

page 33

2.2

Structuring, efficient transportation networks fully integrated into the urban fabric

By 2013, an estimated investment of more than 2.3 billion dollars will be required in order to renovate and replace the metro's fixed assets and cars. Some 660 million dollars will be necessary to upgrade the Société de Transport de Montréal's (STM) fleet of 1,600 buses.

Another estimated 380 million dollars per year will be required over a ten-year period in order to restore and maintain the municipal road network, bridges, tunnels and other assets (bikeways, traffic lights). The Master Plan recognizes transportation networks as fundamental components of the City's spatial organization. Accordingly, the Plan emphasizes the consolidation of the various districts of Montréal that are already served by major transportation networks. The Plan also recommends improving certain areas of the City that require a different approach in light of the complexity of their planning challenges. The Plan identifies these areas as requiring a detailed planning process (see Chapter 4). Given the decisive role of transportation networks in influencing urban form, many of these Detailed Planning Areas require major interventions in terms of public transportation and road work.

In keeping with its planning approach, the Plan supports the preservation and optimal use of existing transportation networks and consequently calls for more intensive and strategic land uses, with a greater emphasis on public transportation, in order to reduce greenhouse gas emissions. The City strongly supports public transportation and considers it to be Montréal's transportation mode for the future.

The Ville de Montréal emphasizes the importance of keeping existing transportation networks in good condition and improving their efficiency. Substantial investments both by the Government of Québec and the City will be required, either for their maintenance or development. The Ville de Montréal supports the proposal that a portion of the gas taxes collected by the federal government be reserved in a special fund earmarked for transit improvements in Canadian cities. Similarly, it would be appropriate for the Québec government to rethink its priorities and to use grants from the federal government's Canadian Strategic Infrastructure Fund for public transportation instead of road building.

In addition, by promoting more complete and diversified living environments, the Plan also encourages travel by foot and bicycle, in accordance with an urban planning approach that is sensitive to the requirements of a healthy environment.

The Plan confirms Montréal's role as a freight transportation hub. Accordingly, the City favours the consolidation of existing infrastructure.

The Master Plan proposes two objectives for the movement of passengers and freight:

3 Consolidate and develop Montréal's territory in relation to existing and planned transportation networks.

4 Confirm the strategic function of freight transportation through the consolidation of existing infrastructure.

MONTRÉAL'S KEY PLAYERS IN TRANSPORTATION

Ministère des Transports du Québec (MTQ)

The MTQ ensures the mobility of passengers and freight through efficient and safe transportation networks that contribute to the sustainable economic and social development of Québec. The MTQ plans, designs, constructs and finances transportation infrastructure and systems, particularly expressways and public transportation networks.

The Plan de gestion des déplacements 2000 (Trip Management Plan 2000) portrayed a vision of transportation development in the Montréal metropolitan area and proposed orientations and solutions to meet the travel needs of passengers and freight.

Agence métropolitaine de transport (AMT)

The AMT is a government agency whose mission is to improve the efficiency of the movement of people in the metropolitan area and to increase public transportation ridership.

The AMT manages and funds the metropolitan commuter train network (consisting of 5 lines), park-and-ride centres, reserved bus lanes and bus terminals. It also looks after the planning, coordination, integration and promotion of public transportation services.

Its annual Strategic Plan details its priorities, objectives, actions and budget for the year ahead, together with performance indicators and a three-year capital expenditure program.

Société de transport de Montréal (STM)

The STM organizes public transportation for people within Montréal's boundaries. It manages the metro (consisting of 4 lines and 65 stations) and bus (consisting of 173 routes) networks while contributing to the development and promotion of public transportation. The STM has adopted a Plan stratégique de développement du transport collectif 2004-2013 (2004-13 Strategic Plan for Public Transportation Development) as well as a Plan d'affaires quinquennal 2004-2008 (2004-08 Five-Year Business Plan).

PRIORITIZING THE DEVELOPMENT OF PUBLIC TRANSPORTATION

In keeping with the principles set forth in the Master Plan's planning approach chapter, namely sustainable development and adherence to the Kyoto Protocol, the Ville de Montréal resolutely supports public transportation.

In this context, despite insufficient financial resources, the Ville de Montréal recognizes the importance of investing in the maintenance and development of public transportation networks and urges the higher levels of government to support this direction.

The Ville de Montréal has a strong tradition of support for public transportation and intends to optimize the use of existing networks. By making public transportation a priority, the City chooses to serve the greatest possible number of residents and thereby endorses the principles of social equity and providing all Montrealers with access to the places they live, work, study and play. In so doing, it is confirming the function of public transportation networks in structuring the organization of its territory.

The STM foresees significant investments to increase client satisfaction, particularly by increasing service levels in the bus and metro systems through the renovation of rolling stock, infrastructure and fixed assets. These improvements will help optimize the use of the existing public transit network.

At a time when choices have to be made with respect to the development of public transportation networks, the Ville de Montréal is emphasizing projects that serve the most densely populated areas, aiming to provide service at the lowest possible cost per passenger. This is why the City will support further developments to the public transportation networks in areas already organized on this basis.

Committed to the preservation of established areas, the Ville de Montréal wants to promote the development of public transportation modes that fit harmoniously into their surroundings and contribute to the consolidation and revitalization of living environments.

MONTRÉAL'S TRANSPORTATION PLAN

The Ville de Montréal has undertaken the development of a Plan de transport (Transportation Plan), which it expects to approve in 2005. The Transportation Plan will support the Master Plan's orientations, particularly in its emphasis on public transportation and the development of Montréal as a transportation hub.

This Transportation Plan will include a Plan d'action vélo (Cycling Action Plan), a Plan de camionnage (Truck Route Plan) and a Politique de stationnement (Parking Policy), through which the Transportation Plan will set targets for reducing the number of parking spaces, particularly in the Centre. In concert with the STM, it will establish quantifiable goals for increasing the market share of public transit. It is important to note that a new financial framework must be defined in order to enable the investments necessary to precipitate these changes.

objective

Consolidate and develop Montréal's territory in relation to existing and planned transportation networks

Between 1982 and 1998, the population of the Island of Montréal remained stable at approximately 1.8 million, while the number of households increased by approximately 9% from 709,500 to 772,000 due to a drop in the number of people per household. During that same period, the number of cars owned by Montrealers rose from 581,200 to 707,600 – a 22% increase – with the ratio of cars per household increasing from 0.8 to 0.9.

Even though its modal share has declined, public transportation is heavily used in Montréal as compared with other large North American agglomerations. Montrealers average 222 trips by public transportation per year, compared to 210 in Toronto and an average of 63 in major American cities (New York, Boston, Chicago, Detroit, Denver, Houston, Los Angeles, Phoenix, Portland, San Diego, San Francisco, Washington DC, Sacramento).

Major trends

Travel within the Montréal Census Metropolitan Area (CMA) is on the rise. From 1982 to 1998, the number of daily trips within the CMA climbed from 6.2 to 8.9 million. During the same period, trips within Montréal itself rose from 4 to 5 million. By 2016, the MTQ projects that approximately two million more daily trips will be added to the 8.9 million observed in the CMA in 1998. However, although overall mobility has increased since 1982, the relative weight of daily trips in Montréal has dropped due to an even steeper rise in the number of trips in the suburbs.

As the graphics below indicate, this travel increase is accompanied by a significant rise in automobile mode split and a corresponding sharp drop in public transportation mode split.

The MTQ estimates that automobile use will continue to rise unless action is taken to counter-balance this trend. Congestion on the expressway network in the central part of the Island is already spilling over into the local network, which in many areas is incapable of absorbing any additional traffic.

Public transportation networks are also heavily used, especially in the peak direction (for example, towards the Centre in the morning), which causes a certain amount of discomfort for users. During the same period, some segments are not used at full capacity, particularly in the opposite direction of the peak.





2.2 Structuring, efficient transportation networks fully integrated into the urban fabric

page 36

action **3.** 1

Facilitate travel between different areas of the City by establishing new public transportation services The City favours the increasing use of public transportation in order to improve the quality of the environment and the quality of life for residents, particularly those without a motor vehicle. In this respect, the Plan proposes a series of actions directed at public transportation networks.

These projects will contribute to providing adequate service for residential, employment and educational areas, as well as to many of the Detailed Planning Areas (see Chapter 4).

Access to Montréal from Laval, Longueuil and the North and South Shores must also be centred on the use of public transportation. From this perspective, the Ville de Montréal favours optimizing the use of existing railway corridors, an initiative which will require modernizing signalling systems, acquiring new rolling stock and double-tracking rail lines in some places. For existing bridges, the City recommends measures that give preferential treatment to public and alternative transit vehicles.

The proposed public transportation corridors must continue to fit harmoniously into their built surroundings and contribute to revitalizing activities in the areas they serve. In denser areas of the City, light rail and modern tramway systems are appropriate. The STM has identified Parc Avenue and René-Lévesque, Henri-Bourassa and Pie-IX Boulevards as transport corridors with potential for intermediate capacity modes such as articulated buses, modern tramways or light rail. In lower-density areas, minibuses and shared taxi programs should be considered to serve public transit users.

The Ville de Montréal also supports universal access to public transportation networks, with facilities that make it easier for all transit users to get around (see Objective 14) and intends to make the public transportation network, particularly the metro, an enjoyable place to be through various efforts including artistic and cultural displays.

The boarding areas of metro and commuter rail stations are designed to ensure a comfortable and safe environment that responds to the needs of riders (see Objective 14). The Plan recommends similar efforts for the transfer points of some of the bus system's most heavily used routes.



In an urban setting, public transportation accounts for only 3% of greenhouse gas emissions. Buses

emit more pollutants than cars, but a bus can

carry 65 passengers, so it produces 6 to 18 times

less pollution per passenger than an automobile. Furthermore, one metro train can carry as many

passengers as 15 buses, without directly emitting

any pollutant gases.



ALTERNATIVE TRANSPORT

While fully committed to maximizing public transit use, the City also wishes to support alternative transport modes such as walking, cycling, carpooling and car sharing.

These modes complement public transit, require few additional investments, fit in well with the built form, contribute to the reduction of greenhouse gas emissions, lower energy consumption and help to improve the physical health of Montrealers.

Self-serve bicycles

A number of institutions and businesses in Montréal now offer their employees and students self-serve bicycles for use during business hours. The City encourages a wider use of this concept at other workplaces and educational institutions.

Car share services

These services permit their members to access automobiles when they need them through a timeshare system. The City recognizes the contribution of this mode of alternative transport. Similarly, the City encourages the use of electric-powered vehicles.

Employer-based programs

Employer-based programs cover a wide variety of different initiatives taken by employers to support the use of public transit by their employees in their journeys between home and work. The AMT is offering guidance and support to a number of different corporations seeking to begin such programs through its Allégo initiative. Carpooling, localized improvements to public transit service, shortened workweeks, telecommuting and bicycling incentive programs are all examples of employerbased initiatives worthy of consideration. Through these efforts, institutions and corporations can reduce the number of parking spaces they offer and put that space to better use. The City recommends the use of such measures.

Implementation measures

The following actions pertaining to public transportation networks, which will be confirmed by in-depth studies, are justified by urban planning considerations (see Map 2.2.1):

Proposed interventions for the metro network

Given the role that the metro plays in intensifying activities, the high density of the residential and employment areas to be served and the presence of areas with strong development potential that are subject to detailed planning (Galeries-d'Anjou / Jean-Talon East, Havre de Montréal, Laurentien / Lachapelle), the City recommends the following interventions:

- Extend Line 5 from the Saint-Michel station to the Borough of Anjou and construct a station at the corner of Galeries-d'Anjou Boulevard and Bélanger Street (under study by the AMT).
- Extend Line 2 from the Côte-Vertu station to the Bois-Franc commuter train station.
- Redesign the access to Old Montréal from the Champ-de-Mars metro station (project under study by the Ville de Montréal).

Proposed interventions for commuter train lines

In an effort to increase Montrealers' use of commuter rail lines and taking into account the relative ease and low cost of their implementation, as well as the proximity of areas with a strong development and improvement potential that are also subject to detailed planning (L'Acadie / Chabanel, L'Anse-à-l'Orme, Décarie / Cavendish / Jean-Talon West), the City recommends the following interventions:

 Build a new commuter rail line linking Repentigny with Montréal's Centre, serving the boroughs of Rivière-des-Prairies–Pointe-aux-Trembles–Montréal-Est, Anjou, Saint-Léonard, Montréal-Nord, Villeray–Saint-Michel–Parc-Extension, Ahuntsic-Cartierville and Saint-Laurent (project under study by the Agence métropolitaine de transport).



- Build new stations on the Blainville line: in the L'Acadie-Chabanel district of the Borough of Ahuntsic-Cartierville; at the corner of Côte-des-Neiges Road and Jean-Talon Street West as well as in the proximity of the Namur metro station in the Borough of Côte-des-Neiges—Notre-Dame-de-Grâce; in the district of the Côte-Saint-Luc mall in the Borough of Côte-Saint-Luc—Hampstead—Montréal-West.
- Build a new station on the Deux-Montagnes line in the Rapides-du-Cheval-Blanc area of the Borough of Pierrefonds-Senneville.
- Redesign the access to the Baie d'Urfé station on the Rigaud line in the Borough of Beaconsfield-Baie d'Urfé.
- Redesign the Bois-de-Boulogne station on the Blainville line, in the Borough
 of Ahuntsic-Cartierville, taking into account the area's potential for development.
- Move the LaSalle station on the Delson line approximately 500 metres north in the Borough of LaSalle, to a residential area with development potential.

Proposed intervention between the Centre and Montréal – Pierre Elliott Trudeau International Airport

Considering the importance of a rapid, efficient public transportation connection between the Centre and Montréal – Pierre Elliott Trudeau International Airport and taking into account the development potential of the area surrounding the airport, as well as those that are subject to detailed planning (Airport surroundings, Central Business District), the City favours the following intervention:

Establish a rail shuttle between the Centre and the airport departing from Central Station.

Proposed interventions between the South Shore and the Centre

A LRT (Light Rail Transit) link between the Centre and the South Shore is presently under study by the Agence métropolitaine de transport. The City will evaluate the project once the study is completed.

The Plan recognizes the necessity of ensuring the permanence of a structuring public transportation corridor between the South Shore and Montréal. To this end, the City has identified the following intervention:

 Improve public transportation from the South Shore by an additional commuter train line on the Victoria Bridge or a reserved bus lane on Champlain Bridge in the direction of peak traffic flow.



Proposed interventions along Parc Avenue and René-Lévesque Boulevard

Given the density of residential and employment areas to be served, the development potential of the area, the revitalization of Parc Avenue, the demolition of the Parc/Pins interchange and its replacement by a level intersection and the presence of Detailed Planning Areas (Acadie / Chabanel, CP tracks surroundings, Quartier des spectacles, Central Business District), the Plan calls for the harmonious implementation of a LRT system along the following corridors:

• From De La Montagne Street to Bleury Street on René-Lévesque Boulevard West and then on Parc Avenue to Jean-Talon Street West (project under study by the Agence métropolitaine de transport) with eventual extension to the Acadie / Chabanel area.

The City also recommends that complementary studies be undertaken with respect to implementing other effective public transportation modes along these arteries. Parc Avenue is a major public transportation corridor that handles 45,000 transit trips per day.

Proposed interventions along road and railway corridors

In order to increase service to residential and employment areas, as well as to improve access to structuring public transportation networks such as the metro and commuter trains and given the presence of Detailed Planning Areas (Bourget / Forget, Louis-H.-La Fontaine Corridor, Décarie / Cavendish / Jean-Talon West, Anse-à-l'Orme, Notre-Dame East), the City recommends the following interventions:

- Initiate preferential measures for public transportation such as reserved lanes that permit taxis as well, traffic signal priority and appropriate road markings along the length of the following corridors (see Map 2.2.1):
 - Highway 25 corridor (project under study by the Société de transport de Montréal);
 - Beaubien Street East (project under study by the Société de transport de Montréal);
 - Cavendish Boulevard;
 - Côte-Vertu Boulevard and Sauvé Street;
 - Pierrefonds Boulevard;
 - Sources Boulevard;
 - Doney Spur;
 - Henri-Bourassa Boulevard West;
- Jacques-Bizard Boulevard and its extension;
- Lacordaire Boulevard;
- Maurice-Duplessis Boulevard;



- Notre-Dame Street East, from Papineau Avenue to Highway 25 via Souligny Avenue (project under study by the Ministère des Transports du Québec in association with the Ville de Montréal);
- Notre-Dame Street East, from Dickson Street to the eastern end of the Island;
- Papineau Avenue;
- Pie-IX Boulevard;
- Rodolphe-Forget Boulevard;
- Rosemont Boulevard (project under study by the Société de transport de Montréal);
- Saint-Charles Boulevard;
- Saint-Jean Boulevard;
- Saint-Michel Boulevard (project under study by the Société de transport de Montréal);
- Sherbrooke Street.

Potential interventions

Given the high densities of the residential and employment areas to be served, the presence of Detailed Planning Areas with strong development potential (Bourget / Forget, Angrignon, Mount Royal, Havre de Montréal, Lachine Canal, East Lachine, Central Business District) and the potential for recreational/tourism development, the City has identified potential new public transportation corridors able to be served by metro, light rail or modern tramways. These are:

- From the future metro station at the corner of Galeries-d'Anjou Boulevard and Bélanger Street to the future Bourget Avenue;
- From the Angrignon metro station to the LaSalle commuter train station and then towards the Borough of Lachine;
- From the Old Port to the Borough of Lachine, along the Lachine Canal;
- From the Quartier des spectacles to the Old Port, Jean-Drapeau Park and Mount Royal.

Further studies will help determine the appropriate route and transport mode in each case.





Public Transportation

Map 2.2.1

----O

.

.

05

Metro Line – Existing or Under Construction Metro Line Under Study Potential Metro Line Existing Commuter Train Line Commuter Train Line Under Study Commuter Train Station to be Redesigned Proposed Commuter Train Station Proposed Rail Link Between the Centre and the Airport Light Rail Transit System Under Study Potential Light Rail Transit System \rightarrow Existing Preferential Measures for Public Transportation Preferential Measures for Public Transportation Under Study Potential Preferential Measures for Public Transportation Precise Route to be Determined Borough Limit

Mise en valeur du territoire et du patrimoine Montréal 🍀

Master Plan

action **3.2**

Promote urban development that favours the use of public transportation

In order to increase the use of public transportation and reduce automobile use, it is important to promote an appropriate form of urban development while improving the availability of public transit.

There is a direct relationship between urban density and mixed uses on the one hand and the use of public transportation on the other. Dense, diversified neighbourhoods are home to a larger number of potential public transportation users and contribute to a reduction in the length of certain trips.

Historically, several commuter train stations have contributed to the development of Montréal's living environments. With the development of the metro network and the construction of new stations, the original structuring effect of stations was progressively eroded in favour of the purely functional role of providing access to networks or modal transfer.

The City recommends increasing the intensity and diversity of urban activities, particularly in the vicinity of metro and commuter train stations and major public transportation corridors that offer potential for consolidation due to the presence of vacant or underused land (see Map 2.2.2). Vacant lots, shopping centre parking lots, park-and-ride centres and other underused lots within reasonable walking distance – approximately 500 metres – from train and metro stations are specifically targeted. However, guidelines must be developed for increasing the intensity and diversity of activities in order to maximize positive impacts, both on the surrounding urban environment and on the use of the public transportation network.

The areas surrounding new metro and commuter train stations and new public transportation corridors must also meet the criteria for the intensification and diversification of activities presented in the implementation measures section below.

To this end, in addition to an appropriate regulatory framework, the City intends to establish a financial aid program. The application of these criteria and the implementation of the program are intended to revitalize and improve certain areas of the City. They will contribute to optimizing the use of the public transportation infrastructure in various ways and will promote a more even distribution of network traffic.



The design quality of public spaces in the vicinity of new metro and commuter train stations is also a priority for the City (see Objective 14).

The detailed planning for the indoor pedestrian network will define development guidelines that will support the use of public transportation (see Chapter 4).

Implementation measures

- Employ appropriate regulatory tools to support an increased intensity and diversity of urban activities along public transportation corridors along the following criteria:
 - Mixed uses, including housing, that can take advantage of the proximity of public transportation;
 - Retail stores and services that meet the needs of public transportation users;
 - The proximity of trip generators, notably academic institutions, libraries, CLSCs and other public facilities;
 - High-quality urban design that reinforces the comfort and safety of pedestrians;
 - Buildings oriented towards the street and designed in a way that contributes to street life;
 - Maximized land use through the construction of underground parking.
- Develop and implement a financial aid program to promote the intensification and the diversification of activities in the vicinity of metro and commuter train stations, as well as major public transportation corridors, identified in Map 2.2.2.





February 2012

2.2 Structuring, efficient transportation networks fully integrated into the urban fabric

action **3.3**

Strategically connect areas of the City by completing the road network



The road network is a major component of the City that ensures the movement of passengers and freight. Efficient road links are an essential condition for the mobility of Montréal's population and the growth of its production, distribution and service activities. They contribute to the consolidation and development of residential, mixed use and employment areas. Through the interventions proposed for the road network, the City seeks to improve access to the different areas of Montréal (see Map 2.2.3).

The Ville de Montréal emphasizes the need to harmonize the proposed interventions with the existing built environment, while contributing to the revitalization of the areas served. This also applies to the implementation of preferential measures for public transportation and carpool lanes along the full length of existing and planned roads.

In order to create a safe and pleasant environment for pedestrians and cyclists, the City also intends to carry out projects such as continuous sidewalks of sufficient width, landscaping, bikeways and appropriate street furniture (see Objectives 13 and 14).

The Master Plan recognizes the importance of protecting and enhancing natural areas on its territory. Therefore, the Ville de Montréal will undertake discussions with the Ministère des Transports du Québec in relation with the possibility that the latter will permanently hand over to the former the Highway 440 right-of-way in L'Île-Bizard in order to consolidate Bois-de-l'île-Bizard nature park.

Implementation measures

The planned actions pertaining to the road networks, which are to be confirmed by in-depth studies, are justified on the basis of a series of urban planning considerations:

Projected interventions on road links

Given its role in structuring Montréal's economic activities, to improve access to the main employment areas, enhance the image of its corridor and harmoniously integrate it with the adjacent built form (especially the residential areas), the Plan identifies the following intervention:

 Proceed with the repair and optimization of the Métropolitaine Expressway while integrating preferential measures for transit (to be performed by the Ministère des Transports du Québec). Given the presence of areas with a strong development potential for residential and employment purposes, particularly the Notre-Dame East Detailed Planning Area as well as to improve access to the Port of Montréal, improve safety and to incorporate facilities that favour travel by public transportation, bicycle and foot, the City recommends the following intervention:

 Design and implement an urban boulevard along the Notre-Dame East corridor up to its intersection with Souligny Avenue, including the extension of Assomption Boulevard from Souligny to Notre-Dame Street East (intervention under study by the Ministère des Transports du Québec and the Ville de Montréal).

In order to improve the image of one of the most important strategic gateways to Montréal, convert significant employment areas with development potential, especially those in the Airport surroundings Detailed Planning Area and to incorporate facilities suitable for public transportation, cyclists and pedestrians, the City favours the following intervention:

 Redesign the Dorval Circle (intervention under study by the Ministère des Transports du Québec, in association with the Ville de Montréal).

In an effort to develop major employment areas with development potential, particularly those in the Glen and Turcot sites and Angrignon Detailed Planning Areas, the City recommends the following interventions:

- Redesign the Turcot interchange (intervention under study by the Ministère des Transports du Québec, in association with the Ville de Montréal).
- Redesign the Angrignon interchange (to be performed by the Ville de Montréal and the Ministère des Transports du Québec).

In order to improve the development potential of certain sites, to incorporate facilities that favour travel by public transportation, bicycle and foot and to enhance the quality of the affected neighbourhoods through coherent street design, the City favours the following interventions:

- Demolish the Parc/Pins interchange and redesign it as a level intersection (to be performed by the Ville de Montréal).
- Demolish and redesign the Remembrance/Côte-des-Neiges intersection (to be performed by the Ville de Montréal).





In order to improve the image of a City gateway, to improve the streetscape and to incorporate facilities that favour travel by public transportation, bicycle and foot, the City recommends the following intervention:

 Redesign Sherbrooke Street East from Georges V Avenue to Marien Avenue and 40th Avenue in the East End of the City (to be performed by the Ville de Montréal).

In order to improve service, to develop employment areas with strong potential (see the L'Anse-à-l'Orme Detailed Planning Area) and to improve access to the Baie-d'Urfé station, the City favours the following interventions:

- Redesign the Highway 40/Morgan Boulevard interchange (to be performed by the Ministère des Transports du Québec).
- Redesign the Highway 20/Morgan Boulevard interchange (to be performed by the Ministère des Transports du Québec).
- Redesign the Highway 40 service roads in the West Island (to be performed by the Ministère des Transports du Québec).

In order to improve and open up major employment sectors with development potential and to improve the accessibility of some residential areas, the City favours the following interventions:

- Complete Maurice-Duplessis Boulevard between Rivière des Prairies and Saint-Jean-Baptiste Boulevard (to be performed by the Ville de Montréal).
- Complete Marien Boulevard between Henri-Bourassa Boulevard East and Maurice-Duplessis Boulevard (to be performed by the Ville de Montréal).
- Complete Langelier Boulevard (to be performed by the Ville de Montréal).
- Connect Toupin Boulevard to Cavendish Boulevard (to be performed by the Ville de Montréal).
- Extend Jacques-Bizard Boulevard from Sommerset Road to Highway 40, including the construction of an interchange with Highway 40 (to be performed by the Ville de Montréal and the Ministère des Transports du Québec).
- Design an urban road link that integrates preferential measures for public transit in the Highway 440 right-of-way between Highway 40 and Gouin Boulevard West, including the construction of an interchange with Highway 40 (to be performed by the Ville de Montréal and the Ministère des Transports du Québec).

In order to provide better access to residential areas and to improve an existing retail area, the City favours the following intervention:

 Redesign the Salaberry interchange by adding an access ramp to southbound Highway 15 (to be performed by the Ministère des Transports du Québec).

In order to upgrade service and enhance an employment area with development potential that is subject to detailed planning (L'Acadie / Chabanel), the Plan identifies the following intervention:

 Build a service road on the east side of Highway 15 in the Jean-Pratt Street corridor (to be performed by the Ministère des Transports du Québec).

In order to open up an area that may be transformed in the East Lachine Detailed Planning Area, the Plan has identified the following intervention:

Extend Victoria Street eastward in the Borough of Lachine.

In order to improve a section of the Havre de Montréal Detailed Planning Area, to incorporate facilities that support public transportation, to complete the perimeter bikeway and to upgrade a main City gateway, the Ville de Montréal favours the following intervention:

Relocate the Bonaventure Expressway and convert it to an urban boulevard running at ground level in order to free the waterfront, improve access to nearby areas and improve development potential of the adjacent land (the Ville de Montréal is assessing the financial and urban planning advantages of lowering the section of the Bonaventure Expressway that it owns, while the federal government must be involved with the lowering and relocation of the section that it owns, from the Champlain Bridge to the Lachine Canal).

To enhance the image of a City gateway, to improve an employment area with development potential that is subject to detailed planning (Côte-de-Liesse Road) and facilitate interchanges with 55th Avenue, Highway 13, Montée de Liesse and the Dorval and Décarie interchanges, the City intends to:

 Explore the possibility of converting Côte-de-Liesse Expressway, between the Décarie and Dorval interchanges, into an urban boulevard.



Projected interventions (precise route to be defined)

In order to improve and open up major employment areas with development potential that are subject to detailed planning (Bourget / Forget, Décarie / Cavendish / Jean-Talon West and L'Anse-à-l'Orme) and to incorporate facilities that are conducive to travel by public transportation and bicycle, the City favours the following interventions:

- Create new links in the Cavendish Boulevard corridor in the Hippodrome and Cité scientifique area (to be performed by the Ville de Montréal and Ministère des Transports du Québec).
- Extend Rodolphe-Forget Boulevard from Henri-Bourassa Boulevard East to Notre-Dame Street East and redesign the interchange in the Highway 40 corridor (to be performed by the Ville de Montréal and Ministère des Transports du Québec).
- Extend Pierrefonds Boulevard to Morgan Boulevard in order to serve the Baie-d'Urfé commuter train station and determine, as a result of a detailed planning study, the optimal route of the road with respect to the natural environment (under study by the Ville de Montréal).

page 52

Potential interventions under study

The MTQ is currently reviewing a scenario for completing Highway 25 towards Laval, which would include the construction of a bridge across Rivière des Prairies and a public transportation corridor. This intervention would be carried out under a private-public partnership agreement. The MTQ will have to conduct a number of studies before a decision is made concerning this intervention.

Upon reviewing these studies, the Ville de Montréal expects that the findings justifying this project must include, among other elements: improved service to employment areas with development potential, improved accessibility to the east end of the Island, the integration of appropriate facilities for public transportation and cycling, a reduction in through traffic, especially in terms of trucks, along Henri-Bourassa and Pie-IX boulevards and protection and enhancement of the natural areas of the Coulée verte du ruisseau De Montigny ecoterritory.

Other interventions may also be considered, including:

 Build an urban boulevard in the axis of the Louis-H.-La Fontaine corridor (part of a Detailed Planning Area), including the construction of a toll bridge with a capacity similar to the Lachapelle and Ahuntsic Bridges. This intervention would integrate a public transportation corridor and a bikeway link, as well as a park-and-ride upstream from the congestion.



September 2005

Complete the City-wide bikeway network to provide access to activity areas and public transportation infrastructure

> The Master Plan favours the use of bicycles and confirms Montréal's position as the leading North American city for cyclists.

ACTIVE TRANSPORT AND HEALTH

Exercising on a daily basis can have a positive effect on health. Walking and cycling are recognized as modes of active transport and have the advantage of consuming a large amount of energy while being relatively accessible to everyone. Bicycles are a key component of sustainable travel in an urban environment and serve as an alternative to cars.

The City is reaching out to cyclists by creating a favourable and safe setting and by providing traffic conditions to accomodate their everyday trips. In fact, the Plan considers bicycles to be a full-fledged mode of transportation for all kinds of trips, including work, school, shopping and recreation.

To achieve this, the Plan supports urban development focused on denser and more diversified neighbourhoods that foster bicycle use by bringing cyclists closer to their destinations. This strategy includes a plan for a continuous, efficient bikeway network designed to improve access to the City's main activity areas, particularly its schools and commercial and employment areas.

Bikeways must be integrated safely and harmoniously with the areas they cross, particularly along the road and rail networks. Bikeways are not always appropriate in the urban environment. Where they are, however, the Plan recommends a number of bikeway design solutions that are harmonious with their surroundings, like designated routes and on-street bicycle lanes. Traffic calming measures should go hand-in-hand with this bikeway concept.

The City also plans to establish adequate, safe parking facilities for bicycles, especially in workplaces and educational institutions, either inside buildings or in areas that are sheltered from the weather. Ideally, cyclists would also benefit from changing rooms and showers.

The City favours the integration of the bicycle and public transportation networks, by facilitating modal transfer through quality facilities that are adapted to the needs of cyclists (see Action 14.2). In light of this, the metro and commuter train stations that are served by a bikeway will have priority in the development of bicycle parking areas.

To encourage cycling and mode transfer, it is important that cyclists feel that their bicycles are safe from theft. Metro and commuter rail stations will receive priority consideration for lockers and secure enclosures for bicycles.

To better support connectivity between cycling and public transit, certain transit authorities have already equipped their buses with bicycle racks. Montréal can take inspiration from their experiences. Certain taxicabs in Montréal also offer this possibility to cyclists.



The Master Plan identifies existing and potential bikeways that have a City-wide reach: the perimeter bikeway, la Route verte, which links Québec's regions, cross-river links and paths serving major activity areas and the public transit network (see Map 2.2.4). To complement this effort, the Plan supports the integration of Montréal's local bike paths with the City-wide bikeway network.

Implementation measures

- Implement the Plan d'action vélo (Cycling Action Plan).
- Complete the City-wide bikeway network, as illustrated in Map 2.2.4.
- Build new bikeways, particularly to serve the Centre.
- Incorporate new bikeways in road links to be completed or redesigned.
- Implement appropriate measures that will encourage safe bicycle travel.
- Ensure the maintenance of bikeways, thereby extending their season of operation.
- Bring existing bikeways up to standard.



DESIGN OF BICYCLE PARKING AREAS

The criteria for designing bicycle parking areas are as follows:

- Locate parking areas in a sheltered area if outdoors, or inside a building;
- Locate parking areas near the entrance of buildings, metro stations or train boarding areas;
- Ensure visibility, adequate lighting and easy access without blocking pedestrian traffic;
- Install a sufficient number of racks adapted to a number of different bicycle types.

THE CYCLING ACTION PLAN

The Ville de Montréal has undertaken the development of a Plan d'action vélo (Cycling Action Plan) to be integrated with the Transport Plan, with approval anticipated in 2005. The Cycling Action Plan will touch upon the maintenance, upgrading and development of cycling infrastructure in the City, among other things. It will support "cyclo-tourism" while promoting bicycles as a mode for everyday transportation.

The Plan will also include measures to make the Centre more accessible to cyclists.



December 2005

City-Wide Bikeway Network

Map 2.2.4

Perimeter Bikeway Projected Perimeter Bikeway Existing Bikeway -Potential Bikeway -----Potential Bikeway (recise route to be determined) → 🛛 Link via River Ferry -Route verte Installation of Bicycle Parking Facilities at Metro Stations,Train Stations 田 and Bus Terminals Metro Line Commuter Train Line Borough Limit Mise en valeur du territoire et du patrimoine Montréal

Master Plan

Montréal Master Plan

2.2 Structuring, efficient transportation networks fully integrated into the urban fabric

page 59



Promote urban development and the use of public transportation and bicycles by taking action on the supply of parking

The City favours urban development based on the optimal use of public transportation, especially in underused spaces. To this end, it aims to set appropriate guidelines for controlling the parking supply, especially in the Centre, where the majority of vacant lots are used as off-street, ground-level parking lots. Building on those lots would increase the City's tax base, while fostering the Centre's consolidation and increasing its appeal (see Objective 7).

Parking conditions have an enormous influence on the choice of transportation mode, especially in the case of work-related trips. The Plan prefers, in this regard, to work to ensure intermodal connections between cycling and public transit.

Implementation measures:

- Within a 500-metre radius of metro stations, establish regulations restricting the number of parking spaces serving retail services, office buildings, public facilities, institutions and industrial buildings.
- Within a 500-metre radius of commuter stations where conditions permit the intensification of activities, as illustrated in Map 2.2.2, establish regulations restricting the number of parking spaces serving retail, services, office buildings, public facilities, institutions and industrial buildings.
- In the Ville-Marie Borough west of Amherst Street, locate all required parking spots inside buildings.
- Within a 500-metre radius of metro stations, encourage that required parking spots be located inside buildings (see Action 3.2).
- Plan for an adequate number of bike racks near metro stations, train stations, office buildings, public institutions and along commercial strips.
- Integrate bike parking in every newly-constructed indoor parking lot.
- Install on-street bike parking where appropriate.



- Expand the capacity of park-and-ride centres located upstream from congestion points by promoting underground garages incorporated into buildings.
- Work with owners of shopping centres and institutions to permit the use of their parking lots by public transit users or other targeted clients.
- Complete an exhaustive study of ways to decrease the quantity of the City's parking supply.
- Develop and implement the City's Politique de stationnement (Parking Policy).

PARKING POLICY

The Ville de Montréal has undertaken the production of a Transport Plan, slated for adoption in 2005. One of its elements will be a Politique de stationnement (Parking Policy), which will contain the following actions:

City-wide actions:

- Strictly enforce existing by-laws, especially the obligation to keep a clear lane leading to each parking space.
- Require an annual operating permit and charge a fee for it.
- Adequately landscape off-street outdoor parking lots.
- Increase the rates of parking meters.
- Review the policy prohibiting on-street parking on certain streets during morning and afternoon rush hour. This change in policy would
 increase the availability of short-term, on-street parking in Montréal's Centre. It would also enable residents of the Centre to park their cars
 close to their homes.
- Simplify on-street parking regulations in residential areas.

Actions favouring the consolidation of the Centre (see Objective 7):

- Gradually eliminate commercial off-street outdoor parking lots, by implementing the following recommendations:
 - Stop issuing new permits for off-street outdoor parking lots;
 - Eliminate illegal parking lots;
 - Increase the surtax on commercial off-street outdoor parking lots.

objective

Confirm the strategic role of freight transportation through the consolidation of existing infrastructure

A FEW FACTS ABOUT THE PORT OF MONTRÉAL:

- A unique geographic location on the North American continent.
- The leading container port on the East Coast for North Atlantic traffic.
- More than one million containers handled every year.
- One of the world's most productive container terminals in relation to available space.

The Ville de Montréal confirms the strategic role of freight transportation through the consolidation of existing infrastructure (see Map 2.2.5). In this respect, the Plan aims at increasing the accessibility and service to employment areas that are freight transportation generators.

Intermodal transportation: One of Montréal's key advantages

Montréal's strategic role has evolved to the point where the City is a freight transportation hub, particularly for traffic between Europe and North America, as a result of the efficiency of its intermodal connections. This role provides Montréal with a major advantage in a global trade environment that fosters competition between cities.

The accessibility and quality of international freight transportation services are factors that export-oriented manufacturing industries and the freight distribution sector consider when selecting a location.

The Port of Montréal is the keystone of freight transportation in Montréal. In addition to the Port, the major trans-Canada railway networks, Montréal – Pierre Elliott Trudeau International Airport and the development of an expressway network connecting the City to all other points in North America contribute to upholding Montréal's role as a freight transportation hub.

Intermodal transportation, which is the key to modern freight movement logistics, is one of the factors that enable Montréal to maintain its international role. Through a series of processes, it can eliminate break bulks from one transportation mode to another.

The fact that more than 100 kilometres of railway track in the Port of Montréal are located directly on the loading docks and in all container terminals, thus providing greater intermodal efficiency, gives Montréal a major advantage over its competitors. These tracks are connected directly to the continent-spanning railway networks of Canadian Pacific (CP) and Canadian National (CN), thereby consolidating Montréal's position. Very few cities benefit from this level of integration.





Over the past 20 years, the globalization of trade, free trade agreements, the new pace of production and the emergence of new delivery demands (just-in-time) have transformed the freight transportation industry.

These changes have increased the flow of goods between regions and countries. This trend, which is in evidence in Montréal, is expected to continue for a number of years. Among other things, this means a large increase in the number of trucks using the municipal road network, which puts upward pressure on maintenance and repair costs.

The transportation sector is responsible for a large part of the production of greenhouse gases and is one of the major generators of nuisances in living environments. From the perspective of reducing emissions and improving air quality, the City favours intermodal connectivity between different modes of freight transportation.

The industry's needs

The railway companies have all the space necessary for their operations. In light of this, the Plan confirms the future residential vocation of the Outremont railyard due to its development potential.

Some rail corridors are used both for passenger and freight transportation. The surge in freight transportation activities along certain corridors restricts the possibility of increasing commuter train services.

Montréal – Pierre Elliott Trudeau International Airport has a large amount of remaining space to meet its expansion needs.

The Port of Montréal faces the opposite situation. Its expansion is limited and due to the increase in container traffic, which requires more space for storage, handling and transshipment, the Port is constantly on the lookout for new areas for its operations. This lack of space means that port, railway and road infrastructure must become more efficient.

In addition, industry competition has led truckers to carry heavier loads and consequently, to increase the size of semi-trailers. One effect of this, particularly in older industrial areas, has been to force drivers to manoeuvre on public roads, which blocks traffic and jeopardizes the safety of other vehicles and pedestrians.



page 63



Improve accessibility and service for major freight transportation generators Freight transportation is the key link in the business supply chain and in the distribution of consumer goods.

The Plan aims to support Montréal's competitiveness and attractiveness by providing conditions that are conducive to new investments. In light of this, the City recognizes the efficiency of transportation links in reinforcing economic activity through the consolidation of employment areas.

The Métropolitaine Expressway, which has serious congestion problems, is the only east-west corridor that crosses the Island of Montréal. The other components of the expressway network are also heavily used. Any incident that disrupts the traffic flow causes major delays and affects the delivery of goods. Congestion along these corridors leads to heavier use of the local road network, inducing additional nuisances in some more sensitive areas. This problem is also amplified by the discontinuity of the municipal road network in certain places.

The City recommends actions pertaining to both the municipal and Québec road network in order to consolidate employment areas and regenerate large underused sites, especially in the Detailed Planning Areas (see Chapter 4).

Implementation measures

- Support the main actions proposed for freight transportation (see Map 2.2.3):
 - Repair and optimize the Métropolitaine Expressway.
 - Design an urban boulevard in the Notre-Dame Street East corridor.
 - Redesign the Dorval and Turcot interchanges.
 - Redesign the service roads along Highway 40 and the Highway 40/Morgan Boulevard interchange.
 - Convert Côte-de-Liesse Road between the Dorval and Décarie interchanges into an urban boulevard.
 - Complete Marien Avenue and Maurice-Duplessis Boulevard.
 - Add a service road along Highway 15 in the Jean-Pratt Street corridor.
 - Extend Cavendish Boulevard (precise route to be determined).
 - Extend Rodolphe-Forget Boulevard (precise route to be determined).
 - Extend Highway 25 or develop an urban boulevard in the Louis-H.-La Fontaine corridor (currently under study).



- Study the possibility of installing preferential measures for truck traffic along certain highway corridors.
- Require a traffic study in order to identify the impacts of and solutions for maintaining the quality of access to employment areas when developing new areas that generate heavy automobile and truck traffic.
- Improve the accessibility and service for the main freight transportation generators by developing a Plan de camionnage (Truck Route Plan), which will be part of the City's Transportation Plan.
- Avoid the obstruction of traffic and ensure the safety of road users by defining new standards for truck manoeuvring areas that provide sufficient clearance for off-street movements, which will apply to future industrial sectors.
- Study the long-term possibility of establishing intermodal cargo centres, such as railyards, off the Island of Montréal and the redevelopment of the vacated sites for other purposes.
- Favour intermodal connectivity between different modes of freight transportation.





September 2005