



TRANSPORTING QUÉBEC TOWARDS MODERNITY

SUSTAINABLE MOBILITY POLICY - 2030

Urban Public Transit
Intervention Framework

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For more information, you can:

- dial 511 (in Québec) or 1-888-355-0511 (elsewhere in North America)
- visit the website of the ministère des Transports at www.transports.gouv.qc.ca.
- write to: Direction des communications
Ministère des Transports
500, boul. René-Lévesque Ouest, bureau 4.010
Montréal (Québec) H2Z 1W7

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1. Urban Public Transit in Québec

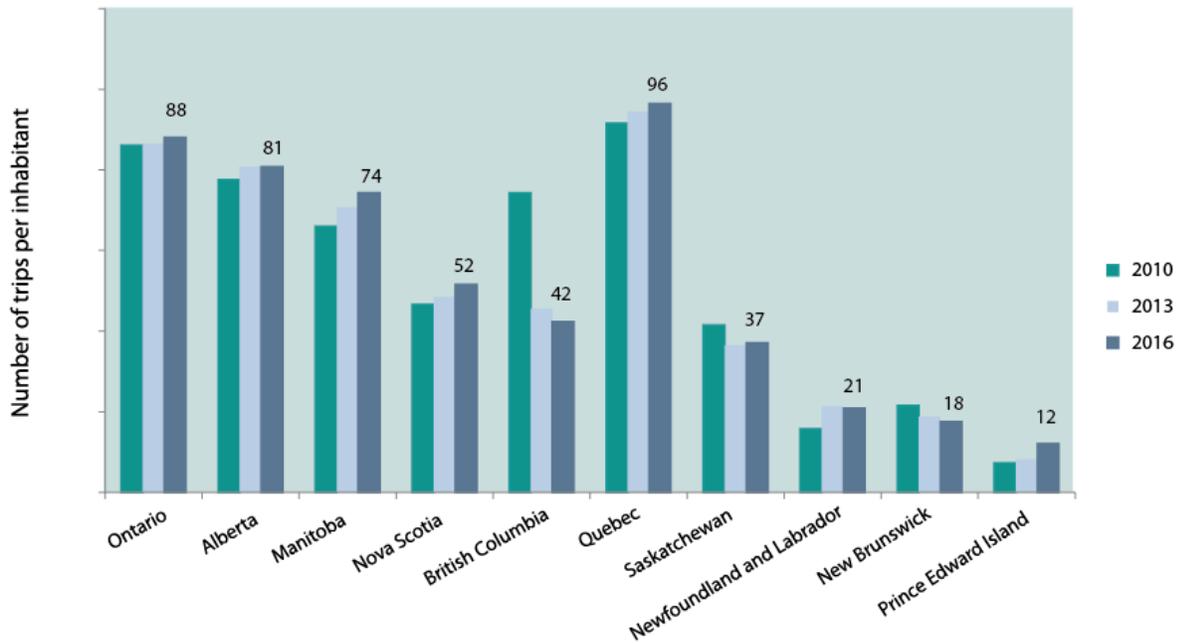
This document is an integral part of the Sustainable Mobility Policy to 2030. It presents an overall portrait of urban public transit in Québec, its issues and all measures related to the 2018-2023 Urban Public Transit Action Plan. The most promising and cross-sectional measures in this sectoral action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

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

Current situation

As shown in Tables 1 and 2, Québec is in a leading position in Canada and North America in terms of the performance and use of public transit services. Despite these encouraging results, urban public transit still has many challenges to meet in order to contribute to sustainable mobility.

Figure 1: Number of annual public transit trips per inhabitant



Source: Canadian Urban Transit Association, *Canadian Transit Fact Book*

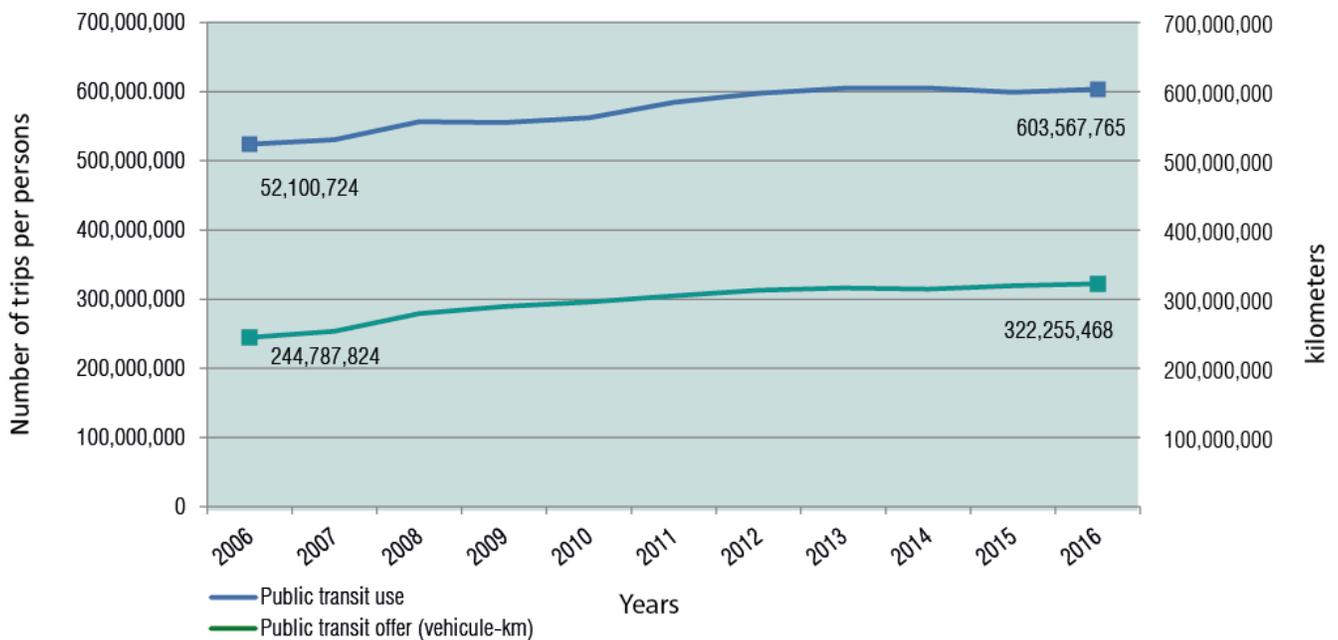
Measures have been put in place over the years to improve the accessibility of public transit for people with reduced mobility. Since 1996, all buses acquired by the nine transit corporations in Québec that receive government financing must be accessible, that is, equipped with lowered floors and access ramps.

Despite the progress, much remains to be done to improve the accessible of public transit networks. For example:

- In metropolitan Montréal, only 12 of 68 metro stations and 12 of 59 suburban train stations are accessible to people who use wheelchairs;
- Many obstacles such as the lack of sidewalks or the non-reliability of ramps limit the use of public buses by handicapped people;
- The accessibility of buses used by other public transportation services is far lower than that of the nine public transit corporations.

After the Politique québécoise de transport collectif was adopted in 2006, with its goal of increasing the use of public transit by 8%, government efforts succeeded in expanding the public service offer by 31.6% between 2006 and 2016, which contributed to a 15.2% increase in use over the same period.

Figure 2: Change in use and offer of public transit services (2006-2016)



Source: MTMDET

Furthermore, in Québec, where 80% of public transit trips are taken in metropolitan Montréal, largely on the métro and Deux-Montagnes suburban train line, about 50% of public transit trips are taken on an electrified mode of transportation.

The importance of accessible urban public transit for sustainable mobility in Québec

The performance and appeal of public transit significantly influence people's quality of life and the competitiveness of metropolises and big cities. With the development of a modern, accessible, efficient and orderly service offer that takes the particularities of all users and all communities in Québec into account, public transportation helps improve the quality of life of families and individuals and consolidates the expertise of Québec businesses.

Public transit also provides solutions to environmental concerns by responding to the sustained demand for flexible, high-performance alternatives to private car use. These alternatives help reduce the use of the major road networks, slow the increase in greenhouse gas (GHG) emissions and encourage the densification of living environments.

In terms of economic development, investing in public transit has especially structuring benefits for the Québec economy. These investments increase social participation, facilitate worker access to production locations, reduce the disadvantages of road congestion and partially rectify Québec's trade balance. With its immense reserves of electric energy, Québec is very well positioned to draw significant benefits from a shift to electric public transit infrastructures.

Accessible public transit generates other positive spinoffs for sustainable mobility. It is widely documented that integrated transit planning, oriented toward urban community-driven development (density, mixed use, connectivity) and increased use of public transit, would have considerable positive effects on the health, safety and wellbeing of the public.

The Québec government's role in urban public transit

In all urban regions, the responsibilities for various public transit networks, infrastructures, modes and services are shared between the ministère des Transports, de la Mobilité durable et de l'Électrification des transports (MTMDET) and the municipal and supramunicipal sector.

> The Québec government

The government coordinates all public transit policies implemented across Québec. It establishes the major guidelines, defines the goals and coordinates the initiatives requested of each public transit stakeholder, including the transport organization authorities (TOA). It acts, in part, by establishing institutional, legislative and financial frameworks, which include government financial support from its various assistance programs to support capital assets and improve the service offer.

> Municipal sector

Municipalities are the primary planners and organizers of public transit services. They have the responsibility for financing the organizations that provide public transit services within their territory and they assume the majority of the operating costs, as well as adding to the financial support from the Québec government for capital assets.

The *Act Respecting Land-Use Planning and Development* entrusts the municipalities with the responsibility to develop a master plan and entrusts the regional county municipalities (RCM) with the responsibility to create a land-use planning and development plan, which are the main land-use planning tools. Using these tools, the municipalities and RCM determine the general land-use guidelines for the territory, the major land-use designations and the density levels, as well as the transportation networks and the projected route of major roads.

> Public transit corporations

With the exception of metropolitan Montréal, where public transit governance underwent a major reform in 2016, the public transit services in the five other major metropolitan areas of Québec are planned, organized and provided by six public transit corporations. The transit corporations are public organizations that have all the powers required to plan, organize and operate the services, except those in metropolitan Montréal.

> Special framework in metropolitan Montréal

In response to the challenges posed by the coherency of public action, the Québec government reformed the governance of public transit in metropolitan Montréal in 2016 by creating the Autorité régionale de transport métropolitain (ARTM) and the Réseau de transport métropolitain (RTM). These two bodies came into being on June 1, 2017.

The ARTM is a metropolitan body that reports mainly to the Communauté métropolitaine de Montréal. It has been given the responsibility to develop a strategic public transit development plan, a financing policy, a ten-year public transit capital asset program and an integrated fare framework; set service goals and standards; integrate all services; and finance public transit services. The operation of the services is entrusted to the RTM and to three transit corporations, the Société de transport de Montréal, the Réseau de transport de Longueuil (RTL) and the Société de transport de Laval, which operate under service contracts with the ARTM.

> Accessibility development plans

Under the *Act to Secure Handicapped People in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration*, the transportation organizing authorities are obliged to produce and have approved by the MTMDET development plans that will provide, within a reasonable period, public transit for handicapped people in their territory.

Trends and outlook to 2030

The challenge of sustainable mobility is to meet the growing demand for mobility between now and 2030 and still reduce GHG emissions, fuel consumption, household car ownership rates and road congestion. The overall framework of the policy has already identified several trends where intervention is required:

- Road congestion and car dependency;
- GHG emissions, petroleum dependency and environmental degradation;
- Urban sprawl and increasing travel distances;
- Increased cost of transportation for households and society;
- In terms of urban public transit, other trends are emerging, confirming that a paradigm shift is required;
- Stagnation of the modal share and user of public transit;
- Overall, for the main urban centres of Québec, we see a greater increase in car trips than public transit trips. For example, in Montréal, during morning rush hour, the number of car trips increased by 187,000 between 2008 and 2013, an increase of 15%, while public transit trips increased by 42,000, an increase of 10%. This means that the market share of public transit remained stable. These findings can be explained by:
 - Demographic and economic growth that is generally higher in the suburbs, where public transit is less efficient and appealing, than in city centres;
 - Sustained growth of car ownership and the low cost of using a car;
 - The complexification of routes.

From the point of view of usage, despite efforts to increase it, there has been a trend toward stagnation for some years. With the Sustainable Mobility Policy, the government wants to provide fresh impetus to increase the use of public transit.

Trend 1: Change in urban mobility demand

The results of origin-destination surveys reveal a certain level of stability in mobility around an average in the order of 2.8 daily trips per person and 25 minutes on average for a trip in a private vehicle.

Significant trends can be seen in the period from 1998 to 2013, however. The first concerns the market share of the car, which continued to increase throughout this period, to the detriment of walking, cycling and public transit. In Greater Montréal, the car holds an important role in terms of the number of trips taken, which rose from 5,469,000 in 1998 to 6,125,700 in 2013, an increase of 12%, due to increased household car ownership rates, which rose from 1.15 in 1998 to 1.34 in 2015.

The second trend concerns the increase in distances travelled, which was in the order of 6% from 2008 to 2013, with the average distance rising from 12.9 km in 2008 to 13.7 km in 2013 in the Montréal region. The increase in distances travelled was more significant for certain kinds of trips, particularly those entirely on the periphery. It is this segment of demand that saw the biggest increase in the volume of trips, at 23%. The last trend concerns the change in urban sprawl. In the Montréal region, the portion of the population in the urban periphery increased from 30% to 33% between 1998 and 2013, to the detriment of Montréal Island, which dropped from 51% to 47%.

Trend 2: Public transit planning and infrastructures

The Sustainable Mobility Policy will provide instructions and guidelines for public transit decision-making and planning at every level. Like those in other jurisdictions, the proposed shift relies on:

- A long-term integrated vision of urban planning and public transit;
- The definition of a public transit investment strategy that relies on reserved, stable, recurring founding;
- An improved planning process for public transit infrastructures to optimize public choices and maximize benefits;
- The organization of a development strategy for heavy mass transit with priority development of surface modes to achieve more structuring results in the short term and better urban coverage at a better cost.

Trend 3: Innovation, new technologies and public transit

The Sustainable Mobility Policy must confirm the foundation for the future development of public transit, which will be determined largely by innovation and new information and communications technologies. Big data, georeferenced data (quantity, integration, use) and the empowerment of systems will influence the public transit service offer, by promoting either intermodality or network interconnection. These new technologies contribute to the rise of new business models that offer new options for on-demand and door-to-door service. These models may, in some respects, compete with taxis and group transit, but they also offer the potential to develop complementary services.

Trend 4: Universal accessibility

The worldwide trend is toward the universal accessibility of infrastructures and services. For the last few decades, there has been consensus on the need to consider the role of environmental factors in the process of designing a handicap. The obstacles or enablers encountered in the living environment, in interaction with the person's disabilities, have a negative or positive influence on their capacity to accomplish their daily activities and fulfil their social roles. Depending on their environment, people with temporary or permanent disabilities may be in a situation of full social participation or, on the contrary, in a situation of handicap.

2. Sustainable Mobility Issues Related to Urban Public Transit

In the current context, the government has to ensure that the increase in capacity on the highway network is justified and focus financial efforts on the consolidation and optimization of the existing infrastructures and equipment and the development of public transit infrastructures. Improved planning practices will lead to optimal development decision-making.

Issue 1: Appealing, competitive, accessible public transit

The Sustainable Mobility Policy will pursue and step up efforts to develop public transit and improve the performance and quality of the services. To offer a viable alternative to cars, public transit must continue to improve its speed, regularity, frequency, connection quality, accessibility and comfort.

Simply improving the service offer is not enough to make public transit more appealing and efficient. Optimizing service integration and complementarity, integrating fares, improving connection conditions, updating the equipment and upgrading the infrastructures, station access conditions and urban planning quality are all ways to support the appeal and competitiveness of public transit services.

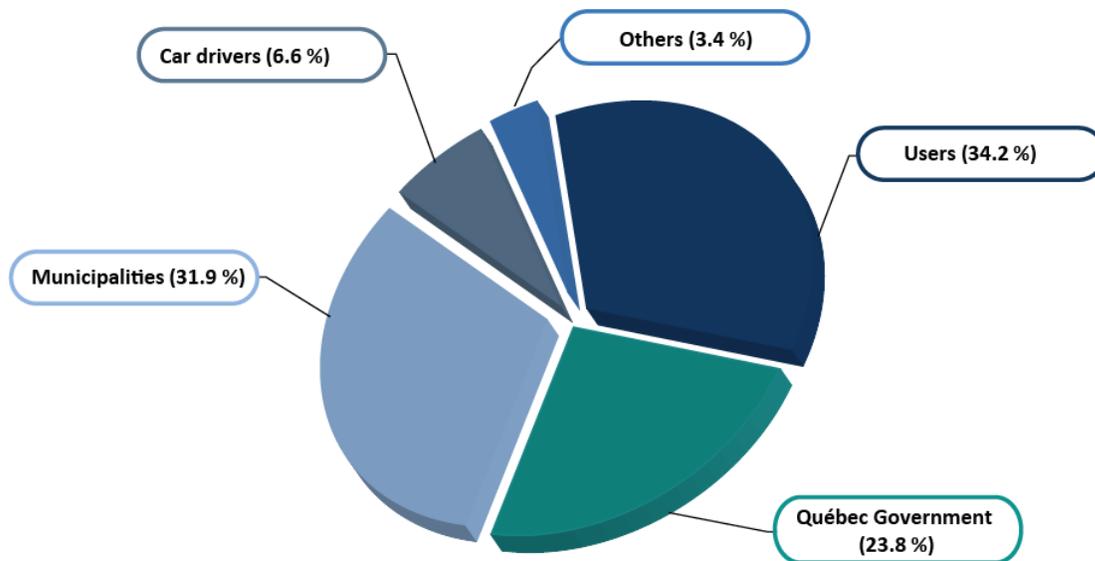
Issue 2: Increased public transit funding

From 2010 to 2016, the Québec government's annual expenditures on the transportation sector rose from \$2.4 billion to \$3.5 billion, an increase of 46% in seven years. Since the Fonds des réseaux de transport terrestre (FORT or ground transportation network fund) was established in 2009, expenditures on the road sector rose from \$1.7 billion to \$2.5 billion in 2016, an increase of 51%. During the same period, expenditures on public transit increased by 34%, from \$750 million to \$1.04 billion.

Increasing pressure is being felt on the public resources financing asset maintenance and infrastructure construction in this transportation sector. Reserved, indexed, recurring and sufficient sources of financing would guarantee the development of public transit, along with the public's needs and the government's objectives in terms of GHG reduction, the electrification of transportation and the reduction of road congestion, as well as fostering the economic development of Québec. It is worth noting that, according to the Institut de la statistique du Québec (ISQ), investments in public transit generate twice as many economic spinoffs as an investment in the car industry, in terms of job creation, added value and government income (royalties and taxes).

Public transit expenditures are financed with contributions from a group of partners. The users are the main contributors, along with the municipalities, the Québec government and drivers. The Sustainable Mobility Policy must seek to maintain an adequate balance, especially when fares are rising faster than the consumer price index.

Figure 3: Financial contribution from public transit partners in 2015



Source: MTMDET

To achieve the shift to sustainable mobility, priorities must be established, particularly with regard to the increase in road capacity, which further weakens public finances while contributing significantly to the increase in congestion, household car ownership rates and GHG emissions. New methods must be embraced to finance future investments in public transit infrastructures.

Issue 3: Better coordination between public transit and urban development

Urban sprawl and increased travel distance reduce the efficiency and performance of public transit. In this situation, the harmonization of urban planning and public transit planning is increasingly important, and the development of urban nodes around exchange hubs and public transit stations intersects with important strategic issues. Coordinating urban planning and public transit programming:

- Controls urban sprawl and densifies urban areas (around public transit stations or near high-potential corridors);
- Reinforces the accessibility of the territory;
- Promotes the mixed functionality of the built landscape;
- Establishes a link between density and public transit service levels;
- Controls car traffic in the context of high urban growth;
- Makes travel more efficient.

The very nature of the connection between urban planning and public transit calls for the coordination of various players to work together, each assuming responsibilities on their own level. An approach that can achieve integrated planning for land use and transportation requires the commitment of all stakeholders in their respective fields.

Issue 4: Innovation and new information and communications technologies

The arrival of autonomous vehicles, the rise of shared mobility and the advent of new technologies that allow for transport on demand will profoundly change the organization of public transportation services. The decompartmentalization and integration of these services must be overseen so they can co-exist with existing public transit services rather than competing with them.

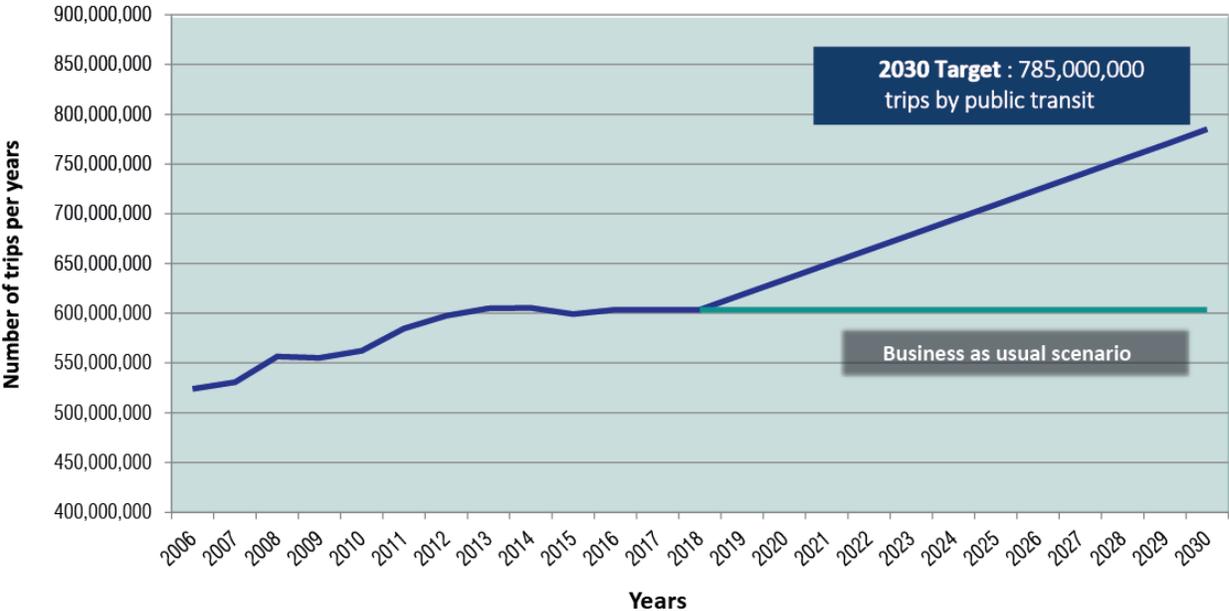
The mobility of the future depends on the way these trends progress, as well as user preferences and government decisions. It is not impossible that the combination of these technological advances will contribute to the increase in urban sprawl, distances travelled and congestion.

3. 2018-2023 Urban Public Transit Action Plan

With the Sustainable Mobility Policy, the government has set an ambitious overall objective for urban public transit. Using various interventions, the government wants to increase the public service offer in Québec by 60% by 2030, an increase of 5% per year. Use should increase by 30%. By the end of this policy, this target would mean 181 million additional trips by public transit, for a total of 785 million trips per year by 2030. This increase will allow public transit to expand its market share in comparison with other modes.

Global indicator and target

Figure 4: Public transit use



More appealing, competitive public transit, better financing of infrastructures and equipment, improvements in the planning process for major structuring projects, land-use planning interventions and better internalization of the costs of the transportation system are all ways to meet the challenges of sustainable mobility and to achieve the target, which is to reduce the share of car transportation to the benefit of public transportation.

Issue 1: Appealing, competitive, accessible public transit

Any sustainable urban public transit mobility strategy must place priority on improving public transit services in urban centres. Making public transit more appealing and competitive depends on improving the service offer, network use conditions, service organization and efficiency, and infrastructure development. Universal accessibility also helps make it more appealing, so its use is comparable for the entire population, including handicapped people and the elderly.

The condition of outdoor public spaces, including inadequate urban infrastructures (sidewalks, bus stops, bus shelters, etc.), is still a factor. These inadequacies restrict the movement of handicapped people and, by extension, their capacity to get to and use accessible public transit services. Efforts to improve the accessibility of public transit, including building obstacle-free routes in outdoor public spaces, must be pursued.

INTERVENTION PRIORITY 1.1: IMPROVE THE PUBLIC TRANSIT SERVICE OFFER

Measure 1: Improve public transit assistance programs in order to increase the service offer by 5% per year

The appeal of urban public transit depends essentially on the speed, regularity, frequency, extent and comfort of the services. Improving the service offer must therefore attempt to achieve these objectives. It is important to significantly expand the service offer in our public transit networks in order to welcome the new users who will adopt this mode of transportation after the implementation of the measures outlined in the Sustainable Mobility Policy. To this end, assistance programs for public transit operations and capital assets will be improved and expanded.

Indicator: Percentage of annual increase in service offer

Target: 5% per year up to 2023

Budget: \$914 million (funds already planned) + \$677.2 million (additional funds)

TOTAL: \$1.6 billion

Measure 2: Support the implementation of preferential measures for buses

Preferential measures for buses strengthen the efficiency and performance of public transit by making it faster, more dependable and more regular for the users. The main advantages of the preferential measures for buses include:

- Reduced travel time for users and increased commercial speed of public transit services;
- Improved service reliability and punctuality;
- Increased client satisfaction;
- Reduced operating costs and improved productivity for operators;
- Fairer sharing of public space and infrastructure optimization.

The Sustainable Mobility Policy recommends developing reserved lanes for public transit by redistributing road capacity to benefit public transit.

The Programme d'aide gouvernementale au transport collectif des personnes (PAGTCP or government assistance program for passenger public transit) provides for financial assistance to cover all costs related to preferential bus measure projects under \$7 million until 2020. This measure will be extended to 2022, and the \$7 million cap will be reviewed and increased to \$12 million.

Indicator: Number of projects carried out each year

Target: 40 projects by 2022

Budget: No additional cost – within currently planned budget envelopes

Measure 3: Support the implementation of operating assistance and passenger information systems

A multimodal transportation offer organized around exchange hubs needs innovative ticketing systems and high-performance user information systems. This equipment must be able to combine different modes of transportation in order to meet the diversity of user needs.

The MTMDET plans to adapt its assistance programs to take the needs of transportation organizing authorities into account, particularly with regard to equipment lifespan. Measure 3 will speed up the renewal of equipment to keep up with the evolving pace of these technologies.

Indicator: Subsidy rate

Target: Subsidy rate reviewed in 2019

Budget: No additional cost – within currently planned budget envelopes

INTERVENTION PRIORITY 1.2: MAINTAIN, UPDATE AND DEVELOP PUBLIC TRANSIT INFRASTRUCTURES

Measure 4: Support the electrification of the transit corporations' bus fleets

The gradual renewal of the rolling stock of all bus networks will improve Québec's environmental performance. As is currently the case, this renewal will first target the most polluting vehicles with replacement by hybrid technologies, with a preference for rapid transition to entirely electric technologies.

The MTMDET plans to adapt its financial aid programs to evaluate electric buses in real conditions of use and promote their integration into the transit corporations' fleets. The new technologies will be evaluated, and all acquisition and integration options will be documented, taking into account the requirements of hybrid vehicles as well as customer satisfaction.

Indicator: Number of hybrid and electric buses acquired

Target: 900 buses by 2023

Measure 5: Improve the planning process for the development of structuring modes of public transit

The planning process for structuring public transit infrastructures (metro, tramway, light rail system [LRS], rapid bus service [RBS], commuter train) must be improved to allow for optimal decision-making and maximum benefits. Although the government already has capital asset programs, the most recent of them do not place enough importance on structuring modes. The process must be transparent and rely on performance criteria that will strengthen decision-making, for both the leaders in the communities where the infrastructure will be established and the government authorities financing the projects. The project planning process must make it possible to:

- Determine and evaluate the options for meeting user needs in the long term;
- Justify the choice of the best option;
- Prioritize and select projects.

Changing the method in this way will ensure that major public transit infrastructure projects offer the biggest benefits to the users, networks and cities. The criteria that will be considered are related to:

- Urban integration (territorial profile and development, increase in number of influence zones for the infrastructure);
- Performance of the mode of transit and characteristics of the service corridor (traffic, commercial speed, load capacity, modal transfer);
- Costs (capital assets and operations);
- Electrification, environmental benefits and long-term contribution;
- Execution time and short-term benefits;
- Universal, obstacle-free accessibility.

The government plans to improve the decision-making process related to the development of structuring public transit infrastructures by 2025 by means of three actions:

- Implementing integrated sustainable mobility plans that will be carried out by the municipal sector;
- Changing the MTMDET planning process for major mobility projects;
- Changing and adapting existing programs.

INTERVENTION PRIORITY 1.3: IMPROVE THE GOVERNANCE OF PUBLIC TRANSIT

Measure 6: Monitor the new governance in the Montréal region

On June 1, 2017, the new public transit governance came into effect in the Montréal metropolitan region. The Agence métropolitaine des transports (AMT) and the intermunicipal transit boards (CIT) were abolished and a new entity in charge of all public transit planning, organization and financing responsibilities was created, the Autorité régionale de transport métropolitain (ARTM). The three public transit corporations in the Montréal region kept their responsibilities for the operation of their services in their respective territories, and the operation of the commuter trains and bus services formerly offered by the AMT and the CIT in the northern and southern suburbs was entrusted to a new organization, the Réseau de transport métropolitain (RTM).

The MTMDET will carefully monitor the implementation of this new governance body and track the needs of the new organizations. This new approach may also influence the thinking concerning the governance of public transit in other regions.

Measure 7: Continue to review the governance and support organizations and stakeholders that wish to join forces

Over the past few years, a consensus has been established concerning the need to optimize the planning and development of public transit services. The current institutional framework does not encourage the efficient performance of projects. Problems related to operations, the lack of fare integration, service interconnection, user information and funding exacerbate the issue.

Based on the goals expressed by all parties in a given territory, the government will assist stakeholders that want to join forces or improve the governance of public transit. The Québec government will support the initiatives and encourage new governance models in order to contribute to the improvement of public transit planning and organization. To achieve this, the government intends to draw on best practices.

Measure 8: Establish a committee of partners to study the possibility of reviewing the composition of the boards of directors of public transit corporations outside the ARTM's territory

The municipal sector may, instead of designating members of the municipal council, appoint independent members to sit on the board of directors of a public transit corporation. The MTMDET would like to advocate the presence of more independent experts on transit corporation boards outside the ARTM territories.

The presence of independent experts on transit boards will create a decision-making environment that combines political accountability and improved planning practices. The MTMDET intends to use the *Act Respecting the Governance of State-Owned Enterprises* to guide the committee's work.

Indicator: Committee established

Target: Submission of recommendations in 2023

INTERVENTION PRIORITY 1.4: IMPROVE THE UNIVERSAL ACCESSIBILITY OF PUBLIC TRANSIT SERVICES AND INFRASTRUCTURES AND OUTDOOR PUBLIC SPACES

Measure 9: Create a working group to formulate recommendations for the establishment of universal accessibility travel and transportation guidelines

Obstacle-free routes must be created in outdoor public spaces in order to give handicapped persons the opportunity to travel independently and safely and thereby access their environment and public services, including public transit services. Universal accessibility means the needs of all users are met, including those of handicapped persons. It is important, however, to have a shared definition of what universal accessibility means and to assess whether standards for travel and transportation should be established.

The purpose of this measure is to oversee the universal accessibility of services, public transit infrastructures and outdoor public spaces so that all goods and services are universally accessible from the time of design, which would also avoid additional costs after the fact. Measure 9 will also provide tools to municipalities that have fewer resources of this sort.

Indicator: Working group created

Target: Submission of recommendations in 2020

Measure 10: Set targets, in collaboration with transportation organizations, for the accessibility of the usual public transit networks

To improve the accessibility of the regular public transit networks, targets should be established in collaboration with the transportation organizing authorities (TOA), particularly by means of the production of development plans for the accessibility of their services to handicapped people as set out in the *Act to Secure Handicapped Persons in the Exercise of their Rights with a View to Achieving Social, School and Workplace Integration*.

A monitoring mechanism for the implementation of these development plans could also be established.

Indicator: Number of development plans including targets

Target: Submission of plans from all TOA – gradually beginning in 2019

Issue 2: Increased funding for public transit

The funding of public transit is a priority for the government. In the 2017-2018 Québec Economic Plan, important measures were announced concerning financial assistance for public transit. These measures included the establishment of a financial framework for the ARTM, the electrification of transportation and major projects such as the construction of the Réseau électrique métropolitain and the extension of the Montréal métro blue line. The plan also provided for an increase of \$308 million over five years, beginning in 2017-2018, to improve public transit services.

In the coming years, the MTMDET will place priority on the maintenance and sustainability/longevity of public transit infrastructures and equipment. In a second phase, to encourage sustainable mobility, the improvement and development of public transit infrastructures will be the priority. Major investments will be required.

INTERVENTION PRIORITY 2.1: OPTIMIZE FUNDING AND DIVERSITY SOURCES OF INCOME

Measure 11: Initiative on funding of mobility and create economic tools for transportation demand management

In the short term, the MTMDET will consult with its partners to undertake a major examination of the funding of mobility in Québec, including public transit. The purpose of this study will be to establish funding needs, current sources of income and their limitations. This will be an opportunity to analyse the funding method for public transit and road infrastructures.

The study will identify solutions to support the investments required in the long term in order to develop public transit infrastructures and better support service operations. It will be an opportunity to open the way to the diversification of municipal income and study new approaches to funding. The study will respond to the absolute need for results in the short, medium and long term and target stable, predictable and recurring sources of income.

The study will also offer the opportunity to establish conditions to allow transportation organizing authorities to gain the financial autonomy to develop public transit infrastructures. The objective is to give more means to transportation organizing authorities so they can fulfil their ambitions and implement their public transit vision. The diversification of income sources, beyond the property taxes collected by the municipalities, will provide an effective response to the principles of autonomy and accountability. The transportation organizing authorities and the municipal sector must be able to finance their choices by accessing the required sources of income. The MTMDET therefore plans to explore these principles in this study.

An examination of transportation demand management tools will also be required. Transportation demand management can contribute significantly to the implementation of a sustainable approach for transit network planning and management, by optimizing the use of infrastructures for drivers, public transit users, cyclists and pedestrians. The approach will allow for a sustainable change in behaviour, and practical actions will be taken to this end. Increased use of public transit can only be achieved if demand management measures reinforce the means already in place.

Indicator: Completion of the study

Target: Public transit study actions and tools recommended by 2020

Measure 12: Improve the integrated planning process for transportation interventions

To solve the problems in the urban transportation system and deal with the issues and challenges our urban centres are facing, the Sustainable Mobility Policy proposes a major change in direction that will make a break from the practices of the past. Henceforward, there will be better oversight of road capacity expansion projects, and the MTMDET will change the criteria that guide its intervention choices to reflect the realities of sustainable mobility and incorporate them into an integrated planning process for transportation interventions.

To achieve this, the government will establish an integrated intervention planning process that, supported by new decision-making tools and meaningful transportation data, will take into consideration all mobility options, as well as factors related to land-use planning, demand management and the development of the public transit offer. For example, projects may be subject to an opportunity study to define or analyse actions to promote the public of public transit, the creation of reserved lanes, ridesharing or other criteria that support sustainable mobility. The best mobility choices will then be able to be made and will then influence the programming of the MTMDET's Plan québécois des infrastructures (PQI or Québec infrastructure plan).

Measure 13: Modernize the public transit project authorization process in the Plan québécois des infrastructures

In general, with regard to public transit, the low rate of completion of projects approved by the PQI can be explained by a variety of factors, including the administration process for project authorization. The administration process involves many different players and numerous procedures that are not all convergent and synchronized, which slows the process.

The government therefore intends to take advantage of its efforts to improve the transportation intervention process to overhaul the public transit project authorization process to make it more efficient and improve the completion rate for PQI public transit projects. Updating the process will improve the coordination of the various kinds of authorization required to carry project out, speed up their implementation, improve the completion rate and reduce the administrative burden for the TOA.

Indicator: Overhaul of the public transit project authorization framework

Target: Framework overhauled and recommendations available by 2020

INTERVENTION PRIORITY 2.2: SIMPLIFY, HARMONIZE, IMPROVE AND DEVELOP FINANCIAL AID PROGRAMS

Measure 14: Create and adopt a new operations financial aid program for the maintenance, development and improvement of services

The MTMDET plans to develop a new, simplified aid program by combining all its current public transit operations assistance programs into a single new program. It will have three separate but linked envelopes to achieve different objectives:

> Service maintenance

This envelope will be to maintain service levels and it will be paid as long as the TOA maintains its service offer at the same level as the previous year. If an organization reduces its service offer, its basic envelope will be reduced proportionately for that year and the next.

> Service development

This envelope will be for the addition of new services and it will be conditional on maintaining the service levels of the previous year. The financial aid will be granted to TOAs that create services after submitting a three-year service development plan, based on the cost of the added services.

> Service optimization

This envelope will use a “bonus” approach that focuses on the improvement of TOA performance, to encourage them to optimize their services. This non-recurring financial aid will be conditional on maintaining the service offer and it will be paid when the organization improves its performance, efficiency or service quality compared to the year before. The financial aid will be granted annually based on merit, in performance bonuses.

Indicator: Adoption and implementation of the program

Target: Program adopted in 2018

Measure 15: Revise financial aid conditions to encourage asset maintenance

Maintaining the quality of the assets is an essential condition for providing an efficient public transit service. The first urban public transit intervention framework makes asset maintenance a priority. Many components of the public transit networks are ageing, and this deterioration is a major issue in the context of increasing use.

In the Montréal region, the metro systems, tunnels and stations have been undergoing gradual renovations by the STM for ten years, and since 2016, the first-generation rolling stock has been gradually being replaced by new Azur cars. For all the networks, the maintenance of public transit infrastructures and equipment will once again require considerable investment in the next few years from the municipalities and the government. The MTMDET estimates that asset maintenance needs are in the order of \$3.3 billion, which is 47% of the public transit budget in the Québec infrastructure plan. Of this sum, the STM estimates that \$400 million a year is required to cover the cumulative maintenance deficit in its metro and bus networks.

The government intends to increase the subsidy rate for maintaining assets by 75% to 85% and to set targets before financing infrastructure development. The increase in the government contribution will facilitate the reduction of the cumulative maintenance deficit and have a considerable impact on the debt service of public transit corporations.

Indicator: Subsidy rate for asset maintenance

Target: 85% by 2019

Budget: \$280.4 million (additional funds)

Issue 3: Better coordination between public transit and urban planning

The connections between the types of urban planning and transportation planning are well known and documented. Urban planning plays a fundamental role in the choice of modes of transportation. For example, the more compact a city is, the more conducive it will be to public transit. While cities have long been designed to facilitate car travel, it is essential today to think of the city differently, and linear urbanization along roads, especially roads in the highway network, cannot continue. One of the main challenges for the future will be to change our territory development practices. The proposed orientation should make it possible to:

- Consolidate the existing urban plot rather than extending urban boundaries;
- Increase residential and employment density;
- Focus development around structuring public transit arteries;
- Support mixed urban functions to encourage non-motorized travel.

Changing our mindset will ensure the territorial planning clearly promotes public transit, which will help reduce car dependency and the car ownership rate among households and individuals. The government is undertaking a number of steps to ensure there is close consistency between the support provided for public transit and the land-use planning orientations.

INTERVENTION PRIORITY 3.1: STEER URBAN PLANNING AND STEP UP DEVELOPMENT AROUND PUBLIC TRANSIT HUBS

Measure 16: Use density thresholds as deciding factors for the planning and implementation of structuring public transit infrastructures

The service and accessibility conditions in urban centres have to be studied at the same time as urban organization and programming projects. There must be an interface between densities, the introduction of equipment and the mode of public transit promoted. The possibility of extending existing or planning structuring networks in the immediate area should also be considered.

The proposed mode of transit to serve an area (métro, tramway, light rail, rapid bus service, city bus, express bus) should be based on the urban fabrics and especially the existing or expected density around the service routes. This means adjusting transit modes to the densities and territorial profiles of the service corridors.

The MTMDET intends to integrate these factors into its planning process for the development of structuring public transit systems.

Measure 17: Develop urban planning guidelines focused on public transit

The urban plan must foster an increase in the use of public transit, thereby helping to optimize these services. The MTMDET intends to adopt an approach rooted in urban design and development focused on public transit. To support the TOA in their decision-making, the MTMDET plans to create guidelines to support the municipal sector in the planning process for structuring public transit systems.

Indicator: Development of guidelines

Target: Guidelines developed by 2020

Measure 18: Make government financing conditional on the development of integrated sustainable mobility plans

The government already offers the municipal sector several assistance programs to support urban and regional public transit, for both operations and capital expenditures. This financial assistance is generally granted based on a number of criteria that are not related to land-use planning, its effect on transportation or a sustainable mobility plan related to territorial development.

Under the new program, the MTMDET and the MAMOT will offer financial assistance to the municipal sector for the development of integrated sustainable mobility plans in their territory. These plans will be complementary with the existing land-use planning tools, such as the metropolitan land-use and development plans (PMAD), the RCM land-use plans and the municipal master plans. They will cover both passenger and freight transportation, considering all transportation solutions and modes.

These new sustainable mobility plans will be an essential condition for accessing financing in the selected public transit assistance programs. The eligibility criteria for this financing will be defined in the Assistance Program for the Preparation of Sustainable Mobility Plan and evaluated by the MTMDET in collaboration with the MAMOT. This program will have a budget envelope of \$50 million for the first five years.

An amount of \$2.5 million is also budgeted for support services for the production of plans and the preparation of guides and reviews of best sustainable mobility practices. These tools will be created by the MAMOT in collaboration with the MTMDET.

The integrated mobility plans may contain a land-use planning strategy focused on public transit to plan structuring transportation modes.

The public transit infrastructure program must also be carried out in conjunction with urban projects (buildable land, urban renewal, requalification). Urban centres will be expected to adopt transit-oriented–development (TOD) strategies.

Public transit projects must, primarily, respond more effectively to use needs by improving service but also prioritize the consolidation of the existing urban plot. These projects contribute to urban requalification along high-demand corridors.

Taking improved service and consolidation of the existing urban fabric into account, the public authorities must establish a planning framework that favours urban densification and mixed functions, particularly applying the Special Planning Programs (SPP) and the Programmes d'aménagement d'ensemble (PAE) around the major stations.

Indicator: Number of integrated sustainable mobility plans

Target: 3 plans by 2023

Measure 19: Develop a guideline that defines the location criteria for government public buildings

The government wants to develop a guideline to give Québec an integrated management framework to accelerate government efforts to locate public buildings in places that meet land-use planning principles that support sustainable mobility. The guideline would offer criteria to help locate government buildings based on the mobility and travel needs they generate, using criteria established by best practices. Under this principle, organizations with numerous employees and visitors would be located near public transit infrastructures. The guideline will contribute to a reduction in the individual use of cars and promote the use of public transit, especially for commuting.

The government will also encourage municipalities to do likewise, for example by adopting a location guideline for equipment that generates travel.

Indicator: Development of the guideline

Target: Guideline developed by 2021

Issue 4: Study of mobility in relation to innovation and new technologies

Innovation, new technologies and new forms of mobility will continue to transform the transportation sector. At a time when the pace of technological advancement is speeding up, it is crucial to rethink the transportation management framework and include new methods, in order to improve service planning, design and operations.

A scalable mobility approach, shared by all partners, that includes all modes and services would improve travel efficiency. In terms of public transit, a vast array of new services structured around the major networks will allow users to get from their point of origin to their destination.

INTERVENTION PRIORITY 4.1: BASE COMPLEMENTARY SERVICES AROUND MAJOR PUBLIC TRANSIT HUBS

Measure 20: Review the legislation and regulations to strengthen the role of public transportation organizing authorities with regard to new forms of mobility

Public transit should be a network around which new integrated urban mobility providers can offer complementary services. The goal is to facilitate travel by making multimodal and multi-partner services available, using new technologies. Transportation should be planned with this in mind. The legislative and regulatory frameworks must be evaluated and revised to ensure that the missions and powers of transportation partners maximize the benefits of integrated urban mobility.

Indicator: Launching of a perspectives study

Target: Perspectives study underway by 2020

SUMMARY TABLE

| Urban Public Transit Intervention Framework Issues, Intervention Priorities and Measures | Indicator | Target | Contribution to aspects of the Sustainable Mobility Policy | | | | | |
|---|--|-------------------------------|--|--------------|--------------|--------------|--------------|--------------------|
| | | | SMP aspect 1 | SMP aspect 2 | SMP aspect 3 | SMP aspect 4 | SMP aspect 5 | Winning conditions |
| ISSUE 1: Appealing, competitive, accessible public transit | | | | | | | | |
| Intervention Priority 1.1: Improve the public transit service offer | | | | | | | | |
| Measure 1: Improve public transit assistance programs in order to increase the service offer by 5% per year (MTMDET) | Percentage annual increase in service offer | 5% per year up to 2023 | X | | | | | |
| Measure 2: Support the implementation of preferential measures for buses (MTMDET) | Number of projects carried out | 40 projects by 2022 | X | | | | | |
| Measure 3: Support the creation of intelligent ticketing and user information systems (MTMDET, AOT) | Subsidy rate | Subsidy rate reviewed in 2019 | | | X | | | |
| Intervention Priority 1.2: Maintain, update and develop public transit infrastructures | | | | | | | | |
| Measure 4: Support the electrification of the transit corporations' bus fleets (MTMDET) | Number of hybrid and electric buses acquired | 900 buses by 2023 | | | | X | | |
| Measure 5: Improve the planning process for the development of structuring modes of public transit (MTMDET) | N/A | N/A | | | X | | | |
| Intervention Priority 1.3: Improve the governance of public transit | | | | | | | | |
| Measure 6: Monitor the new governance in the Montréal region (MTMDET) | N/A | N/A | | | | | | X |
| Measure 7: Continue to review the governance and support organizations and stakeholders that wish to join forces (MTMDET, CMQ) | N/A | N/A | | | | | | X |

| Urban Public Transit Intervention Framework Issues, Intervention Priorities and Measures | Indicator | Target | Contribution to aspects of the Sustainable Mobility Policy | | | | | | |
|--|--|--|--|--------------|--------------|--------------|--------------|--------------------|---|
| | | | SMP aspect 1 | SMP aspect 2 | SMP aspect 3 | SMP aspect 4 | SMP aspect 5 | Winning conditions | |
| Measure 8: Establish a committee of partners to study the possibility of reviewing the composition of the boards of directors of public transit corporations outside the ARTM's territory (MTMDET) | Committee established | Submission of recommendations in 2023 | | | | | | | X |
| Intervention Priority: Improve the universal accessibility of public transit services and infrastructures and outdoor public space | | | | | | | | | |
| Measure 9: Create a working group to formulate recommendations for the establishment of universal accessibility travel and transportation guidelines (MTMDET, OPHQ) | Working group created | Submission of recommendations in 2020 | X | | | | | | |
| Measure 10: Set targets, in collaboration with transportation organizations, for the accessibility of the usual public transit networks (MTMDET, TOA) | Number of development plans including targets | Submission of plans from all TOA – gradually beginning in 2019 | X | | | | | | |
| ISSUE 2: Public transit funding | | | | | | | | | |
| Intervention Priority 2.1: Optimize funding and diversity sources of income | | | | | | | | | |
| Measure 11: S Initiative on funding of mobility and create economic tools for transportation demand management (MTMDET) | Completion of the study | Public transit study actions and tools recommended by 2020 | | | | | | | X |
| Measure 12: Improve the integrated planning process for transportation interventions (MTMDET) | N/A | N/A | | | | | | X | |
| Measure 13: Modernize the public transit project authorization process in the Plan québécois des infrastructures (MTMDET) | Overhaul of the public transit project authorization framework | Framework overhauled and recommendations available by 2020 | | | | | | X | |

| Urban Public Transit Intervention Framework Issues, Intervention Priorities and Measures | Indicator | Target | Contribution to aspects of the Sustainable Mobility Policy | | | | | |
|--|---|-------------------------------------|--|--------------|--------------|--------------|--------------|--------------------|
| | | | SMP aspect 1 | SMP aspect 2 | SMP aspect 3 | SMP aspect 4 | SMP aspect 5 | Winning conditions |
| Intervention Priority 2.2: Promote and support the use of ferry and river shuttle services | | | | | | | | |
| Measure 14: Create and adopt a new operations aid program for the maintenance, development and improvement of services (MTMDET) | Adoption and implementation of the program | Program adopted in 2018 | X | | | | | |
| Measure 15: Overhaul financial aid conditions to encourage asset maintenance (MTMDET) | Subsidy rate for asset maintenance | 85% by 2019 | | | X | | | |
| ISSUE 3: Better coordination between public transit and urban planning | | | | | | | | |
| Intervention Priority 3.1: Steer urban planning and step up development around public transit hubs | | | | | | | | |
| Measure 16: Use density thresholds as deciding factors for the planning and implementation of structuring public transit infrastructures (MTMDET) | N/A | N/A | X | | | | | |
| Measure 17: Develop urban planning guidelines focused on public transit (MTMDET) | Development of guidelines | Guidelines developed by 2020 | X | | | | | |
| Measure 18: Make government financing conditional on the development of integrated sustainable mobility plans (MTMDET, MAMOT) | Number of integrated sustainable mobility plans | 3 plans by 2023 | X | | | | | |
| Measure 19: Develop a guideline that defines the location criteria for government public buildings (SQI) | Development of the guideline | Guideline developed by 2021 | | | | | | X |
| ISSUE 4: Study of mobility in relation to innovation and new technologies | | | | | | | | |
| Intervention Priority 4.1: Base complementary services around major public transit hubs | | | | | | | | |
| Measure 20: Review the legislation and regulations to strengthen the role of public transportation organizing authorities with regard to new forms of mobility (MTMDET) | Perspectives study launched | Perspectives study underway by 2020 | X | | | | | |