



# Budget Process – Ten-Year Capital Works Program component: Investment Planning

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April 26, 2023  
**2022 Annual Report**  
Auditor General of  
the Ville de Montréal



## Budget Process – Ten-Year Capital Works Program component: Investment Planning

### Background

The ten-year capital works program (PDI) groups together investment projects that the Ville de Montréal (the City) plans to carry out over the next ten years to maintain its infrastructure and encourage its economic development. This management and planning tool takes into account the needs of the population and the agreed upon service levels. It informs the population of the directions taken and the strategic choices made to determine the level of taxation and the service levels of the various municipal activity sectors.

The City owns assets with a replacement value estimated at approximately 66 billion dollars (\$66 billion). Over the next ten years, the City plans to invest \$19.5 billion, of which 70.3% will be allocated to protecting and maintaining its assets.

Given the City's limited financial capacity and the condition of its assets, several of which are nearing the end of their useful life, an asset management strategy is currently being developed. Its objective is to maintain the City's service offer and, as much as possible, to obtain an optimal return on these assets.

### Purpose of the audit

To ensure that the City has strategies that enable it to plan its capital investments based on its long-term needs, financial resources and strategic vision.

### Results

Aware of investment needs attributable to its aging infrastructure, the City has, for the past two years, been preparing an investment budget for a period of ten years, rather than three years, to ensure integrated strategic planning. The City has put in place several policies and directives regarding the development of the PDI. An annual internal report on knowledge of the assets has been produced since the establishment of the PDI.

However, some practices aimed at aligning long-term needs and financial resources with the City's strategic vision have not been implemented. Compliance with the investment planning and funding strategies in effect is sometimes lacking. The information disclosed in the budget document and financial accountability report is incomplete, making it difficult to assess the extent to which the PDI aligns with the City's needs and matches its long-term financial capacity, and whether achievements correspond to budget forecasts.

## Main Findings

### Identification of Needs to Ensure the Short-, Medium- and Long-Term Maintenance of Assets Based on Their Condition, Lifecycle, Service Levels and Operational Planning Tools

- The annual report of January 31, 2022, on knowledge of the condition of the City's assets revealed several failures on the part of the business units to meet the directive. The work to be done to enable the City to have a complete picture of the condition of its assets and then to define its asset management strategy is huge. Defining the stakeholders' roles and responsibilities and ensuring their buy-in to this work are essential.
- To eliminate all confusion regarding the scope of the pre-budget consultation, consideration should be given to improving the consultation document by clarifying it, thereby ensuring that its objective is to survey the citizens' level of satisfaction with the City's infrastructure.
- There is no corporate portfolio identifying all the programs and investment projects.
- The technology tools used to develop the PDI and project files, as well as the investment funding forecasts, are outdated and not adapted to the City's needs, increasing the risk of errors.

### Existence of a Long-Term Funding Plan

- Balancing the budget is only done for the coming year despite the fact that there is a requirement under the *Balanced Budget Policy* to predict the short- and medium-term impact of each project on the operating budget (OB).
- The impact of the PDI on the OB is not considered for all projects and programs within the financial framework.

### Investment Funding Strategies

- Some measures provided for under the *Debt Management Policy* have not been applied.
- For the period 2015–2020, both investments and cash payments were lower than those planned in the Programme montréalais d'immobilisations: perspectives 2015-2024 (PMI), while borrowing was higher.

### Allocation of Budget Envelopes Between the Business Units

- There is no consistent, structured multi-criteria analysis for the prioritization of all the City's investments.

### Accountability

- Other than the notion of lowering the debt ratio below the 100% mark in 2027, there are no specific objectives or indicators establishing a link between the City's directions and asset management in the budget document.
- The annual financial accountability report does not present comparative data between what was planned in the PDI and what actually occurred, especially regarding investments, cash payments, the debt ratio and government subsidies for capital works.

In conjunction with these results, we formulated various recommendations to the business units, which are presented on the following pages.



# List of Acronyms

**BU**

business unit

**City**

la Ville de Montréal

**DG**

Direction générale

**EC**

executive committee

**INVESTI**

système de gestion budgétaire du  
programme décennal d'immobilisations

**OB**

operating budget

**PDI**

Ten-Year Capital Works Program

**PMI**

Programme montréalais d'immobilisations  
(PMI): perspectives 2015-2024

**PTI**

Three-Year Capital Works Program

**SF**

Service des finances

**SIMON**

Système intégré Montréal

**SPSPO**

Service de la planification stratégique et  
de la performance organisationnelle

**UAC**

urban agglomeration council



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# 1. Background

Two years ago, the Ville de Montréal (the City) began presenting its investment budget for a period of ten years,<sup>1</sup> rather than three years. The reason was the City's desire to ensure integrated strategic planning over ten years, especially given the investment needs attributable to its aging infrastructure (e.g., viaducts, roads).

The ten-year capital works program (PDI) groups together investment projects that the City plans to complete in the coming ten years to maintain its infrastructure and encourage its economic development. This management and planning tool takes into account the needs of Montréal's population and the agreed upon service levels. To be able to produce a PDI, an organization must put a structured process in place. This budget process helps establish the strategy and objectives and allocate resources according to established priorities. It is generally based on strategic planning that draws on the organization's long-term vision and its financial capacity.

At the municipal level, it is also a communication vehicle that enables a city to inform the population of the directions taken and the strategic choices made to establish the level of taxation and the service levels of the various municipal activity sectors.

As indicated in the best practices guide of the Ministère des Affaires municipales et de l'Habitation for preparing a capital works plan, the thoroughness, transparency and consistency shown by the "elected officials and city managers" in developing and implementing their three-year capital works program (PTI) will ensure the credibility of their decisions and the acceptance and satisfaction of their citizens regarding the development and sustainability of their living environment

## Ten-Year Capital Works Program

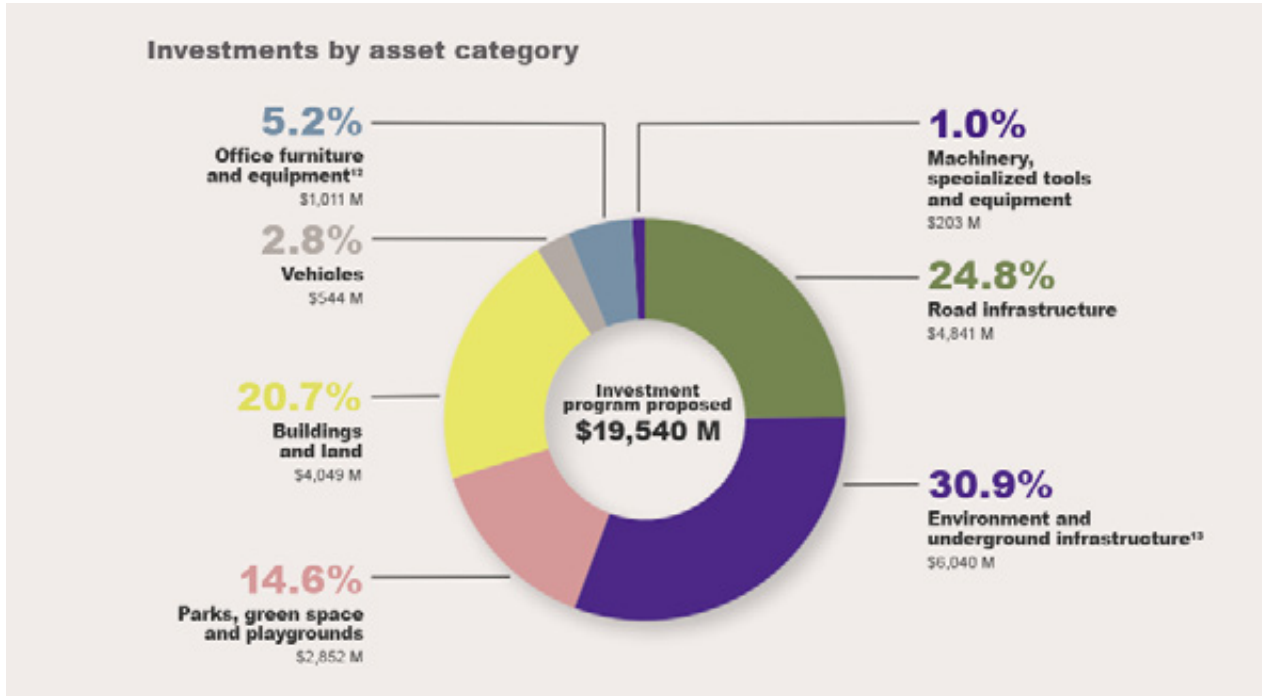
The City owns assets whose estimated replacement value is approximately 66 billion dollars.<sup>2</sup>

During the coming decade, planned investments will total \$19.5 billion, of which 70.3% will be allocated to the protection and maintenance of assets. Figure 1 presents the investments by asset category planned in the 2022–2031 PDI.

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<sup>1</sup> The 2021–2030 PDI is the first Ten-Year Capital Works Program prepared by the City and replaces the Programme montréalais d'immobilisations (PMI): perspectives 2015–2024 (PMI).

<sup>2</sup> Source: 2022 Budget – 2022–2031 PDI, page 240.

**FIGURE 1****PLANNED INVESTMENTS IN THE 2022–2031 TEN-YEAR CAPITAL WORKS PROGRAM BY ASSET CATEGORY**

<sup>12</sup> Includes information technology.

<sup>13</sup> Includes water.

Source: 2022–2031 PDI budget, page 37.

Five central departments<sup>3</sup> are responsible for 73% of the content of the PDI, while the boroughs are responsible for 7%.

Three funding methods are used to support the planned capital activities:

- ◆ External funding;
- ◆ Cash payments;
- ◆ Loans.

External funding eases the fiscal burden on taxpayers. In the case of the 2022–2031 PDI, it represents an amount of \$3.6 billion, or 18.2%<sup>4</sup> of total investments of \$19.5 billion. External funding sources are mainly subsidies of \$2.7 billion from the federal and provincial governments, income from commercial activities, including \$0.9 billion from the Commission des services électriques de Montréal, and \$25 million from various sources of revenue, including developers' contributions. Cash payments and loans represent \$8.9 million or 45.6% and \$7.1 million or 36.2%, respectively.

<sup>3</sup> The Service de l'eau, Service de l'urbanisme et de la mobilité, Service des grands parcs, du Mont-Royal et des sports, Service de la gestion et planification des immeubles and Service des technologies de l'information.

<sup>4</sup> \$3,550.4 million/\$19,539.8 million.

## Administrative and Legislative Frameworks

The process for preparing the City's budget and PDI is very complex and is defined by:

- ◆ Multi-level governance (city council, urban agglomeration council (UAC), borough council, executive committee (EC));
- ◆ Several strategic documents prepared since 2014;
- ◆ Various laws and regulations that have an impact on governance decision-making;
- ◆ Various policies and directives issued;
- ◆ External factors (e.g., climate change, economic factors).

To this end, the City has adopted several policies that state management directions and practices that frame investment planning and funding, in particular the following:

- ◆ *Policy on Equipment and Infrastructures;*
- ◆ *Capitalization and Amortization Policy for Capital Expenditures;*
- ◆ *Debt Management Policy;*
- ◆ *Policy on Operating Surplus Management;*
- ◆ *Policy on Sources of Revenue;*
- ◆ *Balanced Budget Policy;*
- ◆ *Directive sur la connaissance de l'état des actifs.*

In addition to the administrative frameworks, the Programme montréalais d'immobilisations: perspectives 2015-2024 (PMI) was developed to define investment targets to maintain the condition of the municipal assets and ensure the City's development.

In the *Policy on Equipment and Infrastructures*, the following rules were established regarding budgets allocated to the boroughs:

- ◆ Unused amounts allocated to the boroughs will be carried over to the following year and added to the allocation amount for that year;
- ◆ The boroughs retain their independence regarding the use funds within the envelope.

A table representing the items influencing the PDI preparation process is presented in Appendix 5.1.

## Roles and Responsibilities Related to the Development Process of the Ten-Year Capital Works Program

The annual PDI preparation process, the major steps of which are presented in Appendix 5.2., continues throughout the year.

The stakeholders in this process are:

- ◆ The chair of the EC, in collaboration with the Direction générale (DG), which sets the directions and investment expenditure forecasts to analyze borrowing needs;
- ◆ The Service des finances (SF):
  - More specifically, the Direction du budget et de la planification financière, which discusses with the DG and coordinates the entire budget preparation process (including the design of budget envelopes, their transfer to the central departments and boroughs, data collection, and participation on various committees),
  - The Direction financement, placement et trésorerie, which works in collaboration with the Direction du budget et de la planification financière to determine the City's financial capacity and establish a budget envelope to be met for investments funded through loans.<sup>5</sup> The Direction financement, placement et trésorerie also prepares the draft debt budget with hypotheses and scenarios sent by the Direction du budget et de la planification financière. Data is updated from various sources to determine the loan program for the next ten years and the City's debt ratio;
- ◆ The central departments, boroughs and paramunicipal agencies, which prepare their budget and will have to defend it.

In addition, in support of the preparation of the PDI, the Service de la planification stratégique et de la performance organisationnelle (SPSPO) is mandated to develop an asset management strategy and coordinate its implementation.

Prior to implementing this asset management strategy, the condition of the assets must be evaluated to:

- ◆ Define the expected service levels;
- ◆ Prepare a long-term funding strategy to maintain service levels, while respecting the City's financial capacity.

In keeping with the *Directive sur la connaissance de l'état des actifs*, in force since 2018, annual reports have been produced.

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<sup>5</sup> Excluding the investments of the Société de transport de Montréal.

## 2. Purpose and Scope of the Audit and Evaluation Criteria

### 2.1. Purpose of the Audit

Under the provisions of the *Cities and Towns Act*, we conducted a resource optimization audit dealing with the “Budget Process – *PDI component: Investment Planning*.” We conducted this audit in accordance with the Canadian Standard on Assurance Engagements (CSAE) C3001 of the *CPA Canada Handbook – Assurance*.

The objective of this audit was to ensure that the City has strategies that enable it to plan its capital investments based on its long-term needs, financial resources and strategic vision.

### 2.2. Evaluation Criteria

The City’s auditor general is responsible for providing a conclusion on the objective of the audit. To this end, we collected sufficient and appropriate evidence to arrive at our conclusion with a reasonable degree of assurance. Our evaluation was based on criteria that we deemed valid under the circumstances. These criteria are, as follows:

- ◆ A strategy is developed to plan the required investments, prioritize them and carry them out at an appropriate time. This strategy includes:
  - Identification of needs to ensure the short-, medium- and long-term maintenance of the assets based on their condition, lifecycle and expected service levels,
  - Future needs forecasts stemming from the City’s strategic vision and urban growth,
  - An approach making it possible to optimize the value of investment projects and programs based on needs and available resources, to plan them at the opportune time and to monitor opportunities and risks;
- ◆ A long-term financial plan is developed to ensure that the amounts required to maintain and develop the assets are available, including maintenance and operating costs over their entire lifecycle, as well as the debt cost, while respecting the City’s financial capacity;
- ◆ A balanced investment funding strategy exists and makes it possible to optimize the choice of funding methods, maintain intergenerational equity and meet the debt level established based on the City’s financial capacity;
- ◆ The budget envelopes allocated to the central departments and boroughs take into account the strategies adopted and organizational priorities.
- ◆ Accountability mechanisms are in place to inform authorities about the implementation of the investment and funding strategies.

The City’s auditor general applies the Canadian Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, or Other Assurance Engagements*. This standard requires the City’s auditor general to formulate, implement

and operate a quality management system that includes policies and procedures to ensure compliance with rules of conduct, professional standards and applicable legal and regulatory requirements. During the course of this work, the City's auditor general complied with the rules of independence and other rules of conduct of the Code of Ethics of the Ordre des comptables professionnels agréés du Québec, which are based on the fundamental principles of integrity, professional competence and due diligence, confidentiality and professional conduct.

### 2.3. Scope of the Audit

Our audit dealt with the investment planning process that led to the preparation of the 2022–2031 PDI, which took place between January and December 2021. For certain aspects, earlier data was also considered. The audit was conducted between the months of June 2021 and September 2022. We also took into account information that was sent to us up to April 2023.

This audit was conducted primarily with the DG and SF.

Upon completing our audit, a draft audit report was presented to the managers concerned in the audited business units (BUs) and to the DG for validation purposes. The final report was then forwarded to the management of each of the BUs concerned and to the DG to obtain an action plan and timeline for implementing the recommendations presented in this report.

## 3. Results of the Audit

### 3.1. Information Regarding Needs Aimed at Ensuring the Short-, Medium- and Long-Term Maintenance of Assets Based on Their Condition, Lifecycle and Expected Service Levels is Incomplete

#### 3.1.1. Public Consultation Process

According to best practices, the participation of citizens in the investment planning process is important since they pay and use the infrastructure. Surveys and public consultations could reveal their degree of satisfaction with existing service levels and their willingness to pay for a lower or higher level of service.

Our audit found that a public consultation process had been in place at the City since the 2020 fiscal year to obtain the opinion of citizens regarding future budget choices.

The managers we met stated that the objective of this consultation process was not to probe the degree of satisfaction of citizens regarding expected service levels linked to the City's infrastructure, but that the process was focused rather on issues related to the operating budget (OB).

Page 13 of the 2022 public consultation document indicates that the City's budget consists of 2 components, the OB and the PDI. We did not find any clarification indicating that the consultation only focused on the OB. In addition, the section concerning the ecological transition states that:

*[TRANSLATION] "The ten-year capital works program will include actions in its process to take into account the objectives of Climate Plan 2020–2030. These actions will help improve and adjust current and future projects and programs to maximize the impact of investments."*

To eliminate any confusion about the scope of the pre-budget consultation, the consultation document should be improved by clarifying that the exercise deals only with the OB, if this is the case.

In our opinion, the public consultation process as part of long-term investment budget planning should, first and foremost, be integrated into the asset management process and address significant budget issues.

Furthermore, the following two recommendations made by the Commission sur les finances et l'administration following the "2022 pre-budget consultation" dealt specifically with capital investment funding:

*[TRANSLATION] "R-5. Ensure the sustainability of the debt by controlling indebtedness and demonstrating the ability to contain the pace of spending."*

*R-6. Maintain at a reasonable level – taking into account the current environment due to the pandemic – the capital cash payment strategy."<sup>6</sup>*

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<sup>6</sup> "2022 pre-budget consultation" – report and recommendations, report filed with city council and the UAC on June 14 and 17, 2021.

While the public consultation process demonstrated the City's desire to understand citizens' opinions about the priorities that it had set for itself regarding the *Montréal 2030* strategic plan, it would be relevant to clarify its scope.

**RECOMMENDATION**  
**3.1.1.A.**

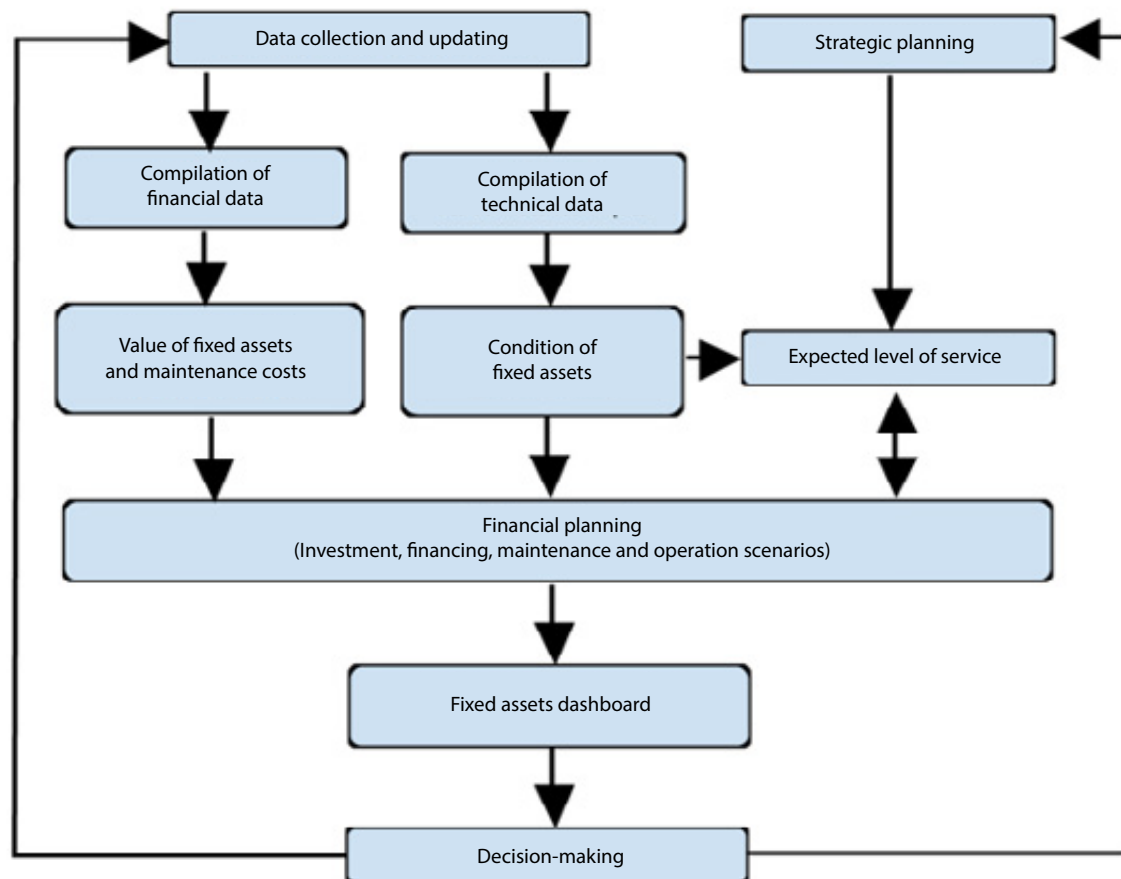
We recommend that the Direction générale clarify the objective of the pre-budget consultation regarding the significant budget issues related to the ten-year capital works program.

**3.1.2. Asset Management Practices of the Ville de Montréal**

Capital asset management is an integrated strategic approach to managing fixed assets and is characterized by several parameters, including the value of the asset, lifecycle and risk assessment. The City's approach comprises all the steps involved in preparing and implementing the acquisition, operation, maintenance, rehabilitation and replacement of the assets. The overall approach is presented in Figure 2.



**FIGURE 2** | **COMPREHENSIVE ASSET MANAGEMENT PROCESS**



Source: Guide de gestion des actifs en immobilisations à l'intention des élu·es et élu·es municipaux, Centre d'expertise et de recherche en infrastructures urbaines, 2014, page 4.

In line with best practices, we analyzed the tools the City put in place to manage assets.

### 3.1.2.1. Planning of Equipment and Infrastructure Investments

#### **Policy on Equipment and Infrastructures**

Given that equipment and infrastructure planning is an essential aspect of responsible financial planning, the City adopted the *Policy on Equipment and Infrastructures*, which came into force on March 20, 2018.<sup>7</sup>

<sup>7</sup> A new version of this policy came into force in January 2023.

The goal of the *Policy on Equipment and Infrastructures* is to determine the planning activities needed to maintain the City's equipment and infrastructure in good working condition and to replace them at the appropriate time. The objectives of this policy are, as follows:

- ◆ Have a PMI that provides for planning over ten years and a quality PTI/PDI;<sup>8</sup>
- ◆ Manage equipment and infrastructure economically;
- ◆ Inventory the fixed assets to know their scale, quality and condition;
- ◆ Ensure that the budgetary position will not be destabilized by unplanned expenditures.

The management practices recommended in the *Policy on Equipment and Infrastructures* require the City, in particular, to:

- ◆ Have a comprehensive, permanent inventory of its fixed assets;
- ◆ Ensure that the fixed assets are in good condition. The City must:
  - Assess the risk of elements causing breakage or premature wear,
  - Set objectives for maintaining the condition of the assets,
  - Design a structured preventive maintenance program;
- ◆ Develop a resource allocation strategy. Efficient planning of resource allocation is essential to increase the completion of projects and programs while complying with costs and timelines and establishing long-term planning for their funding.

Among the recommended management practices in the *Policy on Equipment and Infrastructures*, which came into force in 2022, is the following:

*[TRANSLATION] "The City shall give priority to the amounts allocated to the PTI (at least 75% of the annual envelope) for the protection of equipment and infrastructure and allocate the remainder to development projects."*<sup>9</sup>

Our review of the budgeted protection/development ratio revealed a lack of compliance with the 75/25 ratio during fiscal years 2019 to 2022. The percentage applicable to asset protection projects or programs compared with the percentage allocated to development projects during these fiscal years is presented in Table 1.

<sup>8</sup> In January 2023, this statement was replaced by: [TRANSLATION] "...have a quality ten-year capital works program that provides for planning over ten years."

<sup>9</sup> In January 2023, this passage was amended, as follows: [TRANSLATION] "The City shall give priority to the amounts allocated to the PDI (a target of 75% of the annual envelope) for the protection of equipment and infrastructure and allocate the remainder to development projects."

**TABLE 1 | RATIO – INVESTMENTS ALLOCATED TO PROTECTION AND DEVELOPMENT**

THREE-YEAR CAPITAL WORKS PROGRAM/ TEN-YEAR CAPITAL WORKS PROGRAM	YEAR	TOTAL AMOUNT THREE-YEAR CAPITAL WORKS PROGRAM/ TEN-YEAR CAPITAL WORKS PROGRAM (IN \$ MILLIONS)	PROTECTION PROJECTS AND PROGRAMS		DEVELOPMENT PROJECTS	
			AMOUNT (IN \$ MILLIONS)	PERCENTAGE	AMOUNT (IN \$ MILLIONS)	PERCENTAGE
2019–2021	2019	6,495.9	4,642.6	71.5%	1,853.3	28.5%
2020–2022	2020	6,066.4	4,239.4	69.9%	1,827.0	30.1%
2021–2030	2021	18,693.3	13,369.7	71.5%	5,323.6	28.5%
2022–2031	2022	19,539.8	13,734.3	70.3%	5,805.5	29.7%

Source: 2022–2031 PDI, Table 160, page 253.

While this data is presented in the PDI, which was approved, we found no evidence of any formal approval of the exemptions by city council. The *Policy on Equipment and Infrastructures* states that any exemption to this policy must be approved.

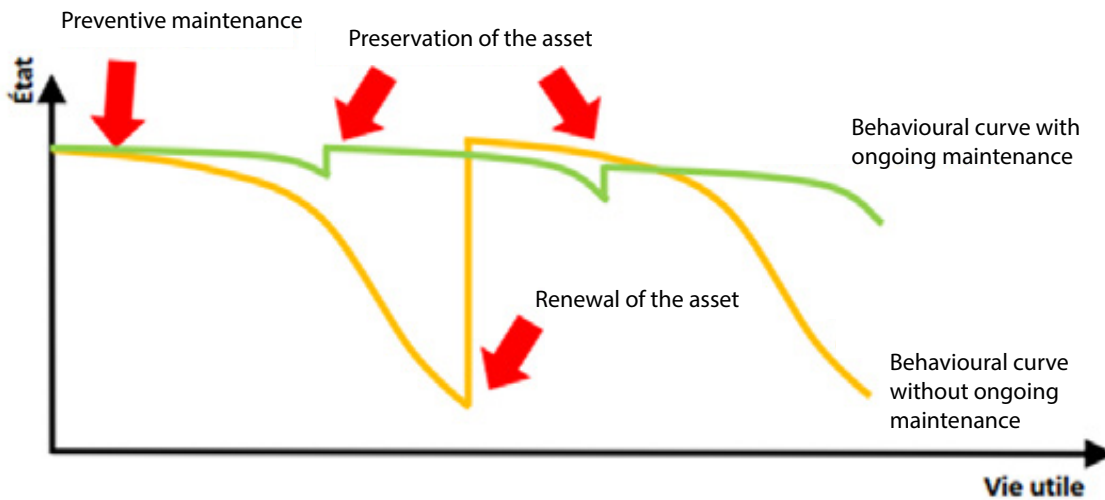
In addition, the parameters of the *Policy on Equipment and Infrastructures* regarding the minimum threshold allocated as a priority to the protection of equipment and infrastructure were amended in the January 2023 version. The indicator “of at least 75%” was changed to “a target of 75%” and now reads, as follows: [TRANSLATION] “The City shall give priority to the amounts allocated to the PDI (a target of 75% of the annual envelope) for the protection of equipment and infrastructure and allocate the remainder to development projects.”

We determined that reaching this target is at least ten basis points below the target for the years 2022–2026, as shown in the table in Appendix 5.3. This raises questions about the impact that this difference might have on the objective of maintaining and protecting assets if this target is not achieved in the next five years.

### ***Directive sur la connaissance de l'état des actifs***

Knowing the condition of the assets is an essential step in putting in place an asset management strategy for the City.

Best practices recommend planning asset maintenance to obtain optimal return, as presented in Figure 3.

**FIGURE 3 | PERFORMANCE OF AN ASSET BASED ON ITS MAINTENANCE**

Legend: The behavioural curve with ongoing maintenance (green) shows maintenance and rehabilitation activities throughout the useful life of the asset. This approach facilitates the preservation of the asset. The costs incurred by this strategy will be lower than those incurred by a reactive approach (yellow).

Source: Guide de gestion des actifs en immobilisations à l'intention des élu·es et élus municipaux, Centre d'expertise et de recherche en infrastructures urbaines, February 2015, page 3.

As an adjunct to the *Policy on Equipment and Infrastructures*, the DG issued in 2018 an administrative framework dealing with knowledge of the real condition of all the City's assets, for which the SPSPO is responsible. The policy was updated in October 2020.

According to the *Directive sur la connaissance de l'état des actifs*, each BU must ensure that an assessment of all the assets for which it is responsible is carried out from the date of coming into force and every five years at a maximum, or according to recognized asset management best practices.

In addition, each BU is responsible for submitting an annual report on the condition of its assets no later than January 31 of each year. This annual report must take into account investments and actions taken on assets each year to know how their condition has changed.

To this end, the SPSPO made the following observations in its report of January 31, 2022, presented to the DG:

- ◆ Missing in the case of some BUs are categories and subcategories of assets regarding the replacement value of identified assets;<sup>10</sup>
- ◆ There is an absence of qualification of the condition of certain identified assets;
- ◆ Data at the borough level is incomplete;
- ◆ Data about the condition of assets in the category "parks, green spaces and playgrounds" is incomplete;

<sup>10</sup> Represents the reconstruction or acquisition of the City's assets.

- ◆ Close to 20% of the identified and evaluated assets are in poor or very poor condition;<sup>11</sup>
- ◆ The five-year audit cycle is not followed: several BUs presented incomplete data, and the vast majority of boroughs did not provide information on this subject;
- ◆ Several BUs fail to enter the asset maintenance deficit<sup>12</sup> in their report for several or all categories of assets for which they are responsible;
- ◆ Projected investments in the PDI are insufficient to meet the average annual investment needs identified by the BUs.

According to the action plan<sup>13</sup> for the deployment of an asset management system, proposed to the DG by the SPSPPO, an asset management plan should be submitted by the central departments in 2025, and by the boroughs in 2026. Accomplishing this will require preliminary fine-tuning of knowledge of the assets for all the BUs.

The SPSPPO is dependent on the collaboration of the BUs, some of which have still not provided data, for example:

- ◆ The percentage of assets that were audited in the past year;
- ◆ For some assets, their replacement value (CRV) after three fiscal years.

In light of the work done to date by the SPSPPO and the BUs to obtain a comprehensive picture of the condition of the assets, we can see that the task is huge but an essential prerequisite to the eventual implementation of an effective asset management strategy. Measures must be put in place to avoid compromising the timelines proposed by the SPSPPO for delivery of the asset management plan.

Due to the City's limited financial capacity and the condition of its assets, several of which are approaching the end of their useful life, asset management has become essential. With this in mind, an asset management strategy should enable the City to optimize the return on these assets and maintain its service offer.

#### **RECOMMENDATION** **3.1.2.1.A.**

We recommend that the Direction générale define the stakeholders' roles and responsibilities so that the Service de la planification stratégique et de la performance organisationnelle:

- ◆ Obtains buy-in from the stakeholders to carry out its action plan;
- ◆ Receives the required data on the assets in a timely manner to implement an asset management strategy.

<sup>11</sup> The chart of asset condition indices is presented in Appendix 5.6.

<sup>12</sup> Makes it possible to identify the amount of investment required to restore the condition of the assets to a satisfactory level (C).

<sup>13</sup> Prepared in June 2022 and updated in March 2023.

### 3.1.2.2. Prioritization of Projects and the Project Portfolio

Our audit revealed that no portfolio exists that identifies all the programs and projects, with the exception of the list of projects entered into the PDI for which project files are filled out by the central departments and paramunicipal agencies. For information purposes, a project file is presented in Appendix 5.4. Such project files are not filled out by the boroughs.

Our examination of the project files entered into the 2022–2031 PDI also enabled us to determine the absence of some relevant information, in particular for prioritizing the project or program, or to assess its financial impact on the OB, including:

- ◆ The condition of the asset (for existing asset protection projects or programs);
- ◆ The asset category;
- ◆ For years 6 to 10 of the PDI, the annual breakdown of the following financial data:
  - Planned investment,
  - External funding sources,<sup>14</sup>
  - Planned cash payment,
  - Impact on the OB;<sup>15</sup>
- ◆ An analysis taking into account several criteria, such as organizational priorities and desired service levels, aimed at establishing a priority ranking scale.

The use of a project portfolio pooling all the information that is relevant to the programs or projects, at the planning or execution phase, including those for which the boroughs are responsible, would reduce the risk that the prioritization of projects is not aligned with needs and the future asset management strategy. This would also make it possible to estimate the financial impact on the OB.

#### RECOMMENDATION 3.1.2.2.A.

We recommend that the Direction générale have a comprehensive portfolio of projects under way, ready to be undertaken or under development, based on complete updated project files, while including those for which the boroughs are responsible.

#### RECOMMENDATION 3.1.2.2.B.

We recommend that the Direction générale improve the project files to include all the relevant information for prioritizing projects and enable the assessment of their feasibility based on the ten-year capital works program and the Ville de Montréal's financial capacity.

<sup>14</sup> Debt subsidy, cash subsidy or developers' contribution.

<sup>15</sup> One-time expenses, recurring annual expenses or required number of person-years.

### 3.1.3. Development of an Asset Management Strategy

During our audit, an asset management strategy was being developed.<sup>16</sup> We examined all the available documents and evaluated, based on best practices, the extent to which all the policies and directives in force regarding the choice and funding of investments were aligned with:

- ◆ Infrastructure and equipment needs;
- ◆ Financial and debt management;
- ◆ The City's strategic development vision.

Developing an asset management strategy for the City should:

- ◆ Align objectives and resources with the agreed upon service levels;
- ◆ Facilitate project planning based on established priorities;
- ◆ Address risks threatening the viability of the services offered.

A link should be established between the City's strategic objectives and tactical and operational levels. To ensure the usefulness of the document, we also believe that it should include targets and results indicators, something that we were unable to trace. Without this information, the document's usefulness would be greatly diminished.

We further believe that it is relevant, through this strategy, to put in place municipal asset management that is integrated into the development of the PDI, so that all the dimensions associated with this management are considered, in particular with the following information:

- ◆ Asset categories;
- ◆ Service levels;
- ◆ Lifecycle.

In addition, an explicit link with the City's financial framework and debt management should be made, which we were unable to trace, thus reducing the relevance of the exercise.

The documents accompanying (policies and directives in effect) the future asset management strategy seem to cover the entire asset management application field. However, it is difficult to find the information needed for decision-making. There is therefore a need to integrate the various policies or relevant references that have an impact on asset management. This would reduce the risk of not taking into account all the parameters to be considered for integrated asset management (such as those of the *Debt Management Policy* and the *Policy on Equipment and Infrastructures*).

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<sup>16</sup> According to the managers we met, the investment and funding targets detailed in the PMI have no longer been followed since implementation of the PDI in 2021.

### RECOMMENDATION 3.1.3.A.

We recommend that the Direction générale include in its asset management strategy elements enabling it to make a link with decision-making, such as:

- ◆ An explicit link with the financial framework of the Ville de Montréal and its debt management;
- ◆ The investment needs and financing capacity of the Ville de Montréal;
- ◆ Targets to attain and results indicators.

### RECOMMENDATION 3.1.3.B.

We recommend that the Direction générale optimize the structure of its policies linked to its future asset management strategy, by either integrating them into the strategy or ensuring that the strategy includes the relevant references.

## 3.2. A Financial Plan That Does Not Ensure the Availability of the Funds Required Over the Long Term to Maintain and Develop Assets

A long-term financial plan must be developed to ensure the availability of funds needed to maintain and develop assets, including maintenance and operational costs over their lifecycle and funding costs, while respecting the City's financial capacity.

Based on best practices, budgeting over a multi-year period contributes to improving the allocation of resources and ensuring more efficient delivery of services, as well as providing predictability to managers.

Conversely, an annual budget process has the disadvantage of providing little wiggle room in allocating resources and makes it difficult to establish a link with financial strategies and needs when making decisions.

The *Cities and Towns Act* requires cities to balance their budget on an annual basis. The City's *Balanced Budget Policy* determines the framework mechanisms and tools needed to maintain this balance on an annual and multi-year basis. The following management practices are set out in the *Balanced Budget Policy*:

#### [TRANSLATION]

- ◆ "When preparing the PTI, it is necessary to allow for the short- and medium-term impact of each project on the operating budget...";
- ◆ To this end, management practices consist of preparing operating cost and revenue projections for a period of three to five years to determine the effect current budget decisions will have on the City's future budgets.

While the *Balanced Budget Policy* requires forecasting the short- and medium-term impact of each project on the OB, this is not being applied since balancing the budget is done for the



coming year only in the financial framework. Consequently, projects undertaken or planned may not have the budget credits needed to operate and maintain the assets during their entire useful life, as shown by certain BUs.

Beyond the fact that the financial framework is balanced over only one year, we also examined the extent to which the financial impact on the OBs of programs and projects entered into the PDI was taken into consideration in establishing the financial framework.

## Assessment of the Impact of Investments on the Operating Budget

We found that the impact of the PDI on the OB is not considered for all projects and programs, which undervalues the forecast expenditures in the financial framework, as well as the anticipated financial imbalance for the coming years.

Based on the information contained in the project files, one-time and recurring expenses linked to capital works projects and programs that have an impact on the 2022 OB amounted to \$27.4 million, while the financial framework forecasted an amount of \$4 million. For the five-year period covered in the 2022–2026 financial framework, the difference added up to more than \$328 million. Table 2 presents these differences.

**TABLE 2** | **DIFFERENCE BETWEEN THE AMOUNTS PLANNED IN THE FINANCIAL FRAMEWORK AND THOSE IN THE PROJECT FILES**

	AMOUNT PER YEAR (IN THOUSANDS OF \$)					
	2022	2023	2024	2025	2026	TOTAL
Amounts presented in the financial framework	3,980.0	10,555.4	3,607.6	632.0	170.5	18,945.5
Amounts presented in the project files <sup>[a]</sup>	27,380.0	47,819.0	65,607.0	94,274.0	112,062.0	347,142.0
<b>DIFFERENCE</b>	<b>(23,400.0)</b>	<b>(37,263.6)</b>	<b>(61,999.4)</b>	<b>(93,642.0)</b>	<b>(111,891.5)</b>	<b>(328,196.5)</b>

<sup>[a]</sup> These amounts include recurring and non-recurring expenses but exclude the number of additional person-years presented in the project files.

Source: 2022–2026 financial framework prepared by the SF on December 6, 2021, and 2022–2031 PDI- detailed project files.

In addition, the information presented in the financial framework concerns some investment projects only, i.e., the modernization of the Pierrefonds plant, the disinfection of the Jean-R.-Marcotte wastewater treatment plant and the organic waste treatment centres.

According to the SF, the difference between the information presented in the financial framework and that presented in the project files is due to the fact that these documents do not have the same objectives. The financial framework presents the additional OB

attributed to the central departments for new planned capital works, whereas the project files include additional operating costs determined by the departments for each capital works project or program taken separately. Nevertheless, faced with the scope of the differences observed in the number of projects considered and the amounts, we question the accuracy of the impact assessment of the capital investment projects on the OB.

While the City assesses its financial capacity over a period of ten years using forecasts and hypotheses aimed at determining its borrowing needs and projected debt ratio based on investments envisaged in the PDI, these projections are insufficient to assess its long-term fiscal sustainability. They do not take into account the effect of increased operating and maintenance costs of its fixed assets on the forecasts and hypotheses used.

Neither the developed financial framework nor the projections made of the debt ratio currently enable the City to demonstrate that the OB will be sufficient to support the implementation of the PDI.

### **RECOMMENDATION 3.2.A.**

We recommend that the Direction générale, with the collaboration of the Service des finances, ensure that:

- ◆ All the documents used in developing the ten-year capital works program are established on the same basis as the program;
- ◆ All additional operating costs are taken into account to assess as completely as possible the financial capacity of the Ville de Montréal and its fiscal sustainability.

## **3.3. Investment Funding Strategies Exist, But They Are Not Completely Followed**

The City's financial policies, including those relating to debt management and sources of revenue, include strategies or measures to guide investment and funding decisions and ensure sound management of the City's finances. The PMI developed by the City in 2014 also provided for strategies to increase investments over a period of ten years and ensure funding.<sup>17</sup>

### **Debt Management Policy**

The *Debt Management Policy*<sup>18</sup> stipulates that the City must have a strategy for funding capital expenditures. The management practices related to this state, in particular, that:

- ◆ Capital expenditures must be funded mainly through a long-term loan for reasons of intergenerational equity;
- ◆ The City will try to increase the cash payment of recurring capital expenditures, such as those related to the rehabilitation of infrastructure that is needed on an ongoing basis.

<sup>17</sup> According to the managers we met, the investment and funding targets detailed in the PMI have no longer been followed since implementation of the PDI in 2021.

<sup>18</sup> The City's *Debt Management Policy*, adopted in 2004, updated in December 2008 and March 2018, 1<sup>st</sup> statement – [TRANSLATION] The City must acquire a funding strategy for capital expenditures.

The *Debt Management Policy*<sup>19</sup> also provides for the City to adopt a strategy to correct the debt level and restore a degree of flexibility to it.

Our audit showed that 2 of the 5 measures contained in the Debt Management Policy regarding implementation of this strategy were not always applied (see Table 3).

**TABLE 3 | MEASURES CONTAINED IN THE DEBT MANAGEMENT POLICY**

MEASURE	APPLIED	NOT APPLIED
Establish reserve funds greater than normal	x	
Plan a voluntary contribution of \$5 million <sup>[a]</sup> annually to repay the debt	x	
Allocate 50% of annual interest savings to debt repayment	x	
Allocate 10% of annual surpluses to debt repayment		x
Annually update the level of achievement of objectives		x

<sup>[a]</sup> This amount should be increased by a minimum of 10% each year.

Source: Table produced by the Bureau du vérificateur général.

Regarding the reserve funds, we found that they increased considerably although no specific objective was established by the City. A financial reserve for the cash payment of capital works was established in 2014, and major sums have been paid out, especially in the past three years. The authorized amount of this reserve was \$300 million at the start and was increased to \$1,050 billion in 2020.

As for the voluntary contribution and allocation of 50% of interest savings, these have been applied each year since the adoption of the Debt Management Policy, which has significantly reduced the amount of debt. An amount of \$665 million derived from these contributions and allocations was used on December 31, 2021, \$638.4 million for debt repayment and \$26.7 million for the cash payment of capital expenditures.

<sup>19</sup> Idem, 2<sup>nd</sup> statement – [TRANSLATION] The City must manage its debt prudently.

The measure aimed at allocating 10% of annual surpluses for debt repayment, however, was partially applied. Based on our analysis of the City's annual surpluses and allocations since the adoption of the policy in 2004, no amount was allocated prior to 2019. From 2019 to 2021, an attempt to catch up was initiated with \$189.3 million being allocated, or 7% of the total. Thus, the total amount allocated was less than \$77.8 million of what should have been determined based on the Debt Management Policy (see Table 4).

**TABLE 4 | VARIANCE BETWEEN CALCULATED ALLOCATIONS AND ALLOCATIONS MADE**

FISCAL YEAR	SURPLUS	CALCULATED ALLOCATIONS	SURPLUSES ALLOCATED	ALLOCATIONS USED	BALANCE OF THE SURPLUS ALLOCATED	ANNUAL VARIANCE	CUMULATIVE VARIANCE
<b>2004 to 2018</b>	1,880,157	188,068	-	-	-	188,068	188,068
<b>2019</b>	250,859	25,086	40,000	-	40,000	(14,914)	173,154
<b>2020</b>	246,996	24,700	40,000	(40,000)	-	(15,300)	157,854
<b>2021</b>	293,073	29,307	109,307	-	109,307	(80,000)	77,854
<b>TOTAL</b>	<b>2,671,085</b>	<b>267,161</b>	<b>189,307</b>	<b>(40,000)</b>	<b>149,307</b>	<b>77,854</b>	<b>77,854</b>

Source: Table produced by the Bureau du vérificateur général.

In addition, a large part of the \$189.3 million that was reserved for debt repayment has still not been used. Only \$40 million was used in 2020 for cash payment of capital expenditures. At the time of our audit, \$149.3 million still remained in the City's allocated operating surplus. If we add this amount to the amount that should have been allocated, i.e., \$77.8 million, the debt could have been reduced by an additional \$227 million. We were unable to obtain confirmation that the decisions to not allocate the surpluses prior to 2018 and not use all available funds to repay the debt were approved by the authorities. Based on our discussions with the SF, the policy does not dictate its use, which remains a strategic choice. We clearly understand that the application of a policy can allow such latitude, but we believe that there is room for improvement in the disclosure of and accountability for implementing applied decisions.

According to the *Debt Management Policy*, the City must set a debt ceiling,<sup>20</sup> and it also clarifies that [TRANSLATION] "...any exemption from this Policy must, upon the recommendation of the executive committee (EC), be approved by city council and the UAC." Our audit showed that these approvals were obtained when the City exceeded the limit that was determined for the debt ratio and that the annual net cost of the debt burden to the taxpayers

<sup>20</sup> A first limit was set (debt ratio) that consisted of limiting the level of direct and indirect net debt to 100% of annual revenues. A second limit stipulated that the annual net cost of the debt burden to taxpayers would not exceed 16% of operating costs.

never exceeded the maximum ratio<sup>21</sup> authorized by the Debt Management Policy.

We found, nevertheless, that the elements to be taken into account in calculating the debt ratio are not clearly defined, for example:

- ◆ Inclusion of the allocations derived from the accumulated surplus and financial reserves in the annual revenues;
- ◆ Exclusion of the initial actuarial debt of the pension plan of employees of the former City, amounting to more than \$800 million.

Since including these elements or not has a significant impact on the debt ratio, they should be specified and documented to avoid any ambiguity in interpreting the ratio.

Other requirements and principles stated in the *Debt Management Policy* would also benefit from greater precision to facilitate their understanding and guide decision-making about funding. For example, mention is made that the City will attempt to increase the cash payment of recurring capital expenditures, without, however, setting a target that could be taken into consideration when preparing funding strategies.

Finally, we found that the City monitors the voluntary contribution made for debt repayment as part of accountability. However, no annual updating has been done, formally or precisely, on the degree of achievement of the objectives by considering all the measures provided to improve the debt level. This would have enabled the City to shed light on the fact that annual surpluses were not always allocated to debt repayment, to correct the situation in a timely manner, or to revise the strategy that it had adopted to correct the debt level.

The current framework mechanisms should be updated to give the DG and authorities sufficient information to ensure that the measures and guidelines contained in the *Debt Management Policy* are applied and to determine whether adjustments and clarifications need to be made on a periodic basis. For example, the long-term *Debt Management Policy* of a city of more than 100,000 inhabitants contains a provision related to follow-up and accountability, as well as another provision that provides for updating this policy every 5 years.

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<sup>21</sup> GDD1183894003, for the temporary exemption of the debt ratio limit of the year 2019 and GDD1193894001, for the temporary exemption of this limit for the years 2020 to 2026.

## Policy on Sources of Revenue

The *Policy on Sources of Revenue* states that the City is pursuing the objective of making financial choices that ensure that its budget situation is sound, and its delivery of public service provision is stable. Among other things, the policy states that the City will seek to reap the maximum benefit from subsidy and funding programs offered to municipalities by the provincial and federal governments and that it will avoid making financial commitments that could lead to incurring fees exceeding the funding of these programs.<sup>22</sup>

During our audit, we found that the government subsidies received varied considerably from year to year, especially since 2018, and that except for the years 2016 and 2021, they were less than those planned for in the PTI/PDI (see Table 5).

**TABLE 5** | **DIFFERENCE BETWEEN AMOUNTS PLANNED IN THE THREE-YEAR CAPITAL WORKS PROGRAM/TEN-YEAR CAPITAL WORKS PROGRAM AND ACTUAL AMOUNTS**

	AMOUNTS PLANNED IN THE THREE-YEAR CAPITAL WORKS PROGRAM/ TEN-YEAR CAPITAL WORKS PROGRAM COMPARED WITH REAL AMOUNTS PER YEAR (IN \$ MILLIONS)							
	2015	2016	2017	2018	2019	2020	2021	TOTAL
<b>GOVERNMENT SUBSIDIES PLANNED FOR IN THE BUDGET</b>	287.3	287.1	380.7	259.0	212.0	330.6	327.2	<b>2,083.9</b>
<b>GOVERNMENT SUBSIDIES RECEIVED BASED ON ACCOUNTABILITY</b>	272.3	322.0	315.7	198.0	158.6	69.0	452.7 [a]	<b>1,788.3</b>
<b>VARIANCE</b>	<b>15.0</b>	<b>(34.9)</b>	<b>65.0</b>	<b>61.0</b>	<b>53.4</b>	<b>261.6</b>	<b>(125.5)</b>	<b>295.6</b>

[a] This amount includes a subsidy of \$56 million received for the Saint-Pierre collector sewer but not planned in the budget, as well as a subsidy of \$327 million planned in the 2020 budget for the "Fuel Tax Program and Quebec's contribution."

Source: Table produced by the Bureau du vérificateur général.

This data shows that the investment funding objectives by subsidy programs were not achieved overall. Given that the amounts not received must be funded through other sources, an analysis of the historic variances and their cause would enable the City to assess whether the subsidy amounts that it plans for in the PDI, as well as its funding strategies, are still appropriate.

<sup>22</sup> The City's Policy on Sources of Revenue, adopted in 2004, updated in March 2018, First formulation – On the funding of public services.

## Programme montréalais d'immobilisations: perspectives 2015-2024

The PMI was developed by the DG during preparation of the 2015–2017 PTI. A major difference was found between the annual infrastructure maintenance and repair needs and the investments made, requiring a major realignment of the PTI. Increased investments and planning over 10 years were proposed to achieve, in the end, the annual investment target of \$2.1 billion, compared with the planned annual average in the 2014–2016 PTI, i.e., \$1.3 billion.

This increase was to be funded by additional, increasing and recurring cash payments, and additional temporary decreasing and non-recurring annual loans, for the years 2015 to 2019. To comply with the financial framework adopted by the City, including the limits set for the debt platform, a substantial increase in cash payments was planned. The PMI funding strategies were linked to debt management practices and strategies and guidelines planned therein. Appendices 5.7. to 5.9. present the increase in investments planned in the PMI, as well as the funding strategy for this increase.

We found that the PMI had not been formally approved by city council and that it was not evaluated and followed up to show its feasibility within the City's financial framework and financial policies. Variances between the amounts established in the PMI and the amounts planned in the PTI appeared from the very first years of implementation. Based on our analysis for the period of 2015 to 2020:

- ◆ Investments made were \$1.5 billion less than those planned in the PMI;
- ◆ Cash payments were \$234 million less;
- ◆ Loans were \$568 million more than those planned in the PMI.

Appendices 5.7. to 5.9. present these variances, as well as their evolution over time.

As of December 2017, the City anticipated surpassing the 100% limit<sup>23</sup> established for the debt ratio, requiring the adoption of new strategies to correct the situation. This surpassing was predictable since forecasts established during the development of the 2015–2017 PTI had shown that the ratio would be 96% in 2015, 105% in 2016 and 115% in 2017.

A temporary exemption from the *Debt Management Policy*, therefore, had to be approved in December 2018 for the year 2019 to increase the ratio limit to 115 %. A second exemption was also approved at the end of 2019, this time for the period of 2020 to 2026, to a maximum of 120%, in the context in which the ongoing increase in capital expenditures made it impossible to achieve the objective before 2027. The SF was then mandated to develop a financial and fiscal strategy to ensure the return of the debt ratio within the Policy's current guidelines.

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<sup>23</sup> According to the *Debt Management Policy*, the City limits the level of its direct and indirect net debt to 100% of annual revenues.

Since 2021, investment and funding strategies have been developed on an annual basis and are integrated into the PDI. The 2021–2030 PDI states:

*[TRANSLATION] “Since 2015, the City has put in place several measures to substantially grow its investments. [...] This major growth of capital expenditures has highlighted a more marked recourse to loans than planned. This situation has resulted in increased pressure on the City’s debt. To avoid increasing the fiscal burden on Montréal property owners, it is important to establish investment planning for future years that matches the City’s financial capacity.”*

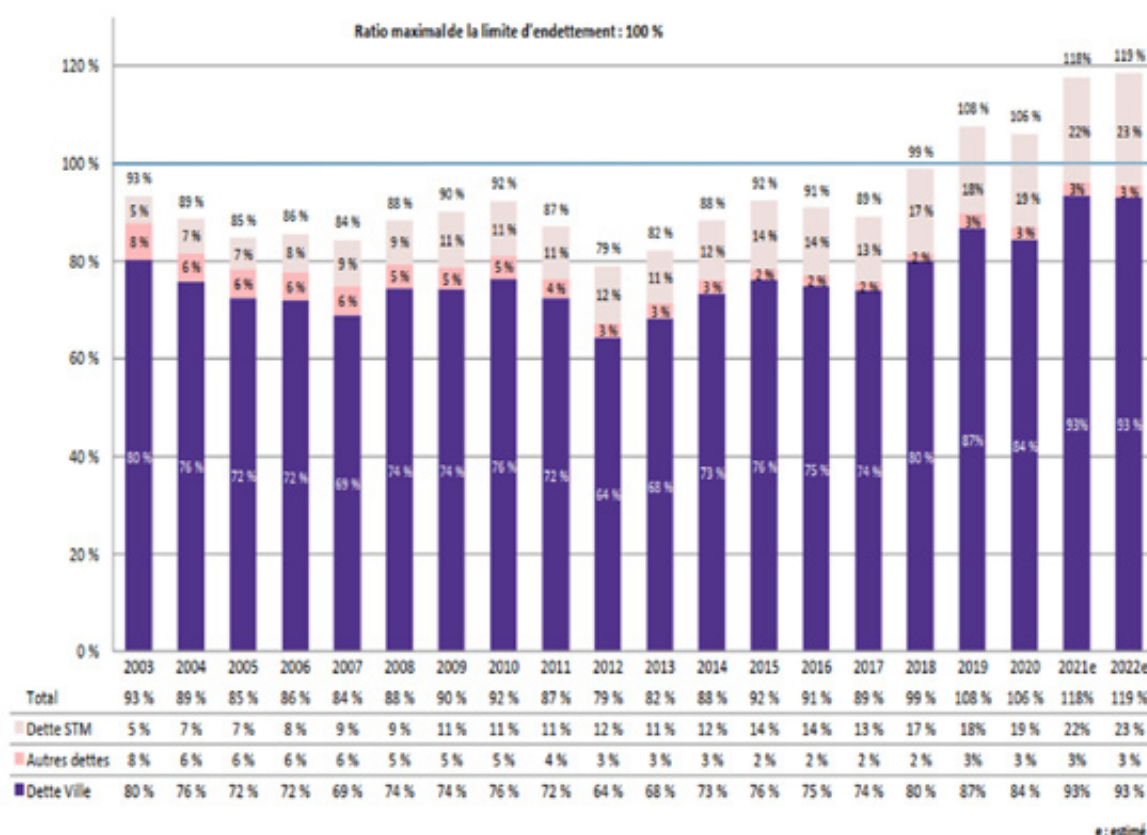
The 2022–2031 PDI also stated that the City is pursuing a major realignment of the investment program begun in 2015 and that the strategies retained since, in monetary terms, consist of:

- ◆ Stabilizing the capital works program at annual expenditures of approximately \$2 billion per year;
- ◆ Maintaining the cash payment growth strategy – which represents, for the years 2022 to 2024, a total payout of \$1,380 million, i.e., \$353 million for 2022, \$460 million for 2023 and \$567 million for 2024.

While the City reviews its investment and funding strategies and forecasts during preparation of the PDI, no action plan or formal costed remedial plan has been adopted to ensure a return of the debt ratio to below the 100% mark. Consequently, the City cannot demonstrate, on an annual basis, that the actions taken have borne fruit and that the objective will be achieved at a given time.

Accountability of performance in relation to the objectives would be relevant in the context where, as shown in Figure 4, the debt ratio has increased, although as presented in Appendices 5.7. to 5.9., investments have decreased since 2019.



**FIGURE 4** | THE VILLE DE MONTRÉAL'S DEBT RATIO, 2003–2022

Source: 2022 budget – 2022–2031 PDI, page 297.

Moreover, the City does not regularly provide an update regarding:

- ◆ The degree of achievement of all the objectives and strategies that it has established for funding;
- ◆ The data from the budget management system of the ten-year capital works program (INVESTI) and the Système intégré Montréal (SIMON) regarding the recurring or non-recurring nature of capital acquisitions that are not used to evaluate whether the City increased the cash payment of recurring expenditures, as stipulated in the *Debt Management Policy*, to ensure intergenerational equity.

The City implemented various strategies, including a strategy to increase cash payments and measures to correct the debt level, but these are not integrated or followed up from an overall perspective. It is constrained, therefore, to act reactively and adopt annual financial strategies that differ from those it had planned when it finds an increase in the debt ratio or a budget imbalance.

The adoption of a comprehensive investment and funding strategy, combining all the strategies and measures adopted in this regard, would help the City determine the changes to be made in a timely manner. Matching this strategy to a long-term financial plan and asset management strategy would also enable the City to anticipate financial issues and determine the measures

to be taken to meet its medium- and long-term objectives. This would also allow it to publicly show its commitment to implementing this strategy and to be held accountable for doing so.

## RECOMMENDATION

### 3.3.A.

We recommend that the Direction générale:

- ◆ Develop a comprehensive investment and funding strategy for capital expenditures, on which the ten-year capital works program would be based;
- ◆ Combine, within this strategy, all the strategies and measures adopted to ensure sound management of the Ville de Montréal's assets, debt and financial situation;
- ◆ Seek approval of this strategy by the appropriate authorities.

## RECOMMENDATION

### 3.3.B.

We recommend that the Direction générale:

- ◆ Conduct a periodic review of the degree of completion of the comprehensive investment and capital expenditure funding strategy adopted;
- ◆ Determine and implement in a timely manner measures to achieve the medium- and long-term objectives.

## RECOMMENDATION

### 3.3.C.

We recommend that the Direction générale ensure that the *Debt Management Policy* is more specific about the appropriations required to justify all exemptions and that its content is periodically updated to reflect the comprehensive investment and funding strategy.

## RECOMMENDATION

### 3.3.D.

We recommend that the Service des finances:

- ◆ Prepare a costed action plan that ensures the return of the debt ratio below the limit established in the *Debt Management Policy*;
- ◆ Seek approval of this action plan by the appropriate authorities.

## 3.4. Budget Envelopes are Distributed to the Business Units on a Historic Basis Rather Than on the Basis of Priorities

For the purpose of developing the PDI, budget directions are prepared annually for the boroughs and central departments.

*[TRANSLATION] "Regarding the 2022 budget directives, to guide the business units in developing their portfolio of projects to be entered into the PDI, they*

*are asked to 'prioritize, first and foremost, investments aimed at both the regular maintenance of assets and catching up on the maintenance deficit to preserve or re-establish a satisfactory level of service (protection)' and then to prioritize based on the following criteria:*

- ◆ *Projects currently underway*
- ◆ *Urgent upgrading projects*
- ◆ *Projects funded by third parties*
- ◆ *Expenditures for asset maintenance.”<sup>24</sup>*

Following the dissemination of envelopes and the selection of projects by the central departments, several other steps must be taken before the PDI is adopted by the authorities:

- ◆ Approval of the project files, validation and consolidation of the information;
- ◆ PDI presentation meetings to the DG and budget committees;
- ◆ Arbitration process of additional requests;
- ◆ Updating of project files and consolidation of the information.

The projects are first presented to the administrative budget committee. A second presentation is made to the political budget committee, of which the chair of the EC is a member. Finally, a third presentation is made to the EC.

Arbitration sessions are also planned to enable the business units (BUs) to present additional requests for projects that could not be included in the initial budget envelopes.

The budget allocation to the boroughs is defined by sections 144 and 144.5 of the *Charter of Ville de Montréal*, metropolis of Québec. This remains at their discretion and will be approved by the respective borough councils.

Regarding asset management, best practices suggest that, to prioritize projects properly, a quantified multi-criteria analysis<sup>25</sup> should be documented. The goal should be to match it with the municipal administration's priorities sector by sector, by asset category, addressing each one separately.

Based on the process in place, each BU does its own prioritization of the projects for which it is responsible. No structured and uniform multi-criteria analysis exists to prioritize all the City's investments. This way of working does not enable us to obtain the assurance that the investments are planned optimally.

In addition to not prioritizing the projects entered in the PDI in a uniform manner, the method of distributing the budget envelopes between the BUs consists essentially of a rollover of the same envelopes from one year to the next. Based on the information obtained, the last budget restructuring was done in 2015.

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<sup>24</sup> Budget Directions – 2022 Operating Budget and 2022–2031 Ten-Year Capital Works Program.

<sup>25</sup> Examples of weighted project assessment grids are presented in the guide titled “Préparation annuelle du programme triennal d'immobilisations – Guide de bonnes pratiques,” MAMH, 2022, pages 27 and 28.

In our examination of the documents related to the development of the 2022–2031 PDI, we found that the adjustments between the originally submitted PDI and the approved PDI were marginal. Yet some BUs told us that they were obliged to reduce investments because of an insufficient budget and that the maintenance deficit would be affected.

Our audit also found that, in May 2021, well before the allocation of the PDI budget envelopes to the BUs, the budget committee had developed strategies aimed at balancing the financial framework for 2022, which had already forecasted reduced expenditure scenarios. As previously mentioned, additional expenditures arising out of new projects are not known at this stage of the process. We are well aware that the economic environment complicates the exercise for all the municipalities, but the goal is precisely to not be in permanent reactive mode and to make better use of resources.

Historically carrying over the budgets allocated to the BUs is not desirable. Projects should be chosen based on priorities determined through a structured multi-criteria analysis and not based on distribution between them. Appreciation of the risk should also be taken into consideration during prioritization. The current way of working does not enable the City to ensure an alignment between its strategic plan, the municipal administration's priorities, the condition of the assets, and the projects or programs entered in the PDI.

## RECOMMENDATION

### 3.4.A.

We recommend that the Direction générale:

- ◆ Establish priorities on the basis of a uniform, structured multi-criteria analysis for all investments;
- ◆ Establish the allocation of budget envelopes in compliance with these clear priorities.

## 3.5. The Tools Used by the Ville de Montréal to Plan and Produce its Ten-Year Capital Works Program are Outdated

### Production of the Ten-Year Capital Works Program and Project Files

Developing the PDI requires two independent systems, the INVESTI system and the SIMON system.

The budget information related to investment projects is entered in the INVESTI system. In addition to being outdated,<sup>26</sup> this system is unable, based on its current functionalities, to integrate qualitative data (the criteria<sup>27</sup> used to justify the entry of a program or project into the PDI) about each of the projects.

To compensate for this problem, the BUs must enter all the relevant information for each of the project files in an Excel spreadsheet. Templates of PDI project files are transmitted and completed by the BUs, who send them to the SF for consolidation. In the course of the

<sup>26</sup> Located in an IBM environment, this system is saturated since it cannot create all the necessary asset categories. It presents data in thousands of dollars. It is also difficult to obtain technical support for this system.

<sup>27</sup> For example, related to the condition of the asset, the needs and priorities of the municipal administration.

exchanges between the BUs and SF that follow, the project file undergoes much back-and-forth,<sup>28</sup> giving rise to the risk of distortion or omissions, in addition to rendering the process of producing the PDI inefficient.

As the future asset management strategy should require putting in place a uniform prioritization process for all projects,<sup>29</sup> we believe that it is imperative for the City to equip itself with a system that makes it possible to integrate all the data needed to produce a PDI budget. This system would also have the ability to generate automated management reports to eliminate the risk of entry errors and to automate the validation steps.

## Investment Funding Forecasts

The scenarios analyzed to assess borrowing needs related to the PDI and forecast the amount of debt in the next ten years, as well as the expenditures related to investment funding to be included in the budget and financial framework, are created in an Excel spreadsheet. This tool is not adapted to the City's needs because of:

- ◆ The large volume of data to be entered and analyzed;
- ◆ The time required to do this;
- ◆ The risk of errors linked to the use of an Excel spreadsheet.

The current information systems, including the debt management system, make it impossible to calculate the debt ratio based on various scenarios studied or to conduct sensitivity analyses. And that does not take into account the slowness associated with updating the data systems to reflect the scenarios retained for the various steps in the budget process and after adoption of the PDI.

Without any interface between the debt management system and the SIMON system, the identification of the assets to be funded when loans are issued and the link with borrowing regulations concerned are not automated and must be done manually using a report produced in the SIMON system. Given the fact that the municipalities' capital funding process is complex and requires various data items, for example whether or not expenditures are capitalizable, the use of efficient integrated tools would facilitate these operations and limit the risk of errors. Data on erroneous or absent capital acquisitions in the SIMON system were found by the Division – Gestion de la dette et de la trésorerie, which could affect the methods of funding these capital assets.

The debt management system should be replaced no later than December 31, 2023, since it will no longer be supported by the supplier after that date. To this end, the Direction du financement, placement et trésorerie, acquired a new debt management application currently in the implementation stage, which is planned for roll-out in fall 2023. There are also plans for this department to acquire a more efficient tool to prepare the debt budget, which will enable it to be more efficient and effective during the budget process. These tools are essential to improving this process, as well as the capital investment funding process.

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<sup>28</sup> Sometimes, more than 30 versions are produced before the final version of the budget.

<sup>29</sup> Projects in the development or execution phase, including projects for which the boroughs are responsible.

## RECOMMENDATION

### 3.5.A

We recommend that the Service des finances acquire more efficient and integrated methods and tools to:

- ◆ Optimize operations aimed at developing the ten-year capital works program and preparing the debt budget;
- ◆ Have the data required to optimize the alignment between the methods of funding capital assets and the funding strategies adopted.

## 3.6. Accountability That Does Not Perfectly Inform About Budget Hypotheses and Results Obtained Compared With the Various Strategies Implemented

The information that would make it possible to inform elected officials and citizens about the implementation of capital investment and funding strategies is presented in the budget document and the annual accountability report.

Based on best practices, each of the objectives must, on the one hand, be paired with a clear and credible target to enable the reader to evaluate the return. On the other hand, all significant variances between the goals and actual outcome of the activities must be explained. It is important to know to what extent the desired results have been obtained so that elected officials and citizens are able to properly assess the City's performance.

### Review of the Budget and Ten-Year Capital Works Program by the Commission sur les finances et l'administration

As with the OB, the PDI was adopted by city council and the UAC. The Commission sur les finances et l'administration is mandated to conduct a study to enlighten their decision-making and recommend the adoption or not of the PDI. Presentations are made by the various departments during the budget review by the Commission sur les finances et l'administration.

Highlights and information regarding debt management are presented by the SF. For example, these include:

- ◆ Strategies and budget directions retained;
- ◆ Distribution of planned investments to protect and develop assets;
- ◆ Distribution of sources of funding.

However, these highlights contain scant information complementary to that presented in the budget document to demonstrate to the authorities the feasibility of the funding strategies established compared with those implemented in recent years.

## Information Presented in the Budget Document

The PDI proposes a completion plan for capital works projects. It indicates amounts that the City plans to allocate to projects,<sup>30</sup> over a period of ten years, specifying the methods of funding it intends to use.

In the 2022–2031 PDI, the City presents its intentions concerning, in particular:

- ◆ Prioritization of investments matching its *Montréal 2030* strategic plan;
- ◆ Investment in its aging infrastructure;
- ◆ Sustained growth of capital expenditures (since 2015), while taking into account its financial capacity.

It also states that:

- ◆ The City continues to base itself on its *Debt Management Policy*, whose guidelines regarding the debt and debt servicing burden are set;
- ◆ The City pursues the realignment of its PMI, begun in 2015;
- ◆ The debt ratio limit is exempt from the *Debt Management Policy* under an exemption granted by city council and the UAC in effect since 2019, a return below the 100% mark is planned for 2027, and the SF is mandated to develop a financial and fiscal strategy to this effect.

Other than the notion of returning the debt ratio below the 100% mark in 2027, we found that there are no specific objectives or indicators that make it possible to create a link between the City's directions and asset management to show the impact of the sums invested on reducing the asset maintenance deficit or achieving the development objectives.

The information presented does not allow the authorities to properly appreciate the hypotheses used and the extent to which the investment and funding strategies planned during the period covered by the PDI correspond to those that were adopted. We found the following facts:

- ◆ The parameters used to determine revenue forecasts used to calculate the debt ratio, including the indexation rate and sources of revenue considered in the calculation, as well as the factors that ensure the growth of cash payments of \$107 million per year during the period of the PDI, are not presented;
- ◆ The borrowing forecasts presented in the PDI do not correspond to those in the borrowing program that the City expects to carry out. In fact, the borrowed amounts planned in the borrowing program adopted by the City are based on an 80% completion rate of the PDI, whereas the amounts presented in the PDI for the coming ten years<sup>31</sup> are established using total capital acquisitions planned therein, i.e., 100%. The result is that the reader may interpret incorrectly that the City intends to invest all the amounts that it presents in its PDI and that the planned debt ratio is based on these amounts.

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<sup>30</sup> Also comprises the programs.

<sup>31</sup> Statement of capital activities and financing methods – Budget.



Below is the definition found in the 2022–2031 PDI:

*[TRANSLATION] "It groups together the investment projects that the City plans to complete on its territory in the next ten years to maintain its infrastructure, encourage economic, cultural and social development and improve the quality of life through better urban planning. Various sources of funding are required for these investments, including long-term loans. All loans thus entered into constitute the City's debt. A portion of these is reimbursed annually and is incorporated into the expenditures provided in the operating budget. This is what is called servicing the debt."*

Furthermore, in the context where the debt ratio exceeds the limit allowed under the *Debt Management Policy* and must be below the 100% mark between now and 2027, the publication of the anticipated ratio during the next ten years will enable elected officials and citizens to assess the extent to which the City will be able to achieve this.

## Information Presented in the Financial Accountability Report

The financial accountability report is a complementary document to the financial report and presents more detailed management information.

As part of our audit, we sought to know the extent to which the City's financial accountability report for fiscal 2021 presents results regarding the following:

- ◆ Information about the distribution of investments between the "protection" component and the "development" component of the *Policy on Equipment and Infrastructures*;
- ◆ Information about the debt and other sources of funding in the *Debt Management Policy* and the *Policy on Sources of Revenue*;
- ◆ Information about the funding strategy achieved compared with what was planned in the PDI.

Here is what we found:

- ◆ The City adequately takes into account its indebtedness and the evolution of the debt;
- ◆ The City states in its financial accountability report that it has opted, since 2014, for a strategy aimed at substantially increasing, year to year, the portion of investments that will be funded by cash. Nevertheless, no information was presented to compare what has been achieved with what was planned;
- ◆ The annual financial accountability report does not present any comparison between what was planned in the PDI and what was achieved, in particular regarding investments, cash payments, the debt ratio and government subsidies for capital assets. Furthermore, the budget document presents information about the achievements of the past five years, without comparing them with what had been planned in the budgets;
- ◆ No information is presented regarding the proportion of investments that were allocated to asset protection<sup>32</sup> in comparison with what was planned in the PDI.

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<sup>32</sup> The *Policy for Equipment and Infrastructures* provides for a targeted rate of 75% allocated to the protection of equipment and infrastructure.



The information presented in the PDI and the financial accountability report could be improved to inform the City's authorities and population about the result of the implementation of investment and funding strategies. The variances between the forecasts and results are not presented, which does not allow the budget performance and the attainment of the objectives established in the adopted strategies to be assessed.

**RECOMMENDATION**

**3.6.A.**

We recommend that the Direction générale's budget document present information making it possible to assess the capital investments and funding strategies by specifying the planned annual debt ratio and the evolution of the debt for the period of the ten-year capital works program.

**RECOMMENDATION**

**3.6.B.**

We recommend that the Service des finances, in its accountability report, compare the achievements and forecasts to make it possible to assess the performance of the investment and funding strategies adopted.

## 4. Conclusion

The Ville de Montréal (the City) owns assets whose replacement value is estimated at approximately 66 billion dollars. The planning and financial management of these investments is currently guided by various administrative frameworks and, from 2015 to 2022,<sup>33</sup> through the Programme montréalais d'immobilisations : perspectives 2015–2024 (PMI).

Given the City's limited financial capacity and the condition of its assets, several of which are reaching the end of their useful life, an asset management strategy is being developed. The objective is to maintain its service offer and, as much as possible, to obtain an optimal return on its assets.

That said, our examination of the various administrative frameworks and their application, as well as the process of developing the ten-year capital works program (PDI) and financial framework, leads us to conclude that some practices aimed at aligning needs and long-term financial resources with the City's strategic vision are not being implemented, not to mention the fact that the investment planning and funding strategies in force are not all complied with.

Furthermore, the information disclosed in the budget document and financial accountability report should also be improved. It makes it difficult to assess the extent to which the PDI aligns with the City's needs and its long-term financial capacity, and that the achievements correspond to the budget forecasts.

More specifically, below are the major findings we took away regarding the evaluation criteria:

### **Determining Needs to Ensure the Short-, Medium- and Long-Term Maintenance of Assets Based on Their Condition, Lifecycle and Anticipated Service Levels and Operational Planning Tools**

- ◆ The annual report of January 31, 2022, required by the City's *Directive sur la connaissance de l'état des actifs*, reveals breaches of the directive by the business units, i.e., absence of the qualification of the condition of some assets identified, percentage of assets audited over a cycle of five years, and asset maintenance deficit not recorded. The work to be done to provide the City with a complete picture of the condition of the assets and then to define its asset management strategy is huge. Defining the stakeholders' roles and responsibilities and ensuring their buy-in to this exercise are essential.
- ◆ To eliminate any confusion about the scope of the pre-budget consultation, the consultation document should be improved by clarifying it and ensuring that its objective is to probe the level of satisfaction of citizens regarding the City's infrastructure and, consequently, to influence the development of the PDI.
- ◆ There is no corporate portfolio identifying all programs and projects.
- ◆ The technology tools used to develop the PDI and project files, as well as the investment funding forecasts, are outdated and not adapted to the City's needs, thus increasing the risk of errors and making the process inefficient.

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<sup>33</sup> According to the managers we met, the investment and funding targets detailed in the PMI have no longer been followed since implementation of the PDI in 2021.

### **Existence of a Long-Term Financial Plan**

- ◆ The budget balancing exercise is only done for the coming year, despite the fact that the *Balanced Budget Policy* requires forecasting the short- and medium-term impact of each project on the operating budget (OB).
- ◆ The impact of the PDI on the OB is not considered for all projects and programs within the financial framework, underestimating the expenditures to plan in the OB.

### **Investment Funding Strategies**

- ◆ Some measures provided for in the *Debt Management Policy* have not been applied.
- ◆ For the 2015–2020 period, investments and cash payments made were less than what was planned in the PMI, while loans were greater without the necessary justification being found.

### **Distribution of Budget ENVELOPES Between Business Units**

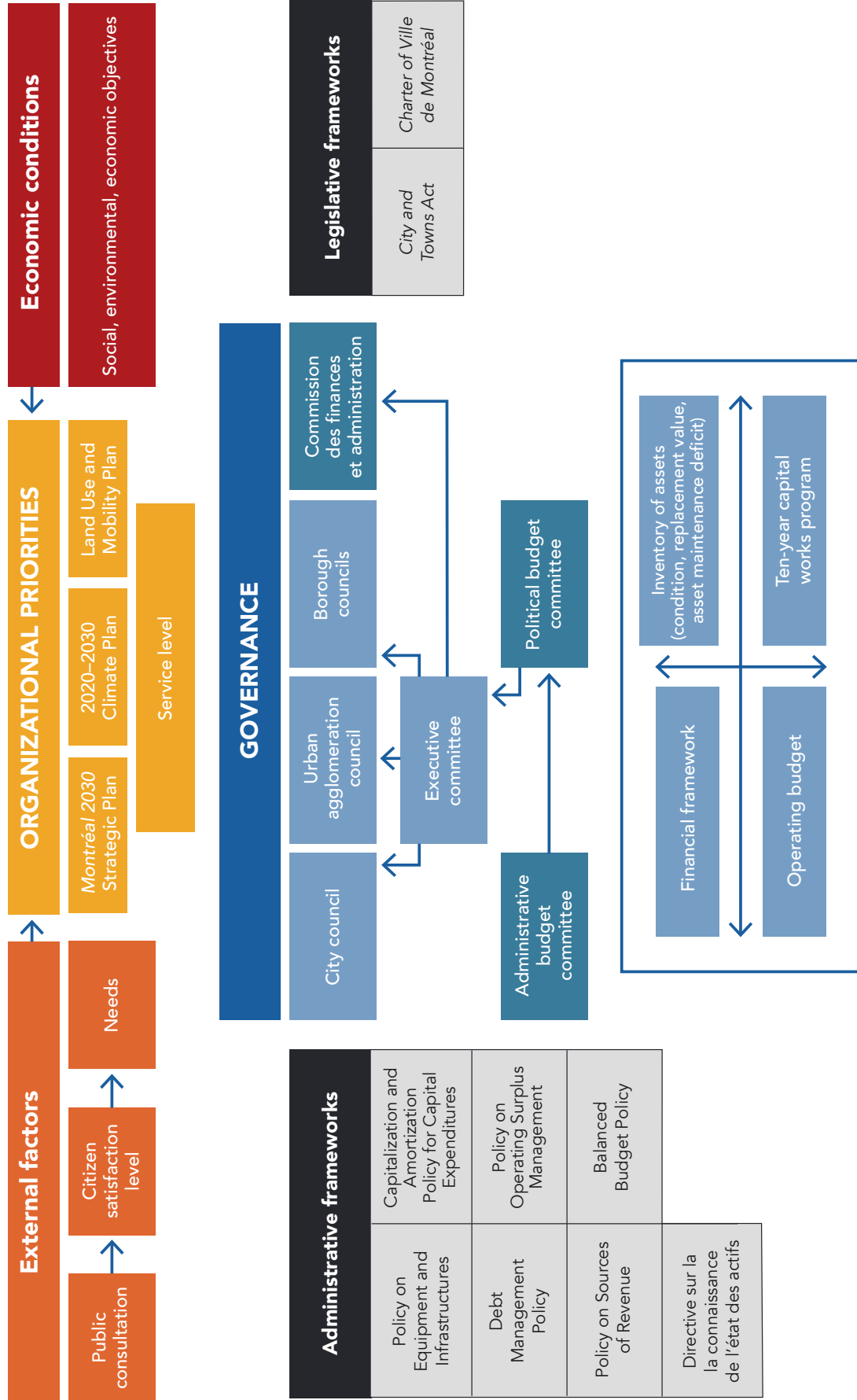
- ◆ The budget envelopes are distributed on a historical basis. There is no uniform, structured multi-criteria analysis to prioritize all the City's investments.

### **Accountability**

- ◆ Other than the notion of returning the debt ratio to below the 100% mark in 2027, there are no specific objectives or indicators making it possible to link the City's directions and asset management in the budget document.
- ◆ The annual accountability report does not present comparative data between what was planned in the PDI and what was achieved, in particular regarding investments, cash payments, the debt ratio and government capital subsidies.

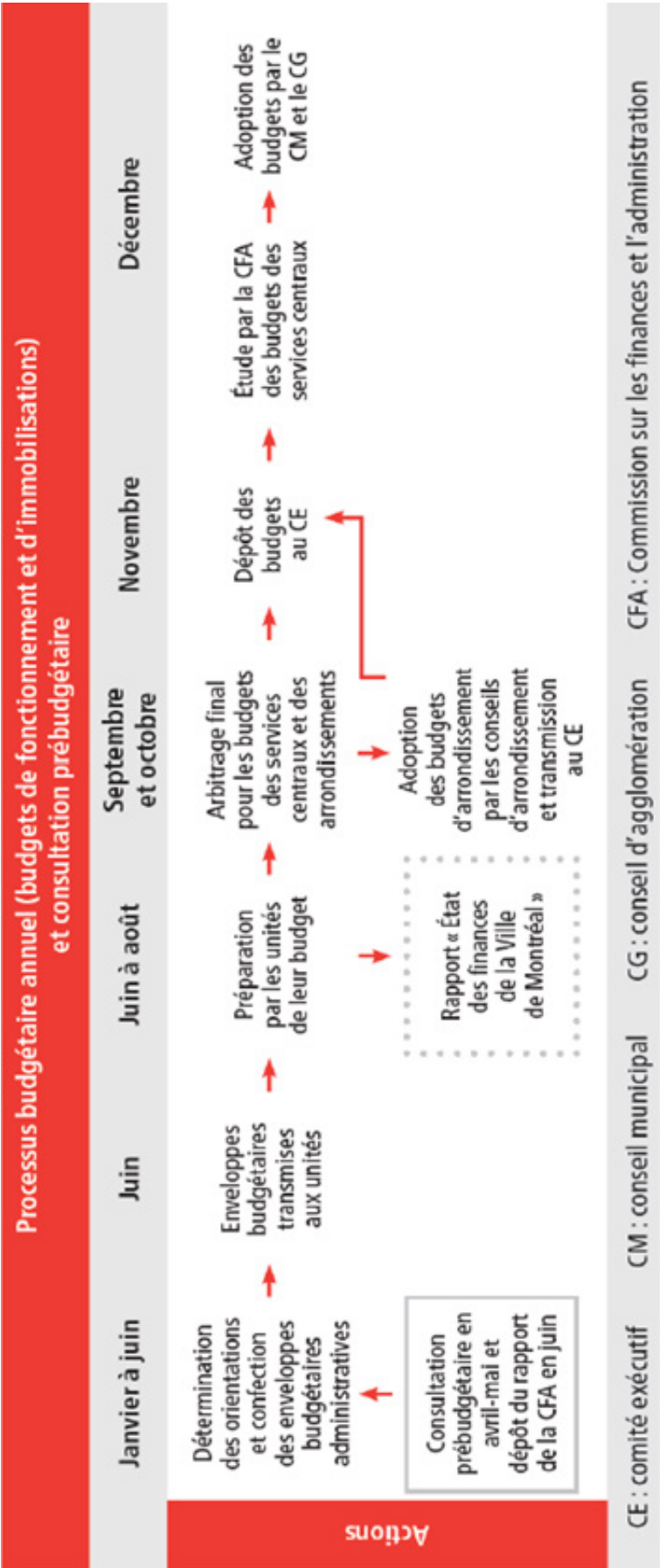
## 5. Appendices

### 5.1. Elements Influencing the Ten-Year Capital Works Program Development Process



Source: Figure prepared by the Bureau du vérificateur général.

5.2. Annual Budget Process



OnSource: Budget 2022 – PDI 2022–2031, Figure 2.

### 5.3. Investments by Asset Category

**Tableau 158 – Investissements par catégories d'actifs – Budget de la Ville de Montréal**  
(en millions de dollars)

Catégories d'actifs - Protection	2022	2023	2024	2025	2026	Total 2022-2026	Total 2027-2031	Total 2022-2031
<b>Protection</b>								
Infrastructures routières	367,4	366,3	333,8	369,9	379,2	1 816,6	2 008,0	3 824,6
Environnement et infrastructures souterraines	534,0	488,0	462,9	417,1	435,8	2 337,8	2 592,2	4 930,0
Parcs, espaces verts et terrains de jeux	164,7	151,4	158,3	140,5	140,1	755,0	682,0	1 437,0
Bâtiments et terrains	230,7	201,4	207,5	200,6	222,8	1 063,0	1 290,1	2 353,1
Véhicules	55,7	42,6	41,7	44,2	45,8	230,0	294,4	524,4
Ameublement et équipements de bureau	55,3	54,6	49,6	53,5	63,0	276,0	265,5	541,5
Machinerie, outillage spécialisé et équipements	15,0	13,4	11,6	11,2	9,9	61,1	62,6	123,7
<b>Total – Investissements</b>	<b>1 422,8</b>	<b>1 317,7</b>	<b>1 265,4</b>	<b>1 237,0</b>	<b>1 296,6</b>	<b>6 539,5</b>	<b>7 194,8</b>	<b>13 734,3</b>
<b>Pourcentage - Protection</b>	<b>69,5 %</b>	<b>62,9 %</b>	<b>61,5 %</b>	<b>65,5 %</b>	<b>69,3 %</b>	<b>65,7 %</b>	<b>75,1 %</b>	<b>70,3 %</b>

Source: Budget 2022 – PDI 2022-2031, page 253.

### 5.4. Example of a Project File

Programme décennal d'immobilisations 2022-2031

Ville de Montréal

202

Source: Budget 2022 – 2022–2031 PDI.



## 5.5. Programme montréalais d'immobilisations: perspectives 2015-2024 (PMI)

	2014 (in \$ millions)	2015 (in \$ millions)	2016 (in \$ millions)	2017 (in \$ millions)	2018 (in \$ millions)	2019 (in \$ millions)	2020 (in \$ millions)	2021 (in \$ millions)	2022 (in \$ millions)	2023 (in \$ millions)	2024 (in \$ millions)
<b>RECOMMENDED INVESTMENTS</b>	\$1,233	\$1,635	\$1,706	\$1,736	\$1,766	\$1,796	\$1,776	\$1,856	\$1,936	\$2,016	\$2,096
<b>PLANNED INVESTMENTS IN THE 2014–2016 PTI <sup>[a]</sup></b>	\$1,233	\$1,255	\$1,296	\$1,296	\$1,296	\$1,296	\$1,296	\$1,296	\$1,296	\$1,296	\$1,296
<b>ADDITIONAL INVESTMENTS</b>	-	\$380.0	\$410.0	\$440.0	\$470.0	\$500.0	\$480.0	\$560.0	\$640.0	\$720.0	\$800.0
<b>Funding Strategy</b>											
<b>ADDITIONAL CASH PAYMENTS</b>	-	\$80	\$160	\$240	\$320	\$400	\$480	\$560	\$640	\$720	\$800
<b>ADDITIONAL TEMPORARY LOANS</b>	-	\$300	\$250	\$200	\$150	\$100	-	-	-	-	-
<b>TOTAL</b>	-	\$380.0	\$410.0	\$440.0	\$270.0	\$500.0	\$480.0	\$560.0	\$640.0	\$720.0	\$800.0

<sup>[a]</sup> The forecasted investments in the 2014–2016 PTI were maintained in the following years compared with 2016.

Source: Table produced by the Bureau du vérificateur général, with data presented integrally in the Programme montréalais d'immobilisation : perspectives 2015-2024 (PMI), page 6.



## 5.6. Condition of the Assets

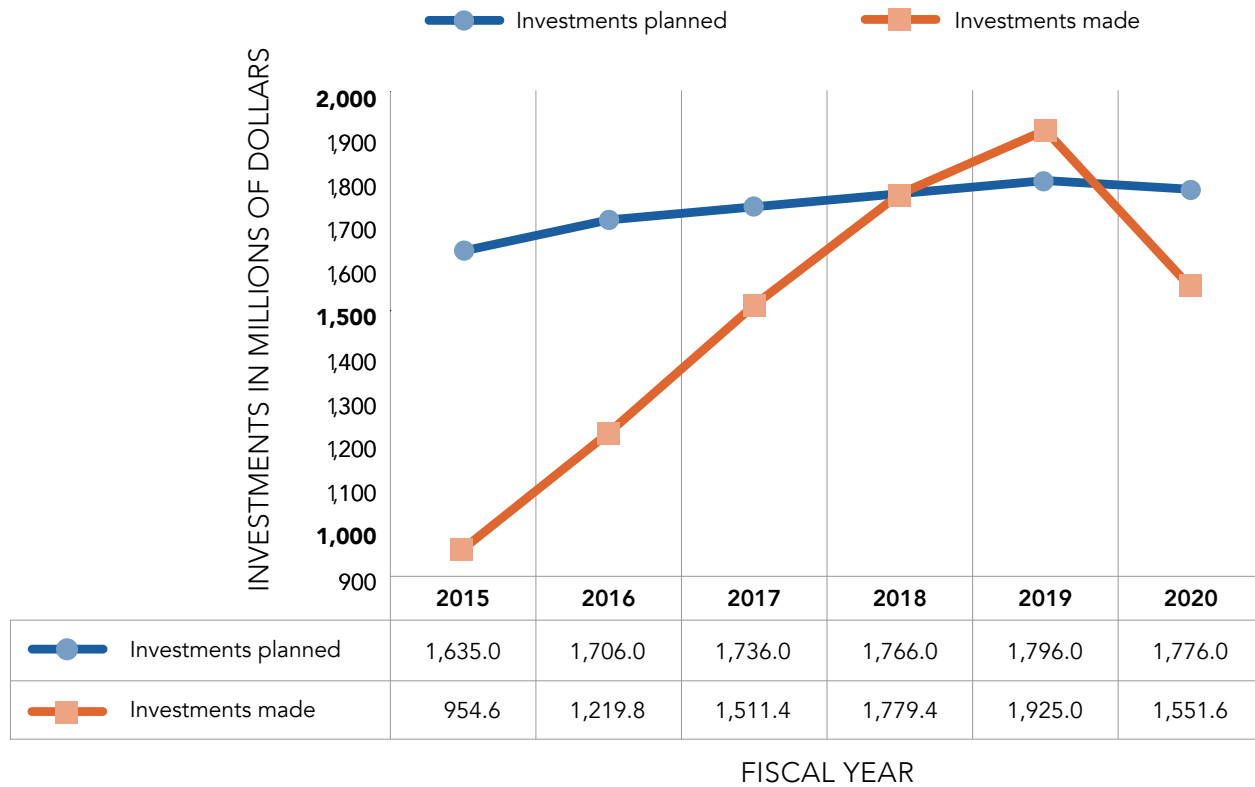
MUNICIPAL ASSET CONDITION INDEX <sup>1</sup> (Immovable, civil engineering work or significant equipment)		
Index	Condition	Description
<b>A</b>	<b>Very good</b> Satisfactory for the future	The asset is usually recent, well maintained or restored to new. It delivers the service without interruption or slowdown, ensures the safety of people and does not affect their health.
<b>B</b>	<b>Good</b> Acceptable for the time being	The asset is in an acceptable condition. It presents a slight level of deterioration and defect. It requires some asset maintenance work. Usually, it has reached half of its useful life. Problems may occasionally arise, but the safety and health of people are not affected.
<b>C</b>	<b>Satisfactory</b> Follow-up needed	The asset presents a moderate level of deterioration and defect. It requires regular asset maintenance. Usually, the asset has reached the final third of its useful life. Problems may occasionally arise, but the safety and health of people are not affected. If necessary, risk mitigation measures are in place.
Condition threshold <sup>2</sup>		
<b>D</b>	<b>Poor</b> Increased risk of compromising service	The asset presents a high level of deterioration and defect. It requires major and often urgent asset maintenance. Usually, it is reaching the end of its useful life. Problems often arise, but the safety and health of persons are not affected.  If necessary, major risk mitigation measures are in place. Restoration to at least a satisfactory condition, replacement or removal from service of the asset must be considered.
<b>E</b>	<b>Very poor</b> Unsatisfactory for prolonged use	The asset presents a very high level of deterioration and defect. It may even be unusable. It requires major and often urgent asset maintenance. It is usually past the end of its useful life. Problems arise frequently, but the safety and health of people are not affected. Major risk mitigation measures are in place.  Restoration of the asset to at least a satisfactory condition, or its replacement or removal from service, is required.

<sup>1</sup> This grid is adapted from the 2015 infrastructure management framework of the Société québécoise des infrastructures du Québec and the assessment scale of the condition of assets of the Canadian Infrastructure Report Card.

<sup>2</sup> Boundary between an asset whose condition is deemed satisfactory and another whose condition is deemed unsatisfactory, i.e., in poor or very poor condition. It is also the boundary between an asset that usually suffers from a maintenance deficit and one that does not.

Source: Connaissance de l'état des actifs (DIRECTIVE) – Appendix A.

## 5.7. Investments Planned in the Programme montréalais d'immobilisations and Made in the Period From 2015 to 2020



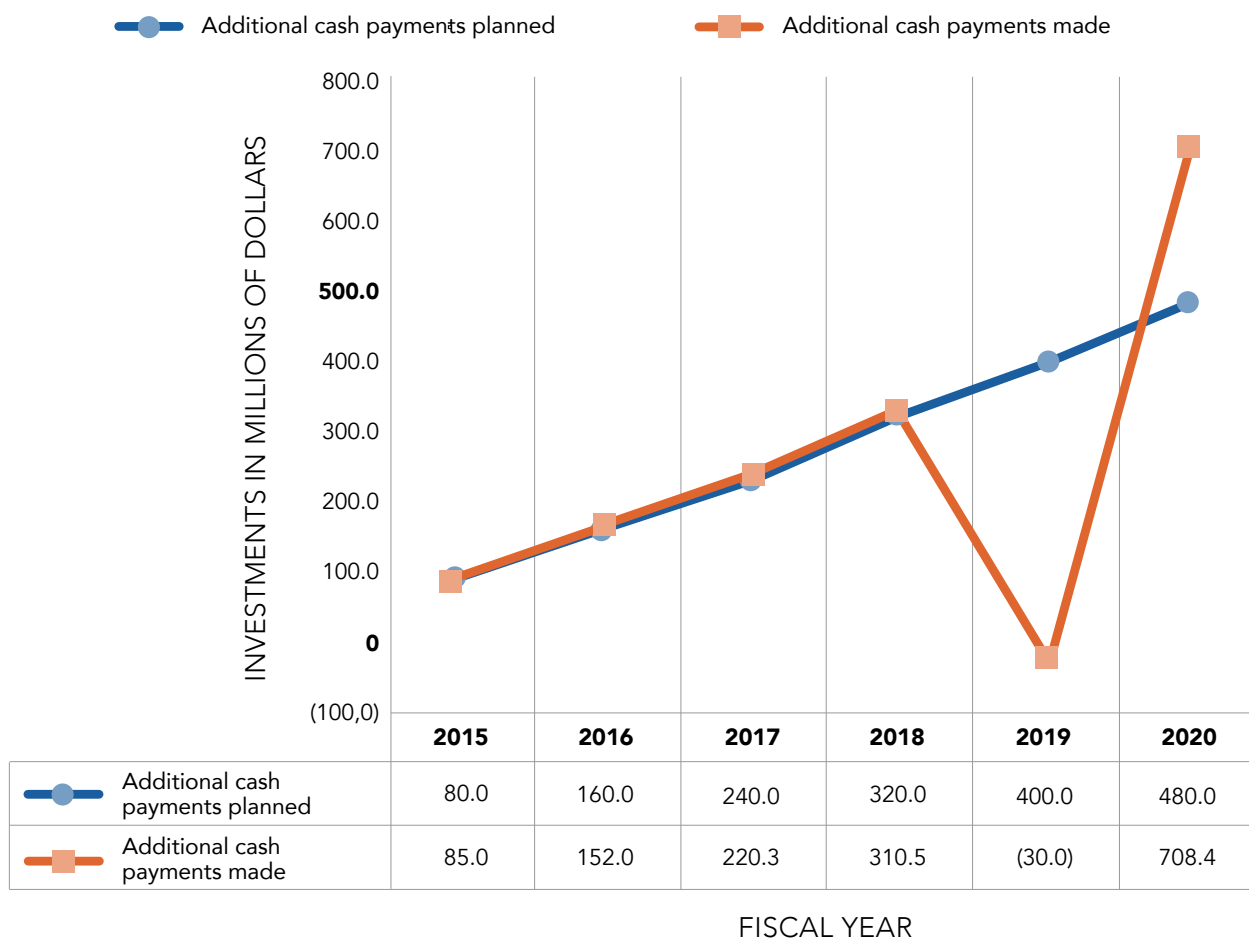
2015–2020 total (in \$ millions).

Planned investments: \$10,415.0 million.

Investments made: \$8,941.8 million.

Source: Graph prepared by the Bureau du vérificateur général based on the PMI.

## 5.8. Additional Cash Payments Planned in the Programme montréalais d'immobilisations and Made for the Period From 2015 to 2020



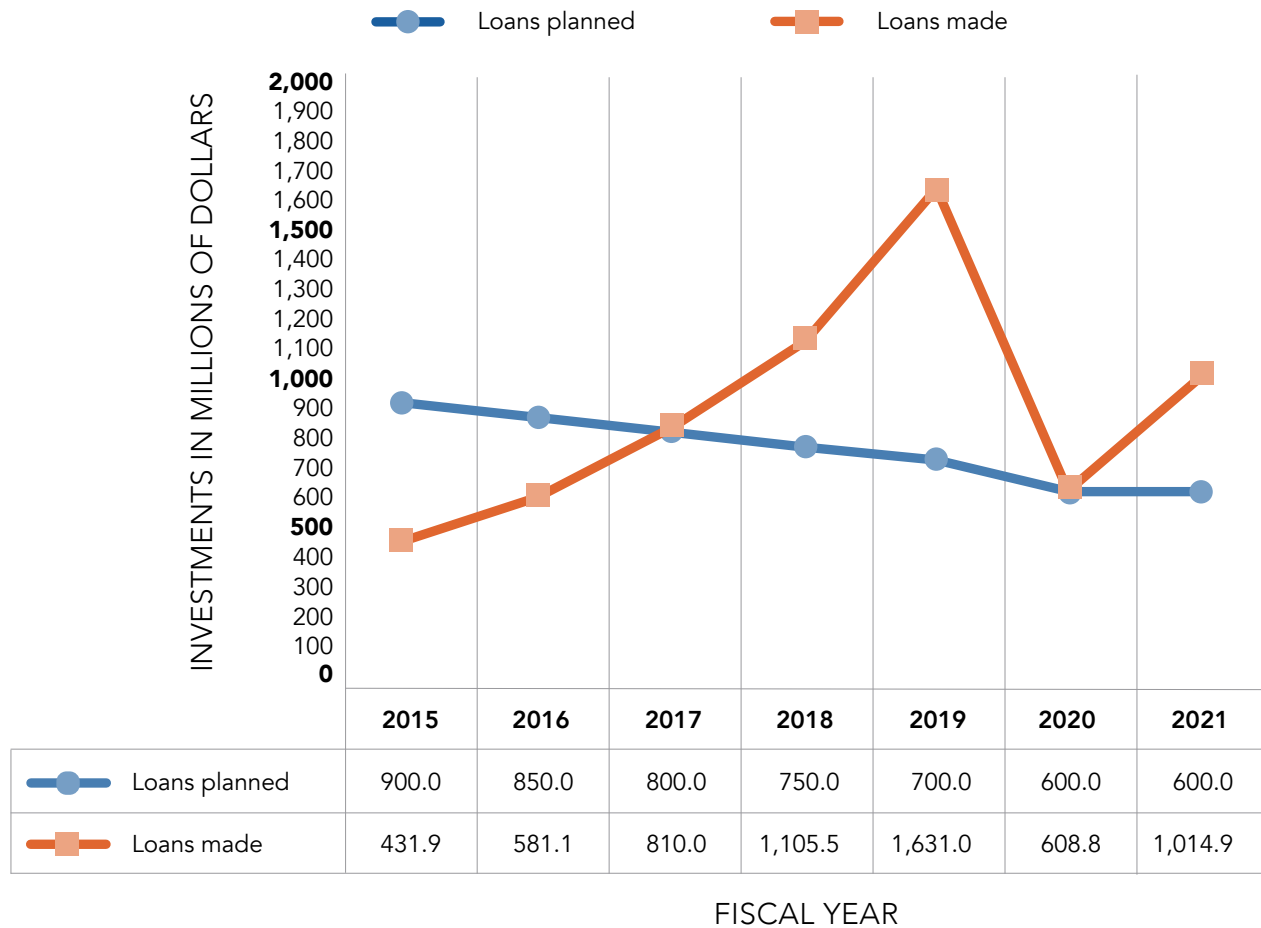
2015–2020 total (in \$ millions).

Additional cash payments planned: \$1,680.0 million.

Additional cash payments made: \$1,446.2 million.

Source: Table prepared by the Bureau du vérificateur général based on the PMI.

## 5.9. Loans Planned in the Programme montréalais d'immobilisations and Made for the Period From 2015 to 2020



2015–2020 total (in \$ millions).

Loans planned: \$4,600.0 million.

Loans made: \$5,168.3 million.

Source: Table prepared by the Bureau du vérificateur général based on the PMI.