TRANSPORTING QUÉBEC TOWARDS MODERNITY

SUSTAINABLE MOBILITY POLICY – 2030

Active Transportation Intervention Framework

Québec

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1. Active Transportation in Québec

This document is an integral part of the Sustainable Mobility Policy to 2030. It presents an overall portrait of the active transportation sector in Québec, its issues and all measures related to the 2018-2023 Active Transportation Action Plan. The most promising and cross-sectional measures in this sectoral action plan also appear in the Sustainable Mobility Policy Comprehensive Action Plan.

The Active Transportation Intervention Framework is a key component of the Sustainable Mobility Policy vision: In 2030, Québec will be a North American leader in 21st-century sustainable and integrated mobility. In a territory planned with a view to sustainable mobility, it will have a high-performance, safe, connected and low-carbon transport ecosystem that contributes to Québec's prosperity and meets the needs of people and businesses.

This framework outlines actions that specifically concern active transportation, taking into account the shape of the territory, the specific infrastructures, the efficiency of active travel and the safety of people during active transportation.

Current situation

Active transportation, mainly walking and cycling, is the foundation of human movement, that is, movement from one place to another powered by the individual, with no motorization other than to compensate for a physical disability or incapacity. It is movement on the human scale. Active transportation is also a factor in most other kinds of movement, such as travel by bicycle to the commuter train station or walking from home to the bus stop. Active transportation, including cycling, also gives people the opportunity to stay mobile despite the inability to walk long distances due to disability, sickness or old age. The active transportation potential of a living environment therefore extends to the idea of travel by wheelchair, four-wheel scooter or even with a sensory or mental handicap.

Active transportation plays an important role in Québec. For the region of metropolitan Montréal alone, 12% of all trips on a typical fall day are taken by active transportation, 10.3% by foot and 1.7% by bicycle[1]. The portion for bicycle mode rises to 11.3% in the Plateau-Mont-Royal neighbourhood and 6.8% in Villeray. These data, taken from the 2013 origin-destination study, do not include trips made by foot or bicycle that are included in other types of travel, such as walking to the bus stop.

Active transportation, especially walking, is therefore a significant factor in all modes of travel, especially for short trips. Active transportation is also one of the means of transportation that best meets the concerns of sustainable development, as it is economical (therefore affordable), ecological (no GHG emissions) and beneficial for the health of the people who use it.

[1] Enquête origine-destination region métropolitaine de Montréal. 2013.

The appeal of active transportation is strongly related to the quality of the infrastructures and the environment. For pedestrian infrastructures, a wide, good-quality, well-maintained surface, especially in winter, with occasional benches for resting, planned to offer shade in summer and sun in winter and designed for universal accessibility, will be appreciated by walkers. These facilities are even more appealing if they are in a dense urban environment, with a tight street layout and a good mixture of urban functions (homes, shops, services), in either a big city or a small municipality. This type of urban fabric reduces the length of trips, allowing more people to reach more services and contributing to the increase in active trips in a given sector. For bicycles, good-quality bicycle paths, separated from the road, with priority at traffic lights, traffic calming measures and the availability of safe bicycle stands are facilities that increase the sense of comfort and safety, thereby attracting more people to this mode of transportation. Reserved corridors on urban roadways (bicycle lanes) make more routes safe at little cost, while separate paths away from car traffic may attract new enthusiasts to this mode of transportation, especially those who are concerned about the dangers of cycling in the city. In all cases, these facilities benefit from being maintained in the winter, to allow for cycling all year long.

With 12,000 km of bicycle paths (2015), including more than 5,000 on the Route Verte (2016), Québec has already demonstrated its willingness to provide infrastructures that allow people to choose active transportation as a viable option for their transportation choices. For walking, the portrait is harder to establish, given the high number of streets that already have sidewalks. But this inventory does not necessarily mean these infrastructures are of the quality required to allow for safe, efficient travel for pedestrians, cyclists and people using motorized mobility assistance devices. Poorly designed cycling facilities, inadequate sidewalks and wide urban streets with no spaces reserved for active transportation reduce the potential of active transportation in the urban environment.

The importance of active transportation for sustainable mobility in Québec

The capacity for people of any age to choose self-powered transportation to get to their destinations is a key component of Québec's sustainable mobility vision. To achieve the objectives of safe, healthy, equitable and environmentally friendly mobility, we must reduce motorized travel in individual vehicles and create conditions conducive to increasing the share of collective and active modes of transportation.

One of the primary conditions for this is the real and perceived appeal and safety of the public roads and the built environment for active modes of transportation. Investing in good-quality pedestrian and cycling infrastructures also allows the most vulnerable users, including children, the elderly and people with reduced mobility, to avoid limiting their movements due to facilities that are unsafe or ill-suited to their specific needs, increasing the very scope of sustainable mobility to include notions of social inclusion.

Active transportation is very popular in Québec, with over half of people aged 5 to 75 saying they have ridden a bicycle in 2015[2], compared with just one-third in the United States and Australia. This number represents the enormous development potential for short trips in urban centres. This particular characteristic of Québec can be explained by the development of cycling cultures by groups such as Vélo Québec and the creation of infrastructures such as the Route Verte, the largest cycling network in North America.

[2] Vélo-Québec, État du vélo au Québec en 2015.

Climate is often cited as a specific constraint for active transportation in Québec, and yet the cycling season is getting longer, with more and more people cycling for a greater part of the year. In 2015, more than a million adults used their bicycles at least once in October or November, and 180,000 did so from December to March. It is possible to cycle and walk all year round, but this requires special attention to the design and maintenance of the infrastructures.

The Québec government's role in active transportation

The Québec government is an important player in the development of active transportation in Québec. With the proposal and creation of the Route Verte, in partnership with the municipal and regional sectors, the Québec government, and the ministère des Transports, de la Mobilité durable et de l'Électrification des transports (MTMDET) in particular, allowed municipalities in Québec to take part in the development of active transportation by contributing to this vast network. In 2015, two out of three Québecers lived in a city with policies advocating the creation of active transportation infrastructures or the introduction of traffic calming measures[3].

> Legislative framework

The MTMDET and the Société de l'assurance automobile du Québec (SAAQ) are responsible for the Highway Safety Code (HSC). The HSC establishes the conditions related to active trips on the road network, including the place of the cyclist and the pedestrian in the public space of the roads, their responsibilities toward other users and their rights.

In addition to the HSC, many laws govern urban and regional development, helping to shape an environment that can be favourable or unfavourable to active transportation. These laws include the *Act Respecting Land-Use Planning and Development* (A-19.1), the *Cities and Towns Act* (C-19) and the charters of the cities of Gatineau, Lévis, Longueuil, Montréal and Québec (C-11.x).

> Policies and programs

Although the MTMDET has never adopted a policy on pedestrians, a policy on bicycles was adopted in 1995, when the Québec government adopted the Route Verte plan, an idea put forward by Vélo Québec to give Québec a national cycling route over 5,000 km long. The Bicycle Policy, updated in 2008, guides the MTMDET's actions and ensures that road projects include efforts to improve the safety and mobility of cyclists. This policy also established objectives, guidelines and statements about different aspects of bicycle travel, including:

- Gradual encouragement to use bicycles as a mode of transportation;
- Promotion of road safety among cyclists and other road users;
- Improvement of the transportation system for cyclists.

To this end, the MTMDET established several programs to support municipalities in projects that contribute to the achievement of the MTMDET's objectives, including the Route Verte Development Assistance Program (1999), the Route Verte Maintenance Assistance Program (2001), the Alternative Transportation to Automobile Financial Assistance Program (2006), the Active Transportation Infrastructure Financial Assistance Program (2013) and the Financial Assistance Program to Develop Active Transportation within Urban Perimeters (2017), all of which contributed extensively to the development and maintenance of an environment conducive to active transportation in Québec.

[3] Vélo Québec, *op. cit.*

> Role of the partners

The municipalities are the government's main active transportation partners. Walking and cycling for utilitarian trips mainly concern the urban scale. The municipalities therefore have a very big role to play in shaping environments favourable to this kind of travel, and for this reason, all the financial assistance programs are primarily for them. Because the regional county municipalities (RCM) play a role in the integration of transportation planning and land-use development, they take part in planning active transportation networks of regional interest, which may be coordinated with the financing of these infrastructures on the municipal level.

In addition to the municipalities, associations and businesses such as Vélo Québec, the Association des réseaux cyclables du Québec and Piétons Québec facilitate activities, offer training and raise awareness of the decision-makers and the general public about active transportation and human-scale urban environments.

Finally, the tourism industry is very involved in the field of active transportation, particularly in supporting the development of the regions by expanding bicycle tourism opportunities, offering accommodations, packages and activities that attract cyclists. Thanks to an initiative by Vélo Québec, Québec now has a network of 500 "Bienvenue cyclistes!" (welcome cyclists) establishments, so cyclists can find accommodations to suit their needs. Tourism spending related to the bicycle was estimated at $700 million in 2015, with 1.6 million overnight stays. Several businesses that produce or build bicycles or cycling accessories also have their headquarters in Québec. Although the manufacture of bicycles has largely moved to Asia, like so many other business clusters, local consumption has remained strong, with over 600,000 bicycles sold each year in Québec, 1.5 times more per capital than in the United States, and representing 3,400 jobs. Annual expenditures by Québec cyclists on the bicycle and equipment market represent another $500 million, for total spending of $1.2 billion per year[4].

Alignment of pedestrian and cyclist safety and mobility

The principle of safety-mobility balance is intimately connected to the potential appeal of active transportation in any given environment. This principle is upheld when road projects carried out by the managers of roads in Québec (MTMDET, municipalities) are designed to improve pedestrian and cyclist safety. The functionality of active transportation developments especially in the urban environment may sometimes be reduced due to pressure from the number of motor vehicles on very busy roads or streets. To improve the road network's capacity to accommodate more vehicles, the roadbed is widened, traffic lights are synchronized and lanes and street parking are managed to optimize the urban road network. This optimization under pressure should not be carried out to the detriment of the most vulnerable users, however. Factors that contribute to the insecurity or the inefficiency of active transportation do not allow the target balance to be achieved:

- Tendency to assign space in the right-of-way to driving lanes and road vehicle parking, to the detriment of cyclable space (bicycle lane, bicycle path, shoulder) and pedestrian space (sidewalks, grassy berms, urban furniture, curb extensions);
- Limited duration of crossing time for pedestrians and cyclists at intersections with traffic lights (short crossing time and long waiting time) to allow for a greater flow of vehicles;
- Deconstruction of major thoroughfares, where main businesses and services are located, and redirection of cyclists and pedestrians to nearby residential roads, reducing accessibility for the sake of safety, etc.

[4] Étude des retombées économiques du cyclotourisme et du vélo au Québec. Chaire de tourisme Transat-ESG-UQÀM, February 2016.

This principle must be reinforced if Québec wants active transportation to truly expand, especially by providing the public with pedestrian and cycling infrastructures that are effective, safe and appealing for everyone and that are appropriate for all kinds of trips.

Alignment of costs related to active transportation infrastructures and the benefits of safe active transportation

This principle is in line with the recurring investments by the MTMDET and the municipalities to improve environments that are favourable to active transportation. The economic and social benefits for the entire population and the governments are often under-estimated, however. The World Health Organization (WHO) is interested in the value of pedestrian- and cyclist-friendly environments and the benefits of these environments on public health. Active transportation combines the need to get from place to place with the physical activity needed to maintain good health. According to État du vélo au Québec en 2015, cycling alone represents a value of $2.6 billion a year using the WHO's Health Economic Assessment Tool (HEAT). If the value of cycling and walking is so high (health, quality of life, environment), it could be assumed that investments would be made to reflect these benefits for the population. According to a Danish study, every kilometre ridden by bicycle gives society a benefit of $0.24, while every kilometre ridden in a motor vehicle costs society $0.84[5].

Trends and outlook to 2030

An analysis of the most recent origin-destination studies shows a strong connection between the shape of cities and the portion of trips that can be made by foot or on bicycle. It is therefore just as important to build cities to allow for better access to their various functions as to remove physical and anthropic barriers and develop infrastructures specifically for active transportation.

Trend 1: Increase in modal share of active transportation

While walking seems more common among the young (under 15) and seniors (over 65), bicycles are especially popular among men, especially those aged 15 to 19. This distribution may be related to the recklessness required to ride a bicycle in certain urban settings as they are today (wide boulevards, narrow lanes that do not encourage sharing among bicycles and motor vehicles, wide intersections and complex turning movements for cyclists and drivers, etc.). While bicycles are used for 2.3% of trips for men (2013), the proportion is just 1.2% for women. But the gap between the modal share of the bicycle for men and women narrowed between the 1998 and 2013 origin-destination studies in Montréal, since it is rising faster for women (0.7% to 1.2%) than for men (1.6% to 2.3%). This trend can be explained by the massive investments made by the Ville de Montréal in its cycling network during this period. In countries where cycling infrastructures are more developed (Finland, Sweden, Germany), the ratio is about 50-50, and it is higher among women than men in Denmark and the Netherlands (55%).

Although children are still one of the biggest cohorts of walkers, the rate of children who walk or cycle to school is constantly decreasing. This is a matter of concern, especially in light of the childhood obesity that is still very much an issue in North America. The causes of the decrease are multiple, but recent studies show that the danger parents perceive in the trip to school is one of the primary causes of this decline in active transportation among children.

[5] Stefan Gossling, Urban Transport Transitions: Copenhagen, City of Cyclists. Journal of Transport Geography, 2013.

The target of a 50% increase in the modal share of cycling, stated in the 2008 Bicycle Policy, may have seem ambitious, especially since the trend in origin-destination studies carried out in recent years points to an ever-increasing share for car trips (driver and passenger). In addition to this trend, there has been reduction in trips for the purpose of education, which were largely associated with active transportation.

Meanwhile, the origin-destination study for the region of Montréal already revealed in 2013 an increase in the modal share of the bicycle almost equal to the target set for 2020. The bicycle is actually the only mode of transportation other than the car that increased its share of trips in the Montréal region between 2008 and 2013.

Although the rate of bicycle trips may seem modest (1.7% in 2013 in Montréal, for a target of 1.8% in 2020), it should be noted that:

- This rate varies significantly over the target region, which includes distant suburbs as well as the central neighbourhoods. For example, for areas such as downtown and the Plateau-Mont-Royal, the modal share of the bicycle may exceed 7% over the entire period (2008 data).
- This rate varies over time throughout the survey period (September to December). For example, in the 2013 study for the enter Greater Montréal region, the rate of bicycle trips drops from 2.5% in September to less than 0.5% in December.

It should also be noted that the modal share of the bicycle in Québec's urban centres is relatively weak in comparison to those observed at the time in some European cities (27% for Amsterdam and 29% for Copenhagen between 2000 and 2005)[6].

Likewise, the share of trips made on foot varies greatly within the same urban centre. For example, for the region of metropolitan Montréal in 2008, the share of trips made on foot was 11.5%, but it rises to over 20% in central neighbourhoods and 30% downtown. With 80% of trips on foot being less than one kilometre, it is obvious that an area with good density and a good mixture of urban functions will encourage people to head to their destination without using motorized modes of transportation.

Trend 2: Increase in utilitarian trips by bicycle

The portion of bicycle trips made for utilitarian purposes (work, studies, business, errands, etc.) is based on the statements of people surveyed in the household study carried out every five years for Cycling in Québec publication. This trip rate increased significantly in the 2010 study, making this target one of the first to be achieved under the Bicycle Policy, which was to increase this type of trip by 10%.

- 17% in 2005
- 37 % in 2010
- 26 % in 2015

The change stems in part from the definition given by the surveyor in the successive surveys. Notwithstanding these fluctuations, we do see a trend solidifying the use of the bicycle as a mode of transportation. The increase in this indicator benefited significantly from the cycling infrastructures in the urban environment, since it is in these dense, diversified areas that utilitarian bicycles trips are most likely to be made, due to the shorter distances to cover to reach a given destination (work, study, shopping).

[6] J. Putcher, et R. Buehler (2008). « Making Cycling Irresistible: Lessons from the Netherlands, Denmark, and Germany ». Transport Reviews, volume 28.

Trend 3: Reduction in number of deaths and serious injuries

Road safety for pedestrians improved in 2016 compared to the five previous years, with a reduction of 13.3% in deaths and serious injuries in accidents involving a motor vehicle. Despite this good news, there was a high proportion of deaths among people aged 65 or over. The MTMDET has never adopted a pedestrian policy, but the road projects it carries out in the urban environment often involve pedestrian infrastructures. Furthermore, assistance programs such as the Programme d'aide gouvernementale aux modes de transports alternatifs à l'automobile (2006-2013), the Programme d'aide financière aux infrastructures de transport actif (2013-2016) and the Programme d'aide financière au développement des transports actifs dans les périmètres urbains (since 2017) have supported the municipalities in the planning and execution of measures for pedestrians, including traffic calming along school corridors.

The 2008 Bicycle Policy set a 2020 target of a 30% reduction in the number of deaths and serious injuries among cyclists involved in an accident with a motor vehicle. This target was considered ambitious in the beginning, because of the constant increase in the use of bicycles and in the number of kilometres driven by motor vehicles, increasing exposure to the risk. The number would have had to drop from 189 (the 2002-2006 average) to 132. This level was attained by 2011.

To avoid strong fluctuations in numbers due to the relatively low number of deaths and serious injuries each year, it was agreed from the start to compare the change in the five-year averages.

Change in number of cyclists involved in accidents with a motor vehicle, serious injuries and deaths

	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Serious injuries	155	139	126	115	107	106	101	102	100
Deaths	16	16	17	17	16	18	17	14	12
Total	171	156	143	132	123	124	118	116	112

To contribute to the performance of this indicator, among all the measures under the Bicycle Policy, the MTMDET intervened in particular with regard to the improvement of environments (construction of bicycle lanes, improvement in user-friendliness of the road network), both on the road networks under its responsibility and those of the municipalities, through financial aid programs.

Trend 4: Increase in the number of kilometres of infrastructure

Few data are available on pedestrian infrastructures. No exhaustive report of the number of kilometres of sidewalks is available. In addition to this gap in quantitative data, the portrait of the pedestrian-friendly environment also relies on non-existent qualitative data, such as streets where traffic calming measures have been introduced (speed humps, curb extensions to shorten the crossing distance for pedestrians, creation of visual corridors using urban furniture and vegetation, tactile identifiers for the visually impaired, elimination of obstacles for people with reduced mobility, etc.).

These quantitative data exist for the bicycle, however, since they were one of the indicators for the 1995 Bicycle Policy. Of all the indicators in the Bicycle Policy, it was this one that showed the greatest increase, in addition to being the one on which the MTMDET has the greatest direct influence. As a road manager, and under the guidelines it adopted to take the needs of cyclists into consideration in its road projects, the MTMDET contributed extensively and directly to improving the conditions for bicycle use in Québec, in part by investing nearly $90 million from 2008 to 2016, helping to add 1,175 km to the cycling network, nearly half of which is on the Route Verte.

Through financial assistance programs, the MTMDET also supported municipal partners in this shift to take the needs of cyclists into account on the municipal scale, by developing and maintaining sections of the Route Verte under their responsibility or creating local bicycle links within their urban boundaries. For the same period between 2009 and 2016, nearly $59 million was invested in assistance programs for the Route Verte and those under the 2013-2020 Climate Change Action Plan (2013-2020 CCAP).

2. Sustainable Mobility Issues Related to Active Transportation

The main sustainable mobility issue is the appeal of active transportation for daily trips. For active transportation to be a viable option for the general public, and for it to hold a more meaningful share among the chosen means of transportation, urban planning and transportation infrastructures must be conducive to walking and cycling:

- With concern for groups most sensitive to the safety of their environment (children, the elderly, women, occasional cyclists) in the way land use and infrastructures are planned;
- With a judicious choice of the infrastructures offered, including:
    - Infrastructures that are separate from the roadway (sidewalks and cycling paths separated from the roadway), efficient and safe on major urban arteries, offering access to popular destinations (shops, services, hubs of employment and education);
    - Infrastructures integrated into the street in residential neighbourhoods by calming the traffic and redirecting through-traffic to collector streets and major arteries (shared streets, bicycle boulevards);
- With the intent to offer fast, fluid links, placing at least as much importance on active transportation as on motorized transportation;
- With careful maintenance of these infrastructures, in summer and winter (longevity and permanence of the infrastructures).

Issue 1: A legislative framework that supports active transportation

This issue is related to the concern the authorities must have for the place granted to active transportation in the way transportation is organized in Québec. Origin-destination studies show that active transportation represents a very high modal share in Québec and that bicycles are used at a higher rate than in the other provinces and neighbouring states. To support the growth of these unintrusive, durable and beneficial means of transportation, conditions must be put in place to legitimize walking and cycling in the public space. For active transportation to truly be an option, we need a supportive framework, backed by legislation, education, promotion and operations (mainly maintenance).

Issue 2: Recognized, promoted active transportation

Active transportation is not very visible in the transportation chain, as pedestrians and cyclists are generally on the edge of the road, on a sidewalk or lane parallel to the roadway or even in neighbouring streets of major arteries to seek out more user-friendly routes. The value of active transportation is also tarnished by the delinquent behaviour of some people who, on foot or on bicycle, break traffic rules to reduce the length and time of their trips, often in areas that are not well set up for their safety (wide arteries). Active transportation that is recognized and promoted means that attention is paid to the lay-out of urbanized environments to reduce the constraints for active transportation in order to encourage

their use without generating conflictual behaviours. It also means recognizing pedestrians' and cyclists' right to make use of the public space of the road, acknowledging that a trip made on foot or by bicycle is as legitimate as a trip made on a bus or in a car.

Issue 3: Environments that are favourable to active transportation throughout Québec

In connection with Issue 1, the growth of active transportation requires the development of favourable environments, either through the organization of land use (dense urban fabric, good mixture of urban functions for accessibility to nearby shops, services and employment hubs) or through the inclusion of pedestrian and cyclist needs in the creation of transportation infrastructures:

- Pedestrian and cycling lanes that are independent from the roadway on major arteries, connected to popular trip destinations;
- Active trips prioritized over motorized trips in residential neighbourhoods, by traffic calming measures and the redirection of transportation traffic to major arteries;
- Creation of shortcuts between neighbourhoods to create an advantage for active trips, either through infrastructures (bridges, tunnels, paths at the end of dead-ends, etc.) or through legislative measures (allowing cyclists to circulate in both ways on one-way streets).

The Route Verte has created a mobilizing bicycle network in most regions of Québec. Although it is more about tourism and recreation than transportation, the Route Verte has been the driver behind the development of active transportation in Québec for the last 20 years and often constituted the first part of the bicycle infrastructures put in place by municipalities, leading to the planning of other cyclable or walkable links as offshoots of the national Route Verte network. The Route Verte is an asset in terms of both the infrastructures themselves and the pool of active transportation enthusiasts it created, and Québec should seize the opportunity to build on it to increase the share of trips made on foot and by bicycle.

3. 2018-2023 Active Transportation Action Plan

Global indicator and target

> Increase the share of active trips in comparison to other modes of transportation by doubling cycling trips and maintaining the share of foot trips at 10.3%.

This increase in the modal share of active transportation by 2030, in comparison to 2017, should be reflected in the daily trips recorded in the most recent origin-destination studies for the various urban centres in Québec. For example, the number of bicycle and foot trips for a typical day in the 2013 study for metropolitan Montréal was 1,169,400, including 165,000 trips made by bicycle. This number should increase to 330,000 in the 2028 study (closest to the target date). The rate of trips made by foot was 10.3% in 2013 in metropolitan Montréal and had been declining for ten years. The target was to limit the decline by increasing the number of trips made by foot and maintaining the modal share at the 2013 level, that is, 10.3%.

> Reduce the number of pedestrian and cyclist accident victims in the road safety report by 25%

The reduction in the total number of accident victims (minor and major injuries and deaths) among pedestrians and cyclists is the target for the 2013 road safety report, in comparison with the 2012-2016 five-year average. For example, this average was 4,683 victims for the 2012-2016 period from. It should drop to less than 3,512 for 2026-2030.

> Consolidate and extend the Route Verte by adding 858 km

The target for the Route Verte is to complete the 5,308 km of the 2008 plan by 2023 (232 km left to add) and add the extension (858 km) by 2030. In addition to this target, the goal is to connect, support and recognize the structuring regional networks that could add to the national network of the Route Verte: 473 km of off-street bicycle trails and 185 km of bikeways on the road network. Finally, efforts must be pursued to improve the entire network, often by reviewing the design of current segments to improve the bicycle tourism experience for users and make sure the quality of the network lives up to its world renown.

Issue 1: A legislative framework suited to active transportation

INTERVENTION PRIORITY 1.1: INCLUDE THE IDEA OF ACTIVE MOBILITY IN MUNICIPAL PLANNING AND LAWS

This intervention priority assumes that future regional and municipal planning will ensure that active transportation is taken fully into consideration, in land-use and development plans and urban plans and through sustainable mobility plans and extended transportation plans. This obligation should allow any RCM and municipality to determine the constraints (insurmountable barriers, whether natural or anthropic, topography, distances, urban wasteland) and the potentials (shortcuts, densification zones, concentrations of educational institutions, employment hubs, intermodality hubs with public transit, etc.) related to walking and cycling. This concern should be present in both new developments and intervention projects in the built environment (redevelopment, densification, urban requalification).

Measure 1: Integrated sustainable mobility plans

With this new program, the MTMDET, in collaboration with the ministère des Affaires municipales et de l'Occupation du territoire (MAMOT), will offer financial assistance to municipalities for the development of integrated sustainable mobility plans in their territory. These plans will be complementary with the current land-use planning tools, such as the metropolitan land-use and development plans (PMAD), the RCM land-use plans and the municipal master plans. They will cover both passenger and freight transportation, taking all solutions and modes into consideration.

This program will include an envelope of $50 million for the first five years. An amount of $2.5 million is also budgeted in support services for the production of plans and the preparation of guides and reviews of best sustainable mobility practices. These tools will be developed by the MAMOT in collaboration with the MTMDET.

Indicator: Number of plans adopted
Target: 100% of the RCM
Budget: $2.5 million (current funds); $50 million (additional funds)

Measure 2: Amend the laws to systematically take active transportation into account in territorial planning and in the planning, design and operation of transportation infrastructures

The laws covered by this measure include:
- Act Respecting Land-Use Planning and Development
- Act Respecting Roads
- Cities and Towns Act
- Act Respecting the Ministère des Transports
- Municipal Code
- Municipal charters

The amendment of the laws is the principal component, but the statement of government guidelines on territorial planning must also be in step with this target and give a predominant place to active transportation.

Indicator: Legislative proposals
Target: Legislative proposals by 2021

Issue 2: Recognized, promoted active transportation

INTERVENTION PRIORITY 2.1: PROMOTE PROPER BEHAVIOURS FROM DIFFERENT TYPES OF ROAD USERS AND KEEP THEM INFORMED ABOUT THE NEW ROAD-SHARING RULES

This intervention priority refers to the current legislative provisions (universal obligation to obey road signs, priority for pedestrians at crosswalks, distance to maintain when passing a cyclist, fines related to dooring) and those that will be adopted in the future (shared streets, bike boulevard, passing pedestrians, etc.). It also targets active transportation users to make them accountable for their use of the public space that is the street, in exchange for increased privileges, in terms of both legislation and infrastructure. This promotion should begin in elementary school, to learn the rules, and continue in high school, to develop the skills and responsibilities related to using the road network for active transportation (autonomy for young people to take charge of their own mobility). This concern will be combined with the MTMDET and SAAQ road safety efforts, particularly in the context of the implementation of the new provisions of the Highway Safety Code in 2018.

INTERVENTION PRIORITY 2.2: COMMUNICATE A POSITIVE AND ENCOURAGING MESSAGE ABOUT THE IMPORTANT ROLE OF ACTIVE TRANSPORTATION IN TRAVEL, THE ENVIRONMENT, QUALITY OF LIFE, HEALTH AND THE ECONOMY

Active transportation is a simple means of transportation, the very foundation of human movement, with no need for major infrastructures and closely linked to the principles of sustainable development. Active travel consumes no energy, other than assisted bicycles and motorized mobility aids (MMA). It is universally accessible and supports local industry, since Québec has a strong presence on the market for outdoor and cycling clothing and equipment in Canada and even North America. The government should also promote walking and cycling as means for moving intelligently around the city. Measures must be taken in parallel with the development of environments that are favourable to walking and cycling, in order to initiate a shift in the population's mobility choices.

Measure 3: Establish a working group on economic tools to make active transportation more accessible to and valued by the public

The goal of this measure is to identify and analyse economic tools that will promote active transportation in the public's mobility choices, including measures to combat the isolation of the underprivileged and encourage their social inclusion.

Indicator: Working group created
Year of implementation: Creation of a working group by 2019

Measure 4: Introduce measures to encourage the use of active transportation, including in Québec government business places

The goal of this measure is to give Québec government offices infrastructures that will encourage the use of active transportation to get to work. The services offered in the workplace will overcome the constraints generally associated with using active transportation to get to work, including the fear of having one's bicycle stolen or exposed to the elements, the need to have a place to clean up and change if the distance cycled or walked is long. These services could even extend to the offer of bicycles lent by the employer for trips during office hours, where there is no self-service bicycle fleet.

Measure 4 will mainly target offering enough bicycle parking for employees and visitors and changing rooms with all commodities. Carrying out this measure will involve offering these services in all Québec government offices, to set an example.

Indicator: Number of new facilities
Target: New facilities in the workplace beginning in 2019
Budget: Included in the cost of renovating or renting government business places.

Measure 5: Extension of the self-service bicycle network Québec agglomerations

This measure will support municipalities in the development of a self-service bicycle offering, both municipalities where the goal will be to launch such a service and those where the existing service will be expanded. This measure may be applied in order to benefit from good urban density and a concentration of popular destinations (educational institutions, workplaces, stores and services, etc.), among other criteria.

Budget: $13 million over five years (additional funds)

Issue 3: Environments favourable to active transportation

INTERVENTION PRIORITY 3.1: GIVE TRANSPORTATION INFRASTRUCTURE MANAGERS MODERN NORMATIVE TOOLS THAT BETTER ADDRESS THE NEEDS OF PEDESTRIANS AND CYCLISTS

This intervention priority relates to both the MTMDET standards and the various guides provided to the municipalities. These guides and standards could benefit from the most recent international developments concerning infrastructures adapted to active transportations, with regard to land-use planning, road design (diversification of street profiles in the urban environment, traffic calming measures, etc.), signage (reduced waiting for walk signal lights, traffic lights synchronized to the speed of bicycle movements, one-way streets limited to motor vehicles, etc.) or urban requalification concepts (shared streets, bike boulevards, transit and active transportation oriented development, etc.).

Measure 6: Amend design and signage standards to re-establish the place of active transportation in the design of transportation infrastructures

This measure stems from the legislative changes planned for the Highway Safety Code, including the introduction of shared streets and bike boulevards. Beyond these concepts, the standards should be reviewed to reduce as much as possible the constraints, discomfort and hindrances that limit accessibility by foot, bicycle or wheelchair, thereby reducing the appeal of active transportation. These considerations involve the sides slope of sidewalks, the bending radii in the urban environment, the segregation of cycling infrastructures to improve the appeal for a bigger portion of the population, traffic light cycles that reflect the presence and needs of pedestrians and cyclists, the design of crosswalks (raised crossing, reduction in crosswalk length, reinforcement of active transportation priorities, etc.) or any other road design detail that could improve the conditions for active transportation.

Indicator: Standards amended
Target: Standards amended by 2019

Measure 7: Strengthen partnerships with community bodies for the reinforcement of active transportation expertise and its dissemination to the municipal and regional sector

The purpose of this measure is to provide technical support for the initiatives of community partners for the production of guides to plan, design, develop and operate territories and infrastructures that favour pedestrians and cyclists, including adaptations required for people with motor, sensory or intellectual disabilities, and to harmonize active transportation with other modes of transportation. This partnership will also support training activities in the municipal sector.

Indicator: Number of guides and technical documents published

INTERVENTION PRIORITY 3.2: TAKE PEDESTRIAN AND CYCLIST NEEDS INTO CONSIDERATION IN ALL INFRASTRUCTURE CONSTRUCTION AND OVERHAUL PROJECTS WITHIN URBAN PERIMETERS

Whether it is on the highway network, an arterial road network, a collector road network or even residential or local streets, the place of pedestrians and cyclists should be systematically taken into consideration whenever work is done within an urban perimeter identified in the development plan. This does not automatically mean that sidewalks or bicycle lanes will be built, although this is often the only solutions for active transportation on major arteries. It could also involve traffic calming measures or the re-routing of through-traffic away from the most local and residential streets, making them more welcoming for cyclists and pedestrians even without a reserved lane. On highways, the consideration could also mean constant intention to improve the bicycle-friendliness of roads, both on cycling routes (Route Verte or other) and on the network in general.

Measure 8: Adopt a management framework to guide all MTMDET road projects

This measure follows on the guidelines already in the MTMDET Bicycle Policy since 1995, extending it to all kinds of active transportation. This measure means, at least for the MTMDET, adopting a management framework to ensure these issues are considered in all projects in its road works planning. The framework should plan for systematic consideration of the presence of pedestrians and cyclists for any road project carried out within urban perimeters, whether it is on a standard section, an intersection or structure or to cross highways that run through urban perimeters. In connection with the objectives of this policy, the MTMDET will clearly establish rules to govern the design and financing of

the road infrastructures it builds, both inside and outside of urbanized areas. For road projects within urban perimeters, special attention will have to be paid to pedestrian and cyclist routes, by creating either infrastructures that are integrated with the road corridor or, in the case of highway networks, infrastructures that make it possible to cross the roads and that improve connectivity between the neighbourhoods these roads divide. The concern should be upheld whether or not the municipality has or plans to have networks reserved for cycling or walking in its territory. In this sense, the MTMDET will assume a leadership role in active transportation and its interventions may, sometimes, serve as a starting point for this kind of planning by the municipality. The municipalities will be subject to this measure through adapted legal frameworks (see measure 2).

Outside the urban centres, the MTMDET will pursue its interventions to adapt roads to the presence of cyclists on the major national routes (Route Verte) and regional routes, as well as local routes planned by municipal authorities. It will also work to improve the bicycle-friendliness of its roads for cyclists using infrastructures that will improve the ratings assigned to them in the Québec 511 application.

Indicator: Management framework adopted
Target: Management framework adopted by 2019
Budget: No cost for the management framework but the resulting work will be integrated into the cost of road projects

Measure 9: Support the municipalities to adapt transportation infrastructures in urbanized environments to the benefit of active transportation

This measure will extend and enhance the Programme d'aide financière au développement des transports actifs dans les périmètres urbains (Financial assistance program for the development of active transportation within urban perimeters), an action that is part of the 2013-2020 Climate Change Action Plan. This program will be enhanced, in both content and financing, and extended beyond the current period of the 2013-2020 CCAP, to adequately meet the requests of the municipalities.

Indicator: Program applied
Target: Program improved by 2021
Budget: $10 million/year until 2020 (funds already planned); $38.5 million over five years (additional funds)

Measure 10: Overhaul the financial aid program for the urban road system (municipal road networks, aqueducts and sewers) so the complete street principle is systematically applied to any new project

This measure advances the idea that active transportation must be a component of any urban road project within urban perimeters and must be a concern for any infrastructure project designer in the urban environment. This measure may result in the addition of sidewalks, cycling lanes or traffic calming measures to any road works project subsidized by the government, whether specifically for the traffic lane or for any other project that requires its reconstruction.

Indicator: Programs overhauled
Target: Programs overhauled by 2023
Budget: Integrated into budgets allocated in current programs

INTERVENTION PRIORITY 3.3: ENSURE UNIVERSAL ACCESS FOR ANY ACTIVE TRANSPORTATION INFRASTRUCTURE WITHIN URBAN PERIMETERS

This is especially important with the ageing of the population, which brings an increase in motorized mobility aids, sensory problems or simply less ease in travel. It is just as important for people with mobility restrictions to remain active as it is for those who can freely cycle and walk. This intention to provide active transportation infrastructures that are accessible to as many people as possible requires analysis that is differentiated by capacity as well as sex, income, culture of origin or age, in order to engage segments of the population who are worried about their ability, their comfort or their safety.

Action 11: Programme d'aide financière à la conservation des infrastructures de transport actif (CITA) (Financial assistance program for conservation of active transportation infrastructures)

The Québec cycling network has been extensively developed in the last 25 years, especially since the Bicycle Policy and the Route Verte project were adopted in 1995. Many of these infrastructures were put in place with no regard for design and signage standards, or making compromises which, with use, have revealed inefficiencies or a lack of safety. Furthermore, ageing and poorly maintained infrastructures require restoration, upgrading and improvement interventions. Finally, climate change sometimes leads to violent weather events that these infrastructures cannot resist, frequently causing the erosion or destruction of segments of bicycling lanes or pedestrian walkways, disrupting the continuity of the networks. Part 3 of the Programme Véloce II targeted this kind of conservation intervention on active transportation infrastructures. Since the end of that program, in March 2016, no measures have been introduced to pursue this end. A new program would fill this void. In addition, a reserve fund component will have to be created to cover emergency interventions for the municipalities and corporations that manage these trails. This program will also encourage the asphalting of stone dust bicycle trails to improve their accessibility, comfort and sustainability.

Indicator: Program in effect
Target: Program in effect by 2018
Budget: $12.5 million over five years (funds already planned); $3 million over five years (additional funds)

INTERVENTION PRIORITY 3.4: CONSOLIDATE THE BICYCLE TOURISM NETWORK IN QUÉBEC BY ADOPTING AN EXPANSION FRAMEWORK THAT CONSOLIDATES THE ROUTE VERTE AND LINKS IT TO REGIONAL CYCLING NETWORKS

The Route Verte will soon be 25 years old, and the final kilometres should be completed in the coming years. A realistic expansion framework would allow the plan to be completed and concentrate efforts on improving various segments, to enhance the users' experience. It would also allow the Route Verte to be linked to existing, under construction and planned regional cycling networks, in order to achieve more destination and sustainable tourism development throughout Québec.

Measure 12: Launch the Programme d'aide financière au développement de la Route Verte et de ses embranchements (Financial assistance program for the development of the Route Verte and its branches or DERV)

The Route Verte expansion framework that is part of the 2017-2018 Route Verte action plan includes several segments to be added (about 900 km), as well as guidelines for the consolidation of existing segments and the recognition of the attached structuring regional networks. The DERV will work with municipal partners to make the Route Verte expansion framework a reality.

Indicator: Program in effect
Target: Program in effect by 2018
Budget: $12.5 million over five years (funds already planned); $5 million over five years (additional funds)

INTERVENTION PRIORITY 3.5: SUPPORT THE LONGEVITY AND PERMANENCE OF ACTIVE TRANSPORTATION INFRASTRUCTURES

This intervention priority supports the maintenance of the assets and their use over a longer period. For the Route Verte and the regional cycling networks, this means contributing collectively to a better bicycle tourism experience. For active transportation infrastructures within urban perimeters, it means year-round maintenance, especially to preserve the potential for active transportation in the winter, either on foot (sidewalk maintenance) or by bicycle (bicycle path maintenance). The actions therefore also target maintaining all sidewalks and bicycle lanes in operation, sometimes justifying more lasting and permanent facilities than simple bicycle lanes set off by removable markers.

Measure 13: Continue to apply the Programme d'aide financière à l'entretien de la Route Verte and extend its scope to the regional cycling networks that meet a minimum standards

Since 2001, the MTMDET has provided financial support to municipalities equal to 50% of the maximum eligible costs for the maintenance of the parts of the Route Verte under their responsibility. In 2016, the annual budget for this financial assistance was $2.5 million, which supported the maintenance of 2,195 km of cycling lanes on the Route Verte. The completion of the current Route Verte, its anticipated expansion (858 km) and the extension of the program to the qualified connected regional cycling networks (658 km) will raise the number of eligible kilometres to over 3,000. The budget required for the MTMDET to assume its share of the maintenance financing for these segments is estimated at nearly $4 million per year.

Indicator: Revised program in effect
Target: Revised program in effect by 2019
Budget: $2.5 million per year (funds already planned to 2021); $5.5 million over five years (additional funds)

SUMMARY TABLE

Active Transportation Intervention Framework Issues, Intervention Priority and Measures	Indicator	Target	Contribution to aspects of the Sustainable Mobility Policy					
			SMP aspect 1	SMP aspect 2	SMP aspect 3	SMP aspect 4	SMP aspect 5	Winning conditions
ISSUE 1: A legislative framework suited to active transportation								
Intervention priority 1.1: Include the idea of active mobility in municipal planning and laws								
Measure 1: Develop integrated sustainable mobility plans (MTMDET, MAMOT)	Number of plans adopted	100% of the RCM	X					
Measure 2: Amend the laws to systematically take active transportation into account in territorial planning and in the planning, design and operation of transportation infrastructures (MTMDET)	Legislative proposals	Legislative proposals by 2021			X			
ISSUE 2: Development of regional public transit								
Intervention priority 2.1: Promote proper behaviours from different types of road users and keep them informed about the new road-sharing rules								
Intervention priority 2.2: Communicate a positive and encouraging message about the important role of active transportation in travel, the environment, quality of life, health and the economy								
Measure 3: Establish a working group on economic tools to make active transportation more accessible to and valued by the public. (MTMDET)	Working group created	Creation of a working group by 2019						X
Measure 4: Introduce measures to encourage the use of active transportation, including in Québec government business places (MTMDET)	Number of new facilities	New facilities in the workplace beginning in 2019						X
Measure 5: Extenion of the self-service bicycle network in Québec agglomerations (MTMDET)	N/A	N/A			X			

Active Transportation Intervention Framework Issues, Intervention Priorities and Measures	Indicator	Target	Contribution to aspects of the Sustainable Mobility Policy					
			SMP aspect 1	SMP aspect 2	SMP aspect 3	SMP aspect 4	SMP aspect 5	Winning conditions
ISSUE 3: Environments favourable to active transportation								
Intervention priority 3.1: Environments favourable to active transportation								
Measure 6: Amend design and signage standards to re-establish the place of active transportation in the design of transportation infrastructures (MTMDET)	Standards amended	Standards amended by 2019	X					
Measure 7: Strengthen partnerships with community bodies for the reinforcement of active transportation expertise and its dissemination to the municipal and regional sector (MTMDET)	Guides and technical documents published	N/A						X
Intervention priority 3.2: Take pedestrian and cyclist needs into consideration in all infrastructure construction and overhaul projects within urban perimeters								
Measure 8: Adopt a management framework to guide all MTMDET road projects (MTMDET)	Management framework adopted	Management framework adopted by 2019			X			
Measure 9: Support the municipalities to adapt transportation infrastructures in urbanized environments to the benefit of active transportation (MTMDET)	Program applied	Program improved by 2021						
Measure 10: Overhaul the financial aid program for the urban road system (municipal road networks, aqueducts and sewers) so the complete street principle is systematically applied to any new project (MTMDET)	Programs overhauled	Programs overhauled by 2023			X			

Active Transportation Intervention Framework Issues, Intervention Priorities and Measures	Indicator	Target	Contribution to aspects of the Sustainable Mobility Policy					
			SMP aspect 1	SMP aspect 2	SMP aspect 3	SMP aspect 4	SMP aspect 5	Winning conditions
Intervention priority 3.3: Ensure universal access for any active transportation infrastructure within urban perimeters								
Measure 11: Programme d'aide financière à la conservation des infrastructures de transport actif (CITA) (Financial assistance program for conservation of active transportation infrastructures) (MTMDET)	Program in effect	Program in effect by 2018			X			
Intervention priority 3.4: Consolidate the bicycle tourism network in Québec by adopting an expansion framework that consolidates the Route Verte and links it to regional cycling networks								
Measure 12: Programme d'aide financière au développement de la Route Verte et de ses embranchements (Financial assistance program for the development of the Route Verte and its branches or DERV) (MTMDET)	Program in effect	Program in effect by 2018			X			
Intervention priority 3.5: Support the longevity and permanence of active transportation infrastructures								
Measure 13: Continue to apply the Programme d'aide financière à l'entretien de la Route Verte and extend its scope to the regional cycling networks that meet a minimum standards (MTMDET)	Revised program in effect	Revised program in effect by 2019			X			