HALIFAX

Growing Halifax's
Active Transportation
Network:

Auditing tools

Accessibility Advisory Committee - April 17, 2023











Agenda

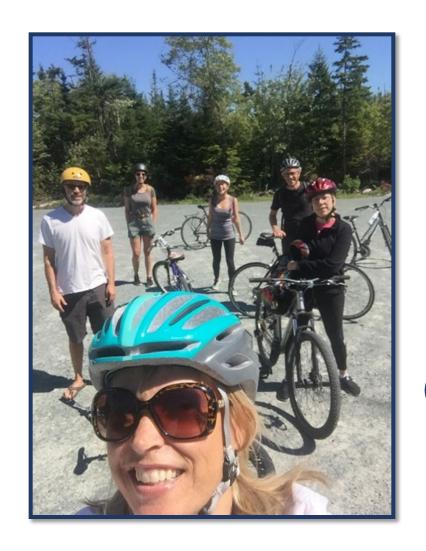
- Intro and Policy Overview
- AAA Regional Centre Cycling Network Progress to Date
- Multi Use Paths (MUP)
- AT auditing tools available

- Questions & Discussion





Who Are We?



Public Works Project Planning &

Asset Management

Active Transportation

Design Engineering

Surveying















The Integrated Mobility Plan (2017)

Residents will have a choice of **connected**, **healthy**, **affordable**, **sustainable** travel options for moving both people and goods.

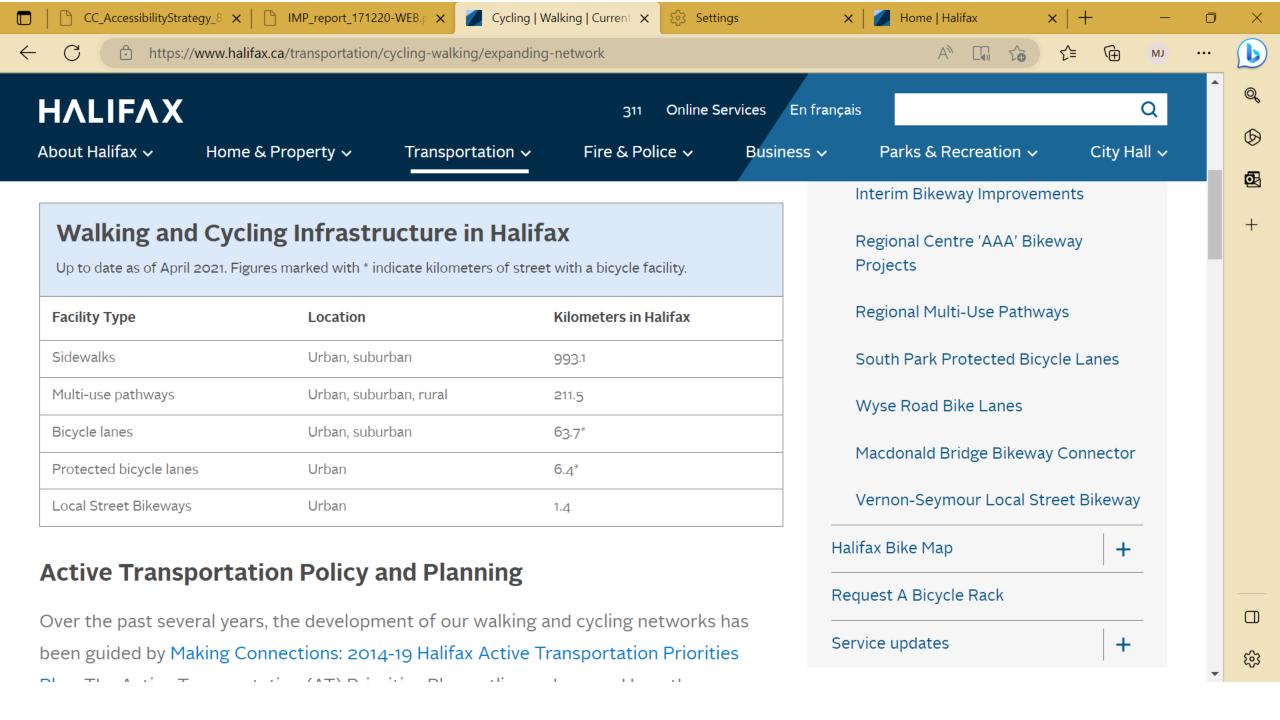




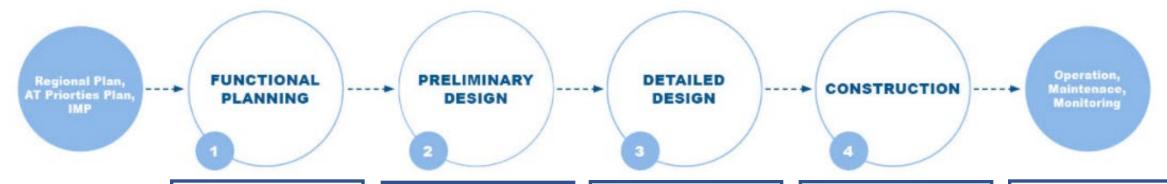








HALIFAX ACTIVE TRANSPORTATION PLANNING & DESIGN PROCESS



12 – 18 months (or longer)

- Public/Stakeholder engagement
- Develop and evaluate concepts
- Utility review
- 30% design
- Cost estimates
- Council approval

6 - 18 months

- Topo Survey
- Land acquisition
- 60% design
- Cost estimates

6 - 18 months

- Final drawings
- Complete land acquisition
- Signal timing
- 90-100% design
- Final cost estimates

1 - 2 Seasons

- Contracts & Permits
- Public and abutter notifications
- Project close out

Ongoing

- Communications launching facility
- On-going monitoring
- Year-round maintenance
- Asset management and rehabilitation





All Ages & Abilities

Level of Comfort More Less **Major Street** Painted Bicycle **Local Street Protected Bike** Off-Street Paint Buffered **Shared Use Lane** Bike Lane **Pathway Bikeway** Lane Lane **Unsuitable for AAA facility** Suitable for AAA facility

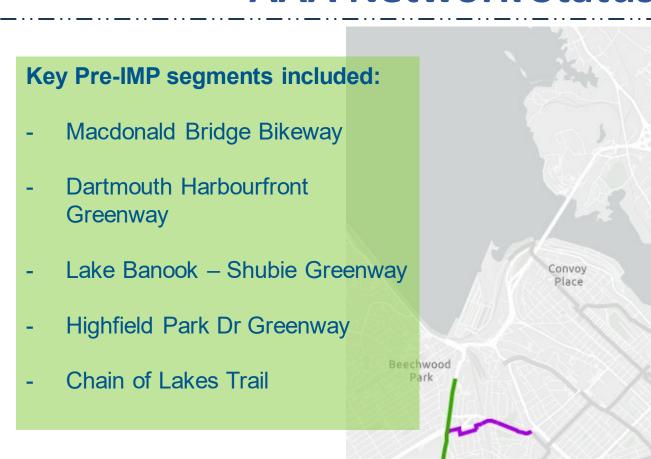




AAA Network Status 2017

Armdale

Cowie Hill











Port Wallace

Grahams

Corner

Crichton

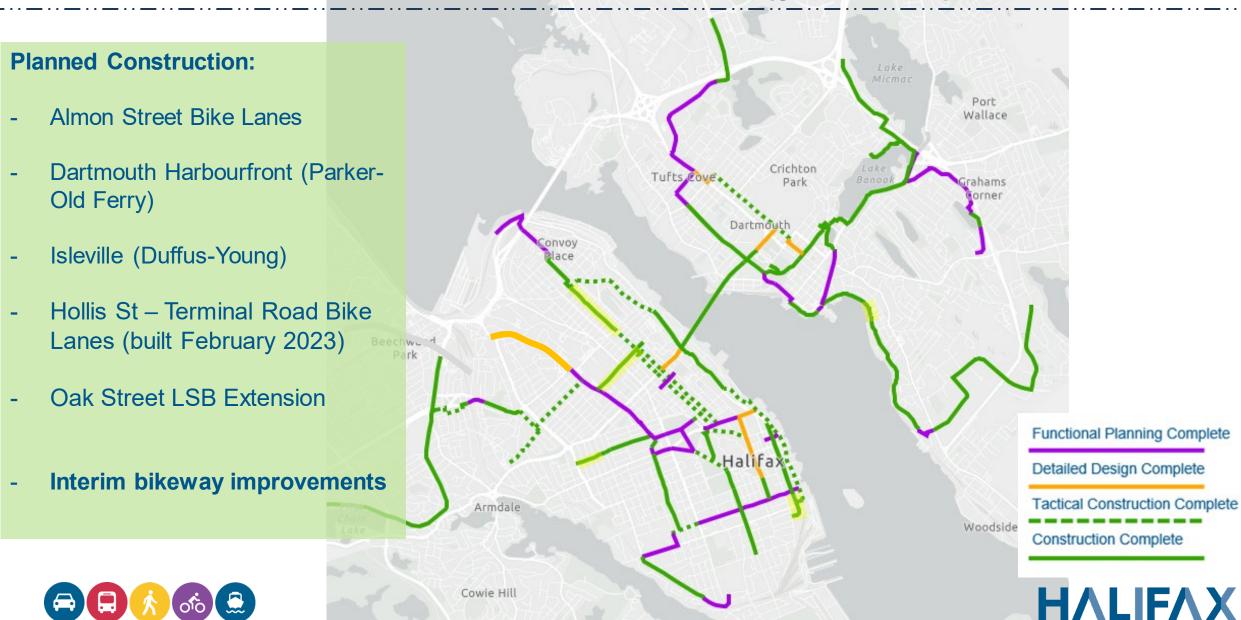
Park

Dartmouth

Halifax

Tufts Cove

AAA Network Status 2023 (planned)



Regional Multi-Use Paths

Below is a list of Multi-Use Pathways that form part of the Regional Network:

HRM's Multi-Use Pathways (owned and/or operated)

Bedford-Sackville Greenway

Burnside Greenway

Chain of Lakes Trail

Mainland North Trail

Forest Hills Parkway Multi-Use Pathway

Dartmouth Harbourfront Trail

Dunbrack Street Multi-Use Pathway

Provincial Rail Trails - Eastern & Western HRM

Shearwater Flyer – Corsair Drive to Bissett Road. Cole Harbour Parks & Trails Assoc.

Cole Harbour Salt Marsh Trail – Bissett Road to West Lawrencetown Road. Cole Harbour Parks & Trails Assoc.

Atlantic View Trail – West Lawrencetown Road to Causeway Road. Atlantic View Trail Association

Blueberry Run Rail Trail - Causeway Road







Multi-Use Paths

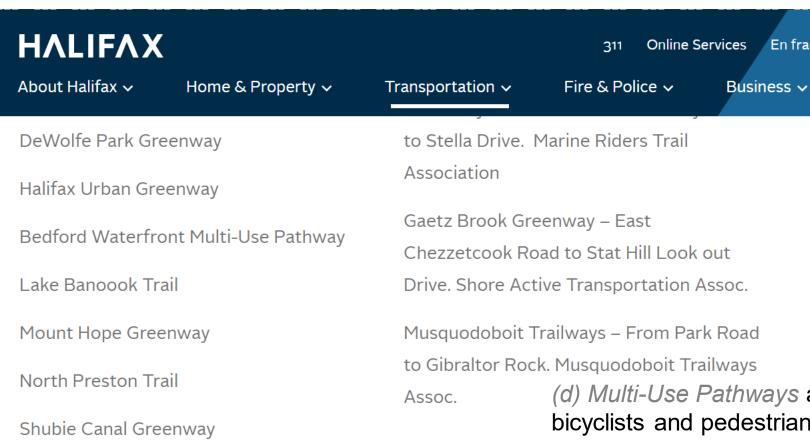




Figure 2.2.5 - Multi-use pathway on Beaufort Avenue

(d) Multi-Use Pathways are spaces that are shared by bicyclists and pedestrians. They must be separated from traffic, typically by a boulevard, curb or ditch. They can require bicyclists to travel at lower speeds in order to safely share the space with pedestrians. Safe transitions to the street network must be considered. These facilities can be considered AAA. Figure 2.2.5 shows an example of a multi-use pathway in Halifax.



Sackville Greenway

Multi-Use Paths

Community Multi Use Pathways supported by HRM Grants Program for Planning,

Construction & Maintenance

Halifax North West Trails Association

Halifax Urban Greenway Association

Lucasville Greenway Society

McIntosh Run Watershed Association

Penhorn Lake Area Trail Association

Porters Lake/Myra Road Wilderness Area Association

Preston & Area Trails Association

Sackville Rivers Association

Sackville Lakes Park And Trails Association

Shubenacadie Watershed Environmental Protection Society (SWEPS)

St. Margaret's Bay Rails to Trails Assoc.

Wooden's River Watershed Environmental Organization

Cole Harbour Parks & Trails Assoc.

Atlantic View Trail Association

Shore Active Transportation Assoc.

Musquodoboit Trailways Assoc.

Beechville Lakeside Rails to Trails Assoc.

First Lake Trails, Friends of First Lake Association















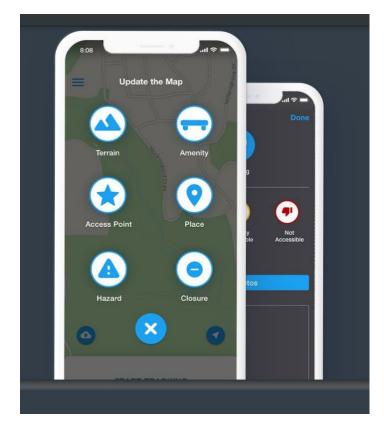


Auditing tools

 AccessNOW Outdoors App- in conjunction with Transcanada Trails

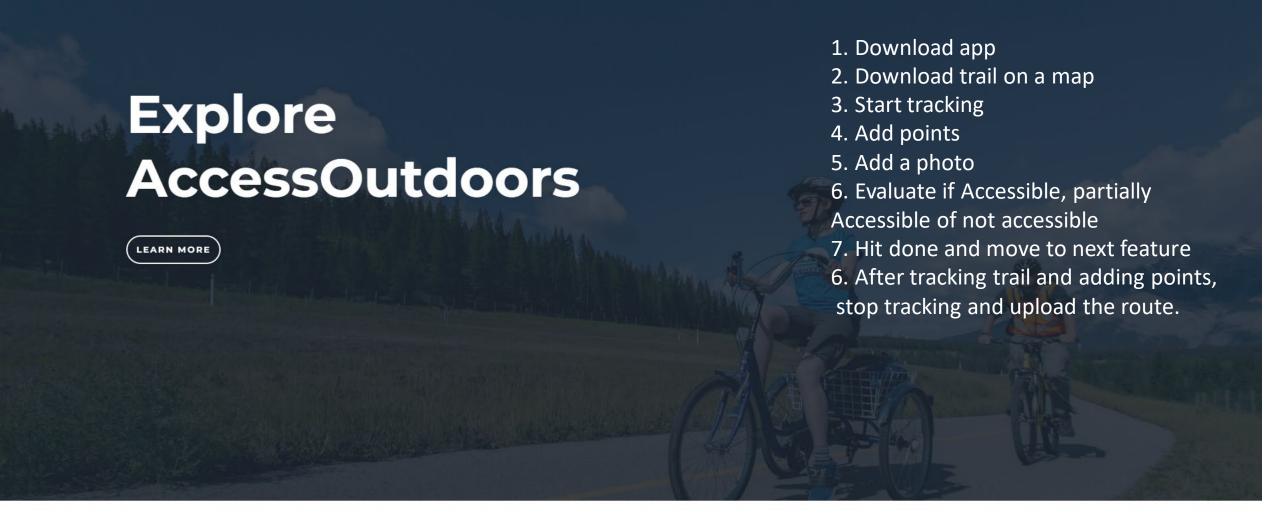
Rick Hansen – other HRM businesses units

- Provincial –suggested features
- Provincial Guidelines









The joys of the outdoors for all to explore

Discover Parks & Trails

Accessibility Ratings







Accessible

Flat, obstacle-free, wide and hard-surfaced paths.

Partially Accessible

Requires caution or deliberate physical effort to travel.

Not Accessible

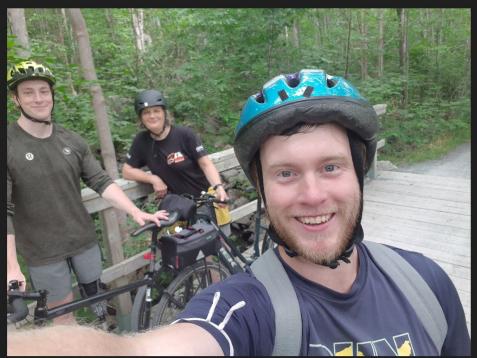
Untraversable, steep inclines, narrow widths, uneven surfaces.

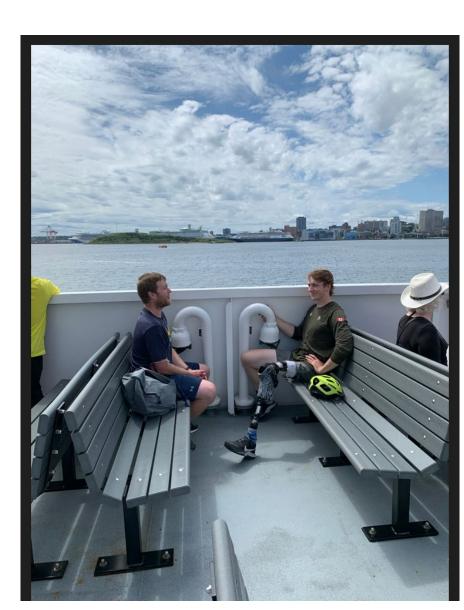


Biked/Walked 3 trails in HRM

- Shubie Greenway
- Dartmouth Harbourfront
- Halifax Boardwalk & Barrington Greenway







Terrain



Surface

What is the quality of the terrain? i.e. paved, gravel, boardwalk, cobblestone, etc.

Slope

Make note of start and end points of slopes. Are they flat, moderate, or steep inclines?

Width

Is the path narrow, moderate or wide?



Terrain: Surface Types











AccessNow Trail Mapping Training







BENCH



WASHROOM



WATER FOUNTAIN



PICNIC TABLE



INFORMATION AREA



Other Features Audited





THINGS TO CONSIDER

Make sure to make note of where the access points

Is the access point directly on the path? Is there street access or road crossing? Do you access a trailhead via a parking lot?

Is the access point accessible?





THINGS TO CONSIDER

Hazards include potholes, large cracks, roots, stones, or even railway tracks. Any obstructions that may prevent you from accessing the trail safely are considered a hazard.

Make note of where the hazard is located. Is it directly on the path or off to the side/shoulder?

Make sure to take photos.

POINTS OF INTEREST



THINGS TO CONSIDER

Points of Interest are notable places along a path

These can include monuments, sculptures, look-out points, landmarks and more.

Points of Interest often have their own listings on AccessNow app.





THINGS TO CONSIDER

Use the Closure option to log any closures on the

If a section is closed off due to construction for example, write it in your description and share any possible detour routes you discover.

Our app will also track your movements when you go off course.













Results Report

2 Reviews Tables

Table 3: Reviews summary for Access Point marks

| Mark ID | Review | Accessibility |
|---------|--|---------------------|
| Mark 1 | | Accessible |
| Mark 7 | | Accessible |
| Mark 8 | Wide entrance and picnic tables | Accessible |
| Mark 9 | Peir 21 ships and busses | Accessible |
| Mark 15 | | Accessible |
| Mark 16 | | PartiallyAccessible |
| Mark 17 | Separate walking from cycling path over bridge | Accessible |
| Mark 20 | Steep and sharp turn | PartiallyAccessible |
| Mark 21 | Warning that bike rout ends | PartiallyAccessible |
| Mark 22 | Crosswalk | Accessible |
| Mark 23 | Rumble strip | Accessible |
| Mark 28 | Slope and speed of cars and no parking | PartiallyAccessible |
| Mark 38 | Accessible doors | Accessible |
| Mark 43 | For peds only. With bike parking nearby | Accessible |
| Mark 51 | From water street but no parking | Accessible |
| Mark 53 | Ferry terminal | Accessible |
| Mark 54 | Rd access to start of trail head | Accessible |

Table 1: Mark type statistics

| Type | Number |
|-------------------|--------|
| Access Point | 28 |
| Bench | 8 |
| Closure | 3 |
| Hazard | 2 |
| Information Area | 6 |
| Park | 1 |
| Parking | 4 |
| Picnic Table | 6 |
| Point of Interest | 14 |
| Terrain | 22 |
| Washroom | 2 |
| Total | 96 |

Accessible

79%

18%

Partially Accessible

Not Accessible

Figure 3: Marks by rating.

Table 2: Accessibility rating statistics













Mark 5

Mark's information

Mark type: Bench.

Accessibility: Accessible. Review: Plenty around.

Latitude: 44.64503; longitude: -63.56801.

Reviewed on: 2022-08-11 17:14:06.

Mark's images



Mark's information

Mark type: Terrain. Accessibility: Accessible. Tags: paved, flat, wide. Review: Centre line and railing seperates. Latitude: 44.65780; longitude: -63.58612. Reviewed on: 2022-10-12 17:57:14.

Mark's images



Mark 12

Mark's information

Mark type: Hazard.

Accessibility: NotAccessible.

Review: Dangerous construction forces you on road as cyclist.

Latitude: 44.65342; longitude: -63.57917. Reviewed on: 2022-08-11 17:47:10.

Mark's images





Mark's information

Mark type: Washroom.

Accessibility: PartiallyAccessible.

Review: Toilet not accessible but benches are and info panel.

Latitude: 44.65661; longitude: -63.58447. Reviewed on: 2022-10-12 17:59:07.

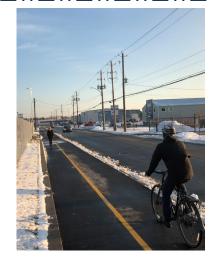
Mark's images



Pros & Cons of ACCESSNOW

- Easy to use
- See what others on trail have commented on
- Assists in Planning your trip
- Contribute to the sharing with others about accessibility
- Photos say a lot
- Is flexible no one is judging your experience
- Photos/info are stored by company

- Good idea to review the apps layout beforehand
- Each person may define features differently ie signage, cracks
- No idea what the limitations the person using the trail has. ie Anton
- Better to walk and use App.
- Rely on company to supply results









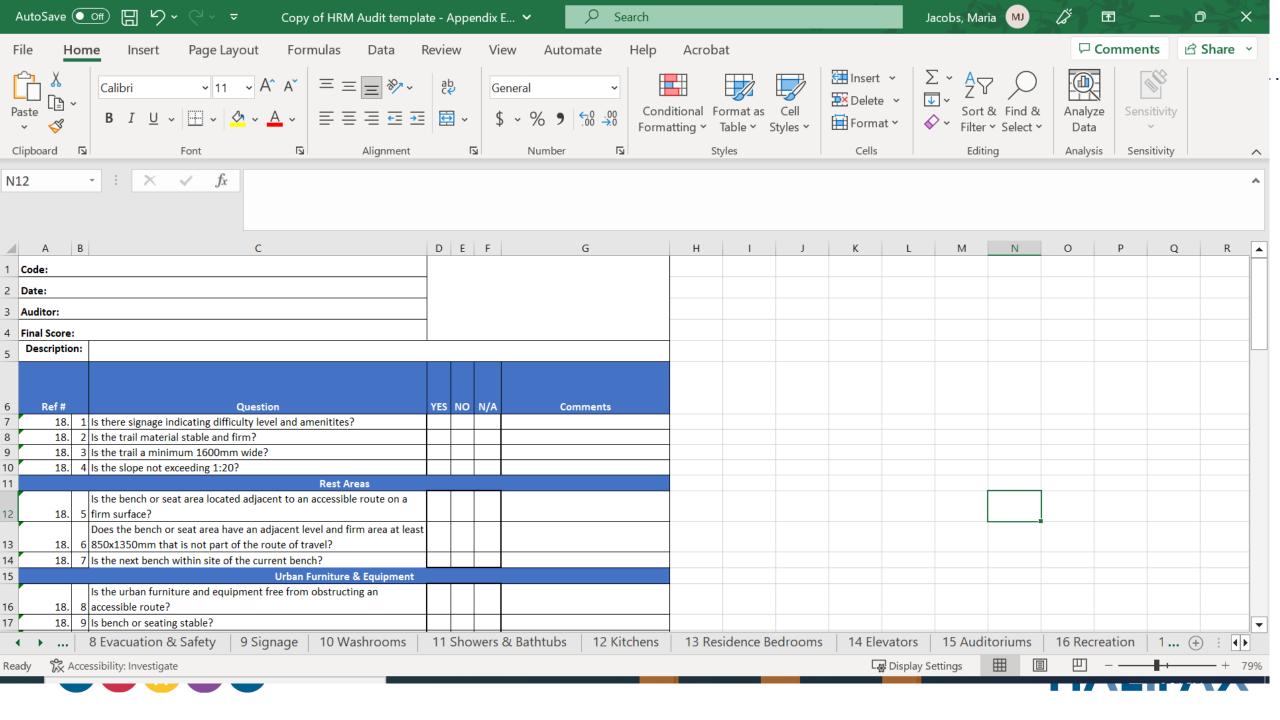


Sign up for eNews

Donate

About Us About Rick Get Involved Become Accessible Schools & Communities News & Stories Q

Attract more visitors & employees — get rated & certified.



Rick Hansen – Features audited

| 6 | Ref# | | Question | YES | NO | N/A | |
|----|------|----|---|-----|----|-----|---|
| 7 | 18. | 1 | Is there signage indicating difficulty level and amenitites? | | | | _ |
| 8 | 18. | 2 | Is the trail material stable and firm? | | | | |
| 9 | 18. | 3 | Is the trail a minimum 1600mm wide? | | | | _ |
| 10 | 18. | 4 | Is the slope not exceeding 1:20? | | | | _ |
| 11 | | | Rest Areas | | | | |
| | | | Is the bench or seat area located adjacent to an accessible route on a | | | | |
| 12 | 18. | 5 | firm surface? | | | | _ |
| | | | Does the bench or seat area have an adjacent level and firm area at least | | | | |
| 13 | 18. | 6 | 850x1350mm that is not part of the route of travel? | | | | |
| 14 | 18. | 7 | Is the next bench within site of the current bench? | | | | |
| 15 | | | Urban Furniture & Equipment | | | | |
| | | | Is the urban furniture and equipment free from obstructing an | | | | _ |
| 16 | 18. | 8 | accessible route? | | | | |
| 17 | 18. | 9 | Is bench or seating stable? | | | | - |
| | | | Does the bench or seat area have a seat height between 430-485mm | | | | _ |
| 18 | 18. | 10 | from the floor? | | | | |
| | | | Do benches or seating areas where there is more than one option | | | | • |
| | | | provide a mix of options? i.e., some with back rests, some with arm | | | | _ |
| 19 | 18. | 11 | rests, and some with both? | | | | |
| | | | | | | | - |

| | | Where a picnic table is provided is it located adjacent or connected to |
|------------|----|--|
| 18. | 12 | an accessible route? |
| - 10 | 12 | Where a picnic table is provided is it located on a level and firm surface |
| 18. | 13 | that extends at least 2000mm on all sides? |
| 18. | 14 | Where a picnic table is provided is it equipped with a knee clearance under the table at least 800mm wide x 430mm deep x 685mm high? |
| 18. | 15 | Where a bicycle stand is provided is it located so that bicycles do not protrude into the accessible pedestrian route? |
| 18. | | Where a bicycle stand is provided is the pavement surface around and under the bicycle stand textured and colour-contrasted to the surrounding surface? |
| 18. | 17 | accessible route is it located adjacent or connected to the accessible route? |
| _ _ 18. | 18 | Where a waste receptacle, recycling bin, or ashtray is located along an accessible route is it securely fastened to the ground, post or wall? |
| 18. | 19 | Where a waste receptacle, recycling bin, or ashtray is located along an accessible route is it securely fastened to the ground, post or wall with a max. lid height of 1060mm from the ground? |
| 18. | 20 | Where a waste receptacle, recycling, bin or ashtray is located along an accessible route, does it have a clear ground area of at least 800 x1350mm at the opening or lid? |
| 16. | | /here a waste recentacle, recycling hip or achtray is located along an |

| | ' | |
|-----|----|---|
| 10 | 24 | Where a waste receptacle, recycling bin or ashtray is located along an |
| 18. | 21 | accessible route is it cane detectable to the ground? |
| | | Where a waste receptacle, recycling bin or ashtray is located along an |
| 18. | 22 | accessible route is it colour contrasted with the surroundings? |
| | | Where grates around tress exist are their openings not greater than |
| 18. | 23 | 13mm wide in one direction? |
| | | dimensions of the opening is perpendicular to the primary direction of |
| 18. | 24 | travel? |
| 18. | 25 | Where grates around trees exist are they slip resistant? |
| | | |
| | | Where tree guards exist are they cane detectable at or below 685mm |
| 18. | 26 | from the floor if they protrude more than 100mm from the trunk? |
| | | Where the headroom due to the tree guards is reduced to less than |
| | | 2030mm from the floor is a guardrail or other barrier provided with its |
| 18. | 27 | leading edge at or below 60mm from the floor? |
| | _ | |

















Rick Hansen – Pros & Cons

- Relatively Easy to use
- Consistent with other groups using system – Facilities & Parks
- Contribute to the sharing with others in the business units about accessibility
- Information can be stored on HRM portal

- \$ to be certified and to hire someone to audit
- Each person may define features differently ie signage, cracks
- Calculations need to be made
- Need to figure how this will improve AT facilities
- Limited features to assess on AT routes
- AT team not responsible for picnic tables, benches, parking
- Use of spreadsheet / no visual









Provincial Interim Guidelines

5. Outdoor public spaces

5.4.1 Trails

Location:

Date and time:

Auditor:

Description:

Principle 1

Does this feature follow the whole journey approach?

Principle 2

Does this feature follow the concepts of universal design?

Principle 3

Is there an adequate seasonal maintenance program for this feature?



Wherever possible, pathways should have a width of 1200 mm or more, or provide passing space at that width frequently (5.4.1.d). Protective guardrails should be provided where there is a drop-off from the trail or pathway's edge (5.4.1.g).













| | | Yes | Most of | Some | No | N/A | |
|---|---------------------------|-------|-------------------|-----------------|-----|--------|--------------------------------|
| | Source | (+ 3) | the time (+ 2) | -times (+ 1) | (0) | (- 3)* | Comments |
| 5.4.1.a When a recreational trail system exists, is there at least one trail with an accessible entrance and path with a firm, stable, slipresistant surface? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.b Is the trail free of any obstacles on the path and overhead? | RHFAC (10-10. 1.4) | | | | | | |
| 5.4.1.c Does the accessible trail contain only low-gradient slope: running slope not exceeding the ratio of 1:20 (5%), and a cross slope not exceeding the ratio of 1:50 (2%)? | (10-10. 1.10) | | | | | | |
| 5.4.1.d Is there is a clear width of at least 1200 mm (47 in.), or passing spaces at regular intervals? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.e SEATING | | | | | | | |
| 5.4.1.e.i Is seating provided at regular intervals? | RHFAC (10-10. 1.10) | | | | | | |
| | | | | | | | chart continued on next page → |

| | | | Yes | Most of | Some | No | N/A | |
|-------------|--|---------------------------|----------|-------------------|-----------------|----------|------------|-------------------------|
| | | Source | (+ 3) | the time (+ 2) | -times (+ 1) | (0) | (- 3)* | Comments |
| 5.4.1.e.ii | Is seating provided before decision points? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.e.iii | Is seating provided before level changes? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.f | If the path crosses traffic, are crossings clearly marked? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.g | If there is a drop-off at the edge of the trail, is there a curb, barrier, or guardrail? | RHFAC (10-10. 1.10) | | | | | | |
| 5.4.1.h | If the trail is open at night, is the trail or path well illuminated? | RHFAC (10-10. 1.10) | | | | | | |
| | | | | | | | Subtotal | Max. score Actual score |
| | | | Subtotal | Subtotal | Subtotal | Subtotal | Final Tota | |
| | | | + | + | + | = | : | |

5. Outdoor public spaces

5.1.1 Sidewalks and walkways

Location:

Date and time:

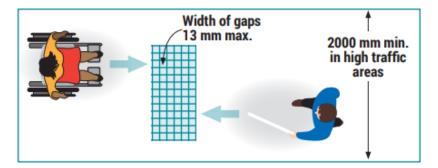
Auditor:

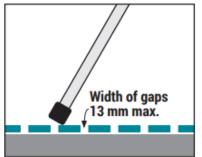
Description:

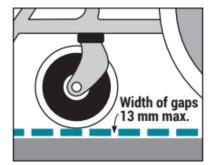
Sidewalk conditions can be assessed by walking the sidewalk section and noting cracks, misaligned sidewalk slabs, tree root damage, and gaps in utility grates or grilles (CSA B651-18, 4.3.4).











Example of an accessible pedestrian route in a high traffic area providing the minimum specified width (5.1.1.a). The grating is oriented in the direction of travel and has spacings that are a maximum of 13mm wide in one direction (5.1.1.d.i). Images of minor sidewalk crack and major sidewalk hazard (5.1.1.e) (Photos: Cities and Environment Unit)

| | | Yes | Most of | Some | No | N/A | |
|--|------------------------------------|-------|-------------------|-----------------|-----|--------|--------------------------------|
| | Source | (+ 3) | the time (+ 2) | -times (+ 1) | (0) | (- 3)* | Comments |
| 5.1.1.a WIDTH | | | | | | | |
| 5.1.1.a.i Is the clear width of the pedestrian route at least 1500 mm (59 in.), with no signposts, fixtures, or elements protruding into the space? | CSA B651-18 (8.2.2) | | | | | | |
| 5.1.1.a.ii In high traffic areas, when signs are present on the pedestrian route, is the accessible path at least 2000 mm (78 in.) wide? | HRM Bylaw S-801 15 (3)(e) | | | | | | |
| 5.1.1.b SLOPE | | | | | | | |
| 5.1.1.b.i Does the pedestrian route have a running slope not exceeding the ratio of 1:20? (5%)? | CSA B651-18 (5.1.2) | | | | | | |
| 5.1.1.b.ii Does the pedestrian route have a cross slope not exceeding the ratio of 1:50 (2%)? | CSA B651-18 (5.1.2) | | | | | | |
| | | | | | | | chart continued on next page → |

| | | Yes (+ 3) | Most of | Some -times | No | N/A | | |
|---|---------------------------|---|-------------------|----------------|-----|--------|-----------------------------------|--|
| | Source | (+ 3) | the time (+ 2) | (+ 1) | (0) | (- 3)* | Comments | |
| 5.1.1.c Surface | | | | | | | | |
| 5.1.1.c.i Is the surface material of walkway stable and firm? | CSA B651-18 (4.3.1) | | | | | | | |
| 5.1.1.c.ii Is the surface material of walkway slip resistant? | CSA B651-18 (4.3.1) | | | | | | | |
| 5.1.1.c.iii Does the surface produce minimal glare? | CSA B651-18 (4.3.1) | | | | | | | |
| 5.1.1.c.iv Does the surface have heavy visual patterning? | CSA B651-18 (4.3.1) | | | | | | | |
| 5.1.1.d GRATINGS | | *************************************** | | | | | | |
| 5.1.1.d.i When gratings are located on sidewalks and walkways, are openings 13 mm (0.5 in.) wide or less in one direction? | CSA B651-18 (4.3.4) | | | | | 5.1.1. | d.ii Are gratings placed s | |
| | | *************************************** | | | | | the long dimension of | |

| | | | Yes | Most of the time | Some -times | No | N/A | | | |
|---------|---|-----------------------------|----------|------------------|----------------|----------|---------------|-------------------------|--|--|
| | | Source | | | | (0) | (- 3)* | Comments | | |
| | Are gratings placed so that the long dimension of the opening is across the dominant direction of travel? | CSA B651-18 (4.3.4) | | | | | | | | |
| 5.1.1.e | Is the ground surface free of openings and irregularities that can catch accessibility equipment and cause a tripping hazard? | CSA B651-18 (4.3.4.a) | | | | | | | | |
| •••••• | | | | | | | Subtotal + | Max. score Actual score | | |
| | | | Subtotal | Subtotal | Subtotal | Subtotal | Final Tota | al | | |
| | | | + | + | + | = | | | | |

Provincial – Regulations from Phase 2

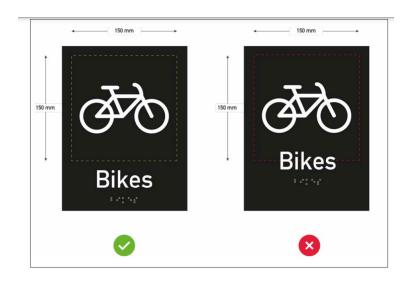
Parks and Recreation

Regulation: Government of Nova Scotia will develop, implement, and communicate

- 1. a ranking and categorization system for accessible provincial, municipal, and non-profit parks and trails that will assist people in planning recreation
- 2. accessible signage and viewpoints that clearly outline directionality, points of interest, emergency information and accessible amenities available.
- Maintenance of accessible trails, parks, etc.
- 4. Grants and funding opportunities



Wayfinding and Signage





Other ideas

Trail Master Plan

HNWTA Trails Brochure

Mainland North Trail

Hemlock Ravine Park Trails

Mainland Common Loop Trail

Belchers Marsh Park Trails

Geizer Hill Trail

Cabin Lake Trail

Fleetview Trail

Mill Run Trail

Old Coach Road Trail

Kearney Lake Trails

Blue Mountain Summit

Birch Cove Lakes Canoe Trail **Ratings System**

Trailhead:

Parkland Drive GPS N 44° 40.811' W 063° 40.690' Main Avenue

Mainland North Trail

Alternative Entraces:

Cross streets all the way from Main Avenue to Parkland Drive

Street parking at trailheads and on nearby side streets, handicapped parking at the top of Westridge Drive.

Bus routes: Visit the Halifax Transit Website for up-to-date routes and

Terrain and Surface:

This 4.5 km crusher dust trail with several gradual slopes is winter-

Rating:

This trail rated Fairly Easy.

Description:

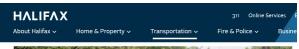
This power line corridor or linear park owned by Halifax is a popular walking and running route and is an Active Transportation route with greenway and natural buffers. There are many side pathways and green spaces along the trail. It connects to the Mainland Common where you will

Trail Map

Click here to enlarge map Google Map



Click here for directions























Questions

- 1. What is your general opinion of the auditing tools presented?
- 2. What feature do you think are the most important information to audit of have for residents?
- 3. What would the community want to do with the audited information?

4. Is signage and information shared on webpage more important than the results of auditing tools?





DISCUSSION



Active Transportation:

halifax.ca/transportation/cycling-walking

CONTACT

- Maria Jacobs: <u>jacobsm@halifax.ca</u>
- David MacIsaac: <u>macisad@halifax.ca</u>

