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Improving Travel Options in Small & Rural Communities

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Contents

Part 1 INTRODUCTION	1
1.1 Purpose of this guide	1
1.2 Challenges and opportunities	2
Community location.....	2
Community form	2
Demographic changes	3
Community culture	4
Public health.....	4
Community resources	5
1.3 Principles for action	8
Take an integrated, strategic approach.....	8
Consider the triple bottom line.....	9
Balance supply and demand	9
Focus on priorities	10
Part 2 STRATEGIES	11
2.1 Multimodal strategies	11
Smart growth.....	11
Integrated transportation planning.....	12
Context-sensitive roads.....	12
Information, education and promotion	12

	For more information on multimodal strategies.....	14
2.2	Active transportation	17
	Overview	17
	Active transportation plans	18
	Supportive land use	19
	Active transportation facilities	20
	Information, education and promotion	22
	School-based active transportation initiatives	23
	For more information on active transportation	25
2.3	Public transit	27
	Overview	27
	Transit plans	30
	Supportive land use	30
	Transit facilities and services.....	31
	Transit promotion	32
	For more information on public transit.....	34
2.4	Ridesharing	37
	Overview	37
	Carpool parking lots.....	38
	Carpool ridematching.....	38
	Vanpool services	39
	Ridesharing promotion	39

For more information on ridesharing	40
2.5 Efficient driving	42
Overview	42
Carsharing services.....	42
Information and education.....	43
For more information on efficient driving	43

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Part 1 INTRODUCTION

1.1 Purpose of this guide

This guide is intended to help practitioners—engineers, planners, health professionals, economic development officials and others—to improve travel options for residents of small and rural communities. This includes a range of actions that make personal transportation activities more sustainable—encouraging drivers to operate their cars more efficiently, or to leave their cars at home and walk, cycle, take transit or carpool instead.

In the course of recent consultations with professional groups and municipal governments, Transport Canada has heard that much existing guidance on improving travel options is more appropriate for larger urban centres. A review of the guidance that does exist largely confirmed this view, although there are some notable exceptions. It is recognized that no guide can replace the “learning curve” within communities that have little experience in sustainable transportation initiatives. However, this guide can act as a “first stop” in the search for help—by offering an overview of key issues, summarizing the principal strategies that are most likely to be relevant to smaller and rural communities, and identifying additional resources that can provide more detail for interested practitioners.

For the purposes of this guide, the term “small and rural communities” refers to communities of all sizes up to about 25,000 people.



1.2 Challenges and opportunities

This section summarizes some of the most important issues that face small and rural communities in Canada, as they consider how they might benefit from improved travel options.

Community location

A community's location, particularly in relation to its neighbours, can define its transportation context. Small or rural communities **close to larger cities** may be growing quickly with a lot of commuting activity, and may be concerned with preserving residents' access to employment and educational opportunities. They may be able to "piggyback" on public transit or other services based in the urban area.

At the same time, **more remote** communities face the challenge of retaining younger residents who are seeking a career or post-secondary education. However, they can maximize opportunities for residents by partnering with neighbouring communities to create or improve options for travel both within and among themselves.

Community form

As they seek to become more sustainable, many communities are growing more aware of the importance of **reconsidering conventional approaches** to land use and infrastructure. They are conscious of the need to rebalance development patterns that encourage travel by car. Dispersed, very low-density land uses make it harder for transit, active transportation and ridesharing strategies to succeed.

In contrast, traditional **village cores** have a concentration of shops, businesses and housing that makes them practical places to walk or cycle, and that can make them a potential hub for public transit services between communities. However, many towns are struggling with deteriorating downtowns that are being slowly replaced by new retail on the outskirts. This form of growth increases automobile use by increasing trip lengths for in-town residents; frequently, it does not provide basic connectivity for walking or cycling trips. A new “big box” store on the edge of one town may also replace several small shops in nearby communities, increasing the travel required by residents to meet their daily needs.

Demographic changes

For many communities, population trends will be a major driver for efforts to develop new transportation solutions.

The number of Canadians living in rural and small town areas has not changed in 25 years. In some communities population has grown, but in many others it has remained stagnant or declined. Growth provides an opportunity for change, so **slow-growing or depopulating** communities face additional challenges. They are less likely to be able to find the financial resources for new initiatives, or to reshape their built form through progressive new development.

Across Canada, small and rural communities have a greater and faster-growing proportion of **elderly residents** than urban areas do. This is especially true in retirement and resort communities. As seniors age and face a reduced ability to drive, they become more dependent on other travel options to meet personal needs like shopping, medical care and social engagements.

Many **young people** who cannot drive or afford a car also find it hard to reach jobs in rural areas, but can eliminate this barrier to employment by

moving to an urban centre. This is likely among the reasons that many small and rural communities have found themselves with a smaller proportion of young adults than urban centres, a situation that can make it hard for employers to find the skilled workers they need. Small towns and rural areas that make it easier for young people to travel within and between communities – whether on foot, in a carpool, or by bike or bus – can increase the number of youth who choose to live and work there.

Community culture

For very good reasons, many small and rural communities are “car-first” places where the **habits and attitudes** of the most influential citizens tend to be automobile-focused. This means that efforts to improve travel options in small and rural communities must first overcome a culture of decision-making that favours cars and people that have access to them, while it disadvantages residents who cannot use cars, such as children, the elderly, and persons with disabilities. Fortunately, these same communities benefit from a strong culture of neighbourliness that is an important resource for volunteer-based programs that can improve travel options for those who need it.

Like all Canadians, those who live in small and rural communities are more aware than ever of **environmental issues** like climate change and ecosystem health. Clearly, the threat posed by excessive automobile use to our environment is no less in the country than it is in the city. In some smaller communities, efforts to shift some travel from automobiles to more sustainable modes can be emblematic of a broader environmentalism that has the power to attract new residents, businesses and tourists.

Public health

Canadians are exhibiting a renewed awareness of the connection between lifestyle and **individual health**. However, recent studies have found that rural Canadians are more likely than urban residents to be overweight and less active in their leisure time. Encouraging active modes of transportation like walking and cycling is one strategy to combat this trend.

Residents of rural areas are also much more likely to be injured or die in **motor vehicle collisions** (in fact, compared to urban Canadians their odds of dying are 60% to 90% higher for men aged 45 to 64, and 70% to 200% higher for women aged 45 to 64). At least in part, this situation arises from their tendency to drive longer distances on higher-speed roads than urban residents. Therefore, reducing the amount of driving in rural communities is one way to reduce death and injury from collisions.

Staying healthy is one concern, but maintaining good **access to healthcare** is another. A trend towards centralization and specialization of health services means that some communities are losing local healthcare options. Residents are increasingly obliged to travel between communities to obtain the care they need – and this is a particular constraint for individuals who cannot drive or do not have access to a car, yet who must travel longer distances. They need better options, which could include volunteer ride arrangements, door-to-door paratransit, regular scheduled transit or (as in some communities) a hybrid model that integrates aspects of each.

Community resources

While **economic constraints** do vary from place to place, they loom large in many small and rural communities. Where the local property tax base is weak due a lack of population growth or declining employment, it can be difficult to secure funds for new transportation initiatives that must compete with day-to-day priorities like road repairs and safety improvements. Even though many communities are eligible for capital funding support from federal and provincial governments, the onus remains on supporters of new initiatives to demonstrate positive returns, which is challenging when benefits are only prospective (such as increasing tourism, attracting retirees or keeping youth in the community).

In smaller communities, **municipal staff** often have many roles and are too busy with day-to-day concerns to devote time and energy to more

experimental projects. It is also hard for them to remain fully aware of the growing array of transportation funding programs offered by provincial and federal governments, and to find the time to prepare and submit applications. They also may not have a strong sense of where to best invest scarce dollars to maximize their return on investment.

Similarly, **non-governmental organizations** in smaller communities can play critical roles as champions that create awareness, shape public opinion, instill a sense of ownership, and harness community energy. However, they typically lack the transportation-related expertise that would help them tap funding sources and develop innovative transportation initiatives.

One way to begin to overcome these serious limitations on financial, human resource and community capacity is through a focus on **better coordination** of the community's current resources. Many small towns and rural areas have a variety of transportation services and resources that are geared toward special populations—seniors, persons with disabilities, schoolchildren or tourists. Re-examining those systems with an eye to maximizing overall community benefits can lead to greater cooperation and coordination that reduce gaps and eliminate inefficiencies.

By bringing together **different sectors** (such as education, health, recreation, social services and tourism), smaller communities can also shift focus from their individual responsibilities to a more collective view of how best to meet the travel needs of individuals.

Finally, small communities have the inherent benefit of **flexibility**. Their municipal administrations have fewer layers of management, streamlined processes and more direct access to senior decision-makers, making it easier to get new directions approved. It is also more likely that one person with a

good idea can be an effective champion, building the attention and support they need to move forward with it.

1.3 Principles for action

This section identifies several “tried and true” principles that can help any community to identify and implement the strategies that are right for it.

Take an integrated, strategic approach

Rural areas around Saint John, New Brunswick are enjoying new Comex express bus services because of creative thinking by the city’s transit and parking commissions. They realized that the city could eliminate the need to spend millions of tax dollars on new parking garages by making it possible for hundreds of rural commuters to take the bus instead of their car.

www.saintjohntransit.ca

Smaller communities may or may not have a comprehensive strategic plan that can motivate and guide decision-making. While having such a plan is helpful, the process of developing one is often more important. The work of bringing community members together and identifying their collective goals, resources, challenges and opportunities is an opportunity to think creatively about the desired future and how to get there. In the absence of such a plan, transportation stakeholders can follow a similar process to examine travel needs and possible solutions in their community. This approach cuts across the silos of responsibility within municipal government, and transcends the divisions that separate governmental, non-governmental and private-sector organizations. It is the best way to identify ways that current resources and activities might be optimized for the benefit of the travelling public as well as taxpayers. It is also a chance to build buy-in, create new partnerships and attract volunteer commitments that might otherwise lie dormant.

Consider the triple bottom line

The conventional “bottom line” is an economic one – but the new best practice for municipalities is to consider a “triple bottom line” that gives equal weight to economic, social and environmental outcomes.

Transportation, as a municipal responsibility having extensive impacts on social and environmental systems in addition to economic effects, is a particularly important area for triple bottom line analysis. Practitioners should view transportation projects as more than line items in a budget – they should weigh the municipal savings and expenses against the benefits and costs to individuals, families, neighbourhoods, businesses and the ecosystem. By doing so, they can better inform decision-makers of the pros and cons of either approving or rejecting an initiative – and decision-makers, in turn, become more accountable to the public.

Balance supply and demand

Conventional approaches to improving travel options involve measures that add to or change the supply of transportation – widening roads, building trails, adding bus routes or bicycle parking. These are important and frequently necessary tools, but they are not alone in the toolbox. In recent years, many communities have been gaining experience with measures that manage the demand for transportation, rather than supply. Transportation demand management (TDM) measures influence whether, why, when, where and how people travel. They shape the economic and social factors behind personal travel decisions, and motivate individuals to make more sustainable choices.

Municipal TDM initiatives can include educational and promotional tools, incentives and disincentives. They include measures like information campaigns, special events, discounted transit fares, public ridematching services, active and safe routes to school programs for children, workplace-based commuting options programs, and household-based individualized marketing. TDM measures often involve partnerships between municipalities and employers, schools and community organizations. They

are typically less costly than infrastructure solutions, but improve the cost-effectiveness of those solutions by increasing their levels of use.

Focus on priorities

In any community, there are inevitably many different actions that can improve travel options for different groups of people. However, there is little benefit in trying to accomplish them all. In fact, there may be greater benefit in focusing initial effort on a small number of priorities and making sure they succeed – thereby gaining momentum and building buy-in for additional actions. For example, well-designed trial projects can gain positive media coverage, attract new supporters and overcome opponents' skepticism – which may be directed more at the notion of doing things differently than at the details of a particular project.

Part 2 STRATEGIES

2.1 Multimodal strategies

Many drivers rely almost entirely on their cars, which offer great flexibility and convenience, for their personal mobility. However, some drivers as well as most non-drivers rely on multiple travel options – walking or cycling for some trips, carpooling occasionally, and taking transit when it works for them. This section of the guide discusses strategies that offer broad support for this “suite of alternatives” to driving; subsequent sections discuss strategies more suited to improving specific travel options.

Smart growth

In recent years, many of Canada’s larger urban centres have adopted “smart growth” strategies (which integrate long-term views on land use, transportation and other sectors) to tackle issues such as a shortage of developable land, spiraling infrastructure costs, traffic congestion and other threats to economic and environmental health. In their own way, smaller communities (many of which face their own growth pressures) are also increasingly recognizing that an integrated approach to community development is a key to long-term prosperity and quality of life.

Communities that may particularly benefit from integrated plans include:

- exurban communities near metropolitan centres that want to improve access to jobs
- destination communities that want to attract tourists and new residents
- production communities that face industrial decline and want to improve access to markets, retain services and diversify their economy

See the profile at the end of Section 2.1 for an example of how small communities can tackle the issue of smart growth.



By fostering more compact development linked by a well connected transportation system, even small and rural communities can reduce their reliance on automobiles while improving their sustainability in other ways.

Integrated transportation planning

A plan is the first step in successful implementation. The creation of a transportation plan is an effective way to address multiple challenges like infrastructure deficits, social equity, economic development and environmental concerns. It also provides an avenue to evaluating alternative projects and identifying priorities that can attract funding from federal, provincial and territorial governments. It is relatively uncommon for small and rural communities to tackle a comprehensive transportation plan, but by doing so they can actively integrate considerations around various modes (car use, walking, cycling, transit), as well as strengthen support for land use plans and economic development goals. Transportation plans also provide a forum for coordinating interests and actions with other governments (either adjacent municipalities or provincial/territorial jurisdictions).

Context-sensitive roads

Roads are important to travellers in small and rural communities, regardless of whether they are car drivers, transit passengers, pedestrians or cyclists. Best practices in road design have evolved greatly in the last decade or so, and the “one-size-fits-all” convention has been replaced with a “context sensitive” approach. Roads, particularly those in developed areas, are now seen as public spaces that motivate desirable forms of development and support quality of life. Wherever pedestrians and cyclists want to travel, roads should accommodate them with at least basic levels of safety and comfort. Experience has shown that preferred design features often have significant secondary benefits—for example, paved shoulders on rural roads have been found to extend road life and improve safety for drivers.

Information, education and promotion

As discussed in Section 1.3, TDM measures are an effective complement to supply-side changes—and although they are more common to urban centres, smaller communities are starting to explore them. Some TDM measures are

A benefit-cost study by the **Town of View Royal, British Columbia** found that paving the shoulders of a highway being reconstructed not only improved the cycling environment, but also yielded a positive return on investment due to maintenance efficiencies.
www.town.viewroyal.bc.ca

particular to one mode, and are discussed later in this guide. Others provide a platform for addressing multiple modes at once, such as:

- workplace travel plans, which reduce reliance on car-based commutes and can help workplaces attract and retain younger workers by making it easier to commute without a car
- information tools, like traveller information pages on a municipal or community Web site, that help people get around as efficiently as possible by walking, cycling, carpooling, transit and driving
- special events like the national Commuter Challenge, a one-week competition that involves entire communities in finding alternatives to driving to work

Another emerging TDM tool that has had significant results in larger Canadian cities is individualized marketing; this involves giving customized travel information to people based on their needs and interests, and can reduce car use by up to 10%. There is one caveat to the use of TDM tools like special events and individualized marketing: they require the travel options being promoted to be feasible, at the very least. It is wasteful and counterproductive to try to motivate individuals to use travel options that do not go where or when they need to travel, or that are inherently unsafe.

Profile

District of Squamish, British Columbia. Squamish was the focus of a smart growth planning exercise facilitated by Smart Growth BC, a non-governmental organization. The initiative developed a new plan for the downtown waterfront area in the community of about 15,000 people, situated north of Greater Vancouver. A series of 14 public workshops and one multi-stakeholder design “charrette” brought together residents, governments, property owners and developers to find common solutions despite their competing interests.

The project took a comprehensive approach to improving travel options, starting with land use-related recommendations for more living, working, learning and playing

opportunities in the downtown area. It also called for a new multimodal downtown transit hub, an integrated trail network, and a “green” rail and truck corridor to move freight from the Squamish port to the business park. The process generated very favourable public reaction, and the District Council adopted the plan. Squamish is developing new subdivision by-laws, engineering standards and a smart growth checklist, and is reviewing its many new downtown development applications against the project recommendations. www.smartgrowth.bc.ca

For more information on multimodal strategies

Smart Growth: A Primer (Smart Growth BC, 2000). This introductory guide provides an excellent overview of related principles and tools. www.smartgrowth.bc.ca

Strategies for Sustainable Transportation Planning (Transportation Association of Canada, 2007). This briefing outlines 12 key principles and suggested approaches to integrate sustainability considerations into transportation planning processes and documents. www.tac-atc.ca

Best Practices for the Technical Delivery of Long-Term Planning Studies in Canada (Transportation Association of Canada, 2008). This research examined analytical tools, processes and data that support long-term transportation planning practices of small- and medium-sized communities in Canada. www.tac-atc.ca

Child- and Youth-Friendly Land-Use and Transport Planning Guidelines (Centre for Sustainable Transportation, 2005). This document explains how to make land use and transportation planning more supportive of the needs of children and youth, with 27 guidelines and a discussion of implementation issues. It is accompanied by a series of short information booklets on children and transportation for a variety of audiences including

educators, health and recreation professionals, municipal officials, parents and youth. <http://cst.uwinnipeg.ca>

Green Mobility Strategy for Nova Scotia (Ecology Action Centre, 2008). This report includes an examination of best practices in green mobility for communities. The Centre is also developing a toolkit for small towns and rural areas that will help them build best practices for sustainable transportation into their integrated community sustainability plans (ICSPs). www.ecologyaction.ca

Toolkit on sustainable transportation policies, infrastructure and promotion (Fraser Basin Council, pending). The Council is developing a local government toolkit for small and mid-sized communities, as well as training resources and a continuing support network to guide implementation. www.fraserbasin.bc.ca

Promoting Sustainable Transportation Through Site Design (IBI Group for the Canadian Institute of Transportation Engineers, 2004). This guide discusses and illustrates numerous strategies to make developments more supportive of walking, cycling and transit use. It has many valuable insights for communities of all sizes. www.ite.org

The Case for TDM in Canada: Transportation Demand Management Initiatives and Their Benefits (Noxon Associates Limited for the Association for Commuter Transportation of Canada, 2008). This practical guide will help practitioners to build an effective argument for TDM initiatives based on documented impacts, and to present it to a variety of audiences including elected officials, government staff, educational institutions and the private sector. www.actcanada.com

Improving Travel Options with Transportation Demand Management (Federation of Canadian Municipalities, 2008). This concise booklet is intended to help municipal decision-makers understand the importance of TDM, explain key areas of action and illustrate Canadian successes. Stakeholders can customize the accompanying PowerPoint slide presentation. www.gmf.fcm.ca/Capacity_Building

Online Urban Transportation Directory (Transport Canada). This Web site offers numerous links to Canadian government agencies and programs, domestic and international research and information, as well as academic, professional and non-governmental organizations in many areas of sustainable transportation. Look under “Information Network” at www.tc.gc.ca/urban

Sustainable Transportation Catalogue (Green Communities Canada, 2008). This resource offers a wide-ranging list of ideas for sustainable transportation initiatives, existing projects and organizations, resources, and potential partners and revenue sources. Look under “Downloads” at www.gca.ca

Online TDM Encyclopedia (Victoria Transport Policy Institute). This Web site is a comprehensive source of information about innovative management solutions to transportation problems. www.vtpi.org/tdm

2.2 Active transportation

Overview

Active transportation is human-powered travel. The term refers primarily to walking and cycling, but also to wheelchairs, in-line skating, skateboarding, cross-country skiing, snowshoeing and even kayaking or canoeing.

Benefits. Active transportation has several benefits for quality of life in small and rural communities:

- It improves public health by fighting obesity and chronic illnesses like heart disease and Type 2 diabetes.
- It offers independent mobility to children, youth, seniors, low-income families and persons with disabilities – all of whom can be left out when cars are required to get around.
- It brings economic benefits by reducing the social costs of transportation, supporting local stores and services, and attracting tourists who wish to get around without a car.
- It enhances street life, increasing citizen interaction and improving personal security.
- It is emissions-free, making it a powerful weapon against climate change and air pollution.

In view of the demographic trends facing many smaller communities, the rewards of active transportation for older and younger persons are especially notable. Communities that support walking are more likely to be attractive places to live for

“The structure of neighbourhoods can powerfully affect how much we walk, and play a big role in making us healthier as we age.... Having easily accessible, well-lit places to walk also improves safety, since older people are more vulnerable than people in other age groups to being hit by cars.”

– B.C. Premier’s Council on



aging adults and families with young children—as well as youth who are developing independent lives but do not have access to a car. These are important considerations for communities where the population is both aging and either stagnant or declining.

Challenges. While the benefits of active transportation are real, so too are various challenges. Only relatively short trips are practical for pedestrians, and even many cyclists are unlikely to regularly travel more than a few kilometres. Communities that have dispersed land uses may lack corridors of strong travel demand that would warrant better facilities for walking or cycling. Harsh climatic conditions including wind, rain, snow, heat and cold can dampen enthusiasm for active transportation.

The key to making active transportation a more viable option for community residents is to focus where opportunities are greatest. Compact communities like traditional small towns are ideal environments for active transportation, given the short lengths of many trips. Neighbouring communities separated by only a few kilometres can work together to foster walking and cycling between them, increasing opportunities for residents and businesses of each. Communities with a strong base of practitioners or interest groups in the health sector may find that health concerns are a strong motivator for action by both government and individuals.

See the profile at the end of Section 2.2 for an example of how small communities can create effective plans for active transportation.

Active transportation plans

Benefits. Communities across Canada, including a number of smaller and largely rural municipalities, have found that the development of a plan for walking and cycling can be a key to success. Active transportation plans are an opportunity to examine and learn from the experience of others, to identify solutions that fit the local context, and to guide their implementation. The process of creating a vision, setting goals, evaluating options, defining networks, laying out programs, and planning affordable investments can be

Several Canadian municipalities that are working to improve active transportation have adopted the **International Charter for Walking**. This policy statement defines a community as pedestrian-friendly in principle, and reinforces a sense of collaborative determination to bring about change.
www.walk21.com

a great catalyst for action by energizing the public, motivating staff and elected officials, and leveraging limited financial resources through volunteer effort. By highlighting ways that they support shared objectives, plans can also build buy-in from key stakeholders.

Support for integration and action. Plans are also a chance to bring active transportation into the “mainstream” of municipal endeavours. Walking and cycling initiatives are more likely to be successful when the responsibility for them is shared by staff groups that manage land use planning, road design and maintenance, public health and recreation. In larger communities, plan implementation can provide a mandate for the addition of new staff resources – typically in the form of an active transportation specialist who is responsible for championing and coordinating change in key areas like development approvals, transportation and park planning, health promotion, road design and construction, road and trail maintenance, traffic safety and enforcement, and signal operations. Ultimately, a key goal of any plan should be to integrate active transportation into everyday municipal activities so that responsibilities are shared and supportive decisions occur as a matter of course.

Supportive land use

“Research... has found that people living in more walkable neighbourhoods with mixed land uses, connected streets, high residential density, and pedestrian-oriented retail do more walking and biking, are less likely to be overweight, drive less, and produce less air pollution than others.”

— B.C. Premier's Council on

Supportive land use is critical to making active transportation a practical choice for individuals. This is true not only of overall community form and growth management, but of individual developments.

Community form. Compact, mixed-use community cores do much to make walking and cycling more practical by increasing the potential for short trips. Because distance is a barrier to active transportation, homes should be as close as possible to schools, offices and stores. Sprawling subdivisions discourage active travel, while higher densities bring friends, stores and restaurants within reach. Mixed uses let people do several errands at once. Because improvements to land use can happen only through development or redevelopment activity, municipalities should act decisively to make development applications as supportive as possible (such as through stricter bylaws, helpful guidelines and more rigorous development conditions). Larger applications, such as those for subdivision plans, need to integrate street grids, sidewalks and landscaped trails that recognize the needs and desires of an aging, environmentally aware and health-conscious population.

Site design. The design of individual buildings and development sites is also important to pedestrians and cyclists. Key features include secure and convenient bicycle parking at major destinations and multiple-unit dwellings, showers and change rooms at workplaces, canopied and at-grade store entrances, parking lots behind or beside buildings rather than next to the street, and pathways that link building entrances to nearby sidewalks and trails.

Active transportation facilities

Pedestrians and cyclists are very exposed to their environment, and as a result are sensitive to the quality of travel facilities. They will avoid routes that they think are inconvenient or unsafe. The benefits of having land uses close together will be reduced or even erased by sidewalks that are insufficiently buffered from busy traffic lanes, by road lanes that are too

narrow to be shared safely by bicycles and cars, or by poor maintenance of otherwise attractive sidewalks and trails.

On-road facilities. Streets are usually the shortest route between homes, workplaces and shops. They serve everyone, but should give priority to slower and more vulnerable users. Universal (or barrier-free) design helps everyone get around – infirm seniors, adults in wheelchairs or scooters, shoppers with carts, and stroller-pushing parents. Pedestrians benefit from wide sidewalks and boulevards, frequent crossings of main streets, and quality lighting. In towns, cyclists are attracted to roads with dedicated bicycle lanes and wide curb lanes. In more rural areas, paved shoulders offer a safer travel environment for both pedestrians and cyclists. Regular sweeping, snow and ice control and timely pothole patching also help keep streets and sidewalks safe.

Off-road facilities. Trails offer a safe alternative to on-road routes, especially where there are large numbers of children or no sidewalks. Trails need not be long – a short pathway (such as one connecting a residential subdivision to a nearby school) can provide a travel option that did not previously exist, by replacing a route along a high-speed rural highway. There are even a growing number of examples in Canada of communities investing in pedestrian bridges, such as those crossing highways or watercourses, as an integral part of trail systems. Of course, trail development has been underway for years in some communities, with many success stories about increasing use for recreational or tourism purposes. Those successes are now being leveraged to emphasize focus on utilitarian use. In some cases, minor new links are required to make recreational trails more useful to reach everyday destinations.

Wayfinding. For active transportation users along streets or trails, wayfinding and route signage are valuable features. Helping people find their way is especially important when trails divert from developed areas with familiar landmarks. It also has a promotional aspect by making non-

users aware of the existence of active transportation facilities. For example, roads with paved shoulders or wide curb lanes may have been designed to foster cycling; signs and pavement markings can inform motorists of this fact, and may have the added benefit of making drivers more alert to the possible presence of cyclists.

End-of-trip facilities. For some cyclists, the barriers they find at their destination loom just as large as the challenges they overcome along the way. Long-distance commuters need a place to shower and change at work, and some cyclists are discouraged by inadequate or insecure parking that puts their (often quite costly) bicycles at risk of theft. While property owners are ultimately responsible for resolving these issues, municipal bylaws can require solutions to be part of new developments. Communities can go further by offering high-quality public bicycle parking in downtown areas, and even by subsidizing the installation of bike racks at workplaces.

Integration with transit. Finally, small or rural communities that have some form of public transit service should make the best of intermodal opportunities. Transit and active transportation are more effective together than as independent options; moreover, transit users are almost always pedestrians – and, more and more, they are cyclists as well. To build ridership, communities can add bike racks to buses, install bike parking at major transit hubs, and upgrade walking and cycling routes around transit stops.

Information, education and promotion

Removing non-physical barriers. Not all impediments to walking and cycling are facility-related. Some can be overcome by addressing the attitudes, awareness, understanding or skills of potential pedestrians and cyclists. Best of all, effective measures need not be expensive and they can make full use of community energy and volunteer resources. They include:

- campaigns (e.g. Bike to Work Week) that raise awareness and encourage people to try new ways of getting around

As it works to improve active transportation facilities, the City of Whitehorse, Yukon also conducts “Wheel 2 Work Whitehorse,” a social marketing campaign that offers incentive prizes to encourage bicycle commuting by residents during the summer season.

www.whitehorse.ca

- walking or cycling maps that highlight recommended routes including sidewalks, trails, bike lanes, and roads with wide curb lanes or paved shoulders
- promotional events to mark milestones (e.g. approval of a cycling plan, opening of a new trail, publication of a walking map) and attract media attention that can raise awareness and build public support for future measures
- awards that recognize the contributions of key individuals and organizations
- cycling skills courses that teach cyclists to ride safely on the road
- educational campaigns that encourage drivers to treat cyclists and pedestrians with care and courtesy

Partnerships. Municipalities need not do it all themselves, when many potential partners can offer energy, knowledge and skills. Non-profit organizations can deliver education programs, employers can offer incentives for active transportation commuters, neighbourhood groups can supply volunteers for special events, community newspapers can print articles, and charities can organize fundraising walks or rides. Finally, business leaders can make irreplaceable champions, especially when economic benefits are at stake (such as in the promotion of initiatives that can attract active tourists).

School-based active transportation initiatives

A growing movement. Across Canada, communities are promoting active transportation as a way to get children to school. This trend is motivated by concerns over the health, safety and environmental impacts of automobile and school bus travel that could be replaced by a walk or bike ride of reasonable length. These efforts are often called “active and safe routes to school” programs, and usually combine changes to the physical environment with behaviour-influencing demand-side initiatives. They often involve an active partnership of parents, school staff and municipal officials.

Possible initiatives. Active transportation initiatives at schools can include several elements:

- “walking school buses” or “cycling trains” that help children travel safely in parent-led groups
- “best route” planning and advice for individual families
- cycling courses to teach safe riding skills and ensure children have the proper equipment
- challenges between schools to see which student population can walk or bike the greatest distance
- classroom curricula or physical education elements that reinforce the benefits of walking and cycling
- upgrades to sidewalks, trails, street crossings, lighting or bicycle parking

Profile

Township of Minden Hills, Ontario. In 2008, the Village of Minden celebrated a new Active Transportation Plan. The plan was developed by government and community partners, based on research and outreach efforts that were supported by small grants and volunteer time. It will help municipal staff and elected officials identify, prioritize and budget for the elements needed to create a comprehensive active transportation network. Minden Hills Council has already used the plan as part of a strategic planning session for the downtown core.

The plan outlines opportunities and barriers as well as strategic priorities to improve conditions for walking and cycling in Minden. Its key recommendations concern policy changes, school zone safety, development and maintenance of an active transportation network, improvements to commercial and tourist areas, and promotional measures. They include before-and-after images to illustrate possible improvements and spur dialogue on how to bring them about.

www.mindenhills.ca

For more information on active transportation

Communities in Motion: Bringing Active Transportation to Life (Federation of Canadian Municipalities, 2008). This concise booklet is intended to help municipal decision-makers understand the importance of active transportation, explain key areas of action and illustrate Canadian successes. Stakeholders can customize the accompanying PowerPoint slide presentation. www.gmf.fcm.ca/Capacity_Building

Canada Walks. This website is an emerging clearinghouse of best practices, case studies, tools, checklists and links to community walkability and walking programs. www.canadawalks.ca

Ontario's Best Trails: Guidelines and Best Practices for the Design, Construction and Maintenance of Sustainable Trails for All Ontarians (Trails for All Ontarians Collaborative, 2006). This is a comprehensive technical resource for creating successful trails that are accessible to people of all abilities. www.abilitiescentre.org

Green Communities Canada - Active & Safe Routes to School. This is the most comprehensive program for school-based active transportation programs in Canada, with a Web site full of tools, resources, contacts and event information. www.saferoutestoschool.ca

Trans Canada Trail. This planned 21,500-kilometre recreational trail will cross every province and territory and link almost 1,000 communities when complete (it is almost 70% finished). The Trans Canada Trail organization raises funds, helps to build and promote the trail, and provides identifying signs to be installed by local groups. Ownership, management and

maintenance of trail segments are the responsibility of local trail groups and/or municipal, provincial or federal governments. www.tctrail.ca

Provincial support programs for active transportation. Most, if not all, provinces offer financial support for local programs that encourage walking and cycling. This support comes from diverse sources, and may be driven by health, social, economic or environmental objectives.

2.3 Public transit

Overview



The concept of public transit is different in small and rural communities than it is in larger urban centres. Individuals have different travel needs, and the absence of a large, concentrated population shifts the fundamental economic conditions under which transit operates. In fact, public transit in smaller communities is more properly viewed as a spectrum of possible services that have different funding and operating structures.

A family of services. Many smaller communities do not have conventional public transit services, but do have a variety of “social transportation” services for specific groups such as seniors, persons with disabilities, or schoolchildren. These services may have only one or two cars or vans, and may be funded and operated by non-profit institutions or charitable organizations. Together, they fulfill many of the objectives of a more formal public transit service. However, a greater degree of coordination could improve efficiency by eliminating overlaps, and improve effectiveness by avoiding gaps in serving various audiences. These diverse services are also vulnerable to financial stresses that lie outside municipal influence. These are primary considerations for small and rural communities that are thinking about public transit as a solution to their needs.

Of course, even communities with well coordinated social transportation services may be challenged by looming demographic trends – namely, the growing proportion of seniors with declining independent mobility. Non-profit funding and the willingness of individual volunteers have their limits. At some point, municipalities may need to ask themselves whether the public interest would be better met through public transit services that are accessible to all members of the community.

Benefits. For smaller communities, the principal benefit of public transit (compared to social transportation services) is that it is open to all—from children and youth to working adults and retirees. This has several positive aspects:

- It addresses a key challenge for many young and lower-income people in smaller communities—namely, limited independent mobility to access educational, employment, recreation and social opportunities.
- It helps seniors, who may otherwise be eligible to use charitable transportation services only for medical appointments, or be restricted in which days of the week they can shop for groceries or visit friends.
- It offers families an alternative to cars as a way to get around with small children, and can help communities attract young families looking to raise their children outside an urban environment.
- It helps employers tap into labour markets by improving the mobility of potential employees such as lower-income residents, youth, the working elderly and residents of adjacent communities. This can be especially valuable for isolated employers such as ski resorts, agri-businesses or extraction operations.
- It can increase the customer base for local stores and services, since those who rely on transit will shop where transit routes go—typically to the community’s own business district and other shopping areas.
- It can attract tourists who might not otherwise visit the community.

In communities of a certain size (say, approaching 25,000 people), these benefits can have collective, secondary impacts as the volume of transit users reaches a threshold of support. For example, the greater accessibility of land and higher pedestrian volumes around major transit hubs can increase land values, support a greater concentration of shops and services, and spur redevelopment that boosts the local tax base.

Challenges. Of course, smaller communities can face real difficulties as they work to make public transit a success:

- Dispersed, low-density land uses are difficult to serve – they make fixed routes less effective, and flexible or demand-responsive routes more costly.
- Around larger urban centres that attract local commuters, the distance to major employment areas can make commuting-oriented routes costly and less able to compete with cars.
- In harsh climatic conditions, passengers may have limited patience for waiting outside.
- Residents may feel that full-size buses have too “urban” a presence, even among those who support the idea of transit.
- While capital funding from federal, provincial or territorial governments makes transit vehicle acquisition affordable, financial support for operations is always a challenge. This makes the first few years of transit services, which typically require greater levels of operating subsidy, especially difficult.
- Transit audiences have different needs that can make economies hard to find. For example, seniors tend to travel outside peak commuter hours, and youth may want more evening and weekend services.
- The quality of pedestrian routes may be poor between transit stops and residential areas, seniors homes, shops and services. Winter conditions only make this situation worse.

In British Columbia, smaller communities follow a formal feasibility study process for new transit services. BC Transit shares costs and conducts the work in cooperation with municipal staff and local agencies. It examines land use and transportation patterns, identifies service options and consults with the public. Concept and implementation plans are followed by the selection of an operator (usually a business) to run the service. Negotiated agreements describe service standards, budgets, fares and other aspects of the operation.

www.bctransit.com

Transit plans

The first major step in developing a new public transit service is a feasibility study or transit plan that can demonstrate need and build buy-in among key stakeholders. This effort can be led by a municipality, a non-profit organization or an entrepreneur who hopes to form a public-private partnership. Regardless, strong community commitment is a vital outcome because the support of customers, community groups and government agencies is critical to making transit work.

Weighing the options. Early in the planning stages, communities should develop a comprehensive understanding of the travel options that already serve the potential transit market. Primarily, these are non-profit or charitable transportation services (such as those run by seniors homes, recreation centres or the Lions Club) that may be subsidized by municipal tax dollars. In some cases their narrow mandates, restrictive passenger eligibility criteria, lack of information sharing and low financial accountability may lead them to be collectively inefficient; new vehicles acquired with capital grants may sit unused for lengthy periods due to shortages of operating fund. For these reasons, communities should carefully consider unrealized opportunities to coordinate, rationalize and leverage these services—opportunities that may be more attractive and offer better value than creating a new transit service from scratch. By investigating these opportunities, communities can enhance the credibility for any eventual proposal for new public transit services, which could require significantly greater financial support. In the end, communities need to decide whether would be better off with incremental action that strengthens existing services, or with something new and innovative. New public transit services are more likely to be appropriate for fast-growing communities, but even they must minimize the risk of replacing volunteer enthusiasm and community-based resources with a more rigid, market-oriented approach.

Supportive land use

Ensuring density of demand. In small and rural communities, economic viability is a critical test for any public transit service. A minimum density of

demand (hourly passengers per bus) is required for transit to be cost-effective – but sprawling, unfocused land uses with highly dispersed origins and destinations make this difficult. Only when clusters of trips share a common start or end point (and preferably both) is transit likely to be truly viable. From a land use perspective, transit needs concentrations of residential land uses, workplaces, schools, medical and retail destinations. Transit service within and between small towns is more likely to work when their traditional cores are preserved – partly due to the resulting density, and partly due to the pedestrian-friendly environment of those downtown cores when compared with the typically car-focused retail and service centres that have developed on their peripheries. This reality is gaining traction in some communities, in part through some of the “smart growth” exercises discussed in Section 2.1.

Transit facilities and services

Passenger facilities. Aside from the acquisition of transit vehicles (which can range from small vans to standard city buses), transit systems in small and rural communities typically make do with little in the way of passenger facilities. Quality pedestrian access routes to transit stops are very important, both in terms of basic provision (e.g. sidewalks and pathways) and maintenance (e.g. snow and ice removal). Passenger shelters at transit stops are desirable, especially in more exposed areas and along less frequent routes, but require funds that may have higher priority uses.

Service delivery options. As suits their varying contexts, smaller communities in Canada have developed a number of different models for transit service. Some involve better coordination of social transportation services. Others are hybrids that take elements of demand-responsive social transportation services and mix them with elements of conventional fixed-route systems. Still others take a conventional approach to service that resembles larger urban centres. Regardless, the most successful services focus closely on meeting the needs of key markets (e.g. seniors, students, commuters to large workplaces) and working with travel destinations (e.g. administrators of schools, seniors centres and workplaces) to match people’s needs with the type and schedule of service offered. In some cases, demand-

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valleyfield.gc.c

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responsive services (such as those offered by subsidized taxis or small dial-a-ride vans) are a cost-effective means of serving customers who do not use a wheelchair or electric scooter, as an alternative to both fixed-route conventional transit services with full-sized buses and specialized transit services with trained drivers and accessible vans.

Working with partners. The potential for partnerships is a key consideration in shaping a service strategy. Within communities, school boards make reliable partners due to the predictability of student transportation needs. Health providers also hold potential due to the overlap in customer markets, and the high cost of providing non-emergency medical transportation. Even major employers can be part of win-win partnerships that eliminate barriers to job opportunities. Several Quebec communities have programs that let adults take advantage of empty seats on school buses or accessible vehicles for customers with disabilities; as long as legislative, regulatory or insurance requirements do not pose a barrier, this can be an efficient use of resources.

Another form of partnership is between adjacent communities. Small communities near larger urban centres may be able to negotiate cost-shared service extensions that “piggyback” on existing services in the urban area. In other cases, two or more small municipalities can form an intermunicipal partnership to share knowledge and manage the cost risk of starting up new services through economies of scale. Service that links communities together can improve a variety of opportunities for residents (see a more detailed example of this at the end of Section 2.3).

Transit promotion

Building ridership. Communities can increase the return on their transit investments by encouraging transit usage. They can market services for special events (e.g. weekend services for a fall fair, extended evening hours

A student U-Pass at British Columbia’s College of the Rockies allows unlimited use of the **Cranbrook Transit** system. In Salmon Arm, BC the **Shuswap Regional Transit System** Valley has capitalized on summertime drops in ridership to offer free under-18 fares that help youth reach summer jobs and recreation destinations. www.busonline.ca

for holiday shopping, late night service for New Year's Eve). They can establish fare programs that reward long-term users, such as discounted yearly passes, student semester passes or universal pass (U-Pass) programs which see entire student populations pay a mandatory discounted fee in exchange for unlimited transit use. U-Passes have a long track record of guaranteeing revenue to transit operators and providing excellent value to individual students, while helping participating institutions reduce parking requirements and gain a competitive advantage in attracting new students.

Profile

County of Kings, Nova Scotia. Kings Transit Authority is one of Canada's most efficient small transit systems and offers a model for rural communities that want to provide cost-effective transit service. The system is run by the Municipality of the County of Kings in partnership with the towns of Kentville, Wolfville and Berwick. With five routes over almost 200 kilometres of Highway 1, it links several rural communities in the Annapolis Valley on Nova Scotia's north shore. Kings Transit offers service six days a week using low-floor, wheelchair-accessible buses equipped with bike racks. A significant proportion of customers are seniors, a market that the system has built through outreach and awareness building.
www.kingstransit.ns.ca

Profile

Hinton, Alberta. The town council in Hinton (population 10,000) has committed to a new transit service, using vans rather than more costly buses, starting in 2009. An 18-month pilot project that ended in late 2008 responded to a 2006 task force that identified a "mobility gap" for low-income individuals and families who did not fit the criteria for Handibus service, but who faced obstacles getting around the low-density community. The pilot service was intended to help low-income persons, youth and seniors reach jobs, shopping, educational and recreational opportunities.
www.town.hinton.ab.ca

Profile

Village of Casselman, Ontario. The newly launched Transit Eastern Ontario service offers daily commuter transportation into Ottawa for rural residents. Organizers plan to expand service between towns in the region, and to integrate service with the schedules of passing Via Rail trains. Monthly fares range from \$210 to \$320, and for an extra \$8 riders can buy a pass that also provides access to regular transit routes in Ottawa. Two of the municipal partners in Transit Eastern Ontario (Nation Municipality and Village of Casselman) offer their residents a monthly fare subsidy of \$20. www.teo-eot.ca

For more information on public transit

Canadian Urban Transit Association (CUTA). This organization is the voice of Canada's public transit industry. In this capacity, CUTA staff provides some degree of assistance to smaller communities several times each year. Communities that join CUTA are entitled to a greater degree of support regarding network contacts, training, funding issues and technical questions. CUTA's Web site includes a variety of research and guidance publications, including a comprehensive guide to starting a universal transit pass (U-Pass) program. www.cutaactu.ca

Transit Implementation Guidelines for Small Canadian Municipalities (Masterton Planning Group and D.A. Watt Consulting for Town of Canmore, 2006). This guide offers comprehensive information on potential transit markets, types of transit service, anticipating costs and revenues, service design and route planning, operating hours and schedules, management and staffing, fare collection, financial management, customer relations, evaluation and monitoring. www.gmf.fcm.ca/Capacity_Building

Rural Transit Planning Guidelines: Users' Guide (ENTRA Consultants for Halifax Regional Municipality, 2008). This guide is intended to plan transit service extensions in the Halifax area, but contains much transferable

information that would help other communities. It offers a number of worksheets and data on ridership projection, vehicle types, service types, capital and operating costs. www.halifax.ca

Let's Plan On It: A Guide to Providing Transportation Services in Rural Areas for Seniors and Persons with Disabilities (Alberta Ministry of Transportation, 1996). This guide offers advice on topics including demand assessment, service design, roles and responsibilities, staff and volunteer management, fleet selection, dispatching, financial management and monitoring. www.transportation.alberta.ca

Guide d'intervention en transport collectif en milieu rural (in French only) (Association des transports collectifs ruraux du Québec, 2009). This guide is geared towards decision-makers and organizations responsible for developing, implementing and managing public transit systems in rural areas. www.atcrq.ca/GuideIntervention_WEB.pdf

Provincial support programs for transit service development (note that this list excludes funding through federal-provincial infrastructure agreements):

- **British Columbia.** BC Transit's small communities program operates under a shared services model that offers centralized expertise in planning, administering, marketing and fleet issues. BC Transit has also purchased minibuses for new small town and rural services to help make those systems more affordable.
- **Alberta.** The Green Transit Incentives Program will support new public transit alternatives in communities throughout the province.
- **Manitoba.** The Mobility Disadvantaged Transportation Program supports start-up and operating costs of handivan services and handivan purchases in 66 communities.
- **Ontario.** Municipalities interested in starting a transit service are eligible to receive the provincial government's gas tax transfer of \$0.02/litre.

- **Quebec.** The *Programme d'aide gouvernementale au transport collectif regional* includes \$8 million in funding for the development of rural transit systems.
- **New Brunswick.** The province supports the capital costs of rural-to-urban commuter transit services. It has also worked with smaller communities to start new transit services, and offers grants to help community organizations buy accessible vehicles.
- **Nova Scotia.** The Community Transportation Assistance Program (CTAP) provides operating support for non-profit inclusive transportation services in lower-population areas. Organizations interested in developing new community-based services are eligible for a grant upon approval of a business plan.

2.4 Ridesharing

Overview

Ridesharing (also referred to as carpooling) occurs when people travel together in a private motor vehicle – most commonly, when a driver shares his or her car with one or more passengers. Because sharing a ride requires people to follow the same schedule, it tends to work best when the travellers have a common origin or a common destination, or both.

Benefits. Ridesharing can be convenient for individuals, depending on their travel needs. It can lead to significant cost savings by allowing driving costs to be split among two or more people. It reduces vehicle emissions, when two or more drivers agree to leave one of their cars at home. It reduces the stress of commuting, especially for people making longer trips and during bad weather, and because carpoolers need to follow a common schedule, it is likely to reduce employee tardiness.

In smaller communities, informal ridesharing is common and people regularly share rides to work, school and social events. It is especially important for youth and seniors, who more commonly rely on other people to drive them where they need to go. People may also feel safer sharing a vehicle when making long trips in rural areas, especially in darkness or bad weather.

Challenges. In the context of regular commuting to schools or workplaces, a basic level of ridesharing will occur as colleagues, neighbours and friends help each other out. Encouraging more ridesharing than that tends to require assistance and incentives that can motivate drivers agree to ride as a passenger in someone else's car. In practice, however, this requires them to give up a degree of independence. It becomes harder to stop off and do



errands, to stay late at work or arrive early for a breakfast meeting. In communities with dispersed, low-density development, drivers and passengers may have to make significant detours for pick-ups and drop-offs. While cost savings are an excellent incentive to make these sacrifices, they may be insufficient.

Carpool parking lots

Carpool parking lots are frequently found around the periphery of metropolitan areas, where carpoolers can meet and leave one or more cars in order to travel together to urban destinations. Carpool lots can also be found in more rural environments, usually at interchanges along major highways—in this context, they help rural residents who have long commuting distances to meet up, share a ride and reduce their driving costs. These carpool lots are usually operated by provincial highway agencies.

Carpool ridematching

Ottawaridematch.com is a sophisticated Web-based service that serves the metropolitan area of **Ottawa-Gatineau**, including a number of rural communities in the vicinity. www.ottawaridematch.com

Kootenayrideshare.com is a simple, notice-board style ridematching service offered in the **Kootenay** region of British Columbia

Commuter carpools. Ridematching services are usually designed to help commuters find carpool partners. They can be as simple as a bulletin board at a post office or general store, or as sophisticated as a full-featured, automated Web-based service. There are smaller Canadian municipalities with their own ridematching services at each end of this spectrum, and other communities “piggyback” on ridematching systems operated by larger cities like Ottawa or Saint John. Ridematching services may address community-wide carpooling, or may focus on travel to particular destinations such as community colleges or large employers.

Single-trip ridematching. Another type of ridematching serves single-trip users, such as seniors travelling to their doctor or a young person travelling to a concert. Charities and non-profit organizations sometimes arrange rides for needy people with volunteer drivers, but because of the logistical complexity this service may be limited to medical appointments or weekly grocery shopping. (Outside of such regular voluntary commitments, it is

otherwise very hard to get drivers to sign up with a single-trip ridematching service except for long and expensive trips – and in some provinces it may be technically illegal to share driving costs for such trips). However, some Web-based ridematching systems are starting to incorporate a feature that enables dynamic, on-the-fly ridematching for one-time trips among a pool of qualified passengers and volunteer drivers. The rising rate of seniors with wireless devices is enabling the use of new technologies like text messaging for instant ridematching, even though many (especially vulnerable persons) may want the security of having a guaranteed ride booked.

Vanpool services

An emerging option. Communities may also consider vanpooling, which is similar to carpooling but involves more passengers in each vehicle (typically 7 to 15). Vanpool vehicles are multi-passenger vans that are leased or owned by an employer or third-party agency, rather than by the driver. Vanpool drivers must meet eligibility criteria, and typically travel for free or at a discount. Passengers pay a monthly fare based on their commute distance, and are free to discontinue at any time after giving notice. Vanpools operate on a formal schedule, and (due to the extra effort and time needed to pick up many passengers) they usually serve longer commutes of 30 km or more.

Vanpools are practical and economical for long-distance commutes in rural areas, but certain business models are restricted in some provinces to protect other transportation service providers. In Ontario, there is some movement to ease those restrictions and permit the entry of for-profit vanpool operations. British Columbia is home to Canada's largest vanpooling operation, run by the non-profit Jack Bell Foundation.

Ridesharing promotion

Encouraging participation. Communities can promote ridesharing by joining in special events like the national Commuter Challenge or the newer national RideShare Week. There are natural synergies between this kind of

promotional measure and the provision of ridesharing facilities and/or ridematching services. Communities can also work with employers and institutions to encourage and facilitate ridesharing by commuters who travel regularly to the same destination.

Profile

Benton and Franklin Counties, Washington State, USA. These largely rural counties are home to a thriving vanpool operation that has grown for over 25 years. The longevity and success of the Ben Franklin Transit vanpool program is in part due to a continued focus on the needs of individual customers as the area has grown and commuting needs have changed. Ben Franklin Transit also partners with the business community to improve travel options for rural commuters. www.bft.org

For more information on ridesharing

RideShare Week. This event, coordinated by the Association for Commuter Transportation of Canada, was held across Canada for the first time in October, 2008. It provides communities an opportunity to enhance the visibility and promotion of carpooling or vanpooling. www.actcanada.com

Ridematching services

- **Private companies.** Several vendors offer ridematching resources that communities can access. The for-profit business Carpool.ca offers a shared ridematching service that is used by numerous Canadian municipalities, including many small and rural communities. Other vendors create Web-based services that can be customized to meet specific customer requirements in terms of added features or a unique “look and feel.”

- **Jack Bell Foundation.** In British Columbia, this non-profit organization operates a carpool ridematching service across the entire province, as well as a fare-based vanpool and carpool service (using its vehicles) in the Lower Mainland and Vancouver Island. www.ride-share.com

2.5 Efficient driving

Overview

Fuel-efficient driving involves a number of practices such as purchasing vehicles that use less fuel, not idling engines, maintaining engines and inflating tires properly, accelerating and braking gently, adhering to speed limits, eliminating unnecessary car trips, and grouping several purposes into a single journey. Actions such as these are essential, considering that motor vehicles will always be part of the mobility equation in smaller communities.

Benefits. Fuel-efficient driving is a realistic approach to reducing the environmental impacts of transportation in small and rural communities. In fact, its potential to reduce emissions is probably greater than that of active transportation or public transit, simply because car use is so prevalent. Fuel-efficient driving can also help individuals save money by reducing wear-and-tear on their vehicles and dramatically cutting fuel consumption – by up to 35%, according to experts. Rising fuel prices, such as those Canadians experienced in 2008, inevitably lead to more fuel-efficient car use – especially among low-income families, seniors and youth.

Challenges. Fuel-efficient driving lacks the broad social cobenefits (e.g. of active transportation) that can attract partners for planning, implementation and promotion.

Carsharing services

Affordable, flexible car ownership. Carsharing is a relatively new form of car ownership that lets people jointly own vehicles with others, through membership in programs that are run by a for-profit or non-profit organization. It is most common in higher-density urban areas, but there are examples in smaller communities. Carshare members pay a monthly fee to



cover some fixed costs, and then pay time- and distance-based fees for each trip they make. Fueling, insurance and maintenance are looked after by the carsharing organization, and booking services are typically online. By distributing the fixed costs of each shared car among many people, and by providing members with a financial incentive to reduce discretionary car trips, carsharing reduces the financial impacts of car ownership and use on individuals and families. Communities can support carshare services by providing parking spaces for shared cars, or (because many carshare members are also transit users) by offering to conduct joint marketing efforts with public transit services.

Information and education

Enabling efficiency. Educational programs are the primary means of motivating individuals to drive efficiently, and across Canada there are several provincial and federal agencies that promote fuel-efficient automobile use to support energy conservation or climate change objectives. Municipal governments or community organizations in small and rural communities can help residents access related information, and in some cases can launch local campaigns using the tools and resources being offered.

For more information on efficient driving

Natural Resources Canada. This federal department offers tools and resources for fuel-efficient automobile use, including details about its Auto\$mart driver education program. www.nrcan-rncan.gc.ca

EcoDriver, Green Communities Canada. This national initiative has a comprehensive Web site and a number of non-profit partners that deliver related programs in communities across Canada. www.ecodriver.org

Regional services

- **Co-operative Auto Network.** This Vancouver-based carsharing organization has cars stationed in the small communities of Comox and Cortes Island, BC. www.cooperativeauto.net
- **Nelson Carshare Cooperative.** This organization operates carsharing services in four small British Columbia communities (Nelson, Kaslo, Revelstoke and Golden). It has over 100 members and about 10 vehicles on the road. www.nelsoncar.com
- **Conserve Nova Scotia.** This provincial energy efficiency agency funds the DriveWiser motor vehicle fuel efficiency program delivered by the non-profit Clean Nova Scotia. www.drivewiser.ca