

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 9.1.2
Halifax Regional Council
June 23, 2020

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by

Jacques Dubé, Chief Administrative Officer

DATE: February 6, 2020

SUBJECT: Addition of Candidate Routes to Active Transportation Priorities Plan:

Community of East Preston, Crichton Avenue, Glen Manor Drive and

Micmac Boulevard

ORIGIN

Item 10.3.1 of the June 20, 2019, meeting of Transportation Standing Committee.

Motion passed that that the Transportation Standing Committee request a staff report to consider the Active Transportation Plan for East Preston as part of the Halifax Active Transportation Priorities Plan.

Item15.2 of the September 26, 2019, meeting the Transportation Standing Committee.

Motion passed that the Transportation Standing Committee request a staff report on adding Crichton Avenue in Dartmouth to the candidate bike routes identified in the Active Transportation Priorities Plan.

LEGISLATIVE AUTHORITY

Section 229(1) of the Halifax Regional Municipality Charter provides that:

A municipal planning strategy may include statements of policy with respect to any, or all, of the following: (b) the physical, economic and social environment of the Municipality;

- ... (i) the provision of municipal services and facilities;
- ... (q) any other matter relating to the physical, social or economic environment of the Municipality.

RECOMMENDATION

It is recommended that Halifax Regional Council:

- suspend the rules of procedure under Schedule 7 of the Transportation Standing Committee Terms
 of Reference under Administrative Order One, the Procedures of the Council Administrative Order,
 and
- 2. amend the Active Transportation Priorities Plan by designating components of the Community of East Preston Active Transportation Plan, Crichton Avenue, Glen Manor Drive and Micmac Boulevard as "candidate routes" in the Active Transportation Priorities Plan as described in this report.

BACKGROUND

Making Connections: The 2014-19 Halifax Active Transportation Priorities Plan (AT Plan) was approved by Regional Council in September 2014. The Integrated Mobility Plan extended the duration of this plan to 2023. The AT Plan describes the approach that the Municipality is using to build and connect walking and bicycling facilities. Maps 2A, B, and C of the Plan identify specific streets as candidate corridors for bike facilities (e.g. bike lane, local street bikeway, or bikeway desired-type to be determined) or multi-use pathways (referred to in the Plan as "Active Transportation Greenways"). These corridors are the candidates for implementation over the life of the Plan.

Since the AT Plan was approved in 2014, new potential candidate routes are being identified periodically. As a result, the corridors identified below in the "Discussion" section are recommended for addition to the AT Plan as candidate routes. This will enable them to be considered for AT infrastructure enhancements.

The addition of these corridors does not constitute approval to immediately implement such facilities. Rather, the designations mean that the provision of pedestrian and bicycling facilities should be considered if action is taken to implement a capital project (e.g. road rehabilitation, new development, specific Council direction, other) or new land use development in the area.

Key considerations on whether a project, specified as a candidate route in the Plan, can be implemented include: availability of budget for capital construction, internal capacity to plan and design, feasibility of the design and construction, and resources for ongoing operations and maintenance. Most of these candidate routes would have to go through a functional planning process to determine alignment, facility-type and an assessment of the overall feasibility of construction. This planning would also establish cost estimates.

The proposed corridor in East Preston is outside the municipal service boundary. Provision of active transportation infrastructure in rural communities is different than areas within the municipal service boundary. These differences include ownership of the right-of-way, lower population base, higher distances between origins and destinations, and different financing options (e.g. sidewalks outside the municipal service boundary are typically funded through local improvement charges). HRM is currently studying how best to provide active transportation infrastructure in rural communities in response to the Integrated Mobility Plan Action 82:

Establish a rural pedestrian program, including: a financing mechanism which recognizes that rural pedestrian safety is affected by regional traffic; criteria to prioritize development of pedestrian infrastructure in village centres, hamlets or other rural areas of concentrated pedestrian activity; opportunities for cost sharing with other orders of government.

Furthermore, at their December 12, 2019 meeting, the Transportation Standing Committee requested a staff report to consider a program to improve pedestrian safety in rural areas. The motion requested consideration of facility types and funding options, as well as a focus on rural areas that have been

historically underserviced and with higher pedestrian concentrations. HRM is currently gathering information and consulting with stakeholders to respond to this IMP action and to the motion. The report is expected to be submitted to the Transportation Standing Committee in late 2020 or early 2021.

In May 2019 the East Preston Rural Access to Physical Activity (RAPA) Action Team published the *Community of East Preston, Active Transportation Plan* (Attachment A). The Plan was developed using a community led process with assistance from external agencies, including HRM. Uplands Planning, a professional planning consultancy compiled the plan. The recommendations are based on significant research, analysis, stakeholder consultation, community engagement, and preliminary design.

All the road corridors in the *Community of East Preston, Active Transportation Plan* are provincially-owned. As such, provincial permission would be required, and construction and operation of AT infrastructure would be the responsibility of the municipality.

DISCUSSION

The corridors/projects described below are the recommended additions to the Active Transportation Priorities Plan as "candidate routes". This will enable them to be considered for walking and bicycling enhancements such as bike lanes, local street bikeways, multi-use pathways, or paved shoulder.

These routes are also supportive of the objectives of the Integrated Mobility Plan. Specifically, there is an objective of the AT section of the IMP to "Encourage walking and bicycling by building complete and connected networks that respond to the needs of urban, suburban and rural communities, for all ages and abilities."

The corridors below are proposed to be added as one of the following categories as defined in the AT Priorities Plan:

- a) "Bikeway desired, facility-type to be determined". This category of AT candidate route means that further planning is required to determine whether the facility would be a painted bike lane, paved shoulder, protected bike lane or multi-use pathway; or,
- b) "Regional AT Greenway Network Vision". This category represents the envisioned municipal network of primarily off-road, multi-use pathway facilities for shared walking and bicycling. Candidate routes may refer to specific streets or publicly-owned corridors (e.g. former rail corridors), or, they may refer to a desired general alignment with further planning required to identify the specific corridor; or,

Whether or not a proposed route should be added as candidate route is assessed on factors such as:

- Proximity to origins and destinations such as residential areas, employment destinations, parks, shopping, education, services, designated growth areas;
- Relation to other existing or proposed routes to ensure connectivity and need; and,
- Existing Council direction.

Whether or not a candidate active transportation route would be selected for further functional planning, detailed design and construction, would depend on the feasibility and a prioritization process comparing all candidate routes.

Factors such as cost, constructability (e.g. property needs or physical features) and integration opportunities would guide a decision on whether a candidate AT route is prioritized for further planning and implementation.

Community of East Preston, Active Transportation Plan

This Plan contains a range of recommendations to enhance mobility, foster physical activity and develop community attractions. The Plan captures some of the key AT challenges in a rural context and suggests an integrated set of solutions in 15 recommendations.

The recommendation from the *Community of East Preston, Active Transportation Plan* that is proposed for addition to the Halifax Active Transportation Priorities Plan as a candidate route are the sections on Trunk 7 from the East Preston Family Resource Centre at 1900 Highway 7 to the Mineville Road as part of the *Regional AT Greenway Network Vision*. This would include a short, 100m segment on Brooks Drive to connect to the Community Centre.

This corridor includes the two priority segments identified in the East Preston AT Plan. It is understood the first priority is between the East Preston Daycare Centre and East Preston Community Centre. While the *Community of East Preston, Active Transportation Plan* proposes sidewalks for this segment, HRM would likely consider a multi-use pathway facility as well.

This report also proposes adding a connection to the existing HRM active transportation network via an "envisioned greenway" from the East Preston Family Resource Centre to the intersection of Main Street and Ross Road. This connection is not part of the "Community of East Preston AT Plan". It is proposed to be added as a candidate envisioned greenway to the Active Transportation Priorities Plan to embed a connection to the rest of the municipal network as a longer-term objective. It is expected that the priority would be the *Community of East Preston AT Plan* goal of improved connectivity and safety within East Preston.

The other corridors identified in the *Community of East Preston, Active Transportation Plan* are quieter 50km/h speed limit streets that connect community destinations such as the Bell Park Academic Centre and the East Preston United Church. These should not be added to the HRM AT Priorities Plan as this point in time until IMP Action 82 has been completed.

Other recommendations in the East Preston AT Plan (e.g. crosswalks, bike parking, speed reduction pocket parks, accessible transit stops) require further discussion with the Province and HRM.

Crichton Avenue and Connections to other AT and Transportation Facilities

Crichton Avenue is an almost 2km municipal street that extends from Ochterloney Street to a dead end at about civic 259 Crichton Avenue. The street is classified as minor collector. The street has varying widths but is generally a two-way street with a 50km/h speed limit. There is a sidewalk on the street. Origins and destinations in the area include the Canal Greenway AT facility at Sullivan's Pond and a future local street bikeway on Dahlia Street, a school, paddling clubs and parks. As such, much of the corridor has value as an AT route and therefore is recommended to be designated as a candidate Bikeway desired, facility-type to be determined. As noted above, further planning would be undertaken to understand which, if any options would be feasible to adding safer facilities for people to bicycle.

Glen Manor Drive and Micmac Boulevard are also proposed for addition to the AT Plan as candidate routes. This is to facilitate connectivity to and from Crichton Avenue and to improve connectivity to Halifax Transit, Mic Mac Mall and other destinations. The addition of Glen Manor Drive and Micmac Boulevard as candidate bikeway routes would improve connectivity to Shubie Park, HRM sport fields, multi-unit residences on Horizon Court, and to a future improved crossing of Woodland Avenue at Micmac and Lancaster. Both Glen Manor Drive and Micmac Boulevard are classified as major collectors.

See map in Attachment C with the Crichton Avenue, Glen Manor Drive and Micmac Boulevard proposed additions to the Active Transportation Priorities Plan as candidate routes to add bicycle facilities.

FINANCIAL IMPLICATIONS

There are no immediate direct financial implications associated with adding these corridors as candidate routes to the Active Transportation Priorities Plan. Future expenditures will be brought forward for consideration in the appropriate capital and/or operating budgets.

RISK CONSIDERATION

There are no risks associated with the recommendation in this report.

COMMUNITY ENGAGEMENT

There was broad community and stakeholder engagement for the *Community of East Preston, Active Transportation Plan.* It is detailed in the attached plan.

Implementation of these routes would be preceded by planning processes that would include public engagement.

ENVIRONMENTAL IMPLICATIONS

There are no direct environmental implications. The potential future development of these corridors will make it safer and more convenient for residents to travel via sustainable modes.

ALTERNATIVES

Halifax Regional Council may choose not to add some or any of these routes as candidate active transportation routes.

ATTACHMENTS

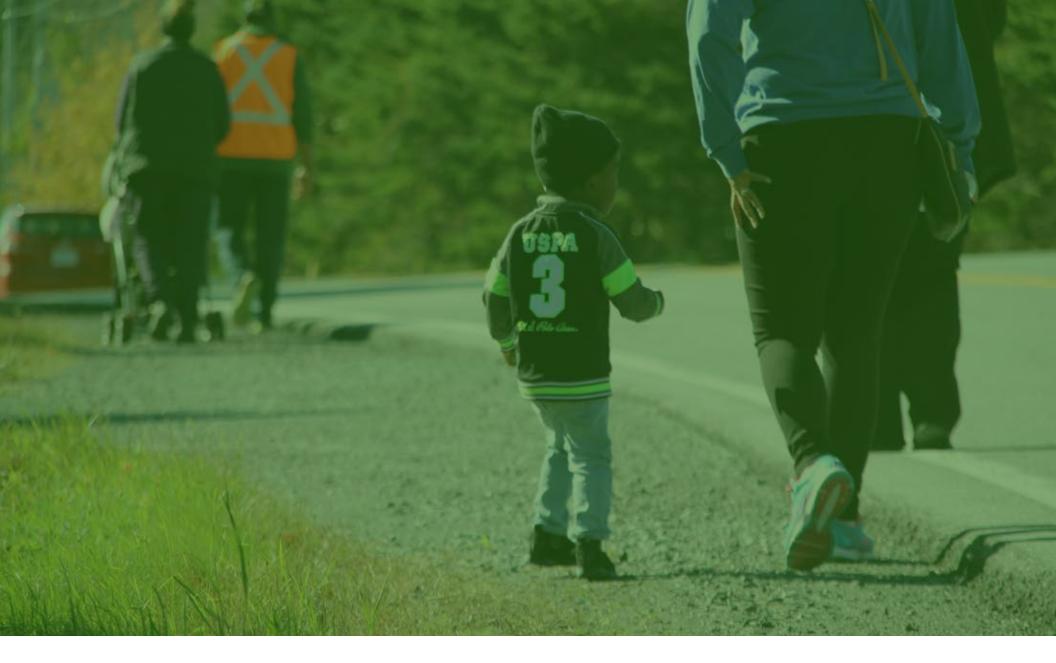
Attachment A: Community of East Preston, Active Transportation Plan Attachment B: Map of candidate Trunk 7 "envisioned Greenway" segment

Attachment C: Map of candidate Crichton Avenue. Glen Manor Drive and Micmac Boulevard "Bikeway

desired, facility-type to be determined".

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

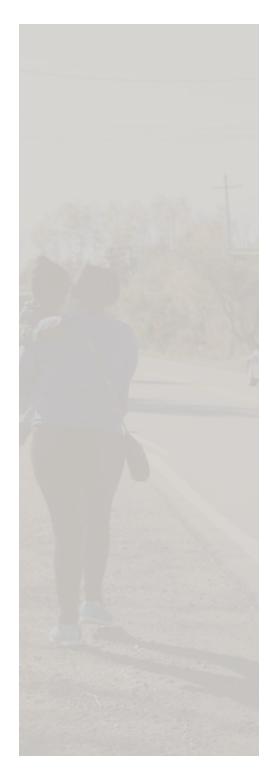
Report Prepared by: David MacIsaac, Active Transportation Supervisor, 902.490.1665



Community of East Preston

Active Transportation Plan

Prepared for the East Preston Rural Access to Physical Activity Action Team



Acknowledgments

UPLAND would like to thank the East Preston residents who contributed to this Plan by providing invaluable feedback, attending meetings, and embedding themselves into the vision of a walkable and bikable East Preston. We would particularly like to thank the East Preston Rural Access to Physical Activity (RAPA) Action Team and the Community Advisory Committee for their dedication, passion and enthusiasm.

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1 Introduction



1.1 What is Active Transportation?

Active transportation (AT) is a broad term, that refers to all forms of human powered or non-motorized transportation. It typically refers to walking and cycling, but also rollerblading, skate-boarding, wheelchair use, etc. There are also many seasonal activities such as canoeing, kayaking and cross-country skiing that can be defined as active transportation.

Active transportation is commonly broken down into two different categories:

- Utilitarian active transportation includes active destination oriented trips (e.g.: commuting to work or school) and active workplace travel (e.g.: delivering materials or attending meetings).
- Recreational active transportation includes leisure, recreational pursuits, and fitness (e.g.: dog walking, hiking, paddling, etc.) and often takes place in off-road locations. In some cases, both utilitarian and recreational active transportation can occur at the same time.

1.2 Why Active Transportation in East Preston?



East Preston is a place in which it is very difficult to safely walk and bike and a community with limited access to transit options. Not unlike many smaller, rural communities, East Preston has not been given priority within the broader municipal and transit plans. East Preston residents are unable to safely walk or use transit because of high vehicular speeds, unpaved and disintegrating shoulders and inadequate transit stop infrastructure.

In the spring of 2017, an action team was formed and identified the opportunity to develop an active transportation plan for East Preston. The action team brought together several community, government and non government organizations including the East Preston Rate Payers Association, Nova Scotia Department of Communities, Culture and Heritage, Public Health, Halifax Regional Municipality, Ecology Action Centre and United Way Halifax. In the fall of 2017, this action team

held a Walkability Audit event in East Preston with over 30 members of the community participating. Many specific features and challenges of the community related to walking and wheeling were identified. Community members also expressed interest in being able to utilize bus travel services to Dartmouth and Halifax.

The results of the audit indicated an extremely low walkability score which further emphasized the need for a plan. Building on the work of this audit and community consultations, the Action Team successfully secured funding to develop an active transportation plan with an additional component addressing access to public transit.

In the fall of 2018, the action team engaged UPLAND Planning + Design and LaMeia Reddick Consulting to lead the conceptual design of critical active transportation improvements.

Although this community project is not specifically identified in the Halifax Regional Municipality's Active Transportation Plan, the staff responsible for implementing that plan have expressed that this is a worthy project which applies an equity lens to prioritizing capital investments and could assist in developing an approach to providing AT infrastructure in other rural areas.



1.3 Impacts and Benefits

"Looking at active transportation through an equity lens can mitigate the geographic inequity faced by East Preston residents." Municipalities across Canada and North America are realizing the multifaceted benefits of promoting active transportation and are undertaking such initiatives. The following paragraphs outline some of the high-level benefits that can be realized by implementing active transportation initiatives at a regional level.

Health Benefits

Encouraging greater participation in active transportation is one of the best ways to increase physical activity, which often results in increased overall health and wellbeing by decreasing obesity rates and improving mental health. Research suggests that increasing physical activity rates is one of the most effective ways to create a culture of healthy living (Department of Health and Wellness, 2012). The economic benefit of reducing physical inactivity is estimated at \$0.52 per kilometer for cycling

and \$1.07 per kilometre for walking (Institute of Sensible Transport, 2011).

Driving remains a relatively dangerous mode of transportation. While at the end of 2018, the number of highway fatalities in Nova Scotia was up more than 50 per cent over 2017, the number of pedestrians killed had almost doubled. As of Boxing Day 2018, 76 people had died on Nova Scotia roads during that year, up from 48 in 2017. Of those deaths, 12 had been pedestrians. That was as many killed pedestrians as the previous two years combined, and the most since 13 people on foot were killed in 2006.1

Active transportation can also facilitate more socially cohesive communities as

1 https://www.thechronicleherald. ca/news/local/nova-scotia-pedestrian-fatality-rates-up-in-2018-271792/ residents have more opportunities to interact with one another when they are outside of their cars. Greater physical activity rates have been proven to reduce mental issues such as stress, anxiety and depression while contributing to an improved quality of life and overall happiness.

Better Mobility Options

Active Transportation provides an efficient, affordable and flexible travel option, particularly for those who would prefer to not drive and for residents without access to a vehicle. Furthermore, an aging population will result in a larger proportion of the population that can no longer operate a vehicle.

Spatial Equity & Benefits

Safe Routes to School (2015) defines equity as "address(ing) the effects of power imbalances and the social,



economic, and political differences that generate disparate outcomes for people in areas like health, education, and employment". Their report looks at the ways in which low-income households and people of colour face barriers to transportation making access to basic needs difficult, dangerous or impossible. Equitable access to convenient active transportation can make these trips easier and less costly rather than perpetuating the cycle of poverty. Looking at active transportation through an equity lens can mitigate the geographic inequity faced by East Preston residents.

Vulnerable populations that are more likely to be victims of spatial inequity and discrimination often experience more barriers to active transportation. Although trends have been changing, 2011 research by Sightline Institute

indicates that about 80% of American cyclists identify as white. Strategic investments in active transportation infrastructure and promotion can be used to overcome socioeconomic barriers to active transportation.

Less Pollution

Active transportation use and its associated infrastructure have a low environmental impact, particularly when compared to driving a vehicle. Automobile use contributes to air pollution through emission of harmful greenhouse gases such as nitrous oxide, carbon dioxide and low level ozone.

The impacts of vehicle infrastructure also have negative environmental implications. Road and parking maintenance such as resurfacing and winter snow removal have negative environmental impacts on soil contamination and water quality. Impermeable road

surfaces increase the degree of runoff during heavy precipitation and cause oil and salt to contaminate neighbouring ecosystems. On the other hand, active transportation infrastructure such as trails, bike lanes, and bike racks have substantially less negative environmental impacts. Trails and bike paths have narrower right-of-ways and are often permeable with less detrimental affects on adjacent ecosystems.

Economic Benefits

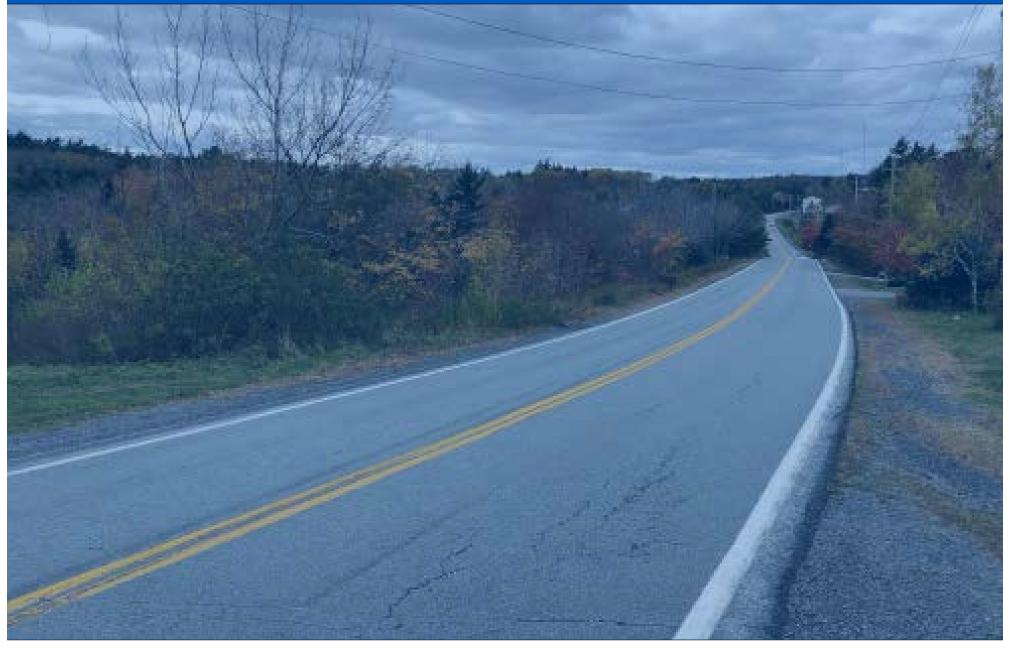
According to a recent national poll owning and operating a car is the second largest expense for Canadian families (CAA, 2013). The average annual costs for a small compact car is \$9,500 or \$0.528 per kilometer. In comparison, the costs of walking and cycling are negligible.

An additional economic benefit is the reduced costs associated with a reduction in car use as outlined in a number of recent studies:

- reduced the costs associated with road construction, repair and maintenance in certain areas;
- reduced healthcare costs;
- reduced fuel, repair and maintenance costs for the user; and
- increased property values along quieter streets and trail networks

Reducing or centralizing parking also has significant economic benefit. Parking has significant costs associated with it including land, construction, maintenance and operational costs. Parking costs are significantly lower for bicycles and non existent for most other forms of active transportation.

2 Background / Analysis



2.1 About East Preston

Originally part of the Township of Preston, East Preston is now located within the Halifax Regional Municipality, just Fast of Dartmouth.

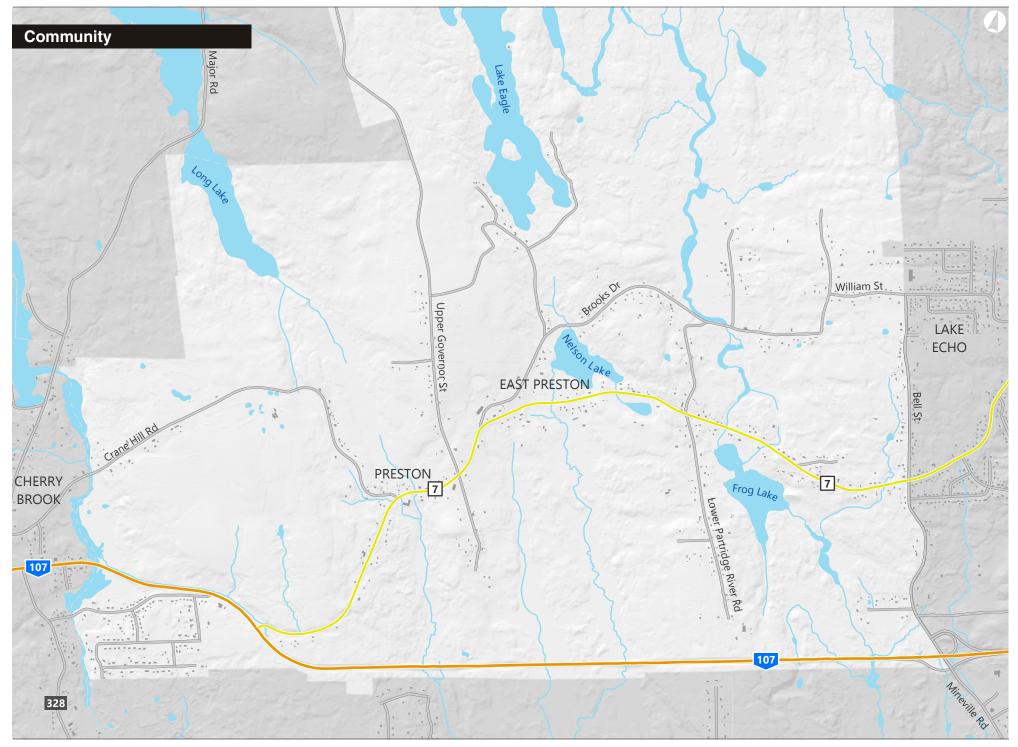
In the 18th century, Black Loyalists who fought for the British in the American War of Independence were promised freedom and land in Nova Scotia, many settling in East Preston and began to build up the community. Later into the century, Maroons were sent to Halifax

from Jamaica after fighting the Spanish and British. Into the 19th century, Black refugees from Maryland and Virginia arrived following a fight for the British in the war of 1812. Black settlers eventually formed what is now known as East Preston and surrounding areas of North Preston, Cherry Brook and Lake Loon.

Bordered by the Highway 107 on the South and transected by the Nova Scotia Trunk 7, the community is developed along a few roads meandering out from the Trunk. Much of the area is undeveloped forest, and several lakes and rivers dot the landscape. Key community assets include the East Preston Day Care Centre, the East Preston Business Centre, the East Preston Recreation Centre and the United Baptist Church.







Population

Commuter Mode Share

Commuting Times

2011 population 1,387

78% drive

2016 population

1,168

7.4% carpool

growth rate -16%



12.6% bus

"Although 13.5% of East Preston residents live less than 15 minutes from their workplace, 0% walk or bike

The dissemination areas making up East Preston indicate a 2016 population of 1,168, down 219 since five years prior, a decline of -16% (Statistics Canada, 2016).

0% walk



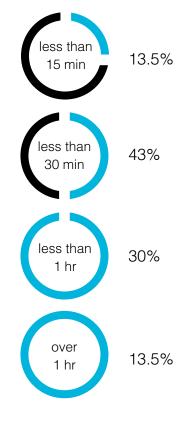
0% bike

All working residents in East Preston commute within Halifax Regional Municipality, with the majority travelling between 15 minutes and an hour. About 78% of these commuters drive themselves, while 7.8% carpool and 12.6% use public transit.

Although 13.5% of residents live less than 15 minutes from their workplace, and 43% live less than 30 minutes away (optimal locations for active transportation), no one commuting out of East Preston walks or bikes, indicating a major gap in the network.

While both the municipality and the community of East Preston have prioritized active transportation in recent strategic plans, the active transportation networks in this area are fractured Preston a car-dependent neighborhood where almost all errands require a car. 1

and unsafe, with a Walk Score of only 4 out of 100. Walk Score describes East



to work."

Walk Score is a private company that provides walkability services and apartment search tools through a website and mobile applications. Its flagship product is a large-scale, public access walkability index that assigns a numerical walkability score to any address in the United States, Canada, and Australia

2.3 Health and Wellness

The Heart and Stroke Foundation (2018) identifies some of the benefits of physical activity as lowering the risk of heart disease and stroke, preventing and controlling high blood pressure, cholesterol, type 2 diabetes, some cancers, stress and depression. Exercise can also improve sleep, energy and digestion. Research by Lee et al. (2010) and similar studies indicates that regular physical activity is an excellent indicator of health regardless of body mass.

Human powered transportation such as walking and cycling incorporates regular activity into peoples' daily routines, and has been shown to make improvements in physical and mental health (Dalhousie, 2018). With no residents regularly walking or biking as a part of their commute, East Preston does not currently have the infrastructure to support active transportation and take advantage of these health benefits.

In the Preston area made up of census tract 2050150.01, 40% of households had at least one resident experiencing health limitations to their daily activities (CMHC, 2011). These health issues and disabilities can include difficulties hearing or seeing, communication or walking. This proportion is up from 2006, when only 36% had an activity limitation.

The ENRICH Project (Waldron, 2016) identifies the impacts environmental racism has had on the health outcomes of African Nova Scotian communities including East Preston. Residents consulted for this research identify social determinants of health including access to health care, services, jobs, health and affordable food, and quality affordable housing. Several of the determinants identified through this study relate to the need for equitable access to good transportation infrastructure, including exercise, reliable and low-cost transportation, barrier-free sidewalks, crosswalks and parks, as well as safety.

East Preston residents emphasize the physical and mental health impacts of racism related to material deprivation, the placement of waste facilities (such as that sited directly adjacent to East Preston), and the absence of community investment and infrastructure.

2006 **Activity Limitations**

Households with at least 1 member experiencing daily health limitations

Nova Scotia

Prestons

Canada

Halifax Regional

2011 **Activity Limitations**

Halifax Regional Prestons

experiencing daily health limitations

Nova Scotia

experiencing daily health limitation.

experiencing daily health limitations

Canada

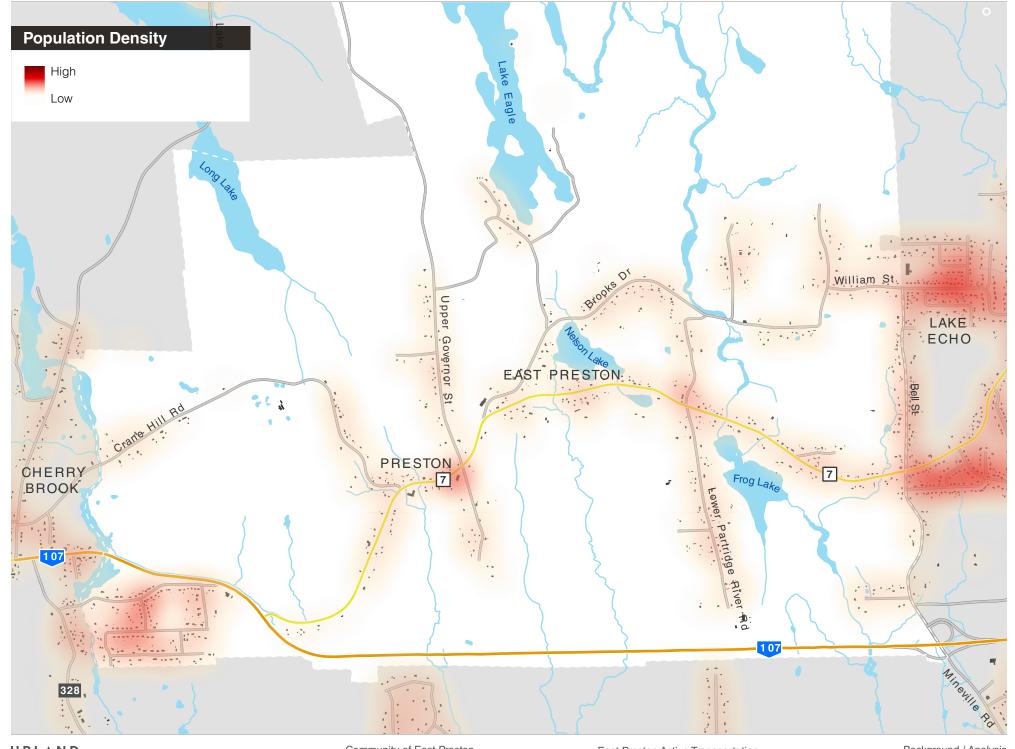
experiencing daily health limitations

2.4 Form & Development

Population density plays a major role in determining the suitability of future active transportation infrastructure. Higher rates of density tend to be more successful when planning active transportation investment, including infrastructure development.

Just inland from the shoreline, the arterial roads of the Prestons largely follow a north / south orientation along lakes and streams. Upper Govenor Street and Lower Partridge River Road form the residential centres.

This population density map (see next page) visualizes the clustering of housing units from Cherry Brook to Lake Echo. As can be seen in the map, the highest density is situated in the community of Lake Echo, while East Preston's density is quite low, sprawling out from the Trunk 7. Even though East Preston does not have an identifiable community centre in the traditional sense, the intersections where roads intersect with Trunk 7 are focal points with higher residential densities and with a small presence of services and retail.



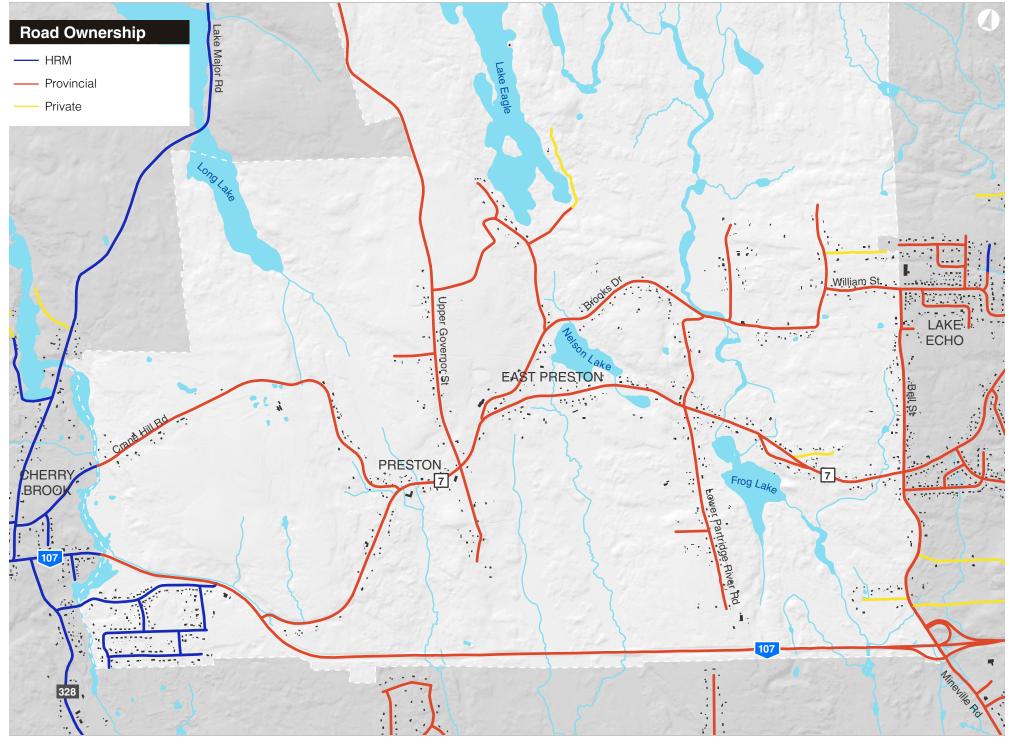
2.5 Road Network

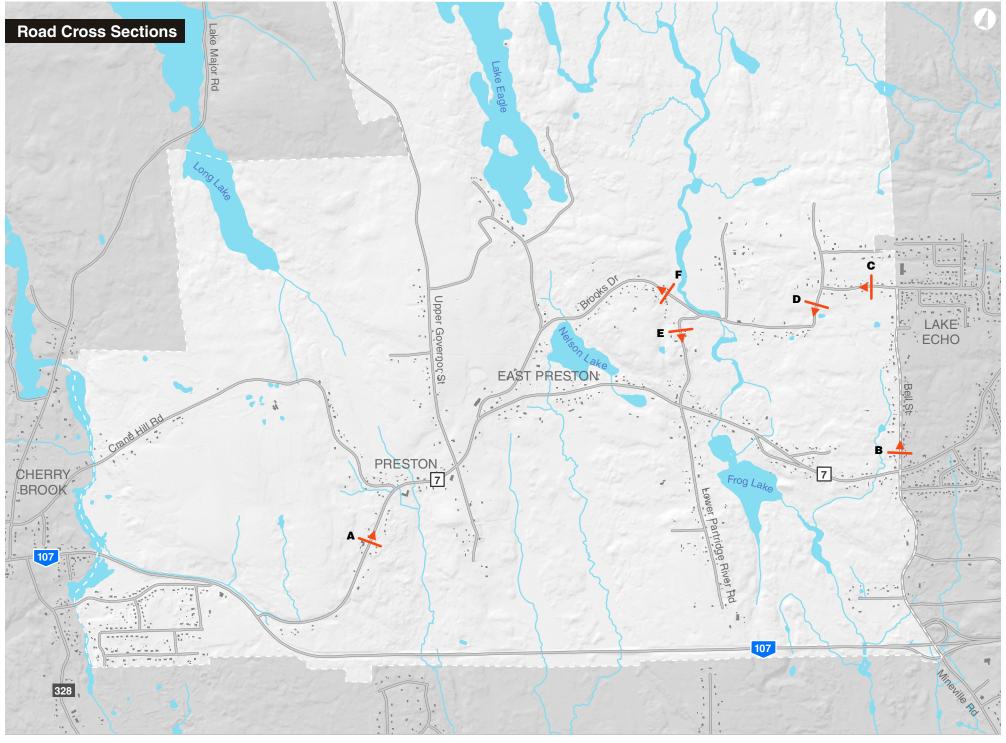
"East Preston's road network is almost exclusively owned and managed by the Province." With the exception of three private roads, and a pocket of municipal roads to the southwest, the East Preston road network is almost exclusively managed by the Province. Constructed and maintained by Transportation and Infrastructure Renewal, provincial roads include the Nova Scotia Trunk 7 and Highway 107.

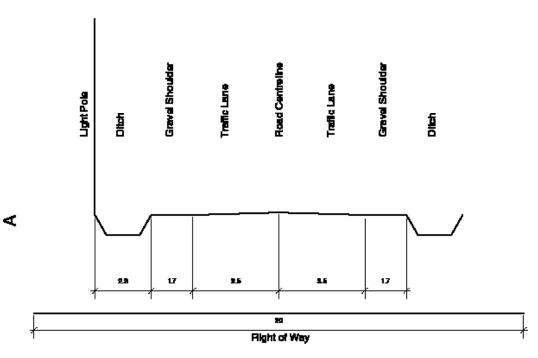
Trunk 7 runs down the centre of East Preston, starting in Bedford and extending to Antigonish, a total of 269 kilometres. This route connects to the 107 in some sections, but splits at Preston and dips North, serving as a two-lane east / west main street. The shoulders of this route are unpaved, and there are no sidewalks. Arterial roads intersecting Trunk 7 include Glasgow Road, Upper Govenor Street, Brooks Drive, Lower Partridge River Road, Bell Street and Mineville Road.

Constructed in 1978, **Highway 107** stretches 42 kilometres from Burnside Industrial Park to Musquodoboit Harbour, where it intersects with Trunk 7. This route shifts from a four-lane highway into two-lane controlled access as it separates from the Trunk 7 in Preston, and a third passing lane is introduced further East. A narrow gravel shoulder separates this highway from the roadside ditch, interupted by exits for Preston and Mineville / Lake Echo.

All roads within East Preston have 20 meter right-of-ways, gravel shoulders, ditches and power/light poles on one side of the road. For cross section measurements and photographs of the current conditions of East Preston's key roads please see the following pages.





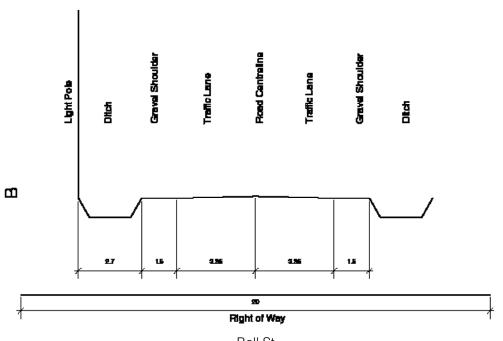




Highway 7

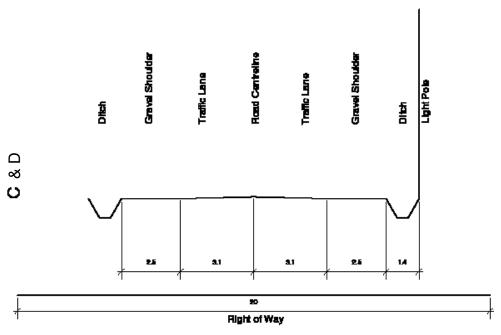






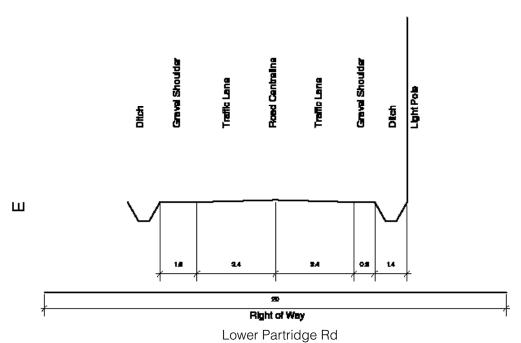


Bell St





Williams St and Upper Partridge Rd





Fight of Way

Brooks Dr



2.6 Public Transit

East Preston is served by two bus routes which pass through or by the community between Dartmouth and Eastern Shore communities. There is also a private shuttle service, MusGo Rider, which serves the Eastern Shore.

The arterial bus route providing service between Dartmouth and the Eastern Shore is the MetroX **Route 370**. This route does not stop in East Preston but passes by it, following the Highway 107. The 370 has limited stops and runs Monday-Friday as an express commuter service.

Route 401 passes through East Preston, via Route 7. It travels between Cole Harbour and Seaforth via Chezzecook, overlapping with the Route 370 in a short portion of Highway 107 west of Preston. Route 370 diverges from Route 7 in East Preston, where it takes Brooks Drive and rejoins Route 7 via Partridge River Rd. Bus 401 has more stops than the 370, but also runs only Monday to Friday.

The **MusGo Rider** is a van service that users pre-book to pick them up at their door and bring them to anywhere within its service area. It is a not-for-profit community cooperative, and rates are kept low to maintain accessibility.

Connecting to these main routes are both the 61 and 68. Changing over from the Route 14 at Scotia Square in Halifax, **Route 61** connects from here to Bridge Terminal in Dartmouth, and then to Portland Hills, Auburn School and Nelson Whynder School in North Preston, stopping just short of East Preston boundaries. This route runs every 30 minutes throughout the week, shifting to on the hour service for weekends and holidays.

Route 68 also runs up to just before East Preston, beginning at the QE II Hospital in Halifax, to the Dartmouth Bridge Terminal, Portland Hills, and up to Cherry Brook at Highway 7. The Halifax end of this route runs only during rush hours, but the remaining stops are serviced on the half hour throughout the week, and every hour weekends and holidays.



Effective November 27, 2017

370 Porters Lake

Regional



To Porters Lake via Bridge Terminal			To Downtown Halifax via Bridge <u>Termin</u> al					
	Albemarle	Bridge Terminal	Porters Lake Park & Ride	Porters Lake Park & Ride	Bridge Terminal 1	Albemarle		
l	9061	7609	Arrive	8394	7609	Arrive		
	Monda	y to Fr	iday	Monday to Friday				
	-	-	-	541a	610a	625a		
	-	-	-	556a	625a	640a		
	-	-	-	629a	700a	715a		
	-	-	-	658a	728a	745a		
	-	-	-	725a	758a	815a		
	-	-	-	757a	828a	845a		
	148p	200p	230p	243p	310p	325p		
	318p	330p	400p	413p	437p	455p		
	345p	400p	430p	-	-	-		
	415p	430p	503p	-	-	-		
	445p	502p	535p	-	-	-		
	515p	532p	602p	-	-	-		
	545p	600p	627p	-	-	-		
	620n	635n	702n					

No service Saturday, Sunday and Holidays.

¹ A.M. and P.M. peak departure times are estimates. This route may depart ahead of the published scheduled time.

HALIFAX TRANSIT

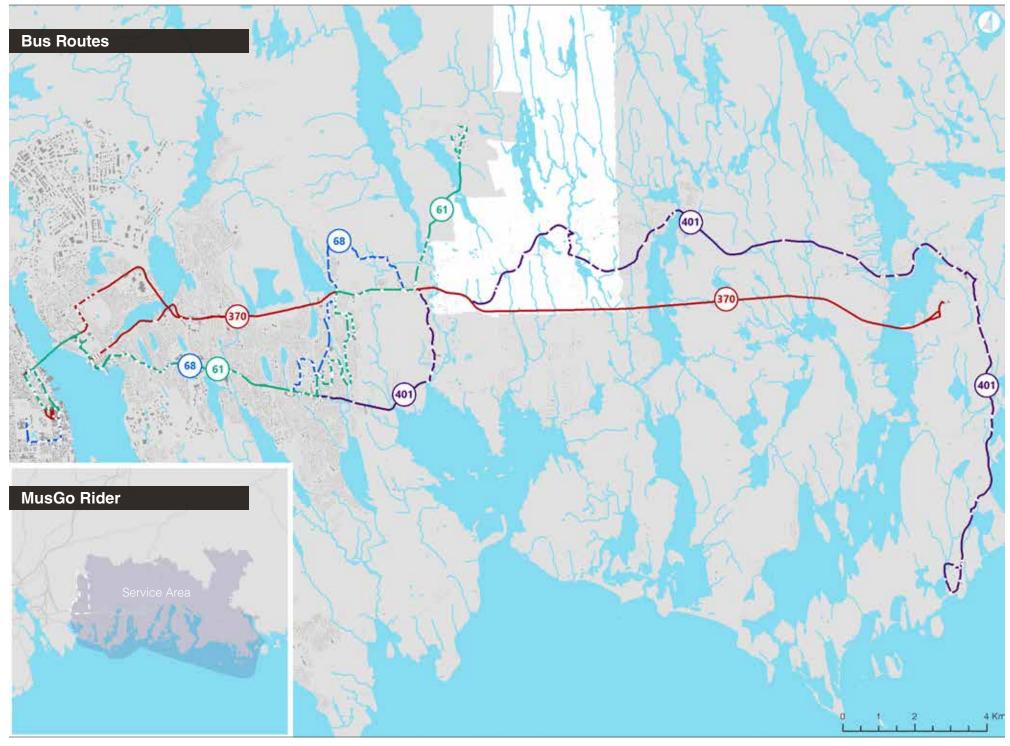
Preston-Porters Lake-Conventional **Grand Desert** To Portland Hills Terminal Lakeview Shopping Centre Cole Harbour & Lawrencetown Seaforth Back F & Hwy 207 8897 8899 8909 | Monday to Friday | 533a | 535a | 545a | 722a | 725a | 734a | 605a 754a 614a 803a 814a 914a 917a 926a 946a 955a 1006a 1105a 1108a 1117a 1137a 1146a 1157a 446p 449p 501p 521p 531p 542p 651p 654p 706p 726p 736p 747p 853p 856p 908p 928p 938p 949p

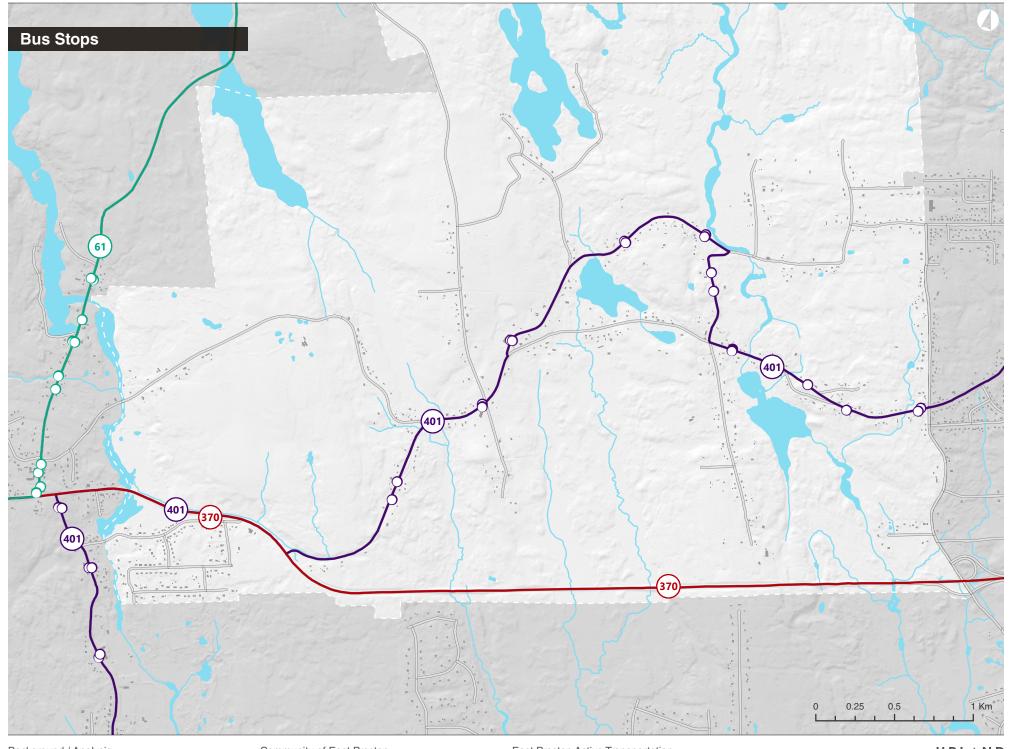
Effective August 21, 2017

40)1		on—P d Dese		Lake-	Conventional
To Gra	nd Des	ert				
Portland Hills Terminal	Cole Harbour & Lawrencetown	Hwy 7 & Lower Partridge River	Lakeview Shopping Centre	Grand Desert	Seaforth Back Road & Hwy 207	
8954	8760	8773	8909	8798	Arrive	
Monda	y to Fr	iday				
630a 822a	637a	646a	707a	530a 717a	532a 719a 911a	
1013a	829a 1020a	838a 1029a	859a 1050a	909a 1100a	1102a	
350p 555p	357p 602p	409p 614p	431p 636p	441p 646p	443p 648p	
757p	804p	816p	838p	848p	850p	

No service Saturday, Sunday and Holidays.

No service Saturday, Sunday and Holidays.





2.7 Trails

The Preston Area Trails Association was formed in 2003, with the goal of creating trails "to create wellness, tourism, access significant landmarks and link the surrounding communities". A number of other organizations in the Preston area have been interested in trail development over the years, including the Preston Area Board of Trade, the Mary Preston Historical Society, the East Preston Ratepayers Association and the East Preston Recreation Centre.

In 2007, the Preston Area Trails Association commissioned a Preston Area Trail Plan¹ that recommended the following trails traversing East Preston.



Cherry Brook Community Centre Trail

This section of wilderness trail would begin at the site of the Cherry Brook Community Centre (at Cherry Brook Road and Lake Look Road), and connect through a piece of Crown land into the Halifax Regional Water Utility (HRWC) lands where it would follow a utility road for approximately 500m and then turn south along the shore of Lake Major to join the north end of Old German Road. Trail users could make this section part of a complete loop by returning along Cherry Brook extension and Cherry Brook road to the Community Centre.

This trail could also ultimately be extended, crossing the narrow point of Lake Major via a footbridge and continuing through HRWC lands to the community of North Preston.



Cherry Brook Road Extension

This is a section of abandoned road between Cherry Brook Road and Lake Major Road, just below Old German Road, currently used by OHVs. If developed into an AT-suitable trail, users could make this section part of a loop by combining it with the Cherry Brook Community Centre Trail.

Developing this trail section would also be a step toward connecting Cherry Brook to North Preston via Lake Major Road, and potentially to East Person via Crane Hill Road or a new wilderness trail link.



Water Line Extension Trail

Developing an AT route along Lake Major road between the Cherry Brook Road Extension trail and North Preston would complete the connection between these two communities. HRWC has indicated that they will eventually extend the water line from the south end of Lake Major Road to North Preston, and that they would be willing to consider the possibility of a trail being developed on top of the new pipeline right of way.



Long Lake Look-off Trail

This trail would begin about half way between East and North Preston on Upper Governor Street, opposite the south of the Whynder Lake Trail. It would lead up to the highest point of land overlooking Long Lake.

A possible extension from this lookout trail could be to wind down the steep slope on the west side of the hill to the Lake Major Road bridge across the Long Lake narrows.

¹ Griffiths Muecke & Gordon Ratcliffe Landscape Architects, Preston Area Trail Plan (2008)



Upper Governor AT Improvements

This link would make use of the additional space in the right of way to create a multi-use trail connection alongside Upper Governor road to link East Preston and North Preston. People already use this road for fitness walking.

This would improve the experience for existing route users and would also create a safe route for pedestrians and cyclists from both communities who want to access other sections of the proposed trail system (Eagle Lake, Whynder Lake and Long Lake Look-off trails).



Eagle Lake Trails

This proposed trail which would extend northwest from the end of Lakemist Court off Westwood, joining the Whynder Lake Trail just south of Whynder lake. This link would provide a scenic, off-road multi-use connection between East and North Preston, opportunities for a variety of trail experiences, and access to the shoreline of Eagle Lake; considering these benefits, this trail was identified as priority in the 2008 Preston Area Trail Plan.

It has also been proposed to establish a trailhead with parking and a connector trail on Upper Governor Street that would give access to this trail, the Whynder Lake Trail and the Long Lake Look-off Trail.



Cranehill Road Connector

This connector would be created by making improvements to the segment of old road that beginns at the junction of Cranehill Road and Glasgow Road (at the ROCA Music & Art House), crosses Upper Governor Street, and ends at Brooks Drive south of Lake Eagle Drive.

This section would eventually form part of an AT link between East Preston and Cherry Brook, and would provide access from East Preston to the proposed trails in the watershed lands.



East Preston AT Improvements (Community Walking/Cycling Loop)

Installing sidewalk and/or making road shoulder improvements along Highway 7 and Brooks Drive would significantly improve the safety and enjoyability of these already well-used AT routes. Making these improvements would provide easier access to community

destinations (East Preston Community Centre, East Preston United Baptist Church, and the seniors centre), and would also provide an enjoyable fitness walking loop circling Nelson Lake.

The additional improvement of creating a sitting/picnic area on Brooks Drive overlooking and Partridge River would add interest to this route and also provide an opportunity for rest.



Little Partridge River Lane Link

This old road connects the lower portions of Lower Governor Road and Lower Partridge River Road. Developing this road into a usable trail would create a large loop that would be well suited to cyclists and other AT users seeking a longer recreational route.

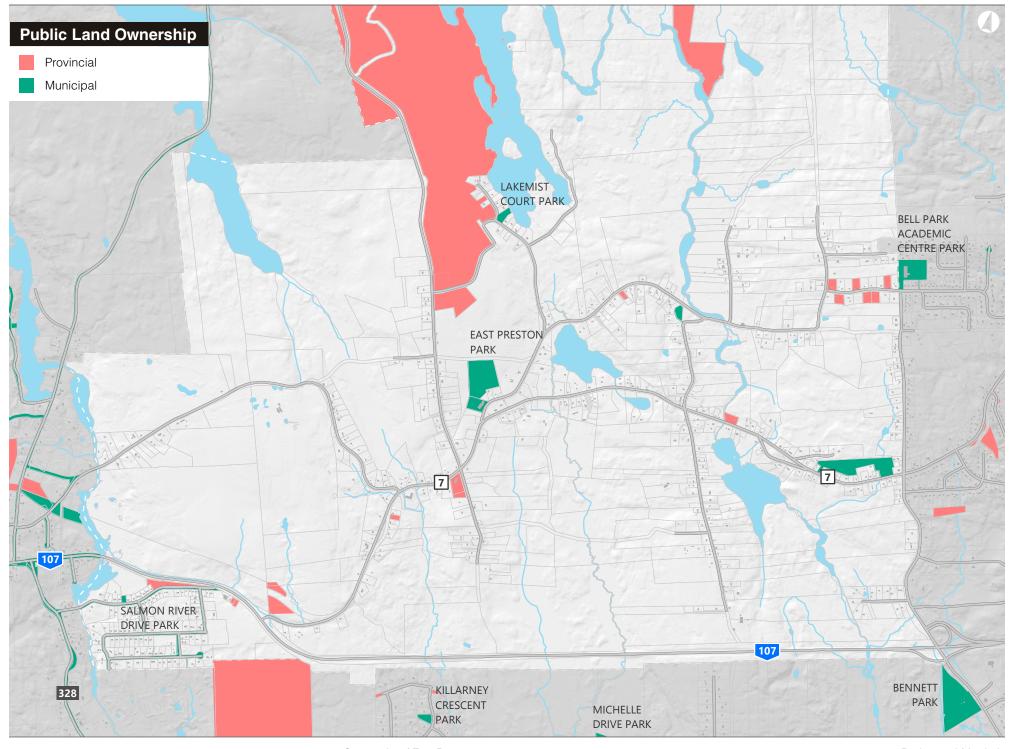


2.8 Public Lands

Public lands can be both active transportation destinations or provide opportunites for implementing public infrastructure such as trails. There are several municipal parks in the area, with Salmon River Drive Park basketball court to the South of Highway 107, Lakemist Court Park overlooking Lake Eagle, East Preston Park and **Recreation Centre** in the centre of the community off of Trunk 7, and Bell Park Academic Centre Park, surrounding the elementary school in Lake Echo. A few other parks South of the 107 icluding Killarney Crescent Park, Michelle Drive Park and Bennett Park are less accessible to East Preston residents.

Two other municipal properties within East Preston are vacant lots within residential areas.

Major provincial lands include a large swath of forested land zoned as mixed resource adjacent to Lake Eagle and one on Trimbel Lake, as well as vacant land zoned for business industry South of the 107.



2.9 Risks

"East Preston is a disaster for walking."



WALK N' WHEEL EAST PRESTON

Are you interested in building a culture of walking and/or biking in our community? Do you want to help assess the barriers & challenges we have to be active and move around the community?

Let's take a walk together. Join us for our **Walkability Audit**, a 30 min walk around East Preston, followed by a debrief about the safety of our streets and roadsides, and what needs to be done to increase the physical activity opportunities for our community.

Date: Saturday, October 28, 2017

Time: 1:00 - 3:00

Place: East Preston Recreation Centre

24 Brooks Drive, East Preston

Event is free but **registration by Oct 25** is required for planning purposes. Water, healthy snacks and prizes will be provided All abilities (wheelchairs, strollers, etc.) are welcome!

To register for this event, please contact Tammy or Claudette at East Preston Family Resource Centre - Tel. 902-462-7266

For more information about this Walkability Audit, please contact Catherine at United Way - Tel. 902-461-3043 or cdroesbeck@unitedwayhalifax.ca

Partnerships for equitable healthy living



Try Do is a partnership of community and government organizations and academic institutions working together to enhance the health & well-being of Halifax residents

Walkability Audit (2017)

A walkability audit (East Preston Walk'n'Roll) was conducted in 2017 in which four common routes were examined in terms of their safety, accessibility, and enjoyability.



Walkers on this section felt vulnerable to the traffic due to high speed limit (70km/hr), poor visibility due to shrubbery, lack of sidewalks and an eroding shoulder. A need for benches along this route was identified, particularly at bus stops. Participants also wanted more crosswalks.

Recreation Centre to MLA's Office (Rte. 7 and Lower Partridge River Rd)

This route was considered the worst section overall for walking in East Preston. Walkers did not find this route scenic and found that the cars were travelling fast through this area, withought slowing at points where visibility was poor. This made crossing the road during this section dangerous. Suggested improvements included creating bus stops set back from the road, and clearing, widening and improving the surface quality of the shoulder.

The audit results show that East Preston is "a disaster for walking", particularly for citizens with accessiblity difficulties.



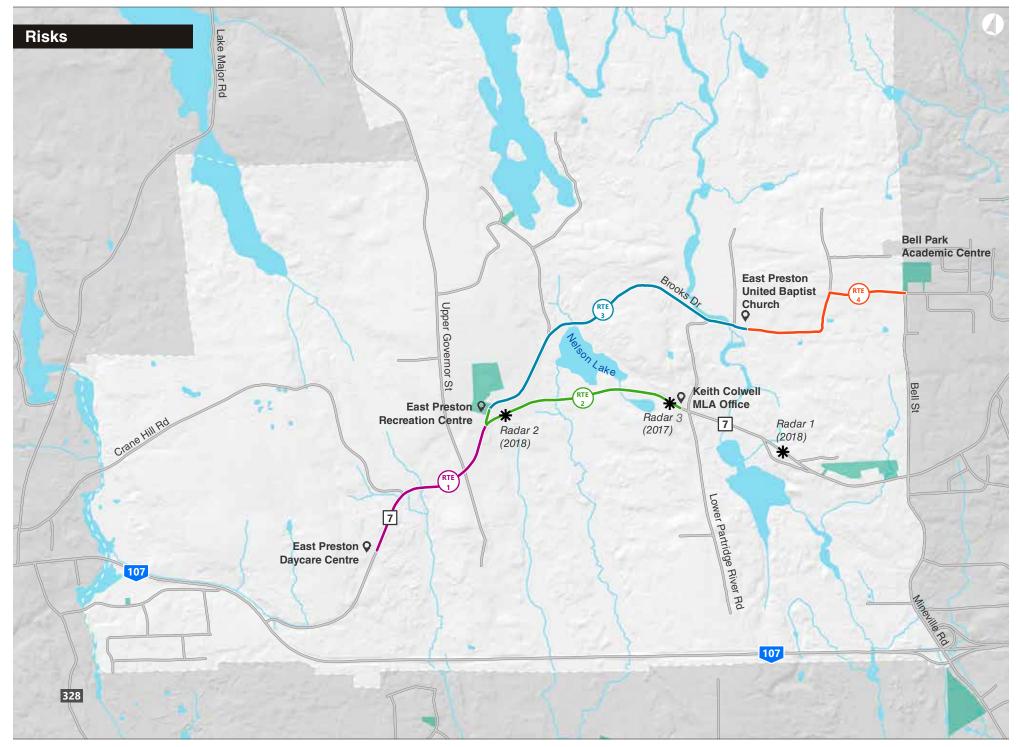
Recreation Centre to East Preston United Baptist Church

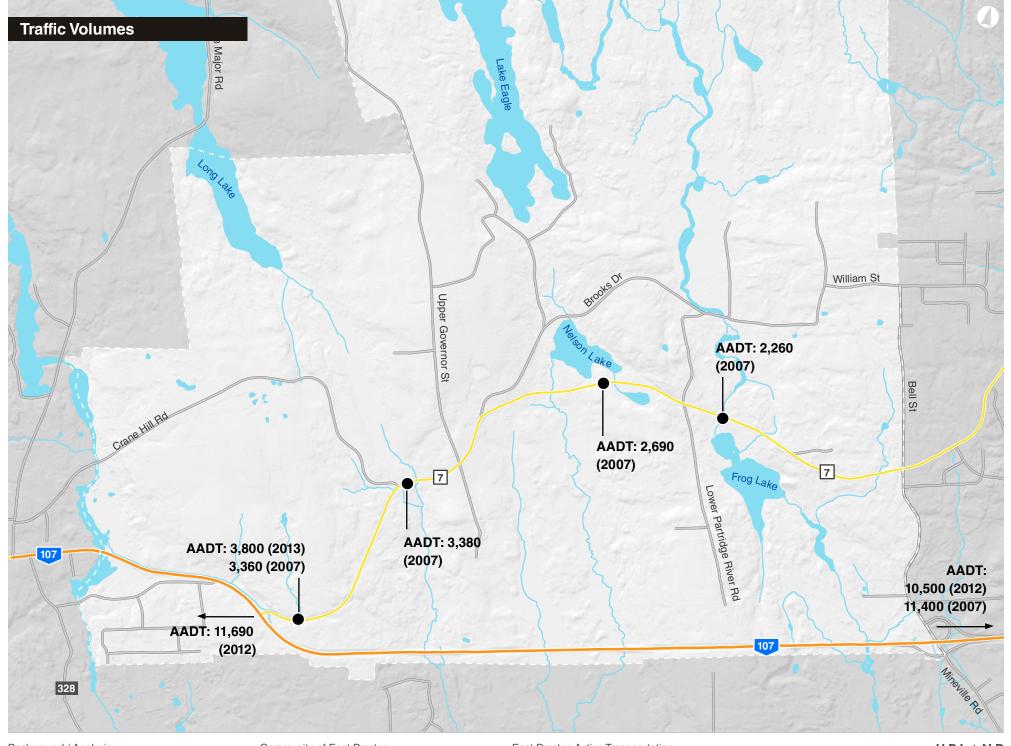
This route, while beautiful, was not considered safe for walking; the speed limit on this section is 70 km/hr, and the lack of walkways/sidewalks means walkers felt vulnerable to the traffic. The road passes by Nelson Lake and a scenic brook, so although it was noted that there are currently no benches (rest stops) or park space along this route, there are several spots that would be suitable for these types of improvements.



Bell Park Academic Centre to East Preston United Baptist Church

Walkers found that this route felt unsafe due to a narrow shoulder and visibility issues, particularly near the intersection with Upper Partridge River Road. The bridge was identified as an area of concern for this section, as repairs appear to be necessary. As with other routes, participants felt that this route could benefit from rest areas and an improved shoulder, as well as cross walks, particularly near the school.





Traffic Volumes + Speed Review

The Nova Scotia department of Transportation and Infrastructure Renewal (NSTIR) periodically conducts regular traffic surveys of their major roads (shown on the facing map). In addition to this, radars were placed at several locations along Route 7 in 2017 and 2018 at

the request of the community of East Preston to collect traffic and speed information as part of a speed survey relating to a request to lower the speed limit on this road. Information from this study is shown below.

"85% of cars were traveling at 84km/hr or under, while the posted speed limit was 70km/hr."

***** Radar 1 (2018)

Route 7 + Diggs Drive

Average Vehicles per Day: 2505*

*Collected May 6-8 2018

At this location 85% of cars were traveling at 80km/hr or under, while the posted speed limit was 70km/hr.

***** Radar 2 (2018)

Route 7 + Brooks Drive

Average Vehicles per Day: 2082*

*Collected May 6-8 2018

At this location 85% of cars were traveling at 84km/hr or under, while the posted speed limit was 70km/hr.

***** Radar 3 (2017)

Route 7 + Lower Partridge River Road

Total Vehicles: 868* Speed Violations: 38.5%*

*values are an average of two collection days, Nov 15 and 23, 9am to 6pm

A majority of speed violations were less than 10km/hr over the speed limit of 70km/hr.

***** Radar 3 (2018)

Route 7 + Lower Partridge River Road

Total Vehicles: 714* Speed Violations: 31%*

*values are an average of eastbound and westbound counts collected on Feb 22, 9am to 6pm

There was about 8% less westbound traffic than eastbound. A vast majority of speed violations were less than 10km/hr over the speed limit of 70km/hr.

2.10 Trip Origins and Destinations

Origins and destinations refer to the starting and end points of any trip. Identifying concentrations of origins and destinations throughout East Preston will help determine where active transportation infrastructure could be best located.

Trip origins and destinations can be visualized by classifying civic address points by category mapping residences and community amenties such as daycares and parks.

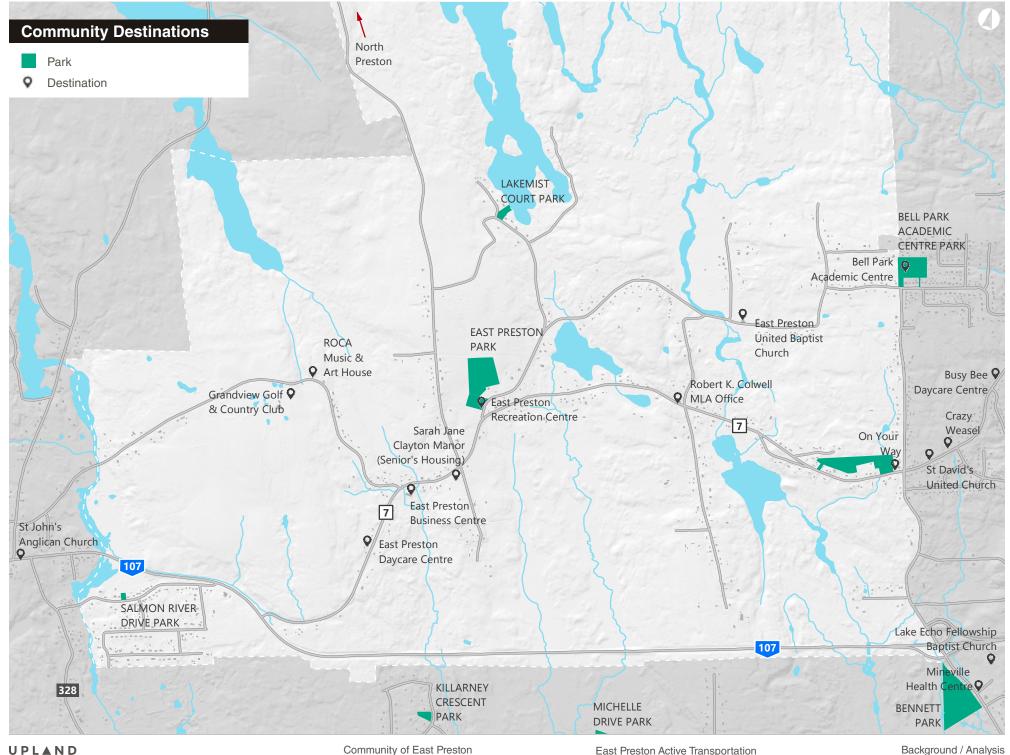
Origins

Assuming the majority of trips begin (or end) at home, all residential civic address points in East Preston have been mapped and displayed to illustrate concentrations and clusters. Residential development in this community follows Trunk 7, with density centered where arterial roads meet this highway.

Destinations

Destinations include both utilitarian trips or trips made to achieve a functional purpose, such as getting groceries, commuting to work, dropping a child off at school, etc., while recreational destinations include locations such as community centres and parks.

As with residential addresses, these destinations follow Trunk 7, indicating a clear need for improved transportation along this road. Offshoots of this main route include the East Preston United Baptist Church and Bell Park Academic School.











2.11 Community Input

Input from the community is critical in order to understand the current state of active transportation in East Preston and to ascertain the key issues and opportunities. Recognizing that the community had already provided valuable input by participating in the Walkability Audit, the Active Transportation Action Committee decided that the resources for this plan should be focused on the technical aspects of active transportation solutions and consultation with stakeholders. The draft recommendations were to be presented to the community at a public meeting.

Stakeholder Workshop

This workshop was held on October 25, 2018 at the East Preston Recreation Centre and was attended by 11 participants which included representatives from NSTIR and HRM Active Transportation.

Attendees were asked about their vision for active transportation in East Preston. Ideas that were generally supported by the group included trails, sidewalks, reduced speed limits, safe biking conditions for children and safe road crossings. The group also felt that road side elements would speak to drivers that they are entering a community. It was agreed that when the character of a road changes, driver's behaviors also change and that an opportunity exists to create narrower impression of a road to slow down drivers. The group also asked to identify opportunities for places along road where stopping and resting opportunities would make for enticing destinations.

Concerns included, the community being dark at night and dangerous walking conditions along the Trunk 7, unsuccessful applications to NSTIR for a speed limit reduction, a need for a better relationship with NSTIR, and a need to raise awareness that East Preston is a community and not a drive-thoroughfare.

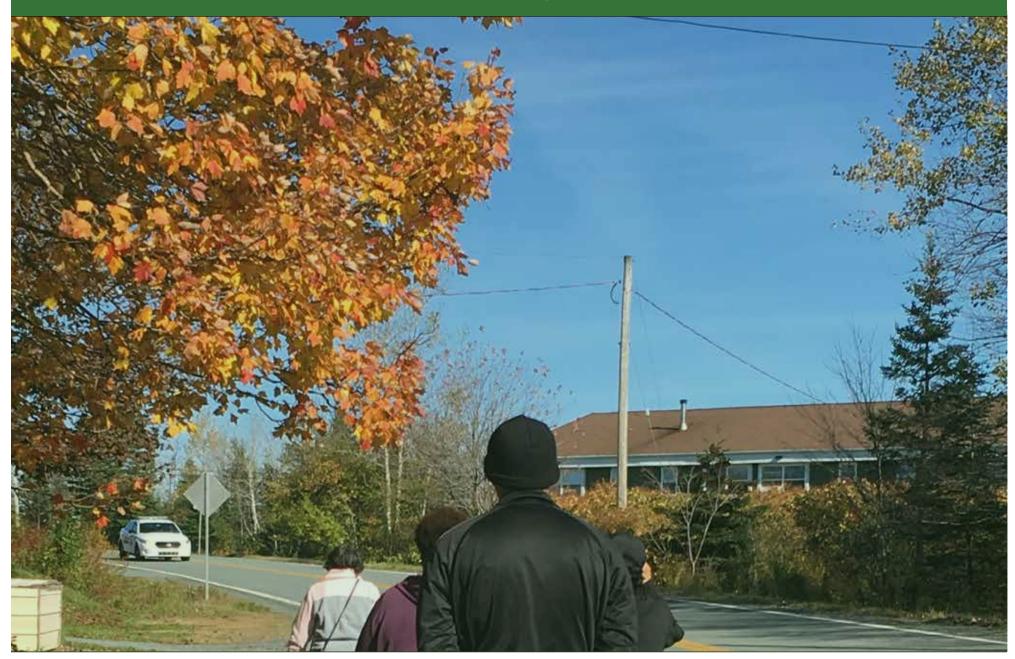
Seniors Home Workshop

This workshop was held on December 13, 2019 at Sarah Jane Clayton Manor and was attended by eight participants. The main concerns raised included that the nearby bus stop is not accessible, is poorly connected to the seniors home and that the low frequency of scheduled trips are the main obstacle for residents to use transit to get into the city.

Public Meeting

The Draft Plan was presented at the East Preston Recreation Centre on March 25, 2019. Comments from over 30 attendees were recorded (**Appendix C**) and incorporated into the Final Plan.

3 Network + Design



3.1 Route Descriptions

The physical layout of East Preston presents an opportunity to implement a comprehensive network of sidewalks, multi-use trails, paved shoulders and nature trails. A new active transportation network in the community can ultimately serve both utilitarian and recreational walking and cycling and enable trips such as leisurely strolls, visits to neighbours as well as walking to school, daycare and bus stops for trips to the city.

The proposed phases of new active transportation infrastructure have the following two main objectives:

Phase 1 and 2: To improve safety for linear movement of pedestrians and cyclists for primarily utilitarian trips along Trunk 7, where the posted speed limit is currently 70km/h.

"The physical layout of East Preston presents an opportunity to implement a comprehensive network of sidewalks, multi-use trails, paved shoulders and nature trails." Phase 3 and 4: To complete the utilitarian AT infrastructure of phases 1 and 2 by a looped network on quieter 50km/h secondary roads that will encourage recreational walking and cycling in the community as well as walking and cycling to the local school.

The connection between the East Preston Daycare Centre, the East Preston Business Centre, the Sarah Jane Clayton Manor and the East Preston Recreation Centre (Phase 1) should be given priority. The immediate construction of new active transportation infrastructure along this stretch of Trunk 7 could induce optimism and excitement among residents and could help proliferate walking and cycling as a new way to get around the community.

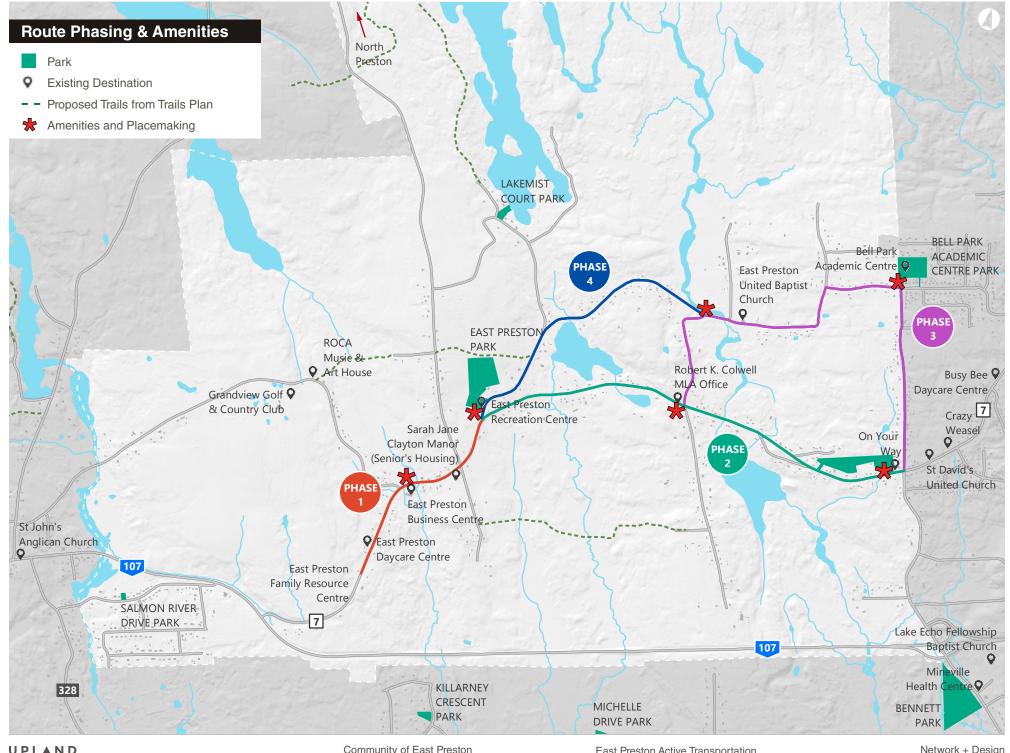
If funding and construction logistics make Phase 2 feasible in unison with the implementation of Phase 1, it should also be implemented immediately. Phase 2 connects the East Preston Recreation Center with two important intersections, office space and a convenience store and is bookended by two municipal parkland areas.

Phase 3 links Phase 1+2 AT infrastructure with the Bell Park Academic Centre and the East Preston United Baptist Church, provides a comfortable walking and cycling facility on quieter roads and creates a loop conducive for recreational walking.

Phase 4 is the logical last connection to complete the network. It links residences along Brook Drive to all other community destinations and offers some scenic qualities that enhance a recreational walking experience.

Because Phase 3 and 4 improvements would take place on roads with lower speed limits and close to Bell Park Academic Centre, the improvements here would also help increase walking to school - something which distance allows but currently is not feasible due to maintenance or AT infrastructure deficiencies.

The walking loop around Nelson Lake consisting of Phase 2, 3 and 4 sections builds on a recommendation from the 2003 Preston Area Trail Plan.



3.2 Amenities and Placemaking

Given the relatively long distances between destinations in East Preston it will be important to provide amenities throughout the proposed route network for active transportation users. Improvements such as seating, landscaping, scenic viewing areas and bicycle parking will improve the accessibility and inclusion for all pedestrians and cyclists in East Preston, creating comfortable public spaces which welcome all people.

"Creating 'places' in East Preston will give drivers visual cues and send a clear message that this is not a drive-(or speed)through-community." Creating 'places' in East Preston will
give drivers visual cues and send a
clear message that this is not a drive(or speed)-through-community. Rather,
East Preston should appear like a place
where drivers need to expect pedestrians and cyclists meandering throughout
the community, crossing from a pocket
park to a sidewalk or from a sidewalk to
a convenience store.

Placemaking initiatives which incorporate playful design and reflect the nature and culture and East Preston will encourage residents to interact with their surroundings. Promoting health and happiness through the built environment can make active transportation more enjoyable to youth and all users. Building on the community's assets and inspiration, these implementations will be best accomplished in partnership with residents and local businesses.

Street Furniture & Pocket Parks

In order to improve the accessibility of East Preston's road network, street furniture and other amenities should be provided. People of all ages and abilities will have an easier time walking or cycling through the community if there are places to stop and rest, which offer protection from the elements. These spaces will reduce stigma associated with "loitering" often placed on marginalized groups, and instead support the public use of public spaces. Lively and active streetscapes provide "eyes on the street" which will create a safe and vibrant community. Comfortable places to loiter can include:

- Benches or picnic tables
- Trees and landscaping
- Public art or commemorative elements

Bicycle Racks and Repair Stations

Bike racks allow cyclists to use their bikes for everyday trips, and repair stations make bike ownership simpler and more affordable. Priority locations for bike racks should be based on common destinations and key junctions in the road network. Bike racks could be placed in the following locations:

- Bell Park Academic Centre
- East Preston Recreation Centre
- East Preston Business Centre
- On Your Way Cornerstore

Interpretive Signage

Creating and updating interpretative planning signage throughout parks and trails can emphasize the natural environment and history of East Preston. This signage can point out landmarks, wildlife and natural rarities, getting visitors actively involved with the landscape. Interpretive planning can serve as word of mouth advertising for tourism and foster pride within the community.

Playfulness

Fostering playful design throughout the active transportation network will create a town that is more fun and enjoyable for all. Playful public spaces can activate streetscapes and improve the community's quality of life. Playful design in other places has featured elements like slides, swings and bike lane street paintings. Some improvements that could support playfulness through the implementation of this network design include:

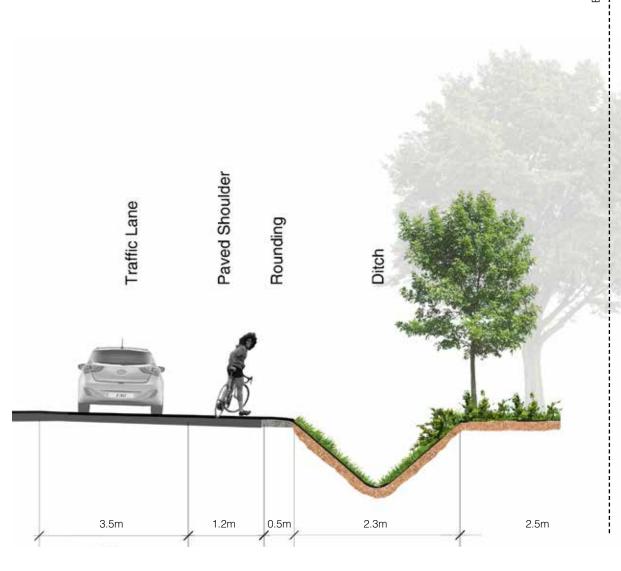
- Build jumps and ramps into trail and park design
- Form scavenger hunts encouraging trail users to engage in their surroundings
- Support participatory art projects
- Promote the use of colour and sound through elements like coloured crosswalks, intersection art projects, wind chimes, mural projects on electrical boxes or benches



3.3 Cross Section Options

Paved Shoulder

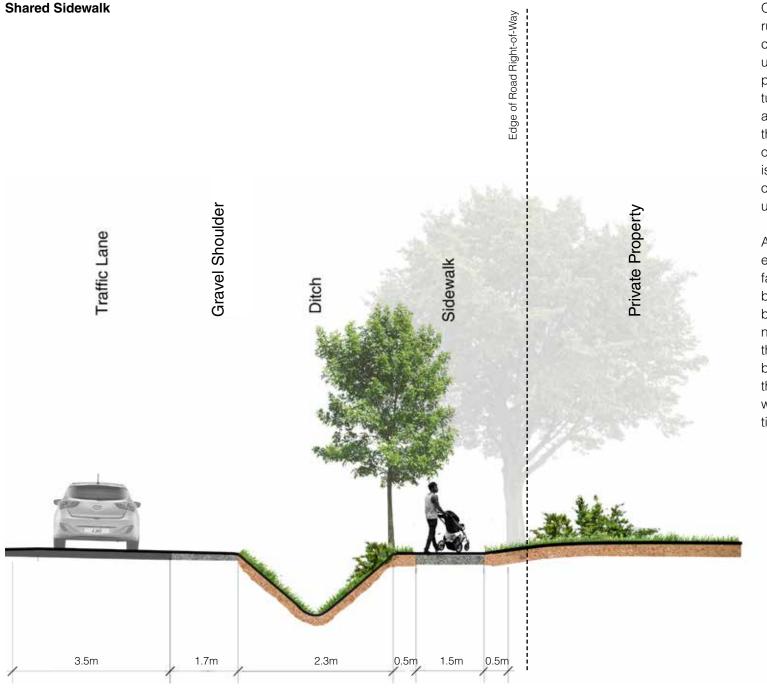
Edge of Road Right-of-Way



Paved shoulders create a lane adjacent to automobiles in which cyclists and pedestrians travel in the same direction. Shoulders should be paved on both sides to avoid cyclists and pedestrians traveling against the flow of traffic.

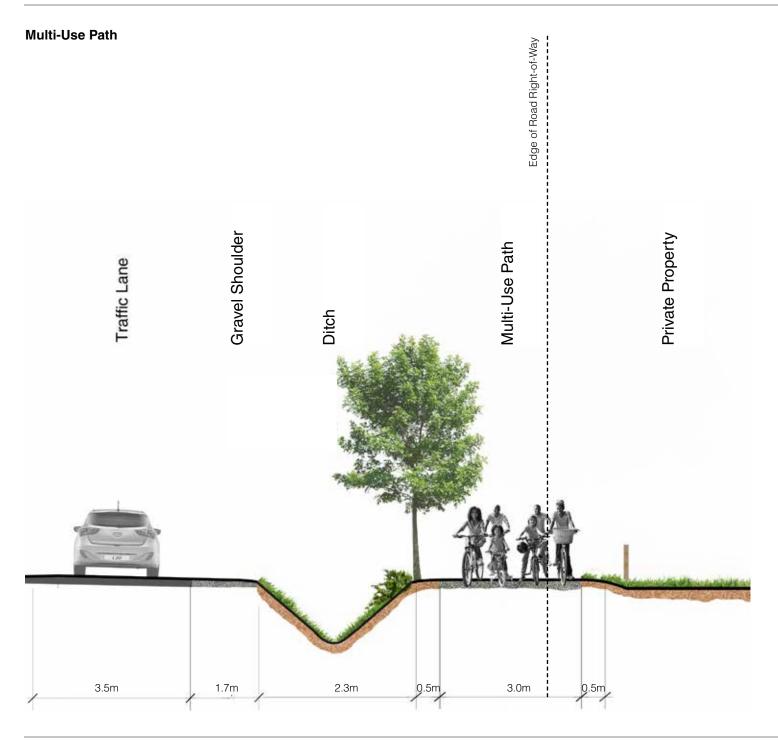
NSTIR does not consider paved shoulders a pedestrian facility. It is however legal to walk on the side of the road, and a paved shoulder can be adequate for a rural situation with low traffic and pedestrian volumes. But it is not appropriate for situations where high pedestrian counts are anticipated because of pedestrians mixing with bicycles in a narrow band right next to moving traffic.

Usually provincial roads in Nova Scotia are not considered for shoulder paving when the Annual Average Daily Traffic (AADT) is less than 1000 vehicles per day (vpd). However, provincial roads where the AADT is not greater than 1000 vpd maybe considered for paved shoulders where the section of a road is a known cycling route or part of an approved AT Plan. (Paved Shoulder Widths for Active Transportation Policy,



On rural roads on which stormwater runoff is collected in a ditch, a sidewalk cannot be provided next to the roadbed unless stormwater is redirected into pipes. New piped stormwater infrastructure is usually cost-prohibitive. Rather, a new sidewalk can be added between the stormwater ditch and the road right-of-way. Even though a 1.5m sidewalk is technically not a cycling route, it can operate as a shared sidewalk to be used by both pedestrians and cyclists.

A sidewalk could be constructed with either a crusher dust and paved surface. For all season usability and durability, a paved surface would be preferable. Given that the municipality provides no snow clearance on unpaved trails, the sidewalks would remain unaccessible to the residents in winter whenever there is a snowstorm, and would make walking in these conditions not an option at all.



Off-Road Multi-Use Trails are the safest and most comfortable option for the provision of safe cycling and walking infrastructure along rural roads. These trails, which are offset from the roadbed, replace on-road cycling lanes and can also function as attractive tourism cycling routes. Because a multi-use trail along Trunk 7 would be partially or completely outside the public road right-of-way, its implementation would require either property acquisitions or easements on private property.

A multi-use path could be constructed with either a crusher dust and paved surface. For all season usability and durability, a paved surface would be preferable.

3.4 Sidewalk Location

In order to make a decision on which side of Trunk 7 a sidewalk should be constructed during Phase 1, its impact on driveways and potential property infractions were mapped.

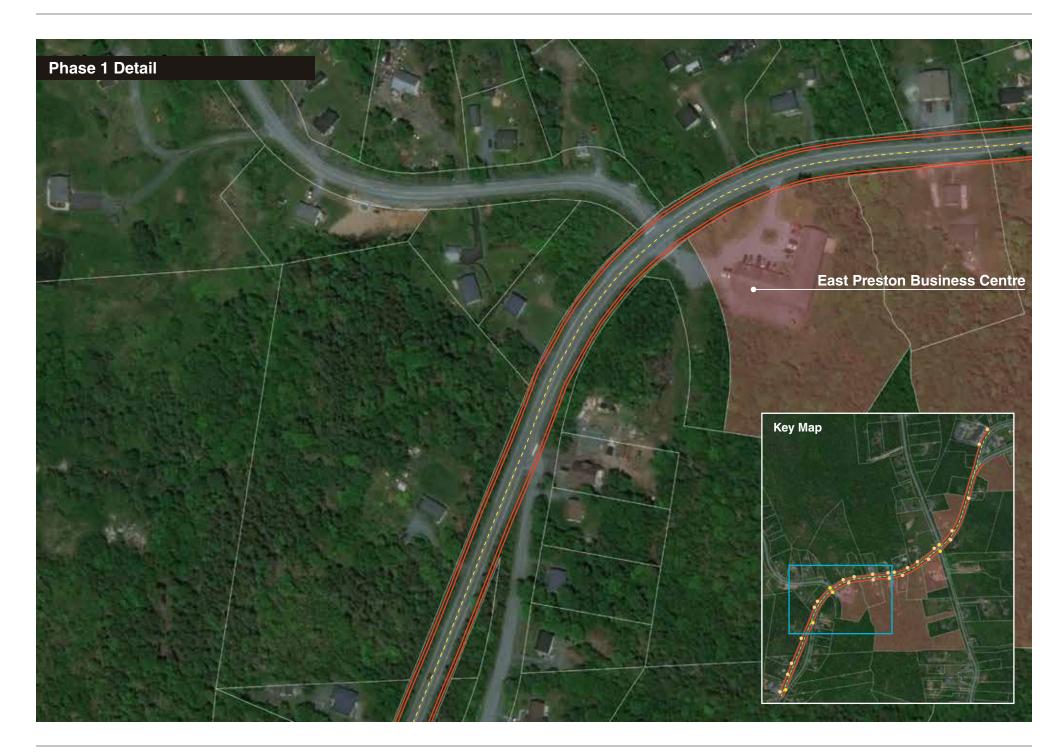
If constructed on the north side of Trunk 7, the sidewalk would cross 16 driveways and potentially intersect with one private property. If constructed on the south side, the sidewalk would cross seven driveways and potentially intersect with seven private properties.

Consultation with the community indicates that people currently prefer walking on the shoulder of Trunk 7's north side. Reasons for this choice likely include the better sun exposure of the northern shoulder, the existing street lighting along the north side of the road as well as the connectivity between various destinations on the north side such as the Daycare Centre, Recreation Centre and private residences.

Detailed mapping for both the north and south side option for a sidewalk is provided on the following pages. Only one side of the road is recommended to have a sidewalk











3.5 Transit Stop Improvements

None of the Route 401 Halifax Transit bus stops are considered accessible. A typical bus stop in East Preston consists of a bus stop sign next to a gravel shoulder. There are no bus shelters on any of East Preston's bus stops.

Currently 100% of Metro Transit's vehicles are accessible. Most achieve this through a fold out ramp at the front door. There are a small handful of rural express buses that use a lift at the rear of the bus, although these buses are close to retirement.

Metro Transit has been working for the past 20 years to create safe locations that allow the use of the on-board ramps and to provide a way for passengers in wheelchairs to get from the stop to their destination. However, curbside infrastructure in rural areas remains a challenge for Metro Transit. Currently, Metro Transit can safely operate on-board ramps at around 90% of its stops.

In areas without a curb or sidewalk, Metro Transit has started installing large concrete platforms that can also hold a shelter. For the last two years, Metro Transit has also installed asphalt in the road shoulder. An asphalt shoulder allows the bus stop to be 'non-standard', which means that buses can still lower the on-board ramp. However, the asphalt shoulder bus stops are not considered accessible bus stops.



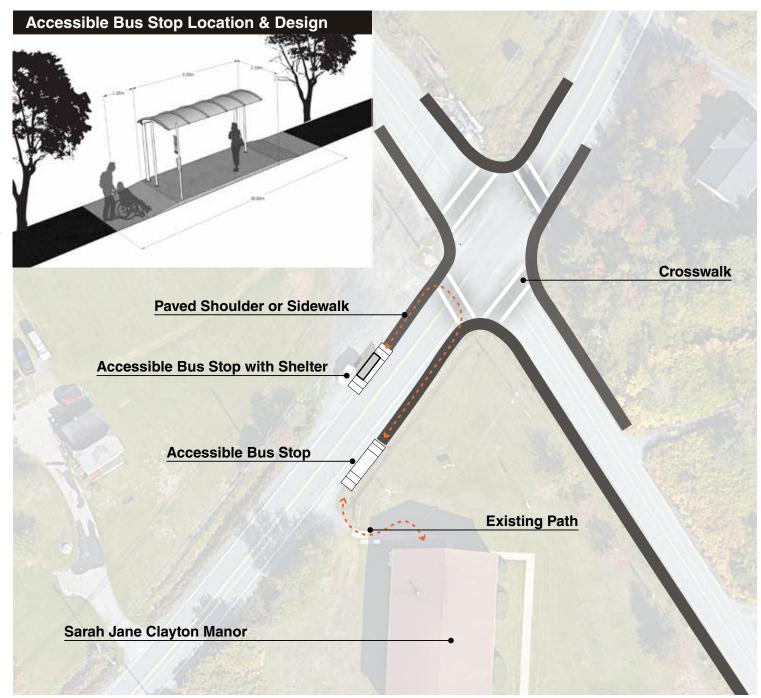


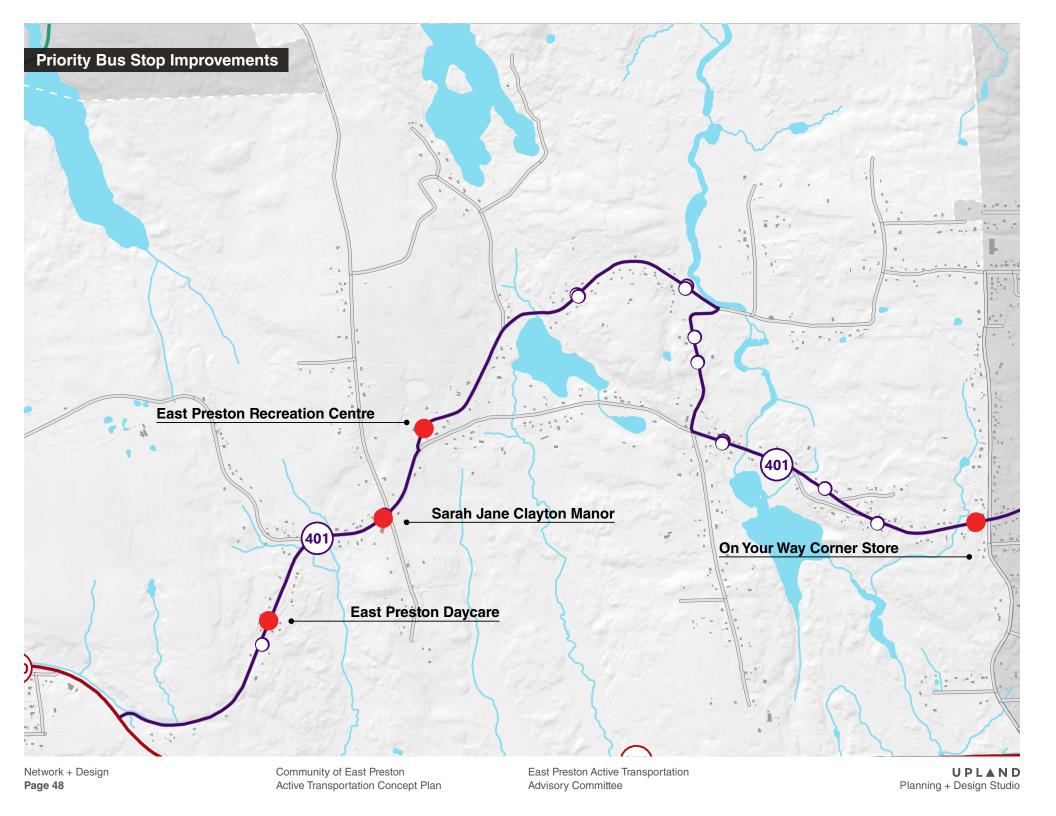
Metro Transit is aware that the bus stop design in areas without curbs/sidewalks is still a work in progress.

Of the ten Route 401 bus stops in East Preston, four would particularly benefit from accessible concrete landing pads due to their associated land uses (see figure on next page). Bus shelters should be a priority at Dartmouth-bound stops where passengers tend to wait for buses to the city. In the long run, all bus stops in East Preston should be upgraded to accessible stops.

The Sarah Jane Clayton Manor bus stop was studied in more depth to illustrate how Metro Transit's rural bus stop design could be refined. The current design used by Halifax (Municipal Design Guidelines, Part B, Halifax Regional Municipality, 2015, Figure HRM 56R) features a curb cut that requires wheelchair users to swerve onto the road when accessing or egressing the concrete platform. With the 70km/h posted vehicular speeds along Trunk 7, this is not a safe option.

This Plan proposes to provide a short section of paved shoulders in the vicinity of the Sarah Jane Clayton Manor and ultimately near all bus stops in East Preston. A refined design for the concrete bus pad should feature tapered ramps that allow wheelchair users to enter the bus stop without swerving into the road. The in-bound bus stop should also feature a bus shelter.





3.6 Crosswalks

Generally, NSTIR considers every intersection as having crosswalks by default. On provincial roads, some crosswalks are marked with either two lines or with what are commonly referred to as 'zebra' markings. Others are not marked at all.

In East Preston, no crosswalks are currently marked. In order to improve pedestrian safety, all intersection crosswalks should be painted with either two lines or zebra markings.

In addition, crosswalks should be installed in areas of Trunk 7 where a road crossing is needed to connect the new sidewalk to a destination such as the East Preston Daycare and the East Preston Business Centre. Bell Park School should also have a crosswalk installed. The installation of crosswalks that are not located at intersections is subject to a detailed assessment of sideline distances and conditions for landings. An any and all cross walk applications need to be approved by the NSTIR Area Manager. Crosswalk details, including dimensions have to be submitted to NSTIR for review.

Halifax Regional Municipality has recently begun to install a new piece of crosswalk equipment in an effort to cut down on collisions between cars and pedestrians. Rectangular Rapid Flashing Beacons (RRFB) have been installed at several crosswalk locations in HRM.

These new pedestrian-activated lights are placed at either end of a marked crosswalk just above the crosswalk signs. The lights are brighter than traditional crosswalk lights and operate in a strobe pattern, which, along with being installed lower to the ground, make them more visible to drivers when activated. Powering the strobe lights with solar panels makes these beacons more cost-efficient than traditional crosswalk lights because no electrical installations are required. This makes these beacons particularly suitable for rural areas such as East Preston.

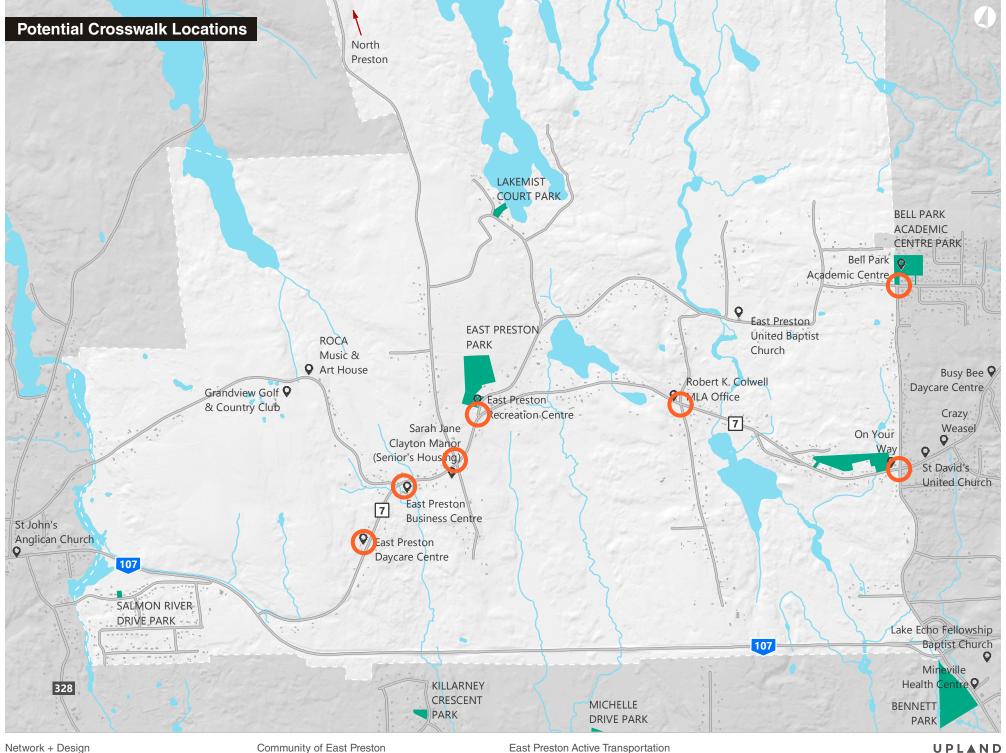
All crosswalks crossing Trunk 7 in East Preston should be equipped with flashing beacons. Vehicle counts and speeds at other East Preston roads do not suggest a need for signalized crosswalks. Existing and proposed locations for crosswalks are depicted on the following page.



Parallel and Zebra Crosswalk Markings (NSTIR)



Solar-Powered Rapid Flashing Beacon



3.7 Implementation

"This Plan does not contain long term recommendations because change in East Preston needs to occur in the foreseeable future." The recommendations proposed in this Plan have been developed with consideration for the human resources and financial capacity of the Province and Municipality to undertake them. The following pages provide a framework for implementing these recommendations. The framework includes a rough time-frame for completion, a high level outline of steps to follow, an identification of the groups and organizations that could be partners in implementation, and if necessary, an opinion of probable costs for each recommendation.

The recommendations are arranged on the following pages based on when work on the specific project should begin. Short term recommendations should begin within years 1 - 3 of the plan period and medium term recommendations in years 4 and 5. This Plan does not contain long term recommendations because change in East Preston needs to occur in a foreseeable time frame. Recommendations labeled as "opportunity" are ideas that depend heavily on the work of outside agencies. These projects should be delayed until an outside opportunity makes it easier to implement that specific AT improvement. Some recommendations are

labeled "ongoing". These projects do not require a specific, one-time action, but rather a commitment from the Municipality to include these actions in its ongoing operations.

The timing of projects is somewhat loaded to the short term end of the timescale. This is done for two reasons:

To encourage the immediate implementation of smaller projects with visible impacts. This will allow the community to capitalize on the enthusiasm surrounding the development of this Plan, as well as establish some early successes that can build further momentum for later elements of the Plan.

3.8 Infrastructure Cost Estimates

Each of the following recommendations includes an opinion of probable costs, if costs are involved. These estimates were developed based on information available at the time of developing this Plan (beginning of 2019), combined with our best professional judgment. As such, variances in these estimates will

occur. The changing costs of material and labour, as well as the conditions and underlying principles from which contractors will derive their bids for the work, are outside our knowledge and control. Costs do not include HST. The range of costs indicated in each of the implementation details below accounts

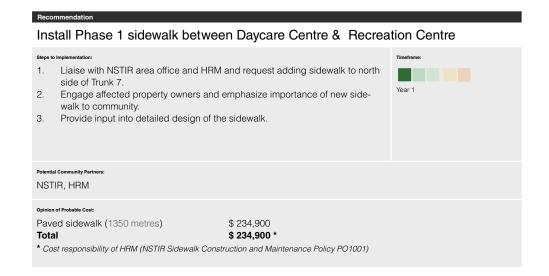
for a 20 percent contingency. Not included in the cost estimates are potential property aquistions.

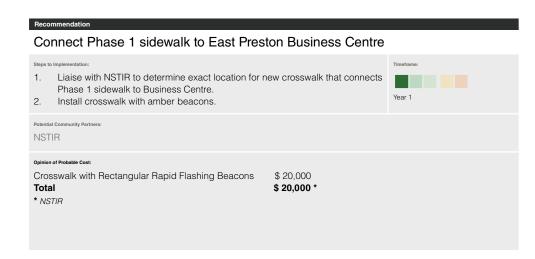
We have assumed the following base unit costs for active transportation route-based initiatives:

Linear Infrastructure			
Route Type	Description	Total Cost per km	
Rural Road with Paved Shoulder	Paved Shoulder as Part of Road Retrofit	\$	43,200.00
Rural Road with Paved Shoulder	Paved Shoulder Added to Existing Road	\$	120,000.00
Sidewalk (Crusher Dust)	Crusher Dust, New Construction, No Curb	\$	144,000.00
Sidewalk (Paved)	Paved, New Construction, No Curb	\$	174,000.00
Multi-Use Trail (Crusher Dust)	Crusher Dust, New Construction, No Curb	\$	216,000.00
Multi-Use Trail (Paved)	Paved, New Construction, No Curb	\$	276,000.00

3.9 Phasing

PHASE 1





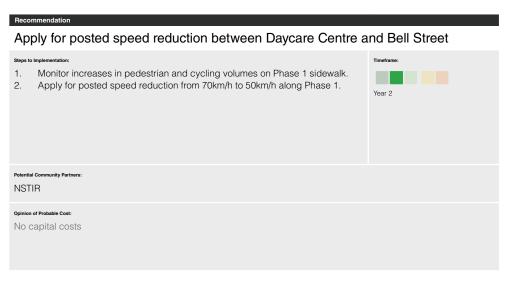
Install new pocket park at East Preston Business Centre Steps to Implementation: 1. Engage community to generate design concepts. 2. Work with landscape architect to create detailed design. 3. Organize community events to assist with installing new pocket park.



Install two accessible bus stops at Sarah Jane Clayton Manor Install paved shoulder to connect manor to new bus stops. Install two concrete pad bus stops with 1 bus shelter (inbound). 2. Paint four crosswalks at Trunk 7/Upper Governor Street. Potential Community Partners: HRM. NSTIR. Metro Transit Opinion of Probable Cost: Paved shoulder (50m) \$ 600* \$5,000 1 concrete bus pad - outbound (2x5m) 1 concrete bus pad - inbound (3.2m x 10m) \$ 13,000 1 bus shelter \$ 15,000 4 painted crosswalks \$ 2,000 * Total \$ 35,600 * * Cost shared between NSTIR and Metro Transit

\$ 20,000

\$ 20,000 *



Potential Community Partners:

Benches, pavers, trees, landscaping

* HRM and community sweat equity

HRM

Total

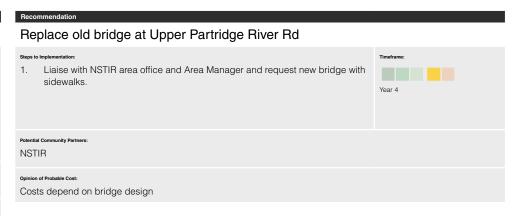
PHASE 2

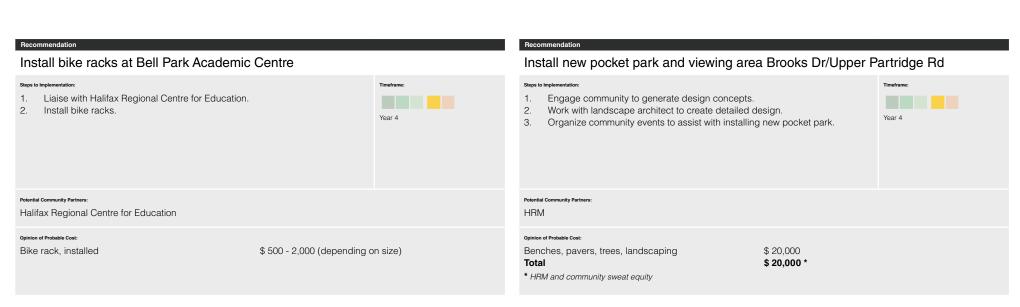
Install Phase 2 sidewalk between Recreation Centre & On Your Way Corner Store Steps to Implementation: 1. Liaise with NSTIR area office and HRM and request adding sidewalk to Trunk 7. 2. Engage affected property owners and emphasize importance of new sidewalk to community. 3. Provide input into detailed design of the sidewalk. Potential Community Partners: NSTIR, HRM Opinion of Probable Cest: Paved sidewalk (1865 metres) \$ 324,510 \$ 324,510 \$ Total \$ 324,510 *

Install new pocket park at municipal property PID 40554503 Steps to Implementation: 1. Engage community to generate design concepts. 2. Work with landscape architect to create detailed design. 3. Organize community events to assist with installing new pocket park. Potential Community Partners: HRM Opinion of Probable Cost: Benches, pavers, trees, landscaping Total * 20,000 * 20,000 * * HRM and community sweat equity

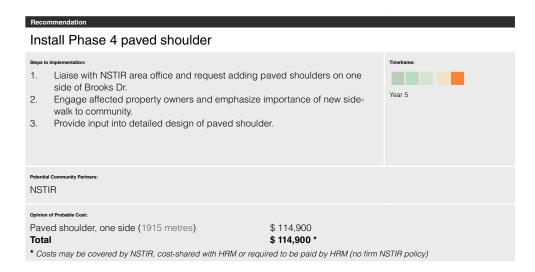
PHASE 3

Install Phase 3 paved shoulder (On Your Way, Bell Park School, Baptist Church) Steps to Implementation: 1. Liaise with NSTIR area office and request adding paved shoulders on one side of Bell St., William St., Upper Partridge River Rd., 2. Engage affected property owners and emphasize importance of new sidewalk to community. 3. Provide input into detailed design of paved shoulder. Potential Community Partners: NSTIR Opinion of Probable Cost: Paved shoulder, one side (3330 metres) \$ 199,800 \$ 199,800 * * Costs may be covered by NSTIR, cost-shared with HRM or required to be paid by HRM (no firm NSTIR policy)

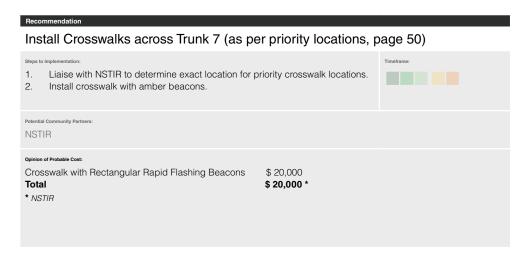




PHASE 4



ADDITIONAL BUS STOPS AND CROSSWALKS





Appendices

Appendix A - Sidewalk Delineation Options Phases 2, 3 & 4

Appendix B - Metro Transit Rural Bus Stop Standard Detail

Appendix C - Public Meeting Community Feedback





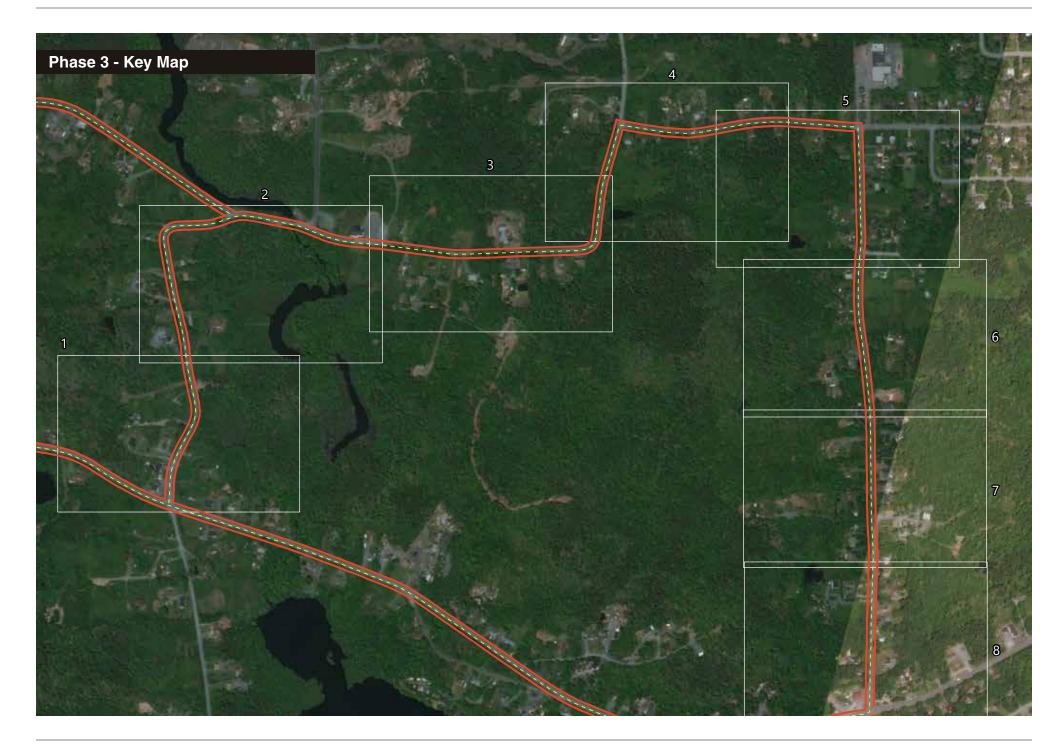
































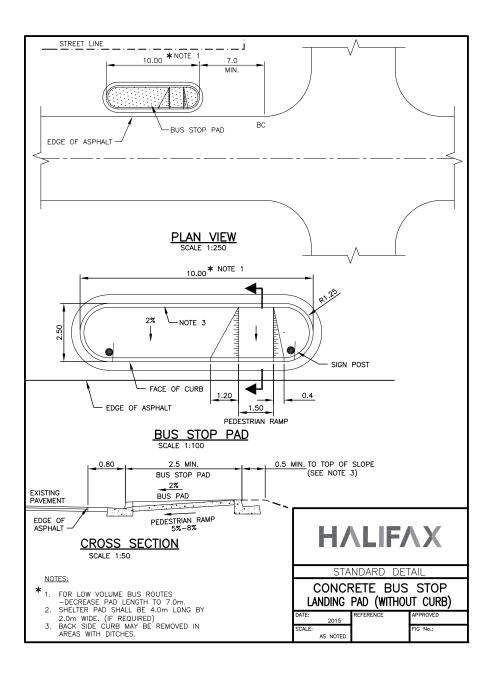


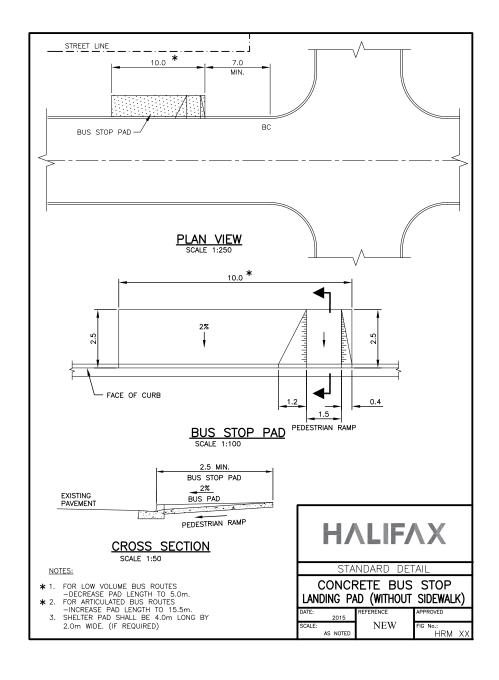






METRO TRANSIT RURAL BUS STOP STANDARD DETAIL





PUBLIC MEETING COMMUNITY FEEDBACK

East Preston Public Meeting 25/3/2019

What do you like? What is missing?

- Needs "Designs Engineering drawings" for EACH and every transit stop to make them ALL accessible and a safe refuge off the side of the busy roads. Complete with seating furniture, fall prevention fence and garbage can.
- We should use the sidewalk option where the road is separated by the ditch to the side walk and do NOT take private land.
- Keep option for future water
- Nobody loses land
- Safer walking away from busy streets.
- Sidewalks at Dacare and Manor School should have flashing lights
- More speed postings on side streets (ie Brooks Dr has no speed limit except one sign telling you to lower speed to 50 on turn)
- Sidewalks on both sides of highway 7 from the EP Day up to the rec centre (safety for children walking to and from the Rec.)
- Flashing lights and crosswalk by daycare and Manor along with bus and shelters

What do you like? What is missing?

- There is a need for specific crosswalks and flashing crosswalk lights East
 Preston Daycare Centre Sarah Jane Clayton Manor/Governor Street.
- Paved shoulders is an <u>absolute</u> minimum Hwy#7 was identified as a <u>transportation</u> route on the "Blue Route" for cycling.
- I like the use path design #7 hwy
- A quick and easy recreational route would be to re-open the old hfx-guysborough hwy between Upper Governor & Brooks Drive/Behind the Ballfield.
- I like the shared sidewalk idea
- At the intersection of Brooks Dr + Upper post. There should be a plaque or historical site of "the old school ground".
- I like the idea of the side walk on the North Side.
- Continue to work on the Trail Group look at the plan

BOARDS

Proposed Network

- Flags for crossing for visibility at the Manor.
- Flashing Crosswalk @ all roads on #7 highway
- Flashing Crosswalk @ Daycare, business Centre, rec Centre, Manor, Corner Store.
- Running Loops Trails that link/connect communities. Roads need repair.

Sidewalk Location Phase 1

- I like sidewalks on North side

Transit Stop Improvements

- Maybe better bus stop on the highway?
- Especially across from the Day centre
- Bus Stop should remain in front of the SJC Manor to accommodate Senior residents.
- Cross walk Flashing Lights.

Cross Section Options

- Multi trail to connect with plan .

Existing Conditions

- We need a crosswalk at the Day Care Centre with flashing lights .

PUBLIC MEETING PHOTOS







UPLAND

