## TRANSPORTATION MANAGEMENT PLAN GREATER MONTRÉAL AREA

PRIORITY INTERVENTION STRATEGY

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This transportation management plan is the outcome of several years of studies and reflection and presents an overview of the development of transportation in the Greater Montréal area. It proposes guidelines and occasionally daring solutions to satisfy current and future passenger and freight transportation needs. The plan clearly indicates the government's determination to support the Greater Montréal area's development.

Of course, it is hard to predict the future. For this reason, the proposed initiatives, especially those that apply in the medium and long term, must be adjusted in light of changes in transportation needs, the findings of current and future studies, and my discussions in the coming months with elected representatives and socioeconomic stakeholders in the Greater Montréal area.

This perspective of the development of transportation is, above all, practical in nature and centred on action. Consequently, I am proposing a priority intervention strategy that focuses on a number of short-term projects, stipulates medium-term initiatives and paves the way for discussion on other measures.

The priority intervention strategy presents projects that we must carry out promptly. Other projects will also be necessary and decisions must be made in this respect.

This transportation management plan leaves to other decision-making authorities the task of broaching questions pertaining to the institutional framework surrounding transportation and taxation. From the standpoint of land use planning, the ministère des Transports believes that the Greater Montréal area urgently needs to adopt a clear vision and the department will participate with its partners in forthcoming discussions on the matter.

This intervention strategy also defines a financial framework centred on investments to be made between 2000 and 2010, in addition to the ministère des Transports' regular investment program. The financial framework must be rounded out in the coming months with partnership formulas that involve the federal government, the municipalities and the private sector.

The Greater Montréal area continues to display vitality and potential. I am convinced that this plan will act as a catalyst and contribute appreciably to the area's economic future and the quality of life of Montrealers. It is with pride that I invite the public to examine the plan.

Guy Chevrette

Minister of Transport

#### TRENDS<sup>1, 2</sup>

<sup>1</sup> Plan de gestion des déplacements, Région métropolitaine de Montréal, Vers une décongestion durable, 92 pages, April 2000. <sup>2</sup> Plan de gestion des déplacements, Région métropolitaine de Montréal, Fiches techniques et cartographiques, 44 pages, April 2000.

#### **Passenger transportation**

Transportation problems are acute in the Greater Montréal area. Every day, they affect 3.3 million Montrealers who make over 8 million trips related to work, study, recreation, and so on. The following observations are drawn from analyses conducted by the ministère des Transports.

- By the year 2016, daily trips in the Greater Montréal area will increase by 2 million, or 25%, bringing the daily total to 10.2 million trips to be managed.
- By 2016, Montréal Island will be the focal point of such trips, over 1 million of which will end there. However, the proportion of trips to Montréal Island in relation to all trips in the Greater Montréal area will decline from 71% to 66%, a reflection of Montréal Island's diminishing demographic weight and growth in certain employment centres outside it.

If nothing is done, most of these trips will be made by automobile and will engender severe congestion at the approaches to bridges leading to Montréal Island and on major traffic arteries. The increased traffic will also produce a spillover effect on the municipal network, which will be more heavily travelled, noisier, dustier and less safe.

• At present, over 70% of the 8 million trips occur within a territory covered by three transportation corporations (the STCUM, the STL and the STRSM). If current trends continue, growth in travel within this territory will be slower than that in travel in the suburbs. This situation can be explained by significant population growth in the suburbs at a time when population growth in the urban core will more or less stagnate. In addition, most of the new trips anticipated will be effected, increasingly, by car.<sup>1</sup>

On a more refined scale, the downtown area will continue to be the main destination.
However, the number of trips to the area will stagnate and its importance in the
region will decline. Saint-Laurent and Côte-des-Neiges, Ahuntsic and Acadie,
Mercier, the east and west ends of the island, downtown Laval and the Champlain
RCM will become increasingly important destinations, mainly for work and study.

<sup>&</sup>lt;sup>1</sup> Plan de gestion des déplacements, Région métropolitaine de Montréal, Vers une décongestion durable, 92 pages, April 2000.

Current trends point to more widespread use of passenger vehicles, a situation that
will obviously aggravate traffic congestion. However, many commuter trips on the
road network could be effected more cheaply and efficiently using mass transit or by
means of car pools.

The Montréal area has excellent mass transit infrastructure, including the metro, which makes accessible most sites and cultural and sports events and contributes to the development of tourism.

#### Freight transportation

Freight transportation reflects economic activity and changes in Québec's external trade, which has expanded significantly in recent years. International free trade agreements, especially between Québec and the United States, have led to striking growth in the north-south movement of goods. Between 1990 and 1996, merchandise exports to the United States increased from \$19.4 billion to \$39.7 billion; the trade surplus with the US rose from \$4.8 billion to \$17.4 billion. During the same period, shipments to the other provinces decreased from \$22.6 billion to \$21.8 billion and the trade surplus, from \$4.8 billion to \$2.5 billion.

Transportation costs, which range from 4% to 20% depending on the type of goods shipped, are of vital importance to Québec exporters, since the opening up of various markets is engendering stiff competition. It should be noted that 800 000 jobs in Québec, equivalent to 25% of all employment in the province, are directly tied to exports, a major advantage from the standpoint of Québec's competitiveness.

The Greater Montréal area is a hub for the transportation of freight by road, railway, sea and air to Ontario and the other provinces and, above all, to American markets. The efficiency of road and rail links between economic centres in the urban area and the continuity of the routes that cross it are a key issue as regards the transportation of merchandise.

The following figures underscore the importance of such transportation.

- Two-thirds of the goods traded between Québec and the United States, worth over \$50 billion in 1998, were transported by truck.
- Some 23 million tonnes of goods were shipped by rail outside Québec in 1997, over 55% of them to the United States. Goods traded between Québec and the United States shipped by rail totalled nearly \$12 billion in 1997.
- The port of Montréal handled 21 million tonnes of freight in 1999, nearly 45% of it containerized.
- Dorval and Mirabel airports handled \$9.6 billion worth of goods traded between Québec and the United States in 1998.

#### Overview of trends

Between 1987 and 1998, traffic on the road network in the Greater Montréal area increased by 1.3 million car trips a day. During the same period, the number of trips made using mass transit during morning rush hour declined from 395 000 in 1987 to 353 000 in 1993, and to 342 000 in 1998. Public reliance on mass transit is clearly declining. For several years, an upturn has been noted in passenger numbers on the public transportation networks in the area. It is difficult to ascertain whether this increase will persist or if it is short-term in nature, a result of increased economic activity.

Below are highlights of forecasts for 2016, based on the 1993 origin and destination survey.

- Daily trips will increase by 2 million, up 25%.
- Peak periods will be longer and traffic will be heavier.
- The number of kilometres of congested routes will quadruple on the road network in the Communauté urbaine de Montréal.
- Traffic will gradually increase outside rush hours, along with the number of trips made by car.
- A high proportion of additional trips will be made by car.
- Trucking will play a bigger role in the transportation of goods.
- Trade will increase, which means greater numbers of trucks operating on transportation networks in the Greater Montréal area.

If nothing is done, the situation anticipated in 2016 will have widespread negative repercussions on economic growth and the quality of life. The increase in traffic volume on the road network overall and the resulting congestion will lead to heavier energy consumption. Heavier traffic will engender greater congestion and pollution, a significant factor in the deterioration of the quality of life in urban areas.

Average travel time by car in the area will increase from 25 minutes in 1993 to 39 minutes in 2016, which will worsen traffic conditions for trucks. This, in turn, will lead to higher freight shipping costs for companies and a reduction in the Greater Montréal area's and Québec's competitiveness.

<sup>&</sup>lt;sup>1</sup> 1998 origin and destination survey.

#### **GUIDELINES AND OBJECTIVES**

#### Guidelines

### Emphasize initiatives that bolster the competitiveness of the regional and Québec economies

The transportation of goods between economic centres in the urban area and to the area's external markets or to Montréal will increase considerably. The port of Montréal, which has strengthened its role in recent years in the realm of containerized shipping, will also develop. As for airfreight, Mirabel and Dorval airports offer sound potential. The rail network is being used increasingly to ship goods to the United States. The strongest growth will occur in the trucking sector, because of the popularity of just-in-time management and the scope of trade with the rest of the country and, above all, the United States. Consequently, traffic arteries used for the transportation of merchandise must be pinpointed and the appropriate planning carried out concerning their use.

Solutions pertaining to road infrastructure must focus on the enhancement and completion of a network designed over 30 years ago. This network must be improved and, eventually, completed, so that traffic is more evenly distributed, in light of each axial highway's capacity.

The ability to more efficiently rely on transportation as an economic development tool will have positive repercussions on businesses and employment not only in the Greater Montréal area but also throughout Québec.

## Emphasize initiatives that foster the revitalization and consolidation of the urban core and facilitate the attainment of government objectives respecting land use planning and the environment

The urban core covers a territory that, from north to south, exceeds Montréal Island and encompasses the immediate South Shore and the centre of Laval.

The core is constantly changing and is likely to grow and spread. As defined by the ministère des Transports, in 1996, the core encompassed over 2 million residents, equivalent to 63% of the population of the urban area, which has a population of 3.3 million people living in a territory that covers just under 16% of the urban area. The centre of the urban area also accounts for 78% of jobs in the region and 78% of trips to the area.

Priority initiatives aimed at the road network and mass transit will make it possible to support the urban core.

It is generally acknowledged that the development of road transportation networks and mass transit act as a catalyst in urban development. However, the factors that have led in recent years to urban sprawl are at once varied and complex. They reflect specific socio-economic, demographic and political conditions that have been constantly

changing since the late 1940s and that affect transportation as much as transportation affects them. The planning and management of urban development are linked to land use planning, which is managed at the local and regional levels by municipal plans, urban planning by-laws and the RCM and CUM development plans.

The fact remains that, with respect to all stakeholders in the area and, in particular, the ministère des Transports, the implementation of a development framework for the Greater Montréal area would facilitate the choice of initiatives by defining clear development priorities.

It is in this perspective that the ministère des Transports intends to meet the challenge of revitalizing and consolidating the core of the Greater Montréal area, using the means at its disposal.

The promotion of mass transit and transportation management are intended to limit the drawbacks associated with the use of the automobile, e.g. air pollution and noise.

#### Give priority to reinforcing and modernizing existing transportation networks

A large proportion of road and mass transit infrastructure was built over 30 years ago. Extensive repair work will soon have to be carried out on part of the infrastructure. The ministère des Transports will continue to modernize transportation networks, which assumes the adaptation of existing safety and traffic flow requirements. When it establishes its intervention priorities, the department will seek, first and foremost, to increase the efficiency of existing transportation networks and systems by properly maintaining them. It will also promote more efficient use of the capacity of existing road and mass transit infrastructure to ensure smoother traffic flows.

Map: Greater Montréal area (urban core)

#### Ensure efficient, equitable funding

Transportation needs will continue to grow over the next 20 years. The ministère des Transports' initiatives must be supported by an efficient funding framework to enable the Greater Montréal area to act now even as it prepares for the future. The Québec government and the ministère des Transports are directly concerned by this need. In current and future deliberations and decisions, they are taking into account growing needs, the visibility and openness of funding, public support, the overall tax burden and taxpayers' ability to pay. The equitable distribution of costs and the benefits derived by various stakeholders are also considered when choices are made.

#### **Objectives**

#### Reduce congestion

Population growth and growth in employment and their impact on transportation services have been analysed. Congestion has already been noted on the road network and is expected to increase over time if nothing is done to reverse the trend. One study¹ estimates economic losses arising from congestion in the urban core at \$502 million. Given the adverse effect that congestion has on economic activity and the quality of life, concrete measures must be adopted to improve traffic flows, i.e. congestion must be reduced and the speed of traffic must be increased on arteries where is has slowed significantly.

#### Promote broader use of mass transit

The ministère des Transports and its partners that operate mass transit networks must seek to improve public transportation services where jobs are concentrated in the economic heart of the urban centre. A reduction in the number of commuters travelling by car can only enhance traffic flows on the road network, which is needed for the transportation of goods. The ministère des Transports is also responsible for ensuring, when operating conditions permit, that transportation services are offered to residents who cannot or do not wish to use a passenger vehicle. Broader use of mass transit offers society significant advantages, mainly from the standpoint of environmental protection and the vitality of the Greater Montréal area.

It will only be possible to broaden recourse to mass transit if the latter is an efficient, attractive, accessible alternative supported by service delivery management measures. The efficacy of such measures, e.g. employer programs, depends on the availability of quality mass transit services.

#### Enhance the efficiency of freight transportation

The transportation of goods is an important activity in the Greater Montréal area. Freight is carried by road, rail, sea and air and, often, by combinations of these different means of transportation.

Goods are shipped between the Greater Montréal area and the rest of Québec and between Québec and its trading partners. They are also shipped between major economic centres within the Greater Montréal area. Such shipments are of the utmost economic importance to the area and Québec as a whole.

<sup>&</sup>lt;sup>1</sup> ADEC, MTQ. Évaluation des coûts de la congestion routière dans la grande région de Montréal, December 1997.

To ensure continued economic development and maintain the competitive position of the Greater Montréal area and Québec as a whole, we must manage and plan the strategic transportation network in light of its economic impact. In particular, the strategic network encompasses key road infrastructure that links the Greater Montréal area to the rest of Québec. This network affords economic centres in the area efficient access to their external markets. It also makes it possible to serve port and airport facilities. The ministère des Transports will initially focus on the components of this network.

#### Manage demand instead of reacting to it

The department wishes to foster better understanding of the impact of land use planning decisions on transportation. Moreover, it wants to ensure that everything possible is done to promote more efficient use of existing services and systems before funds are invested in new solutions. A considerable effort must be made to strike a better balance between the use of automobiles and mass transit and, in some instances, to ensure better use of the road network.

In all likelihood, a simple increase in the availability of mass transit will raise the number of users sufficiently to reverse general trends. Other measures are necessary.

Along with traditional means of counteracting congestion and increased reliance on passenger vehicles, the management of demand is a method whose efficacy has been tested in many countries. It consists in adopting a series of measures aimed at modifying the conditions under which travel leading to congestion is undertaken, by focusing on needs, the time of day at which travel occurs or individual choices with respect to the means of transportation.

Contrary to investment in infrastructure, which is usually substantial, measures related to the management of demand are relatively inexpensive.

The management of demand centres on the implementation of measures intended, among other things, to encourage at destination points, i.e. businesses and institutions, car pools, the use of bicycles and the management of parking to round out efforts to develop mass transit. These measures must be part of the solutions emphasised.

#### PRIORITY INTERVENTION STRATEGY

The Greater Montréal area is grappling with serious congestion problems that are prejudicial to the quality of life and competitiveness. These problems have several causes, including the form of urban development, population shifts from the centre to the suburbs, uneven population growth within the urban area, a widespread increase in mobility, and more fragmented economic activity organized in several centres at the heart of the urban area, some of which are now hard to reach by means of public transportation. The is greater numbers of trips effected by car and a general trend toward reduced reliance on mass transit.

Congestion is especially acute on strategic axial highways located in the centre of the urban area and at approaches to bridges. It has a spillover effect on municipal and residential roads and adversely affects the quality of life of residents. Moreover, it compounds the difficulty of reaching inaccessible workplaces and hinders goods shipments to businesses, not to mention the air pollution that affects the entire region.

The ministère des Transports believes that the complementary, interrelated solutions to be implemented depend on the management of demand and the expansion of the road and mass transit networks.

However, these initiatives must be phased in gradually. Priorities will be established according to response to guidelines and objectives in the transportation management plan. The initiatives introduced must satisfy economic needs and reflect a desire to consolidate and revitalize the urban core, while enhancing the quality of life. The establishment of priorities must also take into account the government's ability to assume the cost of the measures. All of the projects cannot be carried out simultaneously, which means that investment will have to be spread out over time. Account must also be taken of technical considerations, bearing in mind the impact that construction work will have on traffic.

#### Management of demand

While the department is planning a number of projects to upgrade, optimize and complete the road and mass transit networks, these enhancements alone cannot solve current and future congestion problems. Financial, technical and environmental constraints are limiting the development of transportation infrastructure and other solutions must be contemplated.

Under the circumstances, the management of demand makes it possible to maximize the use of existing transportation networks by relying on a series of streamlined measures that are often less costly.

The ministère des Transports is emphasizing three initiatives in respect of which it will intervene concretely and which will demand broader participation by its partners.

**Employer programs**<sup>1</sup> seek to broaden transportation services from the workplace through the promotion and organization, among other things, of car pools, assured return transportation programs, the management of parking, and so on.

The ministère des Transports will encourage the implementation of employer programs in businesses and institutions in the Montréal area. To this end, it will provide technical assistance and foster the involvement of its partners in this undertaking.

**Fiscal measures** that encourage the use of means of transportation with high rates of usage can significantly help to promote mass transit and car pools. The ministère des Transports is examining the possibility of granting certain tax advantages to commuters who rely on mass transit and employers and employees who participate in employer programs.

#### Management of parking

The ministère des Transports is proposing to the Montréal area that it consider the importance of adopting a comprehensive policy on parking, which, increasingly, is perceived as an important means of managing travel. Such a perspective will make it possible to ascertain which measures are likely to facilitate the attainment of objectives regarding support for mass transit and car pools and to harmonize throughout the urban area the initiatives of various stakeholders in this field.

#### An integrated service strategy for the east end of the Greater Montréal area

The east end of the urban area and, in particular, the eastern portion of the CUM, displays striking deficiencies in the realm of transportation infrastructure. These shortcomings are apparent, in particular, in the absence of transportation services such as the metro, more limited access to the road network, and an incomplete municipal network.

The eastern portion of the Greater Montréal area has considerable development potential, which centres, by and large, on vacant industrial lots on Montréal Island and on residential lots available within urban development zones on Montréal Island, in Laval and the northern and southern suburbs.

<sup>&</sup>lt;sup>1</sup> Ministère des Transports, *Le programme-employeur - Pour améliorer vos déplacements, mettez-vous à l'heure du changement*, 1999, unpaginated.

Specifically, the strategy is intended to:

- facilitate the transportation of passengers and goods in the eastern portion of the Greater Montréal area and between the eastern portion and other economic centres in the urban area
- enhance access among residents and businesses in the eastern portion to certain axial highways and to the mass transit network.

Between 2000 and 2010, the strategy's key components include the following initiatives:

- line 5 of the metro to Anjou (\$317.0 million)
- metrobus service in the rail corridor between Repentigny and downtown Montréal (\$22.0 million)
- metrobus service along boulevard Henri-Bourassa (cost to be determined)
- modernization of rue Notre-Dame (\$165.0 million)
- enhancement of the municipal road network in the eastern portion of Montréal Island (a partnership is being considered with the municipalities concerned)
- development of employer programs to improve access to businesses in the eastern portion of the CUM
- the extension of autoroute 25. A partnership between the public and private sectors would make it possible to proceed sooner with this project so that the opening coincides with completion of modernization work on rue Notre-Dame. The anticipated cost of the project is \$325 million. The extension of autoroute 25 along with the establishment of a rapid-transit corridor linking Laval and the Anjou and Radisson metro stations will make mass transit more readily available to residents in the northeastern portion of the urban area and improve traffic conditions in respect of the transportation of goods.

The development of the eastern portion of the urban area is an objective that can be attained by relying on the developmental effect of transportation infrastructure. An integrated transportation strategy will be beneficial for economic activity in this territory.

The ministère des Transports perceives urban sprawl as a genuine problem that must be managed throughout the Greater Montréal area and be accompanied by a comprehensive development strategy for the territory that establishes phased residential, industrial and commercial development within existing urban development zones in Laval and the northern suburbs by strictly limiting encroachment on protected farm land.

#### Priority initiatives aimed at making mass transit more widely available

Changing transportation needs must clearly guide choices with respect to mass transit, which must efficiently serve key destinations that are attracting growing numbers of commuters.

The measures that the ministère des Transports intends to emphasize reflect a series of observations on urbanization in the Montréal area and its impact on travel, origins and destinations, current use of transportation networks and changes in various means of transportation.

The measures also centre on governmental and departmental guidelines respecting land use planning, economic development and the environment.

In addition to projects already adopted and under way (Pie-IX and Laval metro) and initiatives planned in conjunction with the integrated strategy governing the eastern portion of the Greater Montréal area (Anjou metro and metrobus), the projects indicated below will be carried out.

- Line 4 of the metro to Longueuil (\$333.6 million)
- Development of the ice boom near the Champlain bridge (\$154.5 million)

While the use of the ice boom is being contemplated in the short term to improve bus service between the South Shore and downtown Montréal, in the medium term the replacement of buses along the A-10 – ice boom routing with a more efficient means of transportation must be considered. The light rail transit (LRT) system project, for which funding has yet to be finalized, could proceed sooner under a partnership agreement with the federal government and the private sector.

- Commuter trains (\$162.8 million):
  - upgrading of service on the Montréal–Rigaud and Montréal–Deux-Montagnes lines
  - implementation of the permanent phase of the Montréal-Blainville line
  - implementation of the Montréal–Mont-Saint-Hilaire line
- Reserved lanes and park and ride centres (\$76.3 million)
- Maintenance and renewal of equipment (metro and buses)(\$490.0 million).

#### Priority initiatives pertaining to the road network in the urban core

The importance of the free flow of traffic for the Greater Montréal area's and Québec's competitiveness demands priority intervention on the strategic road network. The measures adopted will focus, first and foremost, on the components of the network located in the urban core.

In addition to the modernization of rue Notre-Dame in conjunction with the transportation service strategy pertaining to the eastern portion of the Greater Montréal area, the following measures will be carried out:

- optimization of the autoroute Métropolitaine (A-40) (\$762.3 million)
- redevelopment of the A-20–A-520 Dorval roundabout (\$22.7 million)
- upgrading of the A-15 in Laval (\$37.0 million)
- upgrading of the A-10 (\$50.0 million)
- management of autoroute traffic (\$58.0 million)
- aggressive management of traffic lights (\$25.1 million).

#### Priority initiatives pertaining to the road network leading to the urban core

- Completion of the A-20 to Vaudreuil-Dorion and on Île Perrot (\$82.1 million)
- Completion of the A-30 between Candiac and Sainte-Catherine (\$110.0 million)
- Upgrading of the A-20 on the South Shore (\$52.3 million).

## Autoroute 30 between Châteauguay and Vaudreuil-Dorion, a new, continuous link to improve transportation

The analysis submitted in March 1995 by the ministère des Transports revealed how discontinuity in the autoroute network limited the choice of itineraries and created overlapping.

By 2016, the autoroute Métropolitaine (A-40) will not be able to handle all new passenger and freight transportation needs, above all on its central portion between autoroutes 13 and 25. The Greater Montréal area has only one direct, continuous eastwest link.

The ministère des Transports' desire to foster competitiveness is reflected in measures aimed at ensuring the smooth flow of goods to and from the Greater Montréal area or across its east-west axis. Manufacturing accounts for a large part of the area's economic base. Among manufacturers' shipments from the five administrative regions that lie wholly or partially within the Greater Montréal area, those from Montréal and Montérégie account for nearly 85% of total exports of manufactured goods and the bulk of shipments by value to Québec as a whole (90%), the United States (73%), Ontario and western Canada (87%).

The completion of autoroute 30 could provide an alternate solution in respect of an uninterrupted autoroute along the east-west axis. The project would require the construction of a 35-km autoroute segment between Châteauguay and autoroute 20 in Vaudreuil-Dorion, at an anticipated cost of roughly \$530 million.

Autoroute 30 was originally intended to link a number of sub-regions in the Montérégie region. Its completion is deemed to be an essential component of the economic and social development of the southwestern portion of the Montérégie region. Moreover, it would make possible the creation of a link between its development centres and other centres in the Greater Montréal area.

This project, funding for which is not stipulated in the priority intervention strategy, will be analysed with a view to pinpointing a funding method that may involve a partnership with the federal government.

#### Priority initiatives to repair the strategic road network

 The ministère des Transports will invest over \$792.2 million dollars in the coming years to preserve the strategic road network. Most of the autoroutes in the region were built in the 1960s and 1970s and will be over 40 years old by 2006. Despite considerable efforts in recent years, the pace of major repairs will accelerate.

#### **Partnership**

#### More extensive public-public partnerships

The ministère des Transports intends to make the most of its experience in the realm of partnerships with the municipalities. Numerous measures pertaining to municipal networks, if they are carried out in time, can engender positive spinoff as regards the enhancement of traffic throughout the Greater Montréal area.

Under the joint Montréal-Québec plan, the ministère des Transports has concluded an agreement with the City of Montréal to carry out projects to which the partners accord top priority. The agreement will be implemented within the broader framework of the transportation management plan. It makes provision for \$115 million over five years for the ministère des Transports, which will examine all new partnership proposals submitted to it by its municipal partners.

#### A public-private partnership that must become a reality

Experience in recent years elsewhere in Canada and abroad has revealed that the realization of transportation projects in partnership with the private sector has led to savings, access to new sources of funding and the moving ahead and acceleration of high-priority projects.

The anticipated projects to be carried out under public-private partnerships must satisfy the objectives of the plan and offer strong potential for profitability, in keeping with social equity and environmental quality objectives. They must also enhance funding formulas and traffic conditions for road and mass transit users and promote technological innovation.

The projects most likely to be carried out by means of a concession to a private consortium are:

- the completion of autoroute 25, between Laval and Anjou, and
- the establishment of a new link between Montréal Island and the South Shore.

#### Intergovernmental partnership is necessary

The federal government recently indicated its intention to help fund road transportation and mass transit projects. Two projects under the transportation management plan could benefit from a partnership between Québec and Ottawa and participation by a private consortium:

- the completion of autoroute 30, between Châteauguay and Vaudreuil-Dorion, and
- the development of a light rail transit (LRT) system on the ice boom along Champlain bridge.

#### Investment between 2000 and 2010

The following tables provide a comprehensive picture of the funds that will be earmarked for the priority intervention strategy. Anticipated measures will require investment on the order of \$2.02 billion over the next five years. Investment planned between 2005 and 2010 stands at an additional \$1.8 billion. These investments assume the continuation of repairs, improvements and the development of the road and mass transit networks, and support for the implementation of employer programs.

#### Management of demand

Employer programs and other measures

#### TOTAL, MANAGEMENT OF DEMAND

#### Measures respecting mass transit

Metro line 5 to Anjou

Metro line 4 to Longueuil

Development of ice boom near Champlain bridge

Commuter trains

Metrobus between Repentigny and downtown Montréal

Reserves lanes and park and ride centres

Preservation of mass transit

Subtotal, mass transit

Equipment maintenance and renewal (buses-metro-trains)

#### TOTAL, MASS TRANSIT

#### Measures respecting the road network in the urban core

Modernization of rue Notre-Dame

Optimization of the A-40 (Métropolitaine)

Redevelopment of the A-20/A-520 Dorval roundabout

Upgrading of the A-15 in Laval

Upgrading of the A-10

Management of autoroute traffic

Aggressive management of traffic lights

#### **Subtotal**

#### Measures respecting the road network leading to the urban core

Completion of the A-20 in Vaudreuil-Dorion and on Île Perrot

Completion of the A-30 between Candiac and Sainte-Catherine

Upgrading of the A-20 on the South Shore

Subtotal

**TOTAL, ROAD NETWORK MEASURES** 

Table : Planned investment in the Greater Montréal area (in millions of dollars)

2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	Total	Total	Total
					2000-2005	2005-2010	2000-2010
0,3	1,0	3,0	3,0	3,0	10,3	-	10,3
0,3	1,0	3,0	3,0	3,0	10,3	-	10,3
2,0	7,0	15,0	31,0	52,0	107,0	210,0	317,0
3,0	7,0	20,0	60,0	60,0	150,0	183,6	333,6
2,0	4,0	18,5	30,0	50,0	104,5	50,0	154,5
20,2	18,5	13,0	20,0	20,0	91,7	71,1	162,8
4,0	9,0	7,0	2,0	-	22,0	-	22,0
15,4	14,4	16,2	20,3	10,0	76,3	-	76,3
46,6	59,9	89,7	163,3	192,0	551,5	514,7	1 066,2
38,54	70,62	44,65	38,73	49,68	242,22	247,8	490,02
85,14	130,52	134,35	202,03	241,68	793,72	762,50	1 556,22
-	2,0	40,0	60,0	35,0	137,0	28,0	165,0
2,2	53,4	78,8	80,0	80,0	294,4	467,9	762,3
4,0	12,0	6,7	-	-	22,7	-	22,7
11,4	5,8	3,6	-	-	20,8	16,2	37,0
0,4	1,2	4,7	18,8	11,6	36,7	13,3	50,0
2,0	6,0	15,0	15,0	20,0	58,0	-	58,0
1,0	2,0	2,0	2,8	2,8	10,6	14,5	25,1
21,0	82,4	150,8	176,6	149,4	580,2	539,9	1 120,1
-	-	0,3	1,5	15,3	17,1	65,0	82,1
0,2	0,5	4,0	12,4	44,6	61,7	48,3	110,0
1,0	1,0	22,5	27,8	-	52,3	-	52,3
1,2	1,5	26,8	41,7	59,9	131,1	113,3	244,4
22,2	83,9	177,6	218,3	209,3	711,3	653,2	1 364,5

#### Joint City of Montréal-ministère des Transports action plan

Connection of boulevards Cavendish Nord-Sud and Royalmount

Redevelopment of the Acadie roundabout

Rebuilding of the Décarie corridor

Development of the A-15 curb ramp at rue Cabot

Development of the A-40 to boulevard Gouin

Other

#### **TOTAL, JOINT ACTION PLAN**

#### Measures respecting repairs to the strategic road network

Autoroute 13 to Laval and to Montréal

Autoroute 15, Turcot cloverleaf crossing

Autoroute 15 Des Laurentides to Laval

Autoroute 40 west on Montréal Island

Autoroute 40 Île-aux-Tourtes bridge

Highway 138 Mercier bridge

Autoroute 19 to Laval

Autoroute 20 Galipeault bridge

Autoroute 40 to the east end of Montréal Island

Autoroute 15 north on the South Shore

Autoroute 25

Other

TOTAL, REPAIRS TO THE ROAD NETWORD TOTAL, INTERVENTION STRATEGY

#### **Public-private partnership**

LTR system on the Champlain bridge ice boom

Autoroute 30 between Châteuaguay and Vaudreuil-Dorion

Autoroute 25, Laval-Anjou

New link between Montréal Island and the South Shore

**TOTAL, PARTNERSHIP** 

Table (suite) : Planned investment in the Greater Montréal area (in millions of dollars)

2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	Total	Total	Total
					2000-2005	2005-2010	2000-2010
1,0	5,0	8,0	10,00	-	24,0	-	24,0
8,0	17,0	18,0	-	-	43,0	-	43,0
12,5	14,0	3,5	2,75	-	32,75	-	32,75
1,1	0,575	-	-	-	1,675	-	1,675
0,8	0,275	-	-	-	1,075	-	1,075
0,25	0,5	1,75	10,0	-	12,5	-	12,5
23,65	37,35	31,25	22,75	-	115,0	-	115,0
25.0	25,0	25,0	25,0	20,0	120,0	11,94	131,94
-	-	15,0	15,0	30,0	60,0	-	60,0
-	-	-	-	-	-	41,0	41,0
-	-	5,0	6,8	10,3	22,1	-	22,1
7,84	12,32	-	-	-	20,16	-	20,16
3,0	2,8	2,44	2,44	8,12	18,75	-	18,75
-	-	-	-	-	-	13,8	13,8
-	-	3,3	3,3	-	6,6	-	6,6
-	-	-	10,5	-	10,5	-	10,5
-	6,32	-	-	-	6,32	-	6,32
-	4,8	6,72	-	-	11,52	-	11,52
30,1	27,2	21,3	17,2	20,5	116,30	333,26	449,56
65,94	78,4	78,8	80,2	88,9	392,25	400,0	792,25
197,23	331,16	425,01	526,27	542,9	2 022,57	1 815,7	3 838,27
-	-	Х	Х	X	X	Х	576,0
-	-	Х	Х	X	X	Х	530,0
-	-	Х	Х	Χ	Χ	Х	325,0
-	-	Х	Х	X	X	Х	650,0
-	-	Х	Х	Х	Х	Х	2 081,0

## IMPENDING DECISIONS RESPECTING OTHER FORMS OF INTERVENTION

Other measures must be carried out in the coming years to enable the Greater Montréal area to meet the challenges it is facing.

#### Upgrading of the A-15 and the A-640 on the North Shore

The enhanced serviceability of autoroute 15 and autoroute 640 on the North Shore, which includes the reconfiguration of the cloverleaf crossings on autoroute 15 with autoroute 640 and the extension of autoroute 13 north from autoroute 640, must be assessed in light of the project's ability to handle traffic from autoroute 15, especially traffic to tourist destinations in the Laurentians, which is growing briskly.

#### **Upgrading of the A-20 within the CUM**

Measures designed to ensure smooth traffic flow on autoroute 20 within the CUM must be subject to more refined technical and financial analyses. The upgrading of this essential link in the freight transportation network requires over \$300 million in investment. Moreover, construction work cannot be carried out simultaneously with that planned on the autoroute Métropolitaine (A-40).

#### Metro line 2 west to Saint-Laurent

Saint-Laurent is one of the biggest employment centres in the Greater Montréal area and has enjoyed sustained development in recent years. The arrival of new firms, the expansion of established businesses and significant residential development have made Saint-Laurent an origin and destination point in which service must be improved.

#### A mass transit system along the autoroute Métropolitaine

A mass transit system adapted to travel in an east-west direction serving key destinations in the centre of Montréal Island will be analysed.

#### **Delson–Saint-Constant and Mascouche commuter trains**

Future commuter train projects, including the Delson–Saint-Constant and Mascouche lines, will be analysed in light of the service they provide to destinations that are experiencing growth. These projects must also be examined in relation to existing alternate solutions and investment already planned in the same sectors. A precise assessment must also be conducted of total capital expenditure and operating costs to be assumed by the government and the municipalities.

#### Rail service between Dorval Airport and downtown Montréal

This proposal is intended to make airport facilities more readily accessible to passengers and airport employees.

#### A mass transit system between downtown Montréal and the Parc des Îles

Given the significant growth in traffic to this tourist centre, consideration is being given to mass transit service to various sites and attractions in the park. The project reflects the desire to support tourism and the economic activity it engenders in a major travel generator in the Montréal area.

#### Light rail transit (LRT) system along avenue du Parc

Service along this artery must be examined in the coming years. The reserved lane along avenue du Parc is one of the most heavily used in the Montréal area.

#### Light rail transit (LRT) system along boulevard Roland-Therrien

Mass transit service on boulevard Roland-Therrien between the future terminus of metro line 4 in Longueuil and boulevard Vauquelin will be analysed.

#### Planning to maintain the mobility of passengers and freight

The implementation of the priority intervention strategy will require planning that takes into account the maintenance of the mobility of passengers and freight while major construction is under way.

In practical terms, this means that before major work begins on a strategic artery, the ministère des Transports must ensure that a number of conditions are met. Specifically, the department must:

- limit simultaneous work on two parallel arteries that provide an alternate solution for passenger and freight transportation
- maximize the use of mass transit infrastructure in the transportation corridor where work is being carried out
- ensure that the ministère des Transports' initiatives do not overlap those undertaken by its municipal partners on their road network in the same transportation corridor
- ensure that the users of various transportation networks receive all necessary information so that they can plan their trips in advance
- ensure that road users receive relevant information in real time so that they can adjust their routes to prevailing traffic conditions.

#### Optimization of the autoroute Métropolitaine: a preparatory phase is necessary

The optimization of the autoroute Métropolitaine will undoubtedly be the construction site of the decade in the Montréal area. In 1990, this major artery underwent extensive upgrading. This time, it will be redesigned in several places in order to better channel and redistribute the tens of thousands of motorists that its most heavily travelled segments attract each day.

Given the drawbacks engendered by construction work, the intervention strategy will take into account the considerations indicated below.

- Rue Notre-Dame will be modernized in order to facilitate travel between the eastern
  and western sections of Montréal Island, to avoid sections of the autoroute
  Métropolitaine during major construction work. Similarly, the autoroute Ville-Marie,
  running along the same axis, renovation of which has been completed, will be ready
  to handle a bigger influx of vehicles.
- The extension of the autoroute traffic management system will reduce the ministère des Transports' reaction time when congestion occurs. This system includes an automatic incident detection feature that relies on road surveillance cameras and electronic message boards at strategic locations that inform users in real time of bottlenecks and alternate solutions.

- The implementation of aggressive management of traffic lights in Montréal will ensure smooth traffic flow on certain urban boulevards, which will experience heavier traffic during major construction work.
- The initial measures pertaining to the optimization of the autoroute Métropolitaine will focus, first and foremost, on the relocation of certain entrances and exits in order to make them more serviceable, then the redevelopment of feeder roads and the Acadie roundabout in order to eliminate certain bottlenecks. These initiatives will improve traffic flow on the autoroute Métropolitaine before major construction begins on the elevated expressway.

#### Coordination of construction

The priority intervention strategy proposes a number of key initiatives pertaining to the road network. For this reason, the ministère des Transports will establish a construction coordination committee, which will coordinate mitigation measures and communication strategies aimed at reducing the impact of construction work on travel. Complete collaboration will be necessary to ensure that the public's transportation needs are met.

The ministère des Transports will rely on its partners operating mass transit networks to provide as many alternate services as possible for motorists who relinquish the use of their cars in order to avoid congestion. The department and its partner will jointly determine the most flexible, efficient measures to implement.

#### **IMPLEMENTATION**

#### A call for cooperation and partnership

To enhance the free flow of passenger and freight traffic, the Greater Montréal area now has a transportation management plan that the ministère des Transports is proposing to it.

This plan has been designed using an integrated, multimodal approach. Among other things, transportation management must enhance travel through decisions that take into account the interdependence of all means of transportation.

The ministère des Transports will focus on initiatives covering the road network, mass transit and the management of demand.

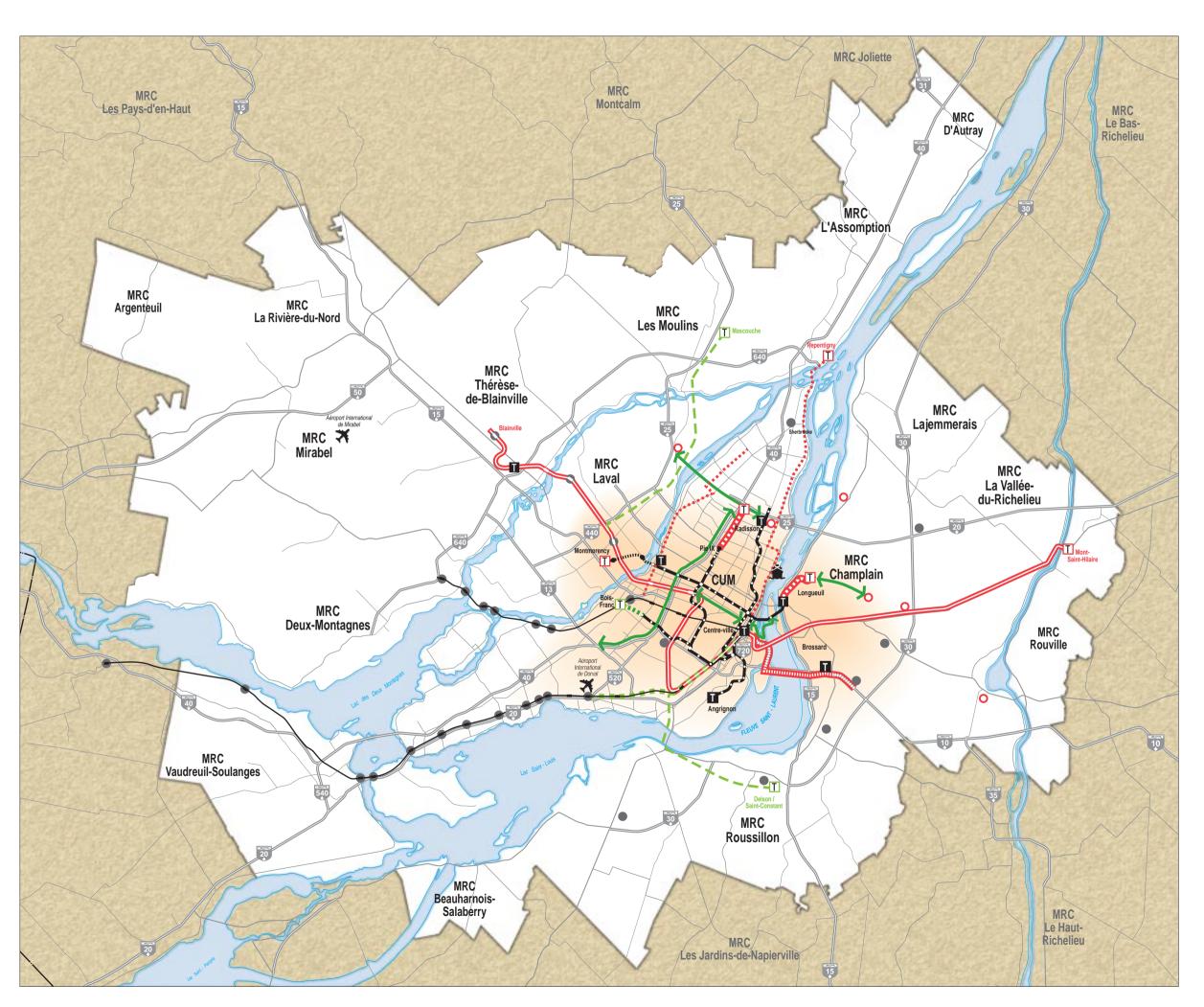
Moreover, the ministère des Transports is asking its partners to adopt concrete measures that will enable the Greater Montréal area to meet the key challenges facing it in the realm of transportation management.

The municipalities, the RCMs and the CUM, along with their mandataries, transportation corporations and intermunicipal transportation boards are being asked to collaborate with regard to land use planning and the management of urbanization, on the one hand, and the integrated, multimodal management of road networks and mass transit under their jurisdiction, on the other hand. Furthermore, they are being asked to support the department's proposed measures respecting the management of demand.

Other government departments, transportation corporations and the Agence métropolitaine de transport must pursue their efforts to make transportation an effective economic development tool and a means of enhancing the quality of life. Businesses must participate in this collective effort by promoting the implementation of employer programs.

Transportation is a tool on which the Greater Montréal area must rely in its development strategy. It must be used with proper judgment. The decisions to be made will have significant repercussions on Montrealers' quality of life and on the Greater Montréal area's and Québec's economic development.

The policy statement indicates the priority intervention strategy that the ministère des Transports is proposing to stakeholders in the Greater Montréal area. It also seeks to establish a dialogue, since its realization will be impossible without the collaboration of everyone concerned.



## Transportation Management Plan Greater Montréal Area

# MAP 1 INITIATIVES PERTAINING TO MASS TRANSIT

#### PRIORITY INITIATIVES

Metro (Anjou and Longueuil)

Commuter train

Development of the ice boom

Metrobus

Intermodal terminal

Park and ride centre

#### PROJECTS UNDER CONSULTATION

Metro (Bois-Franc)

Mass transit system (LRT or other)

Commuter train

Rail service between
Dorval Airport and downtown Montréal

Intermodal terminal

Existing metro

Future metro

Commuter train and station

Intermodal terminal

Park and ride centre

Centre of the urban core

— Greater Montréal area (1996)

0 1 5 10 km



