



Changing transportation behaviour in Atlantic Canada

Overview

This article profiles several Atlantic Canadians who have changed their transportation habits as a direct result of their participation in a sustainable transportation program. Their stories illustrate how even simple transportation initiatives can have a long-term, beneficial impact on people's travel behaviours—changing drivers into carpoolers, transit users, cyclists, pedestrians and teleworkers.

Selected Resources

The Sustainable Cities Challenge in Canada.
<https://www.siemens.ca/web/portal/en/AboutUs/Sustainability/SustainableCitiesChallenge/Pages/Default.aspx>

For other resources mentioned specifically in this paper, please see the **Resources** section at the end of the paper.

Sustainable Transportation in Atlantic Canada

Electricity generation makes up the single largest source of greenhouse gas (GHG) emissions in Atlantic Canada but the emissions associated with the transportation sector come in a close second and they are on the rise. In 2006, transportation emissions accounted for 31% of all emissions in the four Atlantic provinces, slightly higher than the national average of 25%.

Reducing emissions and improving sustainable transportation options are top-of-mind issues for many Atlantic municipal leaders. In a 2010 report entitled *The Sustainable Cities Challenge in Canada*, 243 municipal experts from across Canada shared their thoughts on a variety of sustainability issues. The experts from Atlantic Canada cited transportation as the second most important infrastructure issue (after water infrastructure) facing their cities in the next decade.

Two concerns dominate this debate. One is the age of the transportation infrastructure. Cities in Atlantic Canada, and those in Nova Scotia in particular, have some of the oldest road and bridge infrastructure in the country (Statistics Canada). Recent extreme weather events, such as tropical storms and hurricanes, put even more pressure to replace aging infrastructure.

More importantly, the report highlighted the need for greater public awareness of sustainable transportation and the need to change people's travel behaviours to more sustainable modes. Two-thirds (66%) of the Atlantic Canadian respondents who participated in the *Sustainable Cities* report cited public awareness and behaviour change as the most serious transportation challenges facing their cities.

This paper showcases some of the ways that Atlantic Canadian communities are helping residents to make the change from single occupant driving to more sustainable modes of transportation by providing programs and services that meet their needs.

This article shares the stories of four Atlantic Canadians who have changed their travel behaviours as a direct result of policies, programs or other initiatives available within their communities.

Bus rapid transit

Atlantic Canadian cities have much smaller populations than most other cities in Canada; Halifax, Nova Scotia is the largest with a population of just under 400,000. Municipalities with smaller populations often find it more difficult to provide full public transit services to their residents as they do not have the population to support the cost.

Two of the stories in this paper, however, illustrate how a new and cost-effective rapid transit service has changed the way many people living outside of Saint John, New Brunswick commute into the city. This high-quality transit service was part of the city's overall transportation plan to reduce the number of cars on city roads.

Cycling programs and support

Increasing the number of cyclists in any city can be challenging. Safety fears, long commutes, and the lack of amenities at work or school (showers, bike lockers, etc.) are all barriers to those who may wish to cycle to work instead of drive.

Two of the stories in this paper, however, show how even simple initiatives can persuade people to cycle more. One outlines how students, faculty and staff at Memorial University in St. John's, Newfoundland benefit from a bikeshare program; the other shows how a "bike buddy"

system helps new cyclists gain the confidence to cycle in city traffic.

Changing habits, one person at a time

All aboard the community express!

When Saint John Transit (SJT) introduced its ComEx (Community Express) service in 2007, commuting life suddenly became a whole lot easier for two local residents, Michael and Chris.

The ComEx bus rapid transit service serves several bedroom communities of Saint John, New Brunswick.

"Before ComEx, my family relied solely on our vehicle for all forms of transportation," says Michael. "We hadn't even considered carpooling." He first learned of the new service from a co-worker and then visited the SJT website for more information.

Michael's bus commute takes about 20 minutes from his home in Rothesay into Saint John.

"After taking the bus for a few weeks I decided I was going to use it full time," he says, adding that he shifted his work schedule to begin half an hour earlier to match the bus schedule. "That way I didn't have to wait at work or the bus stop for any length of time."

Michael says that the cost of the service was one of the primary reasons he switched. "Through work our bus passes are not only at a discounted business rate but are also subsidized at the cost of our employer. That meant that the cost of a monthly bus pass went from \$99 to \$59.25," he says. "Compared to having a second vehicle—if you consider the cost of car payments, insurance, gas and maintenance—we are saving a great deal of money." He also says that helping the environment, the convenient location of the bus stops, and federal incentives that provide a tax credit to transit users also played a role in his decision to switch.

Since making the move to transit, Michael says that he walks more and has built up his stamina. "Overall, I feel better by the time I get to work," he says. "Another great thing is that I don't have to worry about the commute. Traffic jams and extreme drivers are now the responsibility of the bus driver, and I no longer have to get up in the morning to clear the snow off my vehicle and waste gas warming it up on cold days."

The only negative he's found is if he needs to leave work in the middle of the day since the ComEx service runs only during peak hours.

"It's a great service with great drivers and I'm very satisfied with the initiatives that Saint John Transit has introduced," he says. "ComEx is extremely valuable and they just added another bus to our area, so it will continue to grow with the community."

Chris says that he used to drive from his home in Hampton to his job at the University of New Brunswick in Saint John. He first heard about the new transit service through word of mouth then contacted SJT's assistant general manager for more details.

He now rides the bus every day, except in the months of July and August when he is typically out of town.

Chris's reason for switching wasn't cost or the environment, but time.

"I'm a workaholic," he admits, "I'm in early and I leave brutally late and I've done that my entire life. I realized that if I started taking the bus, it would force me to leave the office at a reasonable time. It helped me to shift my mindset and I'm not putting in 14 hour days anymore."

Originally from Boston, Chris was used to the U.S. version of mass transit where there are few stops along the route and passengers are dropped off at a central location. Similarly, ComEx has only one or two stops between the outlying communities and Saint John and one major drop off point once the bus reaches the city. From there, passengers can take other city bus routes to reach their final destination.

Chris's bus stop is a 10-minute walk from his home and the bus drops him at a park and ride facility in Saint John. "The Hampton stop is right outside a Tim Hortons, so I grab my coffee then grab a paper from the local grocery store then grab the bus." Once he arrives in Saint John, he takes a local bus straight to the university.

Once at the university, Chris occasionally needs to travel to meetings uptown, but not having a car hasn't posed a problem. "ComEx allows you unlimited travel—the cost is covered as part of the pass—so if I have meetings I just jump on the bus from the university."

Although his commute time doubled (going from 30 minutes by car to one hour by bus), Chris says that he can do some work during his bus ride, something he couldn't do if he were driving. "This isn't a milk run. There are one or two stopping points and as long as that concept stays, I'm in."

Chris is now celebrating his second year using the service. Like Michael, Chris says that not having to shovel his driveway or clean snow off his car in winter is a big plus. "That makes a big difference to me—it's just get up and go for us walkers!"

Chris says that ridership in Hampton is so strong that Saint John Transit had to buy an articulated bus to accommodate all the passengers. "Hampton is what I would call a unique community with lots of artists, professionals and people who are environmentally conscious," he says, "so I'm not surprised that ComEx has done well here. People use the bus because it fits with their beliefs."

Bikesharing in St. John's, Newfoundland

When Obadah, a summer student at Memorial University (MUN) in St. John's found out about the MUNBikeshare he jumped at the chance to make his commute easier.

MUNBikeshare loans out bicycles to students, faculty and staff and also gives members access to a repair shop and workshops.

"For a small deposit, I get a bike all summer," he says. "I'm also pretty environmentally conscious so if I can find a way to help, I'll take it."

Obadah says that since he switched to cycling every day, he's more alert once he gets to class. "When I was taking the bus I had to take two routes and was still sleepy once I arrived," he says. "With the bike I'm awake and there are shower facilities at the university."

As an asthma sufferer, Obadah's doctor had encouraged him to participate in activities that would build up his endurance and cycling fit right in. And although he admits that cycling in St. John's can be tricky—the city is quite hilly with many ups and downs and no cycling lanes—he has seen the benefits of cycling every day. "I now have a flat stomach!"

Bike buddy program supports new cyclists

It's only been a few months since Olivia switched from driving to cycling to work, but she can't imagine any other way now.

Olivia works at the IWK Health Centre in Halifax, Nova Scotia. The IWK took part in the annual Commuter Challenge and Bike to Work Week campaigns and it was an ad for those events on her workplace intranet site that caught her eye.

"The ad said that new cyclists would be assigned a bike buddy who would ride to work with you," she recalls. A few months prior to the Commuter Challenge Olivia had bought a bike with an eye to riding to work but had never had the courage to do it. Having a bike buddy was too good a deal to pass up.

"Initially, I was terrified to cycle to work since I hadn't been on a bike since my early teens," she says. "The first day that I met my first bike buddy, I rode on the sidewalk to the place where we were meeting up. I was simply too afraid to ride on the road. But on my second day, my second bike buddy was a doctor and she went out of her way to meet me at my front door and rode the entire way with me."

Both buddies gave her lots of tips, advice and encouragement and, as Olivia says, "eventually weaned me off their guidance! But I love the fact that they gave me all these great tips. My first bike was very heavy and they

convinced me to buy a lighter bike and padded shorts—they make all the difference!"

She admits that she was anxious cycling to work during that first month. "I just wasn't used to it," she says. "I grew up in a little neighbourhood without much traffic. This was a whole new scary world. But now, I just love it and the anxiety and fear is gone. I've even bought waterproof panniers so that I can grocery shop on my way home."

Since beginning to cycle in late May 2010, Olivia reports that she's gained muscle, lung capacity, and has lost some weight. She is now trying to convince her husband and stepson to try cycling on the weekend.

When she first started cycling, her commute took about 30 minutes, but with the regular exercise, she has shaved about 10 minutes off her time. Compared to when she was driving, her commute time has remained about the same because, as a driver, she used to park several blocks away. "I don't have to contend with the same issues in traffic anymore and instead of parking farther way, I now ride straight to work and lock up at the bike racks by the front door."

Olivia says that one of the unexpected benefits is that she no longer has road rage. "I used to be an impatient driver but now that I'm on a bike, I just follow the rules of the road and if some driver is being a jerk, I let it pass."

When asked if she planned to continue cycling in the winter, Olivia wasn't sure. "I went to one of the workshops they held during Bike to Work Week and they told me that the right clothing is the key to winter cycling. I'll see how far into the colder months I can get."

Programs, policies and initiatives

Each of the programs highlighted in this paper is described below.

Commuter Challenge / Bike to Work Week

The Commuter Challenge and Bike to Work Week are separate events, but many Canadian communities run both campaigns concurrently in late May and early June each year.

Bike to Work Week's mandate is to encourage and promote the use of the bicycle as transportation to work, while the goal of the Commuter Challenge is to encourage Canadians to leave their car at home and walk, cycle, take transit, carpool or telework instead of driving to work alone. This national challenge is a friendly competition between communities and workplaces to see which region or workplace has the highest percentage of healthy commuters during the weeklong event. More than 135 Canadian cities participated in the 2010 Commuter Challenge.

ComEX

ComEx is a bus rapid transit service that provides morning and afternoon peak hour service to citizens in outlying areas to and from uptown Saint John, New Brunswick. ComEx serves residents of Grand Bay-Westfield, Rothesay, Quispamsis and Hampton.

“The surrounding communities fully subsidize the ComEx service to make up for what is not collected from the fare box,” says Brian Thorne, SJT’s assistant general manager. “For us it is a break even in that the taxpayers in Saint John do not have to cover the expenses of providing service to the outlying communities. The service reduces pollution, congestion, decreases wear and tear on asphalt, and reduces the infrastructure required to park vehicles.”

Saint John Transit and the Saint John Parking Commission are also working in partnership to provide an integrated transportation network for the area. For example, the Saint John Parking Commission has introduced Share Your Ride, a community carpooling website that lets commuters find ridesharing partners in their area. Free ComEx parking lots are also provided for those who want to park their car and ride the bus, or as a meeting and drop off point for ridesharing partners.

Each ComEx bus removes up to 40 cars from the road, eliminating the need for 40 parking spaces in uptown Saint John. By using ComEx, area residents reduce CO₂ emissions and traffic congestion and save money on their commuting costs.

MUNBikeshare

Memorial University (MUN) BikeShare has been active since 2007. Its goals are to encourage cycling as a healthy, accessible and sustainable mode of transportation within the city of St. John’s, Newfoundland and to empower cyclists, both veterans and beginners, with mechanical and safety education through workshops and a repair shop. MUNBikeshare also works with the city on its cycling plans.

Each semester, BikeShare rents out bikes to MUN students, staff and faculty at a cost of \$40 (a \$20 deposit, which is refunded once the bike is returned, and a \$20 fee). Riders do not have to pick up and return the bike each day; rather they keep the bike and use it throughout the entire semester.

The annual \$20 fee also allows cyclists access to the repair shop’s tools and resources. The shop’s mechanics are there to assist only so that cyclists gain mechanical knowledge. The MUNBikeshare repair shop is the first co-operative bike repair shop in St. John’s and is run mostly by volunteers. Workshops include commuter safety, bicycle repair and maintenance, and winter cycling basics.

BikeShare was created by MUN’s Project Green, which promotes sustainable living to students, university staff and

faculty, and the community as a whole. Through events and initiatives, like the MUNBikeshare, Project Green aims to raise people’s awareness about environmental issues.

Highlights

As evidenced by the *Sustainable Cities* report, referred to at the beginning of this paper, many municipal experts agree that increasing public awareness of sustainable transportation and changing people’s travel behaviour is one of the biggest challenges they face.

There is a perception that traveling by car is less time consuming and more convenient, but in many cases, cycling or taking a bus may actually take the same amount of time, or even less.

In addition, as the rates of certain lifestyle-related illnesses such as obesity, Type II diabetes and heart disease skyrocket as a result of inactivity, the benefits of active commuting have the potential to dramatically improve the health of Canadians, while decreasing the amount we spend on health care.

The people interviewed for this paper made a change to their commuting behaviour for a variety of reasons. Health was often cited as a contributing factor in their decision, but the original impetus to make the change came about as a direct result of a program or initiative offered in their community or workplace.

This section presents some of their insights on how program managers can remove impediments and make sustainable transportation more comfortable and reliable for all citizens.

Rapid transit must be convenient and cost-effective

Chris of Hampton, New Brunswick was impressed with the way the ComEx rapid bus service was introduced as part of the Saint John’s strategic plan to reduce car traffic in the city.

“If you provide a good service and you get people changed to the habit of using it, they’ll stay with it. They won’t revert back.” The fact that ComEx was introduced at a time when gas prices were high, says Chris, didn’t hurt. “The timing was right so that helped a lot. And, once people were committed to using the bus, even after gas prices came down, they stuck to it.”

The key, he says, is reliable service and travel times. “It’s got to be there every day, otherwise people will revisit their decision,” he says. “If I was going to take the bus, it had to be reliable and fast. If a trip normally took me 20 minutes by car and two hours by bus, I wasn’t going to switch.”

He notes that transit is especially important in outlying areas where everyone has a car. “People have options and won’t put up with any inconveniences.”

He also says that transit managers shouldn't underestimate other elements, such as the condition of the fleet. "The ComEx buses are new and comfortable. They're not marked up or dirty."

Michael began using ComEx because it was priced right. In addition to the savings of not having to own and operate a second vehicle, Michael's employer subsidizes the ComEx bus pass, cutting the monthly cost almost in half.

One of the findings of the *Sustainable Cities* report was how much of a role transportation infrastructure plays in a city's competitiveness. The experts cited in the report concluded that, "investing in transportation is most important in attracting investment to their cities." As a step in that direction, employers can attract and retain employees by making commuting cheaper and easier. In addition, employers stand to gain financially if they are able to reduce the amount of parking provided or eliminate subsidized parking as a result of offering sustainable transportation programs, like discounted transit passes.

Although many transit agencies in Canada offer discounts similar to those of SJT, more could likely be done to advertise this option to employers who can, in turn, offer it as an incentive to employees.

Obadah in St. John's says that transit managers must look at add-on features, such as park and rides to make transit use more convenient.

"In downtown St. John's there are a couple of major employment hubs and a lot of the people there could take the bus," he says. "But there's a huge parking lot at those buildings so people drive. I know that in other cities there are park and ride facilities and that would be great to have here."

Improving cycling infrastructure

Olivia says that Halifax has very few cycling lanes and that cyclists' safety is also affected by the city's narrow streets and the fact that drivers are allowed to park on both sides of the street.

On her first day of cycling, Olivia was afraid to cycle on the road, opting instead to ride on the sidewalk. "I'm ashamed to admit that I did that, but I was simply too afraid to bike on the road. I know of another woman who started cycling around the same time I did. She got doored [car door opening into traffic] on her very first day but she kept going."

Providing ample room for cyclists, constructing bicycle lanes or restricting on-street parking are some of the ways that municipal planners can improve conditions for cyclists. For more information on ways to reduce parking, see Transport Canada's issue paper *Reducing or eliminating parking in support of TDM initiatives* (a link to the paper can be found in the Resources section).

Buddy up

When it comes to biking, new cyclists often need support and advice on what to wear, which routes to take or what gear they need.

Olivia attended several of the workshops offered by her employer during the week of the Commuter Challenge. "I learned how to fix basic things on my bike, tips on cold weather cycling and there was even a yoga class for beginner cyclists."

But she says that having a bike buddy was the most important factor in her decision to stop driving and start cycling. Bike buddies show new cyclists the ropes, which can increase a cyclist's confidence and offset the safety concerns of cycling alone.

Olivia says that she was lucky to have two bike buddies who provided her with advice. They not only rode with her to work but also gave her tips on what to wear, the type of bike to buy, and things she could do to avoid having her bike stolen.

In Nova Scotia, Olivia says that motorists are not all that friendly to cyclists. She says that one of her bike buddies was originally from Montreal and knew how to handle even the worst traffic situations. "I had bought a bike with commuting in mind but I would never have put it into practice without the bike buddies."

RideShark, a national rideshare website, offers an online tool where people who are interested in cycling can search for cycling buddies. They offer similar online tools for walking and transit buddies.

Conclusion

Atlantic Canada has many transportation challenges ahead of it, not the least of which is replacing aging road and bridge infrastructure. Since these initiatives will require investments in the many millions of dollars, the value of simple, cost-effective ways of changing the way people travel should not be underestimated.

Changing travel behaviours is a lot like changing any other habits. It takes time and perseverance, but ultimately it comes down to programs and services that address the needs of the community. This paper showcased only a few of the options available to would-be sustainable commuters, but each demonstrates that by providing the right service at the right time, people will respond.

Resources

Atlantic Provinces Economic Council. *Energy Drives Atlantic Canada's Greenhouse Gas Emissions*.
<http://www.esans.ca/pdf/apescscorecard.pdf>.

Bike to Work Week. <http://www.biketowork.ca/>.

Community Foundations of Canada. *Average Commuting Time and Median Distance for a Round Trip Between Work and Home*. Based on data from Statistics Canada. <http://www.vitalsignscanada.ca/rpt2008/table-XII-1.pdf>.

Commuter Challenge. <http://www.commuterchallenge.ca/>.

MUNBikeshare. <http://munbikeshare.wordpress.com/>.

Natural Resources Canada. Office of Energy Efficiency. *Passenger Transportation GHG Emissions by Energy Source*.
http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/tablestrends2/tran_on_5_e_4.cfm?attr=0.

Saint John Transit. <http://www.saintjohntransit.com/>.

Siemens. *Sustainable Cities Challenge*.
<https://www.siemens.ca/web/portal/en/AboutUs/Sustainability/SustainableCitiesChallenge/Pages/Default.aspx>.

Statistics Canada. *Population by year, province and territory*. <http://www40.statcan.gc.ca/l01/cst01/demo02a-eng.htm>. *Age of Public Infrastructure: A Provincial Perspective*. <http://www.statcan.gc.ca/pub/11-621-m/11-621-m2008067-eng.htm>.

Transport Canada. *The Role of Community-Based Social Marketing in Supporting Active and Sustainable Transportation*.
<http://www.tc.gc.ca/eng/programs/environment-utsp-commsocialmarketing-839.htm>. *Reducing or eliminating parking in support of TDM initiatives*. <http://www.tc.gc.ca/eng/programs/environment-utsp-casestudy-cs76eparkingtdm-891.htm>.