This project was developed by the City of Moncton Active Transportation Committee (a working sub-group of the Environment Committee). We are pleased to provide this document as a guide to active transportation in Moncton. We are also pleased to have the opportunity to implement this city transforming plan in the upcoming years. Please feel free to contact any of our committee members if you have any questions.

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city of moncton active transportation plan
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1

transforming a city

Active transportation is any human powered and environmentally friendly mode of getting around. This includes walking, cycling, rollerblading and public transit. Active transportation (AT) is also the fastest growing approach to remediation traffic congestion in North America. Most North American cities have implemented some form of AT plan. This report, The City of Moncton Active Transportation Plan, presents approaches and an implementation plan for Moncton.

A properly implemented AT plan has the potential to transform the City of Moncton from an automobile reliant community to a place where motorists, public transit users, walkers, cyclists and others share a common vision for an approach to future transportation desires and needs. Imagine a place where your daily transportation decisions could efficiently and safely include walking, cycling or rollerblading to work and school. Imagine a place where the required infrastructure to do this is immediately outside your door and imagine the social and economic benefits to the city and developer alike by offering this possibility in new and existing communities.

An effective AT plan provides a framework for making this great place by integrating user desires for the various modes of *getting around* with desired community destinations. This report outlines and approach for beginning to implement active transportation in Moncton.

1.1   why consider active transportation?

Moncton is one of Canada's fastest growing cities. There is an ever-increasing dependence on almost all of its social, physical and environmental systems. This is a commonality facing all North American cities (and a commonality addressed in almost all European cities over the last 100 years). Many North American cities have developed approaches that blend the European notion of

healthy and active living with typical and/or local transportation models. Some of the benefits include:

Health Benefits

- Reduction of dependence on automobiles (which reduces consumed emissions and related respiratory problems).

- Reduced dependence on health care programs as a result of healthier citizens.
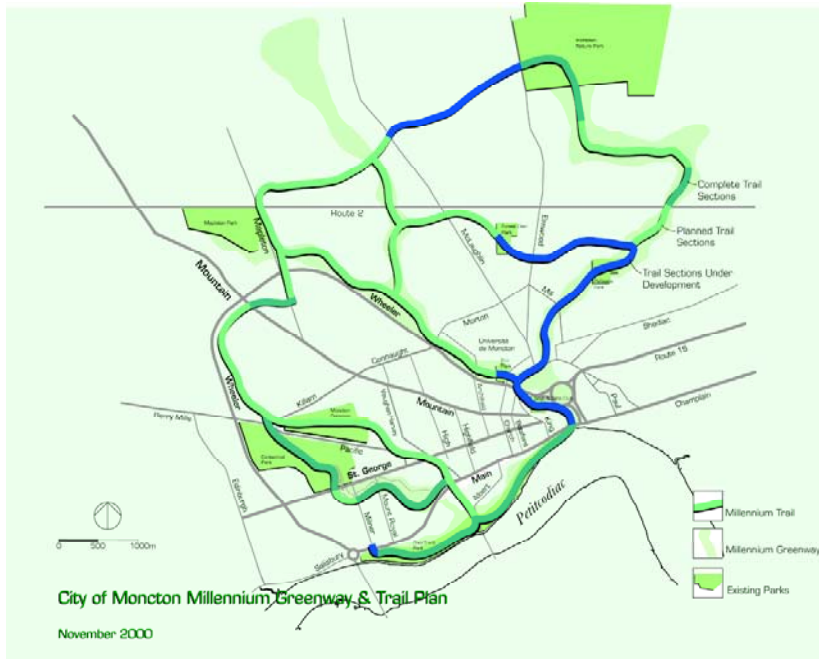
Environmental Benefits

figure one
The City of Moncton millennium trail provides a good starting point for the active transportation plan.

- A reduction of emissions resulting in reduced atmospheric environmental impacts. Also, AT can help Canada meet its Kyoto Accord requirements.
- A well-planned network can provide opportunities for residents to be in touch with nature more often (thus fostering an increased appreciation and love for natural settings).

Built Infrastructure

- An increased reliance on AT infrastructure results in a decreased reliance on traditional street infrastructure thus resulting in reduced street maintenance budgets.
- AT infrastructure incorporated into new residential development is both a good marketing tool for developers as well as a health and social benefit for new residents.

Economic Benefits

- A reduction in personal and family costs related to transportation thus making money available for other activities.
- Increased land values in areas adjacent to AT infrastructure (trails, bike lanes) resulting in higher lot yields and tax revenues.
- Reduced parking requirements.

Social Benefits

- Providing a setting where people can frequently meet and talk encourages residents to get out of their homes more often for health excuses and social reasons.

- Simply put, healthy people are happy people (about themselves and their environment).

1.2 previous active transportation work in moncton

The City of Moncton developed a linear park and greenway plan in 1999-2000 to identify an approach to sustainable development relative to critical habitat spaces and trails. From this, work began on the Millennium Trail (a pathway looping the municipality linking many communities to parks and other important civic and business destinations - see figure one). These initiatives led the City's environmental committee to consider future health, active living and transportation needs. Thus the AT committee was formed and charged with the development of this plan.

2

building the vision

The first step in our city wide planning process was to tap into resident's imaginations to determine what a this plan should do for the municipality. Thus, our plan is a vision-based (reliant on a highly creative and interactive community consultation process). The following provides a brief description of our process.

2.1   project process

Step One   A Vision
Workshops were held with residents to determine the major destinations, desired routes and methods of *getting around*. We also identified various barriers to developing AT in Moncton.

Step Two   Precedent Review
We either visited or interviewed several cities to review approaches and solutions to the various barriers.

Step Three   Concept Plan
We developed a concept plan based on the vision and the precedent reviews. This concept was presented to residents for review and comment at a public open house.

Workshops were held with city residents to develop a vision for active transportation in Moncton.

Step Four   Active Transportation Plan
With an agreed vision and concept, we developed the final plan complete with an implementation strategy.

2.2   the vision

Our planning and design vision is an interpretation of the words and actions of workshop attendees. For example, attendees expressed concern over the perceived problem of bicycle conflict with vehicular traffic on streets such as Mountain Road. At the same time, attendees developed plans that incorporated travel routes on streets

such as Mountain Road (because "it gets you to where you want to go"). This clearly tells us that city arterials should be multi-use arterials. This is one of our challenges. The following summarizes the findings of our community workshop.

The Neighbourhood and Community

The base element of an AT plan for Moncton is the Neighbourhood and the Community. Residents feel comfortable walking, biking and playing within their neighbourhood. These neighbourhoods come

Workshop attendees developed plans that illustrated city wide destinations and active transportation routes.

together to form communities (and there may be problems in safely accessing community amenities such as schools, stores and parks).

The Destinations

Workshops attendees identified public and secondary schools, UdeM, city parks as well as downtown Moncton as priority destinations. Other important destinations include the Trinity Drive shopping area and important work places such as the industrial parks.

A Multi-Modal Network

Attendees described a network of street corridors and trails that combine to form an interconnected transportation system inclusive of cars, buses, bikes, roller blades, walkers, runners, etc. The system starts at your front door and results in a safe arrival at your destination (whether you decide to use your bike on a city street or trail, a bus, a sidewalk, your rollerblades or any combination if these).

The Routes

The city's existing arterial and collector streets and the Millennium trail form the structure for the system's primary routes. Streets at the neighbourhood/community level need to be determined while most of the city's arterial streets should be active transportation routes.

Education

Attendees clearly state that car drivers and bikers need to be educated on how to share city streets – whether streets have bike lanes or not.

The Vision Statement

The City of Moncton active transportation system is a safe and comfortable multi-modal network that connects communities to the schools, parks, work and shopping areas. The well-designed system combined with citywide education encourages everyday use of public transit, trails and active transportation routes.

2.3   looking around

The project team reviewed approaches and projects in cities around North America (with a clear understanding of how the residents of Moncton wanted to proceed with AT in at home). The purpose of the review was to identify and understand relative opportunities and constraints for our plan at locations where programs and infrastructure are being interwoven into well-established city streets and communities. The cities reviewed include Quebec,

Utilizing existing public infrastructure for promotion of active transportation indicates civic commitment while promoting use and safety.

Montreal, Toronto, Vancouver, Kelowna, Portland (Maine and Oregon), Boston, Bangor and Washington DC. The following describes the relative key lessons learned. In addition to these, we discovered that, contrary to conventional wisdom, busy streets are good places for bike lanes (as traffic is slowed on a busy street). This is supported by statistics from throughout North America.

Education and Infrastructure

Bike or multi-use lanes (or any active transportation infrastructure) should not be placed on streets prior to an education program that teaches all commuters how to safely use, share and understand the infrastructure. Automobile drivers must also be taught how to share streets with the various users through creative approaches to providing information (inclusive of various medias).

Two Level System

The most popular AT systems are two-level system that includes, at one level, trails (that functions as a recreational amenity for the city). This level of the system acts as a *feeder* for a second level commuter system (street-based collector and arterial networks).

Recreational transport routes helps develop future active transportation commuters.

Streets as Corridors

The most successful systems promote the notion of streets as public multi-use corridors rather than streets for motorized vehicles alone.

Partnerships

Successful education, promotional programs and infrastructure development require partnerships to leverage public funding (maximizing development opportunities).

3

active transportation in moncton

This chapter incorporates the vision with our precedent research lessons to propose an approach to developing AT in Moncton. The approach is based on the following three concepts.

3.1 the citywide network

The Primary Network Plan (see next page) illustrates a citywide network that provides both passive and active recreational/commuter connections from all of the city's communities to the important destinations identified during the workshops. The citywide network utilizes the following route components.

The Arterial Route

These are the on-street commuter routes throughout the city. The arterial routes will incorporate all vehicles permitted by New Brunswick's Motor Vehicle Act (i.e. street legal motorized vehicles and bicycles) within its corridor. The streets are:

- Mountain Road (the entire length)
- Gorge Road (from Mountain Road to city limits)
- Mapleton Road (the entire length)
- McLaughlin Road (from Elmwood to city limits)
- Elwood Drive/Irishtown Road (from Lewisville to city limits)
- MacNaughton Road (the entire length)
- Harrisville Road (the entire length)
- Old Shediac Road (from Lewisville to city limits)
- Botsford Street/Lewisville Road (City Hall to Old Shediac Rd.)
- St. George Street (the entire length)
- Main Street (the entire length)
- Salisbury Road (from circumferential to city limits)
- Vaughan Harvey Boulevard (the entire length)
- Pacific Road (entire length)
- Killam Drive (the entire length)
- Connaught Avenue (the entire length)
- Morton Avenue (the entire length)

The ideal (and statistically safest) on street bicycle route is the designated bike lane however shared lanes can be designated where space for a dedicated lane is not available.

Canada specifications.

The Collector Route

These are the connections from the various communities to the arterial routes. The network plan illustrates proposed locations for these based on findings from the workshops however these require further research (as described in 3.2). Final locations will be determined by the individual communities and discussions with Codiac Transit officials to ensure interconnectivity of the various transportation modes.

Like the arterials, the collector routes can be either shared or dedicated bicycle lanes as determined by the communities.

Safe Neighbourhood Routes

Not illustrated on the plan, these are street and sidewalk routes determined at the neighbourhood level to provide safe connections

The treatment of these streets to accommodate cyclists can be as minimal as designating curb edge lanes as shared lanes (for both bicycle and automobiles), or to designate separate 1.5m (1.2m min.) cycle lanes (contingent on available space). This would require street lane width and markings to Transportation Association of

for kids on foot, bike, etc. to important community destinations. These will be determined as described in 3.2.

The Arterial Trail

These are the asphalt or granular surface trails that provide connections from communities to important citywide destinations (in a method similar to the arterial on-street routes). The surface types of all trails will depend on desired use and municipal budgets as this plan is implemented. Desired trail use (cycling, walking, rollerblading, skateboarding, etc) will be determined through further community consultation (see 3.2).

This figure illustrates a sample community where four neighbourhoods share common amenities and destinations within the community

The very important linkages from the arterial routes and trails into each community rely on input from workshops with local community representatives to determine where the important destinations are and what type of collector and safe neighbourhood routes can provide safe access throughout the community.

The developing millennium trail provides a starting point for an arterial

trail. The communities can connect as required from important destinations within each community. Additional arterial trail development may be required to achieve this plan.

The Collector Trail

This trail is the connection from within communities to the arterial trail. This may be a dedicated trail or be some combination of street, sidewalk and trail dependant on the situation.

3.2   the neighbourhood and the community

AT begins at the home. When leaving their front door, residents should have immediately apparent recreation and transportation options. This is the fundamental layer of this plan and where a city-wide network must make meaningful connections to ensure the success of the entire system.

Residents believe the streets within their neighbourhoods are safe places to bike, walk, meet and play. Safety becomes an issue beyond the perceived border of their neighbourhood.

Vision planning workshops have identified how the system works at a city-wide level. They have yet not identified how the system works at a neighbourhood and community level. However, attendees referred to neighbourhoods as a comfortable place for family

activity. Safety becomes a concern beyond this perceived boundary. We must consult further at these levels prior to any physical project development within the communities.

The notion of how physical communities are structured in Moncton was discussed during the workshops. All agreed that the communities are comprised of neighbourhoods that share community wide amenities (stores, schools, community parks, etc.). Future (and immediate) work must determine where these important amenities are located within each community and how each neighbourhood relates to the amenities. This will identify where *local safe routes* can be established and promoted, and where the city-wide network can meaningfully connect to each community.

The point where the network connects in each community is very important. This will be a location where the community can access the citywide network from their respective collector routes and trails (and where AT in Moncton is both promoted and accessed). For example, this place may be located at a store, school or park. Infrastructure at this location may include a bike rack, a network map (with safety and/or promotional information), a Codiac Transit stop (with bus route/schedule information), community information and whatever else the community believes is required. This location

A simple unsigned bike rack is a great promotional tool for active transportation and active living alike.

and final infrastructure requirements will be determined during local workshops and will form a multi-modal station.

3.3 education and promotion

AT education and promotion is probably more important than the on the ground infrastructure (such as bike lanes and parking racks). An effective marketing program that provides safety education while promoting active living is good for civic life, with or without bike lanes is critical to the proper implementation of an AT plan. In fact, this education must be undertaken before any infrastructure is in place (a lesson learned during precedent research).

Several existing safety education programs provide approaches and materials for the City of Moncton to draw from when developing their own program.

For Moncton, we are proposing three of these projects to undertake immediately. More and expanded projects will be required throughout the life of plan implementation. These will be continually be developed and delivered by Community Services staff. The programs to begin with are:

Education Programs
Education is largely focused on the car driver and cyclist. Many

municipalities either utilize existing national programs or have developed their own (usually hybrids of other programs). We are aware that these programs must specifically target both drivers and cyclists as well as together where possible. Thus, a bike rider safety program should be developed that incorporates ideas from other national and municipal programs (designed specifically for the various target groups in Moncton – school and youth groups, cycle clubs, RCMP, etc.).

An education program specifically targeted to car drivers should include printed materials received in association with other vehicle and personal license registrations and insurance documents.

Joint education programs should include consistent street graphics that become constant reminders that both groups are sharing the same street surface (signage, bike racks, pavement markings). This is covered more in the next few paragraphs.
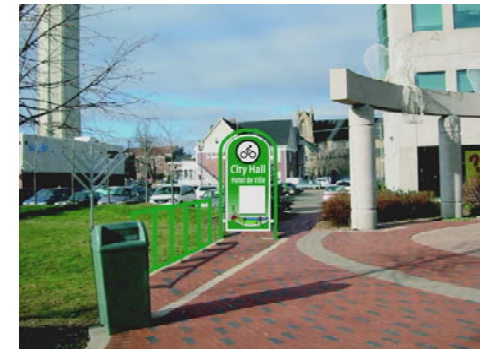
Promotional Programs
It is a little difficult to separate education and promotion because each serves the other. For our purposes, we separate these into promotional programs of education (as previous) and physical promotion programs

Installing bike racks and consistent graphics throughout the city illustrate participation in active transportation and living.

sign Inc.

(below). New and adapted programs will be developed as this plan is implemented.

Physical promotion programs include the graphics and infrastructure that demonstrate Moncton is an AT city. The following provide a starting point for doing this:

Bike Racks
The city should install bike racks (complete with signage) at important civic destinations within the municipality. Also, partnerships should be formed with businesses to provide and install bike racks and signage for workers and/or shoppers. Various sized racks and signage will be required based on the location.

Street Signage
The city should install signage on all of the designated routes for wayfinding and information purposes.

Multi-Modal Stations
The city should work together with communities and Codiac Transit to develop stations where the bus stops and where community information and bike racks are available (at a minimum). The multi-modal station forms part of the important community destination described in 3.2.
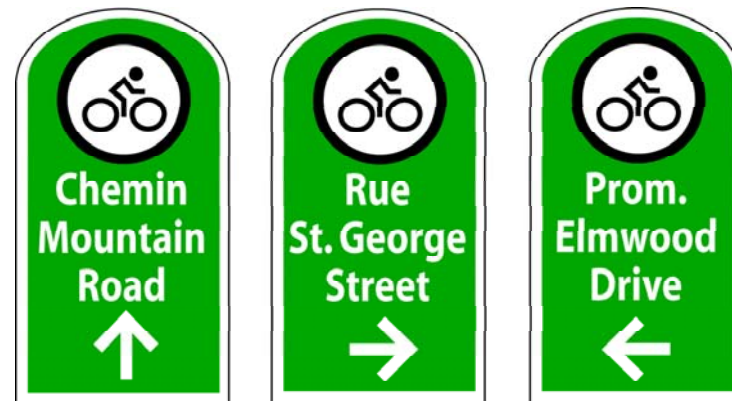
Public Transit Signage
The city should capitalize on public transit stops and bus billboards to promote AT and safety.

Public Transit Bike Racks
The city should ensure that all buses have bike racks.

Network Mapping
The city should develop and consistently update mapping that can be available in both hard copy and digital formats (from

Well-designed route directional signage serves both wayfinding and marketing needs.

www.moncton.org).

4

implementation plan

This chapter proposes an approach to implementing this AT plan. It is not intended to be a "step by step" action plan. Rather, it is an iterative process that can be changed and reorganized as required to ensure success. The following describes these steps.

Infrastructure such as bike lanes can only be installed after proper public safety education and skilled street design considerate of all users within the street corridor.

4.1 achieve the required legislative mandate

This plan requires municipal legislative support for implementation. The Greater Moncton District Planning Commission will be updating Moncton's planning by-laws and strategy during 2003. The city should provide a copy of this document to the planning commission to include the following policies for inclusion in the update process. The planning commission may edit and place the policy and text as required with the city's approval.

Policy One   Bicycle Routes
It shall be Council's intent to designate the active transportation routes identified in the 2002 City of Moncton Active Transportation Plan based on consultations with the City's engineering department.

Policy Two   Community Plans
It shall be Council's intent to develop plans for, and in partnership with, each of the city's communities illustrating how each relates to the city-wide active transportation network.

Policy Two   Safety Education
It shall be the Council's intent to encourage bicycle safety education programs as identified in the 2002 City of Moncton Active Transportation Plan and developed by the AT Coordinator.

Policy Three   Active Transportation Partnerships

It shall be Council's intent to encourage the AT coordinator to develop infrastructure and program public/private partnerships to implement the 2002 City of Moncton Active Transportation Plan.

Policy Four   Street Corridors

It shall be Council's intent to consider all streets as mixed-use corridors requiring spatial consideration for all users of the corridor.

Residents can develop maps describing what they do, where they do it, and how they get around. The active transportation network can then be meaningfully tied into this community "fabric".

4.2   develop neighbourhood and community plans

The relationship between the city network of routes and trails must have meaningfully connect to where people live. This should be resolved through workshops in each community where residents work on maps illustrating where they live, important community destinations and routes in and out of the community. Consensus on locations for neighbourhood safe routes, collector routes and trails as well as multi-modal stations can be achieved through group discussions about the maps.

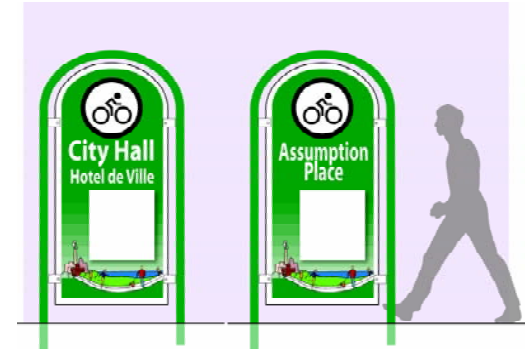### 4.3   develop and implement awareness programs

The AT coordinator should develop and implement the educational and promotional programs (including maps) to both raise AT awareness and promote rider safety.

4.4   develop a details palette

The committee should develop a details palette of route and trail construction details, signage details, bike rack and related signage details, and multi-modal station types. This will require further design thinking relative to construction and legal issues (and street rebuilding schedules).

4.5   install bike racks and signs at important locations

The AT coordinator should facilitate the installation of bike racks and signage at important civic destinations such as

At a minimum, bike racks at important destinations should include a sign panel displaying a consistent graphic and important community information such as festival schedules or rider safety tips.

City Hall, parks, the Moncton Museum, etc. The coordinator can

also develop partnerships with private business (with the help of groups such as Downtown Moncton Inc.) to install racks throughout the city.