

# County Road 20 One-Way Cycle Track

## SUSTAINABLE URBAN TRANSPORTATION

### SOCIAL



Existing  
Conditions



Completed  
Cycle Facility

Facility  
Usage



### ECONOMIC

Public  
Input



Safety

Construction



### ENVIRONMENTAL

519-776-6441  
TTY 1-877-624-4832

360 Fairview Ave. W.  
Essex, ON N8M 1Y6

countyofessex.ca

## Introduction

The County of Essex is pleased to have been accepted as one of five finalists for the 2020 TAC Sustainable Urban Transportation Award for the County Road 20 One-Way Cycle Track project. The following application highlights the partnerships, timeline and components that went into completing this sustainable active transportation facility. Through the efforts of robust collaborations between multi-tiered government organizations, community partners and the public, this initiative provides an innovative sustainable urban transportation solution for a range of active transportation users.

In 2019, the County of Essex completed the construction of this six-kilometer One-Way Cycle Track along County Road 20 through the municipalities of Kingsville and Leamington. This raised cycle track is a bicycle facility adjacent to and vertically separated from the roadway. It is designated for exclusive use by cyclists and provides cyclists the ability to travel in each direction to ensure continuity and connectivity. This project highlights sustainable urban transportation through the transformation of a corridor to allow for multi-modal transportation.

This facility formed part of the regional County Wide Active Transportation System (CWATS). The County of Essex has developed a comprehensive Active Transportation Master Plan to guide the County and local area municipalities in implementing a regional network of cycling and pedestrian facilities spanning some 800 km, over the next 20+ years. The County of Essex has partnered with seven local municipalities, Essex Region Conservation Authority, Windsor-Essex County Health Unit, Ministry of Transportation of Ontario and neighbouring municipalities of Chatham-Kent and City of Windsor to create and build a cycling and pedestrian network that improves lives and unites communities. This One-Way Cycle Track project was supported by all of the partners through this system.

CWATS was introduced in 2012 to promote healthy, active and sustainable lifestyles and recognizes the importance that connected trails can play in supporting both tourism and residential development. CWATS developed a Master Plan includes planning, design and operation guidelines to support an active transportation network along with supporting policies, programs and outreach initiatives. Infrastructure as part of the regional CWATS network is identified and implemented through formal consultation with the CWATS steering committee comprised of its partners. All infrastructure built through the CWATS initiative follows a phased detailed process.

## Phase I – Preliminary Review

### Need for an Active Transportation Route is Identified

This portion of County Road 20 was highly desirable for incorporating active transportation as it follows the shoreline of Lake Erie and is part of the Lake Erie Wine route and Lake Erie Waterfront Trail. Completion of this facility provided a direct active transportation connection between Kingsville and Leamington.

There were significant challenges for cyclists to safely use this corridor due to the constrained roadway width, lack of cycling or pedestrian facilities, as well as the combination of traffic volumes, commercial vehicles and operating speed. Many daily users travelling along this corridor demonstrated the high demand for a sustainable urban active transportation facility in this location.

The local greenhouse industry is continuing to grow to intensify greenhouse production facilities along the Leamington-Kingsville corridor which will increase the need for an active commuting route for migrant workers. This portion along County Road 20 between Leamington and Kingsville is a key commuting route for a large number of migrant workers employed in the area who rely on cycling as their main mode of transportation. This route is also utilized by area cyclists for recreational purposes.

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This segment was initially identified as a result of public feedback through a general public questionnaire that requested comments on the County Network as a whole. The following comment demonstrates a summary of comments collected on this section:

**“ I feel this is a long overdue necessity for our area (along County Road 20) for the safety of our own residents as well as the safety of the MANY migrant workers who use our roads. We have an obligation to provide safe transportation for them. They are an important part of our economy and deserve our serious consideration. Their only means of transportation is by bicycle. ”**

Photos from before the installation of the One-Way Cycle Track show clear desire lines and the need for a more equitable facility for all types of users. The installation of this facility improved workers cycling safety as well as safety for other recreational users within the County of Essex.



*FIGURE 1: COUNTY ROAD 20 WITHOUT ONE-WAY CYCLE TRACK FACILITY (2013)*

### Cost Estimate and Funding Strategy

Projects part of the CWATS Network are subject to an innovative cost-sharing practice that was adopted by the County and local municipalities through the CWATS Master Plan in 2012. The cost for active transportation facilities within urban areas is cost shared: 40% by the County and 60% by the local municipality. This cost share practice was determined to confirm that CWATS facilities on County Roads in urban areas have a greater benefit to local municipal residents and businesses (e.g. going to work, local retail/commercial destinations, to school etc.) within that community making the local municipality a partner for these projects. This funding practice gives the local municipality a formal role in ensuring the route and facility meets the needs of their community.

## PHASE II – Feasibility of County Road 20 Facility

### Public Consultation

After the identification of the need for a facility along this corridor, the County proceeded to support this through the partnership of CWATS to confirm and identify the required facility.

In 2013, the Municipality of Leamington initiated, in partnership with the County of Essex, a Public Information Centre (PIC) to share with the community the potential for implementation of an active transportation facility along this section of County Road 20.



Leamington 11A, B & C Feasibility Design Study  
Branton Drive – County Road 31



### WELCOME!

Leamington 11 A, B & C Feasibility Design Study  
Notice of Public Information Centre

#### WE WANT TO HEAR FROM YOU!

The Municipality of Leamington and the County of Essex are inviting residents and local stakeholders to review and provide input on a proposal to improve cycling and walking conditions on County Road 20 (from Branton Drive to County Road 31) in Leamington

Tuesday, November 5<sup>th</sup>, 2013

Leamington Kinsmen Recreation Complex, 249 Sherk Street  
3:00 pm to 7:00 pm

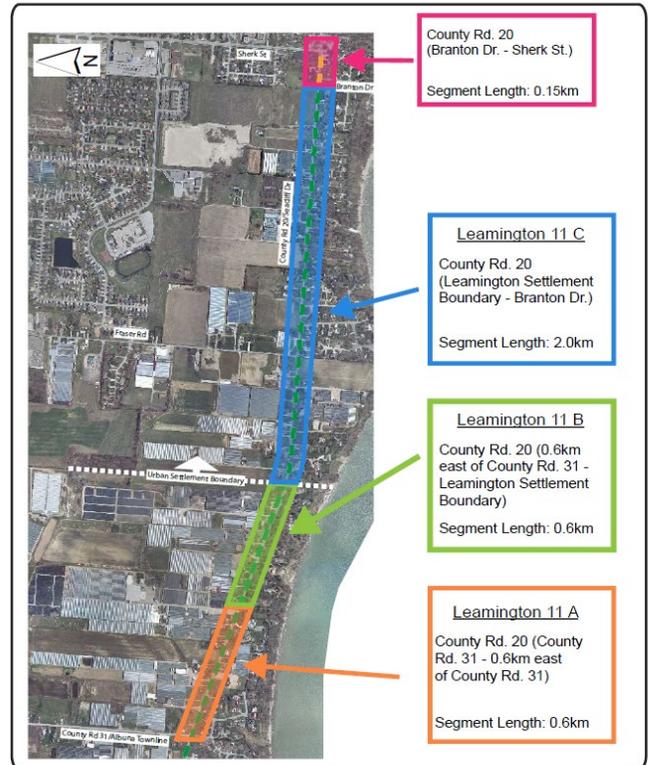


FIGURE 2: PIC FOR LEAMINGTON SEGMENT (2013)

Following in 2014, the Town of Kingsville and the County of Essex hosted another PIC in Kingsville to extend and connect the facility along County Road 20.

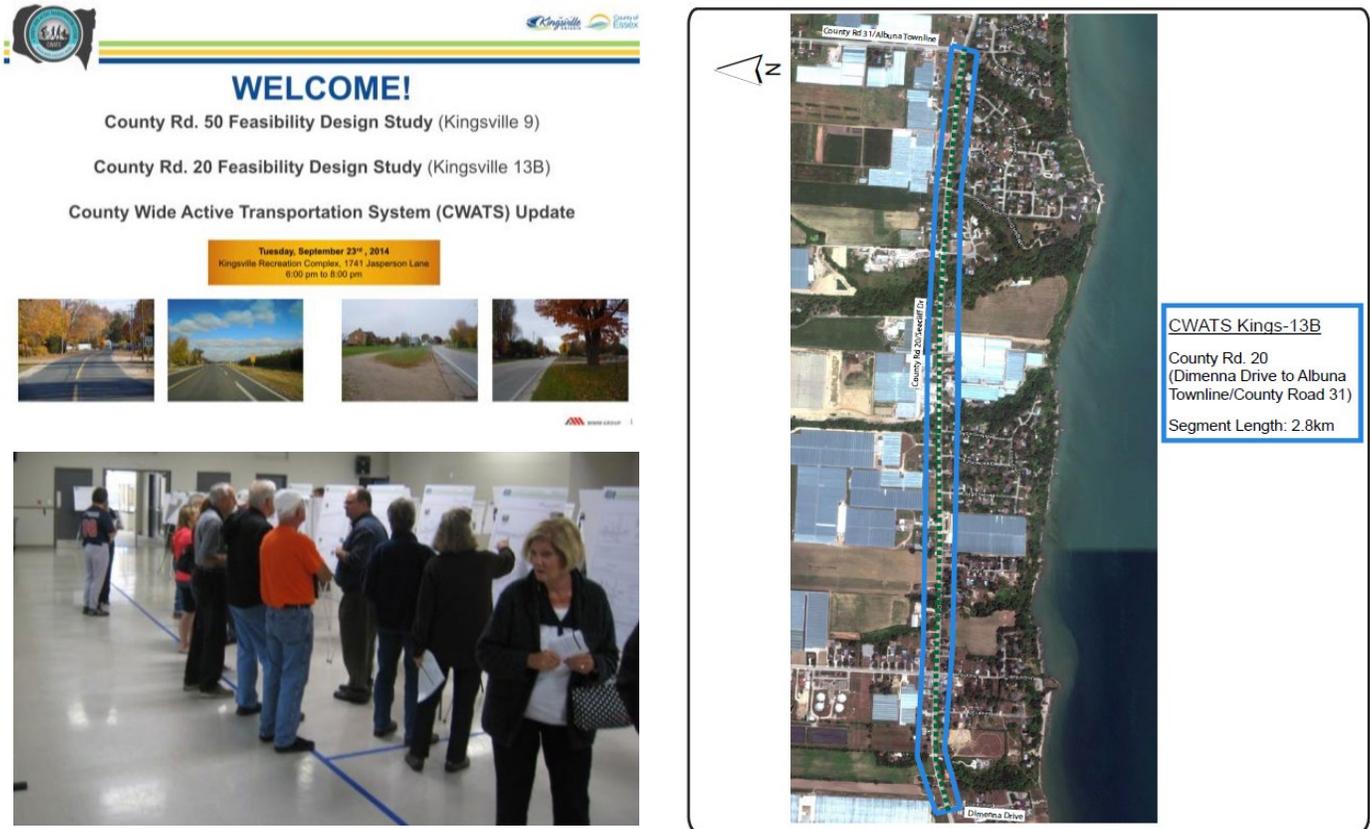


FIGURE 3: PIC FOR KINGSVILLE SEGMENT (2014)

Based on the above, the community was asked to share their comments and feedback regarding the challenges, constraints, and/or barriers to improving active transportation conditions on County Road 20. In addition, a variety of design options were presented along this corridor to confirm usage and the public needs. Comments were reviewed from both PICs pertaining to the active transportation improvements being proposed.

### Feasibility Design Study

In 2015, Kingsville, Leamington and the County of Essex jointly undertook a feasibility design study to confirm the appropriate alignment and facility type for the proposed active transportation facility based on the public comments and options presented. Consideration was also given to the existing AADT in this corridor (between 10,000 and 15,000 vehicles per day, of which 20-30% of the traffic volume is comprised of commercial vehicles) and the posted speed of 60km/h.

This corridor was also compared to the recommended bicycle facility selection process in the Ontario Traffic Manual (OTM) Book 18: Cycling Facilities. When applied to County Road 20 the suggested desirable facility type is a separated facility (e.g. buffered bicycle lane/paved shoulder or cycle track) based on corridor traffic volume and speeds.

The following evaluation criteria was also considered during the feasibility design study:

<b>Separation from Motor Vehicles</b>	The amount of spatial and/or physical separation between motor vehicles and pedestrians and cyclists. A higher degree of separation is preferred by most pedestrians and cyclists.
<b>Operating Space</b>	The preferred AT pathway should consist of at least the desired operating width of 1.5 m for cyclists (a suggested minimum width of 1.2 m may be considered for constrained corridors).
<b>Drainage</b>	The preferred alternative should have minimal impact to existing drainage systems along the corridor.
<b>Land Requirement</b>	The preferred alternative should have minimal land acquisition or agreement requirements. There should be minimal adjustment of utilities, signs or vegetation within the corridor.
<b>Constructability</b>	The level of effort required to install the AT facility. It measures both the level of impact to the existing road right-of-way and complexity of the construction needed.
<b>Road Condition</b>	The preferred alternative should maximize economies of scale on the project and minimize the impact during construction. It will realize opportunities to improve the state of the road and leave it in good "State of Repair."
<b>Construction Cost</b>	Considerations include the cost of asphalt (or tinted concrete) surface, grading, utility relocation, pavement markings and signage related to the implementation of the alternative.

FIGURE 4: EVALUATION CRITERIA FOR THE PREFERRED ACTIVE TRANSPORTATION FACILITY

Based on the above criteria the selected design was the One-Way Cycle Track facility with new mountable curbs along this six-kilometer corridor. Following approval by both Municipal Councils and County Council this project moved to proceed to implementation through a public tender process.

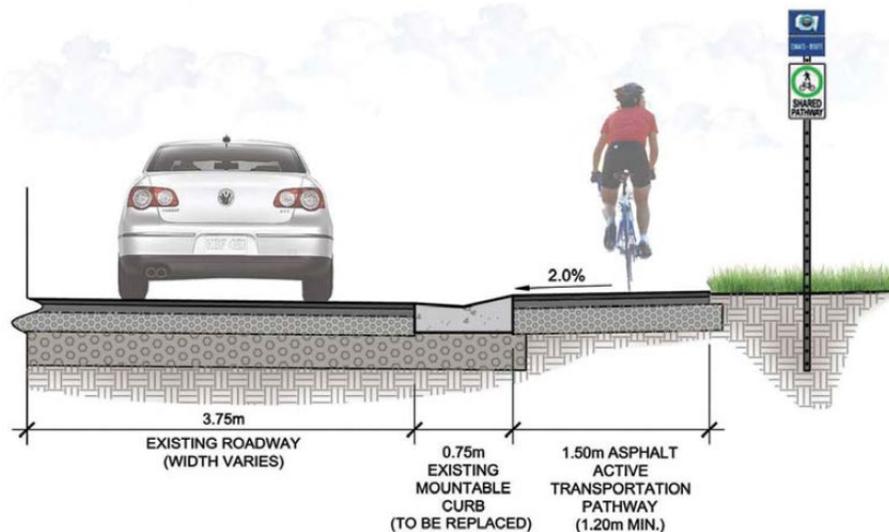


FIGURE 5: PROPOSED DESIGN OF ONE-WAY CYCLE TRACK ON COUNTY ROAD 20

### PHASE III –Tender & Construction of the Facility

Based on the length of the facility, tendering & construction was completed in a phased approach and took place from 2015–2019.

#### Tender and Financial Components

The following table is a financial break down of tendered construction costs by phase.

Kings-13B on County Road 20					
Total Segment = 2.15 km from Dimenna Dr to CR 31					
Year	Description	Length (km)	Total Project Cost (\$)	County Cost (\$)	Municipality Cost (\$)
2015 - 2017	CR 31 to Ravine Line	0.75	1,181,686.86	472,674.74	709,012.12
2017 - 2018	Whitewood to Union Rd	0.90	932,736.90	373,094.76	559,642.14
2018	CR 45 to Dimenna Dr	0.50	523,421.49	209,368.60	314,052.89
		<b>2.15</b>	<b>2,637,845.25</b>	<b>1,055,138.10</b>	<b>1,582,707.15</b>

Leam-11abc on County Road 20					
Total Segment = 3.18 km from CR 31 to Branton Drive					
Year	Description	Length (km)	Total Project Cost (\$)	County Cost (\$)	Municipality Cost (\$)
2018	CR 31 to 600m E of CR 31	0.47	68,356.67	27,342.67	41,014.00
2018	600m E of CR 31 to 1.2 km E of CR 31	1.40	3,089,391.47	1,235,756.59	1,853,634.88
2019	1.2 km E of CR 31 to 60 m W of Sherk Street	1.31	280,121.04	112,048.42	168,072.62
		<b>3.18</b>	<b>3,437,869.18</b>	<b>1,375,147.67</b>	<b>2,062,721.51</b>

The total construction costs to implement the project was \$6,075,714.00. Cost sharing was applied based on the cost sharing funding strategy identified in CWATS to the respective municipality.

#### Construction and Implementation

Construction on the facility commenced in 2015 in Kingsville and continued into 2019 into Leamington to complete the entire section of the facility.



FIGURE 6: PHOTOS DURING CONSTRUCTION OF THE COUNTY ROAD 20 ONE-WAY CYCLE TRACK

During construction a short video was created to share and communicate to the residents and to allow transparency with the public and to provide residents details about the new active transportation facility being installed.

The video shared on the County of Essex’s Facebook page can be found at the following link:

<https://www.facebook.com/EssexCountyOntario/videos/260459154603518/>

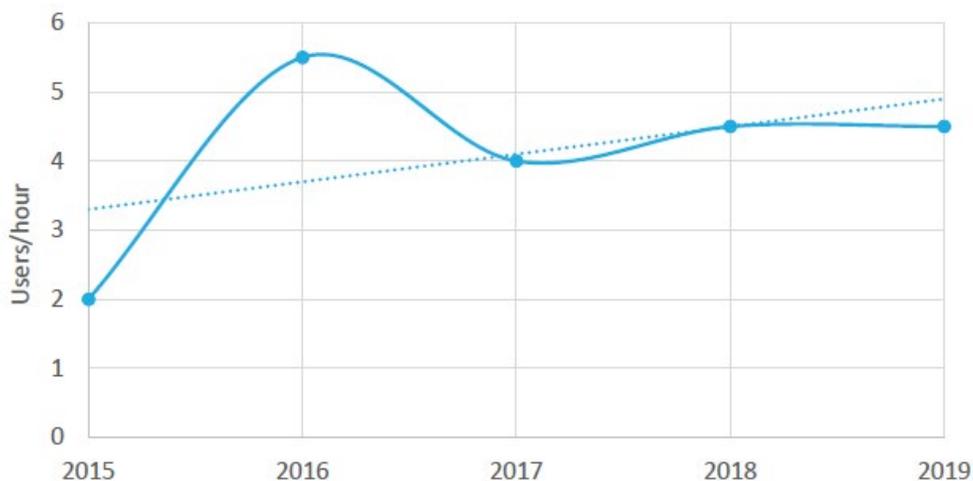
## Phase IV – Monitoring

### Annual Traffic Count Program

In 2015, the County of Essex established a short-term active transportation count program that provides a snapshot in time for pedestrian/cyclist activity. The County of Essex tracks performance monitoring on the CWATS Network facilities through two annual programs - the manual traffic count program and automated eco-counters. In addition to usage, the manual counts allow for observations such as forms of active transportation, direction of travel, appropriate usage, safety, and basic demographic information of users. This data is essential for building long term support for active transportation. The manual traffic counts are conducted at 77 locations in all seven municipalities within the County of Essex.

Since the County began this traffic count initiative in 2015 there has continued to be a trend of increased cyclists in the region and in 2017 the number of cyclists using the CWATS facilities surpassed the number of non-cyclists. This demonstrates that cycling is increasingly more popular amongst Essex County residents as a legitimate mode of transportation. General findings to date show us that there are more male active transportation users than females and adults typically use active transportation facilities more than children.

The manual traffic count data shown below is based on counts obtained along the One-Way Cycle Track on County Road 20 in Kingsville. Data collected over the last 5 years shows a spike in usage in 2016, the year this phase of the facility was built.



*FIGURE 7: MANUAL TRAFFIC COUNT DATA FROM COUNTY ROAD 20*

Educational efforts and outreach also contributed to this increase of facility usage along County Road 20 through a program run with the local cycling advocacy group Bike-Windsor Essex. This included visits to local greenhouses where education on bike maintenance was provided to the migrant works along with providing them proper safety equipment (i.e. bicycle lights and bells).

Overall, there is consistent data that shows more usage of this corridor after the installation of sustainable urban cycling infrastructure paired with educational programming.

The County of Essex has since installed automated eco-counter technology and in 2019 began collecting more accurate and representative usage counts on our network. A snapshot of data from 2019 shows that a total of 4,623 cyclists used the One-Way Cycle Track facility in Kingsville, with a daily average of 13 cyclists. This technology provides the County with accurate usage numbers of facilities to continue support based on usage of these facilities throughout the County.

## PHASE V – Recognizing Additional Benefits of the Facility

Through our regional CWATS program the County and local municipalities adopted the regions first pedestrian charter to help facilitate and promote the development of a walkable and pedestrian friendly environment. A pedestrian charter is an important measure of the quality of the public realm, health and vitality.

**Walk Ride County Wide!**

Together, local towns, workplaces, organizations, schools, families, and individuals can do our part to support a vibrant and prosperous Essex County. Visit us online to learn how you can actively do your part. [www.cwats.ca](http://www.cwats.ca)

# CWATS Charter

FOR THE COUNTY OF ESSEX AND ITS PARTNERS

The following principles lay the foundation of our region's first Active Transportation Charter. By supporting active transportation, we all play a leadership role in creating a more vibrant and liveable County of Essex.

- Access**  
Active forms of transportation can support residents to access local goods, services, and places that they need to go.
- Equity**  
Active transportation is a universally affordable way to travel that allows residents to live more independently.
- Health and Well-being**  
Regular, active transportation enhances overall health and well-being of our residents and community.
- Environmental Sustainability**  
Active transportation relies on human power and is good for our environment.
- Personal & Community Safety**  
An environment where people feel safe and comfortable supports active lifestyles and increases community safety for all.
- Community Cohesion and Prosperity**  
Active transportation encourages social interaction and boosts local economic vitality.
- Through a strong partnership..**  
The County of Essex, along with its lower tier municipalities, the Essex Region Conservation Authority and the Windsor-Essex County Health Unit, are committed to these CWATS Charter principles.

**CWATS Vision**  
The County of Essex and its partners are working together to foster a safe, comfortable bicycle- and pedestrian-friendly environment. Well-designed and connected facilities can inspire you to choose active travel as it makes you feel safer and healthier, is a fun and affordable way to travel and is better for the environment.

**CWATS • ROUTE**

FIGURE 8: THE CWATS PEDESTRIAN CHARTER (2015)

The County of Essex recognizes the importance of economic, social and environmental sustainability and our cycling infrastructure is one way we work towards prioritizing sustainable initiatives in our region. The charter outlines our commitment to active transportation through seven distinct principles that include community building, safety and the environment. As a region the County of Essex, along with its partners, recognize that by supporting active transportation we all play a leadership role in creating a more vibrant and livable community.

## Social Benefits

The One-Way Cycle Track on County Road 20 demonstrates how the improved facility encourages continued growth for our cycling tourism industry along the Lake Erie Wine route which in turn contributes to a healthy, livable community through integrated planning. This cycling facility also provides connections to both the Great Trail (formerly the Trans Canada Trail) and the Lake Erie Waterfront Trail. These trail networks connect the County of Essex with our neighbouring municipalities and continue to connect communities across Canada. Annual cycling events such as the Essex Region Conservation Authorities Annual Bike Tour route cyclists down this facility to encourage safe and separated cycling during regional events.

## Economic Benefits

There is ample evidence that active transportation facilities provide significant economic benefits for adjacent landowners and local businesses. There is clear evidence of benefits associated with designing active transportation, cycling and pedestrian friendly communities and encouraging people to be more active by walking and biking. Promoting active transportation is a simple strategy that can encourage people to reduce their use of the personal automobile, and create sustainable, more livable, safe and active communities.

## Environmental Benefits

Active transportation activities are energy-efficient, non-polluting modes of travel. Reducing the number of motor vehicles on the road decreases the number of pollutants released into the atmosphere by motor vehicles. It is important to create bicycle connectivity given the important role that cycling plays in reducing emissions of air pollutants and greenhouse gases and fostering good health.

The effects of climate change can be reduced by encouraging drivers to use other modes, or to travel outside rush hours. A roadway can carry 7 to 12 times as many people per lane per hour by bicycle compared to that of motor vehicles in urban areas operating at similar speeds. Making communities less auto-dependent by providing infrastructure for alternative transportation modes, such as walking, cycling and public transit, can reduce the amount of land required to construct new communities, thus creating more compact subdivisions that make more efficient use of available land. Automobile dependent communities require more land for road rights-of-way and parking than communities that are not as reliant on the automobile.

## **Conclusion**

This sustainable urban transportation facility provides direct connections through built-up areas along a designated and recognizable route in two local municipalities while also providing connection to local area networks that have been developed. These connections are important as they allow local users to travel seamlessly from their local network onto network routes that they can follow across the County. This innovative project demonstrates social, economic and environmental benefits through the availability of safe infrastructure to accommodate all users which in turn increases safety of those travelling along this corridor.

This project implementation and success is transferable to other municipalities by showcasing the success of partnerships and collaboration. As we currently revisit our Master Plan and our Network to update the vision, current trends, standards and requirements it is the success of projects like the County Road 20 One-Way Cycle Track and its continued benefit to the community that keeps driving our work forward.

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