

A Review of Active Transportation Plans in Atlantic Canadian Communities: Motives, Hurdles, and Pitfalls

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Abstract

In larger urban centres, the key motivation behind promoting active transportation is often driven by transportation demand management. The modal shift from automobile trips to active modes of transportation such as walking and cycling is intended to reduce the dominance of the single-occupancy vehicle as the primary mode of transportation. Decreasing single occupancy use is intended to lessen traffic congestion and promote environmental sustainability and healthy lifestyles. But in smaller urban centres without serious traffic congestion and with limited capital resources, the motivations behind active transportation are often different.

Recently, several medium-sized communities have undertaken active transportation plans in Atlantic Canada. This paper presents a review of recently-developed or in-progress active transportation plans. The motivation for community groups to steward the development of these plans will be discussed. The active transportation and bikeway plans developed for Colchester-Truro, Nova Scotia, and Corner Brook, Newfoundland were reviewed along with knowledge of other plans in development in Atlantic Canada, current demographic trends, and current practice of planning active transportation facilities.

This paper will explore the background conditions in these small to medium Atlantic Canadian communities. The motivating factors behind active transportation plan development will be reviewed. To provide a successful plan and implementation program, the stakeholder consultation program is vital. The project team also requires an understanding of the political and human factors inherent in active transportation planning, a deviation from the traditional engineering approach.

Introduction

Why would a small community struggling with to fund their public works program initiate an active transportation plan? These communities often have very few traffic congestion areas. Transportation Demand Management is unheard of. Lately, there have been several cases of groups of concerned citizens approaching smaller municipalities in order to demand more active transportation facilities for walking, cycling, and other active modes. The result has been the development of several active transportation and trails master plans in medium-sized communities in Atlantic Canada. The motivating factors behind the development of these plans and the background conditions in which they are developed differs from larger urban centre and therefore the approach to devising the plans must account for the characteristics of the community.

Active transportation refers to any form of human-powered transportation. This includes walking, cycling, rollerblading, skateboarding, pushing a stroller, running, skiing, and so forth. Active transportation plans provide long-term vision for active transportation facilities, consider benefits and opportunities to promote active transportation and propose network and facility improvements and strategies for their implementation.¹ The purpose behind active transportation plans is to improve opportunities for active transportation use, not to detract from facilities from other modes of transportation.

The development of active transportation Plans in the small to medium communities in Atlantic Canada has been driven by different factors from the major urban centres across Canada. The background conditions affecting the development of these plans are different in the smaller communities. As a result, the motivation behind the plan creation is different and local stakeholders play a critical role in the plan development. This paper explores these background conditions, the motivations behind the plans, and the way pitfalls and hurdles to plan success can be avoided through an inclusive stakeholder consultation process and an understanding of the human and political factors behind the plan. Through this, lessons may be learned to aid with the development of active transportation plans in small to medium communities.

Background Conditions

The typical medium-sized community in Atlantic Canada is significantly different from the major Canadian urban centre. For the purpose of this study, the medium-sized communities considered have a population of 20,000 – 100,000. These communities typically have a very rural component. The population density can be half that of the typical Canadian centre. There are some exceptions due to the way the cities have been formed. The average age of the community is 3 - 5 years older than that of the population in an urban centre. Table 1 summarizes these indicators for some of the medium-sized Atlantic Communities in comparison with larger centres.

With a smaller population and typically lower tax rates, the small-to-medium community has a smaller capital works budget. It can be difficult to justify investment in active transportation facilities if the municipality is struggling to provide the most basic infrastructure. The construction of new active transportation facilities tends to be very low on the priority list.

The largely rural nature of these communities and the low population density typically results in spread-out cities requiring longer trails and more facility construction. For example, the trail network proposed in Colchester-Truro, Nova Scotia consisted of linking 30 km of the Cobequid Trail, 20-km trail network in Victoria Park, as well as the Shubenacadie Trail and the Trans Canada Trail.²

The rural nature of the communities tends to support other recreational activities which may impose themselves onto the active transportation network. These activities include snowmobiling, snowshoeing, and especially riding of all-terrain vehicles (ATVs). The conflict

between the automated recreational vehicles and the active transportation plan development could be the subject of another paper but will be touched upon briefly in this paper. Luckily, winter activities such as snowmobiling typically do not conflict because there are few pedestrians and cyclists during the winter months.

Table 1: Population Indicators

<i>Town / City</i>	<i>Population</i>	<i>Population Density</i>	<i>Average Age</i>
Small-to-Medium Atlantic Canadian Communities			
Miramichi, NB	18,129	100.8	43.1
Corner Brook, NL	20,083	135.5	43.6
Colchester-Truro, NS	50,023	13.8	42.5
Yarmouth, NS	10,304	17.6	42.6
Quispamsis, NB	15,239	267.8	37.5
Sackville, NB	5,411	72.8	43.4
Major Urban Centres			
Halifax, NS	372,679	67.9	39.0
Fredericton, NB	50,535	386.7	38.4
St. John's, NL	100,646	225.6	39.1
Winnipeg, MB	633,451	1365.2	38.7
Toronto, ON	2,503,281	3972.4	38.4
Ottawa, ON	812,129	292.3	38.4

Source: Statistics Canada website

Another predominant factor is the health conditions of the citizens. As seen from Table 1, the average of age of these citizens is slightly older than the typical urban centre. Another health concern is the predominance of obesity in Atlantic Canada, particularly outside of the major urban centres. For instance, 41 percent of New Brunswickers would be considered overweight based on the Canadian interpretation of Body Mass Index (BMI) of 27 or greater. This is the highest percentage in Canada and a dramatic increase from 16.5 percent in 1985.³ Obesity leads to an increased risk of diabetes, high blood pressure, incontinence, heart disease, asthma, arthritis, back problems, and stroke. The causes of obesity have been mainly been associated with a sedentary lifestyle, the widespread consumption of junk food, and lack of physical activity. The Canadian Medical Association and provincial medical associations have previously urged all levels of government to encourage active transportation by encompassing active transportation principles into community planning and infrastructure renewal and by developing and enacting public education and awareness programs to increase understanding of the relationship between health, active transportation, and the environment.⁴

For the small to medium Atlantic Canadian community, in many cases, the impetus behind active transportation planning is Public Health not Transportation Demand Management (TDM). TDM refers to initiatives to reduce use of single-occupancy automobiles for the purposes of reducing traffic congestion and providing environmental sustainability. The need to reduce traffic congestion in the small-to-medium Atlantic municipalities is much less of an issue than it is in the major centres. For example, the Halifax Regional Municipality, included as part of its regional municipal planning strategy with respect to travel demand management the provision of an active transportation plan and network.⁵ Traffic congestion is typically not an issue in the smaller communities.

Often, in these communities, using active transportation for commuting is impractical. In the case of Colchester-Truro, there were several obstructions against commuting or utilitarian use of active transportation modes. These factors included weather, availability of trip-end facilities (i.e. bike lockers, showers, etc.), and the trip distance.⁶ These factors are also prevalent in several other communities considered due to the dispersed population, harsh winters and often the need to

travel to the closest major centre for employment which may also be shift work with non-standard hours. It would be very difficult to impose conditions that would result in a major modal shift for home-to-work trips to active transportation in these communities.

Even the use of active transportation for home to school trips is not as prevalent as many children now are bussed to school or dropped off by parents. In another municipality, the local school district actually mandated that children should not ride their bicycles to school. The reasoning was thought to be that the safety of the cyclists could not be guaranteed with the presence of the school buses arriving on site.

While public health may be more of an impetus than supporting alternate forms of commuting, the groups that come together to form the active transportation plan often are committed to building a more sustainable community. There is often a clear understanding of the importance of active transportation within the overall transportation system of a community.

Motivation Behind Active Transportation Plans

On October 1, 2008, the headline story in Miramichi, New Brunswick, was the closure of Morrissey Bridge. The ninety-year old structure was being closed due to being structurally unsafe and too costly to repair.⁷ The bridge served as a key crossing not only for vehicles but for pedestrians and cyclists in the area. The City of Miramichi consists of several unique communities amalgamated together and therefore connectivity between the communities was considered key in the amalgamation. The closure of the structure united several different interest groups to form the Miramichi Trails Coalition which is currently stewarding a trails master plan for the City of Miramichi.

The Town of Quispamsis has recently embarked on an active transportation planning process citing the desire for healthy lifestyles and the concern for environmental sustainability.⁸ The Town has developed with both rural and sub-urban components which both have separate needs. Portions of the Town are dense subdivisions while other portions are rural in nature. The geographic diversity of the Town creates many scenic areas. The impetus behind the request for active transportation plan development was a group of citizens approaching the Town to request more facilities for active transportation. The Town is now commissioning an active transportation plan with a realistic implementation plan to provide for the needs of the citizens.

The motivating factors behind the development of active transportation plans are wide-ranging. Some of the motivating factors could include the want or need of:

- A recreational trail network for personal use for active cyclists or runners
- A recreational trail network for tourism
- Improvements to existing trails
- Sidewalks for children to walk to school
- A trail to connect different communities to prevent long, circuitous routes for cyclists or walkers.
- Adequate pedestrian connections to transit facilities
- Environmental sustainability through increased use of active transportation modes
- Decreased traffic congestion through increased use of active transportation modes

While in the case of Miramichi, it was the need for community connections that acted as a catalyst for the plan development, in other medium-sized Atlantic communities, there has been the need for connected recreational trails. In the case of Cape Breton Regional Municipality, the college was the main motivator behind the active transportation plan development as active modes were the main travel modes for the college students. What is being observed is the motivation for the development of active transportation plans starts from community groups working together. These groups often consist of community associations, walking groups, cycling groups, among other interested parties.

The motivation often starts with recreational active transportation uses. The purposes of active transportation are:

- Active Commuting which involve journeys to and from work
- Active Workplace Travel which include trips during working hours such as delivery of materials or attending meetings
- Active Destination-Oriented Trips which include trips to and from school, shops, visiting friends, and running errands.
- Active Recreation which involve the use of an AT mode for fitness or recreational pursuits, such as hiking or cycling.

Due to the spread-out and combined rural/urban nature of the cities, active transportation is rarely used for commuting, or even for destination-oriented trips such as trips to/from school. A typical resident anywhere will only walk between 500 m to 600 m before choosing to drive or cycle for up to 3 km for utilitarian trips. In these communities, the utilitarian trips are often too long to make by non-auto mode. Destination-oriented trips for tourists may be more likely during the summer when tourism is at its peak and the weather is conducive to active transportation modes. The bulk of trips considered in the small-to-medium Atlantic Canadian community are for recreation.

The Importance of Stakeholder Consultation

The active transportation plan development process can be derailed for a variety of reasons. Including the right set of stakeholders and concerned public in the consultation and education process can be key in avoiding pitfalls in plan development.

Political interests can derail the best-laid plans at any stage of the plan development and implementation. A plan may be halted not only in its development but also during the implementation if its political support falters. The political decision makers are often uneducated in what active transportation is. To the decision makers, it may seem counter-intuitive to allocate funds on a facility for which there appears to be little demand. The need and demand for these facilities may not be particularly obvious in a small community. Support from politicians should be gained during the plan development stage. If the politicians are involved in the plan development, they are more likely to become champions for the plan or at least provide greater levels of support. To be very successful, champions within the community should be found for the active transportation plan development. These champions may later act as allies in the request for funds to implement the plan. The champions do not necessarily need to be politicians but political support is essential. If politicians attend the stakeholder meetings with the citizen representatives, they will see the support for the plan development and understand how the plan came together. (It can also help the project's cause if pictures are taken of the politicians at the meetings to later have proof of their support.)

Stakeholder consultation is essential to the plan development process. The stakeholder consultation should occur early in the project. It can be very effective to two-to-three day

workshops for the key stakeholders early in the project. This allows for education of key personnel, a walk-through of specific routes or problem areas, discussions on vision and key destinations, and interviews with individuals to gain insight into the system from stakeholders with various perspectives.

The stakeholder group is typically composed of a diverse group of interest groups. Some of the representatives may include:

- Councilors
- Planning Department
- Recreation Department
- Engineering Services
- Public Health Services
- Provincial Government
- School Board / District
- Cycling groups
- Walking / Running groups
- Transit
- Police services

The various interest groups that came forward to support the plan development may have competing interests. For example, citizens concerned about safety for children walking to school may prioritize sidewalk construction near schools where an advocate for environmental sustainability may prioritize trail connections towards the major employment centre. Runners would define a desirable trail standard differently from a cyclist. By providing education sessions for the entire stakeholder group, everyone is able to state their views and agree upon the desired priorities for the trail system. The implementation plan can then build upon the priorities agreed upon by the stakeholder group.

If certain groups are not included in the stakeholder consultation, they may later act to derail the plan. One example has been the recreational drivers of all-terrain vehicles (ATVs). There has been debate about whether ATV use should be allowed in the active transportation network. For any municipality with rural components, ATV use is often widespread and popular. ATV industry sales figures indicate that although the population of Atlantic Canada (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador) is only 6.9% of the total Canadian population, over the past seven years, these provinces have represented 10.9% of the total ATV sales in Canada.⁹ The ATV users often create their own trails or thrive on a gravel trail surface with the typical unpaved cross-section design.

The reasons for prohibiting ATV users from using trails are that these vehicles are generally seen to create a lot of dust and noise that residents and other trail users would consider a nuisance. Also, there is a concern for misuse on the paths, resulting in unsafe conditions for pedestrians and cyclists. Not including ATV users in the consultation process for the trail development has resulted in problems after the plan development. In Corner Brook, Newfoundland, measures meant to act as barriers to keep ATV users off the bicycle trail network have been vandalized with

paint. Through the community of Paradise in Annapolis Valley, Nova Scotia, a trail was constructed purposely with barriers to prevent ATV users from accessing the trail. The provincial government originally supported the prohibition of ATV users on the trail but later opened the barriers. The adjacent land owners provided surveys which indicated that the majority of residents preferred quieter active transportation uses for the trail and disagreed with the allowance of ATVs.¹⁰ The inclusion of ATV interest groups in the Active Transportation Plan development process may be contrary to the notion that ATVs should not share trails with walkers and cyclists and other forms of active transportation. However, inclusion of representatives from this group would ensure that the process is not derailed in later stages.

Residents impacted by the proposed active transportation plan measures should also be included in the consultation process. These residents may successfully oppose the plan at the end stages of development or during the plan implementation. A few complaints from residents on some of the plan's components can be enough to lose political support for the plan and halt the plan implementation. While changes such as adding a bicycle lane or developing an abandoned rail bed as a trail may seem minor, they can pose a major nuisance to a resident as they may result in changes to their front yards, reductions in parking, a loss of privacy, or a perceived reduction in property value. It is important to have all residents who might be impacted aware of any changes and involved in the planning process, if possible. Another tactic that may be successful is to attempt to avoid development of trails in residential areas.

The protest of even a few citizens against any of the plan elements can delay or halt the implementation of the entire plan. This makes it critical to include any possible detractors in the plan development process. By ensuring that possible detractors are included in the planning process, the support for the plan can be solidified. It is extremely important to ensure that as many interest groups as possible are included in the plan development.

The Human Factors

Through the development of active transportation plans, human and political factors impact the plan which may not be obvious to the engineers who are developing the majority of the active transportation plans. The traditional engineering approach does not always result in a successful plan that meets the needs of the small to medium-sized community.

Budgetary constraints may hinder the implementation of the active transportation plan. For the council, unless there are recognized local champions for the plan, it may be easy to prioritize other improvements over the plan implementation. There may be less perceived demand for the proposed trail network improvements compared to other municipal services. There may be an unwillingness to fund first phases of the active transportation plan due to concern about the need to commit to future investment.

The traditional engineering approach has often favoured development of a comprehensive, paved trail with a phased construction plan. The construction costs that could be associated with such plans may be discouraging to the small community's council. In order to overcome these concerns, some recommendations can be made which involve very little capital investment. These may include signage, a public awareness campaign, or re-striping a section of roadway or trail. These quick victories maintain the momentum of the plan and show the public that the plan is being followed through. In some cases, a minimalist approach to construction projects may be more successful. For example, formalizing existing unmarked trail may create a low-cost component of the active transportation network, providing an adequate if not ideal surface for cyclists.

Contrary to the traditional engineering approach, the importance of the public consultation process cannot be understated. Engineers often lack a keen understanding of the political environment in the municipality which may be required in order to ensure the plan is supported

and approved. The inclusion of all the right stakeholders in a meaningful consultation process is essential to garnering support for the plan.

The importance of the public education component of the active transportation plan cannot be understated. The plan should not just include the proposed trail network and implementation plan. The branding of pre-existing trails can be critical to gaining more users and political support for active transportation facilities. Educational and promotional programs ensure the success of the new trails and additional public awareness of the existing facilities within the community.

Also, where available, the entire plan development process should comply with provincial and federal government requirements to receive grants for improving active transportation facilities. Recently, the higher levels of government have set up programs to promote the use of active transportation and these programs must be researched to determine the applicable program and the application process to receive funding for active transportation network improvements.

Conclusions

The small-to-medium sized Atlantic Canadian community has a different motivation for developing an active transportation plan. Unlike a larger urban centre, these small communities experience no traffic congestion. The dispersed nature of development and often severe winter weather conditions result in dependency on automobiles for commuting. As such, the primary motivation is often health-driven as opposed to traffic congestion. Other motivating factors typically include environmental sustainability, community connections, and the need to improve pedestrian connections to improve conditions for children. The trip purpose of Active Recreation is the most predominant in these discussions. These communities have small capital works budgets.

During the development of the active transportation plan, stakeholder involvement is key in ensuring continued support for the plan. Including politicians in the stakeholder process can result in political support and an awareness of the public support for the plan. A diverse group of stakeholders must be included in the plan development process after a brief education in active transportation planning. These groups may come to the table with competing interests but through working together, they will understand the most important priorities. Residents impacted by the potential trail development must be included in the process. Another thought would also be to include other user groups such as ATV sport representatives.

The traditional engineering approach may not be successful as human factors need to be recognized in developing the plan. The construction program must be appropriate to the available budget. The plan may also require public awareness and education campaigns.

The success of active transportation plans in the small to medium Atlantic Canadian communities is due to the support of active citizens interested in making their communities healthier and more sustainable. Their continued success is dependent on developing plans with an understanding of the local concerns, interests, and environment.

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