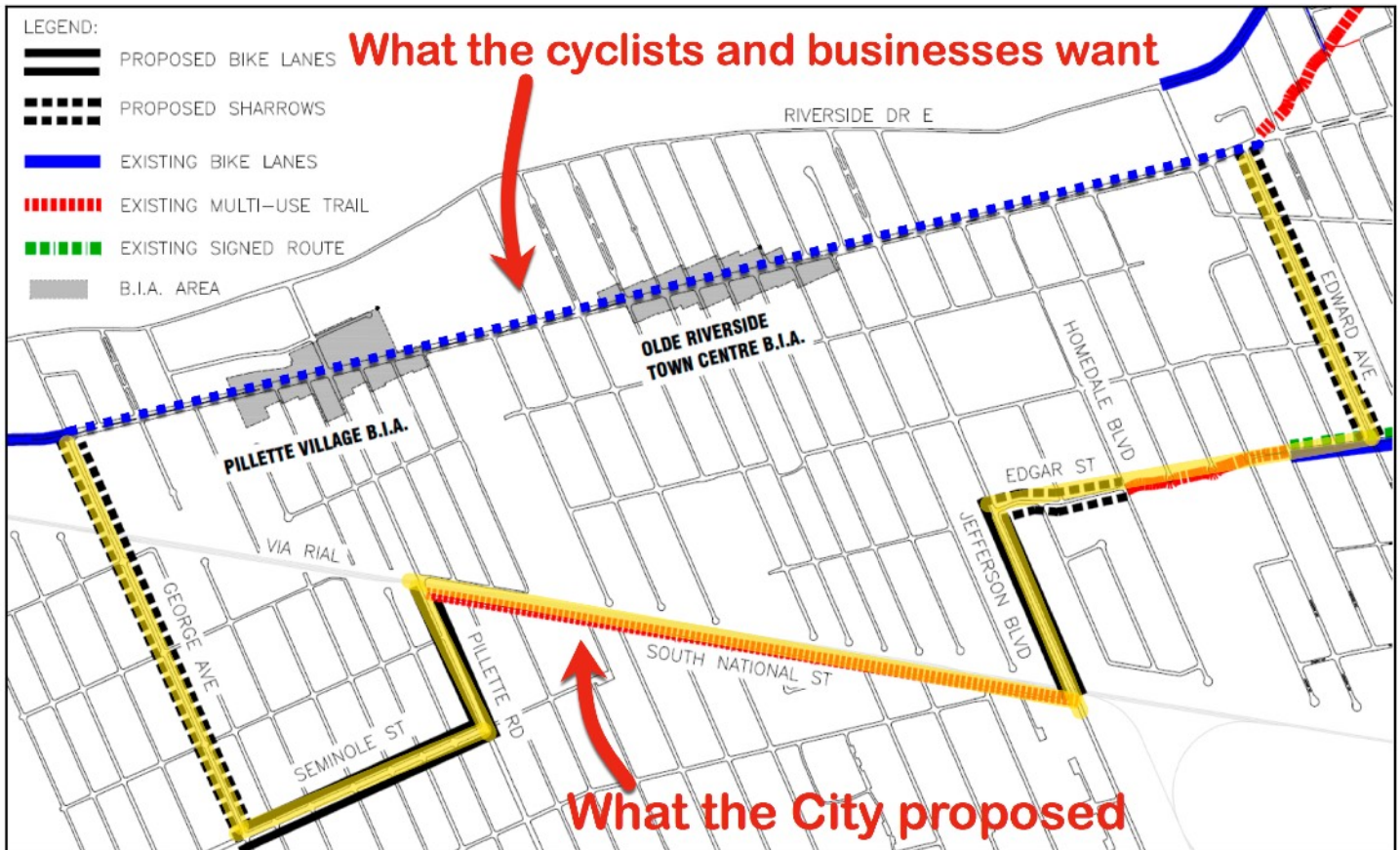
This stretch of Wyandotte was identified in the BUMP (2001) as a bike lane to be built within 5 years. Almost twenty years later, no bike lanes have been built. Cyclists and business owners were excited on October 3, 2016 when City Council [approved a plan and funding](#) (see page 142 to 154) to build bike lanes on Wyandotte E from Isabelle Place to Strabane Avenue (Parking Impacts to be reviewed).

When work was imminent, City Administration consulted the Windsor Bicycling Committee and the two affected BIAs. The result being that all affected parties were delegates to City Council to urge the installation of bike lanes on Wyandotte E from George to Clairview without deviations. (NOTE: An early letter from the BIAs against the bike lanes was later retracted because "they had not been provided sufficient information from the City to make an appropriate decision.")

Based on an interim proposal by administration (nicknamed "the zigzag" by the press and public), business owners on Wyandotte became so concerned that cyclists would be diverted away from the street that they started a petition and developed a website (<http://oneroadforall.ca>) to show the widespread public support for cycling infrastructure. Within a couple of weeks, more than 2000 signatures were collected.

The issue was to be debated at the City Council meeting on June 19, 2017 ([agenda of the meeting here](#), see pages 276 to 306). More than 10 delegations had registered to speak in support of this issue and a large group of cyclists donned One Road for All shirts and rode the 8km route along Wyandotte to City Hall (in the rain).

The 100+ individuals who showed up were turned away when Council decided to refer the matter to this ATP and not listen to any of the business leaders and citizens who registered to speak.



“Cycling advocates have been pushing for the infrastructure, but a proposal from the city's transportation committee outlined a different bike route that zigzags down to South National Street.”
Source - [CBCNews](#)

This is a high profile issue, not because people want to see the “Windsor Loop” closed, but because cycling is not being treated as transportation. Cyclists want to take a direct route to work and school and they want to be able to ride to shopping destinations safely. [Recent decisions](#) to divert cyclists away from shopping districts has cyclists and business owners very concerned.

“It could be two years before Windsor city council has a meaningful discussion about putting bike lanes on Wyandotte Street East” Source - [Windsor Star](#)



Cycling advocates lobby for bike lanes on Wyandotte Street as part of Windsor Loop in front of Windsor city hall Monday, June 19, 2017. (Rich Garton / CTV Windsor) <http://windsor.ctvnews.ca/wyandotte-bike-lanes-to-be-studied-in-active-transportation-master-plan-1.3467175>

Recommendations

1. Emphasize the benefits and importance of developing cycling corridors to and through shopping routes in the Active Transportation Plan.
2. Propose a network of bikeways that is logical and continuous, without unnecessary obstacles, delays and diversions to get cyclists to shopping destinations, school and work.
3. Provide bicycle parking that can accommodate employees, customers, residents and tourists at destinations such as shopping corridors.

SUMMARY OF RECOMMENDATIONS

1	Provide safe, direct, connected cycling infrastructure that addresses the difficulties in crossing Windsor's railroads and high volume roads
2	Make geo-referenced mapping arising from this Active Transportation Plan available to the public through their Open Data Portal
3	Review problem intersections and employ existing best practices to redesign intersections to reduce conflict between bicyclists, other vulnerable road users and vehicles. Consider low cost fixes such as bike boxes, intersection crossing markings, painted facilities or other treatments that have proved successful in other jurisdictions
4	Establish winter control guidelines for on road cycling infrastructure
5	Actively promote commuter cycling to the University of Windsor, St. Clair College and secondary and elementary schools, and assist these institutions in the purchasing and siting of bicycle parking.
6	Work with business and the community to encourage the use of bike valets at major events (some cities make bike valets mandatory at large events).
7	Work with the local school boards and the Health Unit of Windsor and Essex County to collaborate on a regional application to the Safe Routes to School Program .
8	Develop a coordinated and meaningful City-wide (preferably County-wide) wayfinding plan for streets as well as trails. Provide a directory of services/facilities on signage and wayfinding, including distances to main attractions and connections. Coordinate with other wayfinding efforts such as Transit Windsor, Trans Canada Trail, etc.
9	Stop the current practice of locking Transit Windsor bus mounted bike racks from December 15 - March 15 and provide year-round access to bus bike racks to ensure those who rely on cycling also have access to a transit option 365 days a year.
10	Identify, prioritize and establish new trails to improve connectivity throughout the city and to promote trail connections for neighbourhoods.
11	Take advantage of opportunities to provide cyclists with safe routes through or adjacent to parkland along major traffic routes.
12	Investigate options with the railways on routes which may be abandoned in the future to provide opportunities for recreational multi use-trails and commuter cyclists.
13	Strengthen all north-south connections to the Detroit River.
14	Work with and establish partnerships to obtain formal access for the development of recreational trails where appropriate on non-city owned lands, e.g., Devonwood, utility corridors and private land parcels.
15	Include environmental considerations in the planning of major new trails through natural areas, and design trails to minimize environmental impacts.
16	Develop trail heads and staging areas with the appropriate amenities for users including; wayfinding, cycle parking, water and interpretation.

17	Establish a “greenbelt” through the Sandwich South Lands to connect eastern and western parks as development occurs.
18	Ensure reasonable and on-going funding to properly maintain bike lanes and trails.
19	Include the unfinished recommendations from the BUMP as recommendations in the 2018 Active Transportation Plan, having updated and improve them, if necessary.
20	Prioritize connecting existing bike infrastructure, both on road bike lanes and multi-use trails. Place the highest priority on existing gaps that drop the cycle lane through intersections.
21	Develop a minimum grid of cycling infrastructure within and through the downtown core.
22	Use Sharrows only as a last resort option
23	Eliminate the use of wide sidewalks as “Shared Pathways” unless they are painted and include clear, visible signage. (i.e. Lauzon Parkway).
24	Limit ‘Share the Road’ signs replacing it with signage that is direct such as “[bicycle symbol] May Take the Lane”
25	Avoid building bike lanes in the door zone of parked cars, consider placing bike lanes next to the curb wherever possible
26	Remove on-street parking adjacent to stop signs and intersections to improve bicycle visibility. Where it merits, replay the vehicle parking with a bike corral.
27	Provide physically separated bicycle facilities on busy streets where motor vehicle volumes or speeds are high
28	Develop a set of design standards that incorporate some of the most progressive best practices, for example; the City of Ottawa’s Street Design Toolkit and the City of Toronto’s Complete Streets Guidelines and City of Vancouver’s Transportation Design Guidelines
29	Plan and schedule new cycling infrastructure in the following order: <ol style="list-style-type: none"> 1. Connect bike lanes that stop at intersections then begin again 2. Connect existing bike lanes where short connections can be made 3. Build new bike lanes in the downtown core and connect them to existing lanes 4. Build new infrastructure using population density as a priority 5. Develop cycling linkages to and from parks, as well as between parks 6. Develop Greenway connections 7. Build AT infrastructure as new development happens in the Sandwich transfers lands.
30	Invest in covered, high-density, secure and low cost bicycle parking at main transport hubs and selected high traffic locations. Make racks or lockers from high quality materials and firmly secured and located in an easily accessed, well-lit area
31	Create some secure, paid, long-term parking located in a separate, access controlled area such as the ground floor of the Pelissier Street parking garage.
32	Adopt innovative bicycle parking facility designs, such as covered bicycle corrals in existing vehicle parking spaces on the street.
33	Adopt a city wide Complete Streets policy and to ensure that policies are adopted and followed consistently, we recommend the City also develop Complete Streets Guidelines to provide a comprehensive and holistic approach for how our streets are design or re-designed.

34	Create bonus provisions in Windsor's planning policies to encourage developers to provide showers, change space and bicycle parking above the minimum requirements.
35	Develop level of service standards for the maintenance and operations of cycling facilities.
36	Adopt Complete Streets policies which include a clear statement of intent that multiple users "shall" or "must" be included in all transportation projects.
37	Update the map in Schedule F - Roads and Bikeways to reflect the existing and proposed roads and bikeways
38	Monitor project outcomes and document and share lessons learned. Where possible, measuring the performance of streets should be done before, during and after street projects are built.
39	Purchase and use bike counters to conduct bike counts on an ongoing basis and establish a cycling data collection program
40	Establish a protocol to track and report cycling collisions
41	Establish a full time Active Transportation Planner position, reporting directly to the Deputy City Engineer or City Engineer. Hire an experienced individual whose primary responsibility would be to implement the recommendations contained in the new 2018 Active Transportation Plan. Do not include traffic calming issues and projects in the duties of this position.
42	Provide support and funding to continue and expand community safety education being provided to residents by Bike Windsor Essex.
43	Join with community organizations to obtain corporate sponsorship and government grants to maintain and expand cycling programs, activities and awareness campaigns.
44	Encourage local school boards to fund and implement programs like Hamilton's New Hope Ride Smart program and Peterborough's Pedal Power program.
45	Use funds raised from Windsor Police annual bike action to fund safety and awareness campaigns.
46	Implement and regularly update short-term network improvement strategies to address gaps and deficiencies in the network, in consultation with residents, advocacy groups, businesses, and other stakeholders. Do not wait until decisions have been made to consult with stakeholders.
47	Provide the public with short and long range plans and a list of cycling infrastructure to be developed/upgraded in the next year. To accomplish this and reach a wide range of stakeholders without many hours of public meetings, we recommend a regularly updated web presence similar to the City of Winnipeg's " Improving and expanding the network " page.
48	Emphasize the benefits and importance of developing cycling corridors to and through shopping routes in the Active Transportation Plan.
49	Propose a network that is logical and continuous, without unnecessary obstacles, delays and diversions to get cyclists to shopping destinations, school and work in safety
50	Provide bicycle parking that can accommodate employees, customers, residents and tourists at destinations like shopping corridors.
51	Partner with Windsor Police and cycling organizations to implement project 529 garage reduce bike theft
52	Remove on-street parking adjacent to stop signs and intersections to improve bicycle visibility. Where it merits, replay the vehicle parking with a bike corral.

REFERENCES

Bike Windsor Essex studies, data collection and community consultation results

[2016 Bike Lane Study](#)

[2016 Community Cycling Survey](#) - 567 respondents

[2017 Rolling Summit](#) (paper survey) - 83 respondents

[2017-2018 Active Transportation Cycling Survey](#) - 200+ respondents

In-person comments collected at monthly community meetings (2017) - 180 people

Comments received through Bike Windsor Essex [social media](#) and [website](#)

In-person comments collected at community events (Bike Rodeos, Open Streets, Bike Valets, Community Rides) - thousands reached

City of Windsor Documents

[Bicycle Use Master Plan](#) (BUMP) - Vol. 1 2001 - City of Windsor

[Parks and Recreation Master Plan](#) (Rediscover our Parks) 2015 - Parks & Rec, City of Windsor

[Road Safety Report 2012](#) - Transportation Planning, City of Windsor

[Road Safety Report 2013](#) - Transportation Planning, City of Windsor

[Windsor Official Plan](#) - Planning, City of Windsor

[Downtown Transportation Strategy](#) -October 2016 - City of Windsor

[Lauzon Parkway Improvements Environmental Study Report](#) - Addendum 2015 - MMM Group, City of Windsor

[Lauzon Parkway Environmental Assessment](#) 2014 - MMM Group, City of Windsor

Other EAs - [Cabana/Division](#), [Central Box Study](#), [Riverside Drive Vista project](#)

[Community Energy Plan](#) 2017 - Garforth Intl, City of Windsor

[Windsor City Council Reports](#)

Cycling guidelines, programs and toolkits

[Toronto Complete Streets Guidelines](#) Edition 1. Volume 1. 2017 - City of Toronto

[Ontario Traffic Manual - Book 18](#) Dec 2013 - Ontario Ministry of Transportation

[A Right to the Road](#) - Understanding and addressing bicyclist safety 2017- GHSA

[City of Ottawa's Street Design Toolkit](#) 2013 - City of Ottawa

[City of Vancouver's Transportation Design Guidelines](#). 2017

[Ontario Safe Routes to School Program](#) , Provincial Priorities 2017 - Green Communities Canada

[Healthy Communities and Planning for Active Transportation](#) 2012 - Ontario Professional Planners Institute

[Winnipeg Pedestrian & Cycling Strategies](#) July 15, 2015 - City of Winnipeg

[Toronto Cycling Wayfinding Strategy](#) 2015 - City of Toronto

[Ride Smart Program 2017](#) - New Hope Community Bikes

[Pedal Power Program](#) 2017 - Peterborough Moves

[Urban Street Design Guide](#) 2013 - NACTO

[Global Street Design Guide](#) 2016 - NACTO

Cycling data

[Strava Heatmap data](#) 2017

[Strava Heatmap 2014/2015](#) comparison data

Windsor Essex County -[Cycle Tourism Regional Research Report](#)