CANADA CASE STUDY 97

Changing Transportation Behaviour in the Prairies and the Northern Territories

Overview

This article profiles several people living in the Prairies and the Northern Territories 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.

Resources

Urban Transportation Task Force of the Council of Deputy Ministers Responsible for Transportation and Highway Safety. *Urban Transit in Canada: Taking Stock of Recent Progress*.

http://www.comt.ca/english/urbanprogress.pdf.

Canadian Urban Transit Association. *The Optimal Level of Supply and Demand for Urban Transit in Canada*. http://www.cutaactu.ca/en/publicationsandresearch/resources/TheOptimalLevelofSupplyandDemandforUrbanTransitinCanada.pdf.

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

Sustainable Transportation in the Prairies and the North

The sustainable transportation needs of a region as vast as the Prairies and Northern Territories necessarily demands a distinction among the population needs, growth and economies of each.

For example, in recent years, Alberta, Saskatchewan and the Yukon have all experienced greater population growth than many other Canadian regions. Alberta saw the largest interprovincial migratory gain in Canada between 2001 and 2006; in 2008 the Yukon saw its highest net population increase in more than 20 years.

As a result, commuting distances in these regions are on the rise. Statistics Canada reports that, between 2001 and 2006, the average commuting distance in Alberta and Saskatchewan rose 7%.

The need for more sustainable transportation is becoming more evident every day. A report by the Urban Transportation Task Force (UTFF) of the Canadian Council of Deputy Ministers Responsible for Transportation and Highway Safety, for example, found that traffic congestion is one of the major factors affecting the competitiveness and quality of life in major cities.

In their report, the Ministers write, "It is clear that a more sustainable future will not allow for the same patterns of transport use in evidence today, particularly with regard to automobile use. Sustainable transportation is critical to the functioning of Canada's big cities and is becoming an increasingly essential source of mobility in smaller cities and communities."

The Canadian Chamber of Commerce (CCC) reached a similar conclusion. In its report, *Strengthening Canada's Urban Public Transit System*, the CCC notes that "public transit is an essential service that contributes to the economic well being of a city through such effects as increased residential and commercial property values and reduced amounts of household budgets devoted to transportation."

Transportation investments have increased across the country in the last few years but the UTFF says that more needs to be done. The task force surveyed 160 cities and found that an investment of nearly \$23 billion will be required over the next decade to maintain and expand existing public transit systems.

According to research done by the Canadian Urban Transit Association (CUTA), the optimal supply and demand of transit in Canada would require an investment of \$71 billion in transit infrastructure. Unlike the UTFF estimate, the CUTA figure includes *both* the maintenance and expansion of existing systems *and* the creation of new ones. However, CUTA found that such an investment would be more than offset by the estimated \$239 billion in economic benefits, benefits that include the creation of about 65,000 permanent full-time jobs.

Furthermore, in its report, *The Optimal Level of Supply and Demand for Urban Transit in Canada*, CUTA writes, "Automobile users pay far less than the true social costs of their travel. They do not pay the costs of delay, lost



mobility, diminished productivity, collisions and environmental and health problems that arise from traffic congestion and that have been estimated to be worth at least \$3.7 billion a year."

CUTA concluded that if automobile users did have to pay those true costs, far more drivers would switch to more sustainable modes of transportation, which would lead to a more efficient allocation of resources between road and other sustainable transportation systems.

Both CUTA and the UTTF recognize, however, that simply investing more in transit will not be enough to reduce the number of automobiles on the road. They believe that investments will have the greatest impact if they are accompanied by good governance, effective planning practices, and transportation demand management.

This paper showcases a variety of ways that communities in the Prairies and the Northern Territories 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 articleshares the stories of several people who have changed their travel behaviours as a direct result of policies, programs or other initiatives available within their communities.

The challenge

Each province or territory has its own unique challenges when it comes to improving the access to and options for sustainable and active transportation.

In its report, Shifting Gears: Sustainable Mobility for Western Municipalities, Climate Change Central, a non-profit organization that provides analysis and policy advice on a range of global climate change issues, offers its perspective on the challenges faced by many Prairie cities.

"Unlike urban centres in other regions in Canada, Prairie cities have few natural barriers to outward expansion," the report states. As the cities spread outwards there is increased pressure on their transportation systems. "With [such] growth, auto-alternative transportation and land use patterns that support alternative transportation modes will be required. The cities cannot afford to simply build their way out of congestion by adding road capacity, nor can they expand indefinitely without placing undo pressure on the environment."

Because of their young age, and unlike older cities in Canada, many Prairie cities were planned around the automobile. As the report notes, "Prairie cities lack urban developments from the pre-automobile era that are more conducive to alternative forms of transportation."

In the Northern Territories, operating sustainable transportation systems are even more challenging. The

Northern Territories must contend with a harsh climate, long distances between communities, a sparse population (and, therefore, a lower fare base for transit), a lack of transportation infrastructure, a sensitive environment, and a much shorter construction period than the rest of Canada.

Public transit

The 2006 Census reports that approximately 11% of the employed labour force in Canada use public transit as their primary mode of transportation. The table below shows the use of public transit in each of the three Prairie provinces and Northern Territories.

	Transit
Alberta	9%
Saskatchewan	2%
Manitoba	2%
Yukon	2.5%
NWT	0.7%
Nunavut	0.2%

In Alberta, 11 municipalities operate regular transit services. Calgary and Edmonton, with more than 50% of the provincial population, offer both bus and light rail service as part of their systems.

Seven communities in Saskatchewan, representing 53% of the provincial population, provide transit services.

Four urban and 66 rural communities in Manitoba offer some form of public transit. In addition, Manitoba is the only Prairie province to have adopted a definition of sustainable transportation that calls for the basic needs of all individuals to be met, for sustainable transportation systems to be affordable and efficient, and that such systems limit emissions and conserve non-renewable resources.

In the Northern Territories, only the major cities (Whitehorse, Yellowknife and Nunavut (Nath wants to me to inquire with Geoff on this, as she feels it should be Iqaluit, rather than Nunavut) offer public transit services. As the largest northern city, Whitehorse provides the widest range of transit services including bike racks on buses and accessible buses.

One of the stories in this paper illustrates how cost, time and transit location all factored into a decision by one Calgary resident to switch from driving to transit.

Another deals with how an individualized social marketing campaign in Winnipeg convinced a long-time driver to switch to cycling and transit. Social marketing techniques focus on direct contact among community members and on removing the structural barriers that prevent people from changing their behaviour.

Active transportation

The 2006 Census reports that, of the 14.7 million employed persons in Canada, 195,510 cycled and 939,290 walked to work. The table below breaks out the modal split for these active transportation modes by each of the three Prairie provinces and territories.

	Walk	Cycle
Alberta	6%	1.1%
Saskatchewan	8%	1.5%
Manitoba	7.4%	1.6%
Yukon	13%	2.6%
NWT	26%	2%
Nunavut	49%	0.1%

People choose to walk and cycle for a variety of reasons: health, the rising cost to own and operate a vehicle, convenience, or a combination of factors. With respect to cycling, however, factors such as fears of cycling in traffic, few or no dedicated bicycle lanes and a lack of cycling amenities can present barriers to those who wish to cycle more.

Municipalities are uniquely positioned to remove those barriers. Many communities that have improved the infrastructure that supports cycling and walking have found that the old adage "if you build it, they will come" rings true.

The majority of the stories in this paper illustrate how even small improvements to cycling infrastructure, such as plowing bicycle paths in winter, can encourage residents to cycle more, even in the coldest of Canadian winters.

Changing habits, one person at a time

Challenging the status quo

Charlie of Calgary changed his outlook on transportation because of his participation in the Commuter Challenge, a national event that encourages people to try sustainable modes of transportation for one week.

"I started to pay attention to the Commuter Challenge about two years ago," recalls Charlie, who used to work as a consultant at various locations. "Before I started taking transit, I would take my car to work, crawl through traffic, fight for a parking space and wonder why the city kept digging up the streets. Many days were started stressed and agitated before my day in the office even began."

In 2008, Charlie and his wife both took permanent jobs in the city's downtown core. "Travel costs started to become noticeable. When I heard about the Commuter Challenge we parked the cars and starting taking transit," he says.

Charlie also says that his children (18 and 25 years old) acted as role models. "Neither of them drive nor do they have drivers' licenses," he says. "They're so accustomed to transit that they've turned down our offer to pay for driving lessons many times."

Charlie says that although the Commuter Challenge got him thinking about his transportation habits, what truly cemented his decision to change were the cost benefits. His gasoline bill is now only \$20-\$40 per month, vehicle maintenance costs are down, and Charlie estimates that he's extended the life of his car by between two and four years.

Charlie also says that he's less stressed once he gets to work. "I get almost an hour of uninterrupted reading time every day—I'm averaging two or three books a month now," he says. "I no longer have to worry about traffic, construction, other drivers, or finding a parking spot."

Even if transit weren't available, Charlie says he'd look for carpooling opportunities to reduce costs and stress. "I work as a business analyst in financial reporting so I could also be a telecommuter in the future."

Transit has now become an integral part of his life. "When we decide to go somewhere, the car is the last option we consider, depending on the situations and needs," he says. "We either walk, take the bus or C-Train [light rail]."

Active commuting keeps this cyclist young at heart

The City of Whitehorse is the largest city in the Yukon Territory in terms of both population and geography (the city spans some 41,600 hectares). Average winter temperatures hover in the -15°C range, so it's not surprising that most (72%) of Whitehorse residents drive.

Not Heather. A long-time cyclist in Vancouver, she moved to Whitehorse several years ago and credits the city's cycling infrastructure for not only making her commute easy but also allowing her to cycle year round.

Heather listed a number of improvements:

- Bike lanes were constructed on several main roads leading into downtown and in the downtown. These lanes are plowed in winter.
- The city paved a portion of the Millennium Trail, a multi-use path for cyclists and pedestrians, and paved one side of Two Mile Hill, a major arterial road, so that cyclists can now ride on either side.
- An intersection at the Alaska Highway and Robert Service Way includes a traffic light triggered specifically for cyclists.

- The city installed bike lockers and commissioned local artists to design funky new bike racks in the downtown core.
- The city is now working to build what Heather calls "a phenomenal trail network for mountain bikers."

Heather cycles year round to her communications job.. "My commute is about 12 kilometres round trip," she says, adding that only about once or twice a year does she need to drive to work. If she needs to attend meetings away from her office during the day, the department does have a vehicle pool but Heather says she usually walks or cycles.

"I love cycling because it's the one thing I can do to reduce my carbon footprint that actually saves me money, too," she says. "It gives me time for a mental transition before I get to work because I can choose a route along the river that virtually eliminates me being in traffic."

She admits that winter cycling can be tough, but that plowing the bike paths and bike lanes has made a big difference. "I use studded tires but some of the road shoulders are not well maintained for cyclists in winter," she says. "That's part of the reason I live where I do—I can access the Two Mile Hill bike path easily and it's a fairly safe ride."

Heather says that people notice her and her partner because they are always riding their bikes. "The other day I wasn't cycling and I saw Bev Buckway, the Mayor. She asked me where my bike was!"

Heather says that, although she and her partner do own a car, they rarely use it anymore. "We ride everywhere to do our errands and as a result we are healthier and happier," she says. "We seldom fill the gas tank and use the car mostly for taking our pets to the vet. On weekends, we ride our mountain bikes on the trails—that's about the best thing we can do for our physical, mental and spiritual wellbeing. It's liberating to just hop on our bikes and go where we want, when we want. I think it keeps us young at heart."

Traveling smart with WinSmart

Winnipeg's WinSmart program began in 2006 and aimed to encourage changes in transportation behaviours. Among its many initiatives, WinSmart's pilot community-based travel marketing project engaged 550 households in an effort to get people to switch from driving to more sustainable forms of transportation.

Carla says that the city contacted her due to the fact that she lives within the Pembina Corridor, an area targeted for the pilot project.

As a result of the initiative, Carla began cycling to work during the summer months (a 20-30 minute bike ride), but continues to drive to work during the winter. The project, however, opened her eyes to other possibilities.

"I'm much more aware of the kinds of transportation options open to me," she says. "I'm regularly checking the city's website to see what they are doing in terms of bike trails and the rapid transit corridor." She also says that she used to drive her two sons to school in the winter, but that they have now started taking the bus and, once they are comfortable taking transit, she too will start taking the bus in the winter months.

During the warmer months, her sons cycle to school and Carla says that WinSmart helped create more awareness of the need to get her kids physically active.

"My boys feel better and they like the fact that they're doing something for the environment," she says. "My youngest is extremely keen on cycling but a lot of people are scared to cycle in the city, so it's important to teach him the rules of the road. By starting young, they learn safety and respect for others on the road."

WinSmart asked each participant to keep a one-day trip diary to record all the trips that households made in order to develop a general transportation profile of all participants. They then provided residents with resources such as personalized trip planning assistance and customized transit and cycling maps, as well as additional incentives such as bike lights, reflectors and pedometers.

"I really appreciated the customized cycling map and I still use it to this day," says Carla. "Even on weekends, I make a point of trying to navigate the city on the bike trails with the information they provided me."

Infrastructure improvements helps two cyclists all year long

Robert of Edmonton and Bryan of Winnipeg were already avid cyclists during the spring, summer and fall. When their respective cities upgraded their active transportation routes both became year round cyclists.

Robert says that he made the decision to cycle year round once the City of Edmonton constructed new bicycle paths and began clearing snow from existing routes.

"The shortest route I can take is 17.5 kilometres and in the summer it takes me about 40 minutes, but in winter it can be up to an hour and a half," he says. "The long route, which I take a couple of times a week on the way home, is 29 kilometres."

Robert says that the benefits of cycling are well worth the effort. "I've lost a lot of weight and have more energy. I can even keep up with my kids!" he says. "I used to take the bus in the winter, so now that I'm cycling I'm saving money."

In Edmonton, winter temperatures can range a great deal—going from spring-like temperatures when the warm Chinook winds pass through, to nose-freezing wind chills of -50°C.

"Cold temperatures have a negative effect on gears and brakes and it can also make it difficult to choose the right clothing to wear. If you wear too much you sweat and then you freeze; if you don't wear enough you freeze the whole way," says Robert. "Visibility can also be a problem because even the best goggles fog up and ice over in 20 minutes."

For Bryan, a middle school teacher who cycles 26 kilometres each day, once Winnipeg upgraded its bike trails and began plowing its main bicycle routes, he began cycling year round.

"One of the paths along the river always got flooded, so they moved it higher up the bank and, more importantly, they plow it in the winter," he says. "The path keeps me out of traffic until I get to Main Street, which is actually one of the safer arterial roads to cycle on."

Bryan says that the benefits of cycling year round come down to three things: cost, awareness and time.

"If I were driving I'd be traveling about 125 kilometres a week, so I'm saving on the gas money," he says.

Bryan says that it wasn't until he began cycling all the time that the impact of the North American car culture really hit home

"My bike gets me out of the isolation of the car. I'm more aware of what's going on because I can go slower and am not separated from the environment. You learn what's really necessary for cyclists and pedestrians...if you're in a car, you don't notice those kinds of things."

Bryan says that the biggest myth about winter cycling is that it's too cold. "As soon as you're riding, you're warm...this fear of the cold just doesn't exist. Even when it's -40°C, I'm sweating by the time I get to school."

At the time of his interview, Bryan was recuperating from shoulder surgery after being hit by a car. "The accident is what made me want to learn more about what the city is doing and to get involved in bike advocacy," he says. This summer, Bryan joined Bike to the Future, a non-profit organization that aims to encourage year round cycling.

"I'm helping to coordinate the Ride of Silence that commemorates all the cyclists who have been killed in the past year," he says.

Bryan almost never uses his car anymore because he's says that, in most cases, cycling is faster. "If I'm going downtown, if I were driving, by the time I got there and found a place to park, I could already have been there and headed back on my bike."

Edmontonian gains a spouse and a career through cycling

Karly grew up in northern Saskatchewan where, she says, "driving was what you did. The mindset is still prevalent in my family."

When she moved to Edmonton she became friends with several people who were involved in the Edmonton Bicycle Commuters' Society (EBCS).

"They appealed to my ego first," she recalls with a laugh. "They asked me to help them organize their information and volunteer. All these people I met rode everywhere, so I started riding with them. It made sense to me. It's cheaper, faster for the most part, healthier, and I have a sense of connection to my community that I don't get when I'm in a car."

She says that cycling gives her a chance to explore her city at her own pace. "On a bike I can meander through the back lanes and check out that sunflower I saw as I rode past. When you're driving you're focused on your destination. You don't have the opportunity to stop and smell the sunflower."

Karly works as one of the sustainability coordinators at Mountain Equipment Co-Op (MEC) and is also Edmonton's only bicycle traffic reporter with a twice-weekly radio show reporting on cycling conditions at a community campus radio station at the University of Alberta.

"I got my current job at MEC because of my involvement running a bike accessible program," she says. "I also married the man I did because I didn't have to question his values about cycling—it's our first choice. It's absorbed my life."

Karly and her husband recently took a six-week cycling vacation to Halifax and back. "I called in for the radio show and counted cyclists across Canada," she says. "It was great—I talked to a lot of people about cycling programs and met with the Halifax Cycling Coalition."

Other than her involvement with the EBCS, Karly says that in winter Edmonton streets are plowed quickly. "It's one of the benefits of living in an oil-rich province with lots of financial resources!"

Because of her decision to cycle year round, Karly chose to live in an area that provides all the daily and weekly amenities she needs—groceries, recreation, close to work, etc. She also participates in Eat Local First, a group that supports local agriculture, which delivers a box of produce to her home every week, saving her a trip to the grocery store.

Although she owns a car she and her husband use it sparingly, opting instead to plan a cycling route for any

errands they need to run. Larger trips that can't be done by bike are left to a once-a-month weekend car trip.

"Cycling is so connected to my world view," she says. "It's the most convenient and efficient transportation mode. How can you go wrong?"

Programs, policies and initiatives

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

Commuter Challenge

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.

City of Whitehorse Sustainability Plan

Beginning around 2002, the City of Whitehorse began developing a community sustainability plan, which included plans to develop a more active transportation network. Adding to what the city has already accomplished (promoting carpooling, constructing dedicated bike lanes, reducing bus fares for city employees, and improving walking trails), the plan calls for new sidewalk construction and sidewalk improvements, the installation of more bike racks and lockers in the downtown, improving trail connections, and widening certain streets to accommodate bike lanes.

WinSmart

The City of Winnipeg's WinSmart program, launched in November 2006, aimed to encourage behavioural change, inspire public policy innovation, promote effective management, reduce greenhouse gas emissions, increase energy efficiency, and introduce or investigate new technologies.

The individualized travel marketing campaign referred to earlier in this paper was just one of the WinSmart initiatives that removed barriers to active and sustainable transportation. Other components of the project included improvements to transit and active transportation infrastructure, such as:

- An automatic vehicle location and a real-time electronic bus department system for all transit buses;
- The construction of a new park and ride facility;
- An e-commerce pilot project, and
- A new downtown "wayfinding" system that provides residents and tourists with a year round climate

controlled pedestrian network, and the construction of an active transportation path that joined a number of existing trails to improve connection options for commuters traveling by alternative means through the Pembina Corridor.

Bike to the Future

Bike to the Future is a voluntary group of concerned citizens working to make cycling in Winnipeg a safe, enjoyable, accessible and convenient transportation choice year round.

Bike to the Future envisions a city where cycling is embraced as the preferred mode of transportation, where cycling is integrated into urban design and planning, and where Winnipeg is recognized as a leader in cycling infrastructure and programs.

Edmonton Bicycle Commuters Society (EBCS)

EBCS supports people using bicycles for everyday urban travel. It sells used bikes, accepts donated bikes, runs bike repair and riding courses, and operates regular community bike workshops.

They also host guided tours of the city to familiarize new cyclists with different routes and offer an online database where cyclists can search out the best routes.

Highlights

The people interviewed for this paper all made a change to their commuting behaviour as a direct result of a program, service or other initiative within their community. The reasons that they cited for switching to more sustainable modes run the gamut, but they often come down to a few main factors.

This section includes some of the advice that interviewees gave that can help municipal program managers better understand the needs of commuters.

Improving cycling infrastructure

Heatherof Whitehorse and Carla of Winnipeg both say that, although their respective cities have done much to improve sustainable transportation infrastructure, additional signage and modified intersections would make cycling even safer and easier for residents.

"Some drivers don't pay attention to the lines on the road or don't acknowledge the bike lanes, so additional signage would help," says Carla.

Heather says that she's noticed a lot of cyclists who take the same route that she does, a route that involves illegally riding a couple of blocks on the sidewalk.

"The city could follow the inclination of cyclists and make it an official winter bike route and maintain it," she says. "If they maintained some of the other major trails that would also go a long way to making it safer and easier for cyclists."

That being said, Heather is extremely happy with what the city's cycling initiatives. "There are some progressive planners at the city who are trying to build a more sustainable community that includes cycling infrastructure," she says. "The city engineer rides his bike to work every day, so it's encouraging to know that there are people in leadership positions who can make changes in this vehicle-centric city."

Carla says that the resources provided by WinSmart were instrumental in getting her to try new modes of transportation. Other municipalities that are interested in increasing the number of active commuters could learn from Winnipeg's example. For a summary of the project, see WinSmart: Winnipeg for Sustainable Management Advancing Responsible Transportation on the Transport Canada web site (a link to the paper is listed in the **Resources** section).

Traffic light triggers

Heather says that it's difficult to cross at some traffic lights in Whitehorse, especially when it requires riding on the sidewalk to push the pedestrian trigger to change the lights. "I would love to see more light triggers installed specifically for cyclists," she says.

Most cities use sensors embedded in the pavement to cue traffic light changes, but in many cases, these sensors detect only large metallic objects (e.g., cars), and not smaller objects, such as bicycles.

Carla agrees. "Many traffic lights are not set up for pedestrians or cyclists and some of them need to give people more time to cross," she says. "I walk my bike across intersections but if I'm with my kids sometimes we can't get across them in the time."

Provide cycling routes that meet commuter needs

Bryanof Winnipeg says that the best thing a city can do to improve cycling is to construct active transportation routes that go somewhere and says that cities need to listen more to bicycle commuters and to cycling advocacy groups.

"What happens a lot of the time when cities put in new infrastructure is that they construct bike paths only for recreation purposes, not for commuters" he says. "Unless there is an advocacy group hounding the city constantly planners may not understand where to put the best and most efficient bike routes."

Addressing parental safety fears

Although this paper focuses on adult commuters, getting children to walk and cycle more is becoming increasingly important as childhood obesity rates increase.

Bryan says that all of his students know that he cycles to school every day but that parental fears stand in the way of more students doing the same.

"My students think it's cool but a lot of parents won't let their kids ride because of safety fears," he says. "Some of my students have started to cycle in good weather and they're proud to tell me that. It's not the kids who are apprehensive about cycling."

One program that can help is Active and Safe Routes to School, a nation-wide program that promotes the use of active and efficient transportation for the daily trip to school, addressing health and traffic safety issues while taking action on air pollution and climate change.

In Manitoba, ASRTS is delivered through Resource Conservation Manitoba.

Addressing commute times

Carla says that when it comes to increasing transit ridership, for commuters it's all about time. "I know that Winnipeg has dedicated transit lanes and I'm sure that's helping, but we don't have huge rush hours here so there's very little incentive to change other than gas prices or environmental concerns," she says. "Cities have to address the issues of time and convenience."

One way that municipalities can make transit easier is to establish a minimum distance or number of minutes a person must walk from their home to the nearest transit stop. Charlie of Calgary says that his switch to transit was made easier because the transit stops were close to his home

"The C-Train station is a five-minute walk away and the bus stop is almost right in front of my house...how much easier can it get?"

Educating all road users

Bryan says that education is key if cyclists and drivers are to get along on the same roads.

"There is a woeful ignorance about a cyclist's right to be on the road. There's a perception that only drivers pay for the roads but everyone pays for them even if they don't use them," he says. "It's almost like there is a class division between the car culture and everyone else."

He says that Bike to the Future is lobbying to change the provincial Highway Traffic Act so that bicycles are recognized as a different type of vehicle with different needs.

"So much of our focus is on educating cyclists, but drivers and municipal planners also need to be educated," he says. "Street engineers know how to tame the car. When a new development goes in, street calming measures and cycling routes must be done concurrently. It's not simply a matter of putting up more bike paths. We can't be separated all the time."

As gas prices rise, Bryan says there will be more bikes on the road, which could lead to more conflicts with motorists. "But I do think we're at the beginning of a movement to get people out of cars and walking and riding."

Karly of Edmonton also believes that more needs to be done to educate drivers and cyclists.

"People who ride in the winter are pretty knowledgeable about cycling and the rules of the road," she says. "But in the spring you suddenly get the less adept cyclists who may not pay as much attention as a seasoned cyclist. These cyclists forget that when they first learned to ride it was probably in a residential, low-traffic area. So they ride with no thought about the rules of the road. It creates ill will on the roadway."

The CAN-BIKE program, a national cycling education program run by the Canadian Cycling Association and supported by Transport Canada, offers cycling courses across most of the country. Courses include basic cycling skills for adults and children, as well as skills that are specific to commuters and those living in rural areas. Municipal governments can use the CAN-BIKE resources to bring those skills to their communities.

Karly believes that all levels of government have a role to play in addressing that situation. "We need to make cycling education mandatory by making it part of the school curriculum." She also suggests combining cycling education with driver education classes. "That way, both drivers and cyclists would understand the needs of the other. It needs to be more than just a paragraph in the drivers' manual."

Conclusion

Whatever region of the country you live in, municipal and transit managers can learn from the experiences of other areas when it comes to improving sustainable transportation programs and services.

Barriers to using sustainable modes are often the same: misconceptions about the time spent commuting by transit, foot or bicycle; safety fears; and a perceived lack of convenience if people don't have access to a car during the day. The people interviewed for this paper are proof that many of these barriers can be overcome with ingenuity, programs and services that meet specific needs, and by improving the infrastructure that supports active transportation.

In the Prairies and the Northern Territories, economic growth and an aging population are some of the factors that will dictate how transportation systems expand in the future. But, as one sustainable transportation coordinator in Alberta put it: "If municipalities design streets for the most vulnerable in our society, you will create streets that work for everyone."

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