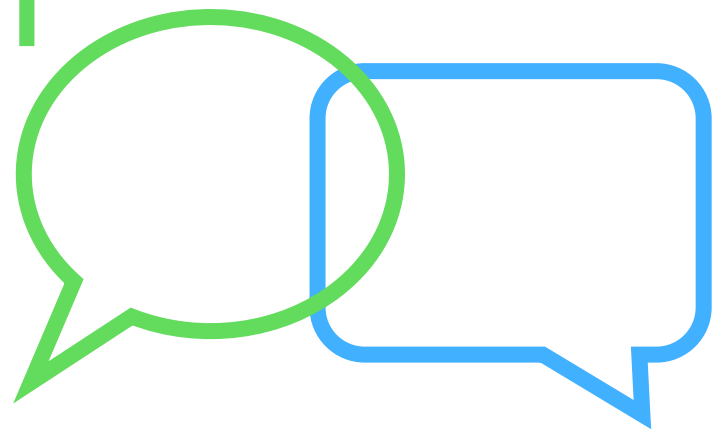


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# Quick Guide to Transportation Policy in the Main Street Dartmouth District



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# EXECUTIVE SUMMARY

The purpose of this document is to summarize all Transportation-related documents relevant to the Village on Main's efforts to get better transit connectivity along Main Street, in Dartmouth, NS, Canada. A summary of each Plan is provided, along with key tables and graphics.

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# REGIONAL PARKING STRATEGY FUNCTIONAL PLAN (2010)

GOVERNMENT OF NOVA SCOTIA

This parking strategy plan was created to compliment the Transportation Master Plan, and to guide decision makers on parking planning, as parking affects all aspects of development in the HRM. This plan outlines the Objectives and guiding principles, the key strategies to achieve said principles, and supporting strategies.

## OBJECTIVES AND PRINCIPLES

| Objectives   | Guiding Principles  |
|--|---|
| <ol style="list-style-type: none"><li>1. Support a choice of integrated travel modes</li><li>2. Encourage alternatives to the single occupant vehicle use</li><li>3. Help mitigate traffic congestion</li><li>4. Promote efficient land use</li><li>5. Operate efficiently and equitably</li><li>6. Support local businesses, tourism, and service sectors</li><li>7. Protect the environment</li><li>8. Link with other ongoing studies</li></ol> | <ol style="list-style-type: none"><li>1. Integration with other plans</li><li>2. Consumer choice</li><li>3. Multimodal interconnectivity and access</li><li>4. Efficient utilization</li><li>5. Flexibility</li><li>6. Pricing</li><li>7. Quality Vs. Quantity</li><li>8. Innovative approach</li><li>9. Consultation</li></ol> |

## CURRENT PARKING ISSUES AND CONDITIONS

Employers providing their employees with ample parking options impede the creation of compact, pedestrian friendly communities.

Most people going into the Urban Core do not drive the private vehicle because of parking prices. Twenty-nine per cent (29%) of survey respondents said they would shift to a different mode of transportation if parking prices rose or become less available.

Parking lots in downtown Halifax range from being 60-100% full, whereas parking lots were approx. 40% full outside of the urban core.

ES.1: Summary of Needs and Priority Areas table (Pg ES6)

## **PARKING STRATEGIES**

### **3.1 INCREASE PARKING EFFICIENCY**

- ➔ Shared parking [provisions and other mechanisms for flexibility in required parking
- ➔ Reduced minimum parking standards
- ➔ Maximum parking standards
- ➔ Introduce parking pricing on selected streets on weekends
- ➔ Improving user information to better explain parking regulation along with policies to reduce the number of parking fine for first time offenders
- ➔ Modifying the existing residential parking exemption program to allow implementation over a multi-block permit zone
- ➔ Increasing the use of the Parking by Permit Only Program in residential areas that have a high occurrence of employees using on-street parking, if desired by residents

### **3.2 STRATEGIES THAT REDUCE PARKING DEMAND**

- ➔ Involve Metro Transit I site design decision to ensure that transit needs are considered in advance of development
- ➔ Expanding and improving regular transit services - particularly to under-served employment areas such as Burnside
- ➔ Improve access to trunk transit services by improving feeder bus services and walking and cycling connection to park and ride lots
- ➔ Continue to price on street parking in commercial areas according to demand while ensuring frequent turnover
- ➔ Expanding the extent of parking pricing as appropriate and in consultation with business associations
- ➔ Improving signage to better explain time restrictions
- ➔ Providing discounts to fuel-efficient vehicles and high occupancy vehicles

### **3.3 SUPPORTING STRATEGIES**

- ➔ Maintaining the status quo
- ➔ Maintaining the status quo, in conjunction with a parking advisory committee
- ➔ Establishing a parking corporation or parking authority
- ➔ Establishing a distinct parking department or division
- ➔ Establishing a Parking District for specific areas
- ➔ Designating a Parking Manager
- ➔ Implementing A cash-in-lieu policy for public parking whereby developers would be relieved from some or all parking requirements in exchange for contributing a set amount to a fund that would be mandatory for development in Downtown Halifax
- ➔ Parking tax reforms

- ➔ Establishing a fund to allow HRM to direct revenues from parking to a dedicated fund
- ➔ Locating surface lot behind buildings and inside city blocks to avoid large gaps in building and public realm
- ➔ Ensuring architectural quality of parking structures
- ➔ Provide clearly marked pedestrian aisles in surface lots
- ➔ Barrier free parking facilities
- ➔ Using low impact development practices to reduce storm water runoff from parking lots and remove pollutants and sediments on site

# TRANSPORTATION DEMAND MANAGEMENT PLAN (2010)

HALIFAX REGIONAL MUNICIPALITY

Transportation Demand Management is a set of initiatives that work together to strategically render the transportation network more efficient and more capable of management the traffic demand of system segments. This plan outlines the HRM initiatives in Transportation Demand Management and compliments the Transportation Master Plan.

## FRAMEWORK GOALS:

1. Identify and Implement opportunities and program to reduce transportation energy consumption and emissions
2. Maximize the availability, appeal and use of fiscally and environmentally sustainable transportation
3. Ensure that TDM is disseminated to both HRM Staff and residents
4. Ensure land use and urban design support fiscally and environmentally sustainable transportation
5. Ensure that TDM is disseminated to both HRM staff and residents

## RECOMMENDED STRATEGIES FOR THE HRM

1. Ridesharing
  - a. Expand both public and private
    - i. Conduct a region wide assessment of the rideshare market potential
    - ii. Elevate marketing of ridesharing programs on campuses of university and colleges
    - iii. Investigate strategies to remove barriers for increased rider sharing
    - iv. Elevate the importance and awareness of rider sharing with appropriate stakeholders

## 2. Transit Pass Program:

- a. Elevate transit pass program awareness among major stakeholders
  - i. Incorporate mandatory policy for transit facilities and transit pass programs in the workplace

## 3. Carshare Program

- a. Undertake needs assessment & develop a long-range plan for TDM in the region
  - i. Use results from needs assessment to develop a long-range plan
  - ii. Work to include and support car share programs within HRMs TDM policies
  - iii. Reserve public parking for car share programs
  - iv. Update parking bylaw requirements, terms and variances and re-evaluate with consideration to car sharing programs.

## 4. Park and Ride

- a. Undertake a Needs Assessment & Development a long-range plan
  - i. Review future park & ride locations based on the following variables: location, functions, lot capacity
  - ii. Accelerate the development of infrastructure needed to support regional park and rides

## 5. Priority Parking

- a. Address priority parking in context with pricing and supply
  - i. Reserve the best parking spaces for vehicles that support TDM initiatives and sustainable travel characteristics
  - ii. Create TDM incentives using parking as a tool
  - iii. Meet with major employers about reserving private parking spaces for vehicles that exhibit sustainable travel characteristics

## 6. Public Bicycle Systems

- a. Undertake a region wide assessment of the potential for reserved public bicycle systems

7. Reserved Lane Program

- a. Undertake a region-wide assessment for the potential for reserved lane programs
  - i. Assess feasibility of HOV lanes
  - ii. Improve user information to explain regulations, function, and benefit of reserved lanes
  - iii. Review existing conditions of reserved lane systems, such as bus lanes and bicycle lanes periodically

8. Commuter Trip Reduction Program

- a. Improve user information & Marketing
  - i. Market strategy to major employer in area

9. Tax Reform. Information and Marketing and Outreach

- a. Market TDM using outreach tools & programs
  - i. Explore pricing mechanisms to establish/increase the costs for parking
  - ii. Address parking/policy/zoning/pricing connection in the context of external costs
  - iii. Initiate a region-wide effort to implement adopted TDM policies, ensure regional coordination and consistency and increase public awareness of sustainable transportation
  - iv. Formally integrate TDM into all transportation planning and programming processes
  - v. Improve TDM vision and knowledge and continue efforts to increase regional coordination
  - vi. Provide aggressive public education, marketing and advertising aimed at changing travel attitudes and behaviours • Develop a single, integrated customer-information hub for all TDM services

10. Settlement and Land Use Patterns

- a. Develop a long-range plan that considers a comprehensive strategy for settlement and land use
  - i. Create a holistic strategy with TDM initiatives of HRM and major development and infrastructure systems in the region

11. Land use bylaw requirements

- a. Evaluate & update bylaws
  - i. Update and develop new bylaws that encourage TDM initiatives

12. Development Processes:

- a. Incorporate land use with regional demand management

13. Single occupant vehicle (SOV) trip disincentives

- a. Develop disincentives for SOV
  - i. Raise acceptable congestion in exchange for developer contributions to TDM programs
  - ii. Develop financial disincentive to driving alone and incentive for using sustainable travel modes
  - iii. Investigate pricing tools that more accurately reflect the true costs of transportation
  - iv. Promote incentives for employers who undertake TDM activity

# CHOOSE HOW YOU MOVE- SUSTAINABLE TRANSPORTATION STRATEGY (2013)

GOVERNMENT OF NOVA SCOTIA

## GUIDING PRINCIPLES OF THE SUSTAINABLE TRANSPORTATION STRATEGY

1. Drive shorter distances;
2. Move more efficiently and use cleaner energy;
3. Increase access to employ and essential services; and
4. Help communities to create locally design and regionally integrated solutions.

## PROVINCIAL LEADERSHIP

Strong provincial Leadership is required to coordinate efforts provincially, across various government departments. This will be spearheaded by the Department of Energy and \$6M will be allocated to funding such initiatives. This will be called the Sustainable Transportation Fund.

1. Assign a clear mandate for sustainable transportation to the Department of Energy, with the responsibility of overseeing the development of the sustainable networks of this plan
2. Dedicate \$6M to advance sustainable transportation in the Province. Funds will be distributed the appropriate institutions to five categories of development:
  - a. Active transportation;
  - b. Public and community transit;
  - c. Land use planning;
  - d. Vehicle and fleet efficiency; and
  - e. Community engagement.
3. Conduct a comprehensive examination of current transportation legislation and regulation, and propose changes to support the development of sustainable transportation.
4. Create an interdepartmental sustainable transportation team responsible for implementing sustainable transportation networks.



5. The province will create a Sustainable Transportation Advisory Group with representation from stakeholders across NS.
6. Support the creation of an Urban Transportation Commission in Halifax, including representatives from different organizations, to explore traffic demand management and the creation of transit friendly environments.
7. All provincial projects will be planned, located and designed in a way that supports the development of sustainable transportation.
8. Through the Rethink: Greener Choices at Work initiative, the Province will;
  - 1) Promote active transportation facilities such as showers and bike racks, at all appropriate government owned buildings;
  - 2) Encourage the use of active and community transit; and
  - 3) Support good fleet management by right-sizing vehicles and exploring the use of shared resources between departments.

## SUPPORTING LOCAL ENGAGEMENT

1. \$3M of the Sustainable Transportation Fund will be dedicated to support the creation and implementation of local initiatives that support the policies and goals of this plan.
2. The province will create a \$3M sustainable transportation fund that runs every 3 years and supports community solutions and engagement around transit
3. Explore a variety of medias and methods marketing transportation education and promoting the adoption and acceptance of different transportation modes.

## SUSTAINABLE TRANSPORTATION NETWORKS

This plan aims to develop a network of a variety sustainable transportation forms, developing roads for specific forms of transportation like active transportation, transit and land-use planning. Each network will be supported by a specific initiative, while still integrating and connecting different networks throughout the province.

## ACTIVE TRANSPORTATION NETWORK

- Province will work to developing and implement The Blue Route. ..
- The province will develop an active transportation policy and plan.
  - This will include a process to guide the Province of Nova Scotia and the HRM work on priorities, design, planning, and funding for active transportation infrastructure.
- Province will develop a policy to ensure active transportation is included in all provincially funded building infrastructure. .
- Province will continue to encourage the development of municipal active transportation plans and policies.

## PUBLIC AND COMMUNITY TRANSIT

- Upgraded urban transit and prioritizing transit oriented development.
- Increase funding for the community transit systems in rural areas. Funding can come from the Community Transportation Assistance Programs (CTAP) or the Accessible Transportation Assistance Program, (ATAP).
- Develop an online information system that helps coordinate all public and private transit systems in Nova Scotia.

## URBAN AND RURAL PLANNING

- Develop a Provincial Statement of Provincial Interest on healthy communities and sustainable transportation to promote the development of active transportation and Complete Communities.
- Increase Human Resource resources for municipal planning within the Department of Service Nova Scotia and Municipal Relations.
- Ensure all municipal planning strategies and land use bylaws reflect the goals and objectives expressed in the Statement of Provincial interest.

## VEHICLE AND FLEET

- Continue collaborating with QUEST to advance sustainable transportation solutions.
- Support a commuter and larger vehicle fleet efficiency awareness program.
- Through a 100,000 grant to Efficiency NS Corp, the province will help fund projects that encourage the use of electric vehicles.
- Research options for public recharging vehicles stations, off peak charging and the viability of integrating electric vehicles onto the electricity grid.

## TRACKING PROGRESS

Tracking the progress of sustainable transportation in the province. This is done by establishing baseline data and tracking indicators.

## TRACKING ACTIONS

The province will publish baseline data on sustainable transportation, develop and monitor key indicators over time, and report annually to the public.

A Sustainable Transportation Center will be created. The Centre will collect, track, analyze, and make available transportation data.

# MOVING FORWARD

# TOGETHER PLAN (2016)

## HALIFAX REGIONAL MUNICIPALITY

The Moving Forward Together Plan aims to initiate and guide the reconstruction of the transportation network throughout the HRM. The Moving Forward Together Plan framework focuses on strengthening and enhancing the pre-existing transit network to support the Region's growth and to manage the demands that it places on the transportation system.

***The Moving Forward Together Plan focuses on 4 guiding principles for future transportation planning decisions:***

### PRINCIPLE 1: INVEST IN SERVICE QUALITY AND

The Moving Forward Together Plan aims to reconstruct the transportation network by investing in quality service and reliability. This means addressing issues in capacity, demand, and service frequency in pre-existing transportation infrastructure. Existing routes are analyzed to be made more efficient and make better use of local routes. The data that will inform this analysis includes data gathered from Automatic Vehicle Location (AVL) and Automatic Vehicle Count (AVC) units on each Halifax public transit vehicle.

### PRINCIPLE 2: INCREASE THE PRIORITY OF RESOURCES TOWARD HIGH RIDERSHIP

This includes a focus on the reallocation of transportation resources - allocating more resources to high ridership services, while reducing and eliminating low ridership services. This principal also provides guidance on time-based service allocation, such as demand management for peak-hour services and off-peak service coverage.

#### URBAN SERVICE TRANSIT BOUNDARY

- The Urban Transit Service Boundary identifies where the highest potential transit ridership exists.
- This establishes a scope for transit resource allocation.

#### OUTPUTS:

- Establish Corridor Routes
- Expanded Express Service
- Service Coverage in Off-Peak Periods
- Low Ridership Service Reduction

### PRINCIPLE 3: GIVE TRANSIT INCREASED PRIORITY IN THE TRANSPORTATION NETWORK

This Plan establishes **10 commuter-focused corridor routes**. This includes **Bus Rapid Transit (BRT) routes** and **express routes**. This principle is enhanced through implementation of more Transit Priority Measures (TPM).

Examples of TPMs considered in this plan include:

- Traffic Signal Priority
- Queue Jumps
- Bus lanes
- Transit corridors that are separated from other traffic

These TPMs allows transit to take a higher priority in road allocation; allowing rapid transit services to navigate areas of higher congestion with minimal delays. The implementation of low cost TPMs will be focused in transit corridors, with **11 prime locations identified for TPM implementation**. TPMs costs can be reduced by integration TPMs implementation into the construction processes of current construction projects and future construction projects.

### PRINCIPLE 4: BUILD A SIMPLIFIED TRANSFER BASE NETWORK

To render the transit network easier to understand and maneuver, routes will be rescheduled to have more consistency in service frequency and times. This allows for riders to predict their transit travel. In addition, the enhancement of passenger amenities, like terminal facilities and bus stops, will create a more comfortable user experience. Weatherproof bus shelters will be installed at all transit stops. Two transit terminals will be created, in Burnside and in Bedford, to facilitate transfers between transit service types.

#### OUTPUTS:

- Facilitated Transfers
- Easily Understandable Transit Network
- Improved Passenger Amenities

The implementation of this plan is intended to be phased; the reflections of the changes made annually can be found the Halifax Transit Annual Service Plans. A summary of implementation schedule follows:

## **STAGE 1: IMPLEMENTING THE NETWORK**

### **➤ FISCAL YEAR 2016-2017:**

- Addition of 330 routes through Tantallon
- Changes to Route 56
- Discontinuation of Portland Hills terminal
- Addition of a new connection to Bridge Terminal

### **➤ FISCAL YEAR 2017-2018**

- Elimination and realignment of low ridership routes and route segments
  - Route 402, special schools
- Introduction of additional express routes
  - Route 186 and route 330
- Route changes
  - Route 66, 22, 7, 370

### **➤ FISCAL YEAR 2018-2019**

- Changes to routes in Clayton Park, Fairview, Bedford, Timberlea
- Coincides with the expansion of the Burnside Transit Center

### **➤ FISCAL YEAR 2019-2020**

- Implementation in Halifax peninsula and Spryfield

### **➤ FISCAL YEAR 2020- 2021**

- Implementation of routes in Sackville and Bedford:
  - Wright Cove Terminal, West Bedford Park and Ride
  - Mareson Dr. / Middle Sackville Dr. Park and Ride
  - Implementation of routes in Dartmouth, Eastern Passage and Cole Harbour

## STAGE 2: EXPANDING AND MAINTAINING THE NETWORK

Once Stage 1 is complete, a five-year review will be conducted and a plan to expanded and maintain the transit network will be developed. Three topics of focus will be:

1. ***Building Frequency of Corridor Routes***
2. ***Service in Developing Areas***
3. ***Future Express Routes***

## Relevance to Village on Main:

Currently, transit services only cover 40% of the Main St, not only is Main St considered to be a potential Activity Hub, but this area is also closely located to a future transit terminals and Portland St Dartmouth, a street that currently has a very high transportation demand. The increase in transit service to Main St can help share the traffic demand of Portland St as well as provide connectivity to riders transferring services at the new Wright Cover Transit Terminal.

- This plan could be used to support the establishment of Main St as a corridor route, at the very least it provides support for the implementation of more efficient transit services throughout Main St as this would be an investment in existing transit infrastructure.

This information/idea comes from a presentation that was conducted by Adam Lanigan, a Project Engineer with HRM. He specializes in transportation modeling and predicts a significant increase in transportation demand on Portland, as a result, they are look to retro fit Portland St as well as find an alternative route for traffic to help share the demands being placed on Portland St. This presentation occurred in a PLAN 4106/6106 Transportation Planning (taught by: Md. Jahedul Alam) on March 22, 2022. His contact information, as provided at the end of his presentation, is [lanigaa@halifax.ca](mailto:lanigaa@halifax.ca)

The Moving Forward Together Plan suggests reductions in transit coverage services. These services are critical to create connectivity between VOM district and other district areas.

Some suggested transit routes changes suggested by VOM include:

1. Discontinue the 54 from Micmac Terminal to Downtown Dartmouth, instead extend along Breeze Dr. to Waverly Rd. where it can connect to the 55, and then loop back Via Lethbridge
2. Divert route 55 from Braemar towards Hartlen, run the routes through Raymond St. onto Waverly Rd.
3. Eliminate the residential responsibilities for Route 61, as it can be absorbed into the responsibilities of Route 68
4. Redirect route 63 to end at Micmac Terminal, via Main St (this will provide more coverage to Main St as well) then to Dartmouth Crossing, instead of ending on Penhorn Mall
5. Reroute the 68 to take over the residential responsibilities of Route 61
6. Continue straight going west on Highway No. 7 to Mic Mac Mall via Main St instead of detouring to the Portland Hills Terminal via Ross Rd.

In addition, Hartlen Street (Tacoma Center) is a candidate for Level 4 transit stop amenities, including electronic message boards, bike rack, payphones, and heated shelters.



# INTEGRATED MOBILITY PLAN (2016)

HALIFAX REGIONAL MUNICIPALITY

## OBJECTIVES AND THEMES

The integrated mobility plan focuses its objectives and policies around four major themes/  
guiding principles.

## COMPLETE STREETS

Street should be designed in a manner that meets the needs of all street users, regardless of their age, abilities, and preferred mode of transportation. To do this, the planning and design of streets should:

- Apply a complete streets approach. This should become common practice for all neighbourhood planning and streetscape improvement projects
- Prioritize walking, cycling and transit when allocating road right of way space
- Incorporate place making elements and opportunities and support the Urban Forest Master Plan and integrate with the Halifax Green Network Plan

The planning and design practices should be specifically tailored to individual street types and classifications. Street can be classified as either a link or a place, the design of these different streets will incorporate different approaches and different types and levels of services.

| <b>Streets categorized as a "link":</b>   | <b>Streets categorized as a "place":</b>  |
|---|---|
| <b>Identified by the movement of people through the street</b><br><b>Typically have high volumes of traffic and high ridership.</b><br><b>Act as connectors for communities</b><br><b>Need to manage the high volume of traffic</b><br><b>Utilizes multi-modal transportation planning.</b> | <b>Identified by the streets attractiveness, use and character.</b><br><b>Have a high density of pedestrian-oriented elements</b><br><b>Decorative sidewalk pavers, light poles, ornamental plant, and public art.</b><br><b>Have a high density of pedestrians</b><br><b>Should be very pedestrian oriented and walking friendly</b><br><b>The maintenance is overseen by an individual HRM staff member</b> |

Although effective, specified elements used to enhance the functionality and safety of link streets, like bike lanes and bus shelters, require a high level of maintenance. This poses a challenge to maintain link streets and further consideration should be given to enhancement elements that are more durable.

The amalgamation of these two problem areas should be considered and the maintenance of ALL placemaking element for that district should be overseen by its designated HRM staff member.

## COMPLETE STREETS PROJECTS

### Following the Pavers

The Following the Pavers project aims to help implement complete streets elements and features in the most efficient and cost-effective way. The most cost-effective time for these elements to be installed is when there is already planned construction on a street, like during street repair projects or retrofit projects. The elements identified in this project can be applied to street construction plans, along with the improved street plan prepared for specified streets. The elements identified in this plan are as follows:

#### **Right Sizing:**

Reallocate lanes that are no longer needed to provide uses that better compliment the streets in the context of being a link or a place. Some examples of uses:

- Bike lanes
- Widened sidewalks for '*link*' streets
- Tree-lined boulevards for '*place*' streets

#### **Curb Extensions:**

Appropriate use of curb extensions to create more complete streets. Curb extensions are used when on-street parking is provided, to increase pedestrian safety when crossing an intersection. These elements create shorter, more protected distances the pedestrians need to travel to cross an intersection. Curb extension also act to increase visibility at the intersection and slows vehicles down as they pass through the intersection. These elements should be integrated into the street network as roads are repaired or retrofitted.

## GETTING AHEAD OF THE PAVERS

The Getting Ahead of the Pavers project aims to accompany and enhance the Following the pavers project. The Getting Ahead of the Pavers project develops complete street and street enhancement plans for all key transportation corridors and streets. When these streets and corridors experience any sort of construction, the street plan can gradually be integrated into any current or future construction projects.

### *How to identify if a key street is incomplete:*

- Missing Pedestrian and cyclist infrastructure as per the Active Transportation Plan
- If it is identified as a key corridor in the IMP, but does not have TPMs
- The street is not reflective of the street's identity as a link street or place street

## GREENING

The Greening Strategy can be applied to construction project plans and can be integrated into renewal projects. This strategy utilizes trees and greening on boulevard, curb extensions and other spaces between the sidewalk and the road. This helps manage storm water, creates a barrier between pedestrians and vehicles to increase the sense of safety, and creates added visual attractiveness.

This section's objective is to provide direction to guide key aspects of transportation system including accessibility, safety, partnership, project evaluation and data collection.

## ACCESSIBILITY

It is important to provide a certain level of accessibility to all users, regardless of their cognitive and physical disabilities or limitations. Providing more accessible services allows for transportation to be a mode option for everyone.

### **Accessibility features include:**

- Pedestrian Clear Zones;
- Tactile Walking surfaces indicators;
- Curb ramps;
- Accessible pedestrian signals;
- New construction mitigation guidelines; and
- Repairing and maintaining sidewalks.

## SAFETY

The IMP aims to implement the Vision Zero/ Towards Zero approach which aims to significantly reduce the number of serious injuries and fatalities of road users.

## Partnerships

To implement the initiatives of the IMP, the cooperation and establishment of partnerships between the provincial government, federal government and other organizations is critical. Examples of partnerships include:

- Other orders of government
- Owners/Administrators of Infrastructure
- Institutional sectors
- Non-Governmental Organizations
- Community and Advocacy Groups

## Transportation Data

Data is essential to transportation planning as it enables decision makers to make evidence-based decisions. In the IMP, transportation data is critical for the planning, monitoring, and evaluation of transportation infrastructure. The following includes the data required for consideration:

- *Socioeconomic Data:*

This type of data provides population characteristics which informs planners where people live and work. This data also provides information on household size, income, and mode choice.

- *Traffic Data:*

This data quantifies traffic demand in specific locations. This allows planners to predict future trends and where infrastructure expansion or reduction is required.

- *Transit Data:*

The data relates to transit services and is the richest data source as it describes the movement of people throughout the municipality. Examples of this data includes running times and ridership counts.

## LAND USE AND TRANSPORTATION

**Objective:** To integrate the planning of the transportation network with community design to better facilitate active transportation and transit use through compact mixed-use development.

Key considerations for informing this sections policies and action items:

- Regional Center has the greatest potential for sustainable mobility as compact communities allows for resources concentration
- Suburban Growth Centres can become complete communities linked by transit, rather than continuing with segregated land uses that creates urban sprawl
- Rural Areas require specialized solutions due to the dispersion and low-density populations.
- Growth Centers must be aligned with transit to create an efficient create an efficient transportation network. Transit Orient- communities will facilitate this.
- Transit service must help shape land-use patterns
- Transit Land use policy must work together to support affordable housing
- Employment and public Facilities must be strategically located
- Industrial lands should minimize urban truck traffic

**Objective:** Reduce demand on the road network by supporting a range of convenient and reliable transportation modes and flexible work times and locations. Through the establishment of partnerships and the support of the Halifax Transportation Demand Management Function Plan (2010), congestion can be managed, rather eliminating it.

### GOALS:

1. Identify and implement programs to reduce transportation energy consumption and emissions
2. Maximize the availability, appeal, and use of fiscally sustainable, environmentally responsible and integrated transportation modes.
3. Enhance and support the use of alternative transportation modes
4. Enhance and support the use of alternative to single occupant vehicle trips
5. Ensure land use and urban design support fiscally and environmentally, sustainable transportation
6. Ensure the Transportation Demand Management s disseminated to both municipal and regional staff.

### Existing TDM initiatives to be expanded and improved

- Smart trip
- Ride hailing
- Car sharing

### Potential future TDM initiatives

- Flexible work schedules, compressed work weeks, working remotely
- Pricing signals
- Bicycle Sharing
- Incorporation mandatory consideration for TDM in new developments
  - Traffic impact assessments

## **MODE SPECIFIC GOALS AND OBJECTIVES:**

**Objective:** 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

### **GOALS:**

- Implement pedestrian infrastructure that is accessible to all ages and abilities
- Halifax will help to enable year-round cycling in all ages and abilities bicycle Network. This requires additional resources and council approval
- Expedite the planning, design, and construction of the regional network of multi-use pathways
- Expand active transportation connection in rural communities
- Connect communities by facilitating improved links for active transportation across geographical or structural barriers
- Monitor and evaluate the effectiveness of active transportation in regions using pedestrian and cyclist counters.
- Prepare for ongoing implementation of the active transportation priorities plan beyond 2019

**Objective:** Enhance transit service by increasing the priority of transit and improving the integration of transit service with land use and settlement patterns

**GOALS:**

- Plan new and existing transit priority corridors and terminals as focal points for higher density mix-use development
- Accommodate Transit Priority Measure in strategic locations by reallocating road right of way from private vehicles and parking to transit
- Continue to implement the Moving Forward Together Plan
- Consider alternate service and cost sharing models to serve low density areas outside urban transit service boundary
- Improve transit promotion and education

## **ROAD NETWORKS**

**Objective:** Limit the expansion of the road network and focus any additional investment in road infrastructure on strategic upgrades that support the municipality's mandate of encouraging a shift towards sustainable transportation modes.

**GOALS:**

- Limit further investigation in additional road infrastructure by reducing reliance on private vehicle trips and encouraging a shift towards more sustainability modes
- Apply a holistic lens to the evaluation, planning and design of road projects
- Make strategic upgrades to the road network, particularly when they support multimodal improvements
- Improve the efficiency of the road network using current and future technological advancements

## **PARKING**

**Objective:** Align parking management with the goal of shifting more trips to active transportation, transit, and car-sharing, while supporting growth in the Regional Center and in TODs and communities.

**GOALS:**

- Allocate curbside parking based on the curbside priority chart
- Use the price of parking to encourage active transportation, transit, and car sharing
- Continue to implement the 2013 parking roadmap

*Relevance to Village on Main:*

Amendments have been made to the MPS and the LUB to prioritize alternative modes to the single occupant vehicle, however these changes are unaccompanied by the transportation connection actions. Main St is a Transit Priority Corridor with only one minimal Transit Priority Measure (TPM). Main St is also a strong candidate for the Getting Ahead of the Pavers project.



# MAKING CONNECTIONS PLAN

## HALIFAX REGIONAL MUNICIPALITY

This is a priorities plan that outlines projects and opportunities for active transportation initiatives between 2015-2019 within the HRM region.

***These priorities are organized into 4 categories:***

### 1- PEDESTRIAN PLANNING

#### GOAL 1: CREATE A CONNECTED PEDESTRIAN NETWORK

In order for a pedestrian network to be considered complete, it must have continuous sidewalks and safe crossings for all ages and abilities.

- ➔ 33km of AT trails built since 2013 (4km/year)
- ➔ Areas with incomplete sidewalk networks:
  - Fairview
  - Spryfield
  - Dartmouth outside of the Urban Core
  - Sackville
  - Burnside Business Park

#### GOAL 2: DOUBLE THE PEDESTRIAN MODE SHARE BY THE YEAR 2026

Dartmouth East: Decrease 3.8 % between 1996 and 2011

Dartmouth South: decrease 3.3 % between 1996 and 2011

Dartmouth North: 2.1 % decrease between 1996 and 2011

**Mode share data is measured using the Journey to Work/Short questions found in the Long Form Census.**

### 2- CYCLING

#### GOAL 1: CREATING A CONNECTED BICYCLE NETWORK

- ➔ 95 km of painted bicycle lanes built in the HRM since 2006
- ➔ Opportunistic approach in the past has resulted in fragmented bicycle network

#### GOAL 2: DOUBLE THE BICYCLE MODE SHARE

Dartmouth East: 1.0% drop from 1996 to 2011 Dartmouth North 0.4% drop from 1996 to 2011 Dartmouth South: 0.8% drop from 1996 to 2011

*Source: Long Form Census, Statistics Canada*

### 3- MULTI-USE

These facilities are intended to serve both walking and bicycling. For example, a multi-use trail.

**GOAL → ESTABLISH A CONNECTED GREENWAY NETWORK: THE ACTIVE TRANSPORTATION GREENWAY**

Greenways are 3-4m wide trails that form part of a network intended for walking, cycling, and other active modes.

Other types of paths may be integrated into this network.

Max. grade should be 5% or 8% if appropriately design rest stops are provided.

### 4- ACTIVE TRANSPORTATION SAFETY AND PROMOTION

**GOAL → CREATE SAFER CONDITIONS WITH APPROPRIATE FACILITIES AND SAFETY PROMOTION PROGRAMS**

#### ***SAFETY PROMOTION PROGRAMS***

- Bicycle Camps and Courses
- Bicycle Safety Rodeos
- SmartCycle
- Bike Week
- Bicycle & Greenways Map
- Get Out Check It Out – Walk Hike Bike
- HRM CAN-BIKE

#### ***IMPLEMENTATION OF THE PROJECTS IS BASED ON:***

- Funding
- Regional Council and Community Council Approvals
- Staff and community capacity
- Property acquisition/easements.
- Co-ordination with other capital projects

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## PEDESTRIAN PLANNING & MAIN STREET DISTRICT

The MCP identified areas of incomplete pedestrian networks. Main Street District is not mentioned. More public engagement is necessary.

### RECOMMENDATIONS:

- 1) Develop a comprehensive strategy to address the gaps in the pedestrian network.**
- 2) Where a sidewalk is needed consideration should be given to building an AT greenway beside the road to serve both modes.**
- 3) A study to determine strategies to avoid new gaps in the pedestrian network by requiring contributions to off-site pedestrian infrastructure using the subdivision process in the Urban Areas.**
- 4) Undergo a Planning Review within Urban Areas to determine if there are areas where the costs of maintaining streets prohibits the ability to address the needs of pedestrians.**
- 5) Weather zoning amendments in those areas.**
- 6) Make adding a tactile surface indication in concrete curb ramps to assist pedestrians with visual impairments a standard practice.**

### INTENDED OUTPUTS OF THE MAKING CONNECTIONS PLAN:

- Add 20km of new sidewalk as part of the existing sidewalk program;
- Develop an arterial/collector sidewalk program that would add 3km;
- Develop rural pedestrian program to address key gaps, particularly in designated growth areas;
- Implement three “walkability” improvement pilot projects; and,
- Improve accessibility at up to 10 intersections through curb cut change, tactile markings, and audible pedestrian signals.

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## CYCLIST PLANNING & MAIN STREET DISTRICT

This section of the Making Connections Plan aims to met the needs of new cyclists and create a connected bicycle network.

### *RECOMMENDATIONS:*

- 1) The municipality should consider protected bike lanes where there are candidate bicycle routes and aim to implement at least one protected bicycle project in the next five years.**
- 2) Bicycle facility development in urban areas outside the regional center should focus on:**
  1. Improved connections to local destinations
  2. Completion of the Greenway Network
  3. New bicycle lanes and local street bikeways that were identified

### *OUTPUTS:*

- 15km of Local Street Bikeways, 5km of bicycle lanes, and 2km of greenways in the Regional Centre;
- One pilot project of a protected bicycle lane;
- Improve connections to MacDonald Bridge Bikeway on both sides;
- 10km of Local Street Bikeways outside the Regional Centre
- 12km of bike lanes and/or paved shoulders outside the Regional Center

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## MULTI-USE FACILITIES

Multi-use facilities accommodate both pedestrians and bicycles, and usually other active modes such as in-line skating, skateboarding, and scooters. Such facilities are separated from motor vehicles.

### RECOMMENDATIONS:

- 1) The municipality should focus on making connections in the greenway network in general, and specifically tackling those connections into and through the regional enter.**
- 2) The municipality should continue to support the Community Development Model for the development of greenways.**
- 3) For the next five years (2014-2018) of AT Plan Implementation, consideration should be given to prioritizing funds from Active Transportation and Regional Trails budgets towards greenways with a transportation focus.**
- 4) The municipality should continue to improve pedestrian and bicycle connections to its transit services. This includes finishing sidewalks on busy streets.**

### OUTPUTS:

- 15 new km of new greenways (multi-use trails);
- 13km of existing greenways upgraded (widen and/or paved);
- Five new pedestrian/ bicycle bridges (or at grade crossings of AT barriers like railway tracks);
- Five functional design plans to inform future projects.

# GOVERNMENT PLANS AS GUIDING A FRAMEWORKS

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These planning documents produced by HRM and Halifax Municipality all guide decision making for transportation development in the Main Street District. These plans are the foundation of the goals, objectives, and guiding principles of community plans - especially those produced by the staff of the Village on Main CID.

The hard working staff at the Village on Main work to produce continuously updated plans, studies and reports of transportation in the Main St District. The reports produced by Village on Main consistently embody the goals and objectives of Regional Transportation plans.

| Plan   | VOM Document   | Supporting Policy  |
|--|--|--|
| <b>Transportation Demand Management Functional Plan</b>          | <ul style="list-style-type: none"> <li>Active Urban Transportation Plan</li> </ul>   | <ul style="list-style-type: none"> <li><u>Safe and Walkable</u></li> </ul>   |
| <b>Sustainable Transportation Strategy</b>                       | <ul style="list-style-type: none"> <li><u>Public Infrastructure Plan (Goal 7)</u></li> </ul>   | <ul style="list-style-type: none"> <li><u>Projects planned, located and designed to supports the development of sustainable transportation.</u></li> </ul> |
|  | <ul style="list-style-type: none"> <li><u>Active Urban Transportation Plan</u></li> </ul>  | <ul style="list-style-type: none"> <li>Encourage the development of municipal active transportation plans and policies.</li> </ul>                         |
|  | <ul style="list-style-type: none"> <li>Connecting Communities: Safer, more Accessible Main Street</li> </ul>   | <ul style="list-style-type: none"> <li>Efficient pedestrian transportation networks</li> </ul>   |
| <b>Moving Forward Together Plan</b>                              | <ul style="list-style-type: none"> <li>Connecting Communities: Safer, more Accessible Main St</li> </ul>   | <ul style="list-style-type: none"> <li>Invest in Service quality</li> </ul>  |
| <b>Integrated Mobility Plan</b>                                  | <ul style="list-style-type: none"> <li>Active Urban Transportation Plan</li> <li>Main St Vision and Concept Plan</li> </ul>  | <ul style="list-style-type: none"> <li>Greening Strategy</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Genivar Transportation Study</li> <li>Assets, Opportunities, and Challenges</li> <li>Main St Vision and Concept Plan</li> <li>Public Infrastructure Plan</li> </ul> | <ul style="list-style-type: none"> <li>Getting ahead of the pavers</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Active Urban Transportation Plan</li> </ul>   | <ul style="list-style-type: none"> <li>Increasing the Accessibility</li> <li>Encourages use of Active Transit</li> </ul>                                   |
|  | <ul style="list-style-type: none"> <li>Active Urban Transportation Plan</li> </ul>   | <ul style="list-style-type: none"> <li>Improved Pedestrian Connections</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Assets, Opportunities, and Challenges</li> </ul>  | <ul style="list-style-type: none"> <li>Double AT modes by 2026</li> <li>Make conditions for AT safer</li> </ul>  |
| <b>Making Connections: Active Transportation Priorities Plan</b> |  |  |



# **Internal Plans, Reports & Studies: Village on Main**





# MAIN ST DARTMOUTH PLANNING VISION AND STREETSCAPE CONCEPT (2007):

EKISTICS PLANNING AND DESIGN

This plan was made in 2007 by Ekistics Planning and Design Inc., and was created to form a cohesive and sustainable street plan for Main St, as it represents a popular activity hub and contributes to an important transportation corridor. Main St, Dartmouth is located at a very advantageous location for many connections to other communities, such as Porters Lake, Preston, and Montague. Main St connects these communities to Downtown Dartmouth and major shopping districts. Additionally, Main St is surrounded by a unprotected watershed lands. Such a key street to the Dartmouth area warrants the creation of a street vision and concept plan, this report establishes a vision for the Main St district, balancing community interests with practical, achievable projects that can be implemented to support a long term street vision. This plan outlines recommendations to be made to Main St, based on a phased implementation Schedule.

## PHASE 1

The first phase of the plan is the **general street improvements**. This section outlines the action that should be taken over this **first 1-5 years** of the plan implementation and should be applied to the entirety of the Main St district.

*This includes:*

- 
- Sidewalk enhancements
  - Sidewalks take precedence over driveways Distinct pavers
  - Curb ramps,
  - No slip surfaces
  - Pedestrian scale lighting
  - Enough light for car safety
  - Recognize the dark sky compliance
  - Street trees
  - Billboard reduction
  - Street furnishings
  - Current median upgrades and additional median creation
  - 2 street trees/median
  - Woodland Corner Park Improvement
  - Prepare park features
  - New configuration to create better visibility at the park
  - Wayfinding kiosk
  - Adequate seating
  - Low maintenance plants

## PHASE 2

The Second phase is the creation and implementation of **pedestrian and bicycle infrastructure** improvements between **years 6 - 9** of the Plan.

*This includes:*

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- Pedestrian and Bicycle Connections (Main Street -> Forest Hills Extension);
- Future road upgrades to the 107 must continue the bicycle route from Sobeys to Lakecrest Dr., on the north side of the 107,
- This path should be made off-road due to power poles placed close to the road would interrupt the path;
- Future catch basins should be biker friendly.

## PHASE 3

The third phase outlines the **specific street improvements** to be made between **the 10 -30 year markers** of the implementation phase.

*This includes:*

---

### Lakecrest Street Improvements

- Consolidate driveways and parking lots on the north side of Main Street;
- Improve pedestrian access to Main St from Lakecrest Dr.;
- Create a new signalized intersection on Main St. near Mountain Avenue;
- Turn Lakecrest Dr. into the main Active Transportation corridor to connect users to the multi-use trail at Lake Banook;
- Investigate Hartlen St. Connection;
- Develop a new street cross section;
- Develop on-street bike lanes on Lakecrest Dr. ;
- Create parallel parking on the south side of Lakecrest Dr.;
- Install a 1.5 m sidewalk along the south side of Lakecrest Dr.;
- The implementation of pedestrian lighting

### Tacoma Street Improvements

- Sobeys Site Redevelopment
- Redevelop to mixed use with dense housing
- Change the 4-way stop on Gordon Ave to a signalized intersection
- Improve sidewalks on both sides of Tacoma, from Gordon Av to Hartlen Dr.
- On-street parallel parking allowed on the south side of Taconma Dr., between Gordon Av and Hartlen St

### Street Tree Program

- Best suited to the south side but can be applied everywhere
- Implement pedestrian scale lighting
- Establish an on-street transit terminal on Hartlen St and Tacoma Dr
- Hartlen St sidewalk repair and expansion to a min of 2.4m, in order to meet accessibility expectations

### AT Routes

West end of Lakecrest Dr. to Lake Micmac

- Multi-use trail
- Remove the slip lane to Braemar and build a right turn lane

Lakecrest Dr. AT Route

- Bike lanes on either side of the road  
Parallel parking on side of the road  
Multi-use trail at the east end of  
Lakecrest Dr.

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This report outlines a variety of policy recommendations, including:

- Down-zone C-3 zones to C-2 zones;
- Establish Main Street design guidelines;
- Conduct a Secondary Planning Study for the Main Street District;
- Conduct a Traffic Study of Main Street

# PUBLIC INFRASTRUCTURE PLAN (2016)

COAST TO COAST CONSULTING

***The Public Infrastructure Plan***, developed by Coast to Coast Consulting, aims to advance the Main Street district Vision & Goals outlined in the ***Main St Dartmouth Streetscape Vision and Concept Plan (2007)***.

## SITE CHALLENGES:

- Heavy traffic
- Poor pedestrian and cycling connectivity
- Inadequate infrastructure amenities
- Limited public space

The root of the issues come from the car-oriented design in this area. The public infrastructure plan outlines how this plan will address these issues.

## GUIDING PRINCIPLES:

- ***Pedestrians can travel through the site comfortably and safely;***
- ***Pedestrians can access public transit safely, comfortably, and conveniently;***
- ***People can travel by bicycle through the site safely;***
- ***People can drive by motor vehicle through the site easily and safely;***
- ***People view the Village on main as a destination;***
- ***People can interact with outdoor public spaces ;***
- ***All designs support sustainable and responsible development.***

The plan will focus on to be retrofitting car-oriented infrastructure for multiple modes and transportation.

## RECOMMENDATIONS

### ***SITE WIDE RECOMMENDATIONS:***

- Adjust motor vehicle spaces
- Narrower lanes
- Two way traffic lanes
- Improve pedestrian space
- Increase sidewalk throughways
- Create distinct furnishing zone that provides more pedestrian amenities
- Install lighting
- Maintain at-grade crossing on Main St, rather than adding pedways
- Install distinct pavement
- Make strategic use of natural elements
- Stormwater management like rain gardens and furnishing zones
- Add trees
- Define cyclist space
- Lane width of 1.5-1.8 min
- Protected bike lanes on Main St
- Addition of bike boxes and painted crossing lanes at intersections on Main St.

### ***SITE SPECIFIC RECOMMENDATIONS:***

- Improve Lakecrest Drive streetscape and expand cycling network.
- Add separated cycling lane to Lakecrest to connect
  - existing cycling lanes outside site;
- Add sidewalk on south side of Lakecrest;
- Remove on-street parking on Lakecrest;
- Improve Main Street streetscape.
- Reduce number of driveways turning off Main Street;
  -
- Add midblock pedestrian crosswalks on Main Street;
- Provide buffered cycling lane east of Tacoma.
- Establish Village Center on Hartlen Street (Figure E2).
- Build road extension of Hartlen and create large public open space to east of new road;
  - bicycle racks
  - Park-and-Ride
  - more park land
  - multi-use trail;
- Provide bike connections from Lakecrest cycling route to transit hub;
- Construct new signalized intersection and convert Tacoma east of Stevens Road to a park;
- Convert Stevens Road to a cul-de-sac;
- Paint bike boxes and crossing marks at new Tacoma-Main intersection;
- Convert intersection into a roundabout and remove shortcut lane on off-ramp;
- Upgrade Hartlen transit stop to transit hub with public amenities;
- Paint bike boxes and crossing marks at Hartlen/ Main intersection;
- Formalize parking on Tacoma using parklets;
- Improve Major Street and Gordon Avenue intersection and streetscapes;
- Expand pedestrian path network;
- Establish pedestrian right of ways connecting Lakecrest to Main, Main to Tacoma, Gordon to the transit hub, and Tacoma east of Hartlen to the transit hub.
- Improve parks and open spaces;
- Make purposeful use of slopes in BID and add features of interest;
- Create more public open space wherever possible to meet HRM open space guidelines;
- Create gateways to the site;
- Define 'Gateways' with signage, landscaping, public art, and traffic-calming measures; and
- Gateway can areas which facilitate the movement between areas.

## IMPLEMENTATION

This plan includes three Implementation phases:

***SHORT TERM*** -> Establish Village Identity

- Hartlen St extension
- Hartlen/ Main Intersection
- Improvements to current bus stops on Hartlen Gateways
- Streetscape improvements on Main (west of Tacoma) Add midblock crossings on Main.

***MEDIUM TERM*** -> Improve Active Transportation Accessibility

- New Intersection at Main St & Tacoma Dr
- Cycling route on Lakecrest Dr
- Streetscape on Main (east of Tacoma) and Lakecrest Dr
- Pedestrian pathways

***LONG TERM*** -> Improve Functionality and Connectivity

- Realign Hartlen Street to connect with Valleyfield Road
- Expand transit hub
- Streetscape improvements on Tacoma Dr & Gordon Dr
- Major Gordon Dr & Main St intersection improvements
- Gordon- Tacoma Intersection Improvements
- Improve existing parks

In the Context of Village on Main Transportation:

This document fills in the gaps between the key issues that still have not been addressed from the Vision and Concept plan (2007) by providing further recommendations. The following chart listed the completed recommendations:

| <b>Policy</b>                                     | <b>Action</b>  | <b>Location</b> | <b>Status</b> |
|---|--|-----------------|---------------|
| <b>Adjust motor vehicle spaces</b>                | Narrower lanes<br>Two way traffic lanes  | Various         | Complete      |
| <b>Make strategic use of natural elements</b>     | Add Trees  | Various         | Complete      |
| <b>Improve pedestrian space</b>                   | Distinct furnishing zone that provides more pedestrian amenities;<br>Sidewalk Throughway<br>Lighting<br>Distinct Paving<br>Rain Gardens and natural storm water management strategies<br>Cyclist lanes | Various         | Complete      |
| <b>Establish Village Center on Hartlen Street</b> | Build road extension of Hartlen and create large public open space to east of new road;  | Various         | Complete      |

The actions that are still incomplete are listed in the following chart;

| <b>Policy</b>  | <b>Action</b>  | <b>Location</b> | <b>Status</b> |
|--|--|-----------------|---------------|
| <b>Define cyclist space</b>  | Lane width of 1.5-1.8 min  |                 |               |
|  | Protected bike lanes on Main St  | Main St         | Incomplete    |
| <b>Improve Lakecrest Drive streetscape and expand cycling network.</b> | Addition of bike boxes   |                 |               |
|  | Add separated cycling lane to Lakecrest to connect<br>Existing cycling lanes outside site; | Lakecrest Dr    | Incomplete    |



|   |  |                         |            |
|---|--|-------------------------|------------|
|   | Add sidewalk on south side of Lakecrest;   |                         |            |
|   | Remove on-street parking on Lakecrest;   |                         |            |
| <b>Improve Main Street streetscape</b>                                      | Reduce number of driveways turning off Main Street;                                      |                         |            |
|   | Add midblock pedestrian crosswalks on Main Street; and                                   | Main St                 | Incomplete |
|   | Provide buffered cycling lane east of Tacoma.  |                         |            |
| <b>Establish Village Center on Hartlen Street</b>                           | Upgrade Hartlen transit stop to transit hub with public amenities;                       |                         |            |
|   | Provide bike connections from Lakecrest cycling route to transit hub; and                | Hartlen                 | Incomplete |
|   | Paint bike boxes and crossing marks at Hartlen/ Main intersection.                       |                         |            |
| <b>Improve Tacoma Drive</b>   | Construct new signalized intersection and convert Tacoma east of Stevens Road to a park; |                         |            |
|   | Convert Stevens Road to a cul-de-sac;  |                         |            |
|   | Paint bike boxes and crossing marks at new Tacoma-Main intersection;                     | Tacoma Dr.              | Incomplete |
|   | Convert intersection into a roundabout and remove shortcut lane on off-ramp;             |                         |            |
| <b>Improve Major Street and Gordon Avenue intersection and streetscapes</b> | Formalize parking on Tacoma using parklets.  |                         |            |
|   | →  | Major St/<br>Gordan Av. | Incomplete |

|  |   |                                    |            |
|--|---|------------------------------------|------------|
| <b>Expand pedestrian path network</b>  | Establish pedestrian right of ways connecting   | Lakecrest to Main                  | Incomplete |
|  |   | Main to Tacoma                     |            |
|  |   | Gordon-transit hub                 |            |
|  |   | Tacoma east of Hartlen-transit hub |            |
| <b>Improve parks and open spaces</b>   | Make purposeful use of slopes and add features of interest                            | Various                            | Incomplete |
| <b>Create more public open space wherever possible to meet HRM open space guidelines</b> |   | Various                            | Incomplete |
| <b>Create gateways to the site</b>   | Define 'Gateways' with signage, landscaping, public art, and traffic-calming measures | Various                            | Incomplete |

# GENIVAR TRANSPORTATION STUDY

## (2011)

GENIVAR INC. (2011)

The Genivar Transportation Study aimed to record the impact of changes to the transit infrastructure. This study was initiated by the HRM, as part the Main St-Dartmouth Streetscape Vision and Concept Plan (2007) and works to achieve the Main St District Vision:

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*The Main Street area will become a dense, mixed use village core with great pedestrian spaces, goods and services, and facilities that invite residents to walk or bicycle to obtain daily needs and in so doing informally interact with their neighbours.*

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### ***This stud:***

#### ➤ Traffic Volume (location based):

- Highway 107, east of the Preston exit → 2% vehicular growth rate per year,
- Main Street, west of Ross Road → 1.9% vehicular growth rate per year,
- Highway 107, between Main Street and Highway 118 → 2.6 % vehicular growth rate per year
- Main Street, east of Caledonia Road → 0.5 % vehicular growth rate per year

*Based on the information gained from the traffic volumes, future traffic volume models were created to predict the changes in trip generation over 10-15 years.*

## ACTIVE TRANSPORTATION AND TRANSIT

### GENERAL IMPROVEMENTS:

- Pedestrian crossings should provide high visibility
- Colour contrast/tactile pavers

*\*\*\*This may require many intersections to be redesigned*

### AT AND TRANSIT IMPROVEMENTS BY LOCATION:

- **Main St and Major St/ Gordon Av. intersection**
  - Addition of bike stop lines
  - Improved curb cuts
  - Increased definition of the separation distance between the sidewalk and the roadway
- **Main St. and Hartlen**
  - Contrasting pavement colour and texture for accessibility
- **Tacoma Dr./ Lakecrest Dr. Connection**
  - Implementation bike infrastructure
- **Gordon Av. and Tacoma Dr.**
  - Infrastructure upgrades to support pedestrian and bike traffic
- **Lakecrest Dr. and Major St.**
  - Shared bike lanes
- **Hartlen St. and Tacoma Drive**
  - Bike lanes created
  - If the intersection is signalized and bike box considered
  - Bike storage should be provided near the bus stop
- **Tacoma Drive and Valleyfield Rd.**
  - Add an all way stop
- **Raymond Drive/Lakecrest Drive and Walker St/Lakecrest Dr**
  - Add signage indicating bike route

### *PROPOSED ACTIVE TRANSPORTATION ROUTES:*

- Primary bike routes include Lakecrest Dr, Major/Gordon, Tacoma Drive loop;
  - 1.5m bike lanes min
  - 2m bike lane on both sides of the street in high traffic areas
  - 1.8m sidewalk
- Pedestrian train along the North-Side of Main St; and
- Multi-use trail way that allows two-way pedestrian and bike traffic, using the existing pedestrian overpass.

### *BIKE PARKING AND STORAGE RECOMMENDATIONS:*

- Create more bike access to store fronts;
- Provide bike parking within close walking distance to destinations; and
- Location recommendation: Hartlen.

### *TRANSIT FACILITIES*

- Move to Tacoma/Hartlen
- New stop should allow for bike storage, park and shop opportunities,
- Bus only lane and transit priority signal at Main and Gordan
- Traffic signal upgrades at Main & Hartlen so traffic lights change to green when a bus is detected

### *ACCESS MANAGEMENT*

Access management balances the wants and needs of the transit and transit users with the want and needs for adjacent land uses. The basic principles of this can be achieved by:

- *Limiting the number of conflict points*
- *Separating conflict areas*
- *Reducing interference with through traffic*
- *Providing adequate on-site traffic circulation and storage.*

Much of the Access management needs exist in the right of way and road allocation the excess of driveways is causing. To meet these needs, the Plan's recommendations include:

#### *CONSTRUCTION OF REAR LOT DRIVEWAY ACCESSES TO ADJACENT STREETS*

- *Reduction in number of driveways for specific sites:*
- *Consider where Main Street median can be constructed when determining driveway locations*
- *Construction of cross-connections between adjacent sites:*
- *Construction of shared driveways for adjacent sites:*
- *Replacing a full-movement driveway with a right-in / right-out driveway:*
- *Curbing long lot frontages to control driveway location:*
- *Construction of curbed median sections to reduce the number of left turns at driveways.*

### *STREET NETWORKS IMPROVEMENTS*

The Genivar study outlines 5 problem areas in the Main St District that need to be addressed.

- **Gordan St / Major St**
  - Option 1: Roundabout
  - Option 2: Additional Lanes at the Intersection

- **Tacoma Drive at Gordan Av**
  - Addition of traffic lights
- **Tacoma Dr to Lakecrest at Hartlen**
  - Hartlen Street Extension
- **Tacoma Drive & Lakecrest Connection to Main St:**
  - Provides North and South connection for the area
  - Pedestrian traffic signal lights moved closer to core
  - Signalized intersections
  - Stevens Road approach
  - Lakecrest approach
- **Vehicle Parking**
  - Parking should move towards the private sector to free up on street parking to reallocate the street use.

**THIS PLAN WAS COMPLETED IN 2011 AND SUPPORTS IDEAS FROM HALIFAX REGIONAL PLAN, DARTMOUTH MPS, DARTMOUTH LBUB.**

# ACTIVE URBAN TRANSPORTATION: THE ROAD TO MORE COMPLETE COMMUNITY

## VILLAGE ON MAIN

ANGUS DOCHERTY,  
FERN KAUFMAN  
COLEMAN KETTENBACH  
CHANTEL KHOURY  
JENNIFER LORNDON  
ISHNEANESU MAPONGA

### BARRIERS ADDRESSED

#### *ACCESSIBILITY*

- The ability for one to obtain a good or services regardless of their own ability.
- Complete communities provide transportation choices and services that all residents to meet daily needs and provide access to amenities for people of all different stages of life.
- Publicly accessible and integrated greenspaces, sidewalks, bike lanes, and bus routes.

#### *WALKABILITY*

- How friendly an area is to walking, regardless of a person's age or abilities.
- In order for Village on Main to become a complete community, the measure of walkability must cater to a variety of age ranges as VOM CID has a range of age groups
- Crosswalks, traffic lights, electric walk signals, sidewalks, sidewalk buffers, or curb extensions

#### *GREEN SPACES*

- Areas of grass, trees, or vegetation set apart from recreational or aesthetic purposes in an otherwise urban environment.
- In order to be a complete community, the district must be redesigned to incorporate land available to build green spaces that are accessible.



## RECOMMENDATIONS

### GREEN PARKING

Increase the amount of green and community spaces in the areas by consolidating parking lots into garages. These garages can potentially be further developed into mixed use buildings, allowing for more commercial space on lower floors.

### PUBLIC AND MUNICIPAL ENGAGEMENT

Establish a framework and implementation plan to address the specific needs of the Village on Main through community based planning and public engagement sessions. This will help to address concerns about age-friendliness and public transit.

### IMPROVEMENT OF INFRASTRUCTURE FOR ACTIVE TRANSIT:

Consider diversifying land use, merging residential and commercial spaces within buildings, increase residential density and incorporate active transportation infrastructure.

Improvements to infrastructure could include:

- Bike Lanes
- Footpaths
- Benches
- Water Fountains,
- Other park accessories

# ASSETS, OPPORTUNITIES AND CHALLENGES (2015)

VILLAGE ON MAIN  
ROSS GRANT  
PAUL DEC

## Goals of the Making Connections: 2014-2019 Active Transportation Priorities Plan

- 1) Establish a complete, integrate and readily accessible region wide AT network serving urban, suburban, and rural areas.
- 2) Double the number of person-trip using AT modes by 2026.
- 3) Make conditions for AT safer through the development of appropriate facilities and safety promotion programs.

### Obstacles to Achieving these goals

- The bike lane on Main Street currently ends at Caledonia Road. The AT Plan calls this bike lane a victory, but it is effectively a bike lane to nowhere;
- Commuters from Cherrybrook, Preston, and Eastern Dartmouth Communities have no safe bike connections to downtown Dartmouth and Halifax;
- There are no bike connections to the Lake Banook Boardwalk and Shubenacadie Canal Greenway Corridor;
- Many pedestrian spaces in the area are dangerous in need of repair and are not enjoyable spaces for walkers; and
- There is a 500-meter gap between the nearest cross walks over Main Street. This puts pedestrians and motorists at risk when jay walkers cross the road.

### Solutions

- Extend the bike lane on Main Street to the end of Lakecrest Drive, and eventually Tacoma Drive in accordance with AT Plan goals. Initially, this will not require a painted lane; it will be sufficient to place shared route and bicycle signs. As traffic on Lakecrest Drive and Tacoma Drive increases it will become necessary to paint bike lanes of at least two meters.
- Connect the extended bike lanes to the existing lane on Braemar Drive by way of an AT trail off Lakecrest Drive running beside the Main Street off ramp.

- Carry out streetscape improvements including trees, benches, landscaping and accessibility elements in the Main Street Area to provide a safe and enjoyable pedestrian atmosphere. This includes reducing the amount of access points to properties on Main St.
- Enhance pedestrian connectivity with a mid-block crossing on Main Street between Hartlen Street and Helen Avenue.

# CONNECTING COMMUNITIES; CREATING A SAFER, MORE ACCESSIBLE MAIN STREET

VILLAGE ON MAIN

## VOM VISION

*Vision:* To create an intimate, walkable community whose mixed-use diversity of commercial and residential space creates an area for everyone. We want to be friendly, green, accessible, inclusive, and to collaborate with the community.

## VOM MISSION

We are a Community Improvement District (CID) leading the transformation of our suburban community into an urban village that blends commercial and residential opportunities. Putting people first, we are creating the freedom to develop friendly and open spaces in a collaborative way.

## THE PEDWAY

- Although it is structurally sound, the pedway goes unused due to disrepair
  - *Rusted fences*
  - *Deteriorating concrete base*
  - *Poor lighting and visibility*

### *Pedway Goals:*

- **Goal 1: To Adapt to Community Health Guidelines**
  - The redesign of the pedway maintains an open concept that allows the proper airflow for managing COVID-19 transmission
- **Goal 2: Celebrate Community Identity**
  - The design of the pedway embodies Dartmouth's identity as the 'City of Lakes'
- **Goal 3: Create Safe and Inviting Mobility Options**
  - Essential upgrades make the pedway safer for everyday use
- **Goal 4: Deliver a range of mobility options**
  - Add pedestrian and AT connections, creating a wider range of efficient and safe pedestrian options

### *Improvement to the Pedway:*

- *Solar powered lighting*

- *Convex safety mirror*
- *Resurface the damaged pathway*
- *Add webcam surveillance along the pedway*

## THE MURAL WALKWAY

Located along Tacoma Drive, a mural design created by Lynda McConnell would transform the 440 Foot concrete wall into a beautiful mural. The mural will add colour to the Village on Main and will be representative of the new energy and transformation the Main St District is undergoing.

*The mural includes:*

- *A veteran's tribute*
- *Rowing on Lake Bannok and Lake Micmac*
- *Books by Nova Scotian authors*
- *Mi'kmaq Medicine Wheel, LGBTQI2S+ Flag*
- *And more!*

### *Mural Walkway Goals:*

- ***Goal 1: Celebrate Community Identity and create a better pedestrian experience***

The mural is a new addition which will showcase the community identity that is reflective and inclusive of the diverse residents and heritage of Main St District.

# RECOMMENDATIONS FOR ACTION:

*Some first steps to addressing these issues include:*

**Undergo a new transportation study of the Main St district to re-evaluate Main St Dartmouth need for transit allocation.** This should be done to reconcile the discrepancy between Halifax Transit guiding data and the comments put forward by residents and community member regarding transportation through and to the Main St District.

**Create a Village on Main Re-development Plan,** that combines the current transportation with new transit planning practices. Street redesign should align with the Integrated Mobility Plan, the Moving Forward Together Plan, and the Making Connections Plan.

**Create an implementation plan for the Village on Main Re-development Plan,** to allow transportation amenities and redesigned elements to be implemented in a phased manner, based on available resources and upcoming constructions projects that are to occur in the Main St District. Priority should be placed on low-cost improvement projects.

**Create a forum to facilitate communication between Community Improvement Districts and HRM Staff responsible for place-making improvement elements. This Staff members project can be expanded to include the oversight of all place-making and transit related improvement projects within the district.** This can ensure Main St is not overlooked for improvement projects and ensures Main St transportation data can remain relevant and reflective of the VOM community