EXPENDITURE BUDGET
2019 • 2020

VOL. 8

QUÉBEC'S PUBLIC INFRASTRUCTURE

MARCH 2019

QUÉBEC INFRASTRUCTURE PLAN

2019 • 2029

ANNUAL MANAGEMENT PLANS FOR PUBLIC INFRASTRUCTURE INVESTMENTS

2019 • 2020

Votre gouvernement

Québec

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The masculine gender is used throughout this document solely to make the text easier to read and therefore applies to both men and women.

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2019-2029 Québec Infrastructure Plan /
2019-2020 Annual Management Plans
for Public Infrastructure Investments

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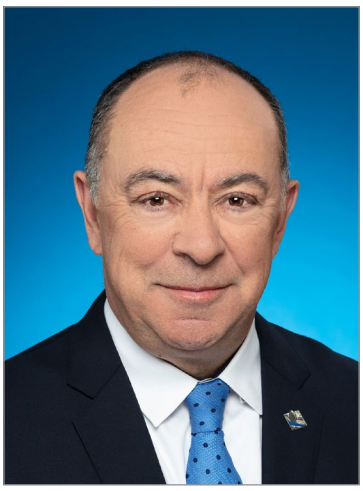


MESSAGE FROM THE CHAIR OF THE CONSEIL DU TRÉSOR

Our government is keenly determined to provide Québec with quality infrastructure. It is acting now to satisfy Quebecers' current and future infrastructure needs and to foster economic prosperity.

More than ever, the condition of public infrastructure requires massive reinvestment. In response to this observation, the 2019-2029 Québec Infrastructure Plan calls for more than $15 billion in new investments. The increase reflects the government's bold determination to achieve results that meet Quebecers' legitimate expectations. The accelerated pace of investment also takes into account its impact on the debt and public expenditures.

First, in keeping with its province-wide priority, the government will earmark a substantial portion of the increased investments for education and higher education to offer students in educational institutions enhanced quality and thereby encourage their success.

The health and social services network will also obtain major investments to ensure quality health care for everyone who needs it. To this end, substantial investments will, in particular, cover the gradual establishment of seniors' homes and the modernization and construction of hospitals throughout Québec.

The QIP also calls for the means to ensure a sustainable, safe road network, which will boost the economy in all of Québec's regions.

Another significant part of the QIP will be devoted to sustainable development and combating climate change through investments in the mass transit sector. We will rely, by way of an example, on the acquisition of hybrid and electric buses, mass transit reserved lanes, and structuring modes of mass transit to reduce greenhouse gas emissions.

Starting today, and over the next 10 years, we are adopting the means to put our wishes into action. While infrastructure investment implementation forecasts have tended, historically, to be overestimated, the government undertakes to remedy the situation through the rigorous implementation of the action plans of the main government departments overseeing infrastructure projects in order to accelerate the completion of the projects that Québec's economic prosperity requires.

What is more, a desire to emphasize investments in the maintenance of the service offer in order to reduce the accrued asset maintenance deficit and foster the sustainability of infrastructure is guiding our initiatives.

I am, therefore, convinced that the implementation of the 2019-2029 Québec Infrastructure Plan will unquestionably enhance Quebecers' quality of life and promote Québec's economic development through structuring projects. I am sure that the many stakeholders called upon to carry out the QIP in all sectors will ensure its success so that it reflects Québec's ambitions and Quebecers' priorities.

The Minister responsible for Government Administration
and Chair of the Conseil du trésor,

Christian Dubé

Québec's Public Infrastructure – March 2019

Terms

Acronyms

Introduction

Highlights

Section A
A Bold Plan for Québec

Section B
The *2019-2029 Québec Infrastructures Plan*

Section C
2019-2020 Annual Management Plans for Public Infrastructure Investments

Terms

ADDITION

Acquisition or construction of new infrastructure.

IMPROVEMENT

Increase in the service potential of existing infrastructure.

ENHANCEMENT

Increase of the government service offer by adding new infrastructure or improving existing infrastructure.

ASSET MAINTENANCE DEFICIT (AMD)

Value of the work required to restore the physical condition of a specific structure to a satisfactory or better condition with the aim of protecting the health and safety of individuals, its continued use for its intended purposes, reducing the likelihood of breakdown or counteracting physical wear and tear.

DISPOSITION

Alienation of a building, civil engineering structure or equipment by sale, transfer or disposal.

MAINTENANCE

Work of limited scope normally performed as part of an infrastructure's daily use. Asset maintenance does not include maintenance work.

SECTOR ENVELOPE

Envelope, under the responsibility of a government department or agency, to provide the required government financial contribution to implement prioritized and authorized projects

CENTRAL ENVELOPE

Envelope providing funding that will be required to implement the projects that have been selected and prioritized by the government among those studied. Transfer to the sectors requires a Cabinet decision.

SURPLUS BUILDING

Building owned by a public body for which no use, for the purpose of providing a government service, is planned.

INFRASTRUCTURE

Building, equipment or civil engineering structure that is part of the government's service offering.

PLANNED INVESTMENT

Value of the financial contribution from the Gouvernement du Québec for a public infrastructure investment listed in the Québec Infrastructure Plan.

PROBABLE INVESTMENT

Forecast of the total cost of an investment for the government fiscal year that is ending.

ACTUAL INVESTMENT

Real total cost of an investment for a government fiscal year that is closed.

ASSET MAINTENANCE

Major work required to keep an infrastructure in satisfactory or better physical condition with the aim of protecting the health and safety of individuals, its continued use for its intended purposes, reducing the likelihood of breakdown or counteracting physical wear and tear.

REPLACEMENT

Acquisition or construction of an infrastructure to replace an existing infrastructure that is usually at the end of its useful life, so as to ensure continuity in service delivery.

REPLACEMENT VALUE

Total investment required to build or acquire an infrastructure of the same dimensions and utility, with equivalent technical features, based on the construction techniques, building codes and materials or technical specifications in effect at the time of the estimate.

USEFUL LIFE

Time period during which an infrastructure or component should serve its intended functions.

Acronyms

AMD	Asset Maintenance Deficit
AMPI	Annual Management Plans for Public Infrastructure Investments
ARTM	Autorité régionale de transport métropolitain
BAnQ	Bibliothèque et Archives nationales du Québec
BHR	Building health report
Caisse	Caisse de dépôt et placement du Québec
CERIU	Centre d’expertise et de recherche en infrastructures urbaines
CHSLD	Residential and long-term care centres
CHU	Centre hospitalier universitaire
CHUM	Centre hospitalier de l’Université de Montréal
CHUSJ	Centre hospitalier universitaire Sainte-Justine
CISSS	Integrated health and social services centre
CIUSSS	Integrated university health and social services centre
CLSC	Local community service centres
Coop	Housing cooperative
CRSSS	Centre régional de santé et de services sociaux
CUSM	Centre universitaire de Santé McGill
DGB	Direction générale des barrages
Directive	Directive sur la gestion des projets majeurs d’infrastructure publique
EBI	Integrated Bilateral Agreement
FCCQ	Building Canada Fund – Québec
FEPTEU	Fonds d’eau potable et de traitement des eaux usées
GCI	Government condition indicator
GHG	Greenhouse gas
HB	Housing bureau
IRI	Ride comfort index
LRH	Low-rent housing
MACM	Musée d'art contemporain de Montréal
MAMH	Ministère des Affaires municipales et de l’habitation
MAPAQ	Ministère de l’Agriculture, des Pêcheries et de l’Alimentation du Québec
MCC	Ministère de la Culture et des Communications
MELCC	Ministère de l'Environnement et de la Lutte contre les changements climatiques
MEES	Ministère de l’Éducation et de l’Enseignement supérieur
MEI	Ministère de l’Économie et de l’Innovation
MSSS	Ministère de la Santé et des Services sociaux

MTQ	Ministère des Transports
MTO	Ministère du Tourisme
MYAP	Multi-year action plan
MYCCP	Multi-year capital and construction plan
NBCF	New Building Canada Fund – Québec
NPHP	Non-Profit Housing Program
NPO	Non-profit organizations
PAFFITC	Programme d'aide financière du Fonds pour l'infrastructure de transport en commun
PAGTCP	Programme d'aide gouvernementale au transport collectif des personnes
PII	Priority of intervention indicator
PIQM	Programme d'infrastructures Québec-Municipalités
PRADIM	Programme de recherche appliquée dans le domaine des infrastructures municipales
PRIMADA	Senior-Friendly Municipality infrastructure program
PRIMEAU	Programme d'infrastructures municipales d'eau
QIP	Québec Infrastructure Plan
RCM	Regional county municipality
RÉCIM	Réfection et construction des infrastructures municipales
REM	Réseau express métropolitain
RIO	Régie des installations olympiques
RMI	Replacement, modernization and improvement
RSSCE	Réseau stratégique en soutien au commerce extérieur
RSSS	Health and Social Services Network
RTC	Réseau de transport de la Capitale
RTL	Réseau de transport de Longueuil
RTM	Réseau de transport métropolitain
SAGIR	Solutions d'affaires en gestion intégrée des ressources
SCT	Secrétariat du Conseil du trésor
SÉPAQ	Société des établissements de plein air du Québec
SHQ	Société d'habitation du Québec
SODEC	Société de développement des entreprises culturelles
SOFIL	Société de financement des infrastructures locales du Québec
SPDAM	Société de la Place des Arts de Montréal
SQI	Société québécoise des infrastructures
SSIP	Sous-secrétariat aux infrastructures publiques
STL (Laval)	Société de transport de Laval

STL (Lévis)	Société de transport de Lévis
STM	Société de transport de Montréal
STO	Société de transport de l'Outaouais
STQ	Société des traversiers du Québec
STTR	Société de transport de Trois-Rivières
STS (Saguenay)	Société de transport de Saguenay
STS (Sherbrooke)	Société de transport de Sherbrooke
TECQ	Programme de la taxe sur l'essence et la contribution du Québec

Introduction

The 2019-2029 QIP marks a new era in which boldness is the dominant theme. To provide reliable, efficient infrastructure adapted to contemporary needs to ensure Québec's long-term economic prosperity, the government is increasing by $15 billion the planned investments under the 2019-2029 QIP. The 15% increase in relation to the previous QIP brings total investments for the next 10 years to an unprecedented $115.4 billion. This is the most ambitious plan since the first QIP's publication. Moreover, it takes into consideration the entire array of new commitments respecting public infrastructure that the government has announced.

Three government priorities underpin the elaboration of this QIP, namely, education, the economy and health. Furthermore, the government has made its choice by emphasizing their contribution to sustainable development.

The government is in a position to accelerate the pace of investments in public infrastructure, given Québec's sound financial and economic situation. For the sake of sound public management, this significant increase in investments has been established bearing in mind their impact on the debt and on public expenditures. The benefits of this decisive initiative will be felt for many years and will contribute to sustained economic growth in all regions of Québec.

This plan seeks both to prioritize the projects that satisfy needs tied to the maintenance in good condition of public infrastructure, especially in sectors related to education and transportation, and to meet the challenge of continuing the development of the new infrastructure necessary to satisfy the aspirations of modern-day Québec.

Moreover, the QIP could not be elaborated without taking into account the 2018-2019 AMPI prepared by the main government departments and bodies that manage most of the government-funded assets. Indeed, they facilitate the monitoring of changes in the condition of infrastructure and its AMD. The AMPI are essential tools for the prioritization of investments for asset maintenance and elimination of the AMD and those required to replace an infrastructure at the end of its useful life.

The government is thus demonstrating its determination to act responsibly but boldly in its long-term management of public infrastructure investments in keeping with its priorities.

Highlights

❑ Major investments of $115.4 billion for the 2019-2029 to maintain and develop public infrastructure

- A $15.0-billion increase, equivalent to more than 15% in relation to the 2018-2028 QIP;
- The most ambitious plan since the first QIP;
- The majority of the enhancement will be allocated to infrastructure maintenance in order to address the accumulated investment delay in infrastructure that is in poor condition and to provide a level of recurrent investment in asset maintenance that will promote the durability of all infrastructure;
- Realization of all the government's public infrastructure commitments, especially for the three priorities of education, the economy and healthcare, while paying attention to the contribution of these investments to sustainable development.

❑ Significant increases in priority sectors

- $6.1 billion to renovate schools and add classes throughout Québec, included progressive implementation of 4-year-old kindergarten classes.
- $5.3 billion in the road network, an essential asset for Québec's economic development, to ensure its good condition and to carry out several major projects, including conducting studies and plans and specifications for a new connection in the east between Québec City and Lévis;
- $1.6 billion to promote projects to improve the public transit service offering, thereby contributing to sustainable development;
- $1.0 billion for the gradual establishment of senior's homes along with the renovation of several Centres d'hébergement et de soins de longue durée (CHSLD).

❑ Many strategic projects for all of Québec

- Construction or expansion of new secondary schools in many regions;
- Initiation of studies for many projects related to the decongestion plan of the road network in the Greater Montreal area, including the introduction of structuring public transit in Montréal's East end, on Boulevard Taschereau in Longueuil, along the Yellow line extension of the Longueuil metro, as well as the use of the shoulders of certain highways by buses;
- Major repairs to the Autoroute Métropolitaine and the Ville-Marie and Viger tunnels;
- Renovation, redevelopment, expansion and construction of hospital centers throughout Québec, including the expansion of the Hôpital Pierre-Le Gardeur;
- Study of a new hospital service offer in Outaouais.

Section A

A Bold Plan for Québec

1. Major investments of $115.4 billion to maintain and develop public infrastructure 3

1.1 A substantial increase 3

1.2 Diversified investments 4

1.3 Substantial investments in prioritized sectors 4

1.4 $12 billion for the central envelope 9

2. Partnerships that will facilitate greater numbers of priority projects 11

2.1 The contribution of the Québec government's partners 11

2.2 An innovative partnership with the Caisse for Québec's economy 12

3. Higher investments geared to public finances 13

3.1 Substantial investments whose impact on the debt is controlled 13

3.2 Ten-year investment planning 14

4. Enhanced governance of infrastructure investments 16

4.1 Enhanced governance 16

4.2 Prioritization of investments to ensure the sustainability of public infrastructure 17

4.3 A comprehensive knowledge of infrastructure appropriate to guide initiatives 18

4.4 Management of 79% of the asset maintenance deficit 19

5. A directive requiring the best project management practices 20

Appendix 1 - Elaboration of the 2019-2029 QIP 22

Appendix 2 - The Directive sur la gestion des projets majeurs d'infrastructure publique 25

1. Major investments of $115.4 billion to maintain and develop public infrastructure

1.1 A substantial increase

The 2019-2029 QIP presents the government's infrastructure investment planning for the next 10 years, totalling $115.4 billion. This represents a $15.0-billion, or 15.0%, increase in relation to the preceding plan. This ambitious plan will enable the government to give concrete expression to all of its commitments in the realm of public infrastructure, more specifically in three priority sectors, that is, education, the economy and health, while focusing on the contribution of such investments to sustainable development.

This QIP is tangible proof of the government's determination to act to provide Québec with infrastructure adapted to today's needs and necessary for its economic prosperity. It will facilitate the realization of essential investments to ensure the maintenance of the public service offer and those required to enhance the services that the government has committed itself to delivering. Accordingly, construction projects will begin throughout Québec this year.

The $15.0-billion increase is in addition to the $3.6 billion made available[1] in the wake of the advancement and completion of several projects in 2018-2019 and the revision of planning of certain major projects. Accordingly, more than $18.6 billion can be devoted to new investments during the period 2019-2029.

Additional Room in the 2019-2029 QIP
(contribution of the Gouvernement du Québec, in millions of dollars)

Quebec Infrastructure Plan increase	15,000.0
Newly available funds	3,600.7
Total	**18,600.7**

Breakdown by Sector
(contribution of the Gouvernement du Québec, in millions of dollars)

Education	6,077.8
Higher Education	484.0
Road network	5,329.2
Public transit and other transport methods	1,575.0
Health and Social Services	2,161.2
Municipal, sports, community, tourism and recreational infrastructure	550.0
Government buildings	501.2
Information resources	436.0
Social and community housing	272.8
Other sectors	307.3
Central envelope[1] - Remaining funds not attributed to sector envelopes	906.2
Total	**18,600.7**

1 This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

[1] See appendix 1.

1.2 Diversified investments

Modern, efficient infrastructure is making Québec more productive, competitive and prosperous. Indeed, quality public infrastructure promotes the maintenance and establishment of businesses in Québec and contributes to the creation of conditions conducive to development, innovation and job creation, especially high-quality jobs.

Consequently, the 2019-2029 QIP plans for investments in all areas of government activity, as the following table indicates.

Breakdown of planned investments in the 2019-2028 QIP by Sector
(contribution of the Gouvernement du Québec, in millions of dollars)

Road network	24,580.0	21.3
Public transit and other transport methods	11,975.9	10.4
Education and Higher Education	20,264.8	17.6
Health and Social Services	20,186.4	17.5
Municipal, sports, community, tourism and recreational infrastructure	9,398.4	8.1
Culture	1,575.6	1.4
Information resources	5,749.1	5.0
Government building	2,602.0	2.3
Social and community housing	2,442.4	2.1
Other sectors	4,663.3	4.0
Central envelope[1]	11,962.1	10.4
Total	**115,400.0**	**100.0**

1 This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

1.3 Substantial investments in prioritized sectors

❑ $6.6 billion for renovation and the addition of space in the education and higher education sectors

Education is the government's paramount priority and it is earmarking a substantial portion of the new funds available under the QIP, that is, nearly $6.6 billion or 35%. Of this amount, $6.1 billion is attributed to the education sector and $484.0 million to the higher education sector.

Of the $6.1 billion in additional education funding, $2.6 billions of dollars will be devoted to the pursuit of the restoration of existing infrastructure in the school system. Without this reinvestment in school infrastructure, the proportion of schools in poor condition, which now stands at 54%, would continue to rise in the coming years. Faced with this situation, the government is acting by substantially increasing the recurring level of investment devoted to this sector in order to reverse this trend while targeting initiatives that address the backlog. At the same time, it will seek to optimize the use of existing schools through refitting and rehabilitation projects.

What is more, nearly $1.9 billion will be invested to accelerate the establishment of new premises to satisfy numerous space deficits, which will allow for the accommodation of new students throughout Québec, including the gradual introduction of kindergarten for 4-year-olds.

In practical terms, the investments will result, among other things, in the completion of more than 5,000 renovation and improvement projects and the addition of roughly 1,000 classrooms to the 50,000 existing classrooms, for the benefit of nearly 25,000 students. Québec will thus have at its disposal more attractive, well-equipped schools, creating environments conducive to learning and academic success for the benefit of students and teachers.

In addition, $1.1 billion has been allocated to major projects in the Greater Montreal area and elsewhere in Québec, aimed at building secondary schools in the coming years to satisfy the most pressing needs. A portion of this funding will also cover major secondary school renovations, especially the École FACE in Montréal. Of the $1.1 billion, $858 million has been earmarked in the central envelope to carry out the projects.

These additional investments will support the attainment of the objectives in the MEES educational success policy, since such success is the keystone to increasing Québec's collective wealth in the long term. The maintenance of quality infrastructure, embellishment and the construction of new schools are part of this vision. A vast project is beginning in this sector.

Additional investments in the 2019-2029 QIP
Education sector
(contribution of the Gouvernement du Québec, in millions of dollars)

Asset maintenance envelopes	2,578.0
Additional learning spaces, including progressive implementation of 4-year-old kindergarten	1,864.4
Major project allocation (school construction and renovation)	1,094.0
Other projects and envelopes	541.4
Total	**6,077.8**

Note: These investments are in addition to those that were planned in the 2018-2028 QIP.

The higher education sector, which includes college and university infrastructure, is allocated an additional $484.0 million along with the additional investments granted in the last QIP to carry out renovation projects and add space. Of this amount, $257.1 million is earmarked for asset maintenance envelopes and $154.0 for the completion of projects and additional envelopes to enhance the service offer. In addition, $72.9 million in additional investments are planned for major projects, in particular the proposed addition of space at Collège Dawson and the redevelopment of the Gatineau campus of the Université du Québec en Outaouais.

Additional investments in the 2019-2029 QIP
Higher education sector
(contribution of the Gouvernement du Québec, in millions of dollars)

Asset maintenance envelopes	257.1
Major project allocation	72.9
Other projects and envelopes	154.0
Total	**484.0**

Note: These investments are in addition to those that were planned in the 2018-2028 QIP.

Furthermore, $115.9 million in additional investments devoted to informational resources included in the additional funding granted to the informational resources sector is planned for the education and higher education sectors networks. In particular, they will support the acquisition of software packages, the development of educational programming, support for the implementation of devices that satisfy technical training needs in the digital technology sector, the efficiency and optimization of information technologies infrastructure, technological upgrading of administrative systems, information security and the development of integrated management software packages.

❑ An additional $5.3 billion invested in the road network

Québec's road network is a vital asset for its economic development and the quality of life of families, especially by promoting the mobility of people and goods. Consequently, the road network must ensure smooth, safe, reliable traffic. Substantial investments are indispensable to ensure the smooth flow of traffic and the good condition and safety of this strategic infrastructure.

In this respect, the 2019-2029 QIP makes provision for more than $5.3 billion in additional investments for this sector. Of this amount, $993.0 million is allocated to maintaining the good condition and sustainability of the existing network. At present, 50% of roadways and 47% of structures on the major road network are deemed to be in poor condition. These investments will ensure the completion of work necessary for asset maintenance throughout the network and will engender significant economic spinoff in all regions of Québec.

An amount of $ 4.3 billion is also earmarked for several major projects included in the "under study" category in the preceding QIP, which move to the "in the planning phase" category in this QIP or will do so in the next fiscal year, including:

- The implementation of a new connection in the east between Québec City and Lévis, which has advanced to the "in the planning stage" in the QIP, is receiving an additional $325 million to carry out studies and elaborate the plans and specifications, pending the results of the project management office. The government has formalized its commitment to make this new link a priority by bolstering the expertise of the project management office. For the sake of consistency, the government has also confirmed that the proposed new connection and the Île-d'Orléans Bridge project will be coordinated;
- Major reconstruction on the Autoroute Métropolitaine and the Ville-Marie and Viger tunnels in Montréal, for which funds are reserved in the 2019-2029 QIP;
- The rehabilitation of the Pont de Quebec's deck.

The $4.3 billion will also cover other projects examined in the current QIP to address problems related to saturation in the network, especially within the framework of the sweeping plan to decongestion the road network in the Greater Montréal area, including:

- The extension of Autoroute 13 to Autoroute 50;
- The redevelopment of Route 132 between Delson and Sainte-Catherine.

Additional investments in the 2019-2029 QIP
Road network sector
(contribution of the Gouvernement du Québec, in millions of dollars)

Major project allocation	4,336.2
Asset maintenance envelopes	993.0
Total	**5,329.2**

Note: These investments are in addition to those that were planned in the 2018-2028 QIP.

❑ $1.6 billion in additional funding for public transit and other modes of transportation to contribute to sustainable development

The more than $1.6 billion in additional funding earmarked in the 2019-2029 QIP for public transit and maritime, air, rail and other modes of transportation will also foster individual mobility and enhance the free flow of traffic. Public transit projects seek to support both the environment and a more robust economy. Consequently, the projects will engender greenhouse gas reduction, reduced road congestion and less time and household spending devoted to transportation.

Most of the funds, that is, $1.1 billion, are allocated to major public transit projects, in particular to round out the government's contribution to the proposed establishment of a structuring public transit system in Québec City, now in the planning phase, and to examine projects related to decongestion in the Greater Montréal area. In the latter instance, the projects examined in the current QIP concern:

- the establishment of a metropolitan reserved lane network on Autoroutes 13, 20, 25, 440, 640, and Route 116;
- the establishment of structuring public transit in Montréal's East end;
- the establishment of structuring public transit on Boulevard Taschereau;
- the establishment of structuring public transit along the Yellow line extension of the Longueuil métro.

As for the structuring public transit system in Québec City, the government is maintaining its commitment to supporting the project's realization and has reserved the necessary funds in the QIP to cover its entire contribution to this important project. The federal government's $1.2-billion contribution will complete the project's funding. Furthermore, the government will ensure that the project is interconnected with the South Shore of Québec City through the bridge entrance sector.

Finally, remember that the Government is committed to ensuring that the third link allows an interconnection between the South Shore public transit system and the new structuring public transit system project in Québec City. In doing so, thousands of citizens from both shores will have access to a new integrated public transit offer.

Additional investments in the 2019-2029 QIP
Public transit and other modes of transport
(contribution of the Gouvernement du Québec, in millions of dollars)

Major project allocation	1,098.2
Other projects and envelopes	476.8
Total	**1,575.0**

Note: These investments are in addition to those that were planned in the 2018-2028 QIP.

❑ $2.2 billion in additional funding for health and social services

The Health and Social services sector is another priority for the government. Accordingly, to offer Quebecers access to establishments that provide quality health care, the government plans to invest nearly $2.2 billion in additional funding in the sector's infrastructure.

To this end, the gradual establishment of seniors' homes is a key undertaking by the government in which it will invest $1.0 billion to build 2600 additional spaces for seniors and spaces for adults who require long-term care. Other funds will be allocated at a later date. In the context of an ageing population, seniors' homes are meant to be a more modern human model better adapted to residents' needs. In addition, the model will foster the establishment of a work environment better adapted to staff. At the same time, the government is also focusing on the situation of seniors through the renovation of several residential and long-term care centres.

Some $1.2 billion will be earmarked for major projects that will move to the "in planning" stage and for the study of new potential projects. Among the projects that will be in the planning phase, mention should be made of the proposed expansion of the Hôpital Pierre-Le Gardeur, in respect of which the government has increased the project's scope from the 150 beds initially planned to 246 beds, and other projects concerning the Hôpital Charles Le Moyne, the Hôtel-Dieu d'Arthabaska, the Jewish General Hospital, the Hôtel-Dieu de Lévis and the Lakeshore General Hospital. The projects under study include a new hospital service offer in the Outaouais region.

Additional investments in the 2019-2029 QIP
Public transit and other modes of transport
(contribution of the Gouvernement du Québec, in millions of dollars)

Gradual implementation of senior's homes	1,000.0
Major project allocation	1,161.2
Total	**2,161.2**

Note: These investments are in addition to those that were planned in the 2018-2028 QIP.

❑ An additional $550 million for municipal, sports, community, tourism and recreational infrastructure

The government is maintaining its significant support for the municipalities, as well as and regional and community organizations to carry out their municipal, sports, community, tourism and recreational projects. It will, therefore, invest an additional $550.0 million in numerous mobilizing regional infrastructure projects. Mindful of the practice of physical activity and aware of the importance for the population of having access to infrastructure, quality recreation and community facilities, the government is planning new investments of $ 257.0 million in such infrastructures. To this amount will be added an equivalent amount from the federal government within the framework of the IBA under the Invest in Canada Plan (Phase 2). Moreover, the investment allocated to the Sépaq will also be increased by $75.0 million to ensure the maintenance of its infrastructure and to enhance its facilities, including those in the Parc de la chute Montmorency and the Parc national du Mont-Mégantic.

❑ An additional $501 million for government buildings

To maintain its infrastructure in good condition, the Québec government is allocating $501.2 million in additional funding for work required on buildings under its responsibility, that is, office buildings, detention centres, courthouses and Sûreté du Québec facilities. The funds will be used, in particular, to renovate the Gérard-D.-Levesque heritage building located at 12, rue Saint-Louis in Québec City, and for asset maintenance of SQI buildings and other rehabilitation projects.

❑ An additional $436 million for informational resources

The government is providing for $436.0 million in additional funding to pursue informational resource projects in several government departments and bodies. Aside from $115.9 million in additional investments for informational resources planned in the education and higher education networks mentioned earlier, the funds will cover the digital transformation of the public administration, in particular through projects devoted to the modernization of justice system infrastructure and to facilitate digital access to Health and Social services.

❑ An additional $273 million for social and community housing

To maintain support for less fortunate households or those whose status is more precarious, the 2019-2029 QIP earmarks for $272.8 million in additional funding, mainly to support the construction of housing units under the Accès-Logis program. This measure falls within the scope of the Québec government's objective to broaden access to decent, affordable housing for many families living in special situations of vulnerability in all regions of Québec.

1.4 $12 billion for the central envelope

The 2019-2029 QIP provides for a central envelope of $12.0 billion reserved to ensure the government's financial contribution that may be required to implement, among the projects under study, those that it retains and prioritizes. The transfer of funds to sector envelopes requires a Cabinet decision.

A number of projects concern the replacement or major rehabilitation of existing infrastructure and are, therefore, deemed essential. In other cases, the projects seek to enhance the service offer at the heart of the government's priorities. Because of the considerable number of projects under study, totalling 62 projects planned in the 2019-2029 QIP[2] and the scope of the government's contributions required for their completing, estimated at nearly $30 billion taking into account one project in the planning stage, the government must plan their gradual implementation during the coming fiscal years. This is the usual practice. In fact, the funds now available in the central envelope under the QIP are insufficient to cover the immediate commitment of the government's financial contribution in planned for all of these projects.

However, the annual update of forthcoming QIPs will make available new funds to constitute the necessary provisions to guarantee the completion of the projects under study that will be adopted, where applicable.

[2] In the 2018-2028 QIP, 57 projects were under study, for which the Government contribution was estimated at nearly $24 billion.

Investments in infrastructure promoting sustainable development

Through the $16.6 billion in investments stipulated in the 2019-2029 QIP, the government is establishing conditions that foster sustainable development to enable Quebecers to live in an environmentally-friendly world. The investments will reduce greenhouse gas emissions, bolster resilience to climate change, improve air, water and soil quality, and broaden access to public transit and electric transport.

- In the public transit sector, a substantial $9 billion has been earmarked to support the implementation of the sustainable mobility policy and to fund the acquisition of hybrid and electric buses and the establishment of reserved lanes. The government has committed itself to invest in large-scale projects to broaden active transportation, for example the extension of the blue line of the Montréal Métro, the new structuring public transit system in Québec City and projects related to the decongestion plan in the Greater Montréal area.
- In the municipal infrastructure sector, the government is allocating substantial investments of $7.2 billion to support municipal drinking water and wastewater infrastructure construction, rehabilitation and expansion projects and to replace drinking water and sewer lines in order to maintain and enhance community residents' quality of life. Provision has also been made for funds to cover municipal biomethanization and composting projects.
- Investments of $305.7 million are also planned to maintain in good condition public dams to control water flow and for other infrastructure related to adaptation and resilience to climate change.

To bolster investments that support sustainable development stipulated in the 2019-2029 QIP, a $7.0-billion federal contribution allocated to Québec has been added pursuant to the Integrated Bilateral Agreement under the Invest in Canada Plan (Phase 2), that is, $5.2 billion for public transit, and $1.8 billion for green infrastructure.

Investments in infrastructure promoting sustainable development
(in millions of dollars)

	2019-2029
2019-2029 Quebec Infrastructures Plan	
Public transit	9,040.3
Municipal infrastructure	7,216.7
Public dams	242.7
Other - Investments for adaptation and resilience to climate change	63.0
Subtotal – 2019-2029 QIP	**16,562.7**
Invest in Canada Plan	
Public transit infrastructure	5,182.4
Green infrastructure	1,808.1
Subtotal – Invest in Canada Plan	**6,990.5**
Total	**23,553.2**

2. Partnerships that will facilitate greater numbers of priority projects

2.1 The contribution of the Québec government's partners

A commitment by other stakeholders in the context of partnerships with the Québec government makes possible the completion of a number of projects that Québec deems to have priority. The contributions of such partners are in addition to the Québec government's contributions.

❑ $16.5 billion from federal infrastructure programs to support projects under the QIP

The federal government is contributing $16.5 billion in addition to the $115.4 billion in Québec government investments planned in the 2019-2029 QIP.

■ $7.5 billion reserved for Québec under IBA

Pursuant to Phase 2 of the federal government's Invest in Canada infrastructure plan, on June 6, 2018, Québec concluded with Ottawa the IBA for the period 2018-2019 to 2027-2028. Québec will receive $7.5 billion to support funding for its infrastructure priorities.

- The two main sections of the IBA, public transit and green infrastructure, focus heavily on sustainable development. These components represent nearly $7 billion in federal government contributions for Québec. The Québec government has pledged to contribute at least an equivalent amount;
- The Québec government submitted to the federal government certain priority projects stipulated in the 2019-2029 QIP, especially in the realm of public transit, in order to obtain funding. In the coming months, Québec will identify and submit to the federal government other projects under all sections of the IBA, which will support the realization of its infrastructure priorities.

IBA – Amounts planned for Québec
(in millions of dollars)

Section	Total envelope for Canada	Quebec's share
Public transit infrastructure	20,125.0	5,182.4
Green infrastructure	9,222.0	1,808.1
Community, cultural and recreational infrastructure	1,347.0	257.0
Rural and northern communities infrastructure	2,400.0	288.5
Total	**33,094.0**	**7,536.0**

■ $9.0 billion from federal programs that precede the IBA

Some $9.0 billion in other federal government investments for the period 2019-2029 are added to the $7.5 billion stipulated in the Québec IBA drawn from previous infrastructure plans such as Phase 1 of the Invest in Canada Plan and the 2014-2024 Building Canada Plan.

❑ $12.7 billion invested by other partners

It is anticipated that other partners, principally the municipalities, public transit authorities and universities will invest $12.7 billion during the period 2019-2029 in public infrastructure projects funded by the Québec government.

Contributions of the Gouvernement du Québec and Partners over the 2019-2029 period
(in millions of dollars and as a percentage)

Gouvernement du Québec – 2019-2029 QIP	115,400.0	79.8
Federal government	16,542.2	11.4
Other partners	12,663.5	8.8
Total	**144,605.7**	**100.0**

2.2 An innovative partnership with the Caisse for Québec's economy

The public infrastructure framework agreement concluded in 2015 between the Québec government and the Caisse marks a significant advance in the implementation of an innovative model to build new public infrastructure in Québec.

The first project under way pursuant to the agreement is the commissioning of the REM. The Caisse, which is fully responsible for the project, plans to incorporate access to downtown Montréal, to the South Shore, to the west of Montréal Island, to the North Shore (Deux-Montagnes) and Montréal–Pierre Elliott Trudeau International Airport with a single electric, automated public transit system.

- In addition to the major Autoroute 30 widening project between autoroutes 20 and 10, which is now under study in order to optimize travel in this heavily used corridor, in particular to ensure smooth access to the REM, the government is committed to establishing in the short term the necessary conditions to optimize buses on shoulders. The scope of the project, which should be completed when the REM goes into service, will cover the Autoroute 30 corridor from Autoroute 20 to the east to Autoroute 10 to the west. As for the segment of Autoroute 30 between autoroutes 10 and 15, the government will initiate discussions with the consortium to evaluate the possibility of relying on buses on shoulders on this segment.

The REM project will ultimately significantly enhance the public transit system in the Greater Montréal area and contribute to the government's decongestion plan. The project, worth an estimated $6.3 billion, is the biggest public transit investment in Montréal since the Métro was built in the late 1960s.

The Québec and federal governments are key financial partners in the project. Each one is contributing $1.3 billion, in the form of capital stock for Québec and a loan from the Canada Infrastructure Bank in the case of Ottawa. Furthermore, the Québec government will contribute to the objectives of integrating all Montréal transportation services through peripheral investments and financial assistance for the Autorité régionale de transport métropolitain, which operates the integrated network. Through Hydro-Québec, a state-owned enterprise, it will contribute to the electrification of the project's system.

The framework agreement puts Québec in the forefront in the realm of governance of major public infrastructure projects and will support the delivery of ambitious projects in Québec by harnessing the Caisse's international experience in this field.

3. Higher investments geared to public finances

3.1 Substantial investments whose impact on the debt is controlled

A significant portion of Québec's public infrastructure was built in the 1960s and 1970s. During the period between the 1990s and the mid-2000s, the Québec government reduced its investments in this sector.

Since the implementation of the initial QIP in 2007, which was tabled in the wake of the adoption of the *Act to promote the maintenance and renewal of public infrastructures,*[3] the government has reinvested massively in all of its infrastructure, especially in transportation, health and education.

❑ Satisfy investment needs bearing in mind the ability to pay

Considering the importance of public infrastructure, Québec must allocate each year significant funds to maintain it in good condition and ensure the necessary development to deliver services to individuals and businesses.

Investment needs are immense and some are pressing, but the financial resources available to meet them are limited. It is therefore essential that government initiatives be efficient with a view to optimizing the anticipated benefits, bearing in mind the taxpayers' ability to pay. In this respect, the government must constantly arbitrate between the level of its infrastructure investments and its public debt reduction targets. This is a sizable challenge. The government must, therefore, prioritize investments within the limits that it has set based on the recommendation of the Minister of Finance and ensure their balanced distribution over time.

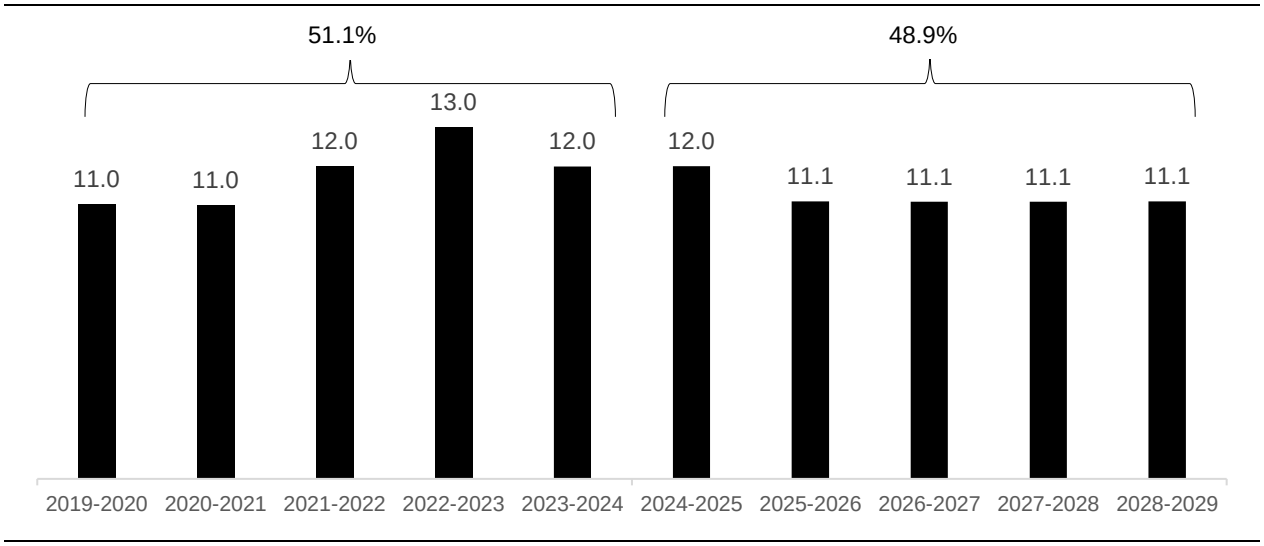
Ten-year investment planning, carried out under the QIP, is one tool that the government has adopted to guide it in this exercise. In addition, it has set as its objective to distribute the investments in a balanced manner between the two five-year periods of the plan.

[3] In 2013 the *Public Infrastructure Act* replaced this Act.

3.2 Ten-year investment planning

Accordingly, in a spirit of respect for the attainment of the government's debt reduction objectives, the 2019-2029 QIP calls for average annual investments of $11.5 billion over the next 10 years.

Annual invetments
(contribution of the Gouvernement du Québec, in billions of dollars and as a percentage)



❑ Control over the impact of investments on public expenditures

The $15.0-billion increase in investments stipulated in the 2019-2029 QIP is a by no means insignificant factor in the management of government expenses. Indeed, such investments will increase government spending in the years to come in the form of debt service and the amortization of the cost of its infrastructure. Expenditures related to transfers to third parties will also ensue, mainly the municipalities and university establishments, for repayment of loans for investments in their public infrastructure. Such expenses cannot be reduced and the government must assume them over a very long period.

Infrastructure investments and government expenditures

Infrastructure investments do not usually appear in the government's consolidated financial statement in the fiscal year of which the work is being carried out.

Indeed, the cost of a government-owned infrastructure is depreciated over its useful life, which is generally a period ranging from three to 50 years depending on the nature of the capital asset. Moreover, the interest expense on loans contracted to finance an infrastructure will follow the repayment period of the loans, which usually ranges from five to 30 years.

In the case of investments related to infrastructure belonging to third parties, in respect of which the government grants transfers to cover repayments of loans and the attendant interest, the transfer expenditure will be recognized over the period of repayment of the loans.

Breakdown of infrastructure investments by Ownership
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Government owned infrastructure	85,001.3	73.7
Third-party owned infrastructure	30,398.7	26.3
Total	**115,400.0**	**100.0**

4. Enhanced governance of infrastructure investments

4.1 Enhanced governance

❑ Governance centred on investment planning

The *Public Infrastructure Act* has established new governance rules pertaining to public investment planning and the management of public infrastructure. This has led, by way of an example, to the elaboration of a 10-year investment plan, the follow-up to the Directive sur la gestion des projets majeurs d'infrastructure publique, and the obligation for government departments and bodies to produce an AMPI.

In 2013, the SCT, which is responsible for planning and monitoring of public infrastructure investments, created the SSIP to support it in this role. It also established an infrastructure project governance committee to ensure follow-up, more specifically as regards major projects, the problems encountered and the challenges to be met.

Furthermore, to support the Conseil du trésor and its Chair in the elaboration of the QIP that it must submit annually to the government, the SCT has established a prioritization process governing requests from government departments and bodies to increase their sectoral investment budgets and provisioning of Québec's contribution to major projects. The outcome of this process is then submitted to the authorities to guide them in the elaboration of the QIP.

❑ An enhanced investment completion rate

Investment forecasts in certain sectors of the QIP have historically tended to be overestimated on a year-on-year basis, that is, the real investment completion rate of the government departments and bodies falls below forecasts. This situation implies, in particular, the postponement and rescheduling in subsequent years.

To adapt annual investment forecasts to this reality and encourage the government departments and bodies to adopt measures to enhance their completion rate, the SCT has taken steps to remedy the situation. Accordingly, the preliminary sectoral investment budgets for the 2019-2029 QIP took into account their historic investment completion rate[4]. In addition, it has asked certain government departments to elaborate an action plan to ensure that their implementation forecasts are as plausible as possible.

[4] See Appendix 2 in part B

4.2 Prioritization of investments to ensure the sustainability of public infrastructure

Public infrastructure investments must be carried out transparently in accordance with best management practices. The Act also covers the appropriate distribution of investments to maintain and develop public infrastructure. To this end, the government has adopted an approach that enables it to ascertain and monitor the condition of the infrastructure in which it invests to ensure its sustainability. This process represents a major challenge since the Québec government owns or funds highly diversified infrastructure whose replacement value stands at more than $400 billion.

The Québec government has adopted guiding principles concerning the prioritization of its public infrastructure investments based on objectives that are geared mainly to the maintenance of the service offer. Moreover, provision has also been made for targeted measures to eliminate the AMD in recent decades, in particular by prioritizing asset maintenance or replacement projects for assets at the end of their useful life. Finally, the optimal use of existing infrastructure is also taken into consideration, especially by altering the current use of certain under-utilized or obsolete buildings.

Guiding principles guiding the prioritization of infrastructure investment

Priority 1 Maintain the government service offer (existing infrastructure)		Priority 2 Enhance the government service offer (new or improved infrastructure)
Asset maintenance **Restore or maintain** the condition of infrastructure	**Replacement** **Replace** obsolete infrastructure	**Improvement and addition** **Build** infrastructure **Acquire** infrastructure **Improve** existing infrastructure

Consequently, the 2019-2029 QIP allocates most of the anticipated investments (65%) to projects that ensure the sustainability of existing infrastructure.

Summary of Investments in the 2019-2029 QIP
By Investment Type
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Maintenance of the service offer		
Asset maintenance[1]	36,545.4	
Reduction of the asset maintenance deficit	17,366.8	
Remplacement	13,199.2	
Studies	52.1	
Subtotal	**67,163.5**	**64.9**
Enhancement of the service offer		
Addition and improvement	35,714.8	
Studies	559.6	
Subtotal	**36,274.4**	**35.1**
Subtotal	**103,437.9**	**100.0**
Central Envelope[2]	11,962.1	
Total	**115,400.0**	

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] These funds, along with those allocated for replacement, may contribute to eliminating the AMD.

[2] This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

4.3 A comprehensive knowledge of infrastructure appropriate to guide initiatives

A comprehensive perspective of the condition of government-funded infrastructure is essential to support public investment planning. A knowledge of needs specific to each infrastructure category is essential to plan, maintain and support a balanced level of investment between sectors, all the more so as the infrastructure is highly diversified, found in the government's missions, and deployed throughout Québec.

To this end, the government has established the AMPI. Since 2015-2016, the main public bodies responsible for managing government-funded assets are required to produce an annual review that indicates changes in the condition and AMD of infrastructure under their responsibility, including the impact of investments carried out during the year.

The AMPI have been developed gradually over five years and now facilitate ongoing monitoring of the condition of most public infrastructure in respect of which investments are planned under the QIP. Since the initial publication of the plans, a constant improvement in knowledge of the infrastructure has been observed and supports the prioritization of investment choices.

The 2019-2020 AMPIs evaluate the condition of 79% of the infrastructure, which represents a level of knowledge sufficient to guide planning geared to a long-term vision of investment needs in order to ensure the sustainability of public infrastructure.

❑ 68% of government-owned infrastructure is deemed in good condition

The reports confirm that most (68%) the infrastructure evaluated to date is in satisfactory or better condition.

Condition rating of the public asset portfolio

	Condition index (%)			Average condition index
	ABC	D	E	
Total	68	17	15	C

❑ An asset maintenance deficit estimated at $24.6 billion

Further inspections have established at $24.6 billion the AMD as of March 2019. This evaluation represents the investments necessary to restore to satisfactory or better condition the government-owned infrastructure inspected.

Changes in the Asset maintenance deficit
(in billions of dollars)

Asset maintenance deficit					
AMPI 2018-2019	Natural degradation	Work carried out	New inspections	Net Change	AMPI 2019-2020
20.8	4.2	(3.0)	2.6	3.8	24.6

The accrued AMD rose $3.8 billion this year. More specifically, the change is attributable to:

- a $4.2-billion increase related to the natural deterioration of infrastructure inspected, during the year, including changes in the cost of the work to be performed;
- a $3.0-billion reduction stemming from AMD reduction work carried out in 2018-2019;
- a $2.6-billion increase related to investment needs pinpointed for the first time this year during new inspections.

4.4 Management of 79% of the asset maintenance deficit

To satisfy Québec's significant public infrastructure needs, the government has announced a $15.0-billion increase in investments to establish the 2019-2029 QIP at $115.4 billion.

By allocating most of the $15.0-billion increase to the maintenance of the service offer, the government has, through the 2019-2029 QIP, the means necessary to enhance the overall condition of Québec's public infrastructure.

This increase will allow for the management of accumulated delays in investing for infrastructure in poor condition, make provision for a recurring level of asset maintenance investments that promotes the sustainability of infrastructure as well as the support for infrastructure development.

A significant portion (79%) of the AMD is managed in the 2019-2029 QIP. Indeed, $19.4 billion is planned for addressing the asset maintenance deficit, especially to replace the most obsolete infrastructure.

Going forward, the government will continue to do what is necessary to enhance the quality of Québec's public infrastructure. To this end, the government is committed to raise to $7.0 billion the annual average over five years in planned investments to maintain the service offer between now and the publication of the 2022-2032 QIP.

5. A directive requiring the best project management practices

The *Directive sur la gestion des projets majeurs d'infrastructure publique*, which the government approved in 2014, established oversight and rigorous management rules to support Cabinet's decision-making process to study, plan and carry out the major projects of government bodies[5].

After five years and in the wake of numerous major projects submitted to Cabinet for a decision, project management practices have steadily improved.

❑ A Directive adapted to accelerate the restoration of Québec's infrastructure

More than ever, the government is determined to accelerate the restoration of obsolete infrastructure. With a broader knowledge of its infrastructure, it intends to review the Directive in order to accelerate the completion of work on infrastructure in poor condition.

This change would accelerate the implementation of certain priority projects, especially projects for which restoration, major renovation or replacement has been determined, by moving directly to the business case while properly managing the risk of such projects.

The management maturity that bodies and major project managers have acquired since the adoption of the Directive allows for a review and a shift of responsibilities towards bodies. This gives the government the opportunity to focus its resources on managing the most significant governance issues.

❑ A Directive that will apply to major public transit projects

The number and growing scope of public transit projects is undeniably a reflection of current sustainable mobility challenges, which are addressed by government policy directions.

The emerging major projects will have a significant impact in the coming decades, not only on the daily lives of millions of Quebecers but, more generally, on the development of Québec's territory.

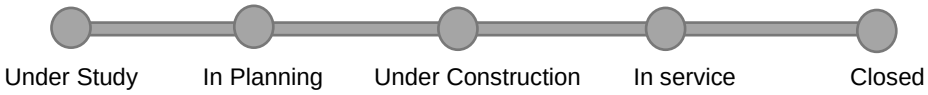
It is with this in mind that the government, an essential financial partner of public transit authorities, has decided to structure the planning and completion of such projects through the Directive to ensure rigorous follow-up geared to the investments made.

[5] See Appendix 2.

❑ Online monitoring of infrastructure projects worth $50 million or more

To enable Quebecers to monitor the workflow and decisions pertaining to major infrastructure projects, whether or not they are subject to the Directive, the SCT has, since July 2018, released information on infrastructure projects worth $50 million or more under the heading “Public Infrastructures” on its website[6]. The information is updated regularly to reflect decisions that the government makes concerning a project, especially its completion status (see the diagram below).

In this way, Quebecers can obtain a brief description of the projects, locate them by region and area of activity (transportation, health and social services, higher education, and so on) and, where appropriate, monitor the changes authorized with respect to cost, scope or the timetable initially approved.



[6] https://www.tresor.gouv.qc.ca/infrastructures-publiques/tableau-de-bord/.

Appendix 1 - Elaboration of the 2019-2029 QIP

The annual development of the QIP takes into account the progress of ongoing projects, the needs expressed by the government departments and bodies, and the government priorities. Thus, from the Plan of the previous year, the following factors are considered.

Evolution during 2018-2019 (first year of the previous QIP)

The starting point of the QIP 2019-2029 does not correspond to the published QIP 2018-2028. In fact, the following elements must be taken into account to update the QIP 2018-2028 to reflect the transactions that occurred in 2018-19, namely :

- The decisions of the Cabinet in 2018-2019. For all major projects whose files have been approved by the Cabinet during the current year, a transfer of the sums allocated to these projects is made from the central envelope to the sector envelopes of the government departments and bodies responsible for these projects.
- The cost revisions to some projects have generated changes to the government's planned contribution, particularly for major projects.
- The withdrawal the first year of the previous Plan (2018-2019) and the addition of the last year (2028-2029) for an equivalent amount, so that the ten-year level of investments remains constant. However, the distribution between the sector and central envelopes of the added year is different from the one subtracted.
  - Indeed, for the additional year (2028-2029), the sums allocated to the sector envelopes mainly represent recurrent allocations for the maintenance of assets. The balance not distributed to the sectors is then an amount available to carry out new projects.
- The progress and completion of several projects release sums that become available for other investments.

Thus, the result of these operations makes it possible to establish the available balance of the sectoral and central envelopes at the beginning of the development of the 2019-2029 QIP.

Governmental decisions

Every year, the government determines the level of investment in the QIP based on identified needs and government priorities, while taking into account the impact of these investments on public finances.

Finally, the government allocates all the available sums $18.6 billion (the available balance of $3.6 billion and an increase of $15.0 billion) between, on the one hand, the sector envelopes in order to implement or improve projects and programs under the responsibility of government departments and bodies and, on the other hand, the central envelope to reserve sums possibly required for the realization of major future projects.

Appendix 1 (cont'd) - Elaboration of the 2019-2029 QIP

Elaboration of the 2019-2029 QIP
(contribution of the Gouvernement du Québec, in millions of dollars)

				Governmental decisions		
	2018-2028 QIP March 2018 budget	**Evolution during 2018-2019**	**Balance starting point for the 2019-2029 QIP**	**Increase**	**Breakdown of available funds**	**2019-2029 final QIP**
Sector envelopes	90,499.1	1,.935.6	**92,434.7**	—	11,003.2	**103,437.9**
Central envelope	9,900.9	(5,536.3)	**4,364.6**	—	7,597.5	**11,962.1**
Subtotal	**100,400.0**	**(3,600.7)**	**96,799.3**	**—**	**18,600.7**	**115,400.0**
Available funds	—	3,600.7[1]	**3,600.7**	15,000.0	18,600.7	**—**
Total	**100,400.0**	**—**	**100,400.0**	**15,000.0**	**—**	**115,400.0**

1 Results to the withdrawal the first year of the previous Plan (2018-2019) and the addition of the last year (2028-2029) for an equivalent amount, so that the ten-year level of investments remains constant.

Provisioning methodology for major projects

The sums required for the planning and execution of major projects are reserved in the central envelope for projects whose opportunity case is scheduled to be approved by the Cabinet during the first year of the 10-year plan, for example, those planned by March 31, 2020 in the case of the QIP 2019-2029.

Appendix 1 (cont'd) – Elaboration of the 2019-2029 QIP

Breakdown of available funds

(contribution of the Government du Québec in millions of dollars)

	2018-2028 QIP		2019-2029 QIP Envelopes evolution				2019-2029 QIP Breakdown of available funds		
	March 2018 budget	Evolution during 2018-2019	Balance starting point for the 2019-2029 QIP	Increase	Breakdown of available funds	Final envelopes	Funds attributed to sector envelopes	Breakdown of central envelope funds[2]	Total of available funds by sector
Road network	20,027.5	3,248.5	**23,276.0**		1,304.0	**24,580.0**	1,304.0	4,025.2	**5,329.2**
Public transit	9,002.4	(435.5)	**8,566.9**		473.4	**9,040.3**	473.4	787.1	**1,260.5**
Marine, air, rail and other transportation	3,089.8	(468.7)	**2,621.1**		314.5	**2,935.6**	314.5		**314.5**
Health and social services	18,567.1	302.4	**18,869.5**		1,316.9	**20,186.4**	1,316.9	844.3	**2,161.2**
Education	8,972.7	(303.3)	**8,669.4**		5,219.8	**13,889.2**	5,219.8	858.0	**6,077.8**
Higher education	6,140.7	(176.2)	**5,964.5**		411.1	**6,375.6**	411.1	72.9	**484.0**
Research	917.3	—	**917.3**		68.5	**985.8**	68.5		**68.5**
Culture	1,578.0	(144.5)	**1,433.5**		142.1	**1,575.6**	142.1		**142.1**
Municipal infrastructure	7,296.4	(79.7)	**7,216.7**		—	**7,216.7**	—		—
Sports, community, tourism and recreational infrastructure	1,860.9	(229.2)	**1,631.7**		550.0	**2,181.7**	550.0		**550.0**
Social and community housing	2,320.1	(150.5)	**2,169.6**		272.8	**2,442.4**	272.8		**272.8**
Government buildings	2,507.9	(306.4)	**2,201.5**		400.5	**2,602.0**	400.5	100.7	**501.2**
Information resources[1]	4,681.1	635.1	**5,316.2**		432.9	**5,749.1**	432.9	3.1	**436.0**
Other sectors	3,537.2	43.6	**3,580.8**		96.7	**3,677.5**	96.7		**96.7**
Total – Sector envelopes	**90,499.1**	**1,935.6**	**92,434.7**	—	**11,003.2**	**103,437.9**	**11,003.2**	**6,691.3**	**17,694.5**
Central envelope	9,900.9	(5,536.3)	**4,364.6**		7,597.5	**11,962.1**	n/a	906.2 [3]	**906.2**
Available funds		3,600.7 [1]	**3,600.7**	15,000.0	(18,600.7)	—			—
Total	**100,400.0**	—	**100,400.0**	**15,000.0**	—	**115,400.0**	**11,003.2**	**7,597.5**	**18,600.7**

1 Results to the withdrawal the first year of the previous Plan (2018-2019) and the addition of the last year (2028-2029) for an equivalent amount, so that the ten-year level of investments remains constant.

2 This distribution is presented for illustrative purposes only, to reflect potential transfers from the central envelope based on project status. The transfer of funds to the sector envelopes requires a decision by the Cabinet in order to implement, among the projects under study, those that the government will retain and prioritize.

3 Corresponds to the remaining funds in the central envelope not attributed to sector envelopes for unexpected circumstances

Appendix 2 - The Directive sur la gestion des projets majeurs d'infrastructure publique

The infrastructure project of a public body is deemed to be major when its total estimated cost is $50 million or more or, in the case of a road project, $100 million or more unless the Conseil du trésor does not expressly qualify as major a project that does not comply with these criteria.

- **To be considered under study under the QIP,** a preliminary plan must be elaborated to describe and justify the need to which the project contemplated responds. According to the priority granted, Cabinet approves, where warranted, the preliminary plan and the project is then "under study" on the trend chart.
- **During the study**, an opportunity file must be elaborated to ascertain the project's relevance and ensure that the best long-term option is recommended to satisfy the need pinpointed and the established requirements. At the conclusion of the study, Cabinet approves the opportunity file, where warranted, and the project is then "in the planning stage" on the trend chart.
- **During planning**, a business case must be elaborated to explain in detail the option adopted and develop its management plan. At the conclusion of the planning stage, Cabinet approves the business case, where warranted, and the project is then "in the completion stage" on the trend chart.
- **During completion**, summary reports indicating the completion status must be elaborated on March 31 and September 30 of each year and submitted to the SCT. During the completion phase, Cabinet must authorize any significant change to the scope, time frame, funding, or cost of the project.
- For a project to be **deemed in operation**, the infrastructure built, replaced or rehabilitated must offer services for the public, whether full or partial, when gradual commissioning is planned. The project is then "in service" on the trend chart. However, some work, acquisitions or dispute settlements may have yet to be completed.
- At the **closing,** all of the work has been performed to the client's satisfaction, usually the MTQ or the SQI, and full service has been offered to the public for at least one year, which leads to formal acceptance. A closure report must then be submitted to the SCT and the project is then "closed" on the trend chart.

Section B

The 2019-2029 Québec Infrastructure Plan

1. The 2019-2029 Québec Infrastructure Plan 3

1.1 Table of investments by sector and by year 4
1.2 Table of investments by type and by year 5
1.3 Table of investments by sector and by type..... 6

2. The Québec Infrastructure Plan by sector..... 7

2.1 Road Network..... 8
2.2 Public Transit.....11
2.3 Marine, Air, Rail and Other Transportation.....14
2.4 Health and Social Services 16
2.5 Education.....18
2.6 Higher education.....20
2.7 Research 21
2.8 Culture.....21
2.9 Municipal infrastructure.....22
2.10 Sports, community, tourism and recreational infrastructure.....24
2.11 Social and community housing 26
2.12 Government buildings.....27
2.13 Information Resources.....28
2.14 Other sectors 28

3. Other information in the Québec Infrastructure Plan 31

3.1 Investments by administrative region 31
3.2 Investments according to projects' degrees of progress.....32

4. Projects valued at $50.0 million or more 33

4.1 List of projects valued at $50.0 million or more in the 2019-2029 QIP 34
4.2 Projects on the list for which the degree of progress changed in 2018-2019 49
4.3 Projects withdrawn from the previous QIP's list.....52

5. Update of probable investments for 2018-2019 54

6. Final statement of investments made in 2017-2018 55

Appendix 1 - Investments made for the 2017-2018 year in relation to investments planned from 2017-2027 QIP 60

Appendix 2 - Historical report of investments made compared to those planned 61

Appendix 3 - Historical report of the investment levels planned in the QIP 62

1. The 2019-2029 Québec Infrastructure Plan

The 2019-2029 QIP is designed to maintain or enhance the service offer to the public with a 10-year government investment plan totalling $115.4 billion.

The table below summarizes the breakdown of investments between the various sector envelopes and the central envelope. It also lists the major information resource investments allocated to the education and higher education sectors.

2019-2029 QIP Investments
Summary by Sector
(contribution of the Gouvernement du Québec, in millions of dollars and percentage)

	Sector envelope	Information resources	Total	%
Road network	24,580.0	–	24,580.0	21.3
Public transit	9,040.3	–	9,040.3	7.8
Marine, air, rail and other transportation	2,935.6	–	2,935.6	2.5
Health and social services	20,186.4	172.3	20,358.7	17.6
Education	13,889.2	897.5	14,786.7	12.8
Higher education	6,375.6	775.3	7,151.0	6.2
Research	985.8	–	985.8	0.9
Culture	1,575.6	61.2	1,636.9	1.4
Municipal infrastructure	7,216.7	–	7,216.7	6.3
Sports, community, tourism and recreational infrastructure	2,181.7	–	2,181.7	1.9
Social and community housing	2,442.4	–	2,442.4	2.1
Government buildings	2,602.0	–	2,602.0	2.3
Information resources	–	3,842.7	3,842.7	3.3
Other sectors Childcare centres Plan Nord Acquisitions by departments and bodies and other investments:	3,677.5	–	3,677.5	3.2
Central envelope[1]	11,962.1	–	11,962.1	10.4
Total	**109,650.9**	**5,749.1**	**115,400.0**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

The following three tables provide more detailed information regarding the intended allocation of investments:

- By sector and by year;
- By investment type and by year;
- By sector and investment type.

1.1 Table of investments by sector and by year

2019-2029 QIP Investments
By Sector and by Year
(contribution of the Gouvernement du Québec, in millions of dollars)

Sector	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total
Road network	2,366.0	2,339.6	2,771.7	2,883.2	2,228.6	2,282.0	2,354.9	2,260.5	2,630.7	2,462.6	**24,580.0**
Public transit	1,042.1	1,008.6	1,022.0	1,014.1	976.1	1,024.9	861.5	756.0	645.4	689.7	**9,040.3**
Marine, air, rail and other transportation	509.2	519.9	408.4	310.6	271.7	240.1	229.9	167.0	167.2	111.7	**2,935.6**
Health and social services	1,352.0	1,374.5	1,902.3	2,340.8	2,412.5	2,381.7	2,203.7	2,294.7	1,966.8	1,957.5	**20,186.4**
Education	1,316.6	1,341.3	1,863.9	2,271.7	1,740.1	1,187.6	1,082.0	1,095.9	1,001.2	988.9	**13,889.2**
Higher education	998.7	943.5	768.1	577.4	513.4	530.5	524.3	525.6	502.4	491.7	**6,375.6**
Research	149.2	139.3	137.7	81.6	82.9	86.2	86.5	74.5	74.0	73.8	**985.8**
Culture	167.5	198.4	185.9	166.7	157.1	155.9	153.9	138.6	124.7	126.9	**1,575.6**
Municipal infrastructure	592.6	635.7	742.0	763.4	738.8	748.8	748.8	748.8	748.8	748.8	**7,216.7**
Sports, community, tourism and recreational infrastructure	480.0	475.4	284.7	193.3	234.2	159.7	94.0	88.3	87.5	84.6	**2,181.7**
Social and community housing	363.1	356.5	354.7	231.4	223.2	189.4	189.2	189.1	186.3	159.5	**2,442.4**
Government buildings	401.4	410.4	398.4	318.4	236.0	191.0	179.5	161.9	156.1	149.1	**2,602.0**
Information resources[1]	786.9	750.8	729.2	679.2	539.5	466.0	446.8	446.0	450.3	454.4	**5,749.1**
Other sectors	491.2	507.5	433.0	436.4	369.2	309.5	297.4	290.0	288.6	254.8	**3,677.5**
Subtotal	**11,016.4**	**11,001.2**	**12,002.0**	**12,268.1**	**10,723.2**	**9,953.3**	**9,452.5**	**9,237.0**	**9,030.2**	**8,754.0**	**103,437.9**
Central envelope[2]	10.0	–	–	731.2	1,270.6	2,048.1	1,645.3	1,851.5	2,062.7	2,342.7	**11,962.1**
Total	**11,026.4**	**11,001.2**	**12,002.0**	**12,999.3**	**11,993.8**	**12,001.3**	**11,097.9**	**11,088.4**	**11,092.9**	**11,096.7**	**115,400.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] Including information resource investments of $172.3 million in the health and social services network, $897.5 million in the education network, $775.3 million in the higher education network, and $61.2 million for state-owned cultural societies.

[2] This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

1.2 Table of investments by type and by year

2019-2029 QIP Investments
By Type and by Year
(contribution of the Gouvernement du Québec, in millions of dollars)

Investment Type	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total
Maintenance of the Service Offer											
Asset maintenance[1]	2,770.1	2,846.0	3,433.4	4,028.5	4,106.4	3,980.3	4,012.5	3,732.6	3,852.9	3,782.7	**36,545.4**
Elimination of the asset maintenance deficit	1,511.5	1,801.5	1,875.7	2,115.5	1,538.8	1,473.7	1,651.3	1,897.6	1,841.2	1,660.1	**17,366.8**
Replacement	1,530.8	1,390.7	1,833.9	1,493.9	1,339.8	1,348.7	1,153.3	1,031.5	996.2	1,080.4	**13,199.2**
Studies	23.8	11.5	9.5	5.9	1.4	–	–	–	–	–	**52.1**
Subtotal	**5,836.2**	**6,049.7**	**7,152.4**	**7,643.8**	**6,986.4**	**6,802.8**	**6,817.1**	**6,661.6**	**6,690.3**	**6,523.3**	**67,163.5**
Enhancement of the service offer											
Addition and improvement	5,063.2	4,812.3	4,762.6	4,412.3	3,732.8	3,150.1	2,635.5	2,575.3	2,339.9	2,230.7	**35,714.8**
Studies	117.0	139.2	87.0	212.0	4.0	0.4	–	–	–	–	**559.6**
Subtotal	**5,180.2**	**4,951.5**	**4,849.5**	**4,624.3**	**3,736.8**	**3,150.5**	**2,635.5**	**2,575.3**	**2,339.9**	**2,230.7**	**36,274.3**
Central envelope[2]	10.0	–	–	731.2	1,270.6	2,048.1	1,645.3	1,851.5	2,062.7	2,342.7	**11,962.1**
Total	**11,026.4**	**11,001.2**	**12,002.0**	**12,999.3**	**11,993.8**	**12,001.3**	**11,097.9**	**11,088.4**	**11,092.9**	**11,096.7**	**115,400.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.
[1] These funds, along with those allocated for replacement, may contribute to eliminating the AMD.
[2] This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

1.3 Table of investments by sector and by type

2019-2029 QIP Investments
By Sector and by Type
(contribution of the Gouvernement du Québec, in millions of dollars)

Sector	Maintenance of the service offer					Enhancement of the service offer			Total
	Asset maintenance[1]	Elimination of the asset maintenance deficit	Replacement	Studies	Subtotal	Addition and improvement	Studies	Subtotal	
Road network	6,590.0	11,987.3	1,613.8	9.9	**20,201.1**	4,025.6	353.3	**4,379.0**	**24,580.0**
Public transit	2,043.6	–	1,422.1	–	**3,465.7**	5,493.4	81.3	**5,574.6**	**9,040.3**
Marine, air, rail and other transportation	1,270.3	–	145.9	–	**1,416.3**	1,518.9	0.5	**1,519.3**	**2,935.6**
Health and social services	3,168.5	1,465.4	5,478.5	20.0	**10,132.4**	9,982.7	71.2	**10,053.9**	**20,186.4**
Education	7,887.0	2,147.9	476.8	–	**10,511.6**	3,370.1	7.4	**3,377.5**	**13,889.2**
Higher education	3,373.9	1,156.2	1,211.4	–	**5,741.5**	606.4	27.7	**634.1**	**6,375.6**
Research	–	–	27.4	–	**27.4**	958.4	–	**958.4**	**985.8**
Culture	843.6	86.0	316.2	–	**1,245.8**	329.8	–	**329.8**	**1,575.6**
Municipal infrastructure	5,683.5	–	626.0	–	**6,309.5**	907.2	–	**907.2**	**7,216.7**
Sports, community, tourism and recreational infrastructure	353.7	157.8	222.3	–	**733.9**	1,443.6	4.2	**1,447.9**	**2,181.7**
Social and community housing	1,033.8	210.8	15.1	–	**1,259.7**	1,182.7	–	**1,182.7**	**2,442.4**
Government buildings	1,275.4	78.1	93.6	22.2	**1,469.3**	1,119.4	13.4	**1,132.8**	**2,602.0**
Information resources[2]	2,193.3	–	1,084.0	–	**3,277.3**	2,471.8	–	**2,471.8**	**5,749.1**
Other sectors	828.7	77.4	466.1	–	**1,372.1**	2,304.9	0.5	**2,305.4**	**3,677.5**
Subtotal	**36,545.4**	**17,366.8**	**13,199.2**	**52.1**	**67,163.5**	**35,714.8**	**559.6**	**36,274.3**	**103,437.9**
Central envelope[3]	997.8	2,072.2	–	5.0	**3,075.0**	8,882.2	5.0	**8,887.2**	**11,962.1**
Total	**37,543.1**	**19,439.0**	**13,199.2**	**57.1**	**70,238.5**	**44,596.9**	**564.6**	**45,161.5**	**115,400.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] These funds, along with those allocated for replacement, may contribute to eliminating the AMD.

[2] Including information resource investments of $172.3 million in the health and social services network, $897.5 million in the education network, $775.3 million in the higher education network, and $61.2 million for state-owned cultural societies.

[3] This envelope ensures the Government's financial contributions potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sector envelopes requires a Cabinet decision.

2. The Québec Infrastructure Plan by sector

The 2019-2029 QIP covers 14 major sectors of activity. It groups investments according to activities associated with, among others, transportation, health and social services, education, higher education, and municipal infrastructure.

Activity sectors under the 2019-2029 QIP
• Road network: highways, roads, bridges, interchanges and overpasses • Public transit: metro, buses, commuter trains, tramway, platforms, stations, tracks and garages • Marine, air, rail and other transportation: ferries, wharves, stations, airports, railways and local roads, rest stops, the Government's vehicle fleet. • Health and social services: institutions in the health and social services network • Education: schools • Higher education: CEGEPs, universities • Research: laboratories, research equipment and centres • Culture: museums, libraries, performance halls • Municipal infrastructure: water treatment plants, water and sewer systems • Sports, community, tourism and recreational infrastructure: multipurpose complexes, sports and tourism facilities, national parks, biomethanization and composting plants, digital infrastructures • Social and community housing • Government buildings: office buildings, courthouses, detention centres, Sûreté du Québec police stations • Information resources: information resource projects and equipment in the various departments, bodies and non-budget-funded bodies, as well as the health and social services, education and higher education networks • Other sectors: childcare centres (CPEs), infrastructures financed by the Société du Plan Nord, public dams, multi-use roads, Québec governemental buildings abroad, acquisitions of movable and immovable property by departments, bodies and non-budget-funded bodies

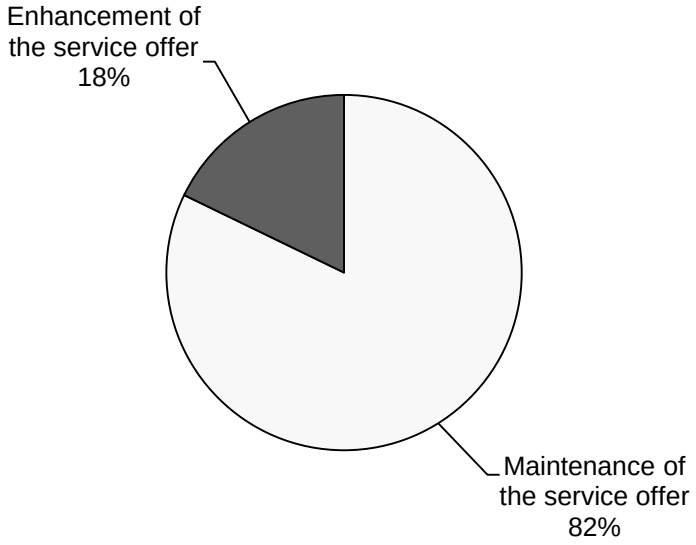
Most projects listed in this section are valued at $50 million or more. The comprehensive list of projects valued at $50 million or more is presented in its entirety in section 4.1 and in the infrastructure project Tableau de bord[1].

[1] The Tableau de bord is available at the following address: https://www.tresor.gouv.qc.ca/infrastructures-publiques/tableau-de-bord/

2.1 Road Network

The 2019-2029 QIP includes nearly $24.6 billion in investments for the road network.

Road Network
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Investments for the maintenance of road infrastructure

More than $20.2 billion (82%) were allocated to maintaining the roadways and structures, including for the elimination of the AMD. This investment will help maintain and restore the road network as well as stimulate the economy in every region of Québec.

■ New projects "in progress"

Among the new projects listed in this category, the major overhaul of the Pie-IX bridge between Montréal and Laval should be mentioned.

- The scope of this project includes replacing the bridge's concrete slabs, providing a reserved lane for the BRT implementation project integrated into the upgrade of Boulevard Pie-IX between Montréal and Laval, as well as the repair of the roadway on Route 125 in Laval, between the Pie-IX bridge and Boulevard de la Concorde Est.
- Work on the Pie-IX bridge will be coordinated with that of the BRT project to ensure the bridge is fully operational by 2022, when the new public transit system is scheduled for commissioning.

■ New projects "in the planning stage"

The new projects listed in this category, include:

- Reconstruction of the Île-aux-Tourtes bridge between Vaudreuil-Dorion and Senneville:
  - The new bridge should include three traffic lanes per direction, one multi-purpose lane (bicycle, walking, etc.), as well as two shoulders, one of which will be adapted for buses.
  - Before the new bridge is commissioned, the current bridge will be subject to an asset maintenance program, including inspections and repairs.
- Major rehabilitation of the Ville-Marie and Viger tunnels in Montréal:
  - This project is primarily intended to correct issues associated with water infiltration around the tunnel structures' seals and replace tunnel equipment that has reached the end of its service life.
- Repairing the slab on the Laviolette bridge in Trois-Rivières:
  - In 2006 and 2007, the approach structure slabs were replaced on the Laviolette bridge. This project will replace the centre portion of the bridge slab, in keeping with the work already completed.

❑ Investments to improve mobility and boost economic development

Nearly $4.4 billion (18%) is earmarked to improve the existing road infrastructures and to provide new structures. Those projects will enhance the whole province's road network and improve the quality of life for all Quebecers.

■ New projects "in progress"

Numerous projects to improve the service offer are already in progress. Certain projects were added to this category, including:

- Repair work on Route 185 from Autoroute 20 to the New Brunswick border – Phase III:
  - Phase III work for this project covers nearly 40 kilometres and will be carried out in seven separate segments, which will be progressively commissioned from 2021 through 2025.
- Widening of Autoroute Henri-IV – Phase II:
  - Widening and repairing Autoroute Henri-IV (Autoroute 73) in Québec City will improve the safety and efficiency of this strategic route used by more than 100,000 vehicles each day. This major project will also contribute to ensuring infrastructure durability;
  - Work began in 2018 and will continue through 2023.

- **New projects "in the planning stage"**

The new projects listed in this category include:

- Implementation of a new road connection between Québec City and Lévis:
  - The project aims to improve sustainable mobility between both shores of the St. Lawrence River. To that end, project objectives consist primarily in:
    - Decreasing traffic congestion at the bridge approaches during morning and afternoon rush hours;
    - Encouraging the use of public transit and thus sustainable development;
    - Optimization of freight transport.
  - In March 2019, the Government authorized the development of the project's business case.
- Extension of Route 138 between Kegaska and La Romaine, and between Tête-à-la-Baleine and La Tabatière:
  - Construction of this route will improve service to communities by offering transport services adapted to the demand while contributing to economic and social development.
  - In 2019-2020:
    - Land clearing is scheduled to begin near La Romaine;
    - Construction work planning will continue.
- Completion of the Autoroute 70 segment between Grande-Anse and La Baie.
  - This project consists of Phase II of the completion of Autoroute 70 between Chicoutimi and La Baie, focusing on a 6.9-kilometre segment between Grand-Anse and La Baie. The project's general objective is to ensure safer and more efficient travel.

- **Projects "under study"**

Two new projects are under study as part of the 2019-2029 QIP:

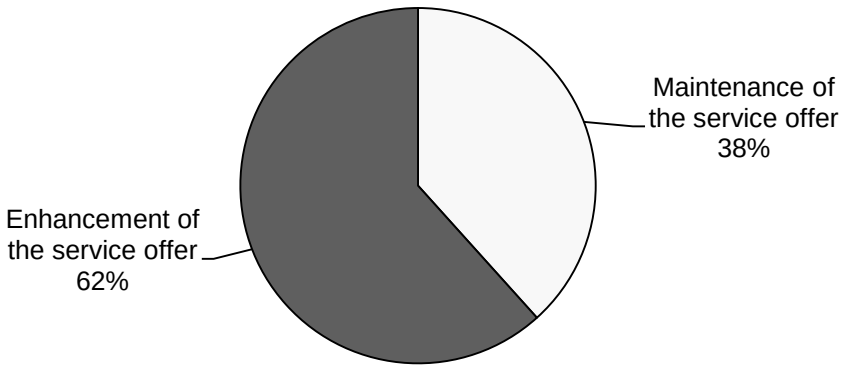
- The optimization of travel along the Autoroute 13 corridor between Autoroutes 640 and 50;
  - Urban development in the City of Mirabel was not supported by the development of an arterial municipal network. Improving the secondary road network and enhancing public transit will allow for the improvement of traffic conditions in the Mirabel area.
  - An updated opportunity case, which was conducted in 2015, will help to optimize the various options according to:
    - Objectives of the Metropolitan Land Use and Development Plan;
    - Government land use directions;
    - Travel needs on the secondary road network and integration of their effects on travel to Laval and Montréal.

- The redesign of Route 132 between Rue Principale in Delson and Autoroute 730 in Sainte-Catherine and in Saint-Constant.
  - This section of Route 132 includes a right-of-way initially intended for a highway project. The route's current status disturbs the urban structure in these three cities.
  - A study conducted by the MTQ in 2011 noted an accident rate that was considerably higher than the critical rate for comparable national roads. The current design with a left-turn lane in both directions was identified as a source of conflict.
  - A committee instituted in 2018 by the MTQ is currently working with its partners to develop a common vision for redesigning this road, with the goal of adopting a master development plan by 2020.

2.2 Public Transit

The Government is investing in public transit infrastructure under the 2019-2029 QIP, particularly to support transportation electrification and the reduction of GHGs. Over the next 10 years, over $9.0 billion will be made available to the different public transit authorities.

Public Transit
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Investments for maintaining public transit infrastructure

Nearly than $3.5 billion (38%) will be invested in numerous large-scale projects to maintain public transit services.

With those investments, the Government intends to contribute to:

- Continuing to restore public transit infrastructure by increasing the financial assistance for asset maintenance projects provided for within the framework of the Sustainable Mobility Policy;
- Meeting GHG emission reduction targets by replacing diesel buses with hybrid and electric buses.

■ New projects "in progress"

The following projects are now in progress:

- Acquisition of an additional 153 AZUR cars for the Montréal metro:
  - This project will considerably improve travel for Montréal's metro clientele.
  - The first train car is scheduled for delivery in the spring of 2020; the last one should be delivered in late 2021.
- Reconstruction of the Complexe Crémazie for STM buses:
  - The existing Complexe Crémazie was built in 1948 and has reached the end of its useful life.
  - This project will enable the STM to adapt to future needs in terms of new hybrid and electric bus technology, expand work areas and optimize work processes.
  - The work schedule should run through the end of 2021.

■ New projects "in the planning stage"

Amounts are also earmarked for several new projects that are currently in the planning stage, including:

- Phase II of the STM infrastructure maintenance program:
  - This program includes work to renovate various bus network transportation centres, since many of these building components have exceeded or will very soon exceed their service life spans.
- Construction of the Centre de transport Bellechasse, to replace the Centre de transport Saint-Denis:
  - The Centre de transport Bellechasse will be the first in North America to be completely underground and fully equipped to operate a full fleet of electric buses.
  - This project will accommodate a significant portion of the 300 new hybrid buses to be purchased by the STM.
  - The work schedule should run through spring of 2022.

❑ Major investments to enhance public transit services

Nearly $5.6 billion (62%) will be devoted to work to provide more public transit, and therefore have a sustainable effect on the environment. This major investment will have an undeniable impact on the mobility of citizens.

These investments provided for in the 2019-2029 QIP will specifically:

- Change travel behaviour by carrying out major public transit network development projects;
- Increase service reliability and quality by improving infrastructure access for people with reduced mobility and modernizing the traveller information systems.

■ New projects "in progress"

The new projects listed in this category, include:

- Implementing an integrated BRT for the upgrade of the Pie-IX corridor between Montréal and Laval:
  - The project consists in instituting permanent reserved lanes, allowing buses to travel on Boulevard Pie-IX between Boulevard Saint-Martin in Laval and the Pie-IX metro station in Montréal;
  - This 11-km route will feature 17 stations, including 2 in Laval and 15 in Montréal, along with a 750-space incentive parking lot at the Laval terminus;
  - Project commissioning is scheduled for 2022.

■ New projects "in the planning stage"

The new projects listed in this category include:

- Expansion of the Viau attachment centre for Montréal metro maintenance vehicles:
  - This project consists in increasing the centre's capacity and acquiring six locotractors to handle the increased number of projects carried out within the framework of the Réno-Infrastructures and Réno-Systèmes programs;
  - The work schedule should run through the end of 2021.
- Expansion of three of the STM’s transport centers for buses (Anjou, Legendre and Saint-Laurent):
  - This project will enlarge the bus maintenance and parking areas, in order to accommodate an additional total capacity of 160 buses;
  - Construction is scheduled to start gradually in 2020.

■ **Projects "under study"**

To enable Quebecers to travel more efficiently and more comfortably while reducing congestion and pollution, the Government implemented several public transit measures into its plan to reduce traffic congestion in greater Montréal. Within the context of the 2019-2029 QIP, some of these measures are being studied, namely:

- Implementation of structuring public transit along the Yellow line extension of the Longueuil metro;
- Implementation of structuring public transit in Montréal's East end;
- Implementation of structuring public transit on Boulevard Taschereau in Longueuil;
- Implementation of a metropolitan network of reserved lanes on Autoroutes 13, 20, 25, 440, 640, and Route 116.

2.3 Marine, Air, Rail and Other Transportation

The 2019-2029 QIP provides for investments of over $2.9 billion in marine, air, rail and other transportation infrastructure.

Marine, Air, Rail and Other Transportation
By Sector Component
(contribution by the Gouvernement du Québec, in millions of dollars and as a percentage)

Marine Transportation	572.7	19.5
Air transportation	321.6	11.0
Rail transportation	315.5	10.7
Other transport infrastructure	1,725.7	58.8
Total	**2,935.6**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

❑ Marine Transportation

Over the period covered by the 2019-2029 QIP, investments of $572.7 million (19.5%) will be made in marine transportation. The STQ is expected to invest nearly $425.0 million of that amount.

- Some projects are expected by local communities in order to maintain the current service level. These projects include the modernization of the MV Joseph-Savard vessel, so the STQ can use it as a back-up vessel at the Québec–Lévis ferry crossing.

In addition to these STQ investments, nearly $150.0 million are specifically earmarked for marine transportation infrastructure. This envelope will most notably be used to assume the Gouvernement du Québec's contributions to the projects retained within the framework of the marine transportation infrastructure investment support program.

❑ Air Transportation

The 2019-2029 QIP also includes $321.6 million (11.0%) in investments for infrastructure related to air transportation, including:

- $100.0 million for investments into regional airport infrastructure. This amount will aim at funding several types of work related to the infrastructure and equipment needed to operate airports, such as runways, lighting systems and automated weather stations;
- Over $150.0 million for northern airports under the responsibility of the MTQ, and nearly $70.0 million for Service aérien gouvernemental infrastructures.

❑ Rail Transportation

Over the period covered by the QIP, investments of $315.5 million (10.7%) will be made in rail transportation.

Of that amount, $85.0 million are earmarked for restoring the Chemin de fer de la Gaspésie.

- The Gouvernement du Québec authorized including the segment between Caplan and Port-Daniel–Gascons "in the planning stage" category.

The balance of more than $230.5 million will enable the Gouvernement du Québec to:

- Maintain the assets required for the Chemin de fer Québec Central;
- Contribute to the projects to build a railway bridge in Dolbeau-Mistassini and a bypass track in Lac-Mégantic;
- Implement the rail transportation infrastructure and modal integration support program.

❑ Other modes of Transport

Under the 2019-2029 QIP, investments of approximately $1.7 billion (58.8%) will be made in other modes of transport, namely:

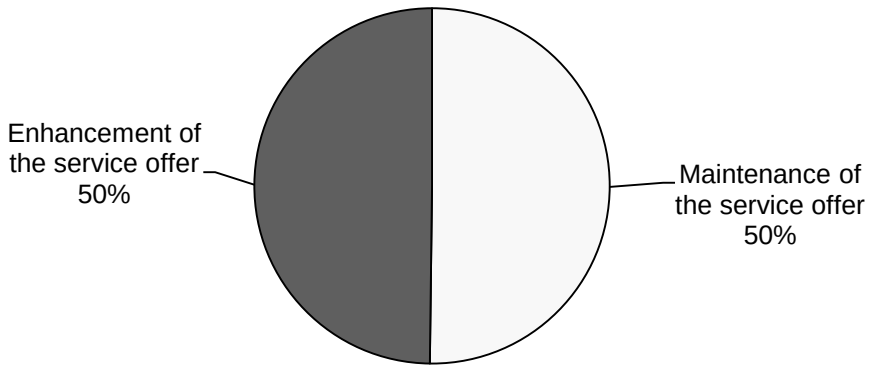
- Nearly $650.0 million in financial assistance will be awarded to municipalities for local road projects;
- More than $560.0 million for the Centre de gestion de l'équipement roulant infrastructure and equipment:
  - An envelope is specifically planned to continue the 2015-2020 Transportation Electrification Action Plan, for the gradual electrification the government vehicle fleet.
- More than $175.0 million to renovate various rest stops on the Québec road network;
- Nearly $100.0 million for investments in bicycle and pedestrian paths. The Government intends to continue developing the Route Verte and its adjoining trails;

- Over $250.0 million for other infrastructure. This investment will make it possible to:
  - Continue the assistance program to improve the efficiency of marine, air and rail transportation by reducing GHG emissions;
  - Continue the program aimed at reducing or preventing GHG emissions by developing intermodal transportation.

2.4 Health and Social Services

The Gouvernement du Québec provides for investments of approximately $20.2 billion in the health and social services infrastructure in the 2019-2029 QIP.

Health and Social Services
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Maintenance of the health and social services infrastructure

Of the nearly $20.2 billion for the health and social services infrastructure, more than $10.1 billion (50%) will be allocated to network establishments for asset maintenance ($3.2 billion), elimination of the AMD ($1.4 billion) and replacement of infrastructure and equipment ($5.5 billion), to ensure continuity in services offered to citizens.

■ Projects "under study"

The Government authorized studies for numerous projects, including:

- Reuse of the Hôtel-Dieu de Québec buildings;
- Modernization of the endoscopy, operating and medical device reprocessing units at the Hôtel-Dieu de Lévis;

- Modernization of the operating, day surgery, cardiology and medical device reprocessing units at Hôpital du Sacré-Coeur de Montréal;
- Modernization of the Montreal General Hospital.

❑ Investments to enhance the service offer of health and social services

Under the 2019-2029 QIP, nearly $10.1 billion (50%) will enable network establishments to perform work on their infrastructure, which will increase the service offered to Quebecers.

■ New projects "in progress"

The new projects listed in this category include:

- Phase II of the construction of a new hospital complex on the Hôpital de l'Enfant-Jésus site:
  - The new hospital complex will group together the clinical services currently offered at Hôtel-Dieu de Québec and Hôpital de l'Enfant-Jésus. The project consists in constructing new buildings on the Hôpital de l'Enfant-Jésus site and redesigning certain existing spaces;
  - The various elements of the project should be progressively commissioned between June 2020 and December 2025.
- Construction of the Centre mère-enfant and the emergency room at Hôpital Fleurimont of the Centre hospitalier universitaire de Sherbrooke:
  - The project consists in grouping together, in a new construction on the Hôpital Fleurimont site, all of the departments providing care to mothers and children, as well as all emergency services;
  - This project should be progressively commissioned between 2020 and 2021.
- Expansion of the Centre intégré de traumatologie, a mother-and-child unit and an endoscopy service at the Hôpital du Sacré-Cœur de Montréal:
  - The project consists in building four storeys on top of the emergency department at Hôpital du Sacré-Cœur de Montréal to accommodate the trauma department, a mother-and-child centre and an endoscopy service;
  - Project commissioning is currently scheduled for May 2021.

■ New projects "in the planning stage"

Two new projects were listed "in the planning stage" category:

- Consolidation of rehabilitation centres for youth in difficulty in the Laurentides region:
  - This project will group all youth rehabilitation services for the Laurentides region into a new facility; these services are currently offered over three sites (Huberdeau, Sainte-Sophie and Saint-Jérôme).
- Expansion and modernization of Hôpital de Verdun:
  - This project will increase the proportion of beds in single rooms and consolidate ambulatory services. It will improve the efficiency of certain support services and ensure better consistency of Hôpital de Verdun critical services.

The scope of the project to expand the Hôpital Pierre-Le Gardeur was also modified:

- Based on demographic studies, authorization was given in 2014 for the project study to add 150 beds for physical health:
- However, the hospital faced major congestion, requiring it to open overflow units and double up beds in some single rooms:
- As a result, the current project proposes expanding to add 246 beds, which is 96 more than the initial request.

■ **Projects "under study"**

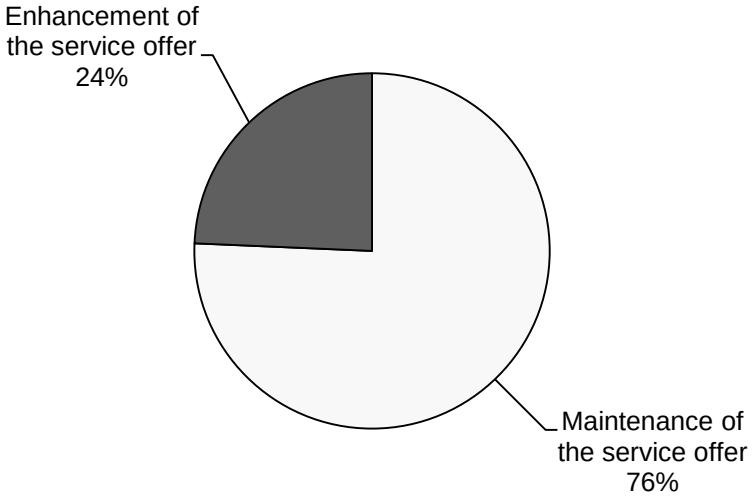
In order to assess the options that will meet the growing needs of the population in terms of health services, the Government authorized studying three new projects, namely:

- Construction of a new hospital in Chisasibi;
- Modernization of the emergency department and the care units at Hôpital de Saint-Eustache;
- A new hospital service offer in Outaouais.

2.5 Education

Investments of nearly $13.9 billion are earmarked for elementary and secondary schools in the education sector under the 2019-2029 QIP.

Education
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Investments to provide healthy and stimulating environments

Priority is given to maintaining the service offer, which represents 76% of the investment in the sector, or more than $10.5 billion. Of this amount, $7.9 billion is earmarked for asset maintenance, $2.1 billion for elimination of the AMD and $0.5 billion for asset replacement.

■ New projects "in the planning stage"

In addition to the new record investment allocated to school boards for maintaining the condition of their infrastructure, it should be noted that the Government also authorized listing the project to renovate the Commission scolaire de Montréal's FACE (Formation Artistique au Cœur de l'Éducation) school "in the planning stage" category:

- The FACE school is a mixed, bilingual, elementary and secondary school with an artistic focus, and is part of the Mount Royal Heritage Site. The building, which was constructed in 1914 and expanded in 1924, is classified as a heritage building due to its historical and architectural qualities. Numerous areas, both inside and outside of the building, are in urgent need of work to ensure its durability and the users' health and safety.

❑ Investments for additional learning spaces

Nearly $3.4 billion (24%) have been earmarked in the 2019-2029 QIP to enable school boards all over Québec to develop new facilities.

■ New projects "in the planning stage"

In order to mitigate a portion of the space deficit recognized by the Ministère de l'Éducation et de l'Enseignement supérieur, the Gouvernement du Québec authorized listing two new projects "in the planning stage" category:

- Acquisition of a lot in downtown Montréal and construction of a new elementary school within the Commission scolaire de Montréal;
- Addition of space to the elementary and secondary schools in Île-des-Sœurs for the Commission scolaire Marguerite-Bourgeoys.

■ Projects "under study"

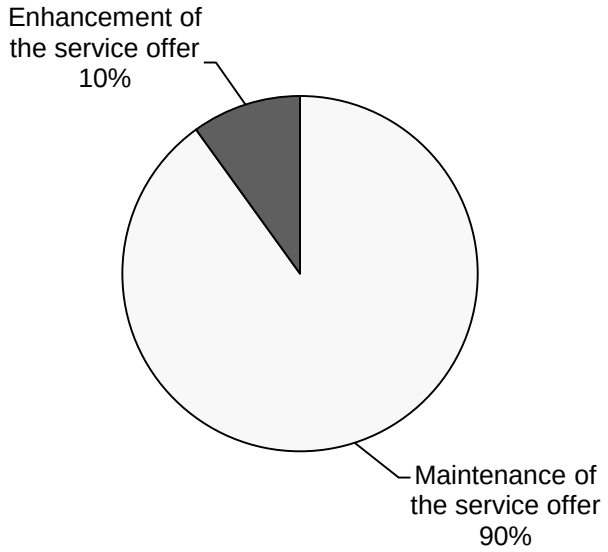
Several projects are listed as "under study" to allow the Government to assess their relevance and select the best long-term option. For example, the Government authorized studies for the following projects:

- Addition of secondary school and vocational training spaces at the Commission scolaire des Grandes-Seigneuries' Louis-Philippe-Paré complex;
- Expansion of the Commission scolaire des Grandes-Seigneuries' École de la Magdeleine secondary school;
- Additional space for vocational training (Centre 24-Juin) at the Commission scolaire de la Région-de-Sherbrooke.

2.6 Higher education

The 2019-2029 QIP provides for nearly $6.4 billion toward the higher education sector.

Higher Education
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Investments for the maintenance of colleges and universities

Priority is given to maintaining the service offer, which represents 90% of the investment in the sector, or more than $5.7 billion. Of this amount, nearly $3.4 billion are earmarked for asset maintenance, more than $1.1 billion for elimination of the AMD, and more than $1.2 billion primarily for equipment replacement.

■ New projects "in the planning stage"

The Government authorized developing a business case for the project to reallocate spaces that were freed up at the mountain site as a result of the Université de Montréal's Complexe des sciences project.

- The project consists in redesigning spaces left vacant at the mountain site subsequent to the relocation of several departments to the new Complexe des sciences, at the former Outremont shunting yard.
- The Roger-Gaudry, Marie-Victorin, J.A. DeSève and Lionel-Groulx pavilions will therefore undergo construction to make them more functional and better adapted to the needs of the departments to be transferred at these locations. This work will also help reduce the use of rented spaces.

❑ Investments to increase the service level and favour scientific research

Within the context of the 2019-2029 QIP, more than $600.0 million (10%) were earmarked to provide cutting-edge infrastructure and equipment to students and researchers in the higher education networks.

■ **Projects "under study"**

In the past year, the Government authorized studies for numerous projects, including:

- Construction of a new pavilion at the École de technologie supérieure on the Complexe Dow site;
- Acquisition and expansion of the J.-Armand-Bombardier pavilion and renovation of the vacated spaces in the Pavillon Principal at the Polytechnique Montréal;
- Redevelopment of the Université du Québec en Outaouais' Gatineau campus.

2.7 Research

Within the framework of the 2019-2029 QIP, investments of nearly $1.0 billion will be allocated for research infrastructure, particularly as part of the Research Support Program.

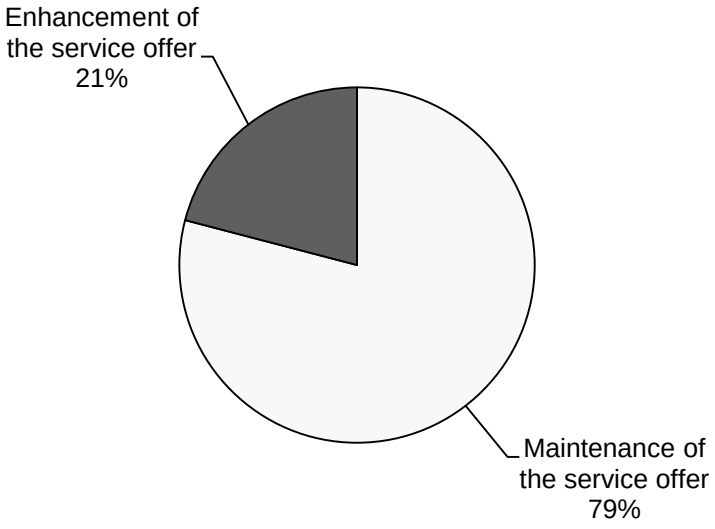
The various research infrastructure financial assistance programs aim to:

- Ensure that the research sectors, niches and branches with strong potential in the health, natural sciences, social and human sciences, as well as the arts and letters fields are appropriately developed by supporting research laboratories and centres;
- Consolidate the structured initiatives of research organizations or technological branches;
- Promote research partnerships between universities, institutions and industries.

2.8 Culture

Investments in the Culture sector included in the 2019-2029 QIP total nearly $1.6 billion.

Culture
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Maintenance of cultural heritage infrastructure

Nearly $1.2 billion (79%) are earmarked for maintaining and replacing cultural infrastructure, as well as for heritage restoration.

With a rich collective heritage to preserve, the Government must allocate a significant part of the budget to maintaining its cultural infrastructure in good condition. To that end, the Québec Cultural Heritage Fund was set up to ensure that the cultural heritage is conserved, transmitted and enhanced for present and future generations.

❑ Supplementation and improvement of the cultural infrastructure

Over the period covered by the QIP, investments of more than $325 million (21%) will enhance the cultural service offer.

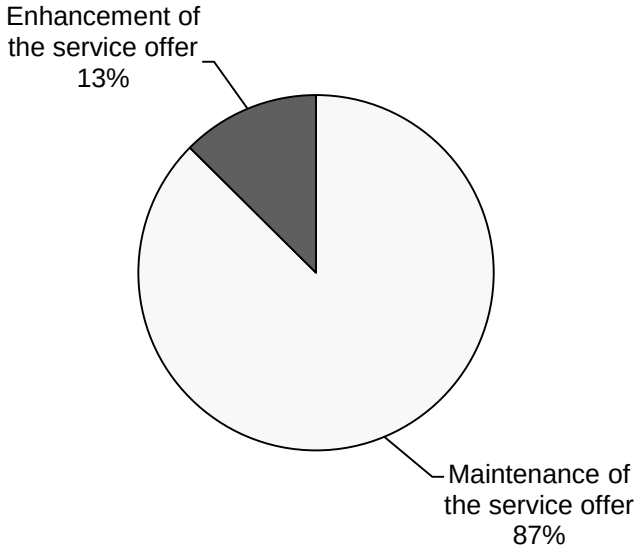
Within the context of the 2019-2029 QIP, additional investments will be made in the Culture sector, more specifically to:

- Ensure the sustainability of the Québec Cultural Heritage Fund;
- Enhance the financial assistance program for restoring religious heritage sites;
- Upgrade artists' studios in Montréal up to current standards.

2.9 Municipal infrastructure

The 2019-2029 QIP puts more than $7.2 billion toward Québec's municipal infrastructure.

Municipal Infrastructure
by Type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Investments in asset maintenance of municipal infrastructure

Of the total $7.2 billion allocated for municipal infrastructure, 87% will be earmarked for asset maintenance and infrastructure replacement in order to ensure continuity in services provided to citizens.

To that end, nearly $6.3 billion will be invested in work to rehabilitate or replace:

- Drinking water and sewage lines;
- Drinking water treatment plants;
- Wastewater treatment plants;
- Stormwater retention ponds and pumping stations.

Several projects are underway so that municipalities can rely to high-quality infrastructure for drinking water distribution and wastewater/stormwater collection, which will significantly contribute to sustainable development. For example:

- Construction of an ozone disinfection unit at the Jean-R.-Marcotte wastewater treatment plant in Montréal, to improve the treatment of discharged wastewater;
- Overhaul of the wastewater treatment plant and equipment in Gatineau;
- Upgrade of the drinking water facilities in Shawinigan by building two drinking water treatment plants to treat water from Lac à la Pêche and Lac des Piles.

❑ Investments for the development of municipal infrastructure

Nearly $0.9 billion (13%) have been earmarked in the 2019-2029 QIP to enable municipalities to carry out infrastructure development, increasing the service level offered to the population.

Numerous projects of $50.0 million or more targeting municipal development are currently underway, namely:

- Construction of an ice rink in Québec City to provide the public with a new speed skating training centre, as well as two regular skating rinks and a running track;
- Construction of the Colisée de Trois-Rivières, which will include a main arena and another skating rink accessible to the community;
- Construction of a multipurpose centre in Gatineau – Centre Robert-Guertin, which will feature a main arena and three additional skating rinks that will be accessible to the community.

2.10 Sports, community, tourism and recreational infrastructure

Over the 2019-2029 period, the QIP sets aside investments of nearly $2.2 billion for sports, community, tourism and recreational infrastructure.

Sports, Community, Tourism and Recreational Infrastructure
By Sector Component
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Sports and Physical Activity Development Fund	718.0	32.9
Régie des installations olympiques	413.1	18.9
Société des établissements de plein air du Québec	318.5	14.6
Biomethanization and composting	276.3	12.7
Tourism	165.6	7.6
Other Infrastructure	290.3	13.3
Total	**2,181.7**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

❑ Sports and Physical Activity Development Fund

The 2019-2029 QIP has allocated $718.0 million (32.9%) toward developing sports and other physical activities. These investments will allow the Gouvernement du Québec to:

- Assume its contributions to projects that will be retained within the context of the Integrated Bilateral Agreement with the federal government;
- Enhance the program to support the upgrading and improvement of trails and other sites for outdoor activities.

Furthermore, Phases II, III, IV and V of the Programme de soutien aux installations sportives et récréatives and the Programme de soutien pour le remplacement ou la modification des systèmes de réfrigération fonctionnant au gaz R-22 will provide for the following projects:

- Construction of a multi-sport centre in Jonquière;
- Construction of a sports centre on the Lévis campus of Université du Québec à Rimouski;
- Construction of an aquatic complex in Matane;
- Construction of an indoor pool in Beaupré;
- Renovation of Aréna Raymond-Bourque in the Saint-Laurent borough of Montréal.

❑ Régie des installations olympiques

$413.1 million are earmarked in the 2019-2029 QIP for the maintenance of infrastructure under the responsibility of the RIO.

This includes:

- Installing a new fire alarm system in the Olympic Park;
- Repairing the Olympic Stadium's structural components.

In addition, during 2019-2020, the RIO will continue planning for projects to replace the Olympic Stadium's roof and lighting system.

❑ Société des établissements de plein air du Québec

Investments in Société des établissements de plein air du Québec national parks will total $318.5 million for the period covered by the QIP. This investment will make it possible to:

- Continue projects already in progress, including creation of the Parc national d'Opémican in the Abitibi-Témiscamingue region.
- Implement certain government orientations, including the Stratégie de mise en valeur du tourisme de nature et d'aventure as well as the Stratégie de mise en valeur du tourisme hivernal.

❑ Biomethanization and composting

Government contributions of $276.3 million will be allocated to the projects to build biomethanization and composting plants, including for the continuation of the city of Montréal's project. In addition, planning for the biomethanization plant construction projects in Québec City, Laval and Longueuil will continue.

- With the investments it intends to make to develop plants that produce biogas from food waste, the Government will contribute to the province's economic and sustainable development.

❑ Tourism

An amount of $165.6 million was allocated for investments in infrastructure, primarily for supporting the tourism component of the Maritime Strategy and for implementing sectoral tourism strategies.

This amount will also allow the Gouvernement du Québec to assume its contribution to the first phase of the Parc Safari development plan, as well as the global development plan for the Zoo sauvage de St-Félicien's Center for Boreal Biodiversity Conservation Foundation.

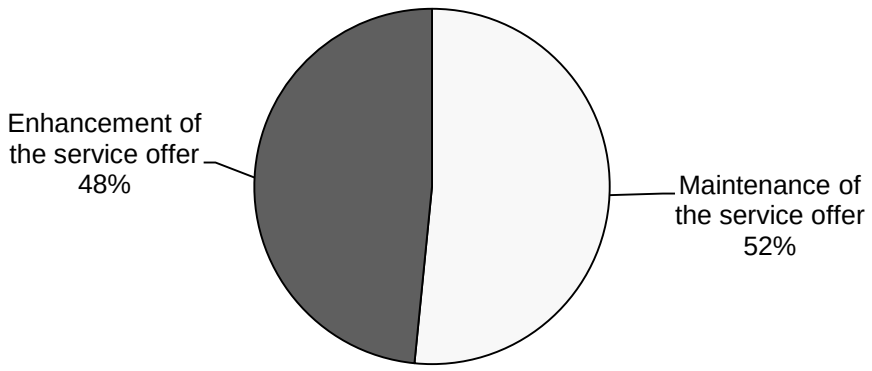
❑ Other infrastructure

An amount of $290.3 million is earmarked in the 2019-2029 QIP for other infrastructure, including those belonging to the Commission de la capitale nationale du Québec, the Société du Palais des congrès de Montréal, and the Société du Centre des congrès de Québec.

2.11 Social and community housing

In the 2019-2029 QIP, investments of over $2.4 billion are planned for social and community housing, both for infrastructure that belongs to the SHQ and for those owned by NPO or MHB.

Social and Community Housing
By type of Investment
(Gouvernement du Québec contribution as a percentage)



❑ Maintenance and rehabilitation of social and community housing

Of the total $2.4 billion allocated for Social and community housing, more than $1.2 billion (52%) will be allocated to asset maintenance, elimination of the AMD, and infrastructure replacement to ensure continuity of services provided to citizens.

❑ Investments for the development of social and community housing

Nearly $1.2 billion (48%) is allocated for work that will improve the service offer to the public.

2.12 Government buildings

In the 2019-2029 QIP, investments of more than $2.6 billion will be allocated to government buildings, namely office buildings, courthouses, detention centres and Sûreté du Québec police stations.

Government Buildings
By Sector Component
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Office buildings	1,441.7	55.4
Courthouses	532.1	20.4
Detention Facilities	478.4	18.4
Sûreté du Québec Police Stations	149.8	5.8
Total	**2,602.0**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

❑ Office buildings

Over the period covered by the QIP, $1.4 billion (55.4%) will be invested in office buildings. Of this amount:

- More than $750.0 million will be used for the maintenance of various components (electrical, mechanical and ventilation systems in government office buildings, exterior cladding, parking lots, etc.);
- More than $650.0 million will allow for the completion of projects related to the development of the Government's real estate spaces.

❑ Courthouses

Under the 2019-2029 QIP, investments of $532.1 million (20.4%) will be made in courthouses.

An amount of over $270.0 million will be used for the maintenance of Québec's courthouses, while more than $260.0 million will be used to improve the existing courthouse facilities.

❑ Detention facilities

The 2019-2029 QIP provides for an investment of $478.4 million (18.4%) in detention facilities.

Of this amount, over $375.0 million will be used to keep these establishments in good condition, while nearly $100.0 million will be invested in improving the existing detention centre facilities.

❑ Sûreté du Québec police stations

Over the period covered by the QIP, $149.8 million (5.8%) will be invested in Sûreté du Québec police stations.

Of this amount, over $60.0 million will be used for maintenance, while nearly $90.0 million will be used to construct new facilities, including the Dunham station in the Montérégie region and the Saint-Georges station in the Chaudières-Appalaches region.

2.13 Information Resources

Under the 2019-2029 QIP, over $5.7 billion will be invested in technological infrastructure for various departments, bodies and non-budget-funded bodies, as well as information technology for the health and social services, education and higher education networks. Of this amount, nearly $900.0 million will be dedicated to the digital action plan for education and higher education, the governemental strategy for digital public administration, for the standardization of information systems in the health and social services network, and the transformation of the justice system.

Information Resources
By Sector Component
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Departments, Bodies ans Bodies than other Budget-funded Bodies	3,842.7	66.8
Health and Social Services Network	897.5	15.6
Education Network	775.3	13.5
Higher education Network	172.3	3.0
State-owned cultural bodies and enterprises	61.2	1.1
Total	**5,749.1**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

More information regarding the information resource projects is presented in the Tableau de bord sur l'état de santé des projets en ressources informationnelles du gouvernement[2].

2.14 Other sectors

The 2019-2029 QIP provides for investments of nearly $3.7 billion in other sectors.

Other Sectors
By Sector Component
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Plan Nord	1,018.3	27.7
Forest and wildlife infrastructure	434.0	11.8
Childcare centres	401.8	10.9
Public dams	242.7	6.6
Other Infrastructure	1,580.7	43.0
Total	**3,677.5**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[2] This additional information can be found at the following web address: https://www.tableaudebordprojetsri.gouv.qc.ca/ (in French only)

❑ Plan Nord

Over the period covered by the QIP, investments of more than $1.0 billion (27.7%) will be carried out under the Plan Nord. Of this amount:

- More than $270.0 million will be used for the maintenance of infrastructure covered by the Plan Nord;
- Over $745.0 million will be used to carry out improvement plans that will have an effect on the economic development of Québec, including an additional investment of $50.0 million in the Société ferroviaire et portuaire de Pointe-Noire in Sept-Îles.

The projects planned as part of the Plan Nord include:

- The James Bay Road rehabilitation project, under the "in progress" category;
- The Kegaska–La Romaine and Tête-à-la-Baleine–La Tabatière segments of the Route 138 extension plan in Basse-Côte-Nord, under the "in the planning stage" category;
- Construction of the Science Complex at the Institut nordique du Québec, under the "in the planning stage" category.

Several other projects are also in progress, including:

- The deployment of a fibre optics telecommunications network in Nunavik;
- The creation of four national parks.

❑ Forest and wildlife infrastructures

An amount of $434.0 million (11.8%) will be invested in forest and wildlife infrastructures over the 2019-2029 period.

- Over $125.0 million will be used for the maintenance of forests and wildlife infrastructure;
- More than $325.0 million will be used to improve these infrastructures' service offers.

These investments will primarily be allocated to:

- Continue asset maintenance and development programs for multi-use roads;
- Upgrade seedling production infrastructures.

❑ Childcare centres

Under the QIP, $401.8 million (10.9%) will be invested in childcare centres.

- Nearly $90.0 million will be used for the maintenance of childcare centres infrastructure;
- Over $310.0 million will be used to build new infrastructures, allowing for the creation of more childcare spaces.

❑ Public dams

Under the 2019-2029 QIP, $242.7 million (6.6%) will be invested to keep the public dams owned by the MELCC in good condition.

❑ Other infrastructure

Nearly $1.6 billion (43.0%) is earmarked in the 2019-2029 QIP for other infrastructure:

- More than $220.0 million for property and equipment belonging to the Agence du revenu du Québec;
- More than $190.0 million for the infrastructure belonging to MAPAQ's Institut de technologie agroalimentaire, and Corporations de recherche et d'expertise;
- More than $80.0 million for the acquisition of various types of vehicles and equipment by the Police Services Fund;
- Nearly $70.0 million for Héma-Québec infrastructure;
- Over $1.0 billion for acquisitions by all other departments and bodies.

3. Other information in the Québec Infrastructure Plan

3.1 Investments by administrative region

Over the period covered by the 2019-2029 QIP, investments of $115.4 billion will be made in all regions of Québec.

Investments under the 2019-2029 QIP
By Administrative Region
(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

01 - Bas-Saint-Laurent	2,701.8	2.3
02 - Saguenay–Lac-Saint-Jean	2,963.2	2.6
03 - Capitale-Nationale	16,828.1	14.6
04 - Mauricie	2,826.6	2.4
05 - Estrie	3,098.4	2.7
06 - Montréal	33,554.2	29.1
07 - Outaouais	3,222.1	2.8
08 - Abitibi-Témiscamingue	1,557.8	1.3
09 - Côte-Nord	2,517.5	2.2
10 - Nord-du-Québec	1,910.8	1.7
11 - Gaspésie–Îles-de-la-Madeleine	1,517.5	1.3
12 - Chaudière-Appalaches	4,323.6	3.7
13 - Laval	3,801.7	3.3
14 - Lanaudière	3,331.0	2.9
15 - Laurentides	4,171.3	3.6
16 - Montérégie	13,459.6	11.7
17 - Centre-du-Québec	1,632.7	1.4
Government buildings abroad	20.0	–
Central envelope[1]	11,962.1	10.4
Total	**115,400.0**	**100.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] This envelope ensures the financing potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sectors requires a Cabinet decision.

3.2 Investments according to projects' degrees of progress

All infrastructure projects valued at $50 million or more listed in the 2019-2029 QIP are divided into three categories, based on their degree of progress.

Investments in Major Projects under the 2019-2029 QIP
By Degree of Progress
(contribution of the Gouvernement du Québec, in millions of dollars)

Projects valued at $50 million or more		
Under study	325,1	0,3
In the planning stage	13 887,4	12,0
In progress	11 521,3	10,0
Subtotal – Projects valued at $50 million or more	**25 733,9**	**22,3**
Central envelope[1]	11 962,1	10,4
Projets valued at less than $50 million and others envelopes	77 704,0	67,3
Total	**115 400,0**	**100,0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] This envelope ensures the financing potentially required to implement the projects retained and prioritized by the Government from among those studied. Transfer of funds to the sectors requires a Cabinet decision.

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4. Projects valued at $50.0 million or more

Projects valued at $50.0 million or more included in the QIP account for a significant proportion of the amounts forecast for the 2019-2029 period.

Projects currently "in progress" or "in the planning stage" have been fully provided for in the sectors involved, while projects "under study" have been allocated only the amounts required to conduct the studies. For some projects “in the planning stage”, the amounts have been reserved in the central envelope.

This list of projects valued at over $50.0 million includes a total of 202 projects, broken down by sector. Most of these projects (nearly 75%) are under the responsibility of the Minister of Transports or the Minister of Health and Social Services.

Number of Projects Valued at $50.0 million or More
By Sector and Degree of Progress

	In progress	In the planning stage	Under study	Total
Road network	24	24	18	66
Public transit	14	19	5	38
Marine, air, rail and other transportation	—	3	3	6
Health and social services	14	4	21	39
Higher education and research	—	3	4	7
Culture	3	2	5	10
Public transit	1	—	—	1
Municipal infrastructure	12	—	—	12
Municipal, sports, community, tourism and recreational infrastructure	2	5	2	9
Government buildings	2	3	2	7
Information resources	1	2	1	4
Other	1	1	1	3
Total	**74**	**66**	**62**	**202**

Note: No projects valued at $50.0 million or more are planned for the education or social and community housing sectors.

4.1 List of projects valued at $50.0 million or more in the 2019-2029 QIP

Road Network

In Progress

(millions of dollars)

	Name	Region	Québec Contribution[1]					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Reconstruction of the Turcot interchange	06	2,374.1	418.7	880.6	1,299.2	3,673.3	–	3,673.3
2-	Redevelopment of Route 185 between Autoroute 20 and the New Brunswick border - Phase III	01	44.2	64.0	445.0	509.0	553.2	389.7	942.9
3-	Dorval circle – Redevelopment of interchange between Autoroute 20 and 520	06	171.1	69.5	–	69.5	240.6	103.6	344.2
4-	Widening of Autoroute Henri-IV – Phase II[2]	03	42.0	39.4	81.3	120.6	162.6	128.6	291.2
5-	Redevelopment of Route 35 between Saint-Jean-sur-Richelieu and the U.S. border – Phases I and II	16	161.1	39.4	–	39.4	200.5	44.3	244.7
6-	Major repair of the Pie-IX bridge between Montréal and Laval	06-13	11.4	15.6	167.5	183.1	194.5	4.1	198.6
7-	Extension of Autoroute 5 from Chemin de la Rivière to the Route 105	07	78.8	0.7	11.4	12.1	90.9	78.0	168.9
8-	Reconstruction of the Gouin bridge between Saint-Jean-sur-Richelieu and Iberville	16	57.4	30.7	6.2	36.9	94.3	32.0	126.3
9-	Construction of a bypass for Rouyn Noranda	08	93.5	23.1	–	23.1	116.7	0.4	117.0
10-	Bypass south of Sherbrooke by extending Autoroute 410 - Phase II	05	13.0	20.5	14.5	35.0	48.0	37.3	85.2
11-	Redevelopment of routes 173 and 277	12	60.5	13.0	11.8	24.8	85.2	–	85.2
12-	Construction of a bypass for Isle Maligne in Alma	02	26.4	18.6	38.9	57.5	83.9	0.2	84.1

Road Network (cont'd)

In Progress

(millions of dollars)

	Name	Region	Québec Contribution[1]					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
13-	Reconstruction of the Côte Arsène-Gagnon on Route 138 in Les Bergeronnes	09	18.1	26.4	39.0	65.4	83.4	–	83.4
14-	Improvement of Route Obedjiwan in La Tuque and Lac-Ashuapmushuan	02-04	13.4	10.4	53.3	63.8	77.2	–	77.2
15-	Rehabilitation of the interchange between Autoroutes 13 and 40	06	11.2	18.4	37.7	56.1	67.3	–	67.3
16-	Redevelopment of the Autoroute 20 and Route 171 (Route Lagueux) interchange in Lévis	12	27.4	23.9	11.1	35.0	62.4	–	62.4
17-	Reconstruction and improvement of various sections of Route 138 between Baie-Comeau and Port-Cartier	09	5.5	18.2	30.2	48.5	54.0	–	54.0
18-	Maintenance of the Turcot and La Vérendrye interchanges	06	347.9	2.2	0.0	2.2	350.1	–	350.1
19-	Maintenance of the Honoré-Mercier bridge	06-16	180.2	14.6	69.9	84.5	264.7	–	264.7
20-	Maintenance of the Saint-Pierre interchange structure	06	127.9	1.6	53.5	55.1	183.0	–	183.0
21-	Maintenance of the Autoroute Métropolitaine structure	06	163.1	0.2	13.3	13.5	176.6	–	176.6
22-	Maintenance of the Île-aux-Tourtes bridge	06-16	89.3	15.1	29.8	45.0	134.3	–	134.3
23-	Maintenance of the Ville-Marie and Viger tunnels in Montréal	06	97.2	12.9	13.3	26.2	123.4	8.4	131.8
24-	Maintenance of the Île-d'Orléans bridge until its reconstruction	03	37.3	8.0	13.2	21.2	58.5	–	58.5
Total			**4,252.0**	**905.2**	**2,021.5**	**2,926.7**	**7,178.6**	**826.4**	**8,005.1**

Road Network
In the Planning Stage

	Name	Region
1-	Completion of Autoroute 70 - Section between Grande-Anse and La Baie	02
2-	Reconstruction of the Île d'Orléans bridge	03
3-	Repairs to the Chemin des Quatre-Bourgeois bridge over Autoroute 73 in Québec city	03
4-	Implementation of a new connection between Québec City and Lévis	03-12
5-	Repairs to the framework, metallization and painting on the Pierre-Laporte bridge - Phase II	03-12
6-	Rehabilitation of the slab on the Laviolette bridge in Trois-Rivières	04
7-	Repair of the Route 138 structure over Rivière Batiscan	04
8-	Improved access to the Port of Montréal through the Boulevard de l'Assomption	06
9-	Removal of louvre grids and repair of lighting in Montréal's Dorval tunnel	06
10-	Rebuilding of the concrete pavement roadway on Autoroute 40 in Kirkland and Baie D'Urfé	06
11-	Major repair of the Ville-Marie and Viger tunnels	06
12-	Reconstruction of the Île-aux-Tourtes bridge between Vaudreuil-Dorion and Senneville	06-16
13-	Reconstruction of the Honoré-Mercier bridge	06-16
14-	Major repair of the Louis-Hippolyte-La Fontaine tunnel	06-16
15-	Extension of Route 138 - Kegaska–La Romaine segment	09
16-	Extension of Route 138 - La Tabatière–Tête-à-la-Baleine segment	09
17-	Redevelopment of Route 138 for the Tadoussac and Baie-Sainte-Catherine ferry crossing	09
18-	Repair of Route 389 between Baie-Comeau and Fermont	09
19-	Widening of Autoroute 20 in Lévis	12
20-	Extension of Autoroute 19 between Autoroute 440 and 640 from Laval to Bois des Fillion	13-15
21-	Major repair of Vachon bridge between Laval and Boisbriand	13-15
22-	Extension of Autoroute 35 to the U.S. border – Phases III and IV	16
23-	Work on the concrete pavement on Autoroute 20 between the municipalities of Mont-Saint-Hilaire and Saint-Hyacinthe	16
24-	Work on the Autoroute 30 bridge in Sorel-Tracy over Rivière Richelieu	16

Road Network
Under Study

	Name	Region
1-	Development of Route 170 in Saint-Bruno in Saguenay–Lac-Saint-Jean and Route 169 in Alma	02
2-	Upgrading of Autoroute Laurentienne between the Lebourgneuf exit and La Croix-Rouge in Québec City[3]	03
3-	Reconstruction of interchanges north of the Québec and Pierre-Laporte bridges	03
4-	Construction of a bridge over Rivière Saguenay between Tadoussac and Baie-Sainte-Catherine	03-09
5-	Major repair of the Québec bridge deck	03-12
6-	Connection of two sections of Boulevard Cavendish in Montréal	06
7-	Reconstruction of the Saint-Pierre interchange	06
8-	Major repair of Autoroute Métropolitaine structures in Montréal	06
9-	Upgrading of Autoroute 50 between Gatineau and Mirabel	07-15
10-	Redevelopment of the Autoroute 20 and Route 173 interchange in Lévis	12
11-	Addition of reserved lanes and repair of roadway on Autoroute 15 in Laval and the Laurentides	13-15
12-	Major repair of Gédéon-Ouimet bridge (Autoroute 15) between Laval and Boisbriand	13-15
13-	Transit optimisation on the Autoroute 13 corridor between Autoroutes 640 and 50	15
14-	Widening of Route 117 to four lanes between Labelle and Rivière-Rouge	15
15-	Development of Place Charles-Le Moyne in Longueuil	16
16-	Widening of the Autoroute 30 between Autoroutes 10 and 20 on Montréal's South Shore	16
17-	Redevelopment of Route 132 between Rue Principale in Delson and Autoroute 730 in Sainte-Catherine and Saint-Constant	16
18-	Upgrading of Autoroute 55 between the Des Acadiens interchange and Autoroute 20	17

Public Transit
In Progress
(millions of dollars)

	Name	Region	Québec Contribution[4]					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Replacement of MR-63 Montréal metro cars	06	1,348.7	178.4	65.3	243.7	1,592.4	530.0	2,122.4
2-	Acquisition of 153 additional Montréal métro AZUR cars	06	–	57.7	243.2	300.9	300.9	279.8	580.7
3-	Réno-Systèmes IV program - Montréal metro	06	68.1	64.1	262.0	326.0	394.1	175.9	570.0
4-	Réno-Systèmes III program - Montréal metro	06	206.0	12.5	44.2	56.7	262.7	237.3	500.0
5-	Construction of an underground garage at the Côte-Vertu metro station	06	108.3	54.2	98.2	152.4	260.7	178.5	439.3
6-	Implementation of a bus rapid transit service integrated into the upgrade of Pie IX corridor between Montréal and Laval	06-13	32.9	71.4	184.0	255.4	288.4	105.4	393.8
7-	Construction of the Pointe-Saint-Charles maintenance centre	06	203.4	4.3	–	4.3	207.7	113.0	320.7
8-	Réno-Infrastructures II program - Montréal metro	06	42.1	36.7	133.0	169.7	211.8	88.2	300.0
9-	Reconstruction of the Crémazie centre (Société de transport de Montréal)	06	32.8	12.3	46.2	58.5	91.3	165.3	256.6
10-	Réno-infrastructures I program - Montréal metro	06	156.6	8.0	12.6	20.6	177.2	72.8	250.0
11-	Subway station accessibility program - Phase I	06	12.2	17.2	123.6	140.8	153.0	56.7	209.7
12-	Acquisition of new commuter rail cars (2000 Class rail cars)	06-16	26.5	47.5	0.4	47.9	74.4	28.8	103.2
13-	Construction of a new entrance shelter a pedestrian walkway at the Vendôme multimodal hub	06	30.3	18.5	27.7	46.1	76.5	–	76.5
14-	Extension of the useful life of MR 73 metro cars	06	19.1	12.2	18.9	31.1	50.2	18.8	69.0
Total			**2,287.2**	**594.7**	**1,259.4**	**1,854.1**	**4,141.3**	**2,050.5**	**6,191.8**

Public Transit
In the Planning Stage

	Name	Region
1-	Installation of a structuring new public transit system in Québec	03
2-	Acquisition of diesel locomotives for the Exo commuter train system	06
3-	Acquisition of additional commuter rail cars (type 2000) for the Exo commuter train system	06
4-	Acquisition of the land and connecting station between the Mascouche commuter train line and the Réseau express métropolitain (REM)	06
5-	Expansion of three transportation centers for the Société de transport de Montréal (Anjou, Legendre et Saint-Laurent)	06
6-	Expansion of the Viau attachment center for Montréal metro maintenance vehicles	06
7-	Construction of the Bellechasse transportation centre	06
8-	Construction of the Estern transportation center for the STM's buses	06
9-	Subway station accessibility program – Phase II	06
10-	Infrastructure maintenance program – Phase II - Société de transport de Montréal	06
11-	Réno-Infrastructures program – Phase III - Montréal metro	06
12-	Réno-Systèmes program – Phase V - Montréal metro	06
13-	Extension of the Montréal metro blue line	06
14-	Replacement of 12-kilovolt step-down substations by 25-kilovolt step-down substations for the Montréal metro	06
15-	Extension of Rapibus in the eastern portion of Ville de Gatineau – Phase III – Lorrain – Airport section	07
16-	Implementation of priority measures for public transit on Boulevard Guillaume-Couture in Lévis	12
17-	Construction of a hangar for the Société de transport de Laval buses – Phase IV	13
18-	Electric conversion of the operation center of the Réseau de transport de Longueuil	16
19-	Major repairs to the operations centre of the Réseau de transport de Longueuil in Saint-Hubert	16

Public Transit
Under Study

	Name	Region
1-	Implementation of structuring public transit in Montréal's East end	06
2-	Implementation of a metropolitan network of reserved lanes for Autoroutes 13, 20, 25, 440, 640 and Route 116	06-15-16
3-	Implementation of a new public transit system in southwestern Gatineau	07
4-	Implementation of structuring public transit along the Yellow line extension of the Longueuil métro	16
5-	Implementation of structuring public transit on Boulevard Taschereau in Longueuil	16

Marine, Air, Rail and Other Transportation
In the Planning Stage

	Name	Region
1-	Construction of the Lac-Mégantic bypass route	05
2-	Rehabilitation of the rail line between Matapédia and Caplan[5]	11
3-	Rehabilitation of the rail line between Caplan and Port-Daniel-Gascons	11

Marine, Air, Rail and Other Transportation
Under Study

	Name	Region
1-	Rehabilitation of the rail line between Port-Daniel-Gascons and Gaspé	11
2-	Enhancement of the shore to shore link between Montérégie and Lanaudière	14-16
3-	Feasibility of the logistics center	16

Health and Social Services

In Progress

(millions of dollars)

	Name	Region	Québec Contribution					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Construction of the new Centre hospitalier de l'Université de Montréal (CHUM) and research centre[6]	06	2,568.8	76.1	445.9	522.0	3,090.8	540.1	3,630.8
2-	Construction of a new hospital complex on the Hôpital de l'Enfant Jésus site in Québec City – Phase I and II	03	420.3	273.0	1,086.9	1,359.9	1,780.2	187.3	1,967.5
3-	Expansion and modernization of the Centre hospitalier universitaire Sainte-Justine - Grandir en santé	06	625.9	16.0	165.3	181.3	807.2	132.5	939.6
4-	Relocation of Hôpital de Baie-Saint-Paul	03	219.2	28.9	18.2	47.1	266.3	–	266.3
5-	Expansion of the Montréal Heart Institute's emergency, ambulatory services, and training centre departments	06	36.4	46.5	85.6	132.1	168.5	57.1	225.6
6-	Construction of the Centre mère-enfant and the emergency at Hôpital Fleurimont du Centre hospitalier universitaire de Sherbrooke	05	29.4	37.7	112.3	150.0	179.4	18.3	197.7
7-	Construction of an integrated regional cancerology centre at Hôtel-Dieu de Lévis	12	105.3	32.9	19.5	52.4	157.7	–	157.7
8-	Expansion of the Centre intégré de traumatologie, mother-and-baby unit and the endoscopy service of the Hôpital du Sacré-Coeur de Montréal	06	59.7	29.8	53.2	83.0	142.7	12.4	155.1
9-	New mental healthcare pavilion at Hôpital régional de Saint-Jérôme	15	17.6	10.6	81.8	92.4	110.0	0.4	110.4
10-	Major expansion and redevelopment of Hôpital Haut-Richelieu	16	95.6	8.8	4.0	12.8	108.4	1.2	109.6
11-	Redeployment of the campus of Hôpital de Lachine	06	2.0	2.3	90.7	93.0	95.0	–	95.0
12-	Construction of a 212 bed CHSLD in Saint-Jérôme	15	52.2	7.4	1.5	8.9	61.1	1.7	62.8
13-	Expansion and redevelopment of the Pavillon Sainte-Marie (Phase II) at the Centre hospitalier régional de Trois-Rivières	04	50.2	6.8	2.8	9.6	59.8	–	59.8
14-	Construction of a new pavilion for dialysis service of the Hôpital Maisonneuve-Rosemont	06	26.4	17.1	10.0	27.1	53.5	–	53.5
Total			**4,309.1**	**593.9**	**2,177.7**	**2,771.6**	**7,080.6**	**950.9**	**8,031.5**

Health and Social Services
In the Planning Stage

	Name	Region
1-	Expansion and modernization of Hôpital de Verdun	06
2-	Additional beds for Hôpital Pierre-Le Gardeur	14
3-	Consolidation of rehabilitation centres for youth in difficulty in the Laurentides region	15
4-	Construction of a new hospital in Vaudreuil-Soulanges	16

Health and Social Services
Under Study

	Name	Region
1-	Construction of a new surgical complex and upgrading to standards certain sectors of mental healthcare at Hôpital régional de Rimouski	01
2-	Expansion and redevelopment of the operating suite and medical device reprocessing unit at Hôpital de Chicoutimi	02
3-	Expansion of the Hôpital La Malbaie	03
4-	Reuse of Hôtel-Dieu de Québec buildings	03
5-	Expansion and redevelopment of the emergency room at Hôpital du Centre-de-la-Mauricie (Shawinigan)	04
6-	Expansion and redevelopment of Hôpital Maisonneuve-Rosemont	06
7-	Expansion and redevelopment of the emergency room at Lakeshore General Hospital	06
8-	Upgrading and modernization of care units at St. Mary's Hospital Centre	06
9-	Modernization of Montreal General Hospital	06
10-	Modernization of the operating suite, the day surgery unit, the cardiology unit and the medical device reprocessing unit at Hôpital du Sacré-Cœur de Montréal – Phase III	06
11-	Redevelopment of spaces at the Jewish General Hospital – Phase IV	06
12-	New hospital service offerings in Outaouais	07
13-	Construction of a radiation therapy centre at Hôpital de Rouyn Noranda	08
14-	Construction of a new hospital in Chisasibi	10
15-	Modernization of the endoscopic suite, the operating suite and the medical device reprocessing unit at Hôtel-Dieu de Lévis	12
16-	Modernization of Hôpital de la Cité-de-la-Santé	13
17-	Modernization of the emergency room and care units at Hôpital de Saint-Eustache	15
18-	Modernization of Hôpital de Saint-Jérôme	15
19-	Expansion of Hôpital Charles-Le Moyne	16
20-	Expansion and redevelopment of Hôpital Pierre-Boucher	16
21-	Expansion and redevelopment of Hôtel-Dieu d'Arthabaska	17

Education
In the Planning Stage

	Name	Region
1-	Land acquisition in downtown Montréal and construction of new primary school at Commission scolaire de Montréal	06
2-	Additional primary and secondary education spaces on Île-des-Sœurs at Commission scolaire Marguerite-Bourgeoys	06
3-	Rehabilitation of FACE school at Commission scolaire de Montréal	06

Education
Under Study

	Name	Region
1-	Additional spaces in Centre de formation professionnelle 24-Juin at Commission scolaire de la Région-de-Sherbrooke	05
2-	Additional vocational training and secondary education spaces at Commission scolaire de Laval	13
3-	Additional vocational training and secondary education spaces to the Complexe Louis-Philippe-Paré at Commission scolaire des Grandes-Seigneuries	16
4-	Additional education spaces and redevelopment to the École secondaire de la Magdeleine at Commission scolaire des Grandes-Seigneuries	16

Higher Education and Research
In Progress
(millions of dollars)

	Name	Region	Québec Contribution					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Construction of a science complex at Université de Montréal	06	109.1	35.8	0.2	35.9	145.0	203.3	348.3
2-	Addition of space in downtown Montréal at HEC Montréal	06	10.5	32.7	50.3	83.0	93.5	89.6	183.1
3-	Construction of a new pavilion at the École de technologie supérieur	06	14.6	1.6	–	1.6	16.2	37.7	53.9
Total			**134.1**	**70.1**	**50.5**	**120.6**	**254.7**	**330.6**	**585.3**

Higher Education and Research
In the Planning Stage

	Name	Region
1-	Reallocation of spaces freed up on the mountain site by the Complexe des sciences de l'Université de Montréal project	06
2-	Renovation of Wilson Hall at McGill University	06

Higher Education and Research
Under Study

	Name	Region
1-	Acquisition and expansion of the J.-Armand-Bombardier pavilion and rehabilitation of the vacated space in the principal pavilion of Polytechnique Montréal	06
2-	Additional spaces at Collège Dawson	06
3-	Additional spaces at the Dow Complex of École de Technologie Supérieure	06
4-	Development of McGill University on a section of the Royal Victoria Hospital site	06
5-	Redevelopment of the Gatineau campus at Université du Québec en Outaouais	07

Culture
In Progress
(millions of dollars)

	Name	Region	Québec Contribution					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Design and construction of the Le Diamant auditorium in Québec City	03	26.1	3.9	–	3.9	30.0	27.0	57.0
Total			**26.1**	**3.9**	**–**	**3.9**	**30.0**	**27.0**	**57.0**

Municipal Infrastructure
In Progress
(millions of dollars)

	Name	Region	Québec Contribution					Partner Contributions	Total Cost
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Construction of a wastewater purification station in Montréal (Jean-R.-Marcotte)	06	34.4	11.8	17.6	29.4	63.8	86.3	150.0
2-	Construction of wastewater retention ponds to control stormwater in Montréal	06	19.3	15.0	15.0	30.0	49.3	98.7	148.0
3-	Development of the Quartier des spectacles in Montréal	06	34.7	5.3	–	5.3	40.0	80.0	120.0
4-	Development of the Outremont rail yard in Montréal	06	18.7	4.7	6.6	11.3	30.0	90.0	120.0
5-	Development of Parc Jean-Drapeau	06	29.0	6.0	–	6.0	35.0	47.0	82.0
6-	Construction of a wastewater purification station in Gatineau	07	12.9	40.2	–	40.2	53.1	26.5	79.6
7-	Restoration of Saint Joseph's Oratory	06	21.8	3.8	5.3	9.0	30.8	48.4	79.2
8-	Relocation the water intake and partially cover the aqueduct canal at Monréal's Atwater plant	06	54.6	5.3	–	5.3	59.8	12.3	72.1
9-	Construction of a skating oval in Québec City	03	13.8	8.5	0.6	9.1	22.9	45.1	68.0
10-	Upgrading of drinking water facilities to standards in Shawinigan	04	21.1	3.0	–	3.0	24.0	40.1	64.1
11-	Construction of Colisée de Trois-Rivières	04	13.9	12.9	–	12.9	26.8	26.8	53.6
12-	Construction of a multipurpose arena in Gatineau - Centre Robert-Guertin	07	11.8	4.4	10.3	14.7	26.5	26.5	53.0
Total			**286.0**	**120.7**	**55.3**	**176.0**	**462.0**	**627.6**	**1,089.6**

Sports, Community, Tourism and Recreational Infrastructure
In Progress
(millions of dollars)

Name	Region	Québec Contribution					Partner Contributions	Total Cost
		Before 2019-2020	2019-2029 QIP			Total		
			2019-2020	2020-2029	Total			
1- Development of the Promenade Samuel-De Champlain – Phase III	03	19.0	68.3	72.3	140.5	159.5	11.6	171.1
2- Rehabilitation of the ferry terminal and the Alexandra jetty in the Vieux-Montréal and Vieux-Port sector	06	16.0	1.0	3.0	4.0	20.0	58.0	78.0
Total		**35.0**	**69.3**	**75.3**	**144.5**	**179.5**	**69.6**	**249.1**

Sports, Community, Tourism and Recreational Infrastructure
In the Planning Stage

Name	Region
1- Biomethanization plant – Québec City	03
2- Biomethanization plant – Montréal City	06
3- Replacement of the Olympic Stadium roof	06
4- Biomethanization plant – Laval	13
5- Biomethanization plant – Longueuil	16

Sports, Community, Tourism and Recreational Infrastructure
Under Study

Name	Region
1- Construction of the Predator pavilion at Aquarium du Québec	03
2- Expansion of the Palais des congrès de Montréal	06

Government Buildings
In Progress
(millions of dollars)

Name	Region	Québec Contribution					Partner Contributions	Total Cost
		Before 2019-2020	2019-2029 QIP			Total		
			2019-2020	2020-2029	Total			
1- Expansion and redevelopment of the Rimouski courthouse	01	56.3	11.9	–	11.9	68.2	–	68.2
2- Repair of the Complexe Marie-Guyart parking facility	03	48.3	10.7	–	10.7	59.0	–	59.0
Total		**104.6**	**22.6**	**–**	**22.6**	**127.2**	**–**	**127.2**

Government Buildings
In the Planning Stage

	Name	Region
1-	Enlargement and renovation of the Roberval courthouse	02
2-	Expansion and redevelopment of the Maison Tanguay detention facility or transfer of women clients to a new detention facility	06
3-	Major redevelopment of the Saint-Hyacinthe courthouse	16

Government Buildings
Under Study

	Name	Region
1-	Restauration and redevelopment of the Édifice Gérard-D.-Levesque	03
2-	Requalification of the entire Royal Victoria Hospital site	06

Information Resources
In Progress
(millions of dollars)

	Name	Region	Québec Contribution					Partner Contributions	Total Costl
			Before 2019-2020	2019-2029 QIP			Total		
				2019-2020	2020-2029	Total			
1-	Consolidation of the Centre de services partagés du Québec data processing centres	-	–	21.5	40.6	62.1	62.1	–	62.1
Total			**–**	**21.5**	**40.6**	**62.1**	**62.1**	**–**	**62.1**

Information Resources
In the Planning Stage

	Name	Région
1-	Government authentication service	-
2-	Solution d'affaires en gestion intégrée des ressources (SAGIR) – Phase SGR7 (payroll system)	-

Information Resources
Under Study

	Name	Région
1-	Solution d'affaires en gestion intégrée des ressources (SAGIR) – Phase SGR4 (accounting system)	-

Other – Plan Nord
In Progress
(millions of dollars)

Name	Region	Québec Contribution					Partner Contributions	Total Cost
		Before 2019-2020	2019-2029 QIP			Total		
			2019-2020	2020-2029	Total			
1- Repair of the James Bay Road	10	57.3	46.6	52.4	99.1	156.4	108.3	264.7
Total		**57.3**	**46.6**	**52.4**	**99.1**	**156.4**	**108.3**	**264.7**

Other – Plan Nord
In the Planning Stage

Name	Region
1- Construction of the Institut nordique du Québec science complex	03 - 06 - 10

Other – Government Buildings Abroad
Under Study

Name	Region
1- Acquisition of a building in Paris to strengthen Québec's influence diplomacy	–

[1] The Gouvernement du Québec's contribution to projects in the "Road Network" sector is assumed by the Land Transportation Network Fund.
[2] Phase I work consisted of the reconstruction of the Rideau and Lorette structures.
[3] Widening of Autoroute Laurentienne between the De la Faune and Louis-XIV exits, provided for under the "Road Network" sector, is not presented, since its total value is less than $50.0 million.
[4] The Gouvernement du Québec's contribution to projects in the "Public Transit" sector is assumed by the Land Transportation Network Fund.
[5] Completion of work for this project could obtain Cabinet approval in March 2019.
[6] The total cost includes construction of the research centre, which has been completed.

Legend:

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08: Abitibi-Témiscamingue
09: Côte-Nord
10: Nord-du-Québec
11: Gaspésie – Îles-de-la-Madeleine
12: Chaudière-Appalaches
13: Laval
14: Lanaudière
15: Laurentides
16: Montérégie
17: Centre-du-Québec

4.2 Projects on the list for which the degree of progress changed in 2018-2019

Since the publication of the 2018-2028 QIP, certain projects valued at $50.0 million or more have changed status, in part due to decisions made by the Cabinet concerning the approval of opportunity assessments or business cases for projects subject to the Directive sur la gestion des projets majeurs d'infrastructure publique. As such, the following projects were entered in the list of projects appended to the 2019-2029 QIP.

Projects in the "in progress" category:

Road network

- Major rehabilitation of the Pie-IX bridge between Montréal and Laval;
- Necessary maintenance on the l'Île-d'Orléans bridge before its reconstruction;
- Phase III of the redevelopment of Route 185 between Autoroute 20 and the New Brunswick border;
- Redevelopment of Routes 173 and 277;
- Phase II of the widening of Autoroute Henri-IV;
- Improvement of the Route Obedjiwan in La Tuque and Lac-Ashuapmushuan;
- Reconstruction and improvement of various sections of Route 138 between Baie-Comeau and Port-Cartier.

Public transit

- Acquisition of 153 additional AZUR cars for the Montréal metro;
- Implementation of a bus rapid transit service integrated into the upgrade of the Pie-IX corridor between Montréal and Laval;
- Reconstruction of the Complexe Crémazie for the STM buses.

Health and Social Services

- Expansion of the Montréal Heart Institute's emergency, critical care, ambulatory services and training centre;
- Redeployment of the Hôpital de Lachine campus;
- Phase II of the construction of a new hospital complex on the Hôpital de l'Enfant-Jésus site.

Higher education and Research

- Additional space downtown for HEC Montréal.

Sports, community, tourism and recreational infrastructure

- Development of Phase III of the Promenade Samuel-De Champlain.

Information resources

- Consolidation of the Centre de services partagés du Québec's data processing centres.

Projects "in the planning stage" category:

Road network

- Completion of Autoroute 70 – Grande-Anse to La Baie segment;
- Repairs to the Chemin des Quatre-Bourgeois bridge over Autoroute 73 in Québec city;
- Construction of a new connection between Québec City and Lévis;
- Rehabilitation of the slab on the Laviolette bridge in Trois-Rivières;
- Major repair work on the Ville-Marie and Viger tunnels;
- Reconstruction of the Île-aux-Tourtes bridge between Vaudreuil-Dorion and Senneville;
- Extension of Route 138 – Kegaska to La Romaine segment;
- Extension of Route 138 – La Tabatière to Tête-à-la-Baleine segment;
- Redevelopment of Route 138 for the Tadoussac and Baie-Sainte-Catherine ferry crossing;
- Widening of Autoroute 20 in Lévis.

Public transit

- Acquisition of diesel locomotives for the Exo commuter train network;
- Acquisition of 2000-type rail cars for the Exo commuter train network;
- Expansion of three of the STM's bus transit centers (Anjou, Legendre and Saint-Laurent);
- Expansion of the Viau attachment centre for Montréal metro maintenance vehicles;
- Construction of the Eastern transit centre for STM buses;
- Construction of the Bellechasse transit centre for STM buses;
- Replacement of 12-kilovolt step-down substations by 25-kilovolt step-down substations in the Montréal metro network;
- Phase II of the STM infrastructure maintenance program;
- Phase IV of the construction of a bus garage for the Société de transport de Laval;
- Electric conversion of the operation center of the Réseau de transport de Longueuil.

Marine, air, rail and other transportation

- Construction of a bypass for Lac-Mégantic;
- Rehabilitation of the railway between Caplan and Port-Daniel–Gascons.

Health and Social Services

- Expansion and modernization of Hôpital de Verdun;
- Consolidation of the rehabilitation centres for youth in difficulty in the Laurentides region.

Education

- Land acquisition in downtown Montréal and construction of a new primary school for the Commission scolaire de Montréal;
- Additional primary and secondary education spaces on Île-des-Sœurs for the Commission scolaire Marguerite-Bourgeoys;
- Rehabilitation of Commission scolaire de Montréal's FACE school.

Higher education and Research

- Reallocation of the spaces freed up on the mountain site by the Université de Montréal's Complexe des sciences project.

Information ressource

- Phase SGR7 (payroll system) of the Solution d'affaires en gestion intégrée des ressources (SAGIR).

Projects in the "under study" category:

Road network

- Transit optimization on the Autoroute 13 corridor between Autoroute 640 and Autoroute 50;
- Redevelopment of Route 132 between Rue Principale in Delson and Autoroute 730 in Sainte-Catherine and Saint-Constant.

Public transit

- Implementation of structuring public transit in Montréal’s East end;
- Implementation of a metropolitan network of reserved lanes for Autoroutes 13, 20, 25, 440, 640 and Route 116;
- Implementation of structuring public transit along the Yellow line extension of the Longueuil métro;
- Implementation of structuring public transit on Boulevard Taschereau in Longueuil.

Health and Social Services

- Reuse of the Hôtel-Dieu de Québec buildings;
- Modernization of the Montreal General Hospital;
- Modernization of the operating suite, the day surgery, cardiology, and medical device reprocessing units at Hôpital du Sacré-Cœur de Montréal;
- A new hospital service offer in Outaouais;
- Construction of a new hospital in Chisasibi;
- Modernization of the operating suite, endoscopy and medical device reprocessing units at the Hôtel-Dieu de Lévis;
- Modernization of the emergency room and care units at Hôpital de Saint-Eustache;
- Modernization of Hôpital de Saint-Jérôme.

Education

- Additional spaces at Centre de formation professionnelle 24-Juin at the Commission scolaire de la Région-de-Sherbrooke;
- Additional spaces for secondary and vocational training at the Commission scolaire de Laval;
- Additional spaces for secondary and vocational training at the Commission scolaire des Grandes-Seigneuries' Louis-Philippe-Paré complex;
- Additional educational spaces and redevelopment of the École de la Magdeleine secondary school in the Commission scolaire des Grandes-Seigneuries.

Higher education and Research

- Acquisition and expansion of the J.-Armand-Bombardier pavilion and rehabilitation of the vacated space in Pavillon Principal at Polytechnique Montréal;
- Additional spaces for Dawson College;
- Construction of a new pavilion at the École de technologie supérieure on the Complexe Dow site;
- Redevelopment of the Gatineau campus of the Université du Québec en Outaouais.

Government buildings

- Restoration and redevelopment of the Gérard D.-Levesque building;
- Requalification of the entire Royal Victoria Hospital site.

4.3 Projects withdrawn from the previous QIP's list

Twelve projects valued at $50.0 million or more that were in the "in progress" category on the list of projects appended to the 2018-2028 QIP published in the March 2018 edition of "Québec's Public Infrastructure" are removed from the list as they are now in service.

Three projects that were in the "under study" category have also been removed from the list, namely:

- The "Urban boulevard on Montréal's West Island" project, because the MTQ and the city of Montréal have agreed that the solution selected for the development of the Autoroute 440 right of way will be under the responsibility of the city of Montréal;
- The "Reconstruction of the Mont-Royal transit centre" project, because rather than proceed with a major repair of this transit centre immediately, the STM has decided to keep it and build the new Eastern transit centre;
- The "Construction of a new attachment centre in the northwestern sector of the Montréal metro network" project, because this project is included in the extension of the Montréal metro blue line.

One project "in the planning stage" was also withdrawn from the list: the "Enhancement of the capacity and efficiency of docking facilities for international cruise ships in Québec City."

- The scope of this project was changed, its total cost is now estimated at less than $50.0 million.

These 16 projects are presented in the table found on the next page.

List of projects withdrawn from the previous QIP's list

Sector	Name	Region
Road network		
1-	Construction of a bridge over the Mistassini River in Dolbeau-Mistassini	02
2-	Extension of Autoroute 70 to Ligne Bagot	02
3-	Redevelopment of the interchange between Autoroutes Félix-Leclerc and Laurentienne	03
4-	Repair of Autoroute Dufferin-Montmorency – Phases III to VIII	03
5-	Urban boulevard on Montréal's West Island	06
6-	Maintenance of the Louis-Hippolyte-La Fontaine tunnel	06-16
7-	Permanent relocation of Route 112 in Thetford Mines	12
Public transit		
8-	Construction of a new attachment centre in the northwestern sector of the Montréal metro network	06
9-	Reconstruction of the Mont-Royal transportation centre	06
10-	Major repair of Berri-UQAM metro station – Phase I	06
Marine, air, rail and other transportation		
11-	Replacement of MV Lucien-L.	03-09
12-	Replacement of MV Radisson	03-09
Higher education and Research		
13-	Expension of the applied science pavilion at Concordia University's Loyola campus	06
Sports, community, tourism and recreational infrastructure		
14-	Enhancement of the capacity and efficiency of docking facilities for international cruise ships in Québec City	03
15-	Construction of a biomethanization plant – Couronne Sud-Est de Montréal	16
Other – Public dams		
16	Barrage Des Quinze - Asset maintenance	08

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12: Chaudière-Appalaches
13: Laval
14: Lanaudière
15: Laurentides
16: Montérégie
17: Centre-du-Québec

5. Update of probable investments for 2018-2019

According to the Public Infrastructure Act, the QIP must include a report on the use of allocated funds for the current fiscal year.

An amount of $10,029.2 million was provided in 2018-2019 for all sectors covered by the 2018-2028 QIP. The probable investment update for 2018-2019 was evaluated at $10,373.4 million, which represents a probable completion rate of 103.4%.

Probable Investments for 2018-2019

(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Sector		Maintenance of the service offer				Enhancement of the service offer	Subtotal	Restate-ment[2]	Total	Probable completion rate[3]
		Asset maintenance[1]	Elimination of the asset maintenance deficit	Replace-ment	Subtotal	Addition and improvement				
Road network	Forecast	311.8	1,098.8	387.4	1,797.9	387.9	**2,185.8**	–	**2,185.8**	**109.5%**
	Probable	444.9	1,095.3	447.8	1,987.9	404.6	**2,392.5**	–	**2,392.5**	
Public transit	Forecast	213.7	–	319.2	532.9	563.6	**1,096.4**	–	**1,096.4**	**84.3%**
	Probable	147.9	–	400.6	548.5	376.1	**924.6**	–	**924.6**	
Marine, air, rail and other transportation	Forecast	185.5	–	35.1	220.5	282.3	**502.8**	–	**502.8**	**105.7%**
	Probable	153.7	–	244.7	398.4	133.3	**531.7**	–	**531.7**	
Health and social services	Forecast[4]	94.5	87.0	319.8	501.3	778.6	**1,279.9**	–	**1,279.9**	**112.5%**
	Probable[2]	104.9	27.6	233.8	366.3	702.6	**1,068.9**	370.5	**1,439.5**	
Education	Forecast	390.6	210.3	17.3	618.2	322.9	**941.1**	–	**941.1**	**108.4%**
	Probable[2]	344.8	219.5	8.1	572.5	406.1	**978.6**	41.6	**1,020.2**	
Higher education	Forecast	333.7	126.7	166.4	626.7	75.1	**701.8**	–	**701.8**	**136.4%**
	Probable[2]	404.0	145.3	172.4	721.8	167.3	**889.1**	68.1	**957.2**	
Research	Forecast	–	–	5.2	5.2	148.3	**153.5**	–	**153.5**	**104.6%**
	Probable[2]	–	–	2.2	2.2	157.3	**159.5**	1.0	**160.6**	
Culture	Forecast[5]	70.0	23.1	31.9	125.0	60.0	**184.9**	–	**184.9**	**102.2%**
	Probable[2]	70.8	16.3	32.8	120.0	58.1	**178.1**	11.0	**189.1**	
Municipal infrastructure	Forecast	210.7	48.2	139.3	398.1	386.1	**784.3**	–	**784.3**	**90.0%**
	Probable	191.6	–	185.0	376.7	328.8	**705.4**	–	**705.4**	
Sports, community, tourism and recreational infrastructure	Forecast	104.9	31.7	5.2	141.8	205.2	**347.0**	–	**347.0**	**84.6%**
	Probable	95.3	21.5	2.7	119.5	174.3	**293.8**	–	**293.8**	
Social and community housing	Forecast	111.4	29.8	0.4	141.7	132.6	**274.3**	–	**274.3**	**118.7%**
	Probable	116.3	24.6	7.0	147.9	177.5	**325.5**	–	**325.5**	
Government buildings	Forecast	167.9	17.4	22.8	208.1	239.2	**447.4**	–	**447.4**	**56.7%**
	Probable	79.7	2.2	4.2	86.1	167.4	**253.5**	–	**253.5**	
Information resources	Forecast[6]	33.3	–	38.3	71.6	394.3	**465.9**	–	**465.9**	**126.8%**
	Probable	96.4	–	237.9	334.4	251.2	**585.6**	5.0	**590.6**	
Information resources in the education network	Forecast	84.2	–	–	84.2	–	**84.2**	–	**84.2**	**95.4%**
	Probable	50.7	–	–	50.7	29.6	**80.3**	–	**80.3**	
Information resources in the higher education network	Forecast	45.8	–	–	45.8	64.7	**110.4**	–	**110.4**	**148.0%**
	Probable	66.0	–	–	66.0	97.4	**163.4**	–	**163.4**	
Other sectors	Forecast	89.8	12.6	36.4	138.8	320.7	**459.5**	–	**459.5**	**75.2%**
	Probable	51.7	24.5	30.0	106.2	239.5	**345.6**	–	**345.6**	
Central envelope	Forecast	–	–	5.0	5.0	5.0	**10.0**	–	**10.0**	**–**
	Probable	–	–	–	–	–	**–**	–	**–**	
Total	**Forecast**	**2,447.7**	**1,685.7**	**1,529.6**	**5,662.9**	**4,366.3**	**10,029.2**	**–**	**10,029.2**	**103.4%**
	Probable	**2,418.8**	**1,576.9**	**2,009.4**	**6,005.0**	**3,871.0**	**9,876.0**	**497.3**	**10,373.4**	

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

1 These funds, along with those allocated for replacement, may contribute to eliminating the AMD.

2 The investments presented for 2018-2019 were standardized on the same bases.

3 A probable completion rate of over 100% may be explained by work that is ahead of schedule or being completed at a faster rate than anticipated.

4 Taking into account the amount of $22.0 million from the Health and Social Services Information Resources Fund transferred to the Information Resources sector, the total amount is $1,301.9 million, as presented in the 2018-2028 QIP.

5 Taking into account the amount of $8.6 million in investment from cultural state-owned enterprise information resources transferred to the Information Resources sector, the total amount is $193.5 million, as presented in the 2018-2028 QIP.

6 Before the transfer of $22.0 million and $8.6 million transferred to the Information Resources sector, the total amount was $435.3 million, as presented in the 2018-2028 QIP.

6. Final statement of investments made in 2017-2018

The Public Infrastructure Act states that the QIP must include a report on the use of allocated funds for the previous fiscal year.

❑ A global completion rate of 86.1%

The amount provided for 2017-2018 for all sectors covered by the QIP was $9,573.2 million. Investments made are evaluated at $8,245.6 million, which represents a completion rate of 86.1%. This section presents the investments made in 2017-2018, per sector.

❑ Municipal infrastructure, Education, Public transit, Information resources, Culture and Research: completion rates over 90%

In the Municipal infrastructure sector, $786.7 million were invested, which represents 101.1% of probable investments:

- $255.9 million were invested in asset maintenance. Projects primarily affect drinking water and wastewater treatment. Upgrading drinking water facilities in Baie-Comeau to standards and other projects were also completed.
- $512.8 million were invested in replacing, improving and adding infrastructures. This amount was primarily used to replace the various buried municipal utilities, to develop Parc Jean-Drapeau and enhance Saint Joseph's Oratory.

In the Education sector, $1,256.1 million were invested in 2017-2018, which represents 95.1% of probable investments:

- The amount of $884.3 million was invested in asset maintenance, elimination of the AMD and infrastructure replacement. Work primarily involved renovating electrical, mechanical and ventilation systems and replacing exterior building cladding in various regions of Québec.
- $371.8 million were invested to expand and build new schools across all regions of Québec.

In the Public transit sector, $887.4 million were invested, which represents 95.0% of probable investments:

- $447.4 million were invested in asset maintenance and replacement, primarily within the framework of Montréal's metro programs: Réno-Systèmes – Phase III and Phase IV, Réno-Infrastructures – Phase I and Phase II, renovation of the Berri-UQAM station – Phase I, and replacement of MR-73 metro cars.
- All other types of investment amounted to $440.0 million. This amount was primarily invested in building the commuter train maintenance centre in Pointe Saint-Charles and an underground garage at the Côte-Vertu metro station.

In the Information resource sector, $498.2 million were invested, which represents 93.7% of probable investments.

- These investments were primarily used to carry out various IT projects for departments and bodies, including the digital information management system for the Agence du revenu du Québec.

In the Cultural sector, $160.8 million were invested, which represents 91.8% of probable investments.

- $55.8 million were invested in state-owned cultural bodies and enterprises. This funding was used to maintain assets and eliminate the AMD.
- $89.3 million were invested in cultural equipment. These funds were used to maintain assets and acquire documents for collections in municipal libraries.
- With regard to projects subsidized by the Québec Cultural Heritage Fund, $15.7 million were invested, most notably for conservation of properties protected by the Gouvernement du Québec under the Cultural Property Act (chapter B-4).

In the Research sector, $126.1 million were invested, which represents 90.6% of probable investments. Of that amount, $23.8 million were invested to build the Complexe des sciences at Université de Montréal, whereas the remaining balance of $102.3 million was used to pay for various projects submitted within the framework of research support programs for Employment and Immigration Canada (EIC).

❑ Maritime, air, rail and other transportation, Social and community housing, Road network, Sports, community, tourism and recreational infrastructure, as well as Higher education: completion rates over 80%

In the Maritime, air, rail and other transportation sector, $228.3 million were invested, which represents 86.9% of probable investments.

- The Société des traversiers du Québec received $19.6 million in investments, most particularly to replace the Lucien-L. and Radisson vessels, and to adapt the wharves for the ferry between Tadoussac and Baie-Sainte-Catherine, as well as to improve traffic fluidity at the ferry between Sorel-Tracy and Saint-Ignace-de-Loyola.
- Air, rail and other infrastructures received investments amounting to $208.7 million in 2017-2018. These amounts were most notably used for improving the local road networks in all regions across Québec, resurfacing the runway at the Umiujaq airport, repaving the runway at the Matagami airport, and pursuing the electrification of the Government's vehicle fleet.

In the Social and community housing sector, $177.8 million were invested, which represents 84.8% of probable investments.

- An amount of $144.7 million was invested in maintaining affordable housing units, while $33.1 million were allocated for completing new housing units or replacing existing ones.

In the Road network sector, $1,796.7 million were invested, which represents 84.5% of probable investments.

- Investments in asset maintenance, elimination of the AMD and infrastructure replacement amounted to $1,494.4 million and were primarily used in reconstructing the Turcot interchange, maintaining the Saint-Pierre interchange and Autoroute Métropolitaine structures, as well as repairing deck structures on the Dubuc bridge over the Saguenay River.
- In addition to these projects, several others were completed to improve and add infrastructures, totalling more than $302.3 million. These projects included building a bypass in Rouyn-Noranda, extending Autoroute 70 toward the Bagot line, and redesigning Route 185 between Autoroute 20 and the New Brunswick border – Phase III.

In the Sports, community, tourism and recreational infrastructure sector, $221.5 million were invested, which represents 82.7% of probable investments. These funds were most notably used for renovating and enlarging the sports complex in the city of Amos and building a biomethanization plant in Sainte-Hyacinthe.

In the Higher education sector, $606.5 million were invested, which represents 81.2% of probable investments.

- $395.6 million were invested in the university network.
- In the college network and for the Institut de tourisme et d'hôtellerie du Québec, the amount of $210.9 million was invested, most particularly for work on building exteriors, roofs, mechanical and electrical systems, as well as laboratory restoration.

❑ Government buildings, Health and Social Services and other sectors: completion rates of over 70%

In the Government building sector, $134.8 million were invested, which represents 74.5% of probable investments.

- $77.2 million were invested in office buildings. These funds went primarily to developing Place des Canotiers in the Old Port of Québec, repairing the parking lot at Complexe Marie-Guyart in Québec City, and upgrading various buildings across the province to standards.
- $24.9 million were invested in courthouses. This amount was used most particularly to enlarge and redevelop the courthouse in Rimouski, and to perform different asset maintenance and upgrade tasks in various courthouses around the province.
- Regarding detention centres, $21.0 million were invested in building new centres in Amos and Sorel-Tracy, as well as in performing various maintenance projects in centres around the province.
- $11.7 million were invested in Sûreté du Québec police stations, to perform various asset maintenance projects.

In the Health and Social services network, investments totalled $1,148.8 million, which represents a 71.9% completion rate.

- $451.2 million were invested in asset maintenance work and elimination of the AMD, such as repair of electrical, mechanical and ventilation systems, as well as building exteriors in all regions of Québec.
- Investments amounting to $286.8 million for replacement were primarily used to build the new CHUM, to relocate Hôpital de Baie-Saint-Paul, and to redesign the emergency department and outpatient clinic at Hôpital d'Alma.
- $410.8 million of investments for improvement and addition enabled some very large-scale projects to continue, such as construction of the Centre régional intégré de cancérologie at Hôtel-Dieu de Lévis, construction of a new hospital complex on the Hôpital l'Enfant-Jésus site, as well as the expansion and redesign of the Hôpital Haut-Richelieu-Rouville.

In all other sectors, $233.9 million were invested, which represents 72.8% of probable investments.

- These investments primarily funded work at the Barrage des Quinze in Abitibi-Témiscamingue, repair of the James Bay Road, construction of 70 social housing units in Nunavik, and asset maintenance at the Institut de technologie agroalimentaire in La Pocatière and Saint-Hyacinthe.

Investments for 2017-2018

(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Sector		Maintenance of the service offer				Enhancement of the service offer	Subtotal	Restate-ment[2]	Total	Completion rate[3]
		Asset maintenance[1]	Elimination of the asset maintenance deficit	Replacement	Subtotal	Addition and improvement				
Road network	Probable	903.4	431.3	366.3	1,700.9	424.4	**2,125.3**	–	**2,125.3**	**84.5%**
	Actual	754.6	397.1	342.7	1,494.4	302.3	**1,796.7**	–	**1,796.7**	
Public transit	Probable	124.2	–	390.0	514.3	419.9	**934.1**	–	**934.1**	**95.0%**
	Actual	104.4	–	343.0	447.4	440.0	**887.4**	–	**887.4**	
Marine, aire, rail and other transportation	Probable	138.7	–	24.6	163.2	99.4	**262.6**	–	**262.6**	**86.9%**
	Actual	129.5	–	3.8	133.3	95.0	**228.3**	–	**228.3**	
Health and social services[2]	Probable[4]	90.6	55.3	312.5	458.4	554.2	**1,012.6**	584.1	**1,596.8**	**71.9%**
	Actual	72.7	18.4	286.8	377.9	389.3	**767.2**	381.7	**1,148.8**	
Education[2]	Probable[5]	390.7	195.4	10.0	596.1	590.0	**1,186.1**	134.8	**1,320.9**	**95.1%**
	Actual	607.8	171.8	13.5	793.1	370.0	**1,163.1**	93.0	**1,256.1**	
Higher education[2]	Probable[6]	338.4	125.2	146.2	609.8	71.6	**681.5**	65.6	**747.1**	**81.2%**
	Actual	304.9	79.7	132.4	517.1	42.9	**559.9**	46.6	**606.5**	
Research[2]	Probable	–	–	9.3	9.3	121.6	**130.9**	8.4	**139.2**	**90.6%**
	Actual	–	–	10.0	10.0	107.7	**117.7**	8.4	**126.1**	
Culture[2]	Probable[7]	69.4	32.6	33.8	135.9	15.0	**150.9**	24.3	**175.1**	**91.8%**
	Actual	70.2	29.1	33.1	132.3	12.9	**145.3**	15.5	**160.8**	
Municipal infrastructure	Probable	194.0	58.2	207.4	459.6	300.9	**760.5**	–	**760.5**	**101.1%**
	Actual	255.9	–	244.3	500.2	268.5	**768.7**	–	**768.7**	
Sports, community, tourism and recreational infrastructure	Probable[8]	98.2	9.6	–	107.7	160.1	**267.9**	–	**267.9**	**82.7%**
	Actual	94.3	9.5	0.9	104.7	116.8	**221.5**	–	**221.5**	
Social and community housing	Probable[8]	109.2	29.6	–	138.8	70.8	**209.6**	–	**209.6**	**84.8%**
	Actual	123.6	17.2	3.8	144.6	33.1	**177.8**	–	**177.8**	
Government buildings	Probable	72.1	10.2	0.6	82.9	98.0	**180.9**	–	**180.9**	**74.5%**
	Actual	49.5	2.4	1.1	53.0	81.8	**134.8**	–	**134.8**	
Information resources	Probable[9]	145.0	–	52.3	197.3	329.5	**526.8**	5.0	**531.8**	**93.7%**
	Actual	190.6	–	161.1	351.7	141.4	**493.2**	5.0	**498.2**	
Other sectors	Probable	37.5	21.1	19.3	78.0	243.4	**321.4**	–	**321.4**	**72.8%**
	Actual	33.6	15.0	14.6	63.2	170.7	**233.9**	–	**233.9**	
Central envelope	Probable	–	–	–	–	–	**–**	–	**–**	**–**
	Actual	–	–	–	–	–	**–**	–	**–**	
Total	**Probable**	**2,711.4**	**968.5**	**1,572.3**	**5,252.2**	**3,498.8**	**8,751.0**	**822.2**	**9,573.2**	**86.1%**
	Actual	**2,791.7**	**740.1**	**1,591.1**	**5,122.9**	**2,572.5**	**7,695.4**	**550.2**	**8,245.6**	

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

1 These funds, along with those allocated for replacement, may contribute to eliminating the AMD.

2 The investments presented for 2017-2018 were standardized on the same bases. In the 2018-2028 QIP, a probable amount of $9.6 billion was planned for 2017-2018, after adjustment for standardization on the same bases. Before adjustment, an amount of $8.8 billion had been foreseen.

3 A completion rate of over 100% may be explained by work that is ahead of schedule or being completed at a faster rate than anticipated.

4 Taking into account the amount of $20.0 million in the Health and Social Services Information Resources Fund, which was transferred to the information resources sector, the total amount is $1,616.8 million, as presented in the 2018-2028 QIP.

5 Taking into account the amount of $38.6 million in investment in education network information resources, which was transferred to the information resources sector, the total amount is $1,224.8 million, as presented in the 2018-2028 QIP.

6 Taking into account the amount of $80.9 million in investment in higher education information resources, which was transferred to the information resources sector, the total amount is $762.3 million, as presented in the 2018-2028 QIP.

7 Taking into account the amount of $7.3 million in investment in cultural state-owned enterprise information resources, which was transferred to the information resources sector, the total amount is $158.2 million, as presented in the 2018-2028 QIP.

8 Some projects have been reclassified from one investment type to another.

9 Before the transfer of $20.0 million, $38.6 million, $80.9 million and $7.3 million to the information resources sector, the total amount was $385.0 million, as presented in the 2018-2028 QIP.

Appendix 1 - Investments made for the 2017-2018 year in relation to investments planned from 2017-2027 QIP

Investments made for the 2017-2018 year in relation to investments planned from 2017-2027 QIP

(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Sector		Maintenace of the service offer				Enhancement of the service offer	Subtotal	Restate-ment[2]	Total	Completion rate[3]
		Asset maintenance[1]	Elimination of the asset maintenance deficit	Replacement	Subtotal	Addition and improvement				
Road network	Forecast	855.7	577.4	401.7	1,834.8	324.5	**2,159.4**	-	**2,159.4**	**83.2%**
	Actual	754.6	397.1	342.7	1,494.4	302.3	**1,796.7**	-	**1,796.7**	
Public transit	Forecast	116.8	-	134.2	251.1	574.9	**825.9**	-	**825.9**	**107.4%**
	Actual	104.4	-	343.0	447.4	440.0	**887.4**	-	**887.4**	
Marine, aire, rail and other transportation	Forecast	131.7	-	27.6	159.3	162.2	**321.5**	-	**321.5**	**71.0%**
	Actual	129.5	-	3.8	133.3	95.0	**228.3**	-	**228.3**	
Health and social services[2]	Forecast[4]	179.0	119.7	434.9	733.6	649.1	**1,382.7**	-	**1,382.7**	**83.1%**
	Actual	72.7	18.4	286.8	377.9	389.3	**767.2**	381.7	**1,148.8**	
Education[2]	Forecast[4]	442.9	207.5	13.2	663.6	532.6	**1,196.3**	-	**1,196.3**	**105.0%**
	Actual	607.8	171.8	13.5	793.1	370.0	**1,163.1**	93.0	**1,256.1**	
Higher education[2]	Forecast[4]	332.7	103.6	148.3	584.6	122.3	**706.8**	-	**706.8**	**85.8%**
	Actual	304.9	79.7	132.4	517.1	42.9	**559.9**	46.6	**606.5**	
Research[2]	Forecast	-	-	17.6	17.6	156.4	**174.0**	-	**174.0**	**72.5%**
	Actual	-	-	10.0	10.0	107.7	**117.7**	8.4	**126.1**	
Culture[2]	Forecast[4]	77.8	27.9	34.1	139.8	7.6	**147.4**	-	**147.4**	**109.1%**
	Actual	70.2	29.1	33.1	132.3	12.9	**145.3**	15.5	**160.8**	
Municipal infrastructure	Forecast[4]	234.2	92.7	191.1	518.1	282.3	**800.3**	-	**800.3**	**96.0%**
	Actual	255.9	-	244.3	500.2	268.5	**768.7**	-	**768.7**	
Sports, community, tourism and recreational infrastructure	Forecast[4]	66.4	22.9	3.2	92.5	201.5	**294.0**	-	**294.0**	**75.4%**
	Actual	94.3	9.5	0.9	104.7	116.8	**221.5**	-	**221.5**	
Social and community housing	Forecast[4]	106.7	32.3	-	138.9	114.2	**253.1**	-	**253.1**	**70.2%**
	Actual	123.6	17.2	3.8	144.6	33.1	**177.8**	-	**177.8**	
Government buildings	Forecast	121.1	18.7	11.4	151.3	144.9	**296.2**	-	**296.2**	**45.5%**
	Actual	49.5	2.4	1.1	53.0	81.8	**134.8**	-	**134.8**	
Information resources	Forecast[4]	149.1	-	61.5	210.7	337.4	**548.1**		**548.1**	**90.9%**
	Actual	190.6	-	161.1	351.7	141.4	**493.2**	5.0	**498.2**	
Other sectors	Forecast[4]	36.7	22.7	68.4	127.8	342.1	**469.9**	-	**469.9**	**49.8%**
	Actual	33.6	15.0	14.6	63.2	170.7	**233.9**	-	**233.9**	
Central envelope	Forecast[4]	5.0	0.8	-	5.8	42.2	**48.0**	-	**48.0**	**-**
	Actual	-	-	-	-	-	**-**	-	**-**	
Total	**Forecast**	**2,855.9**	**1,226.1**	**1,547.4**	**5,629.4**	**3,994.2**	**9,623.6**	**-**	**9,623.6**	**85.7%**
	Actual	**2,791.7**	**740.1**	**1,591.1**	**5,122.9**	**2,572.5**	**7,695.4**	**550.2**	**8,245.6**	

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

1 These funds, along with those allocated for replacement, may contribute to eliminating the AMD.

2 The investments presented for 2017-2018 were standardized on the same bases.

3 A completion rate of over 100% may be explained by work that is ahead of schedule or being completed at a faster rate than anticipated.

4 Some projects have been reclassified from one investment type to another.

Appendix 2 - Historical report of investments made compared to those planned

History of investments made compared to those planned

(contribution of the Gouvernement du Québec, in millions of dollars and as a percentage)

Sector	2015-2016 (2015-2025 QIP)			2016-2017 (2016-2026 QIP)			2017-2018[2] (2017-2027 QIP)			Average 2015-2016 to 2017-2018		
	Forecast	Actual	%	Forecast	Actual	%	Forecast	Actual	%	Forecast	Actual	%
Road network	2,342.7	2,032.7	86.8	2,042.2	1,920.5	94.0	2,159.4	1,796.7	83.2	2,181.4	1,916.7	87.9
Public transit	948.1	457.8	48.3	1,133.7	644.1	56.8	825.9	887.4	107.4	969.3	663.1	68.4
Marine, air, rail and other transportation	365.3	352.7	96.5	366.6	184.8	50.4	321.5	228.3	71.0	351.1	255.3	72.7
Health and social services[1]	1,460.8	1,432.1	98.0	1,226.1	1,058.3	86.3	1,389.6	1,173.7	84.5	1,358.8	1,221.4	89.9
Education[1]	1,381.0	1,071.0	77.6	1,553.8	1,296.8	83.5	1,250.9	1,305.8	104.4	1,395.3	1,224.5	87.8
Higher education[1]	415.6	538.1	129.5	605.2	540.3	89.3	787.9	698.6	88.7	602.9	592.3	98.2
Reasearch	94.3	70.1	74.4	114.1	99.9	87.6	174.0	126.1	72.5	127.5	98.7	77.4
Culture[1]	227.7	233.2	102.4	239.4	192.4	80.4	154.6	171.1	110.7	207.2	198.9	96.0
Municipal infrastructure	709.7	567.0	79.9	623.6	489.4	78.5	800.3	768.7	96.0	711.2	608.4	85.5
Sports, community, tourism and recreational infrastructure	208.4	155.3	74.5	272.6	178.5	65.5	294.0	221.5	75.4	258.3	185.1	71.7
Social and community housing	285.1	241.8	84.8	278.2	164.5	59.1	253.1	177.8	70.2	272.2	194.7	71.5
Government building	386.1	304.8	78.9	272.3	181.6	66.7	296.2	134.8	45.5	318.2	207.1	65.1
Information resources[1]	464.4	308.8	66.5	445.0	260.3	58.5	398.2	321.3	80.7	435.9	296.8	68.1
Other sectors	561.2	435.5	77.6	413.5	316.8	76.6	469.9	233.9	49.8	481.5	328.7	68.3
Central envelope.	61.1	–	–	10.0	–	–	48.0	–	–	39.7	–	–
Total	**9,911.5**	**8,200.8**	**82.7**	**9,596.3**	**7,528.4**	**78.5**	**9,623.7**	**8,245.6**	**85.7**	**9,710.5**	**7,991.6**	**82.3**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

1 The investments presented include the adjustment for standardization on the same basis.

2 For purposes of comparison with the years 2015-2016 and 2016-2017, investments in Information Resources of the Health and Social services, Education, Higher education and state-owned enterprises reporting to the Minister of Culture and Communications planned for 2017-2018 have not been reclassified to the Information Resources sector..

Appendix 3 - Historical report of the investment levels planned in the QIP

Historical report of the investment levels planned in the QIP
(contribution of the Gouvernement du Québec, in millions of dollars)

Sector	2013-2023 QIP	2014-2024 QIP	2015-2025 QIP	2016-2026 QIP	2017-2027 QIP	2018-2028 QIP	2019-2029 QIP
Road network	22,410.80	20,423.60	16,655.3	17,322.0	17,901.0	20,027.5	24,580.0
Public transit	6,426.2	7,615.0	7,247.7	7,059.9	7,059.9	9,002.4	9,040.3
Marine, air, rail and other transportation	2,775.6	2,023.8	2,164.7	2,755.7	2,654.3	3,089.8	2,935.6
Health and social services[1]	19,367.3	16,998.9	14,421.8	14,695.6	17,058.2	18,567.1	20,186.4
Education[1]	7,440.3	7,315.4	8,077.7	8,153.3	8,175.7	8,972.7	13,889.2
Higher education[1]	4,951.8	4,884.5	5,291.9	5,756.9	5,916.1	6,140.7	6,375.6
Research	800.0	786.7	815.5	831.7	863.9	917.3	985.8
Culture	1,989.6	1,956.7	1,650.2	1,599.3	1,525.2	1,578.0	1,575.6
Municipal infrastructure	6,087.5	6,933.2	6,939.5	6,977.5	6,872.9	7,296.4	7,216.7
Sports, community, tourism and recreational infrastructure	2,024.0	1,589.5	1,274.6	1,419.0	1,722.8	1,860.9	2,181.7
Social and community housing	2,640.5	2,279.4	2,013.5	1,964.3	2,082.5	2,320.1	2,442.4
Government buildings	2,825.0	2,631.1	2,441.1	2,241.6	2,253.9	2,507.9	2,602.0
Information resources[1]	4,755.2	4,071.6	4,445.7	4,512.7	4,710.7	4,681.1	5,749.1
Other sectors							
Childcare centres	5,989.1	4,232.4	4,310.4	3,395.4	3,527.3	3,537.2	3,677.5
Plan Nord							
Acquisitions by departments and bodies and other investments							
Central envelope	1,817.1	6,558.1	10,650.8	10,015.0	8,775.4	9,900.9	11,962.1
Total	**92,300.0**	**90,300.0**	**88,400.0**	**88,700.0**	**91,100.0**	**100,400.0**	**115,400.0**

Note: Figures are rounded and the sum of the amounts may not correspond to the total indicated.

[1] For purposes of comparison with the QIP 2019-2029, investments in Information Resources of the Health and Social services, Education and Higher education networks planned for the 2013-2023 to 2018-2028 QIPs have been reclassified to the Information Resources sector.

Section C

2019-2020 Annual Management Plans for Public Infrastructure Investments

1. The Development of a Long-Term Vision 3

2. Highlights of the 2019-2020 Annual Management Plans for Public Infrastructure Investments 5

2.1 The Level of Knowledge of the Condition of Infrastructure Stands at 79% 5

2.2 68% of Infrastructure is Deemed in Good Condition 5

2.3 The Asset Maintenance Deficit is Evaluated at $24.6 Billion 7

2.4 The Net Increase in the Asset Maintenance Deficit Stands at $1.2 Billion 9

3. The Prioritization of Investments Aimed Towards the Maintenance of the Public Service Offer 10

3.1 The 2019-2029 QIP Manages 79% of the Asset Maintenance Deficit 10

3.2 $8.6 Billion in Additional Funding to Maintain the Government Service Offer 11

4. The 2019-2020 Annual Management Plans for Public Infrastructure Investments 13

Affaires municipales et habitation 15

The municipalities 17

The Société d'habitation du Québec 23

Bodies subsidizes by the SHQ 25

Conseil du trésor et Administration gouvernementale 31

The société québécoise des infrastructures 31

Culture et Communications 39

Government bodies and state-owned enterprises that report to the Minister of Culture and Communications 40

Éducation et Enseignement supérieur 49

The school boards 50

CEGEPs 63

Universities 64

Environnement et Lutte contre les changements climatiques 73

The Ministère de l'Environnement et de la Lutte contre les changements climatiques 73

Santé et Services sociaux 81
The Ministère de la Santé et des Services sociaux 81
Tourisme..... 93
The Régie des installations olympiques..... 93
Transports 99
The Ministère des Transports 99
Public transit authorities 101
The Société des traversiers du Québec..... 102

1. The Development of a Long-Term Vision

The provisions that the *Public Infrastructure Act* introduced in 2013 guided the implementation of the means necessary to develop a long-term vision of the government's infrastructure investment needs.

For instance, since 2015-2016, the Annual Management Plans for Public Infrastructure Investments (AMPI) of bodies designated by the government present an inventory and the condition of most of the infrastructure under their responsibility. The implementation of such plans marks the first stage in a government-wide approach aimed at ensuring optimum planning of infrastructure investments stipulated in the QIP, bearing in mind the requisite balance between infrastructure maintenance and development needs and Quebecers' ability to pay.

The Québec government owns or funds public infrastructure whose replacement value is estimated at more than $400 billion. This highly diversified stock of infrastructure is distributed throughout Québec and is essential to ensure the delivery to Quebecers of quality services. It comprises, in particular:

- nearly 28,000 buildings, including schools and hospitals;
- some 9,700 bridges and overpasses;
- more than 31,000 km of roads;
- more than 94,000 km of drinking water, wastewater and rainwater networks;
- numerous buildings and equipment in the mass transit sector.

To set priorities and plan investments under the QIP, and in order to maintain infrastructure in good condition and reduce the accumulated Asset Maintenance Deficit (AMD) on ageing infrastructure, the government has adopted a government condition indicator (GCI).

This indicator, which is based on best practices in the realm of infrastructure investment management, allows the government for a comprehensive, comparative, relativized evaluation basis pertaining to the condition of public infrastructure. It hinges, first and foremost, on a quantitative basis, that is, the evaluation of investment needs within five years regarding each existing infrastructure. It is then combined with a risk management approach focussing on the infrastructure's service potential. The GCI thus facilitates the assessment of the level of recurring investment necessary to maintain the service offer under the QIP.

Government Condition Indicator

Indicator	Condition	Description
A	Very good	The infrastructure is generally new or has been refurbished. It provides service free of interruption or slowdowns. It requires little asset maintenance work.
B	Good	The infrastructure shows a low level of degradation and defect. It requires some asset maintenance work. Generally, the infrastructure is in the second third of its useful life. Interruptions or service slowdowns may occasionally occur.
C	Satisfactory	The infrastructure shows a moderate level of degradation and defect. It requires regular asset maintenance work. Generally, the infrastructure is in the final third of its useful life. Interruptions or service slowdowns occasionally occur. Risk mitigation measures are implemented as needed.
Condition threshold		
D	Poor	The infrastructure shows a high level of degradation and defect. It requires significant, and sometimes urgent, asset maintenance work. Generally, the infrastructure has surpassed its useful life. Interruptions or service slowdowns occur often. Significant risk mitigation measures are implemented as needed.
E	Very poor	The infrastructure shows a very high level of degradation and defect. It requires very significant, and often urgent, asset maintenance work. Generally, the infrastructure has clearly surpassed its useful life. Interruptions and service slowdowns occur very often. Very significant risk mitigation measures are implemented.

The GCI comprises five possible conditions, ranging from very good to very poor, and a threshold below which the infrastructure is no longer deemed in satisfactory condition. When the condition of the infrastructure falls below the threshold, it usually has an AMD, which represents the value of the investments required to restore it at least to a satisfactory condition or replace it. In such a situation, the organization responsible must ensure that individual health and safety are not compromised, failing which the infrastructure must be decommissioned.

Together, the GCI and the AMD support the prioritization of government investments with a view to ensuring the durability of infrastructure, especially investments to maintain quality public services.

In this respect, the projects planned under the QIP will continue to be targeted increasingly according to needs stemming from documented inspections. Moreover, in order to anticipate the impact and ascertain the probable return on the investments planned to support decision-making, measurable and more precise objectives will be defined in the near future with public bodies, according to their circumstances. The resulting enhanced accountability will enable Quebecers to monitor in the Annual Management Plans for Public Infrastructure Investments the outcomes achieved by sector and category of infrastructure, in particular changes in the rate of obsolescence and management of the AMD.

Provision has also been made to document the entire life cycle of infrastructure, principally to better anticipate and plan fluctuating needs between its commissioning and the end of its useful life. Accordingly, in order to target priority actions that allow long-term returns, further inspections and updates of the infrastructure data will aim at critical components using an evidence-base approach model.

2. Highlights of the 2019-2020 Annual Management Plans for Public Infrastructure Investments

2.1 The Level of Knowledge of the Condition of Infrastructure Stands at 79%

In the AMPI 2019-2020, the overall level of knowledge of the condition of inspected infrastructure in respect of which investments are forecasted under the QIP is estimated at 79%.

Level of Knowledge of the Condition of Infrastructure Listed in AMPI's
By Sector
(in percentage)

	Inspection Rate
Government-Owned Infrastructures	
Road network	98
Health and social services	100
Education	97
Higher education	91
Other sectors	45
Average Rate	**90**
Non Government-Owned Infrastructures	
Public transit	35
Municipal infrastructure	90
Other sectors	25
Average Rate	**45**
Weighted Average Rate[1]	**79**

[1] This average rate is weighted according to the value of investments levels of each sectors of the QIP 2019-2029, excluding « Information Ressources » and « Central envelope » sectors.

The average rate of non-government-owned infrastructure states at 45% as for government-owned this figure is 90%. The latter represents a sufficient level of knowledge to establish the appropriate level of investment to ensure the durability of public infrastructure in sectors under its responsibility.

Future initiatives will focus on the consolidation of the knowledge acquired of government-owned infrastructure and the capacity to continuously and efficiently maintain an up-to-date reporting of these infrastructures including follow-ups to changes in condition and the AMD following the completion of the substantial forecasted investments in the QIP.

2.2 68% of Infrastructure is Deemed in Good Condition

Of the infrastructure evaluated, 68% is deemed to be in satisfactory or better condition and its average condition indicator is satisfactory (C) :

- The condition of 60% of government-owned infrastructure is satisfactory or better and its average condition indicator is satisfactory (C);
- Some 79% of non-government infrastructure is in satisfactory or better condition and its average condition indicator is good (B). It should be noted that in the AMPI 2019-2020, only 45% of the value of such infrastructure has been evaluated according to the GCI. Consequently, the average condition indicator is liable to change in the coming years as the inspections increase, especially in the mass transit sector.

Condition of the public ifrastructure porfolio
By sector and public bodies
(in percentage)

	2018-2019 AMPI	2019-2020 AMPI			
		Condition Indicator			Average Condition Indicator
	ABC	ABC	D	E	
Condition of the Public Infrastructure Portfolio	**69**	**68**	**17**	**15**	**C**
Government-Owned Infrastructures					
Road network					
Ministère des Transports					
Roadways	50	50	22	28	C
Structures — highway system [1]	49	53	8	39	C
Structures — municipal bridges [1]	57	58	8	34	C
Culverts	82	83	8	9	B
Marine, air, rail and other transportation					
Société des traversiers du Québec	88	79	20	1	A
Health and social services					
Establishments of the HSSN	85	83	13	4	B
Education					
School boards	50	46	35	19	D
Higher education and research					
CEGEPs	71	76	21	3	C
Universities	67	68	19	13	D
Culture					
Government bodies and corporations under the authority of the MCC	73	80	16	4	C
Sports, community, tourism and recreational infrastructures					
Régie des installations olympiques	31	33	52	15	D
Social and community housing					
Société d'habitation du Québec	77	77	16	7	B
Government buildings					
Société québécoise des infrastructures	75	75	21	4	C
Other sectors - dams					
Ministère de l'Environnement et de la Lutte contre les changements climatiques	23	30	70	0	D
Total	**61**	**60**	**21**	**19**	**C**
Non Government-Owned Infrastructures					
Public transit					
Public transit corporations	78	82	15	3	B
Municipal infrastructures					
Municipalities	80	79	11	10	B
Social and community housing					
Bodies funded by the SHQ	76	78	16	6	C
Total	**80**	**79**	**12**	**9**	**B**

[1] Proportion of condition indicator according to replacement value.

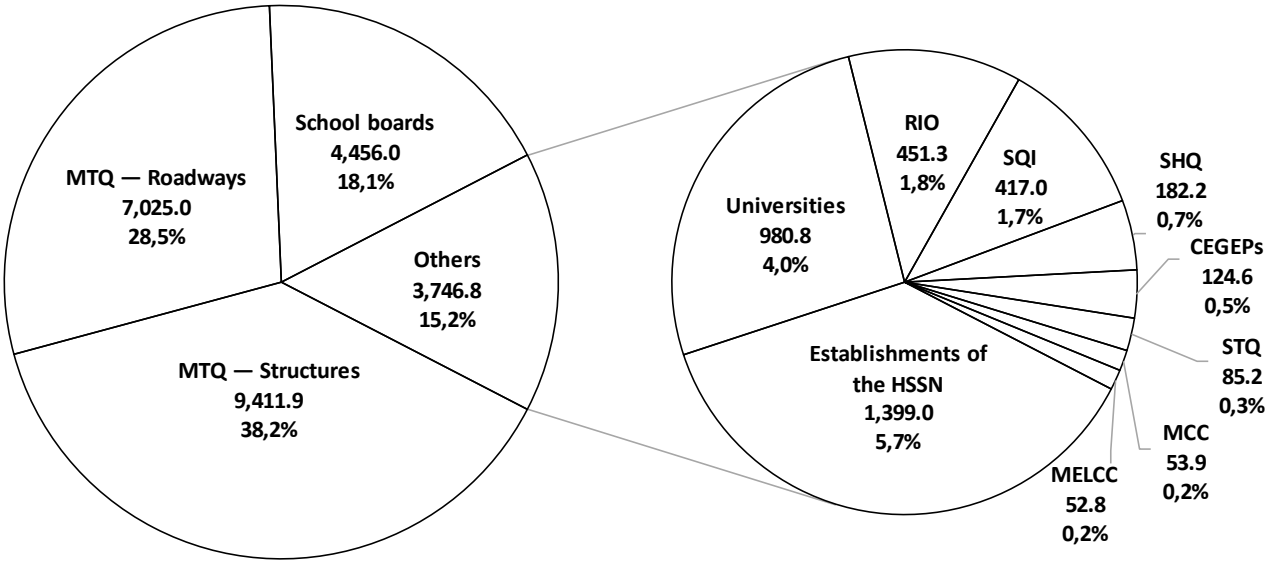
2.3 The Asset Maintenance Deficit is Evaluated at $24.6 Billion

In 2019-2020, the government's AMD stands at $24.6 billion, a gross increase of $3.8 billion in relation to the previous year. The AMD solely concerns government-owned infrastructure. As for other infrastructure, such as infrastructure that the municipalities and public transit authorities own, their AMD is not accounted for since it is not under the government's direct responsibility. The AMD is attributable to:

- the transportation sector (67%);
- the education sector (18%);
- other sectors (15%).

It is incumbent upon each organization designated by the government to elaborate an Annual Management Plan for Public Infrastructure Investments to estimate the AMD. Accordingly, the AMD represents the value of the investments required to restore infrastructure whose GCI is D (poor) or E (very poor) to a satisfactory condition or better. It is expected for an infrastructure at the end of its useful life to have an AMD. It can be addressed, either through performing the requisite renovation work, demolition or the sale of the infrastructure.

Asset Maintenance Deficit Distribution
(by body, in millions of dollars and in percentage)



The increase of the AMD in 2019-2020 is principally attributable to the transportation and education sectors, which show increases of $1.8 billion and $1.2 billion, respectively. The increases reveal that the current pace at which renovation work is being carried out in these sectors in insufficient to fully overcome the backlog in recent decades, especially as regards roads and schools.

The level of AMD has influenced the government's decision to allocate most of the $15.0-million increase under the 2019-2029 QIP to maintain the service offer. The government intends to pursue this course in the coming years.

Change in the Asset Maintenance Deficit by Sector
(millions of dollars)

	Asset Maintenance Deficit				
	2018-2019 AMPI	**Increase**	**Elimination**	**Change**	**2019-2020 AMPI**
AMD from Government-Owned Infrastructures[1]	**20,822.2**	**6,850.2**	**(3,032.7)**	**3,817.5**	**24,639.7**
Road network					
Ministère des Transports					
Roadways	6,044.0	1,777.0	(796.0)	981.0	7,025.0
Structures — highway system	7,896.8	1,709.0	(954.0)	755.0	8,651.8
Structures — municipal bridges	720.9	158.3	(119.1)	39.2	760.1
Culverts	N/A	n/a	n/a	n/a	N/A
Total — Ministère des Transports	14,661.7	3,644.3	(1,869.1)	1,775.2	16,436.9
Marine, air, rail and other transportation					
Société des traversiers du Québec	55.4	29.8	—	29.8	85.2
Health and social services					
Establishments of the HSSN	641.3	956.7	(199.0)	757.7	1,399.0
Education					
School boards	3,292.2	1,875.5	(711.7)	1,163.8	4,456.0
Higher education and research					
CEGEPs	142.1	20.8	(38.3)	(17.5)	124.6
Universities	1,024.4	63.4	(107.0)	(43.6)	980.8
Culture					
Government bodies and corporations under the authority of the MCC	43.8	26.4	(16.3)	10.1	53.9
Sports, community and recreational infrastructures					
Régie des installations olympiques	306.3	174.1	(29.1)	145.0	451.3
Social and community housing					
Société d'habitation du Québec	173.8	30.7	(22.3)	8.4	182.2
Government buildings					
Société québécoise des infrastructures	409.7	22.5	(15.2)	7.3	417.0
Other sectors - dams					
Ministère de l'Environnement et de la Lutte contre les changements climatiques	71.5	6.0	(24.7)	(18.7)	52.8

[1] No AMD accounted for non-owned government infrastructures.

2.4 The Net Increase in the Asset Maintenance Deficit Stands at $1.2 Billion

The change in the AMD is either attributable to an increase stemming from the natural deterioration of infrastructure during its life cycle, including fluctuations in the cost of the work to be performed, or the completion of work that facilitates its reduction, or the observation of needs pinpointed for the first time during the year.

Change in the Asset Maintenance Deficit
(millions of dollars)

	Asset Maintenance Deficit				
	2018-2019 AMPI	**Increase**	**Elimination**	**Change**	**2019-2020 AMPI**
AMD from government-owned infrastructures	**20,822.2**	**6,850.2**	**(3,032.7)**	**3,817.5**	**24,639.7**
New inspections		(2,584.9)		(2,584.9)	
Net change excluding new inspections		**4,265.3**	**(3,032.7)**	**1,232.6**	

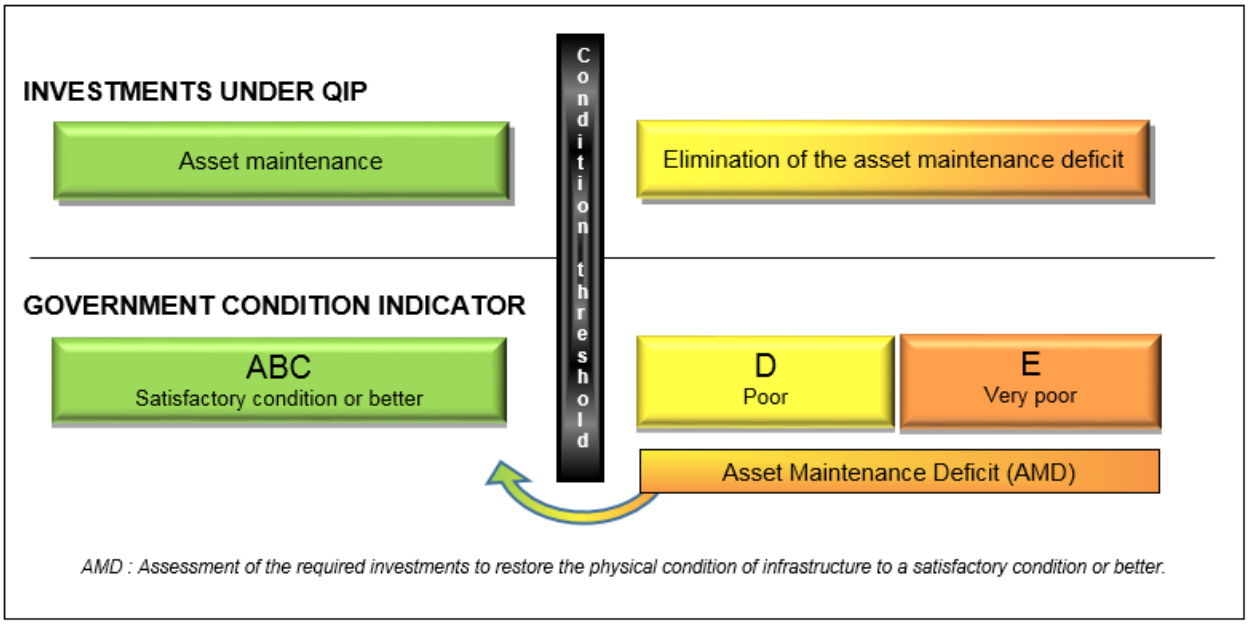
In relation to the recorded AMD in the 2018-2019 Annual Management Plans for Public Infrastructure Investments ($20.8 billions), a $1.2-billion net increase of the AMD has been recorded in 2019-2020, that is once the $2.6-billion impact of new inspections during the year has been subtracted. Thus, the natural deterioration of infrastructure in poor condition exceeds the elimination of AMD due to the work completed during the year. This outcome illustrates the need to enhance the elimination of the AMD and thus target investments in this respect, which the government is doing under the 2019-2029 QIP.

More specifically, changes in the AMD in 2019-2020 revealed:

- the natural deterioration of infrastructure contributed to a $4.2-billion increase in the AMD, including:
  - $2.9 billion related to the natural deterioration of civil engineering structures, especially roadways and road network structures;
  - $1.3 billion related to the ageing of buildings, especially in the education network.
- investments made allowed for a $3.0-billion elimination of AMD, including:
  - $1.9 billion in remedial and reconstruction work on roadways and road network structures;
  - $1.1 billion in respect of work on and the upgrading of worn out critical components of buildings in the health and social services, education and higher education networks. Furthermore, these sums also allowed for the replacement of outdated medical devices in the health and social services network.
- The new inspections conducted over the past year have made it possible to pinpoint needs for the first time or to specify the need to intervene with respect to failures already observed worth $2.6 billion, including:
  - $1.3 billion in new work in the education and health and social services sectors and at the Régie des installations olympiques;
  - $0.7 billion attributable to the reassessment of the scope and cost of roadway rehabilitation projects planned on the road network;
  - $0.6 billion for the programmed replacement of medical devices that have exceeded the end of their useful life in the health and social services network.

3. The Prioritization of Investments Aimed Towards the Maintenance of the Public Service Offer

The long-term maintenance of a quality public service offer requires a level of recurring asset maintenance investment geared to the changing needs accounted for in the Annual Management Plans for Public Infrastructure Investments.



Accordingly, to ensure the durability of existing public infrastructure, and therefore avoid delaying investments that would unduly increase the AMD, the government must prioritize and seek a balance between investments that address the AMD and investments required to maintain and replace infrastructure before it falls below the satisfactory threshold.

3.1 The 2019-2029 QIP Manages 79% of the Asset Maintenance Deficit

The government plans some $19.4 billion in investments under the 2019-2029 QIP to carry out work that targets the elimination of the $24.6 billion of AMD accounted for the government-owned infrastructure. On the whole, 79% of the AMD listed in the Annual Management Plans for Public Infrastructure Investments is thus managed through the planning of projects dedicated to the elimination of AMD on deteriorated infrastructure in all sectors over the next decade.

Management of the annual maintenance deficit
(millions of dollars)

	Transports	Education	Other	Central envelope	Total
AMD total in AMPI	16,436.9	4,456.0	3,746.8	n/a	**24,639.7**
Planned AMD investments in QIP	11,987.3	2,147.9	3,231.6	2,072.2	**19,439.0**
Proportion planned	73 %	48 %	86 %	n/a	**79 %**

In practical terms, the following investments will enhance the quality of public services in all sectors in the coming years depending on the pace of completion:

- $12.0 billion in the transportation sector:
  - Substantial investments are planned in the coming years to complete repair work on roadways showing significant deficiencies. At the same time, a large portion of such funds will be earmarked for the reconstruction of bridges and overpasses reaching the end of their useful life and for the replacement of critical components that will allow for the extension of the useful life of other civil engineering structures.
- $2.1 billion in the education sector:
  - The average age of school buildings exceeds 50 years, the investments forecasted to address 48% of the AMD will restore schools to good condition through the replacement of outdated components in the coming years, such as heating and air conditioning systems, roofs, exterior cladding and windows. Efforts will continue in the coming years to increase the management rate of the AMD in the education sector.
- $3.2 billion in the other sectors:
  - The management of the accumulated delay accounted for in the Annual Management Plans for Public Infrastructure Investments must occur simultaneously in all areas of activity, especially for hospitals and residential and long-term care centres, the universities, cultural properties, the Olympic Stadium, social housing, government buildings and dams.
- $2.1 billion reserved for core funding:
  - The government is reserving more than $2.0 billion, equivalent to 17% of core funding, to carry out projects to support the elimination of the AMD, especially those now under study that are highly likely to be prioritized in forthcoming QIPs.

3.2 $8.6 Billion in Additional Funding to Maintain the Government Service Offer

The entire array of initiatives to be carried out within five years listed in the Annual Management Plans for Public Infrastructure Investments reveals certain shortfalls, especially in the transportation and education sectors. The government is acting now to deal with them by allocating a significant portion, that is, $8.6 billion or 58% of the $15.0-billion increase under the 2019-2029 QIP for investments to support infrastructure durability, including:

- $3.9 billion in the transportation sector:
  - The investments are intended to sustain the requisite pace to complete work necessary for regular road network maintenance, thereby contributing to the enhancement of road user safety and the free flow of traffic. The additional investments will facilitate, in particular, the performance of asset maintenance work and the rehabilitation of structures and roadways, measures aimed at critical components that will extend the useful life of certain structures, and the reconstruction of bridges and overpasses that have reached the end of their useful life.

- $2.8 billion in the education sector:
  - The substantial increase in the recurring level of investments to maintain the service offer will allow for the enhancement of the management of the AMD on infrastructure in poor and very poor condition and meet the current needs of schools already in good condition (A, B or C). This reinvestment will address directly the deterioration of schools and help avoid accumulating additional AMD in the coming years by curbing growth in the obsolescence rate of schools.
- $1.9 billion in other sectors:
  - Several other targeted increases in all other sectors will allow for a response to numerous priorities to maintain the service offer, in particular the rehabilitation of municipal drinking water and wastewater infrastructure, the renovation of certain government buildings and social housing units, and the maintenance of the information assets necessary to ensure their smooth operation.

Over the years to come, the government will pursue its actions so as to enhance the quality of public infrastructures in Quebec. To this end, the government is committed to increase to $7.0 billion the yearly average over five years of the forecasted investments towards the maintenance of the service offer before the QIP of 2022-2032.

4. The 2019-2020 Annual Management Plans for Public Infrastructure Investments

The 2019-2020 AMPI includes the following sections:

- **Infrastructure management** presents the vision, orientations and objectives, responsibilities and a description of the infrastructure of the government department and bodies that make up the portfolio of the designated Minister.
- **Public infrastructure investments** presents the investments carried out in 2017-2018, probable investments in 2018-2019, and anticipated investments in 2019-2020.
- **Infrastructure sustainability** presents an inventory of the infrastructure of the government department and the bodies under the Minister's responsibility, including, by way of an example, an evaluation of its condition and its AMD. The change in condition and the AMD also presents variations during the year and the main explanations for such change.
- **The appendices** present, where warranted, more detailed information.

Public Bodies Designated by the Government to Elaborate an AMPI

Budgetary portfolio/QPI sector	Public organizations
Affaires municipales et Habitation	
Municipal infrastructures	Municipalities
Social and community housing	Société d'habitation du Québec
	Bodies funded by the Société d'habitation du Québec
Conseil du trésor et Administration gouvernementale	
Government buildings	Société québécoise des infrastructures
Culture et des Communications	
Culture	Bodies and government corporations reporting to the Minister of Culture and Communications
Environnement et Lutte contre les changements climatiques	
Other sectors	Ministère de l'Environnement et de la Lutte contre les changements climatiques
Éducation et enseignement supérieur	
Education	School boards
Higher education and research	CEGEPS
	Universities
Santé et Services sociaux	
Health and social services	Establishments of the Health and social services network
Tourisme	
Sports, community and recreational infrastructures	Régie des installations olympiques
Transports	
Road network	Ministère des Transports
Public transit	Public transit corporations
Marine, air, rail and other transportation	Société des traversiers du Québec

AFFAIRES MUNICIPALES ET HABITATION

INFRASTRUCTURE MANAGEMENT

THE MINISTÈRE DES AFFAIRES MUNICIPALES ET DE L'HABITATION

VISION

The MAMH seeks to act as a decisive partner of the municipalities in the development of sustainable, dynamic, attractive living environments for all Quebecers.

ORIENTATIONS AND OBJECTIVES

The mission of the MAMH is to support municipal governments and the sustainable development and occupancy of the territory for the benefit of the population.

To successfully carry out this mission, the MAMH promotes a sustainable, integrated approach for the benefit of Quebecers. To this end, it subsidizes Québec municipalities to enable them to carry out projects to upgrade, maintain and replace drinking water, wastewater or community infrastructure.

RESPONSIBILITIES

The MAMH administers substantial financial assistance budget allowances to satisfy the priority needs of the municipalities. It must ensure that the projects covered by applications for funding comply with the rules established and oversee accountability for spending from the standpoint of government investments. Moreover, it guides the smallest municipalities in the development of more complex projects to steer them to plausible solutions in respect of the desired outcomes but that are also acceptable from an economic perspective.

The MAMH's financial assistance programs offer financial support to Québec municipalities to enable them to offer and maintain basic services for their residents. The investments can thus contribute to enhancing the quality of life of communities and their environment. The MAMH relies on different formal and informal mechanisms to consult the municipal sector, thereby ensuring that programs meet the needs. Several programs are adapted to reflect that small municipalities often find it difficult to make the investments necessary to upgrade their basic infrastructure given their limited financial capacity, small populations and the latters' dispersal in the territory.

Rules and standards that the Conseil du trésor approves regulate the terms and conditions of the programs. Such standards and other assessment criteria respecting applications for funding guide the MAMH's selection of projects. The MAMH prioritizes projects focusing on compliance with regulations (the *Regulation respecting the quality of drinking water* and the *Regulation respecting municipal wastewater treatment works*), and problems related to health and public health.

The programs indicated below that the MAMH manages support municipal infrastructure projects.

MAMH programs that offer funding solely from Québec

Such programs change according to the needs of the municipalities and the investments authorized under the QIP:

- PRIMEAU: this program seeks to support the realization of municipal construction, rehabilitation or expansion projects pertaining to drinking water or wastewater infrastructure projects and projects to replace transmission mains and sewers;
- RÉCIM: this program offers assistance to municipalities with limited financial capacity to enable them to carry out work to resolve infrastructure-related problems. The program covers administrative offices (city halls, borough offices), fire stations, municipal garages and warehouses, and community centres;
- PRIMADA: the Senior-Friendly Municipality infrastructure program financially supports municipalities that have adopted a seniors' policy and the SFM action plan to carry out small construction upgrading or expansion projects devoted to infrastructure that seniors use;
- PIQM: this program is devoted to work relating to several categories of infrastructure adapted to the needs of the municipalities.

MAMH programs that offer funding from Québec and Canada

The following programs stem from specific agreements between the Québec and federal governments.

- TECQ: the program allows for the transfer to Québec municipalities of part of the revenue from the federal excise tax on gasoline and the Québec government's contribution to the realization of work related to drinking water, wastewater, local road networks and other types of infrastructure. The TECQ facilitates the repayment of all of the eligible expenses of projects;
- NFCCQ volet Fonds des petites collectivités: this program offers municipalities with fewer than 100 000 residents financial support to maintain and upgrade water infrastructure, cultural, tourism, recreational and sports infrastructure, and local and regional airports;
- FCCQ volets Collectivités, Grandes villes et Grands projets: this program seeks to provide municipalities with water infrastructure to enhance drinking water services or reduce the harmful effects of wastewater on the environment and public health. It also seeks to provide communities or regions with service infrastructure that contributes, by way of an example, to their cultural, economic, sports or tourism development;
- FEPTEU: this programs targets drinking water and wastewater treatment infrastructure projects in the context of economic revival.

The PIQM, NFCCQ, FCCQ and FEPTEU programs are closed to new applications for subsidies but projects that have already received a confirmation of financial assistance are being maintained.

Except for the TECQ, each subsidized project implies the sharing of costs between the governments and the beneficiary municipality.

The MAMH must also manage agreements reached with the federal government.

It should be noted that the Québec and federal governments signed an integrated bilateral agreement on June 6, 2018, which stems from phase II of the federal government's Invest in Canada infrastructure plan. Investments related to the agreement are planned over a period of 10 years. The MAMH will implement in 2019 a portion of such investments under a new water infrastructure project financial assistance program.

The MAMH or an auditor from an outside firm directly audits the projects funded by the programs. Such audits seek to ensure the eligibility of the work covered by claims for payment and compliance with the provisions stipulated in the memoranda of understanding.

Lastly, the MAMH obtains from the municipalities relevant information on the state of water infrastructure to enable it to establish an objective and reliable profile.

THE MUNICIPALITIES

RESPONSIBILITIES

Since the municipalities own their infrastructure, they are responsible for its construction, maintenance, operation and financing, including compliance with the attendant regulations.

Accordingly, they must obtain the requisite financing to carry out their projects, especially through authorized loan by-laws. The MAMH subsequently reimburses to them the government contributions, once expense claims are approved. Each of the MAMH's financial assistance programs defines the accountability process applicable to the municipalities for the purposes of reimbursing the expenses.

Consequently, it is incumbent upon the municipalities to evaluate and document the state of their infrastructure, define needs, ensure the appropriate asset management bearing in the mind the desired level of service, and periodically update this information.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

This Annual Management Plan for Public Infrastructure Investments presents an overview of municipal water supply system and wastewater infrastructure and roadways above drinking water and wastewater mains. Municipal water infrastructure comprises water collection facilities, drinking water and wastewater mains, drinking water treatment plants, reservoirs, water pressure control stations, retention ponds, treatment plants, pumping stations, and overflow structures.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement	
Municipalities						
2017-2018						
Actual	255.9	—	244.3	500.2	268.5	**768.7**
2018-2019						
Probable	191.6	—	185.0	376.6	328.8	**705.4**
2019-2020						
Planned	265.6	—	103.0	368.6	224.0	**592.6**

ADDITIONAL INFORMATION

The municipalities

The financial assistance that the MAMH provided to support municipal infrastructure investments carried out in 2017-2018 stands at $768.7 million, compared with an anticipated total of $705.4 million in 2018-2019.

Most of the investments made in 2017-2018 and in 2018-2019 target the realization of municipal water infrastructure projects such as the construction, rehabilitation or upgrading of drinking water or wastewater treatment facilities or the replacement of mains. Aside from water infrastructure, the funds allow for the realization of municipal and community, recreational, cultural and other infrastructure projects. For example, the funds have facilitated the completion or pursuit of the following projects:

- upgrading of drinking water facilities in Baie-Comeau;
- the replacement of water mains in Montréal;
- the construction of a wastewater disinfection plant in Montréal;
- the construction of wastewater retention ponds to control overflowing in Montréal;
- the rehabilitation of the wastewater treatment plant in Gatineau;
- the establishment of a sanitary sewer system and extension of the waterworks located around Lac-à-la-Tortue in Shawinigan;
- construction of the Centre de glaces in Québec City;
- construction of an arena in Trois-Rivières.

The financial assistance planned by the MAMH in 2019-2020 will total $592.6 million and will facilitate construction, rehabilitation or upgrading projects pertaining to drinking water or wastewater treatment plants. Aside from water infrastructure, the funds will allow for the realization of municipal and community, recreational, cultural and other infrastructure projects. Several of the major projects mentioned earlier were already under way in 2018-2019 and will continue in 2019-2020.

The downturn in the level of investments between 2017-2018 and 2019-2020 is mainly attributable to the imminent conclusion in 2019 of certain federal grant programs such as the TECQ 2014-2018 and the FEPTEU. What is more, a new financial assistance program for water infrastructure projects will be implemented in 2019 pursuant to the integrated bilateral agreement with the federal government stemming from phase II of the Invest in Canada infrastructure plan. A new investment phase under the TECQ will also be implemented for the period 2019 to 2023.

INFRASTRUCTURE SUSTAINABILITY

MUNICIPALITIES

Infrastructure Inventory[1, 2]
By Infrastructure Type and Category

	Quantity	Dimension[3]	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator
					ABC	D	E	
Real Estate								
Non-linear infrastructure								
Drinking water supply and production facilities	3,720	N/A	48	100	48	29	23	C
Water treatment facilities	5,004	N/A	29	100	57	36	7	C
Civil Engeneering Works								
Linear infrastructure								
Drinking water pipes	n/a	42,088 km	39	86	89	7	4	B
Wastewater pipes	n/a	34,018 km	40	89	91	3	6	B
Storm water pipes	n/a	18,056 km	33	89	96	1	3	A
Roadways above pipes	n/a	37,793 km	N/A	88	61	18	21	C

Legend: N/A = not available; n/a = not applicable

1 Data as at December 3, 2018.
2 The average age and condition indicators are those of the infrastructures in the municipalities consulted.
3 The sizes provided are estimates for Québec as a whole based on a partial report.

ADDITIONAL INFORMATION

Since 2014, the Centre d'expertise et de recherche en infrastructures urbaines (CERIU) has collected data from Québec municipalities that has enabled it to structure and consolidate knowledge of municipal water infrastructure. The CERIU project is being carried out in collaboration with key interveners in the municipal sector.

An estimated 900 Québec municipalities are served by a water distribution system. The state of water infrastructure in Québec municipalities is based on data supplied by 727 municipalities in respect of water mains and roadways (linear infrastructure), and by 835 municipalities regarding water infrastructure (localized infrastructure). Appendix I of the 2018 report of the CERIU devoted to the *Portrait des infrastructures en eau des municipalités du Québec* lists the municipalities and is available at https://ceriu.qc.ca/bibliotheque/rapport-2018-du-portrait-infrastructures-eau-municipalites-du-quebec-piemq. The data in the table below are drawn from the report.

Data collection and processing will continue in the coming years to ensure the most complete and representative profile of the state of municipal water infrastructure in Québec, in keeping with government guidelines.

Percentage of Inspection

The percentage of inspection represents the cumulative percentage of water infrastructure in Québec in respect of which the CERIU has obtained inventory and report data from the municipalities.

The inventory of linear infrastructure is established according to data from 727 municipalities that account for 92% of the total length of water mains and roadways and 83% of the population served by a water distribution system in Québec.

The inventory of water facilities is established based on data from 835 participating municipalities bearing in mind that they are representative of water infrastructure overall.

Methodology

Since the MAMH does not own the water infrastructure, the inventory and evaluation report is based on data available from and provided by the municipalities. In this respect, in the absence of inspections or specific diagnoses, missing data have been estimated according to the most convincing information accessible, including the number of breakdowns and the infrastructure's remaining useful life. This methodology facilitates the establishment, for the purposes of the Annual Management Plan for Public Infrastructure Investments, of an accurate indicator of average condition, as well as to support for planning investments and maintaining follow-up on the impact of the investments on changes in the state of infrastructure.

Data Collection

The CERIU has compiled most of the data on civil engineering structures based on response plans for the replacement of drinking water mains, sewers and roadways that are intended to determine priority work to be carried out by the municipalities. In the case of water facilities (localized infrastructure), the CERIU obtains each year data by means of a specific form that the participating municipalities fill out. Discussions between municipal representatives and analysts from the CERIU have facilitated the validation and examination of the information obtained and, *ipso facto*, the detection of possible errors or anomalies, standardization of the nomenclature and, if need be, the estimation of certain missing data.

Evaluation of the State of Infrastructure

The evaluation by the CERIU of the physical condition of civil engineering structures has been conducted by means of overall modelling of the network based, on the one hand, on data derived from inspections and detailed analyses and, on the other hand, for certain segments of the network that were not inspected or do not maintain breakdown logs, on their remaining useful life. In this specific instance, the evaluation instead reflects a theoretical state based on a risk of breakdown linked to age.

In the case of localized infrastructure such as water treatment plants and pumping stations, the evaluation is based on the useful life and reflects a risk of breakdown associated with age rather than a physical state based on a list of work stemming from an inspection.

The percentages of the condition indicator (ABC / D / E) and the average condition indicator are weighted according to the replacement value for water facilities (localized infrastructure) and according to dimension for water mains and roadways.

Change in Infrastructure Condition
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator	
	AMPI		Variation	AMPI	
	2018-2019	2019-2020		2018-2019	2019-2020
Real Estate					
Non-linear infrastructure					
Drinking water supply and production facilities	53	48	(5)	C	C
Water treatment facilities	49	57	8	C	C
Civil Engineering Works					
Linear infrastructure					
Drinking water pipes	92	89	(3)	B	B
Wastewater pipes	92	91	(1)	B	B
Storm water pipes	98	96	(2)	A	A
Roadways above pipes	64	61	(3)	C	C

ADDITIONAL INFORMATION

Variation

Overall, the average condition indices remain relatively stable for municipal water infrastructure.

The few changes observed are mainly attributable to additional data obtained from 150 municipalities in respect of water mains and roadways, and from 12 municipalities regarding localized water facilities.

The state of linear infrastructure for 90% of the municipalities mentioned in the 2018 report of the CERIU on the *Portrait des infrastructures en eau des municipalités du Québec* was evaluated between 2016 and 2018. It should be noted that this evaluation has not been subject to an annual update to take into account the completion of work and new observations of breakdowns. The CERIU and the MAMH are nonetheless elaborating an annual follow-up method that will facilitate a cursory assessment of changes in the state of infrastructure. A more precise profile will be produced every five years when the municipalities have submitted updates of their response plans. Localized infrastructure is evaluated annually.

Accordingly, changes in the profile stem from a partial update and greater numbers of observations. The Annual Management Plans for Public Infrastructure Investments for subsequent years should produce a better description of changes in the state of each category of infrastructure since the data bank will have been completed and knowledge of the state of infrastructure will be enhanced.

INFRASTRUCTURE MANAGEMENT

THE SOCIÉTÉ D'HABITATION DU QUÉBEC

VISION

The mission of the SHQ is to meet Quebecers' housing needs through an integrated and sustainable approach. It seeks to be the leader in housing, recognized for its commitment to the enhancement of the quality of Quebecers' lives and its partnerships with communities. To this end, it:

- supports individuals with low-cost and affordable housing through an array of programs covering home construction, renovation and adaptation, and home ownership;
- fosters an integrated and sustainable approach to housing on Québec's territory by contributing to the development of varied offerings of quality and affordable housing, and by promoting innovation and consultation from the standpoint of public and private housing initiatives;
- adheres to and participates in current government policy directions such as economic inclusion and social participation, the fight against homelessness, health prevention, the occupancy and vitality of territories, and the Plan Nord.

ORIENTATIONS AND OBJECTIVES

To successfully carry out its mission, the SHQ has adopted the orientations and objectives indicated below with respect to the infrastructure under its responsibility.

Orientations

- Enhance the quality of life of individuals;
- Ensure development and innovation in housing.

Objectives

- Adjust measures to the changing, varied needs of individuals and communities.
  - Revise by 2021 all active subsidy programs on a five-year basis.
- Establish conditions that ensure the quality and durability of housing stock.
  - Raise by 2021 the condition indicator of all properties in public housing stock rated D or E in December 2017 to a condition indicator of C or better;
  - Complete by 2021 the BHRs of 25% of private subsidized rental housing units.
- Foster innovation in housing.
  - Support by 2021 four new innovative housing projects.

RESPONSIBILITIES

The SHQ, which is under the responsibility of the Minister of Municipal Affairs and Housing, is the main government body responsible for housing in Québec. Under its enabling legislation, it is responsible, in particular for:

- offering Quebecers low-cost housing;
- facilitating home ownership;
- informing the Minister of the needs, priorities and objectives to be attained in all sectors of housing.

More specifically, the SHQ elaborates the rules governing the distribution and allocation of budgets and approves the budgets allocated to each organization. Moreover, it establishes an approach through which it grants considerable autonomy to its partners in a context of risk management and results-based management. This approach principally confers SHQ a supervisory, support and quality control role. It relies on the service centres to ensure front-line support to the bodies, especially in the elaboration and planning of a MYCCP or in the preparation of a request for an RMI budget or a special project.

Through its NPHP and RMI budget, the SHQ ensures that all low-cost housing buildings in Québec's social housing stock that it owns or that belong to bodies such as HBs, cooperatives and housing NPOs are maintained in good condition. Within the framework of this management, the SHQ does not make a distinction between real-estate complexes that it owns directly and those that bodies own.

The NPHP is intended for low-income households selected according to their socioeconomic conditions. The available housing is attributed according to the category of household making the application (seniors, families), its composition (single individuals, couples with or without children), and the priority of the application. Households pay rent equivalent to 25% of their income.

The program has four sections:

- **Regular Public Component**: buildings that the SHQ or the HBs own or which the latter manage;
- **Inuit Public Component:** buildings that the SHQ or the Kativik Municipal Housing Bureau own, which the latter manages, and two health centres (Innulitsivik and Tulattavik);
- **Regular Private Component:** privately owned buildings that cooperatives and NPOs manage;
- **Regular Private Component Outside Reserve**: buildings that Habitation Métis du Nord owns and that the Corporation Waskahegen manages.

To ensure the sound management of LRH and investments in such housing, the SHQ relies on:

- knowledge of the housing stock and the determination of the work to be carried out indicated in the BHR;
- planning of investments by means of a computer application that manages the MYAP and facilitates the presentation and authorization of and follow-up to RMI budget requests;
- the allocation of budgets based on an assessment of the need to intervene in light of the observations recorded in the BHR;
- the completion of the work;
- accountability.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The SHQ owns 3,769 buildings, that is, 2,463 in the regular public section and 1,306 in the Inuit public section, which account for 45,268 low-rent housing units.

BODIES SUBSIDIZES BY THE SHQ

RESPONSIBILITIES

Since they own the buildings, the bodies that the SHQ subsidizes are responsible for the construction, maintenance and operation, as well as financing of such buildings, including compliance with the attendant regulations.

More specifically, each organization, such as HBs, cooperatives and housing NPOs, is responsible for having its board of directors approve its MYAP and annual RMI budget application. While the enjoy decision-making autonomy, they are obliged to resort to their service centres to elaborate their MYAPs and to prepare and submit RMI budget applications. Furthermore, HBs must ensure that the municipality agrees to assume its financial participation before the HB submits its RMI budget application to the SHQ.

The service centre supports bodies in its territory in the elaboration of MYAPs and the preparation and submission of RMI budget applications. The service prepares the RMI budget application in accordance with the form and contents determined by the SHQ and takes into account the priority criteria that the latter establishes to advise the organization.

The service centre submits for the organization's approval the MYAP and the RMI budget application that it has prepared. It subsequently submits the budget application to the SHQ. It should be emphasized that the service centre manages all renovation projects stemming from the budgets in the RMI budget allowance. It should also be noted that certain bodies, without relying on other agencies, act on their own behalf as service centres.

It is incumbent upon the bodies that the SHQ subsidizes to evaluate and document the state of their infrastructure, define needs, ensure adequate management according to the desired level of service, and periodically update this information.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The infrastructure belonging to the bodies that the SHQ subsidizes comprises 3,794 buildings, that is, 1,991 belonging to HBs under the regular public section, 755 belonging to the Kativik Municipal Housing Bureau for the Inuit public section, and 1,048 belonging to cooperatives, housing NPOs and HBs under the private section, for a total of 27,521 low-rent housing units.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhance of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replacement	Subtotal	Addition and Improvement	
Société d'habitation du Québec						
2017-2018						
Actual	70.5	17.2	—	87.7	—	**87.7**
2018-2019						
Probable	62.5	24.6	—	87.1	—	**87.1**
2019-2020						
Planned	63.6	25.0	—	88.6	—	**88.6**
Bodies Subsidized by the SHQ						
2017-2018						
Actual	53.1	—	3.8	56.9	—	**56.9**
2018-2019						
Probable	53.8	—	7.0	60.8	—	**60.8**
2019-2020						
Planned	54.8	—	15.1	69.9	—	**69.9**

ADDITIONAL INFORMATION

The Société d'habitation du Québec

Maintenance of the Service Offer

In 2017-2018, the SHQ invested $87.7 million in the buildings that it owns. Probable investments for 2018-2019 stand at $87.1 million. The investments allowed, by way of an example, for the completion of the following projects:

- the rehabilitation of electrical and ventilation systems and modernization of dwellings in the Girouard real-estate complex in Saint-Hyacinthe;
- rehabilitation of the shell and mechanical systems and modernization of dwelling units in buildings in Sept-Îles;
- rehabilitation of the shell and modernization of dwelling units in semi-detached buildings in Cap-Chat.

In 2019-2020, the SHQ plans to invest $88.6 million to maintain the service offer for its buildings. The investments will, in particular, facilitate the completion of the following projects:

- work related to partition fire-proofing and the modernization of dwelling units in a building in Québec City;
- reconstruction of parking lots and modernization of dwelling units in two buildings in La Guadeloupe;

- rehabilitation of the shell and modernization of dwelling units in two buildings in Longueuil.

The investments are covered by the RMI budget attributed annually to the bodies targeted by the NPHP, which use them to carry out maintenance and improvement work on buildings that the SHQ owns in order to reduce their AMD. The work has, by way of an example, facilitated the rehabilitation of exterior cladding and mechanical systems (plumbing and ventilation) and the modernization of dwelling units.

The RMI budget thus ensures the maintenance and sustainability of the collective heritage that low-rent housing stock represents as well as a healthy, safe living environment for beneficiary households under the NPHP.

Bodies Subsidized by the SHQ

Maintenance of the Service Offer

Some $56.9 million in financial assistance from the SHQ supported the investments that bodies carried out in 2017-2018. Probable investments for 2018-2019 stand at $60.8 million. The funds allowed for the rehabilitation of exterior cladding and mechanical systems (plumbing and ventilation) and the modernization of dwelling units. Here are some examples of projects carried out by means of the investments:

- rehabilitation of the shell and mechanical systems and modernization of dwelling units in the Jean-Nicolet sector in Trois-Rivières;
- rehabilitation of the shell, upgrading of building fire separations and modernization of dwelling units in the Habitations Raymond-Brunet real-estate complex in Gatineau;
- reconstruction of social housing units in the Adélard-Dugré real-estate complex in Trois-Rivières;
- construction of the warehouses of the Kativik Municipal Housing Bureau in Nunavik.

In 2019-2020, financial assistance from the SHQ to support the investments of bodies to maintain the service offer stands at $69.9 million. The investments will, in particular, allow for the completion of the following projects:

- the rehabilitation of the shell of buildings in Terrebonne and Saint-Jérôme;
- reconstruction of the warehouses of the Kativik Municipal Housing Bureau in Nunavik.

INFRASTRUCTURE SUSTAINABILITY

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Number of buildings	Number of dwellings	Average Age (Years)	Inspec-tion (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings Belonging to the SHQ									
Regular Public Component	2,463	43,492	35	98	75	17	8	B	172.1
Inuit Public Component	1,306	1,776	30	99	89	8	3	B	10.1
Total	**3,769**	**45,268**							**182.2**
Building Belonging to Bodies Subsidized by the SHQ									
Regular Public Component	1,991	19,085	45	89	73	19	8	C	n/a
Inuit Public Component	755	1,576	9	79	87	13	0	A	n/a
Regular Private Component	398	4,985	29	91	87	10	3	B	n/a
Regular Private Component Outside Reserve	650	1,875	29	93	91	9	0	B	n/a
Total	**3,794**	**27,521**							

Legend: n/a = not applicable
[1] Data as at December 1st, 2018.

ADDITIONAL INFORMATION

Percentage of Inspection

The SHQ plans inspecting all buildings every five years. Inspections of all of the buildings should be completed by December 31, 2020.

Methodology

Building inventories and inspections are conducted during the elaboration of the BHRs, a standardized inspection process that the SHQ implemented in 2009. Each BHR is produced after an inspection that seeks to evaluate each component of buildings and dwelling units. This uniform, structured methodology facilitates the collection of technical information on the components that might affect individual health and safety, the integrity of the buildings, the operation of a component, or the availability of a service. What is more, the condition of buildings can change between inspections following the updating or addition of deficiencies that may eventually require work to be carried out. The SHQ adopts the same processes for its buildings and those that belong to the bodies that it subsidizes.

The average condition indicator has been calculated according to the replacement value of the buildings inspected. The AMD has been extrapolated according to the number of dwelling units in the buildings inspected in relation to the total number of dwelling units.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improve-ment	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings Belonging to the SHQ									
Regular Public Component	77	75	(2)	B	B	156.8	30.7	(15.4)	172.1
Inuit Public Component	79	89	10	B	B	17.0	—	(6.9)	10.1
Total						**173.8**	**30.7**	**(22.3)**	**182.2**
Building Belonging to Bodies Subsidized by the SHQ									
Regular Public Component	74	73	(1)	B	C				
Inuit Public Component	71	87	16	B	A			n/a	
Regular Private Component	85	87	2	B	B				
Regular Private Component Outside Reserve	N/A	91	n/a	n/a	B				

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Changes in condition

The average condition indicator of the buildings belonging to the SHQ and to the bodies that it subsidizes has remained fairly stable. This situation is attributable to balanced planning of asset maintenance work carried out during the year on the buildings to prevent deterioration, especially those in a satisfactory or better condition (A, B or C). Notwithstanding the stability of the average condition indicator, an improvement has nonetheless been noted in the condition of 98 buildings in the Inuit public section.

Changes in the AMD

The $30.7-million increase in the AMD stems, by and large, from the ageing of buildings in the regular public sector.

The $22.3-million reduction of the AMD is attributable to the completion during the year of work on buildings whose index was poor (D), thereby restoring their condition in order to offer quality housing to the clientele. This work falls within the scope of an investment allocation strategy that targets buildings whose needs are the most urgent and in respect of for which the AMD is significant. The investments that allow for the reduction of the AMD in the buildings mainly come from the Québec government but also from the Canada Mortgage and Housing Corporation and the municipalities.

CONSEIL DU TRÉSOR ET ADMINISTRATION GOUVERNEMENTALE

INFRASTRUCTURE MANAGEMENT

THE SOCIÉTÉ QUÉBÉCOISE DES INFRASTRUCTURES

VISION

The SQI contributes to the planning, construction and maintenance of government buildings in accordance with the most stringent practices.

It seeks to plan a sustainable heritage not only from the standpoint of the quality of construction but also in light of its long-term impact on government resources and finances, to foster excellence in all public infrastructure management teams, and to maintain the trust of its shareholder, clients, business partners and Quebecers.

ORIENTATIONS AND OBJECTIVES

To successfully carry out its mission, which consists, in particular, in developing, maintaining and managing a building inventory that satisfies the needs of its clientele by making available to it buildings and providing building construction, operation and management services, the SQI has, from the standpoint of the infrastructure under its responsibility, adopted the orientation and objectives indicated below.

Orientation

- Ensure the long-term durability of infrastructure.

Objectives

- Attain by March 31, 2023 a government condition indicator greater than or equal to C, that is, satisfactory, for all of the properties targeted;
- Ensure follow-up to changes in the AMD.

RESPONSIBILITIES

The SQI is responsible for ensuring the durability of one of Québec's largest building inventories. It must, therefore, maintain its properties in satisfactory condition to ensure their long-term physical and functional integrity. Moreover, it must meet the building needs of government departments and bodies by offering premises whose location, availability, quality and costs meet their expectations, and ensure optimum space occupation in order to reduce to a minimum the vacancy rate and rigorously manage the government's rent bill.

To this end, the SQI prioritizes its investments according to building requirements and government policy directions, bearing in mind the investment capacity that the government sets for it.

In a spirit of sustainable development, the SQI seeks to minimize energy consumption and ascertain climate change impacts on its buildings in order to reduce their vulnerability. Accordingly, the SQI considers both the safety of occupants and the continuity of the government's essential missions.

As for the condition of the buildings that it owns,[1] the SQI is responsible for the regular inspection of components, maintenance and repairs, and the day-to-day operations necessary to ensure services for occupants, the safety of the premises and the durability of the buildings.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The SQI's wholly-owned building inventory comprises 368 buildings and civil engineering structures totalling more than 1.9 million m^2 in rentable area. It includes office buildings used for government administration, courthouses, detention facilities, Sûreté du Québec police stations and other specialized buildings, in particular, transportation centres, conservatories of music and dramatic art, laboratories, warehouses, and underground parking lots and tunnels.

[1] Except for buildings covered by a lease with an establishment in the HSSN and in respect of which the establishment is responsible for asset maintenance.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Infrastructure Category and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement	
Office Buildings and Other Specialized Building						
2017-2018						
Actual	27.1	0.2	0.3	27.6	49.6	**77.2**
2018-2019						
Probable	44.8	0.1	0.6	45.5	98.3	**143.8**
2019-2020						
Planned	93.5	0.6	4.0	98.1	131.8	**229.9**
Courthouses						
2017-2018						
Actual	9.7	2.2	—	11.9	13.0	**24.9**
2018-2019						
Probable	16.3	2.1	—	18.4	59.3	**77.7**
2019-2020						
Planned	25.0	4.0	—	29.0	47.5	**76.5**
Detention Facilities						
2017-2018						
Actual	6.1	—	0.2	6.3	14.6	**20.9**
2018-2019						
Probable	14.0	0.1	2.6	16.7	4.4	**21.1**
2019-2020						
Planned	28.8	2.5	7.8	39.1	25.2	**64.3**
Sûreté du Québec Police Stations						
2017-2018						
Actual	7.0	—	0.1	7.1	4.6	**11.7**
2018-2019						
Probable	5.4	—	—	5.4	5.3	**10.7**
2019-2020						
Planned	9.1	—	2.3	11.4	19.2	**30.6**
Total						
2017-2018						
Actual	49.9	2.4	0.6	52.9	81.8	**134.7**
2018-2019						
Probable	80.5	2.3	3.2	86.0	167.3	**253.3**
2019-2020						
Planned	156.4	7.1	14.1	177.6	223.7	**401.3**

ADDITIONAL INFORMATION

In 2017-2018, the SQI invested $134.7 million in the buildings that it owns. Moreover, in 2018-2019, probable investments total $253.3 million and forecast investments in 2019-2020 stand at $401.3 million.

The anticipated $148.0-million increase in forecast investments in 2019-2020 in relation to probable investments in 2018-2019 hinges, on the one hand, on $91.6 million in additional investments to maintain existing infrastructure and, on the other hand, a $56.4-million investment to make acquisitions, carry out major refitting in courthouses, build new Sûreté du Québec police stations, and build a new detention facility.

Maintenance of the Service Offer

Investments to maintain the service offer seek to carry out the work required to ensure the long-term physical and functional integrity of the SQI's building inventory. Investments on infrastructure in poor condition at high risk of failing are prioritized when work is planned. Such investments reduce the asset maintenance deficit observed.

Asset maintenance investments in respect of government buildings focus essentially on work related to compliance with codes, structures, building shells, escalators and elevators, and the integrity of a building's mechanical and electrical systems.

Over half of the total investments of $52.9 million to maintain the service offer in 2017-2018 and probable investments of $86.0 million for 2018-2019 pertain to asset maintenance projects and compulsory upgrading under $5 million.

Aside from such projects under $5 million, the SQI carried out the following projects:

- structural reinforcement of the floor slabs in the Athanase David building in Saint-Jérôme;
- upgrading of the Louis Joseph Moreault building in Rimouski;
- rehabilitation of the masonry and replacement of heritage windows in the Ernest Cormier building in Montréal;
- replacement of electrical components in the Wilfrid Derome building in Montréal.

Forecast investments totalling $177.6 million for 2019-2020 will allow for, in addition to the projects under $5 million, the completion of the following key projects:

- rehabilitation of the parking lot at the Marie Guyart building in Québec City;
- rehabilitation of the parking lot at 10, rue Pierre-Olivier-Chauveau in Québec City;
- replacement of high-tension components at the Montréal Courthouse;
- replacement of salt shelters that have reached the end of their useful life, including the shelter in Gatineau;
- reconstruction of the custody area in the La Tuque detention facility.

Enhancement of the Service Offer

The enhancement of the service offer consists in acquiring or building new infrastructure and broadening or improving the service potential of existing infrastructure from the standpoint of quality or functionality.

Investments to enhance the service offer carried out in 2017-2018 totalling $81.8 million and probable investments of $167.3 million in 2018-2019 allowed for the completion of the following projects:

- construction of the Sorel-Tracy, Sept-Îles and Amos detention facilities;
- construction of an office building at 25, rue De Martigny in Saint-Jérôme;
- expansion and refitting of the Rimouski Courthouse;
- acquisition of the office building located at 1000, rue Fullum in Montréal;
- refitting of the Leclerc facility in Laval and the Sûreté du Québec police station in Magog.

Forecast investments for 2019-2020 totalling $223.7 million will allow for the completion the following projects:

- refitting of space in the Louis Philippe Pigeon building in Québec City;
- refitting of premises at 930, chemin Sainte-Foy in Québec City;
- construction and regrouping of staff in Chibougamau;
- development and expansion of space in the Gatineau Courthouse;
- construction or leasing of a detention facility in Puvirnituq;
- development of the Centre de traitement informatique – Phase 1 in the Cyrille Duquet building in Québec City;
- expansion and refitting of the Rimouski Courthouse;
- temporary installation during work on the Gérard D. Levesque building in Québec City;
- construction of a Sûreté du Québec police station in Saint-Georges.

INFRASTRUCTURE SUSTAINABILITY

SOCIÉTÉ QUÉBÉCOISE DES INFRASTRUCTURES

Infrastructure Inventory[1, 2]
By Infrastructure Type and Category

	Quantity	Dimension[3] (m^2)	Average Age[4] (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Office buildings	56	503,242	37	97	77	16	7	C	67.5
Other Specialized Building	157	412,510	33	100	83	13	4	C	22.0
Courthouses	43	431,874	38	100	69	30	1	B	108.2
Detention Facilities	14	208,557	22	100	74	24	2	C	107.5
Sûreté du Québec Police Stations	72	170,246	24	100	88	12	0	B	10.5
Non-rental and Surplus Buildings	7	19,758	47	100	3	0	97	E	80.3
Civil Engineering Works									
Parking Facilities and Tunnels	19	239,603	20	82	52	1	47	E	21.0
Total	**368**	**1,985,790**							**417.0**

1 Data as at October 23, 2018.
2 The inventory excludes emphyteutic leases, buildings under construction and rented buildings under capital leases, including the building located at 3800, rue de Marly, Québec City.
3 Data pertaining to building dimension represent the leasable area, in compliance with the BOMA-96 standard. Non-rental buildings, parking facilities and tunnels are measured according to gross area of the development.
4 Average age represents the "effective" age of infrastructure assets. This means how old the infrastructure looks (observed condition), taking into account such elements as chronological age, the degree of work carried out and its useful life.

ADDITIONAL INFORMATION

In 2018-2019, the SQI put into service a new office building in Saint-Jérôme and purchased 1000, rue Fullum in Montréal. A new detention facility was also put into service in Amos.

Percentage of Inspection

In 2018-2019, the SQI pursued the implementation of its cyclical detailed infrastructure evaluation program by evaluating 105 buildings. In addition to ensuring the ongoing inspection of other buildings under its responsibility, it also inspected and evaluated its parking lots and achieved an 82% inspection rate in 2018 (compared with 21% in 2017). The complete inspection of the SQI's parking lots will conclude as planned in 2019.

Methodology

The condition indicator percentages (ABC / D / E) and the average condition indicators are weighted according to the replacement value of the infrastructure.

The AMD of the "parking lots and tunnels" category has not been extrapolated.

Change in the Infrastructure Conditions and Asset Maintenance Deficit By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI			AMPI					
	2018-2019	2019-2020	Variation	2018-2019	2019-2020	AMPI 2018-2019[1]	Improvement	Reduction	AMPI 2019-2020
Buildings									
Office buildings	75	77	2	C	C	47.4	20.5	(0.4)	67.5
Other Specialized Building	82	83	1	C	C	28.6	1.3	(7.9)	22.0
Courthouses	70	69	(1)	B	B	114.5	—	(6.3)	108.2
Detention Facilities	76	74	(2)	C	C	107.0	0.5	—	107.5
Sûreté du Québec Police Stations	88	88	0	B	B	11.0	—	(0.5)	10.5
Non-rental and Surplus Buildings	5	3	(2)	E	E	80.3	—	—	80.3
Civil Engineering Works									
Parking Facilities and Tunnels	6	52	46	E	E	20.9	0.2	(0.1)	21.0
Total						**409.7**	**22.5**	**(15.2)**	**417.0**

[1] As a result of the reclassification of an office building in the non-rental and surplus buildings, an amount of $38.5 million was also reclassified to the 2018-2019 AMPI in this category.

ADDITIONAL INFORMATION

The change in the condition indicator and the AMD of the SQI stems directly from the application of its investment strategy. The strategy prioritizes investments in infrastructure classified below the satisfactory threshold and in respect of which work is required to enhance its condition in order to equal or exceed this threshold.

The implementation of the SQI's investment strategy had the impacts indicated below for each category.

- Office buildings: The average condition indicator of the category has remained stable at C, although a $20.5-million increase in the AMD has been noted. The increase stems principally from the inspections of the facades at 1141-1145, route de l'Église and at 2535, boulevard Laurier in Québec City. Preliminary estimates indicate that investment needs to rebuild the facades stand at $13.5 million and $6.0 million, respectively. Moreover, studies in the planning stage for the renovation of 360, rue McGill in Montréal and the rehabilitation of the building shell at 1075, chemin Sainte-Foy in Québec City will reduce the AMD by $35.3 million for this category upon the completion of the work.
- Other specialized buildings: The average condition indicator of the category has remained stable at C, although a $7.9-million reduction of the AMD has been noted. The reduction is attributable to the sale of two specialized buildings (Notre-Dame-des-Neiges and Radisson) and ongoing work in several buildings that has restored six buildings to at least satisfactory condition. The $22.0-million cumulative AMD stems, by and large, from the advanced age of several transportation service centres and will be reduced in the future following targeted measures devoted to the most deteriorated buildings, among other things the replacement of abrasive warehouses.

- Courthouse: The average condition indicator of the category has remained stable at B. However, the replacement of components in several buildings and electrical components at the Montréal Courthouse and the modernization of control systems in the Saint-Hyacinthe building led to a $6.3-million reduction of the AMD. The cumulative $108.2-million AMD is attributable principally to the curtain wall at the Montréal Courthouse and architectural components at the Saint-Hyacinthe Courthouse. The AMD will be reduced in the context of the completion of major projects now in the planning stage.
- Detention facilities: The average condition indicator of the category has remained stable at C. Following the delivery of the new facility in Amos, the proposed refitting of the former facility is in the planning stage and will ultimately significantly reduce the establishment's $28.2-million estimated AMD. The $107.5-million cumulative AMD is attributable, aside from the former facility in Amos, to the Québec City, Tanguay and Gatineau facilities, in respect of which renovation, compulsory upgrading or replacement projects are under study.
- Sûreté du Québec police stations: The average condition indicator of the category has remained stable at B. Investments of $0.5 million at the Marieville police station have contributed to the reduction of the AMD noted and to stabilizing the average condition indicator of this category of buildings in relation to the preceding period.
- Non-rental buildings and immovables surplus to requirements: The average condition indicator of this category has remained stable at E. While immovables surplus to requirements display a very high level of deterioration, they no longer fulfil their initial purpose. Aside from minimal asset maintenance, the SQI does not anticipate any significant investment in this category of buildings since they will be sold or demolished. The $80.3-million cumulative AMD corresponds to an estimate of the value of the investments required to put the infrastructure back into service. However, the reduction of the AMD of the buildings is recorded at the time of sale or demolition. The demolition of the Athanase David building under way will lead to a $38.5-million reduction of the AMD in 2020-2021.
- Parking lots and tunnels: While the proportion of parking lots and tunnels in satisfactory or better condition has improved, the average condition indicator for the category has remained stable at E. A major renovation at the d'Youville parking lot is now in the planning stage and will reduce the AMD observed in this infrastructure category. Furthermore, in 2019-2020, the SQI will complete the $59.0-million parking lot reconstruction project at the Marie Guyart building witch is an integral part of the office buildings category.

CULTURE ET COMMUNICATIONS

INFRASTRUCTURE MANAGEMENT

THE MINISTÈRE DE LA CULTURE ET DES COMMUNICATIONS

VISION

The MCC seeks to act as a catalyst for a unique, diversified, accessible, inclusive culture that relies on partnerships and citizen engagement.

ORIENTATIONS AND OBJECTIVES

The MCC is a leader with respect to government action in the realm of culture, communications and the French language. It is contributing to broadening the influence of these fields, individual and collective self-fulfilment, the establishment of an environment conducive to creation, and regional vitality. To successfully carry out this mission, it has adopted the orientation and objectives indicated below with respect to the infrastructure under its responsibility.

Orientation

- Promote access to culture and its dissemination by means of quality infrastructure.

Objectives

- Prevent the deterioration of the buildings and equipment of government bodies and state-owned enterprises[2] to avoid major renovations;
- Ensure that the infrastructure that serves the clienteles of government bodies and state-owned enterprises complies with standards;
- Maintain adequate conditions to present and preserve property and artworks.

RESPONSIBILITIES

Substantial funds are allocated each year to the government bodies and state-owned enterprises that report to the Minister of Culture and Communications to maintain their assets and reduce the AMD. The MCC ensures that the funds allocated are used for the purposes stipulated. It also ensures that information concerning infrastructure and the requisite documentation pertaining to its condition is available and relevant in order to establish a comprehensive, complete, reliable overview of the state of infrastructure under its responsibility.

In this way, the MCC properly manages infrastructure by respecting the enabling legislation of all of the government bodies and state-owned enterprises in its portfolio.

[2] Appendix 1 indicates the government bodies and state-owned enterprises that report to the Minister of Culture and Communications.

GOVERNMENT BODIES AND STATE-OWNED ENTERPRISES THAT REPORT TO THE MINISTER OF CULTURE AND COMMUNICATIONS

RESPONSIBILITIES

The government bodies and state-owned enterprises that report to the Minister of Culture and Communications carry out detailed planning of their asset maintenance needs, reduction of the AMD and infrastructure replacement. They are responsible for the work carried out, regular follow-up and accountability, and evaluations of the general condition of their infrastructure. Indeed, it is incumbent upon the government bodies and state-owned enterprises to evaluate and document the condition of their infrastructure to ensure optimum management and to periodically update this information.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The infrastructure of government bodies and state-owned enterprises under the responsibility of the Minister comprises a total of 51 buildings, 37 of which are protected by the *Cultural Heritage Act* (CHA). It also includes eight buildings of heritage interest that are not, however, protected by the Act. Of the 37 buildings protected pursuant to the CHA, 31 belong to the SODEC. The infrastructure also includes specialized equipment that is essential to fulfill the missions of the government bodies and state-owned enterprises.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body or Group of Bodies and by Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement	
Government Bodies and State-Owned Enterprises Reporting to the Minister of Culture and Communications						
2017-2018						
Actual	24.9	29.1	—	54.0	1.8	**55.8**
2018-2019						
Probable	16.8	16.3	—	33.1	33.2	**66.3**
2019-2020						
Planned	11.7	16.0	0.8	28.5	28.0	**56.5**

ADDITIONAL INFORMATION

Maintenance of the Service Offer

Investments to maintain the service offer allow for the realization of:

- work dedicated to the structures and shells of infrastructure;
- work dedicated to electromechanical facilities (electricity, heating, air conditioning and fire alarm systems);
- the maintenance and replacement of specialized equipment (lighting systems, audiovisual systems, shelving systems and mobile shelves).

More specifically, investments in 2017-2018 and 2018-2019 totalled $54.0 million and $33.1 million, respectively, and allowed for the advancement of the following projects:

- rehabilitation of the exterior cladding of the Grand Théâtre de Québec;
- reconstruction of the Esplanade de la Place des Arts;
- repair work on SODEC heritage buildings.

In addition to the pursuit of the completion of the abovementioned projects, forecasted investments of $28.5 million in 2019-2020 to maintain the service offer include, in particular:

- the rehabilitation of the recently acquired Au-Pied-du-Courant building.

Enhancement of the Service Offer

Investments carried out in 2017-2018 and 2018-2019 aimed at enhancing the service offer stand at $1.8 million and $33.2 million, respectively. In particular, they allowed for:

- the acquisition of the Au-Pied-du-Courant building and its refurbishment;
- the elaboration of the proposed transformation of the MACM.

Furthermore, $28.0 million in investments to enhance the service offer in 2019-2020 will allow for, in particular:

- the pursuit of refurbishment work in the Au-Pied-du-Courant building;
- the proposed transformation of the MACM;
- the proposed expansion of the BAnQ preservation centre.

INFRASTRUCTURE SUSTAINABILITY

GOVERNMENT BODIES AND STATE-OWNED ENTERPRISES REPORTING TO THE MINISTER OF CULTURE AND COMMUNICATIONS

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Museums	10	96,599	87	100	87	4	9	B	10.6
Venues	5	152,321	41	100	81	19	0	C	19.8
Librairies	3	74,836	63	100	98	0	2	B	7.0
Broadcasting	2	14,552	122	100	0	100	0	D	2.7
Heritage Buildgings[2]	31	26,738	239	100	23	70	7	D	8.8
Total	**51**	**365,046**							**48.9**
Specialized equipments									
Museums	16,950	n/a	13	100	76	7	17	C	0.5
Venues	11,406	n/a	20	100	53	7	40	D	4.1
Librairies	32	n/a	14	100	100	0	0	B	—
Broadcasting	10,895	n/a	12	100	96	4	0	C	0.4
Educational Institutions	213	n/a	29	100	100	0	0	C	—
Total	**39,496**								**5.0**
Total									**53.9**

Legend: n/a = not applicable

[1] Data as at December 31, 2018.
[2] This category includes only heritage buildings owned by SODEC.

ADDITIONAL INFORMATION

Compared with last year's data, the reduction in the total dimension and increase in the average age of television broadcasting sites are attributable to the transfer of the building that housed the head office of the Société de télédiffusion du Québec and the acquisition of the Au-Pied-du-Courant building. Considering that the Société de télédiffusion du Québec will be the building's main occupant, it was incorporated into this category of property. What is more, the increase in museum-related specialized equipment is attributable to the addition of the equipment at the MACM.

Percentage of Inspection

All buildings and specialized equipment have been inspected. Lastly, in keeping with its mission, the SODEC pursues each year its investment plan to protect and develop its building inventory.

With a view to the adoption of good infrastructure management practices and alignment with government guidelines, a five-year ongoing inspection calendar has been established and will be updated annually in order to target, in particular, critical components of the buildings. The objective of the update is to maintain an accurate profile of the condition of buildings and specialized equipment, thereby contributing to enlightened decision-making in this respect.

Methodology

The evaluation method used to determine the government infrastructure condition indicators, except for the heritage buildings of the SODEC, is based on the facility condition indicator. In the case of SODEC buildings, the method used is a weighting based on five criteria, as specified in the management framework of the government department, which presents a more representative picture of reality by taking into consideration the buildings' specific characteristics.

The entire array of priority initiatives in the condition assessments are accounted for as AMD for buildings whose facility condition indicator exceeds the satisfactory threshold (15%). This figure is updated annually and takes into account new investment needs, the work completed and cost escalation. Only the AMD of the Bibliothèque Saint-Sulpice was not calculated according to this method since the facility was not inspected this year. This method will be applied when it is next inspected.

The condition indicator percentages (ABC / D / E) are weighted according to the replacement value of the buildings.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings									
Museums	87	87	0	B	B	4.2	6.7	(0.3)	10.6
Venues	60	81	21	C	C	20.8	11.0	(12.0)	19.8
Librairies	98	98	0	B	B	6.7	0.3	—	7.0
Broadcasting	0	0	0	D	D	0.6	2.1	—	2.7
Heritage Buildgings	23	23	0	D	D	6.5	6.3	(4.0)	8.8
Specialized equipments									
Museums	77	76	(1)	C	C	0.5	—	—	0.5
Venues	53	53	0	D	D	4.1	—	—	4.1
Librairies	100	100	0	B	B	—	—	—	—
Broadcasting	96	96	0	B	C	0.4	—	—	0.4
Educational Institutions	100	100	0	C	C	—	—	—	—
Total						**43.8**	**26.4**	**(16.3)**	**53.9**

ADDITIONAL INFORMATION

Changes in Condition

The average condition indices of most buildings remained stable because of the constant, balanced completion of asset maintenance work and reduction of the AMD.

More specifically, the increase in the proportion of arts and cultural venues in satisfactory or better condition is principally attributable to the improvement in the condition of the building housing the SPDAM theatres, which is now in a satisfactory state (C) in the wake of the work carried out. However, the overall average condition indicator for this category is stable.

Changes in the AMD

The $26.4-million increase with respect to the AMD is attributable, by and large, to:

- an upward adjustment of the estimated cost of priority work in museums in poor condition;
- the addition of necessary work not performed in 2017-2018 in arts and cultural venues;
- the addition of work to be carried out estimated in the condition reports on heritage buildings belonging to the SODEC.

The $16.3-million reduction is attributable, essentially, to:

- repair work on the exterior cladding of the Grand Théâtre de Québec and reconstruction of the Esplanade de la Place des Arts, which contributed to a $12.0-million reduction in respect of arts and cultural venues;
- targeted investments for heritage buildings belonging to the SODEC, which led to a $4.0-million reduction.

APPENDIX 1

COMPOSITION OF THE GROUPS OF BODIES

Government Bodies and State-owned Enterprises Reporting to the Minister of Culture and Communications

Bibliothèque et Archives nationales du Québec
Conseil des arts et des lettres du Québec
Conservatoire de musique et d'art dramatique du Québec
Musée d'art contemporain de Montréal
Musée de la civilisation
Musée national des beaux-arts du Québec
Société de la Place des Arts de Montréal
Société de télédiffusion du Québec
Société du Grand Théâtre de Québec
Société de développement des entreprises culturelles

ÉDUCATION ET ENSEIGNEMENT SUPÉRIEUR

INFRASTRUCTURE MANAGEMENT

EDUCATION

VISION

The condition of school board infrastructure affects the quality of the service offered. It is, therefore, essential that Québec students have at their disposal stimulating and accessible learning environments that foster their educational success. Whether from the standpoint of safe infrastructure or environments that satisfy the needs of students and staff, interveners' efforts must focus on the attainment of a common objective that of offering quality teaching that meets the highest standards.

ORIENTATIONS AND OBJECTIVES

To fulfill its mission, which consists, in particular, in promoting education, the MEES has adopted the orientation and objectives indicated below with respect to the infrastructure under its responsibility.

Orientation

- Maintain conditions conducive to educational success by ensuring the quantity, quality, safety and durability of infrastructure.

Objectives

- Offer the school boards state-of-the-art expertise and tools that allow for optimum planning of their needs;
- Enhance the quality of information on the state of infrastructure and follow-ups on projects under way related to asset maintenance and the reduction of the AMD;
- Make available to students and school board staff buildings that are in good condition.

RESPONSIBILITIES

The MEES is responsible for:

- allocating funds to the school boards for asset maintenance, the reduction of the AMD and the addition, replacement and enhancement of their infrastructure;
- ensuring that the funds allocated are used for the purposes stipulated;
- prioritizing the funding of investments in light of government guidelines.

THE SCHOOL BOARDS

RESPONSIBILITIES

The school boards are responsible for:

- planning investments and carrying out work pursuant to the projects authorized, the funds allocated and the regulations in force;
- inspecting their infrastructure to establish an accurate picture of its condition and the work to be carried out to maintain it in good condition;
- managing, in collaboration with the MEES, the infrastructure that it owns;
- ensuring that their infrastructure is functional and remains safe, efficient and reliable.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

School board infrastructure[3] comprises 4,036 buildings occupying an area of 16.7 million m^2.

It is divided among 69 linguistic school boards and three special-status school boards. It encompasses buildings in different categories, namely preschool, elementary and secondary education establishments; vocational training and general adult training centres; buildings devoted to administration and other uses; and surplus buildings.

[3] Appendix 1 presents the list of school boards.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Group of Bodies and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Services Offer				Enhancement of the service	Subtotal	Restate-ment[1]	Total
	Asset Mainte-nance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement			
School Boards								
2017-2018								
Actual	607.8	171.8	13.5	793.1	370.0	1,163.1	93.0	**1,256.1**
2018-2019								
Probable	344.8	219.5	8.1	572.4	406.1	978.5	41.6	**1,020.1**
2019-2020								
Planned	394.9	167.2	35.2	597.3	719.3	1,316.6	—	**1,316.6**

[1] A restatement is presented on an interim basis to reflect work done under projects scheduled prior to March 31, 2015.

ADDITIONAL INFORMATION

Investments in 2017-2018 and 2018-2019 totalled $1,256.1 million and $1,020.1 million, respectively, and covered the completion or pursuit of the work indicated below.

Maintenance of the Service Offer

Work to maintain the service offer is intended primarily to maintain and restore buildings in a satisfactory or better state. Some examples of the work carried out are:

- the reconstruction of roofs and exterior cladding and the replacement of windows and floor coverings;
- work to remedy problems related to mould and air quality in the schools;
- work to adapt buildings for students with handicaps or students experiencing adjustment or learning difficulties;
- the replacement of institutional equipment;
- functional renovations such as the conversion of offices or multipurpose rooms into classrooms;
- the rehabilitation or reconstruction of buildings damaged by disasters.

Moreover, the investments announced to the school boards for 2018-2019 will allow for the completion of projects such as:

- the renovation of teaching and sanitary facilities at the Westmount Park Complex in Montréal;
- the removal of asbestos from the interior finish, renovation of the building envelope and upgrading of the heating, ventilation and air conditioning systems of the Pavillon Marie-Charlotte in Joliette;
- renovation of the building envelope and windows at the École Pépin in Laval;
- replacement of the roof of the École D'Iberville in Rouyn-Noranda;
- upgrading of the emergency exits and interior staircases at the École Leblanc in Laval;
- renovation of the gymnasium and the locker rooms at the Polyvalente de Sainte-Thérèse.

Enhancement of the Service Offer

The enhancement of the service offer seeks to add classrooms in order to reduce the overcrowding observed in some of them. Some examples of the work carried out are:

- the expansion and construction of more than 80 schools in Québec's regions;
- the construction of a specialized school for students with handicaps or students with special education needs or learning difficulties.

Furthermore, investments for 2019-2020 totalling $1,316.6 million will facilitate the completion of the following projects:

- the expansion of the École Louisbourg in Montréal;
- the construction of a primary school in Laval;
- the expansion and refitting of the Centre de formation professionnelle Paul-Rousseau in Saint-Germain-de-Grantham;
- the construction of a secondary school in Inukjuak.

Within the framework of the 2016-2026, 2017-2027 and 2018-2028 QIP, the government has announced additional investments of $1,331.5 million, that is, $500 million, $400 million and $431.5 million, respectively, to address the deterioration of schools. The funds are being added to the regular asset maintenance budgets authorized annually in the school system.

The MEES has rigorously planned the projects in order to allocate to the school boards over the next three years nearly 92% of the budgets, i.e. $1,221.5 million. It plans to allocate the balance of the additional funds in 2019-2020.

The estimates submitted by the school boards indicate that work totalling $534.5 million has already been completed. This has unquestionably affected the quality of the building stock, as revealed by the improvement in the condition indicator of 358 school buildings distributed in 58 school boards.

To accelerate work in the schools and maximize the short-term return on these planned investments, the process of confirming capital expenditure budgets in the school boards has been moved ahead. They can, therefore, more quickly implement renovation project planning (most renovations occur during the summer).

INFRASTRUCTURE SUSTAINABILITY

SCHOOL BOARDS

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Linguistic School Boards									
Educational Institutions									
Preschool and Primary Schools	2,263	7,313,473	57	100	41	35	24	D	2,421.1
High Schools	447	6,320,189	52	100	50	36	14	D	1,185.7
Vocational and Adult Education Centers	321	2,051,266	55	100	46	39	15	D	447.3
Administrative and other Buildings	362	501,976	50	100	48	21	31	D	203.4
Special status school boards	518	282,110	27	41	77	18	5	B	52.9
Surplus buildings	125	252,731	69	35	34	17	49	E	145.6
Total	**4,036**	**16,721,745**							**4,456.0**

[1] Data as at January 2019.

ADDITIONAL INFORMATION

Percentage of Inspection

All of the buildings in the linguistic school boards have been inspected. The inspection of surplus buildings and the buildings of special-status school boards will continue in the coming years. The MEES anticipates that all of this infrastructure will be inspected by 2020.

At the same time, the MEES is pursuing its efforts to enhance its inspection processes and tools to manage the asset maintenance needs of school buildings. Mention should be made of the implementation of a standardized and recurrent inspection process that will ultimately produce a complete and continuous profile of the condition of all buildings in the school network. Moreover, the MEES has retained the services of a firm that will, by way of an example, prepare a methodological inspection guide for the school boards and validate the work already inventoried. The support that the firm is offering also includes a training and support component that reflects the MEES' goal to standardize inspections across all school boards.

The MEES expects that the firm chosen will begin in the spring of 2019 and will complete its work in the fall of 2020 in all school boards.

What is more, the MEES is in the final stages of obtaining a new infrastructure management tool that will support the strategic planning of its infrastructure projects.

Methodology

The school boards use a software package to inventory the work, as they perform building inspections, that they must carry out within the next five years. The condition and AMD are based on the list of work recorded in the software package according to the inspection procedures set out in the *Cadre de gestion des infrastructures scolaires.* The procedures seeks to obtain a coherent and continuous assessment of the condition of buildings that is harmonized throughout the school boards.

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the replacement value of the buildings.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improve-ment	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings									
Linguistic school boards									
Educational institutions									
Preschool and primary scholls	45	41	(4)	D	D	1,814.2	893.5	(286.6)	2,421.1
High schools	53	50	(3)	D	D	930.9	505.3	(250.5)	1,185.7
Vocational and adult education centers	60	46	(14)	D	D	282.6	186.0	(21.3)	447.3
Administrative and other buildings	50	48	(2)	D	D	181.1	103.2	(80.9)	203.4
Special status school boards	80	77	(3)	B	B	26.1	54.9	(28.1)	52.9
Surplus buildings	37	34	(3)	D	E	57.3	132.6	(44.3)	145.6
Total						**3,292.2**	**1,875.5**	**(711.7)**	**4,456.0**

ADDITIONAL INFORMATION

Changes in Condition

Overall, the condition of school infrastructure has deteriorated this year, both from the standpoint of the proportion of infrastructure in satisfactory or better condition as well as in the case of the increase in the AMD. It should be noted, once again this year, that a significant part of this observation stems from the enhancement of the general knowledge of investment needs in preschool, elementary and secondary schools following the new inspection process implemented last year.

Changes in the AMD

The increase in the AMD, in the order of $1.9 billion, is attributable to:

- additional work in the order of $1.1 billion related to the natural deterioration of critical components of certain school buildings;
- the enhancement of the inspection process, which has revealed $0.8 billion of non-inventoried asset maintenance work in the schools concerned.

The $711.7-million reduction is attributable, in particular, to:

- the replacement of components that are outdated or at the end of their useful life, such as roofs, exterior cladding and windows;
- work to eliminate problems that affect air quality in certain buildings.

Despite the scope of the annual investments carried out, the MEES anticipates that the AMD will increase for several years to come because of:

- the implementation of the new building inspection process in the school network that will enhance the knowledge of the condition of building stock and the AMD;
- broader knowledge of heritage buildings stock which generally means higher costs related to the cost of materials and the complex nature of the work to be performed.

On the other hand, the optimisation of the annual asset maintenance budget allocation process in the school boards will support for better planning of contracts and maximize the amount of work to be performed in the summer.

Furthermore, to address the anticipated increase in the AMD, the government must pursue its efforts to target allocations in priority sectors and adopt measures to ensure the capacity to carry out the work accordingly.

APPENDIX 1

COMPOSITION OF THE GROUPS OF BODIES

The School Boards

Linguistic

Commission scolaire des Monts-et-Marées
Commission scolaire des Phares
Commission scolaire du Fleuve-et-des-Lacs
Commission scolaire de Kamouraska–Rivière-du-Loup
Commission scolaire du Pays-des-Bleuets
Commission scolaire du Lac-Saint-Jean
Commission scolaire des Rives-du-Saguenay
Commission scolaire de La Jonquière
Commission scolaire de Charlevoix
Commission scolaire de la Capitale
Commission scolaire des Découvreurs
Commission scolaire des Premières-Seigneuries
Commission scolaire de Portneuf
Commission scolaire du Chemin-du-Roy
Commission scolaire de l'Énergie
Commission scolaire des Hauts-Cantons
Commission scolaire de la Région-de-Sherbrooke
Commission scolaire des Sommets
Commission scolaire de la Pointe-de-l'Île
Commission scolaire de Montréal
Commission scolaire Marguerite-Bourgeoys
Commission scolaire des Draveurs
Commission scolaire des Portages-de-l'Outaouais
Commission scolaire au Cœur-des-Vallées
Commission scolaire des Hauts-Bois-de-l'Outaouais
Commission scolaire du Lac-Témiscamingue
Commission scolaire de Rouyn-Noranda
Commission scolaire Harricana
Commission scolaire de l'Or-et-des-Bois
Commission scolaire du Lac-Abitibi
Commission scolaire de l'Estuaire
Commission scolaire du Fer
Commission scolaire de la Moyenne-Côte-Nord
Commission scolaire de la Baie-James
Commission scolaire des Îles
Commission scolaire des Chic-Chocs
Commission scolaire René-Lévesque
Commission scolaire de la Côte-du-Sud
Commission scolaire des Appalaches
Commission scolaire de la Beauce-Etchemin
Commission scolaire des Navigateurs
Commission scolaire de Laval
Commission scolaire des Affluents
Commission scolaire des Samares

APPENDIX 1
(continued)

Commission scolaire de la Seigneurie-des-Mille-Îles
Commission scolaire de la Rivière-du-Nord
Commission scolaire des Laurentides
Commission scolaire Pierre-Neveu
Commission scolaire de Sorel-Tracy
Commission scolaire de Saint-Hyacinthe
Commission scolaire des Hautes-Rivières
Commission scolaire Marie-Victorin
Commission scolaire des Patriotes
Commission scolaire du Val-des-Cerfs
Commission scolaire des Grandes-Seigneuries
Commission scolaire de la Vallée-des-Tisserands
Commission scolaire des Trois-Lacs
Commission scolaire de la Riveraine
Commission scolaire des Bois-Francs
Commission scolaire des Chênes
Commission scolaire Central Québec
Commission scolaire Eastern Shores
Commission scolaire Eastern Townships
Commission scolaire Riverside
Commission scolaire Sir-Wilfrid-Laurier
Commission scolaire Western Québec
Commission scolaire English-Montréal
Commission scolaire Lester-B.-Pearson
Commission scolaire New Frontiers

Special-Status

Commission scolaire du Littoral
Commission scolaire crie
Commission scolaire Kativik

APPENDIX 2

DETAILED INVENTORY

The School Boards

Buildings[1]

	Quantity	Dimension (m^2)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
			ABC	D	E		
0-10 years							
Educational institutions							
Preschool and primary schools	81	362,888	100	0	0	A	—
High schools	2	8,840	100	0	0	A	—
Vocational and adult education centres	12	18,534	100	0	0	A	—
Administrative and other building	42	80,377	99	0	1	A	0.9
11-20 years							
Educational institutions							
Preschool and primary schools	48	195,570	74	24	2	B	8.2
High schools	12	106,801	91	9	0	B	0.3
Vocational and adult education centres	20	83,081	95	5	0	A	0.3
Administrative and other building	25	14,024	80	11	9	B	3.2
21-30 years							
Educational institutions							
Preschool and primary schools	83	314,996	60	36	4	C	33.0
High schools	26	220,738	71	29	0	C	4.6
Vocational and adult education centres	29	165,554	86	14	0	B	2.7
Administrative and other building	33	32,171	87	8	5	C	2.5
31-40 years							
Educational institutions							
Preschool and primary schools	103	403,118	41	50	9	D	59.7
High schools	16	211,036	58	28	14	D	35.7
Vocational and adult education centres	6	39,072	78	6	16	D	6.0
Administrative and other building	33	27,169	56	1	43	D	8.3
41-50 years							
Educational institutions							
Preschool and primary schools	115	536,726	29	41	30	D	220.1
High schools	140	2,821,703	51	36	13	D	493.0
Vocational and adult education centres	32	391,635	50	36	14	D	72.6
Administrative and other building	57	35,873	6	43	51	E	36.5
51-60 years							
Educational institutions							
Preschool and primary schools	794	2,276,633	38	35	27	D	802.6
High schools	149	2,113,915	47	38	15	D	433.3
Vocational and adult education centres	86	738,653	34	55	11	D	156.8
Administrative and other building	72	106,799	31	38	31	D	39.7
61-70 years							
Educational institutions							
Preschool and primary schools	765	2,186,576	40	37	23	D	700.3
High schools	60	429,688	50	39	11	D	73.4
Vocational and adult education centres	82	385,443	31	43	26	D	137.9
Administrative and other building	64	132,468	46	15	39	D	74.1

APPENDIX 2
(continued)

	Quantity	Dimension (m^2)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
			ABC	D	E		
71 years and above							
Educational institutions							
Preschool and primary schools	274	1,036,966	27	33	40	E	597.2
High schools	42	407,468	41	33	26	D	145.4
Vocational and adult education centres	54	229,294	52	24	24	D	71.0
Administrative and other building	36	73,095	30	31	39	D	38.2
Total							
Educational institutions							
Preschool and primary schools	2,263	7,313,473	41	35	24	D	2,421.1
High schools	447	6,320,189	50	36	14	D	1,185.7
Vocational and adult education centres	321	2,051,266	46	39	15	D	447.3
Administrative and other building	362	501,976	48	21	31	D	203.4
Special status school boards[2]	518	282,110	77	18	5	B	52.9
Surplus buildings[2]	125	252,731	34	17	49	E	145.6
Total	**4,036**	**16,721,745**					**4,456.0**

[1] The age of buildings is based on the initial year of construction.
[2] This category is not broken down by age group.

INFRASTRUCTURE MANAGEMENT

HIGHER EDUCATION

VISION

The quality of higher education infrastructure affects the impact of the service offered in Québec. It is, therefore, essential that students have at their disposal stimulating learning environments that are tailored to the labour market. Whether from the standpoint of safe infrastructure, cutting-edge laboratories or environments that satisfy the needs of students and staff, interveners' efforts must focus on the attainment of a common objective, that of offering quality teaching that meets the highest standards.

ORIENTATIONS AND OBJECTIVES

To fulfill its mission, which consists, in particular, in promoting higher education, the MEES has adopted the orientation and objectives indicated below with respect to the infrastructure for which it is responsible.

Orientation

- Maintain conditions conducive to higher education by ensuring the quantity, quality, safety and durability of infrastructure.

Objectives

- Assess every five years all buildings recognized for funding purposes and ensure follow-up;
- Maintain in satisfactory condition or improve the condition of buildings that students and staff use in the higher education network;
- Enhance the quality of information related to the condition of the infrastructures as well as the annual reporting of projects related to asset maintenance and AMD;
- Review the resource allocation model to take into consideration, as an example, the state of infrastructure;
- Enhance annual reporting of projects related to asset maintenance and the reduction of the AMD.

RESPONSIBILITIES

The MEES allocates funds to colleges and universities for asset maintenance and the reduction of the AMD as well as for the addition, replacement and improvement of their infrastructure. It also ensures that the funds allocated to the establishments are used for the purposes stipulated. The MEES also audits the capital expenditure budgets of the establishments to ensure that allocations for spaces recognized for funding purposes are used solely for such spaces.

CEGEPS AND UNIVERSITIES

RESPONSIBILITIES

The MEES funding formula distinguishes between spaces that are recognized and not recognized for funding purposes. The distinction between the two types of space relates to their mission and the standards that the MEES applies.

The MEES pays allowances for asset maintenance and the reduction of the AMD as well as for the addition, replacement and enhancement of buildings in respect of recognized spaces. Colleges and universities are responsible, regarding such spaces, for managing their infrastructure and planning work to be carried out, in accordance with the rules that the MEES issues. The establishments must submit the projects that they plan to carry out based on an annual capital expenditure budget and obtain confirmation from the MEES of the budgets' compliance. For each project, the establishments must provide a brief or detailed description, depending on the scope of the project, and provide funding details and building identification. The establishments must also submit to the MEES information on the condition of such buildings.

The MEES does not report to the Annual Management Plan for Public Infrastructure Investments pertaining to spaces not recognized for funding purposes given that it does not pay any allowances in respect of such spaces. The establishments must rely on their own revenues to satisfy investment needs related to them. Each establishment is thus responsible for ensuring the quality, safety and durability of such spaces.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

College network infrastructure encompasses 976 buildings with an area of roughly 2.7 million m^2, of which roughly 2.5 million m^2 in 892 buildings recognized by the MEES for funding purposes. This network accounts for 48 colleges.[4]

University network infrastructure encompasses 1,048 buildings with an area of roughly 4.8 million m^2, of which roughly 3.6 million m^2 in 746 buildings recognized by the MEES for funding purposes. This network accounts for 19 universities.[4]

The college and university networks also own equipment that is used for higher education and research.

[4] Appendix I presents the list of bodies in the higher education networks.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Group of Bodies and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Services Offer				Enhancement of the service	Subtotal	Restate-ment[1]	Total
	Asset Maintenance	Elimination of Asset Management Deficit	Replace-ment	Subtotal	Addition and Improvement			
CEGEPs								
2017-2018								
Actual	165.3	26.1	3.0	194.4	12.6	207.0	1.6	**208.6**
2018-2019								
Probable	194.4	38.3	40.2	272.9	51.1	324.0	3.2	**327.2**
2019-2020								
Planned	188.7	40.4	35.8	264.9	62.0	326.9	—	**326.9**
Universities								
2017-2018								
Actual	139.6	53.5	129.2	322.3	28.3	350.6	45.0	**395.6**
2018-2019								
Probable	209.6	107.0	131.9	448.5	115.6	564.1	64.9	**629.0**
2019-2020								
Planned	260.4	128.8	126.4	515.6	154.1	669.7	—	**669.7**

[1] A restatement is presented on an interim basis to reflect work done under projects scheduled prior to March 31, 2015.

ADDITIONAL INFORMATION

CEGEPs

Investments in 2017-2018 and 2018-2019 totalled $208.6 million and $327.2 million, respectively, and allowed for the completion or pursuit of the work indicated below.

Maintenance of the service offer

Work to maintain the service offer is intended primarily to maintain and restore buildings in a satisfactory or better condition. Some examples of the work carried out are:

- the rebuilding of roofs and exterior and interior cladding in buildings;
- the replacement of mechanical and electrical systems;
- the rehabilitation of the most deteriorated buildings in order to reduce the AMD;
- the replacement of institutional equipment.

More specifically, such investments facilitated the completion or pursuit of the following projects:

- the rehabilitation of the building envelope of the student residences at the Cégep de Sherbrooke;
- the renovation of the library at the Collège John Abbott;
- the refitting of classrooms at the Collège de Valleyfield;
- the restoration of the swimming pool at the Collège Rosemont.

Enhancement of the service offer

Enhancement of the service offer seeks principally to increase the number of student places and improve the quality of the services offered. Some examples of the work carried out are:

- the expansion and construction of buildings to broaden technical training offerings by creating additional student places, especially at the Cégep Gérald-Godin;
- the establishment of simulation-model assisted learning laboratories in nursing in all colleges that offer the program.

Furthermore, investments for 2019-2020 totalling $326.9 million allow for:

- the creation of new student places through the addition of spaces in Montréal and the surrounding area;
- the replacement of outdated, defective teaching equipment.

Universities

Investments in 2017-2018 and 2018-2019 totalled $395.6 million and $629.0 million, respectively, and allowed for the completion or pursuit of the work indicated below.

Maintenance of the service offer

Work to maintain the service offer is intended primarily to maintain and restore buildings in a satisfactory or better condition. Some examples of the work carried out are:

- the rebuilding of roofs and exterior and interior cladding in buildings;
- the replacement of mechanical and electrical systems;
- the rehabilitation of the most deteriorated buildings in order to reduce the AMD;
- the replacement of institutional equipment.

More specifically, such investments facilitated the completion or pursuit of the following projects:

- preliminary work to secure the structure of the Dow complex at the École de technologie supérieure;
- restoration of the bell tower of the Église-de-Saint-Jacques in the Pavillon Judith-Jasmin at the Université du Québec à Montréal;
- refitting and renovation of the classrooms in the main building (phase 1) of Polytechnique Montréal.

Enhancement of the service offer

Enhancement of the service offer seeks principally to increase the number of student places and improve the quality of the services offered. Some examples of the projects carried out are:

- the refitting and renovation of the Bishop's library;
- the production of the opportunity case for the McGill University redevelopment project on a portion of the Royal Victoria Hospital site;
- the construction of a new building at the École des Hautes Études Commerciales de Montréal in the borough of Ville-Marie.

Furthermore, forecast investments for 2019-2020 totalling $669.7 million will allow for the completion of several projects, including:

- the construction of a building at the École de technologie supérieure on the Techtown site;
- the outfitting of the École des sciences de gestion de l'Université du Québec à Montréal;
- the conversion of the energy source of the campus of the Université du Québec à Chicoutimi;
- the reallocation of space freed up on the De la Montagne site by the Complexe des sciences de l'Université de Montréal project;
- the addition of an interdisciplinary teaching and research clinic dedicated to health care and psychosocial services at the Université du Québec en Abitibi-Témiscamingue.

INFRASTRUCTURE SUSTAINABILITY

CEGEPs

Infrastructure Inventory [1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Spaces designated for funding	892	2,532,237	43	94	76	21	3	C	124.6
Equipment	N/A	n/a	N/A	0	N/A	N/A	N/A	N/A	N/A

Legend: N/A = not available; n/a = not applicable

[1] Data as at February 12, 2019.

ADDITIONAL INFORMATION

Percentage of Inspection

The initial inspection of spaces recognized for funding purposes in the college network occurred between 2010 and 2012. Each component of a building was evaluated during these inspections. This inspection was accompanied by a renewal forecast and a list of necessary asset maintenance work to maintain and restore to a satisfactory level the condition of the buildings. An annual update of this list was produced for 94% of the surface area of the building inventory in the network to reflect changes in asset maintenance needs and to support the work to be carried out in the short term. The condition of the buildings of the college network inventory is thus representative of the current situation.

It should be noted that investment needs regarding interior refitting observed during the internal audits conducted over the past year were added to the list of asset maintenance work that the colleges update annually.

A new inspection cycle of spaces recognized for funding purposes in the college network will begin in 2019-2020. What is more, the MEES does not possess information on the inventory of equipment in the college network, but the latter is pursuing its efforts to obtain information relevant to monitoring its condition.

Methodology

The colleges use a software package to record the work that they must carry out within the next five years on their buildings following the inspections that were conducted by a specialized firm. The evaluation of the condition and the AMD of all buildings are based on this list of work recorded in the software package according to the inspection parameters set out in the *Cadre de gestion pour les investissements liés aux infrastructures de l'enseignement supérieur*, which seeks to obtain a coherent and continuous assessment of the condition of buildings that is harmonized throughout the college network.

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the replacement value of the buildings.

CEGEPs (CONTINUED)

Change in Infrastructure Conditions and Asset Maintenance Deficit By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings									
Spaces Designated for Funding	71	76	5	C	C	142.1	20.8	(38.3)	124.6
Equipment	N/A	N/A	n/a	N/A	N/A	N/A	n/a	n/a	n/a

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Changes in Condition

The condition of college buildings is stable despite a $17.5-million overall reduction of the AMD. This situation is attributable to a level of asset maintenance investments that is sufficient to control the natural deterioration of building components combined with a targeted intervention strategy aiming at the most deteriorated buildings in order to reduce their AMD.

Changes in the AMD

The $20.8-million increase in the AMD is attributable to the natural deterioration of the spaces recognized for funding purposes overall.

The $38.8-million reduction of the AMD is attributable to the renovation of mechanical and electrical systems and interior refitting in one or more run-down premises.

UNIVERSITIES

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Spaces Designated for Funding	746	3,565,684	54	90	68	19	13	D	980.8
Equipment	N/A	n/a	N/A	0	N/A	N/A	N/A	N/A	N/A

Legend: N/A = not available; n/a = not applicable

[1] Data as at February 12, 2019.

ADDITIONAL INFORMATION

Percentage of Inspection

The first inspections of buildings recognized for funding purposes in the university network began in 2014 and ended in the spring of 2016. An annual update of the list was produced for 90% of the surface area of the building inventory in the university network to reflect changes in asset maintenance needs and to ensure that work was supported in the short term. The condition of the university buildings inventory is thus representative of the current situation.

A new inspection cycle covering spaces recognized for funding purposes in the university network will begin in 2019-2020. To this end, the university network launched an invitation to tender in late 2018 and selected the service providers.

The MEES does not possess information on the inventory of equipment in the university network, but the latter is pursuing its efforts to obtain information relevant to monitoring its condition.

Methodology

Universities use a software package to record the work that they must carry out within the next five years on their buildings following the inspections that were conducted by a specialized firm. The evaluation of the condition and the AMD of all buildings are based on this list of work recorded in the software package according to the inspection parameters set out in the *Cadre de gestion pour les investissements liés aux infrastructures de l'enseignement supérieur*, which seeks to obtain a coherent and continuous evaluation of the condition of buildings that is harmonized throughout the university network.

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the replacement value of the buildings.

UNIVERSITIES (CONTINUED)

Change in Infrastructure Conditions and Asset Maintenance Deficit By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Building									
Spaces designated for funding	67	68	1	D	D	1,024.4	63.4	(107.0)	980.8
Equipment	N/A	N/A	n/a	N/A	N/A	N/A	n/a	n/a	n/a

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Changes in Condition

Overall, the condition of infrastructure in the university network improved slightly this year. This situation is attributable to the pace of asset maintenance work and the reduction of the AMD, which are making it possible to control the natural deterioration of the spaces recognized for funding purposes overall and, in some instances, to restore them to a satisfactory or better condition.

Changes in the AMD

The $63.4-million increase in the AMD is attributable to the natural deterioration of the overall spaces recognized for funding purposes.

The $107.0-million reduction of the AMD is attributable, in particular, to the upgrading of certain buildings from the standpoint of health and safety, and the replacement of worn out heating, air conditioning and ventilation systems.

APPENDIX 1

COMPOSITION OF THE GROUPS OF BODIES

CEGEPs

Cégep de l'Abitibi-Témiscamingue
Collège Ahuntsic
Collège d'Alma
Cégep André-Laurendeau
Cégep de Baie-Comeau
Cégep Beauce-Appalaches
Collège de Bois-de-Boulogne
Champlain Regional College
Cégep de Chicoutimi
Collège Dawson
Cégep de Drummondville
Cégep Édouard-Montpetit
Cégep de Saint-Félicien
Cégep de Sainte-Foy
Cégep Garneau
Cégep de la Gaspésie et des Îles
Cégep Gérald-Godin
Cégep de Granby
Collège Héritage
Cégep de Saint-Hyacinthe
Cégep Saint-Jean-sur-Richelieu
Cégep de Saint-Jérôme
Collège John Abbott
Cégep de Jonquière
Cégep régional de Lanaudière
Cégep de La Pocatière
Cégep de Saint-Laurent
Cégep de Lévis-Lauzon
Cégep Limoilou
Collège Lionel-Groulx
Collège de Maisonneuve
Cégep Marie-Victorin
Cégep de Matane
Collège Montmorency
Cégep de l'Outaouais
Cégep de Rimouski
Cégep de Rivière-du-Loup
Collège Rosemont
Cégep de Sept-Îles
Collège Shawinigan
Cégep de Sherbrooke
Cégep de Sorel-Tracy
Cégep de Thetford
Cégep de Trois-Rivières
Collège de Valleyfield
Vanier College
Cégep de Victoriaville
Cégep du Vieux Montréal

APPENDIX 1
(continued)

Universities

École des hautes études commerciales de Montréal
École nationale d'administration publique
École de technologie supérieure
Institut national de la recherche scientifique
Polytechnique Montréal
Télé-université
Université Bishop's
Concordia University
Université Laval
Université de Montréal
McGill University
Université du Québec (siège social)
Université du Québec en Abitibi-Témiscamingue
Université du Québec à Chicoutimi
Université du Québec à Montréal (UQAM)
Université du Québec en Outaouais
Université du Québec à Rimouski
Université du Québec à Trois-Rivières
Université de Sherbrooke

APPENDIX 2

CEGEPs and Universities

Buildings
Spaces Designated for Funding

	Quantity	Dimension (m^2)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
			ABC	D	E		
0-10 years							
CEGEPs	89	103,034	99	1	0	A	0.0
Universities	39	161,240	99	0	1	A	1.7
11-20 years							
CEGEPs	94	89,181	86	14	0	B	1.8
Universities	105	533,872	100	0	0	A	0.0
21-30 years							
CEGEPs	128	212,935	86	13	1	B	6.1
Universities	102	614,707	94	6	0	B	10.0
31-40 years							
CEGEPs	100	216,033	59	38	3	C	15.3
Universities	37	247,394	51	8	41	E	136.1
41-50 years							
CEGEPs	175	750,882	75	23	2	C	40.8
Universities	89	528,026	56	36	8	D	65.2
51-60 years							
CEGEPs	144	560,297	77	21	2	C	22.3
Universities	141	818,639	57	25	18	D	296.9
61-70 years							
CEGEPs	66	246,140	68	28	4	C	12.6
Universities	52	151,795	52	40	8	D	30.9
71 years and above							
CEGEPs	96	353,735	76	18	6	C	25.7
Universities	181	510,011	26	44	30	E	440.0
Total							
CEGEPs	**892**	**2,532,237**	**76**	**21**	**3**	**C**	**124.6**
Universities	**746**	**3,565,684**	**68**	**19**	**13**	**D**	**980.8**

ENVIRONNEMENT ET LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES

INFRASTRUCTURE MANAGEMENT

THE MINISTÈRE DE L'ENVIRONNEMENT ET DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES

VISION

The MELCC's leadership in the fight against climate change and environmental protection is central to government action and fosters social development as well as a green and resilient economy for the benefit of present and future generations.

ORIENTATIONS AND OBJECTIVES

The mission of the MELCC is to contribute to Québec's sustainable development through environmental protection, biodiversity conservation and fighting climate change.

It is also oversees the operation, management and monitoring of public dams. The MELCC has assigned this responsibility to the DGB, which must play its role according to the orientation and objectives indicated below.

Orientation

- Ensure the operation, management, monitoring and maintenance of public dams under the responsibility of the MELCC in order to ensure their safety.

Objectives

- Safely manage dams;
- Inspect and monitor dams so as to ensure their safety and operational efficiency;
- Carry out required maintenance work in accordance with the legislation in force;
- Assess the safety of public dams and coordinate response to emergencies;
- Dismantle, for safety and environmental protection reasons, of dams that are not essential to the government's mission.

RESPONSIBILITIES

The management of dams is subject to legal obligations that vary according to the type dam (high-capacity, low-capacity and small dams). In addition to these legal obligations, the MELCC takes into account the risk associated with dams as well as the budget and the human resources allocated to the management of dams.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The MELCC operates and administers 753 dams, within the meaning of the *Dam Safety Act* (chapter S-3.1.01), including 318 high-capacity dams, 205 low-capacity dams and 230 small dams.

High-capacity dams are subdivided into two major categories: 49 mechanised dams and 269 non-mechanised dams. Mechanised dams are equipped with electro-mechanical evacuation equipment to manage water levels and flows. Non-mechanised dams are equipped instead with a fixed threshold that does not allow such management. Accordingly, the complexity of the components of mechanised dams and the need to ensure their reliability and functioning at all times requires major investments in relation to other types of dams.

The *Dam Safety Act* specifically defines “high-capacity” and “low-capacity” dams. Furthermore, “small dams” are dams that are more than 1 m high and are neither “high-capacity” nor “low-capacity” dams but are also covered by the *Dam Safety Act.*

The MELCC is also responsible for other infrastructure:

- eight main buildings used as service points in the regions to ensure the operation and maintenance of nearby dams. The buildings include office space, warehousing and workshops. The service centres are located in seven administrative regions: Capitale-Nationale, Saguenay–Lac-Saint-Jean (two buildings), Bas-Saint-Laurent, Laurentides, Abitibi-Témiscamingue, Estrie and Montérégie;
- a discharge pipe that carries effluent from the Produits forestiers Résolu commercial pulp plant in Saint-Félicien. The pipe, which the MELCC built in 1976, conveys water treated by the plant to the Rivière Mistassini located nearly 15 km away. The pipe had an initial useful life of 25 years and has now been in service for 42 years;
- the MELCC is also responsible for other buildings attached to the service centres. The inventory under way will enable the DBG to determine which buildings will be included in the forthcoming Annual Management Plans for Public Infrastructure Investments.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement	
MELCC						
2017-2018						
Actual	0.6	15.0	1.5	17.1	—	**17.1**
2018-2019						
Probable	0.4	24.5	4.4	29.3	—	**29.3**
2019-2020						
Planned	2.2	7.8	9.4	19.4	—	**19.4**

ADDITIONAL INFORMATION

The major investments to offset the asset maintenance deficit carried out in 2017-2018 and in 2018-2019 are attributable, by and large, to the finalization of upgrading of the Des Quinze dam.

Maintenance of the Service Offer

Investments to maintain the service offer cover the work required to ensure the integrity of the dams in order to protect individuals and property against risks stemming from the presence of these structures. Work on dams in poor condition is prioritized according to risk when investments are planned. Such work thus facilitates the reduction of the asset maintenance deficit accounted for previously.

The government's investments in respect of public dam asset maintenance cover the following types of work:

- the rehabilitation of heavy mechanical components such as gates, winches, gantries, generating sets or embedded parts;
- the rehabilitation of electrical and control components such as electrical panels, heating systems, automated systems, or communications systems;
- the reconstruction of service buildings, garages or equipment shelters;
- the rebuilding of steel structures such as catwalks;
- the installation or upgrading of safety equipment;
- the rehabilitation of riprap spillways through reshaping, the addition of riprap or the filling of gaps;
- the rebuilding or installation of fishways;
- the reconstruction of dikes through reshaping, heightening, sealing, stabilization or the addition of drainage;
- the rehabilitation of concrete components or the correction of concrete pathologies.

The investments carried out with respect to asset maintenance and the reduction of the asset maintenance deficit in 2017-2018, totalling $15.6 million, and likely for 2018-2019, of $24.9 million, facilitated the completion of the following major projects:

- finalization of the upgrading of the Des Quinze dam (Abitibi-Témiscamingue);
- repairs to the riprap spillways at the Du Canard (Chaudière-Appalaches), Monroe (Laurentides) and Chaudière (Bas-Saint-Laurent) dams;
- replacement of the discharge pipe and stabilization of the retaining wall of the Du Bas dam (Bas-Saint-Laurent);
- repair work on cracks and cavities in the concrete at the Lyster dam (Estrie);
- repair work on cracks in the concrete at the Bombardier dam (Estrie);
- repair work on two gates at the Beaudet dam (Centre-du-Québec);
- repair work on the gates at the Grand-Moulin dam (Laval);
- repair work on the concrete at the Choinière dam (Montérégie);
- completion of the second phase of mechanical and civil engineering work on the Portage-des-Roches dam structure (Saguenay–Lac-Saint-Jean);
- stabilization of a dike and repair work on a gate at the Jules-Allard dam (Chaudière-Appalaches);
- civil and mechanical engineering remedial work at the Étang-Masson dam (Lanaudière).

Forecast investments with respect to asset maintenance and the reduction of the asset maintenance deficit in 2019-2018, totalling $10.0 million, will facilitate the completion of the following major projects:

- repair work on the riprap spillways of the Mont-Louis (Gaspésie–Îles-de-la-Madeleine) and Landry (Capitale-Nationale) dams;
- repair work on concrete and bank protection at the Sautauriski dam (Capitale-Nationale);
- repair work on the automated gates at the Des Quinze dam (Abitibi-Témiscamingue);
- finalization of rehabilitation work on the gates and work on the automatic systems at the Beaudet dam (Centre-du-Québec);
- upgrading of the mechanised equipment electrical system at the Grand-Moulin dam (Laval);
- upgrading of the portal crane at the Portage-des-Roches dam (Saguenay–Lac-Saint-Jean);
- repair work on the ventilation system in the service building at the Morin dam (Bas-Saint-Laurent).

The investments carried out with respect to infrastructure replacement in 2017-2018, totalling $1.5 million, and likely for 2018-2019, of $4.4 million, facilitated the completion of the following major projects:

- the demolition and reconstruction of the Chochocouane (Abitibi-Témiscamingue) and Crow (Mauricie) dams.

Forecast investments with respect to infrastructure replacement in 2019-2020, totalling $9.4 million, will facilitate the completion of the following major projects:

- the demolition and reconstruction of the En Croix, Lajeunesse, De l’Ouest and Sincennes dams (Mauricie).

INFRASTRUCTURE SUSTAINABILITY

MINISTÈRE DE L'ENVIRONNEMENT ET DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Buildings									
Service Centers	8	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Civil Engineering Word									
High-capacity Dams									
Mechanised	49	Variable	42	100	25	75	0	D	47.8
No-mechanised	269	Variable	21	100	92	7	1	A	5.0
Low-capacity and Small Dams	435	Variable	57	33	64	36	0	C	—
Effluent Discharge Pipe	1	15 km	42	3	N/A	N/A	N/A	N/A	N/A
Total									**52.8**

Legend: N/A = not available
[1] Data as at December 2018.

ADDITIONAL INFORMATION

The $52.8-million asset maintenance deficit is mainly attributable to the significant investments required to renovate certain mechanised dams that are in poor condition. The MELCC has prioritized work on the dams.

Percentage of Inspection

An inspection program for high-capacity dams has been elaborated according to the risks associated with this type of dam (minimal, low, average and high levels of consequences). This program targets both dams with a condition indicator of A, B or C (dams already upgraded) and dams with a condition indicator of D (to be renovated) or E (to be dismantled). The investment needs of dams with a poor condition indicator (D) and a high level of risk are prioritized when work is planned.

All of the high-capacity dams under the responsibility of the MELCC are inspected at least once a year, in accordance with the requirements of the *Dam Safety Regulation.* Such inspections focus, in particular, on the assessment of the structures' safety.

In 2018-2019, the MELCC implemented a low-capacity and small dam visual inspection plan spread over four years, although it has no legal or regulatory obligation to do so, given their limited impact on the safety of individuals and property. The inspections are intended to validate the general state of the structures and to confirm their category. Considering the MELCC's limited resources, the assessment of the required asset maintenance work cannot be performed in the context of the current inspections. Such work will be evaluated at a later date.

The buildings attached to the service centres are not subject to regular and detailed inspections. However, an inspection program will be launched in early 2019-2020 to determine the asset maintenance work that must be carried out for all of the buildings.

Lastly, the Saint-Félicien discharge pipe was subject to a partial inspection in 2018-2019 to detect potential deficiencies. Therefore, this inspection neither allow for the evaluation of the condition of the infrastructure overall nor for any extrapolation in this respect. The feasibility of cleaning and conducting a complete inspection of the pipe in 2019-2020 is under study, this would make it possible to determine its overall condition and the requisite asset maintenance work.

Methodology

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the replacement value of the buildings.

The condition indices and the AMD are not extrapolated for low-capacity dams and small dams.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings									
Service Centers	N/A	N/A	n/a	N/A	N/A	N/A	n/a	n/a	N/A
Civil Engineering Work									
High-capacity Dams									
Mechanised	19	25	6	D	D	65.9	5.2	(23.3)	47.8
No-mechanised	90	92	2	B	A	5.6	0.8	(1.4)	5.0
Low-capacity and Small Dams	92	64	(28)	B	C	N/A	—	—	—
Effluent Discharge Pipe	N/A	N/A	n/a	N/A	N/A	N/A	n/a	n/a	N/A
Total						**71.5**	**6.0**	**(24.7)**	**52.8**

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Changes in Condition

The decrease in the proportion of low-capacity dams and small dams in a satisfactory or better state is attributable to the progress of the inspection program, which revealed numerous anomalies in dams not previously inspected. Consequently, the average condition indicator fell from B to C in relation to the index presented in the preceding period.

Changes in the AMD

The $24.7-million reduction of the AMD improved the proportion of high-capacity dams in a satisfactory of better state (ABC) and the average condition indicator of non-mechanised dams. The reduction stems, by and large, from:

- major work worth $10.6 million carried out on the Des Quinze, Beaudet, Jules-Allard, Étang-Masson and Grand-Moulin dams and the reconstruction of the Chochocouane dam;
- less extensive work worth $1.1 million carried out on the Pibrac Est, Pibrac Ouest, Sartigan, Grand-Moulin and Crow dams;
- the $13.0-million downgrading of the estimated cost of projects generally stemming from the clarification of needs and their scope during completion.

As for the $6.0-million increase with respect to the AMD, it is attributable principally to:

- the observation of additional anomalies noted during the annual inspections. The anomalies require work estimated at $1.6 million (cavitation problems, electrical system failures, mechanical malfunction of hoisting apparatus, and so on);
- a $4.4-million upgrading of certain project costs, especially at the Mathieu-D'Amours and Beaudet dams, in respect of which the scope of the projects was reassessed.

Intervention Strategy

Dam-related initiatives are planned according to the distinctive technical features of the different categories of dams:

- mechanised high-capacity dams are usually prioritized when asset maintenance work is planned since the consequences of a failure or a rupture would usually be more significant than those associated with other categories of dams. The natural deterioration of dam evacuation equipment requires measures to be planned to ensure the equipment's smooth operation, especially during floods;
- non-mechanised high-capacity dams in respect of which the level of consequences is average or higher are prioritized in relation to those whose level of consequences is low or minimal. Moreover, non-mechanised dams usually require less investments in human and financial resources during their useful life. Consequently, the MELCC is prioritizing essential work until the state of the structures requires complete reconstruction. Accordingly, since the coming into force of the *Dam Safety Act*, nearly 75% of the 269 dams have been subject to complete reconstruction or significant upgrading.

SANTÉ ET SERVICES SOCIAUX

INFRASTRUCTURE MANAGEMENT

THE MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX

Vision

The MSSS seeks to offer an integrated and efficient health and social services network accessible to individuals and living environments.

ORIENTATIONS AND OBJECTIVES

To fulfill its mission, which consists in maintaining, improving and restoring Quebecers' health and well-being by making accessible an array of integrated, quality health and social services, thereby contributing to Québec's social and economic development, the MSSS had adopted with respect to the infrastructure under its responsibility the orientations and objectives indicated below.

Orientations

- Ensure the sound management of the infrastructure of the HSSN[5];
- Carry out new infrastructure investments aimed at priority needs;
- Ensure the safety of individuals and property, impede the deterioration of buildings and oversee their conservation.

Objectives

- Maintain a reliable, up-to-date inventory of HSSN infrastructure;
- Ensure an appropriate annual level of investment to maintain HSSN infrastructure;
- Ascertain the physical condition of HSSN infrastructure;
- Promote good infrastructure management practices in establishments in the HSSN;
- Set objective and fair prioritization criteria to support investment choices;
- Support project planning by establishments in the HSSN, especially through the elaboration of guides and departmental directives;
- Optimize practices in the realm of procurement and resource use.

RESPONSIBILITIES

The MSSS determines priorities, objectives and orientations with respect to health and social services and ensures their application.

It evaluates and allocates the funds necessary to maintain assets, reduce the AMD and to add, replace or enhance HSSN infrastructure. In this respect, it ensures that the funds allocated to the HSSN are used for the purposes intended to.

[5] Appendix 1 presents the list of bodies that the HSSN encompasses.

THE HEALTH AND SOCIAL SERVICES NETWORK

RESPONSIBILITIES

The establishments are responsible for maintaining HSSN infrastructure in accordance with departmental policy directions. They determine, prioritize, plan and carry out the work that the MSSS has authorized beforehand.

In collaboration with the establishments in the HSSN, the MSSS updates and certifies each year the real estate inventory and the province-wide inventory of medical equipment.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

Building Inventory

The HSSN's building inventory comprises 2 707 buildings with a total area of 9.4 million m^2. The buildings are divided into seven main categories corresponding to their mission:

- hospitals, which include short-term care centres, health care centres and psychiatric centres;
- residential and long-term care centres;
- rehabilitation centres;
- youth centres;
- local community service centres;
- other buildings, including employees' and physicians' residences, research centres, administrative premises, warehouses, laundries and boiler rooms;
- immovables surplus to requirements.

Medical Equipment

Medical equipment mainly comprises 11 823 devices used to offer care and service in specialties such as medical imaging, radiation therapy, medical biology, respiratory therapy and surgery.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Services Offer				Enhancement of the service	Subtotal	Restatement[1]	Total
	Asset Maintenance	Elimination of Asset Management Deficit	Replacement	Subtotal	Addition and Improvement			
Health and Social Services								
2017-2018								
Actual	61.0	18.4	277.4	356.8	389.3	746.1	381.7	**1,127.8**
2018-2019								
Probable	93.4	27.6	224.0	345.0	702.6	1,047.6	370.5	**1,418.1**
2019-2020								
Planned	159.2	73.7	298.8	531.7	807.3	1,339.0	—	**1,339.0**

[1] A restatement is presented on an interim basis to reflect works done under projects scheduled prior to March 31, 2015.

ADDITIONAL INFORMATION

Maintenance of the Service Offer

Asset maintenance investments allow for the work required to maintain the physical condition of HSSN buildings or to restore it when the buildings have an AMD, for the purposes of ensuring individual health and safety, remedying physical deterioration, and preserving the building inventory.

Such major work focuses, in particular, on the building structure or shell (or both), mechanical and electrical systems, and compliance with mandatory codes and standards.

Investments in 2017-2018 for the maintenance of the service offer total $356.8 million and probable investments in 2018-2019 should reach $345.0 million. The MSSS anticipates investments of $531.7 million in 2019-2020. The significant increase in relation to investments in the two preceding years seeks to accelerate the completion of work to ensure the durability of the building inventory.

Infrastructure replacement investments in 2017-2018, totalling $277.4 million, and probable investments of $224.0 million for 2018-2019 facilitated the completion of the following major projects:

- relocation of the Hôpital de Baie-Saint-Paul;
- construction of the new Centre hospitalier de l’Université de Montréal (CHUM) and the research centre;
- the replacement of medical devices in the HSSN;
- the replacement of furnishings and other non-medical equipment.

Forecast investments for 2019-2020, totalling $298.8 million, will, by way of an example, allow for the pursuit of phase II of the CHUM project now under way and completion of the demolition of the old hospital in Baie-Saint-Paul. Moreover, part of the investments will cover the replacement of medical equipment, furnishings and other non-medical equipment in the HSSN.

Enhancement of the Service Offer

Investments to enhance the service offer carried out in 2017-2018 totalling $389.3 million and probable investments of $702.6 million for 2018-2019 allowed for the completion or the pursuit of the following major projects:

- CHU de Québec – Université Laval – Construction of a new hospital on the site of the Hôpital de l'Enfant-Jésus, Phases I and II;
- CISSS des Laurentides – Hôpital régional de Saint-Jérôme – a new mental health building;
- Montréal Heart Institute – Training centre, consolidation of ambulatory care and expansion of the emergency department;
- CIUSSS du Nord-de-l'Île-de-Montréal – Expansion of the Centre intégré de traumatologie, de l'unité mère-enfant et du service d'endoscopie at the Hôpital du Sacré-Cœur de Montréal;
- CHUSJ – Expansion and modernization of the Centre hospitalier universitaire Sainte-Justine;
- CIUSSS de l'Estrie – CHUS – Construction of the centre mère-enfant et de l'urgence at the Hôpital de Fleurimont in the centre hospitalier universitaire de Sherbrooke.

Forecast investments in 2019-2020 to enhance the service offer, totalling $807.3 million, will allow, in particular, the completion of four major projects:

- CIUSSS de la Mauricie-et-du-Centre-du-Québec – Pavillon Sainte-Marie – Phase ll of service restructuring;
- CISSS de Chaudière-Appalaches – Hôtel-Dieu de Lévis – Construction of the Centre régional intégré de cancérologie;
- CISSS de la Montérégie-Centre – Expansion of the Hôpital du Haut-Richelieu;
- CIUSSS de l'Est-de-l'Île-de-Montréal – Construction of a new hemo-dialysis service building at the hôpital Maisonneuve-Rosemont.

INFRASTRUCTURE SUSTAINABILITY

HEALTH AND SOCIAL SERVICES NETWORK

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Real estate									
Buildings									
Hospital centres	573	4,738,164	50	100	88	10	2	B	322.8
CHSLD	463	2,134,167	49	100	78	18	4	C	153.8
Rehabilitation centres	174	385,792	52	100	79	14	7	C	34.2
Youth centres	180	329,388	58	100	66	26	8	C	56.7
Local community service centres (CLSC)	187	358,862	42	100	82	17	1	B	16.6
Other[2]	1,077	1,299,354	50	100	77	16	7	C	182.8
Surplus buildings	53	182,606	92	100	56	11	33	D	59.8
Total	**2,707**	**9,428,333**							**826.7**
Equipment									
Medical devices									
Imaging	3,666	n/a	8	100	76	21	3	C	280.8
Radiotherapy	99	n/a	8	100	83	7	10	C	36.4
Medical biology	1,761	n/a	8	100	69	22	9	C	58.4
Monitoring (No. facilities)	127	n/a	7	100	81	17	2	B	34.1
Respiratory Therapy	2,693	n/a	8	100	80	17	3	B	32.7
Surgery	867	n/a	8	100	82	12	6	B	25.1
Care	336	n/a	5	100	88	10	2	B	18.8
Other	2,274	n/a	7	100	73	17	10	C	86.0
Total	**11,823**								**572.3**
Total									**1,399.0**

Legend: n/a = not applicable

1 Data as at February 28, 2019 for real estate inventory and September 30, 2018 for medical equipment.
2 Other buildings include staff and doctors' quarters, research centres, administrative spaces, warehouses, laundries and boiler rooms.

ADDITIONAL INFORMATION

Percentage of Inspection

Private firms inspected all of the HSSN's buildings between 2015 and 2018, except for immovables surplus to requirements, whose physical condition was evaluated by officials from the establishments.

The expression "immovable surplus to requirements" means an immovable which the institution, the agency concerned and the Minister foresee will not be used for the purposes of any institution for whatever purpose for the five ensuing years.[6]

The establishments systematically monitor the condition of medical devices through preventive maintenance programs in order to ensure the continuity and quality of the services that they provide.

Methodology

The government condition indicator and the AMD do not take into consideration the functional obsolescence of buildings, that is, an outmoded development concept, inadequate configuration, or non-optimal space layout.

The condition of a device is determined according to its actual age in relation to its preestablished standardized useful life. Medical devices are usually replaced at the end of their useful life.

The condition indicator percentages (ABC / D / E) are established according to the surface area of the buildings and the replacement value of the medical devices. The average age and average condition indicator of the buildings are weighted according to their surface area and, in the case of medical devices, according to their replacement value.

Appendix 2 indicates the condition indicator of buildings according to their age group.

[6] *Act respecting health services and social services* (chapter S-4.2), s. 262.1, paragraph 6.

Change in Infrastructure Conditions and Asset Maintenance Deficit By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019[1]	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Real estate									
Buildings									
Hospital centres	90	88	(2)	B	B	236.4	108.6	(22.2)	322.8
CHSLD	76	78	2	C	C	148.8	16.0	(11.0)	153.8
Rehabilitation centres	81	79	(2)	B	C	17.1	19.5	(2.4)	34.2
Youth centres	66	66	0	C	C	48.0	12.7	(4.0)	56.7
Local community service centres (CLSC)	82	82	0	B	B	16.7	1.1	(1.2)	16.6
Other	78	77	(1)	C	C	174.3	21.6	(13.1)	182.8
Surplus buildings	N/A	56	n/a	N/A	D	N/A	59.8	n/a	59.8
Total						**641.3**	**239.3**	**(53.9)**	**826.7**
Equipment									
Medical devices									
Imaging	76	76	0	C	C	279.8	72.7	(71.7)	280.8
Radiotherapy	79	83	4	C	C	40.4	8.9	(12.9)	36.4
Medical biology	69	69	0	C	C	56.3	10.1	(8.0)	58.4
Monitoring (No. facilities)	77	81	4	B	B	39.7	4.9	(10.5)	34.1
Respiratory therapy	75	80	5	C	B	40.0	8.1	(15.4)	32.7
Surgery	79	82	3	B	B	28.2	2.8	(5.9)	25.1
Care	85	88	3	B	B	22.8	4.5	(8.5)	18.8
Other	75	73	(2)	C	C	75.2	23.0	(12.2)	86.0
Total						**582.4**	**135.0**	**(145.1)**	**572.3**
Total						**1,223.7**	**374.3**	**(199.0)**	**1,399.0**

Legend: N/A = not available; n/a = not applicable

[1] The AMD pertaining to medical equipment was not included in the 2018-2019 AMPI.

ADDITIONAL INFORMATION

Buildings

Changes in Condition

Except for “rehabilitation centres,” the average condition indicator for different categories of HSSN buildings has remained stable. The change from B to C in the average condition indicator of “rehabilitation centres” is attributable to the deterioration in the condition of the facade cladding observed during detailed inspections of certain buildings.

Changes in the AMD

The $239.3-million overall increase in the AMD is attributable, by and large, to the addition of more than $100.0 million to renovate the facade cladding of certain buildings, the addition of the AMD of immovables surplus to requirements worth $59.8 million, and the addition of $20.0 million to make compliant emergency department electrical power systems in certain hospitals. The residual increase in the AMD stems from new work pinpointed with respect to certain HSSN buildings.

The completion of asset maintenance work in the HSSN led to an overall $53.9-million reduction in the AMD and, consequently, to the improvement of the condition of certain buildings, in particular “hospitals” and “residential and long-term care centres.”

Medical Devices

Changes in Condition

The average condition indicator of respiratory therapy devices improved over the past year while the average condition indicator of other categories of medical devices has remained stable, that is, good (B) or satisfactory (C). The ongoing equipment replacement program is enabling the MSSS to satisfy needs for the replacement of medical devices that have reached the end of their useful life.

Changes in the AMD

The AMD for the replacement of medical devices has declined slightly over the past year. The MSSS anticipates a significant imminent reduction in the AMD of medical devices because of higher investments undertaken in recent years.

APPENDIX 1

COMPOSITION OF THE GROUPS OF BODIES

Health and Social Services Network

CISSS du Bas-Saint-Laurent
CIUSSS du Saguenay–Lac-Saint-Jean
CHU de Québec – Université Laval
CIUSSS de la Capitale-Nationale
Institut universitaire de cardiologie et de pneumologie de Québec – Université Laval (IUCPQ – UL)
CIUSSS de la Mauricie et du Centre-du-Québec
CIUSSS de l'Estrie – CHUS
CIUSSS de l'Ouest-de-l'Île-de-Montréal
CIUSSS du Centre-Ouest-de-l'Île-de-Montréal
CIUSSS du Centre-Sud-de-l'Île-de-Montréal
CIUSSS du Nord-de-l'Île-de-Montréal
CIUSSS de l'Est-de-l'Île-de-Montréal
Centre hospitalier de l'Université de Montréal (CHUM)
CHU de Sainte-Justine
McGill University Health Centre (MUHC)
Montréal Heart Institute (MHI)
Institut national de psychiatrie légale Philippe-Pinel (INPLPP)
CISSS de l'Outaouais
CISSS de l'Abitibi-Témiscamingue
CISSS de la Côte-Nord
CLSC de Naskapi
CRSSS de la Baie-James
CISSS de la Gaspésie
CISSS des Îles
CISSS de Chaudière-Appalaches
CISSS de Laval
CISSS de Lanaudière
CISSS des Laurentides
CISSS de la Montérégie-Centre
CISSS de la Montérégie-Est
CISSS de la Montérégie-Ouest
RRSSS du Nunavik
Conseil Cri de la santé et des services sociaux de la Baie-James

APPENDIX 2

DETAILED INVENTORY

Health and Social Services Network

Buildings[1]

	Quantity	Dimension (m^2)	Condition Indicator (%)			Average Condition Indicator
			ABC	D	E	
0-10 years						
Hospital centres	43	668,075	100	0	0	A
CHSLD	35	127,996	100	0	0	A
Rehabilitation centres	11	26,043	100	0	0	A
Youth centres	16	14,868	100	0	0	A
CLSC	21	44,894	100	0	0	A
Other	179	239,390	100	0	0	A
11-20 years						
Hospital centres	63	334,501	100	0	0	A
CHSLD	61	267,443	97	3	0	A
Rehabilitation centres	12	29,677	100	0	0	A
Youth centres	12	9,824	100	0	0	A
CLSC	37	57,968	96	4	0	A
Other	174	61,114	92	6	2	A
21-30 years						
Hospital centres	54	269,535	100	0	0	A
CHSLD	62	192,148	97	3	0	B
Rehabilitation centres	11	5,722	88	12	0	B
Youth centres	14	35,423	95	5	0	A
CLSC	29	25,336	87	13	0	B
Other	139	110,582	85	9	6	B
31-40 years						
Hospital centres	42	253,125	92	7	1	B
CHSLD	76	326,729	82	13	5	C
Rehabilitation centres	24	13,701	69	27	4	C
Youth centres	8	3,185	100	0	0	B
CLSC	36	67,980	66	34	0	C
Other	91	79,506	89	7	4	B
41-50 years						
Hospital centres	82	657,242	95	3	2	B
CHSLD	100	456,254	66	28	6	C
Rehabilitation centres	30	63,064	63	36	1	B
Youth centres	38	54,629	49	31	20	D
CLSC	18	34,274	95	0	5	B
Other	122	109,786	69	21	10	C
51-60 years						
Hospital centres	78	597,391	88	10	2	B
CHSLD	56	286,769	61	30	9	D
Rehabilitation centres	42	160,682	79	9	12	C
Youth centres	39	89,197	57	30	13	C
CLSC	16	42,755	50	50	0	C
Other	120	213,242	65	23	12	C

APPENDIX 2
(continued)

	Quantity	Dimension (m^2)	Condition Indicator (%)			Average Condition Indicator
			ABC	D	E	
61-70 years						
Hospital centres	86	928,473	70	25	5	C
CHSLD	31	151,754	56	43	1	C
Rehabilitation centres	19	25,965	64	16	20	D
Youth centres	17	28,505	86	14	0	B
CLSC	13	41,582	94	6	0	B
Other	118	207,911	73	18	9	C
71 years and older						
Hospital centres	125	1,029,821	84	14	2	B
CHSLD	42	325,075	80	17	3	C
Rehabilitation centres	25	60,938	84	13	3	B
Youth centres	36	93,757	55	37	8	C
CLSC	17	44,072	80	16	4	B
Other	134	277,824	63	29	8	D
Total	**2,654**	**9,245,727**				

[1] Inspected buildings. Surplus buildings are not considered in this appendix.

TOURISME

INFRASTRUCTURE MANAGEMENT

THE RÉGIE DES INSTALLATIONS OLYMPIQUES

VISION

The vision of the RIO, as approved by its Board of Directors in 2012, consists in making the Olympic Park a international reference as a modern urban park, a unique hub that encompasses creation, discovery, entertainment and physical activity.

ORIENTATIONS AND OBJECTIVES

To fulfill its mission, which is to capitalize on the Olympic Park's full potential in tandem with its partners and the surrounding community, and to protect and develop the architectural heritage, the RIO has adopted, from the standpoint of the infrastructure and systems under its responsibility, the orientation and objectives indicated below.

Orientation

- Protect and develop the Olympic Park's architectural, technical and historic heritage.

Objectives

- Eliminate all risks of failure that could compromise the health and safety of clients and users of the Olympic Park;
- Increase revenues or reduce operating costs;
- Enhance the quality of the customer experience;
- Preserve the Olympic Park's built heritage;
- Reduce the Olympic Park's environmental impact.

RESPONSIBILITIES

The RIO, for which the Minister of Tourism is legally responsible, must manage its infrastructure and plan the measures to be carried out.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The RIO's infrastructure comprises numerous unique buildings and systems, which are grouped together as follows: the Olympic Stadium and the attendant buildings (the Olympic Tower, the sports centre, the thermal power plant), the roof, underground parking lots, the Esplanade and all of the outdoor spaces surrounding the Olympic Stadium.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replace-ment	Subtotal	Addition and Improvement	
Régie des installations olympiques						
2017-2018						
Actual	69.3	9.5	0.9	79.7	—	**79.7**
2018-2019						
Probable	29.5	21.5	1.5	52.5	—	**52.5**
2019-2020						
Planned	10.5	35.7	7.5	53.7	—	**53.7**

ADDITIONAL INFORMATION

Investments in 2017-2018 and 2018-2019 totalled $79.7 million and $52.5 million, respectively, and allowed for the completion of the following major projects:

- rehabilitation of the outer shell of the Olympic Tower (work);
- upgrading of the Olympic Tower and renovation of the vertical transportation (work);
- replacement and optimization of air conditioning and heating systems (design and construction);
- rehabilitation of the fire alarm system (plans and specifications and work);
- rebuilding of new sections in the parking lots (plans and specifications and construction).

Forecast investments in 2019-2020, totalling $53.7 million, will allow for the completion or pursuit of the following projects:

- Olympic Tower upgrading and renovation program (work);
- rehabilitation of the fire alarm system (work);
- reconstruction of sector 900 of the Esplanade skatepark (plans and specifications and work);
- rebuilding of Viau Métro access points at the base of the Olympic Tower (plans and specifications);
- rebuilding of new sections in the parking lots (plans and specifications and work).

INFRASTRUCTURE SUSTAINABILITY

RÉGIE DES INSTALLATIONS OLYMPIQUES

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension (m^2)	Average Age[2] (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Building									
Olympic Stadium and Other Buildings	12	295,912	27	100	31	59	10	D	335.0
Roof	1	23,266	20	100	0	0	100	E	N/A
Esplanade and Outdoor Spaces Around the Olympic Stadium	3	150,533	25	100	39	23	38	D	90.0
Civil Engineering Works									
Parking Lots	8	163,043	14	100	64	36	0	B	26.3
Total	**24**	**632,754**							**451.3**

Legend: N/A = not available

1. Data as at December 13, 2018.
2. Average age represents the "apparent" age of the infrastructures. It refers to the age the infrastructure shows (observed condition), taking into account such elements as chronological age, degree of work carried out and the effective use of the infrastructure.

ADDITIONAL INFORMATION

Percentage of Inspection

Annual follow-up and ongoing updates to the work to be performed on the overall site are carried out in order to maintain a representative state of the Olympic Park's condition.

Methodology

Based on the expertise obtained, the roof the Olympic Stadium has reached the end of its useful life and can no longer be repaired. Consequently, it must be replaced and it is not therefore necessary to evaluate the AMD. The proposed replacement of the roof of the Olympic Stadium is included in the "planning stage" category of the 2019-2029 QIP. The final acceptance of the work related to the replacement of the roof is anticipated in 2024. In the meantime, to ensure the absolute safety of all interveners occupying the space, the RIO is applying a management protocol governing the occupation of the stadium's main area. The Régie du bâtiment du Québec reviews and approves the protocol annually.

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the dimensions.

Change in Infrastructure Condition and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Impro-vement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Buildings									
Olympic Stadium and Other Buildings	29	31	2	D	D	186.0	166.0	(17.0)	335.0
Roof	0	0	0	E	E	N/A	n/a	n/a	N/A
Esplanade and Outdoor Spaces Around the Olympic Stadium	12	39	27	D	D	82.4	7.6	—	90.0
Civil Engineering Works									
Parking Lots	64	64	0	B	B	37.9	0.5	(12.1)	26.3
Total						**306.3**	**174.1**	**(29.1)**	**451.3**

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Changes in Condition

Overall, the average condition indicators of all categories of infrastructure have remained stable. Indeed, asset maintenance work during the year was principally carried out on the Olympic Tower to avoid its deterioration. Furthermore, it has been noted that the proportion of infrastructures in the “Esplanade and outdoor spaces surrounding the Stadium” category deemed in satisfactory or better condition has increased. This is attributable, by and large, to the improvement in the calculation method, which now takes into account the relative value of each component.

Changes in the AMD

The increase in the AMD for the Olympic Stadium and other buildings stems from the studies conducted during the year, following the decision to replace the roof, aimed at determining the level of obsolescence of the main facilities and the facilities inside the Stadium, and the requisite work. Such work will focus essentially on the replacement of components that will enhance the customer experience, such as seating, television broadcasting equipment, and the lighting and sound systems in the main area of the Stadium.

The reduction of the AMD for the Olympic Stadium and other buildings results from the replacement and optimization of the air conditioning and heating systems, the rehabilitation of the fire alarm system, and the reconstruction of certain offices (electromechanical systems and architecture).

The parking lot rebuilding program led to a $12.1-million reduction in the AMD for this year.

APPENDIX 1

DETAILED INVENTORY

Olympic Stadium and other Buildings

	Quantity	Dimension (m^2)	Average Age (Years)	Condition Indicator	Asset Maintenance Deficit (M$)
Montreal Tower, Tourist Spaces, Observatory	3	27,503	20	C	37.1
Stadium (Tiers, Access Balconies, RLSQ, Play Area and Technical Services)	5	211,340	41	D	278.3
Sports Center	1	32,572	14	B	—
Thermal Power Plant	1	8,306	7	C	—
Administrative Buildings	1	3,769	34	D	19.6
Institut national du sport du Québec (INS Québec) Offices	1	12,422	4	A	—
Total	**12**	**295,912**	**27**	**D**	**335.0**

Esplanade and Outdoor Spaces Around the Olympic Stadium

	Quantity	Dimension (m^2)	Average Age (Years)	Condition Indicator	Asset Maintenance Deficit (M$)
Soccer Practice Pitch	1	17,489	6	A	—
Walkway Around the Stadium and Access Points	1	84,666	28	D	28.0
Esplanade (Sectors 100 to 900) and Access Points	1	48,378	42	E	62.0
Total	**3**	**150,533**	**25**	**D**	**90.0**

Parking Lots

	Quantity	Dimension (m^2)	Average Age (Years)	Condition Indicator	Asset Maintenance Deficit (M$)
Indoor Parking (P1)	1	32,315	4	A	—
Indoor Parking (P12 and P3)	2	58,889	16	D	26.3
Indoor Parking (P4)	1	21,552	12	A	—
Indoor Parking (P5 Level 1)	1	22,582	4	B	—
Indoor Parking (P5 Level 2)	1	17,708	2	B	—
Outdoor Parking (P7 - StarCité Cinema)	1	5,010	18	B	—
Outdoor Parking (P8)	1	4,987	42	B	—
Total	**8**	**163,043**	**14**	**B**	**26.3**

TRANSPORTS

INFRASTRUCTURE MANAGEMENT

THE MINISTÈRE DES TRANSPORTS

VISION

The MTQ is a major player in the organization of transportation in Québec. It seeks to offer Quebecers and businesses efficient, accessible transportation systems and is committed to ensuring the competent, rigorous, innovative, transparent management of infrastructure for which it is directly responsible. The MTQ is responsible, by way of an example, for the management of the highway system[7], a key link in economic exchanges and links between Québec's regions.

ORIENTATIONS AND OBJECTIVES

The MTQ's mission is to ensure throughout Québec the sustainable mobility of individuals and goods by means of efficient, safe transportation systems that contribute to Québec's development. The maintenance in good condition of road infrastructure, especially roads and structures, is a focal point of its initiatives and it devotes a substantial portion of its budgets to it.

In keeping with its mission, the MTQ must carry out major projects and asset maintenance work, build new infrastructure and replace infrastructure whose age and condition require doing so. In line with such work, the MTQ ensures the adaptation and development of the road network according to Quebecers' needs and Québec's economic development. Under the *2017-2020 Strategic Plan*, the MTQ has adopted the following orientation and objectives:

Orientation

- Support efficient, diversified, integrated and safe transportation systems.

Objectives

- Maintain road infrastructure in good condition;
- Ensure sustainable mobility in transportation;
- Promote the use of mass transit, active transportation and alternative transport.

[7] The highway system comprises freeways, provincial, regional and collector highways, and resource access roads.

RESPONSIBILITIES

The MTQ is responsible for carrying out all construction, reconstruction or maintenance work required in respect of the infrastructure under its jurisdiction. The acquisition and disposal of immovables are also governed by legislation and regulations that define the department's initiatives. The Minister of Transport is also responsible for the Société des traversiers du Québec.

Moreover, the *Act respecting the Ministère des Transports* and the *Act respecting Roads* stipulate the Minister's obligations and, more specifically, those relating to the management of the road network under his responsibility. In this respect, the Act specifies that the Minister of Transport can carry out on the network all acts and exercise all of the rights of an owner although it stipulates that the local municipalities own roads that the government builds or rebuilds, except for freeways, which the government owns, or those declared by government decree to be freeways.

Furthermore, the MTQ administers financial assistance programs to meet the priority needs of public transit corporations. It must ensure that applications from such corporations comply with the rules established and oversee accountability for spending from the standpoint of government investments.

The financial assistance programs seek primarily to support transportation authorities to carry out the capital projects necessary to organize and operate services. The programs are intended to foster the maintenance, enhancement and development of mass transit equipment and infrastructure.

Public transit authorities benefit, in particular, from the subsidy programs indicated below.

- Programme d'aide gouvernementale au transport collectif des personnes (PAGTCP – volet immobilisation): the program seeks specifically to maintain in good condition existing assets, improve the quality of the services offered to the clientele, and develop new services.
- Programme d'aide aux immobilisations en transport en commun de la Société de financement des infrastructures locales du Québec (SOFIL): the program, which came into force on January 1, 2006, targets capital projects in the realm of mass transit. Funding sources include a portion of the revenue from the federal excise tax on gasoline, revenue from registrations of automobiles with high-displacement engines, and revenue from the Land Transportation Network Fund (FORT).
- Programme d'aide financière du Fonds des infrastructures de transport en commun (PAFFITC): this program stems from the *Canada-Québec Agreement on the Public Transit Infrastructure Fund* concluded on June 29, 2016. The program seeks to support investments to restore and improve existing mass transit networks and those targeting the elaboration of studies to support longer-term network expansion projects.
- Programme d'aide gouvernementale d'infrastructures en transport collectif (PAGITC): this program stems from the signing of the *Integrated Bilateral Agreement* (IBA) with the Government of Canada and is designed to support new mass transit infrastructure construction, expansion, improvement and restoration projects and active transportation projects.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The MTQ manages the major road network totalling over 30,000 km and more than 5,400 structures such as overpasses, bridges over watercourses, tunnels and retaining walls. Since 2007, the MTQ has also been responsible for more than 4,200 bridges located in the municipal network whose management was ceded back to the municipalities in 1993.

The MTQ's assets also include culverts less than 3 m in diameter. Nearly 62,000 culverts are found on the major road network, including nearly 13,000 in the Réseau routier stratégique de transport en soutien au commerce extérieur (RSSCE).

The MTQ is also responsible for the infrastructure indicated below:

- Buildings: wayside parks (roadside rest areas and service areas) and airport terminal buildings;
- Civil engineering structures: overhead and roadside sign structures;
- Electrotechnical equipment (lighting systems and light signals);
- Air, rail and marine transportation infrastructure: airports, heliports, the Chemin de fer de la Gaspésie and the Quebec Central Railway, ferry terminals and service wharves.

The air, marine and rail transportation sectors are regulated. Inspections of infrastructure in these sectors are targeted and documented to ensure compliance with the safety standards in force. However, the structure and composition of such inspections does not, for the time being, allow for the evaluation of the condition and of the AMD.

PUBLIC TRANSIT AUTHORITIES

RESPONSIBILITIES

Since they own their infrastructure, public transit authorities are responsible for the construction, maintenance, operation and financing of such infrastructure, including compliance with the attendant regulations.

Consequently, it is incumbent upon the public transit authorities to evaluate, document and update data on the condition of infrastructure in order to support optimum management set on their priorities.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The infrastructure of public transit authorities comprises buildings such as terminals and bus shelters, equipment maintenance garages, stations and administrative and service buildings.

Civil engineering structures include infrastructure related to the operation of the Métro, that is, stations and tunnels, reserved bus lanes and parking lots and sites required to properly manage the vehicle fleet. Such structures also include infrastructure related to the operation of the train network, that is, railroad lines, bridges, culverts, tunnels and walls.

Lastly, equipment comprises Métro cars, including the new state-of-the-art AZUR cars that combine better reliability, higher capacity and improved comfort. It also includes equipment related to the operation of the train network, namely, locomotives, passenger cars, automatic electrified cars, and railroad switches. The mass transit equipment inventory also includes a bus fleet that provides quality mass transit, emergency vehicles, signalling, and all other equipment essential to ensure service continuity.

THE SOCIÉTÉ DES TRAVERSIERS DU QUÉBEC

VISION

Be recognized as an innovative leader in public maritime transport by offering the clientele an integrated marine transportation experience adapted to its expectations with the support of a proud, committed team.

ORIENTATIONS AND OBJECTIVES

To successfully carry out its mission, the STQ has adopted the orientation and objectives indicated below with respect to infrastructure under its responsibility.

Orientation

- Offer the clientele quality, functional, safe ships and land-based infrastructure.

Objectives

- By means of equipment that complies with standards, safely transport the clientele with qualified staff where service quality is a priority;
- Maintain terminals and ships in good condition;
- Ensure ship's compliance with the applicable regulations;
- Maintain minimally at 99.5% the service provision of the anticipated number of crossings.

RESPONSIBILITIES

The STQ, which falls under the responsibility of the Minister of Transport, must ensure that the infrastructures that it owns attains the abovementioned objectives. To succeed in doing so, the STQ must allocate sufficiant resources to:

- guarantee the infrastructures' integrity;
- ensure compliance with the applicable regulatory requirements;
- carry out work that extend their useful life;
- undertake improvements to satisfy new requirements;
- replace infrastructures at the end of their useful life.

DESCRIPTION OF THE INFRASTRUCTURE PORTFOLIO

The nine crossings[8] under the responsibility of the STQ are mainly located along the St. Lawrence River, between Sorel and the Basse-Côte-Nord region.

Aside from its head office building, the STQ owns infrastructure that includes ships, buildings (terminals, service buildings, footbridges, warehouses, workshops), wharves, pedestrian bridges, landing docks and other civil engineering structures (waiting areas, access roads).

[8] Crossing: the route that a ferry follows on a watercourse.

PUBLIC INFRASTRUCTURE INVESTMENTS INCLUDED IN THE QUÉBEC INFRASTRUCTURE PLAN

By Body and Investment Type

(contribution of the Gouvernement du Québec, in millions of dollars)

	Maintenance of the Service Offer				Enhancement of the Service Offer	Total
	Asset Maintenance	Elimination of Asset Maintenance Deficit	Replacement	Subtotal	Addition and Improvement	
Ministère des Transports						
2017-2018						
Actual	784.1	397.1	343.2	1,524.4	305.0	**1,829.4**
2018-2019						
Probable	483.2	1,095.3	450.2	2,028.7	416.7	**2,445.4**
2019-2020						
Planned	456.6	1,009.8	417.3	1,883.7	599.5	**2,483.2**
Public Transit Authorities						
2017-2018						
Actual	104.4	—	343.0	447.4	440.0	**887.4**
2018-2019						
Probable	147.9	—	400.6	548.5	376.1	**924.6**
2019-2020						
Planned	97.5	—	208.6	306.1	736.0	**1,042.1**
Sociétés des traversiers du Québec						
2017-2018						
Actual	13.0	—	1.5	14.5	5.0	**19.5**
2018-2019						
Probable	5.3	—	240.5	245.8	18.2	**264.0**
2019-2020						
Planned	21.7	—	—	21.7	58.3	**80.0**

ADDITIONAL INFORMATION

The Ministère des Transports

In 2017-2018, investments made by the MTQ totalled $1,829.4 million.

An amount of $1,524.4 million was dedicated for the maintenance of the service offer of the infrastructures and was apportioned mainly between the following strategic priorities:

- pavement preservation;
- the preservation of structures, including municipal bridges.

Additional funding announced in previous QIPs has increased investments to address ageing road infrastructure. Under the MTQ's response strategy, such work mainly targets the reduction of the AMD of the most deteriorated infrastructures.

The main projects under way regarding the maintenance of the service offer are:

- asset maintenance on the Turcot and De La Vérendrye interchanges and reconstruction of the Turcot interchange;
- asset maintenance on the Honoré Mercier Bridge;
- the requisite asset maintenance on the Île-d'Orléans bridge until it is rebuilt;
- asset maintenance on the Île-aux-Tourtes Bridge;
- asset maintenance on structures on the Metropolitan Autoroute;
- asset maintenance on structures on the Saint-Pierre interchange;
- rebuilding of the interchange between autoroutes 13 and 40;
- reconstruction of the Côte Arsène-Gagnon on Route 138 in Les Bergeronnes;
- asset maintenance on the Ville-Marie and Viger tunnels;
- major rehabilitation of the Pie-IX Bridge, between Montréal and Laval.

It should be noted that the reconstruction of the Turcot interchange will continue until 2021-2022. It remains the MTQ's biggest project. Moreover, the main projects under way regarding the enhancement of the service offer are:

- redevelopment of Route 185 between Autoroute 20 and the New Brunswick border – Phase III;
- widening of the Autoroute Henri-IV – Phase II;
- improvement of the Obedjiwan road in La Tuque and Lac-Ashuapmushuan;
- construction of a bypass in the Isle-Maligne district in Alma.

Public Transit Authorities

As for the funds allocated by the MTQ to support public transit authorities, investments made in 2017-2018 totalled $887.4 million. Furthermore, the key projects under way that are increasing forecast investments in 2019-2020 are:

- the acquisition of 153 additional AZUR passenger cars for the Montréal Métro;
- the construction of an underground garage at the Côte-Vertu Métro station;
- the establishment of a rapid bus service integrated into the requalification of the Pie-IX axis between Montréal and Laval;
- the construction of a commuter train maintenance centre in Pointe-Saint-Charles;
- the pursuit of Montréal Métro renovation programs;
  - Réno-Infrastructures (enhancement of accessibility and major rehabilitation of tunnels);
  - Réno-Systèmes (replacement or upgrading of operations-related equipment, including, by way of an example, ventilation, elevators and track equipment such as rail supports and guide bars);
- replacement of the MR-63 passenger cars in the Montréal Métro.

The Société des traversiers du Québec

In 2017-2018, the STQ's investments totalled $19.5 million and probable investments in 2018-2019 stand at $264.0 million. The substantial increase in 2018-2019 is attributable to the acquisition of two ships to replace the Lucien-L. and the Radisson ferries.

The main projects carried out or under way in 2018-2019 are:

- the redevelopment of the waiting area in Matane;
- the purchase of a tugboat for freight transportation at the Rivière Saint-Augustin (Basse-Côte-Nord) and Harington Harbour crossing;
- construction of a pile dolphin in Tadoussac;
- enhancement of the fluidity at the Saint-Ignace-de-Loyola crossing.

Forecast investments in 2019-2020 amount to $80.0 million and will, in particular, allow for the completion of the following projects:

- the purchase of a crew boat;
- modernization of the N.M. Joseph-Savard;
- upgrading of the landing docks in Québec City and Lévis.

INFRASTRUCTURE SUSTAINABILITY

MINISTERE DES TRANSPORTS

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension	Average Age (Years)	Inspection (%)	Condition Indicator (%) ABC	D	E	Average Condition Indicator	Asset Maintenance Deficit (M$)
Civil engineering works									
Highway system roadways	n/a	31,023 km	N/A	83	50	22	28	C	7,025.0
Structures									
					By number				
					76	7	17	C	
Highway system	5,454	5,019,122 m^2	39	100	By value				8,651.8
					53	8	39	C	
					By number				
					58	8	34	C	
Municipal bridges	4,265	754,055 m^2	N/A	100	By value				760.1
					58	8	34	C	
					By number				
Culverts under 3 m	61,687	1,436,855 m	N/A	97	83	8	9	B	N/A
Total									**16,436.9**

Legend: N/A = not available; n/a = not applicable

[1] Results based on 2018 data.

ADDITIONAL INFORMATION

Percentage of Inspection

Highway System Roadways

The MTQ monitors 25,800 km of the 31,023 km of the main paved roadways in the Québec major road network, which corresponds to an inspection rate of 83%. The unmonitored portion of roadways mainly comprises gravel roads and onramps.

Structures (Highway System and Municipal Bridges)

The inspection program provides a comprehensive picture of the condition of all structures under the responsibility of the MTQ. Follow-up is carried out by means of different types of inspections at frequencies that vary depending on the age and the level of deterioration of the structure.

Culverts under 3 m

An inspection process has been established and the proportion of culverts inspected stands at 97%. The MTQ is currently developing an AMD evaluation method. The findings of such analyses will be incorporated into the Annual Management Plan for Public Infrastructure Investments once completed.

Methodology

Highway System Roadways

The evaluation of the AMD and the GCI hinges on data from inspections conducted in 2018. The extrapolation for the AMD and the GCI are carried out bearing in mind the representativeness and relative scope of the unmonitored portions of the network.

Condition indicator

For over 15 years the MTQ has monitored the main paved roads, observed changes in their condition and published an annual report based on a key indicator of surface condition, that is, ride comfort. The use of the IRI to evaluate ride comfort that users experience on the roads is a standard employed by many road authorities in the world. Its definition and calculation are subject to international standards.

Based on this indicator, the MTQ has established in its successive strategic plans its performance targets in terms of the percentage of the road network in good condition. The MTQ reports on them in its *Rapport annuel de gestion* and publishes follow-up in this respect in its *Bilan annuel d'état du réseau routier*. Good pavement is defined as a road segment in respect of which the value of the ride comfort index falls below a threshold between what is deemed good condition and a condition that requires intervention to restore sound ride quality. On the other hand, the choice of initiatives and the best technique to be implemented take into consideration other indicators such as rutting, cracking and vulnerability to freezing.

Within the framework of the Annual Management Plan for Public Infrastructure Investments, four indicators have been combined to create a new indicator integrated for the purposes of the GCI: the IRI, the rutting index, the cracking index and vulnerability to freezing. A road segment can offer good ride quality although it displays a fairly high cracking rate. The combination of the four indicators means that the assessment presented based on the GCI can differ from that hinging uniquely on the IRI. Consequently, recourse to this combination of indices better links the condition of infrastructure to the investments need to attain what is deemed satisfactory or better condition.

Asset Maintenance Deficit

The value of the AMD of roadways represents the cost of work to repair roadways in poor and very poor condition in respect of which the requisite work has not been carried out and have thus reached a state of major deficiency, or whose residual useful life is less than or equal to three years.

Intervention Strategy

The MTQ has adopted a planning strategy in respect of pavement preservation measures to ensure that road network users enjoy a high level of service. The strategy seeks to maximize long-term spinoff from pavement preservation investments. The challenge is to invest in the right roadway at the right time using the proper technique through optimum planning of measures and to avoid the "worst is first" reflex.

The strategy is open-ended and adapted to geographic location according to the knowledge acquired on the condition of the network and the level of service offered to users. Knowledge of the financial parameters and follow-up to the guiding principles governing the prioritization of infrastructure investments and the targets established in the MTQ's strategic planning are also part of the strategy.

Based on the principles of sound road asset management, this strategy hinges on four complementary sections: preventive interventions to maintain roads in good condition, high cost-benefit corrective rehabilitation measures, stopgap interventions to enhance the short-term security of the network until the appropriate corrective work is carried out, and measures focusing on other considerations and uncertainties to deal with unusual situations.

In addition to the abovementioned parameters, the MTQ must ensure that it strikes a balance between investments in complex measures that remedy major deficiencies and high cost-benefit investments that remedy minor deficiencies. What is more, special attention is paid to heavily used road segments that display rutting.

Structures (Highway System and Municipal Bridges)

Condition indicator

For several years the MTQ has used different indicators to monitor the safety, functionality and general condition of structures. The key indicator that most road authorities use is the "proportion of the number of structures in good condition," which for the purposes of the GCI corresponds to the entire array of condition indices above the threshold, that is, very good (A), good (B) and satisfactory (C), while structures "to be repaired" are accorded condition indices of poor (D) and very pool (E).

At the MTQ, this indicator is based, in particular, on inspection data by targeting the key components whose condition requires intervention within the next five years. Other complementary indicators are also used, such as:

- a structure's functionality index, which determines whether the structure satisfies users' needs;
- a structure's behaviour index, which reflects its stability and safety.

The combined outcomes of the indicators facilitate the selection of the most worthwhile, advantageous measures.

The "proportion of the number of structures in good condition" indicator is formulated in terms of number, which facilitates its interpretation. However, this approach has the drawback of attributing the same weight to each structure, regardless of size. Another way of presenting the information, which appears in the previous table, is in terms of the percentage of the value of structures. This approach has the advantage of making the connection between investment needs from the viewpoint of the relative importance of the structures. Consequently, structures of high value strongly influence the comprehensive overview of the GCI of the structures.

Asset Maintenance Deficit

The AMD of structures in the major road network and bridges in the municipal network corresponds to the sum of the work required for more than five years to restore the condition of the structures to be repaired. This value is strongly influenced by a number of major structures on which work is required and in respect of which the MTQ has planned to carry out major work, such as the Turcot interchange, the pont-tunnel Louis-Hippolyte-La Fontaine, the Ville-Marie and Viger tunnels, the l'Île-aux-Tourtes Bridge, the Île d'Orléans Bridge and the Honoré-Mercier Bridge. The MTQ will continue to emphasize initiatives that ensure public safety and is committed for many years to come to a replacement and maintenance cycle focusing on ageing assets.

Lastly, the MTQ has developed other indicators in response to specific needs:

- the general condition indicator, which offers a cursory picture of the condition of structures for the general public by dividing them into four main categories, that is, structures that:
  - require replacement;
  - require major work;
  - require repairs;
  - do not require any intervention.
- the index of restoration investments to be carried out, developed at the request of the Auditor General of Québec.

The *Bilan de l'état des structures* presents information on the structures in the major road network and bridges in the municipal network under the responsibility of the MTQ. The *Rapport annuel de gestion du ministère des Transports* includes reporting according to the targets established under the *Plan stratégique 2017-2020*. Moreover, the MTQ presents the general inspection reports on its structures on its website.

Intervention Strategy

The intervention strategy devoted to structures prioritizes measures that ensure public safety. The MTQ's initiatives also seek to maintain assets to ensure the structures' durability. Lastly, because of the investments necessary, the strategic importance of structures and multi-year planning of initiatives, major structures are handled separately.

Indeed, based on the 2019-2021 integrated intervention strategy, the preservation of structures hinges on four key principles:

- slow the pace of the structures' deterioration through targeted preventive maintenance measures and inexpensive repairs intended to postpone for five to 10 years major interventions;
- reduce as quickly as possible the number of structures to be repaired on the RSSCE;
- limit the scope of structure repair projects to measures that are strictly confined to structural deficiencies or other safety-related problems without adding "non-priority" measures;
- modify in the medium and long terms the distribution of intervention needs in respect of structures to lengthen the time available to complete major repair work.

Culverts under 3 m

Condition indicator

The MTQ uses 17 criteria to determine the condition of culverts during inspections. The criteria are divided into categories: structural capacity, hydraulic capacity, condition of the embankment and the roadway, and the condition of other components such as the headwall.

The criteria are then processed to create the GCI, which is divided into five classes, from A to E. The classes facilitate the determination of the culverts that require work in the short term as well as the definition of the GCI linked to the infrastructure.

Culverts that are classed A, B or C are deemed to be in good condition, which means that they do not require any short-term intervention. While the culverts are deemed to be in good condition, some of them may require minor repairs or maintenance to ensure their performance and to prolong their useful life. Culverts that are classed D and E require short-term intervention, whether rehabilitation or reconstruction. Such structures require rigorous, ongoing follow-up.

The PII is another important index in the management of culverts. It facilitates the determination of the frequency of culvert inspections, which varies from one to five years.

Intervention Strategy

The 2019-2020 integrated intervention strategy in respect of culverts less than 3 m in diameter seeks to:

- reduce the number of culverts in poor condition classed D or E;
- complete repairs aimed at maintaining in good condition culverts in class C.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Civil engineering works									
Highway system roadways	50	50	0	C	C	6,044.0	1,777.0	(796.0)	7,025.0
Structures	By number								
	75	76	1	C	C				
Highway system	By value					7,896.8	1,709.0	(954.0)	8,651.8
	49	53	4	D	C				
	By number								
	57	58	1	C	C				
Municipal bridges	By value					720.9	158.3	(119.1)	760.1
	57	58	1	C	C				
Culverts under 3 m	By number								
	82	83	1	B	B	N/A	n/a	n/a	N/A
Total						**14,661.7**	**3,644.3**	**(1,869.1)**	**16,436.9**

Legend: N/A = not available; n/a = not applicable

ADDITIONAL INFORMATION

Highway System Roadways

Changes in Condition

The proportion of roads in satisfactory or better condition (A, B or C) in the major road network has remained stable. Work on 2,072 km of roads during the year maintained their condition. The work can be broken down as follows:

- repair work on 1,083 km (52%) (surface rehabilitation, extensive rehabilitation, reconstruction) sought to remedy deficiencies in the roadway;
- preventive work on 757 km (37%) focused on sealing cracks and thin resurfacing to maintain the roadways in good condition and increase their residual useful life by means of economical measures;
- makeshift repairs on 232 km (11%) consisted in local repairs and thin resurfacing, which seeks to achieve on roadways in very poor condition that cannot be rehabilitated in the short term an adequate level of quality and safety by means of lower-cost temporary measures.

Changes in the AMD

The $1,777.0-million increase in the AMD is principally attributable to the following factors:

- $608.0 million is linked to higher intervention costs, especially because the projects evaluated this year more extensively involved allied activities (professional fees, expropriation and the shifting of public services) and other factors (signage, mitigation measures and crash barriers);
- $569.0 million is attributable to the natural ageing of roadways that this year attained a residual useful life of less than three years (1’364 km);
- $457.0 million is linked to roadways that this year crossed the major deficiency threshold (zero residual useful life). Intervention needs on such roadways (1,411 km) are now more extensive and costly;
- $72.0 million stems from an upward adjustment of intervention needs on certain roadways (393 km) in the wake of the updating of condition data and configuration parameters;
- $71.0 million has been added to take into account the average cost of major rehabilitation on roadways (162 km) in very poor condition that require short-term makeshift repairs.

The $796.0-million reduction in the AMD is principally attributable to the following factors:

- $517.0 million devoted to repair work on roadways (944 km) intended to remedy their deficiencies;
- $197.0 million stems from the downward adjustment of intervention needs on certain roadways (1,116 km) in the wake of the updating of condition data and configuration parameters;
- $82.0 million related to the reassessment of project costs as a result of the lower unit cost of interventions.

Structures – Highway System

Changes in Condition

Results According to Number

The condition of structures on the major road network improved over the past year and the proportion of structures in satisfactory or better condition now stands at 76%.

Results According to Value

The overall condition of structures in the major road network according to value also improved, from an average condition indicator of D to C. The improvement reflects the impact of the intervention strategy implemented with regard to major structures and in respect of which the work is given priority.

The major structure projects in the QIP encompass 80% of the value of the ADM. The projects under way will facilitate the preparation and completion of work to reduce the cumulative AMD in the coming years. The MTQ’s management reveals that it controls its structures.

Changes in the AMD

The $1,709.0-million increase in the AMD is attributable, by and large, to the following factors:

- $1,386.0 million stems from the updating of the cost of rebuilding structures whose condition falls below satisfactory, in particular the Laviolette Bridge;
  - It can take several years to prepare and complete major structure rehabilitation or reconstruction projects. Estimated intervention costs are recorded in the AMD as long as the repair work has not been completed or the new structure has not been put into service. Consequently, they affect the scope of the AMD for several years. For example, in the case of the reconstruction of the Gouin Bridge in Saint-Jean-sur-Richelieu, while the work has been ongoing since 2017, the AMD will only be reduced once the new bridge is put into service in 2019.
- $323.0 million stems from the ageing of the structures overall.

The $954.0-million reduction in the AMD is principally attributable to the following factors:

- $661.0 million relates to the completion of reconstruction work on certain bridges and overpasses that had reached the end of their useful life;
- $293.0 million is related to major repair work completed on critical components that prolong the useful life of certain structures or a review of the scope and nature of the requisite interventions observed during the latest inspections.

Structures – Municipal Bridges

Changes in Condition

Results According to Number and Value

The proportion of municipal bridges in satisfactory or better condition also improved and stands at 58%.

Changes in the AMD

The $158.3-million increase in the AMD is attributable, by and large, to the ageing of structures and bridges in the municipal network.

The $119.1-million reduction in the AMD is principally attributable to the following factors:

- $84.1 million stems from work completed on structures deemed below the satisfactory threshold;
- $35.0 million is related to the review of the scope and nature of the requisite interventions observed during the latest inspections.

PUBLIC TRANSIT CORPORATIONS

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension	Average age (years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator
					ABC	D	E	
Buildings								
Stations	51	1,201,824 m²	20	98	88	12	0	B
Garages and workshops	46	1,493,721 m²	36	54	72	4	24	C
Terminus	94	687,891 m²	14	77	85	10	5	B
Administration and services	141	129,466 m²	40	0	N/A	N/A	N/A	N/A
Bus shelters, shelters and temperature-controlled stations	4,366	44,199 m²	14	62	95	5	0	B
Civil engineering works								
Metro								
Stations	68	206,339 m²	43	0	N/A	N/A	N/A	N/A
Tunnels	179	76 km	41	0	N/A	N/A	N/A	N/A
Trains								
Railroad tracks	n/a	43 km	15	100	100	0	0	A
Bridges, culverts, tunnels and walls	132	n/a	41	97	60	33	7	C
Reserved lanes	n/a	338 km	12	67	97	3	0	C
Park-and-ride lots	28	452,482 m²	15	86	79	17	4	C
Equipment								
Metro cars								
MR-63	3	n/a	53	100	0	0	100	E
MR-73	423	n/a	43	100	0	100	0	D
AZUR	423	n/a	2	100	100	0	0	A
Buses								
Standard	3,428	n/a	10	87	94	3	3	B
Articulated	472	n/a	7	100	99	1	0	B
Minibus	147	n/a	6	100	98	1	1	B
Trains								
Locomotives	41	n/a	15	100	100	0	0	B
Passenger rail cars	206	n/a	12	100	100	0	0	A
Electric rail cars	58	n/a	24	100	0	100	0	D
Catenaries	n/a	N/A	N/A	0	N/A	N/A	N/A	N/A
Switches	13	n/a	20	100	100	0	0	A
Emergency response vehicles	759	n/a	11	97	78	21	1	C
Signage	234	n/a	12	64	100	0	0	B
Other[2]	246	n/a	11	93	84	15	1	B

Legend: N/A = not available; n/a = not applicable

1 Results based on data as at December 31, 2018.
2 The *Other* category includes the following elements: elevating platforms, mechanical and washing sweepers, lift trucks, pallet trucks, floor cleaners, electric vehicles and platforms.

ADDITIONAL INFORMATION

Percentage of inspection

This inventory of mass transit infrastructure incorporates all of the infrastructure that public transit authorities own, that is, the ARTM, the RTM (Exo), the STM, the RTC, the RTL, the STL (Laval), the STO, the STL (Lévis), the STTR, the STS (Saguenay) and the STS (Sherbrooke).

The MTQ does not own mass transit infrastructure and the inventory hinges on the data available provided by the public transit authorities. From the standpoint of government guidelines, the MTQ collects and processes, in collaboration with all of the public transit authorities, data to establish and update a complete, representative picture of the condition of the infrastructure that the authorities own. This approach seeks to plan the Québec government's investments to support public transit authorities over the next 10 years bearing in mind the responsibilities linked to the ownership of the infrastructure concerned. In conjunction with this approach, the MTQ will work with the STM to subsequently present the condition of civil engineering structures in the Métro, that is, stations and tunnels.

Methodology

The condition indicator percentages (ABC / D / E) and the average condition indicator are weighted according to the infrastructures for all categories, except reserved lanes and railroad lines, which are weighted according to the number of kilometers.

SOCIÉTÉ DES TRAVERSIERS DU QUÉBEC

Infrastructure Inventory[1]
By Infrastructure Type and Category

	Quantity	Dimension	Average Age (Years)	Inspection (%)	Condition Indicator (%)			Average Condition Indicator	Asset Maintenance Deficit (M$)
					ABC	D	E		
Real estate	85	9,005 m^2	22	100	100	0	0	A	—
Civil engineering works									
Wharves	26	7,571 m	38	100	43	57	0	C	47.1
Docks	20	3,604 m^2	24	100	64	29	7	B	14.6
Other	22	161,298 m^2	34	100	100	0	0	A	—
Equipment									
Vessels	21	n/a	28	100	83	17	0	A	23.5
Total									**85.2**

Legend: n/a = not applicable

[1] Results based on data as at December 2018.

ADDITIONAL INFORMATION

Percentage of Inspection

An ongoing inspection calendar has been established that targets critical components in essential buildings and civil engineering structures in order to provide the requisite service. The objective is to maintain an up-to-date picture of the condition of infrastructure to support decision-making pertaining to it.

The periodic inspection and follow-up programs governing the key components of ships are required according to legislative obligations and standards imposed, in particular, by the *Canada Shipping Act* (2001). Through the inspections, each ship obtains the requisite periodic statutory approvals in order to maintain the certification required to fulfill its mission.

Methodology

The average age of buildings and civil engineering structures reflects the apparent age, which takes into consideration the infrastructure's chronological age and work completed on it in order to ensure its capacity to provide service until the end of its useful life.

The evaluation method respecting the condition of buildings and civil engineering structures is based on the determination of a facility condition indicator established following a technical inspection. The evaluation method concerning the condition of wharves and landing docks is based on an age-based infrastructure deterioration model. This evaluation supports the investment strategy, which seeks to group together interventions in order to minimize their impact on operations.

With a view to achieving continuous improvement and compliance with government guidelines, the method of evaluation respecting the condition of ships was revised in order to take into account both the vessels' deterioration and age. The objective is to obtain an up-to-date picture of the condition of the ships to support enlightened decision-making pertaining to them.

The condition indicator percentages (ABC / D / E) are weighted according to the replacement value.

Change in Infrastructure Conditions and Asset Maintenance Deficit
By Infrastructure Type and Category

	Proportion of Infrastructures in a Satisfactory Condition or Better (%)			Average Condition Indicator		Asset Maintenance Deficit (M$)			
	AMPI		Varia-tion	AMPI		AMPI 2018-2019	Improvement	Reduction	AMPI 2019-2020
	2018-2019	2019-2020		2018-2019	2019-2020				
Real estate	100	100	0	A	A	—	—	—	—
Civil engineering works									
Wharves	38	43	5	C	C	41.8	5.3	—	47.1
Docks	64	64	0	B	B	13.6	1.0	—	14.6
Other	100	100	0	A	A	—	—	—	—
Equipment									
Vessels	99	83	(16)	A	A	—	23.5	—	23.5
Total						**55.4**	**29.8**	—	**85.2**

ADDITIONAL INFORMATION

Changes in Condition

The average condition indicator for the infrastructure overall has remained stable during the year and is in satisfactory or better. This situation is attributable to the pursuit of the STQ inspection program, which allows for the targeting and prioritization of asset maintenance work and the establishment of the most comprehensive and up-to-date profile possible for such infrastructure.

Wharves and landing docks display a stable average condition of C and B, respectively. An increase has been noted in the proportion of infrastructure in satisfactory or better condition with respect to wharves, attributable to the acquisition of two new wharves from Fisheries and Oceans Canada, that is, the Notre-Dame-des-Sept-Douleurs and L'Isle-Verte wharves.

As for ships, the reduction in the proportion of vessels in satisfactory or better condition stems, by and large, from the application of a new evaluation method. The method used now takes into consideration the ship's age and the facility condition indicator in the calculation of the GCI. The condition indicator thus obtained provides a more representative picture of the general condition of the ship and makes it possible to better anticipate and plan ship replacement needs.

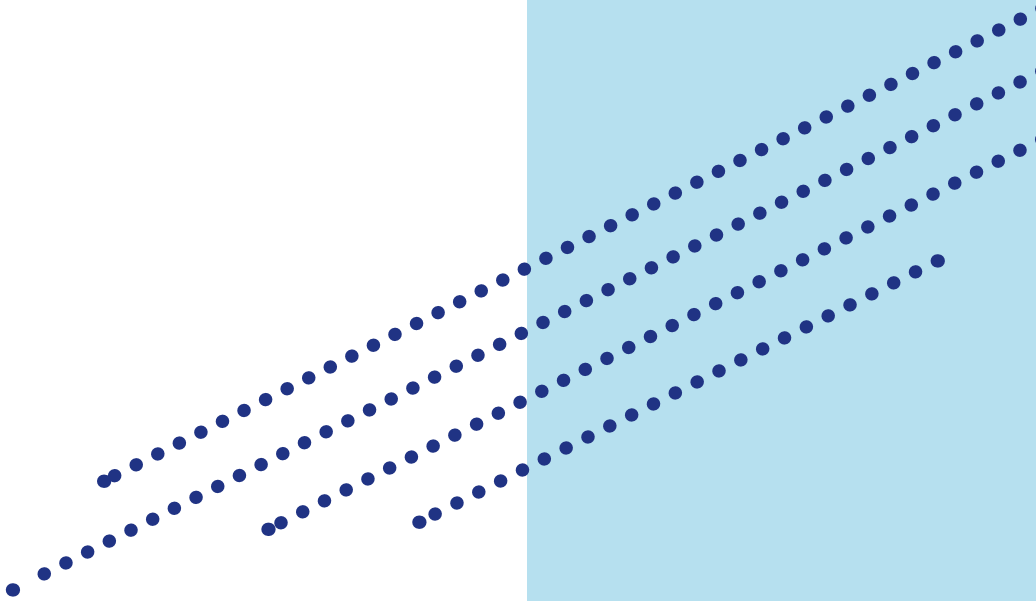
It should be noted that the periodic follow-up required by legislative obligations and standards imposed, in particular, by the *Canada Shipping Act* (2001) ensure the ships' safety.

Changes in the AMD

The increase in the AMD with respect to wharves and landing docks is attributable to the natural deterioration of their condition observed over the past year.

The increase in the AMD as regards of ships stems from the work completed on the N.M. Joseph-Savard focusing on the replacement and upgrading of components that have reached the end of their useful life.

In 2018-2019, the asset maintenance work completed did not allow for the reduction of the AMD. However, it is anticipated that in 2019-2020 work will be carried out targetting the reduction of the AMD, in particular the upgrading of the landing docks in Québec City and Lévis.



Conseil du trésor
Québec