Ministry of Infrastructure

Real Estate Services

1.0 Summary

The Ontario Infrastructure and Lands Corporation (Infrastructure Ontario) is a Crown agency under the Ministry of Infrastructure (Ministry). One of Infrastructure Ontario's responsibilities is to manage a large and diverse portfolio of real estate owned and leased by Ontario Government ministries and some agencies (government properties).

Infrastructure Ontario is responsible for helping its client ministries and agencies find space by either matching their needs to available space in government properties or leasing other space within the private sector. It is also responsible for managing these properties, including the costs of cleaning, repairs and maintenance, security, utilities, property taxes, and, for government-owned land and buildings, their sale or demolition. Infrastructure Ontario has an external property and land manager, which is a real estate services company, that provides all the operating and maintenance work for Infrastructure Ontario's client ministries and agencies. Further, Infrastructure Ontario is responsible for overseeing capital projects, namely the construction, rehabilitation and renovation of government properties. In 2014, it contracted with two external project managers to oversee its capital projects, which includes overseeing general contractors selected through competitive processes.

About 9% of government properties, based on rentable square feet as of March 31, 2017, were procured through the Alternative Financing and Procurement (AFP) model developed by Infrastructure Ontario about 10 years ago. Under the AFP model, construction of a project is financed and carried out by the private sector, and, in some cases, the private-sector company is also responsible for maintaining the asset over a 30-year contract. A number of hospitals are maintained through AFP agreements, and, while Infrastructure Ontario is not directly involved in managing hospitals' AFP agreements, it offers guidance to the hospitals when requested.

Our audit determined that Infrastructure Ontario's management of government properties was impacted in part by weaknesses in the Enterprise Realty Service Agreement (Agreement) between Infrastructure Ontario and the Ministry of Infrastructure. The Agreement does not set out any mandatory, minimum standard of performance for managing the costs of capital projects. It also does not set out timelines for meeting the accommodation standard for office space designed to ensure that existing government properties are used efficiently, and timelines for maintaining the state of government-owned properties to the Agreement's standard.

These areas are interdependent because not ensuring that costs are reasonable has led to fewer

resources being available to maintain aging government properties. Deferred maintenance of buildings has more than doubled from $420 million as of March 31, 2012, to $862 million as of March 31, 2017. Over the last six years, the condition of government properties has deteriorated from excellent to almost a poor level of condition as measured by the industry standard.

Our audit found significant opportunities for savings, for example by:

- reducing the square footage in government office space to meet the 2012 Office Accommodation Standard of 180 rentable square feet per person;
- more effectively disposing of vacant buildings that were incurring carrying costs; and
- revising future AFP agreements to better support hospitals in obtaining cost-effective maintenance agreements.

Pertaining to **capital projects**, our audit found:

- **The design of a Request for Proposals (RFP) approach attracted few bids for the management of 7,500 capital projects**—In 2014, the structure of Infrastructure Ontario's public RFP to select external project managers for the management services of capital projects worth $900 million over five years did not attract the interest of a broad range of companies. Due to the structure of the RFP—which divided the province into two areas—only three bids were received, all from large companies. Of the two companies Infrastructure Ontario chose to procure services from, one project management company had performed poorly in its previous contract between 2011 and 2014. For example, it received low scores on Infrastructure Ontario's client satisfaction survey over those years, and failed to meet key performance measures for staying on budget and completing projects on time.
- **Better oversight of external project managers' procurement methods for capital projects is needed**—Infrastructure Ontario does not obtain enough information from its external project managers to assess whether procurements are done in a competitive and fair manner. Specifically, Infrastructure Ontario does not track how many vendors bid on capital projects and which vendors are winning the bids. Vendors are normally selected through a vendor-rotation process operated by an electronic bidding service that invites vendors of record to bid on projects in a fair manner. However, since 2013/14, Infrastructure Ontario has allowed its external project managers to select vendors from its vendor-of-record list and manually add them to the list of bidders. We identified 321 projects worth nearly $49 million between 2013/14 and 2016/17 awarded to companies that were manually added to the list of bidders by the external project managers.
- **Infrastructure Ontario is using preliminary estimates to prioritize which capital projects to do**. Infrastructure Ontario informed us that the initial cost estimates derived from its asset management system are limited as they do not factor in the additional costs that might be incurred to address actual site conditions. The engineering firm that we contracted with to advise us also agreed with this assessment. Infrastructure Ontario uses these initial cost estimates for prioritizing which projects to do for the current year and the next two years based on the estimated cost of the projects and the funding that is available. Since subsequent estimates and the actual cost of the projects tend to be significantly higher than the initial cost estimates, Infrastructure Ontario is not prioritizing projects based on complete cost estimates. This could increase the risk of selecting projects that do not yield the highest cost-benefit.
- **Minimal incentive exists for external project managers to manage costs**—Total management fees of $56.5 million were paid between 2011/12 and 2015/16 to three

external project managers; of that, only 0.5% was for delivering projects on budget. Moreover, external project managers receive a smaller amount of performance pay (and therefore are financially penalized) if they underspend by more than 5% of the total amount Infrastructure Ontario allocates for projects to be spent by March 31, the end of the fiscal year, because funding cannot be carried forward to the next fiscal year.

- **External project managers do not have an incentive to complete projects on time**—External project managers are not held accountable for meeting the original completion dates, and Infrastructure Ontario does not track these dates. Our review of a sample of capital projects completed between April 2013 and March 2017 indicated that these capital projects, which cost $76 million, were completed on average about 330 days later than originally scheduled. For example, one of the client ministries informed us that its capital project had been delayed due to the external project manager not having sufficient staff to oversee projects. External project managers can revise project completion dates while the project is ongoing, and Infrastructure Ontario does not always ensure the change is for valid reasons.
- **Capital repair funds used to fund operating costs for managing government properties**—Infrastructure Ontario collects base rent from client ministries and their agencies that, according to its guidelines, should be used to cover the cost of future capital repairs in government properties. However, Infrastructure Ontario informed us that, due to insufficient revenue to fund its operating costs for managing government properties, it used a total of $202 million over six years from base rent to pay for these operating costs. While this is not explicitly prohibited under the Enterprise Realty Service Agreement between Infrastructure Ontario and the Ministry, it has led to a further deterioration of government-owned buildings.

Pertaining to **operating and maintenance services**, our concerns are as follows:

- **Infrastructure Ontario provides insufficient information on operating and maintenance services to its client ministries and agencies**—Infrastructure Ontario's external property and land manager is required to arrange operating and maintenance services for Infrastructure Ontario's client ministries and agencies, which then pay Infrastructure Ontario for the services. However, invoices received by client ministries did not provide sufficient information on the volume and types of services they were paying for. Ministries informed us that they could not determine whether they were receiving the services paid for because they were not provided with building-specific information on what services they were supposed to be receiving.
- **Office space per person exceeds the Ministry standard**—Over $170 million in office accommodation costs could be saved annually if effective steps are taken to reduce the space occupied per government staff person to comply with the 2012 Office Accommodation Standard of 180 rental square feet per person set by the Ministry of Infrastructure. Neither the Ministry nor Infrastructure Ontario has set a goal for when this standard should be met.
- **Almost $19 million spent in one year on operating and maintaining 812 vacant buildings**—Infrastructure Ontario incurred $18.9 million in rent paid to third parties, property taxes and operating and maintenance costs for 812 vacant buildings across the province in 2016/17. Infrastructure Ontario does not consistently track how long buildings are vacant, but we found about 600 of the 812 had been vacant for an average of almost eight years. Vacancy dates for the remaining 212 buildings were not readily available. Further, Infrastructure Ontario was only able

to sell 40% of the buildings it planned for the 2016/17 fiscal year.

Pertaining to **Alternative Financing and Procurement (AFP) arrangements**, we found that Infrastructure Ontario's framework did not handle maintenance costs effectively in some hospitals. Our specific concerns are as follows:

- **AFP agreements have not been structured to cover all maintenance work that hospitals require**—Management at hospitals we spoke to are involved in long-term, ongoing disputes with private-sector companies over interpretations of the maintenance portion of their AFP agreements. They have not been able to realize many of the benefits they expected under AFP agreements, including having the cost of all maintenance that they require covered by the payments established in these agreements. Hospitals informed us that they are paying higher-than-reasonable rates to the private-sector company for carrying out maintenance work considered outside of the AFP agreement.
- **One private-sector company with a history of poor performance is still being awarded new contracts by Infrastructure Ontario**—Infrastructure Ontario does not have a formalized performance evaluation program of private-sector companies during the maintenance phase of the AFP contract, and new AFP contracts are awarded without consideration of past performance. This has resulted in companies with past poor performance receiving contracts. For example, one private-sector company that has been in dispute with a hospital since 2013 over what work is included in the AFP agreement was awarded contracts—in 2016 for $1.3 billion and in 2017 for $685 million—to design, build, finance and maintain two more hospitals. The dispute is still ongoing.

This report contains 13 recommendations, with 28 action items, to address our audit findings.

Overall Conclusion

Infrastructure Ontario could maintain government properties more cost-effectively by better overseeing the companies that it has engaged to provide most capital repair and property management services to ensure costs for capital repairs and property management services are reasonable and projects are completed on time. As well, existing government properties could be used more efficiently, with people occupying less space per person. The agreement between Infrastructure Ontario and the Ministry of Infrastructure needs better performance standards to incentivize Infrastructure Ontario to manage and maintain government properties more cost-effectively.

We also found that the Alternative Financing and Procurement maintenance framework often did not support the cost-effective management of building maintenance in hospitals that was intended when the arrangements were structured.

OVERALL RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario appreciates the work of the Auditor General's office in examining the government properties it manages. This report could contribute to the modernization of government properties. Infrastructure Ontario will implement the recommendations. The government's properties that Infrastructure Ontario manages were built on average 49 years ago. These buildings are costly to maintain, and state-of-good-repair investments are not fully funded. It is significant that the Auditor General acknowledged that it is unsustainable to manage the real estate portfolio in 2017 with a funding model from 1998.

Within the funds, policies and mandates set by the Ministry of Infrastructure, Infrastructure Ontario has taken a modern approach to real estate. This includes in-house experts and strategic contracts with outsourced service providers. Other owners, like the Government of Canada and the City of Toronto, are taking an approach similar to Infrastructure Ontario's. Infrastructure Ontario will continue to work with the Ministry to continue to evolve the real estate model to meet the needs of government ministries and the public interest. Infrastructure Ontario will continue to deliver positive value for money for taxpayers by striking the appropriate balance between the number of qualified providers and the economies of scale, while using performance-based contracts that share risk.

Infrastructure Ontario is committed to open, fair, transparent and competitive procurements. It will continue to work with all service providers to ensure robust processes are in place to avoid conflicts of interest and to enforce ethical and legal requirements. Infrastructure Ontario will continue to improve its oversight of service providers through data analytics, audits and the use of key performance indicators.

In conjunction with the Ministry of Infrastructure and other ministries, Infrastructure Ontario will continue to reduce the government properties' footprint and capital repair backlog, using the available funding and through rightsizing of the portfolio and ministry accommodation space. Substantial reductions in the deferred maintenance backlog, improvement in the portfolio's facilities condition index and footprint reduction will result from the completion of the Macdonald Block Reconstruction Project that is now underway.

Infrastructure Ontario has already taken steps to address the recommendations, including the launch of the building portal to provide client ministries with more information on their building services, and an agreement in principle with the Ministry of Health and Long-Term Care and hospitals to support hospitals with AFP contracts during the operations phase. We will develop an action plan to implement the recommendations made by the Auditor General.

2.0 Background

2.1 Overview of Infrastructure Ontario

In June 2011, under the *Ontario Infrastructure and Lands Corporation Act, 2011* (Act), the Ontario Realty Corporation was merged with Infrastructure Ontario—a Crown agency then predominantly responsible for managing Alternative Financing and Procurement (AFP) arrangements (discussed in **Section 2.4**) and municipal lending. The entities merged to form the Ontario Infrastructure and Lands Corporation (Infrastructure Ontario). Under the Act, Infrastructure Ontario is now also responsible for managing the Province's general real estate portfolio (government properties).

The government properties that Infrastructure Ontario manages are used by all 30 ministries and their related agencies. **Figure 1** provides information on the buildings as of March 31, 2017.

Thirty-five percent of the rentable square feet within government properties is office space; the rest is special purpose space that includes OPP detachments, detention centres, labs, storage space and courthouses.

As seen in **Figure 2**, about 77% of the rentable square feet of government properties is owned by the government; the remaining 23% is leased from third parties.

The average age of all owned buildings was 49 years, based on an average rentable square foot basis, as of March 31, 2017. **Figure 3** provides a more detailed breakdown of the age of government-owned buildings.

As seen in **Figure 4**, government properties overseen by Infrastructure Ontario represent about 29% or $5.5 billion of the total net book value of provincial government land and buildings. Infrastructure Ontario manages 130,000 acres of land with a book value of $0.8 billion. Most of this land consists of hydro corridors; some vacant land that Infrastructure Ontario is considering for disposal;

Figure 1: Government Properties by Intended Use as of March 31, 2017

Source of data: Infrastructure Ontario

	Occupied		Vacant		Total	
Building Category	**# of Buildings**	**Area (RSF million)[1]**	**# of Buildings**	**Area (RSF million)[1]**	**# of Buildings**	**Area (RSF million)[1]**
Core[2]	3,400	35.86	179	0.84	3,579	36.70
Transition[3]	215	1.38	165	0.80	380	2.18
Hold[4]	27	0.10	32	2.55	59	2.65
Disposition[5]	351	1.15	318	0.23	669	1.38
Demolition[6]	33	0.47	118	0.63	151	1.10
Total	**4,026**	**38.96**	**812**	**5.05**	**4,838**	**44.01**

1. Area is measured in millions of "rentable square feet" (RSF). RSF includes both the space available for office activities and also common areas, such as washrooms, lobbies and electrical rooms. The term "usable square feet" is only the space available for office activities. Areas such as elevator shafts and stairwells are not included in either definition.
2. Buildings that will be used for the long term to fulfill current or future government needs.
3. Buildings that will be reviewed to determine whether they continue to be core or will be disposed of or demolished.
4. Buildings that will no longer be used for program delivery, once the lease expires, but cannot be demolished or disposed of until environmental, heritage or other circumstances have been addressed.
5. Buildings that have been recommended for sale or transfer; occupants are moved either to existing government-owned properties or to a third-party lease.
6. Buildings that have been recommended for demolition; occupants are moved either to existing government-owned properties or to a third-party lease.

Figure 2: Government Properties by Ownership Type as of March 31, 2017

Source of data: Infrastructure Ontario

In Rentable Square Feet	Office Space (million)	Special Purpose Space (million)	Overall Government Properties (million)	%
Owned	8.0	22.3	30.3	68
Leased	7.5	2.5	10.0	23
Managed by Alternative Financing and Procurement Agreement*	–	3.8*	3.8	9
Total	**15.5**	**28.6**	**44.1**	**100**

* Owned by the provincial government and managed by private-sector companies.

Figure 3: Ages and Sizes/Areas of Government-Owned Buildings as of March 31, 2017[1]

Source of data: Infrastructure Ontario

Age (Years)	Number	% of Total Number	Size/Area[2]	% of Total Size/Area
0–10	130	3	4,557,799	13
11–20	103	3	2,508,579	7
21–30	317	8	4,079,034	12
31–40	447	11	3,813,950	11
41–50	1,137	28	8,365,206	24
51–60	1,035	26	4,632,716	13
61–70	274	7	1,610,746	5
Over 70	604	15	5,244,028	15
Total	**4,047**	**100**	**34,812,058**	**100[3]**

1. Infrastructure Ontario does not have the construction year for 791 buildings, with a combined size/area of 9,201,006 rentable square feet.
2. Size/area is measured in rentable square feet.
3. Total percentage has been rounded to 100.

Figure 4: Book Value of Buildings Managed by Infrastructure Ontario as of March 31, 2017

Source of data: Public Accounts of Ontario 2016/17

	Land and Buildings Overseen By Infrastructure Ontario ($ billion)	Total Provincial Ministries and Agencies' Land and Buildings ($ billion)[1]
Cost (A)	7.8	22.4
Amortization[2] (B)	2.3	3.4
Net Book Value (A – B)	**5.5**	**19.0**

1. Amounts exclude properties in the broader public sector (i.e., hospitals and schools). Properties not overseen by Infrastructure Ontario are directly managed by agencies that have the authority to manage their own property. See **Appendix 1** for a list.
2. Amortization is the process of expensing the cost of an asset, such as a building, over its projected life.

and other land that the government has set aside for economic development purposes, such as to develop and later sell.

While most land and buildings owned by ministries and their agencies are overseen by Infrastructure Ontario, 58 agencies have title and authority to manage their own property, such as the land and buildings owned by Metrolinx and the Royal Ontario Museum. See **Appendix 1** for a list of the 34 agencies that manage their properties. Twenty-four other agencies choose to have Infrastructure Ontario manage their properties for them.

2.1.1 Governance

Infrastructure Ontario is overseen by its board of directors, which in turn is accountable to the Minister of Infrastructure for its responsibilities to manage government properties.

Infrastructure Ontario's responsibilities are set out in a Memorandum of Understanding and in an Enterprise Realty Service Agreement (Agreement) between itself and the Ministry of Infrastructure (Ministry). The Memorandum also requires Infrastructure Ontario to comply with directives from Treasury Board and follow the Ministry's policies and standards; for example, the Accommodation Standard that sets out targets for efficient use of space and the Ministry's Realty Policy that requires consideration of current available space within government properties prior to making decisions on accommodation. The Agreement provides greater detail on Infrastructure Ontario's responsibilities, including the requirement for it to maintain government property through the development of an annual capital budget and requirements on what it must report annually to the Ministry, including the condition of government property.

2.1.2 Funding

For real estate services, Infrastructure Ontario is funded primarily through the payments it receives from client ministries and agencies for managing their properties. It also receives funding from the Ministry of Infrastructure (Ministry).

As seen in **Figure 5**, for government-owned buildings, client ministries pay Infrastructure Ontario a "charge for accommodation," which is intended to cover the costs to maintain the properties. This charge consists of four components:

- base rent;
- operating and maintenance costs;
- payments in lieu of property taxes; and
- facility management fee—calculated using fixed rates per rentable square foot based on the location and use of the government-owned property. This fee is lower than the 15% of government-owned properties' operating and maintenance expense that the Enterprise Realty Service Agreement between

Figure 5: Charge for Accommodation

Source of data: Infrastructure Ontario

Type of Charge	Description of Charge
Base rent	Intended to fund required capital projects.[1]
Operating and maintenance[2]	Services include landscaping, janitorial services, utilities, snow clearing, repairs and maintenance.
Payments in lieu of property taxes	Property taxes.
Facility management fee[3]	To cover the cost of managing government properties.

1. Also includes certain relocation costs to make more efficient use of government buildings.
2. Funding is collected by Infrastructure Ontario and paid to its external property and land manager, which pays the service providers.
3. These amounts are set rates based on rentable square feet and are intended to fund the management fee of 15% of the operating and maintenance expenses.

Figure 6: Charges for Accommodation Billed by Infrastructure Ontario to Client Ministries and Agencies Occupying Government-Owned Properties, 2011/12–2016/17 ($ million)

Source of data: Infrastructure Ontario

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Avg. % Change Each Year
Base rent[1,2]	101.73	101.70	102.94	104.10	102.70	101.88	0.03
Operating and maintenance of occupied buildings	141.68	155.69	155.98	172.51	174.18	176.58	4.60
Infrastructure Ontario management fee[1]	12.35	12.30	12.33	12.29	12.06	12.22	(0.21)
Payments in lieu of taxes	41.80	43.12	46.19	48.10	50.05	47.69	2.75
Total Charge for Accommodation	**297.56**	**312.81**	**317.44**	**337.00**	**338.99**	**338.37**	

1. Based on rentable square feet.
2. Small variances can occur in base rent revenue and Infrastructure Ontario's management fee, resulting from activities that include government employees moving into or out of privately owned buildings; base rents being increased after a government property is renovated; or discontinuance of use of an owned property when it is no longer needed.

Infrastructure Ontario and the Ministry allows Infrastructure Ontario to earn.

Figure 6 shows the charge for accommodation that Infrastructure Ontario billed client ministries and agencies over the past six years.

As seen in **Figure 7**, a portion of Infrastructure Ontario's revenue is also provided by the Ministry to help with capital repairs and the costs of properties leased to the private sector, as well as the costs of operating vacant properties. Infrastructure Ontario also receives strategic advisory fees and project management fees to provide strategic direction for government properties and oversee capital projects, respectively.

2.1.3 Staffing

Infrastructure Ontario's total operating costs ranged from $46.7 million in 2011/12 to $56 million in 2016/17. Infrastructure Ontario has procured the services of an external property and land manager, as well as two project management companies to provide real estate services (discussed further in **Section 2.2.1**).

As seen in **Appendix 2**, for the 2016/17 fiscal year, Infrastructure Ontario had 179 direct staff in the real estate division. An additional 104 staff, including legal, finance, information technology, human resources and procurement specialists, further supported real estate operations. As seen in **Figure 8**, total Infrastructure Ontario staffing costs

Figure 7: Funding to Infrastructure Ontario from Ministry of Infrastructure, 2011/12–2016/17 ($ million)

Source of data: Infrastructure Ontario

Type of Funding	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Capital repairs	79.03	64.18	67.24	72.10	84.10	68.31
Strategic advisory fee and project management fee[1]	18.70	18.70	18.70	18.70	18.70	18.70
Vacant properties' funding	14.1	16.36	12.85	13.98	13.96	14.37
Properties leased to private sector[2]	7.04	7.04	7.04	7.04	7.04	7.04
Total	**118.88**	**106.28**	**105.83**	**111.82**	**123.80**	**108.42**

1. Based on the sum of strategic advisory fees, which are 0.2% of the net book value of government property, and the project management fee, which is between 2% and 5% of the value of capital projects managed by Infrastructure Ontario. This is capped at $18.7 million annually.
2. The funding is to offset expenses incurred because the revenue from these leases is returned to the Ontario Government.

Figure 8: Infrastructure Ontario's Operating Costs for Managing Government Properties from 2011/12 to 2016/17 ($ million)

Source of data: Infrastructure Ontario

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Salaries and benefits	28.12	29.44	30.33	32.75	32.90	37.48
General and administration	9.35	11.75	12.35	11.52	8.03	8.88
External property and land manager fee	9.27	9.11	9.66	9.91	9.78	9.68
Total	**46.74**	**50.30**	**52.34**	**54.18**	**50.71**	**56.04**

for its real estate services ranged from $28.1 million in 2011/12 to $37.5 million in 2016/17.

The staff are mainly responsible for oversight, although Infrastructure Ontario also performs some functions directly, such as providing realty advisory services, property sales transactions, direct project delivery—for example, new building construction—and identifying government-owned properties that might be over-valued for the assessment of property taxes.

2.2 Capital Projects

Capital projects consist of new construction, major renovations and rehabilitation of buildings. Capital projects are funded in two ways: ministries either request capital projects to be completed using their own funding, or Infrastructure Ontario identifies projects to be completed based on an assessment of need, using capital funding from base rent and the Ministry.

Projects are selected based on the greatest need for repairs in government properties. Infrastructure Ontario allocates funding to external project managers at the beginning of the fiscal year, first to ongoing projects started in past years and then for new projects.

As seen in **Figure 9**, Infrastructure Ontario has outsourced the management of capital projects between $100,000 and $10 million to external project managers, but will manage some projects of less than $10 million itself at its discretion. It directly manages those that are between $10 million and $100 million. Projects over $100 million are handled under the Alternative Financing and Procurement model, which was previously reviewed by our Office in our *2014 Annual Report*.

As seen in **Figure 10**, about $805 million in projects individually less than $10 million initiated by Infrastructure Ontario were delivered by its external project managers from 2011/12 to 2016/17.

Figure 9: Capital Procurement by External Project Manager

Source of data: Infrastructure Ontario

Capital Value	Project Manager	2017 # of Projects	2017 Construction Costs ($ million)	Contract Expiry
From $100,000–$10 million	Outsourced by Infrastructure Ontario to project management company[1]	1,574	277	Project Managers A and B: 2020 (with five single-year extensions possible beyond 2020)
Less than $100 million[2]	Infrastructure Ontario (traditional procurement)	24	48	n/a
Over $100 million[3]	Infrastructure Ontario Alternative Financing and Procurements	6	1,194	30 years after AFP maintenance agreement

Note: n/a—Not applicable because Infrastructure Ontario is managing these projects.

1. For the majority of the period under audit Project Managers A, B and C were the project management companies. In 2014, Project Manager C lost the bid to continue delivering the project management services.
2. Infrastructure Ontario can take on any project at its discretion. 33% of projects were under $1 million; 21% were between $1 million and $10 million; and 46% were over $10 million, with one—related to the Pan Am Games—as high as $128 million.
3. A value-for-money audit of projects procured using the Alternative Financing and Procurement arrangement was done by our Office in 2014. In 2015, the threshold of AFP projects changed from $50 million to $100 million. Projects with capital value between $50 million and $100 million are delivered through traditional procurement unless an exception is made and approved by the government.

Figure 10: Total Costs of Projects Less Than $10 Million Initiated by Infrastructure Ontario between 2011/12 and 2016/17 ($ 000)

Source of data: Infrastructure Ontario

Project Manager	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Total
A	33,741	55,778	51,710	35,775	92,565	96,505	**366,074**
B	19,971	19,774	19,286	20,121	35,888	53,761	**168,801**
C*	54,129	59,007	71,259	65,158	15,797	4,491	**269,841**
Total	**107,841**	**134,559**	**142,255**	**121,054**	**144,250**	**154,757**	**804,716**

* Project Manager C's projects were initiated prior to 2014/15, when it ceased being a project manager.

For outsourced projects, the external project manager is responsible for the procurement and management of required contractors. Infrastructure Ontario pays its external project managers based on a percentage of the actual cost of the project, some of which may be required to be returned if performance measures set out in their contracts (see **Figure 11**) are not met.

2.2.1 Project, Property and Land Managers

External Property and Land Manager

Infrastructure Ontario (then Ontario Realty Corporation) entered into a Master Service Agreement in 2009 with a real estate services company to be the external property and land manager to provide all operating and maintenance work for client ministries and agencies for leased and owned properties. The Master Service Agreement is scheduled to end March 31, 2020. Operating services include snow removal, cleaning, security and landscaping. Maintenance services include repairs to equipment,

Figure 11: Performance Measures of Project Managers A and B in 2015 and 2016

Source of data: Infrastructure Ontario

Performance Measure[1]	Purpose	Dollars Awarded in 2015/2016[2]	% Awarded
Spend 95% to 100% of allocated budget from the Ministry of Infrastructure	To measure the project managers' ability to spend all the Ministry of Infrastructure's program funding.	Project Manager A $63,165/$63,165	100
		Project Manager B $21,677/$29,436	74
Spend 95% to 100% of amount project managers forecast in December	To measure the project managers' ability to spend by March what was forecast in December.	Project Manager A $31,583/$31,583	100
		Project Manager B $14,718/$14,718	100
85% of projects within 5% of post-tender estimate	To measure project managers' ability to keep final costs within 5% of the post-tender estimate.	Project Manager A $63,165/$63,165	100
		Project Manager B $29,436/$29,436	100
90% of projects reach project completion on time (within 5 days)	To measure the project managers' ability to complete projects on or before the planned date.	Project Manager A $22,599/$22,599	100
		Project Manager B $4,205/$10,513	40
Project close-out on time ≥ 75%	To measure the project managers on whether they complete all responsibilities and deliverables within 120 days after substantial completion.	Project Manager A $45,118/$45,118	100
		Project Manager B $0/$21,026	0
Timely communications of project cost or schedule deviations ≥ 90%	To measure the project managers on whether they communicate project cost/schedule deviations in a timely manner.	Project Manager A $56,397/$56,397	100
		Project Manager B $0/$26,282	0
Non-conformance action plan completion and submission to Infrastructure Ontario on time (100%)	To measure the project managers on whether they provide Infrastructure Ontario with a plan to rectify non-conformance within 10 business days.	Project Manager A $56,397/$56,397	100
		Project Manager B $0/$26,282	0
Client satisfaction ≥ 85%.	To measure the project managers' ability to receive a client satisfaction score above 80% for projects completed.	Project Manager A $28,199/$28,199	100
		Project Manager B $13,141/$13,141	100
Data quality – completeness and accuracy is ≥ 90%.	To measure whether the project managers provide complete and accurate capital project data.	Project Manager A $56,397/$56,397	100
		Project Manager B $26,282/$26,282	100
Form for pre-tender estimate changes provided to management on time is ≥ 90%.	To measure the project managers on whether they complete and submit changes to their pre-tender estimate in a timely manner.	Project Manager A $28,199/$28,199	100
		Project Manager B $13,141/$13,141	100

1. For all above required rates of compliance, external project managers may request Infrastructure Ontario to exempt a project from being included in this measure.
2. External project managers that meet performance measures receive all performance pay. If they do not meet a performance measure, external project managers either receive no performance pay—if they miss it by a large margin—or receive some performance pay—if they miss it by a small margin.

such as security systems and heating, ventilation and air conditioning, and buildings.

The majority of the annual cost of the Master Service Agreement is based on an annual budget that the external property and land manager develops and that Infrastructure Ontario reviews and approves. The external property and land manager receives management fees based on the number of properties managed and the types of services that are to be provided. The external property and land manager was paid $9.7 million in 2016/17. Within the last five years, its fees ranged from a low of $9.1 million in 2012/13 to a high of $9.9 million in 2014/15 (see **Figure 8**). About one-quarter of the fees paid to the external property and land manager are based on meeting performance measures, such as whether services are on time and on budget and the quality of services.

It procures vendors to provide operating and maintenance services according to Infrastructure Ontario's procurement policy requirements, and renews these contracts every few years. See **Figure 12** for six years of cost information.

The external property and land manager is also responsible for inspecting all buildings annually for maintenance and capital needs with more detailed inspections occurring every two years for core and transition buildings. See **Figure 1** for more on core and transition buildings. Information obtained from these inspections is entered into Infrastructure Ontario's asset management system. The external property and land manager runs an annual report on the maintenance and capital construction repair needs for the next 10 years that prioritizes spending; for example, the highest priority is given to projects that impact health and safety. Infrastructure Ontario uses this report to select the projects that it plans to fund and sends a list of these projects to the external property and land manager, which, in turn, is responsible for determining a plan for each project that includes the cost estimate, scope, and timeline in consultation with the external project managers.

External Project Managers

In 2014, Infrastructure Ontario contracted with two external project managers (Project Manager A and Project Manager B) to manage an estimated $900 million of capital projects, each estimated to cost between $100,000 and $10 million. Prior to 2014, the company that provided external property and land manager services was also an external

Figure 12: Government-Owned Properties' Operating and Maintenance Costs, 2011/12–2016/17 ($ 000)

Source of data: Infrastructure Ontario

Operating and Maintenance Expenses	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Avg. % Change Each Year
Cleaning	25,617	25,216	25,690	23,921	26,328	26,206	0.61
Repairs and maintenance[1]	60,553	60,285	62,253	65,746	70,695	68,008	2.43
Security	5,728	6,067	7,342	8,751	9,129	9,169	10.18
Grounds and roads	9,320	9,029	10,607	10,226	11,952	12,025	5.65
Electricity	40,694	42,618	47,451	46,486	49,264	54,538	6.14
Other utilities	26,254	27,394	27,718	31,144	24,712	25,566	0.14
General and administration	18,364	16,170	17,636	17,369	19,928	20,173	2.31
Total[2]	**186,530**	**186,779**	**198,697**	**203,643**	**212,008**	**215,685**	

1. This includes the cost of building repairs up to $10,000, which Infrastructure Ontario recovers from tenants. The cost of larger capital repairs is included in capital projects.
2. These amounts are higher than the operating and maintenance charged to ministries and agencies because they include vacant property costs and costs of leases to the private sector.

project manager; in 2014, the number of external project managers was reduced from three to two.

The project managers procure architects and general contractors from Infrastructure Ontario's vendor-of-record listing. Every few years, Infrastructure Ontario conducts an open procurement to obtain architects, interior designers, general contractors and engineers to populate its vendor-of-record listing. The last such process was conducted in June 2013, with contracts lasting three years from then. In 2016, Infrastructure Ontario invoked a one-year extension to June 2017, and at the time of our audit it was completing a new vendor-of-record process. Infrastructure Ontario's external project managers are required to use these vendors.

The vendors of record do not include electricians, bricklayers, plumbers and other tradespeople, who are procured directly by the general contractor at its discretion. **Figure 13** charts the responsibilities for real estate services for government properties.

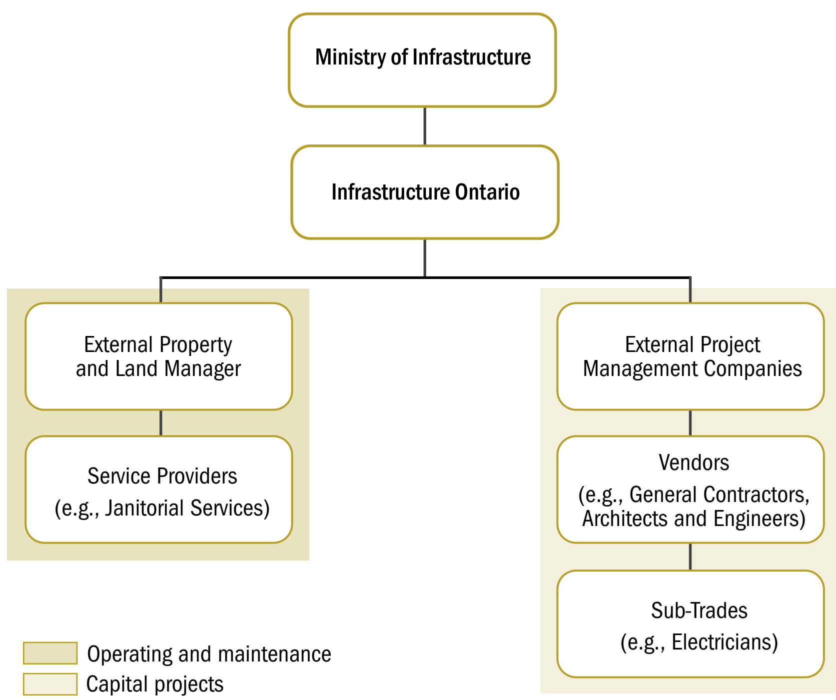
2.2.2 Process for Estimating Construction Projects' Cost

Infrastructure Ontario's cost estimate process has over a dozen stages over which costs for capital projects between $100,000 and $10 million are revised and refined. Five key stages are referred to throughout this report to trace project cost estimate changes, with the final step being the actual cost at project completion, which is when a building is ready to be used for its intended purpose, but some work may still need to be done. Infrastructure Ontario's project planning estimates are as follows:

1) **Initial cost estimate:** Infrastructure Ontario creates the first estimate of costs for all projects using its asset management system. The system develops the initial estimate using industry standards for individual components (such as a window or door) and adding a mark-up for costs, such as for contingencies and design costs consistent with industry standards, to arrive at the initial estimated total project cost. This estimate, which is

Figure 13: Organizational Chart for Real Estate Services for Government Properties

Prepared by the Office of the Auditor General of Ontario



updated annually, is then used to develop Infrastructure Ontario's rolling 10-year plan, which is used to prioritize projects within Infrastructure Ontario.

2) **Business plan estimate:** For Infrastructure Ontario–initiated capital projects the business plan estimate is created by the external property and land manager. For such projects, the external property and land manager prepares an estimate of scope, cost and timelines. If a construction or repair project is requested by a client ministry or agency, and the client ministry or agency provides funding for the project, then the client ministry/agency provides the estimate of scope, budget and timelines.
3) **Pre-tender estimate:** The external project managers then revise the business plan estimate of scope, cost and timelines after Infrastructure Ontario has assigned them the project. Project managers might revise this several times prior to arriving at the estimate that will be used as the basis for procuring the general contractor and vendors.
4) **Post-tender estimate:** The external project manager revises the estimated cost after awarding contracts to vendors. External project managers procure contractors mainly through either a public Request for Proposals or through Biddingo—an online bidding platform service used by the provincial and municipal governments and private companies, which automatically selects a set number of vendors through a vendor rotation process. The vendors used in this pool are selected by Infrastructure Ontario after it reviews their qualifications.
5) **Actual cost:** This is determined after project completion.

If a repair to a building is required due to an emergency, a more expedited process is followed, depending on the degree of urgency, to ensure that the emergency is addressed. In fiscal 2016/17, Infrastructure Ontario spent $7.8 million on emergency repairs and about $59 million in the past three years.

2.2.3 Deferred Capital Maintenance

Ideally, all required repair and maintenance work should be performed when the need is identified. In some cases, repair and maintenance work is deferred due to a lack of funding.

The Facilities Conditions Index (Index) is an industry standard used to measure the relative condition of a building. It is calculated by dividing the estimated cost of repair and maintenance work that is past due the cost to replace the building. According to the industry standard, buildings with an Index of 0% to 5% are considered to be in excellent condition, 5% to 10% are considered in good condition, and over 10%, in poor condition.

Infrastructure Ontario calculates the Index differently than the industry because it uses the Ontario Government's standard. This standard divides the cost of repairs required in the current and the next two years by the cost to replace the building. The Enterprise Realty Services Agreement includes a performance target for Infrastructure Ontario to ensure that based on the Ontario Government standard core government-owned buildings should be at an index of 0% to 10% (good condition) and at an index 11% to 20% (fair condition) for transition buildings. According to the government standard, a building with an index over 30% would be considered to be in poor condition.

2.3 Use of Government Properties

Standard for Office Size

The Ministry introduced the Office Accommodation Standard (Standard) in 2012. Infrastructure Ontario is required by the Enterprise Realty Services Agreement to work with client ministries in achieving this standard. The Standard sets the maximum rate of usage of office space in order to minimize the footprint of government properties. According to the Standard, the size of an office should not exceed 180 rentable square feet, on average, for each person occupying it. For example, an office that has 10 people should be no more than 1,800 square feet.

Disposal of Properties

Infrastructure Ontario disposes of properties that client ministries, agencies and Infrastructure Ontario have determined are no longer required for government use and are surplus. The disposal process can take many years and result in a property being sold on the open market, demolished or offered to a municipality or not-for-profit organization at a lower-than-market rate. If a municipality or not-for-profit purchases the property at a lower-than-market value, it is required to sign an agreement that allows Infrastructure Ontario the option of taking back the property or any profits realized upon the sale of the property within 20 years.

As seen in **Figure 14**, over the last five fiscal years, Infrastructure Ontario has sold 144 properties that were no longer needed by ministries and agencies for about $229 million.

From fiscal 2011/12 to 2016/17, across the province 261 buildings with 82 unique addresses and 1.3 million rentable square feet have been demolished to eliminate the costs of maintaining them. The land associated with these buildings was then offered to other government entities or offered for sale.

Accessibility of Government Properties

The *Accessibility for Ontarians Disability Act, 2005* (Act) took effect with the purpose of developing, implementing and enforcing accessibility standards to "achieve accessibility for Ontarians with disabilities" on or before January 1, 2025.

Also, the Ontario Building Code was updated in January 2015 with enhanced requirements for accessibility to a new building or an existing building that undergoes an extensive renovation. Neither the Act nor the Building Code requires existing buildings to be retrofitted to meet accessibility requirements.

Figure 14: Total Properties Sold by Infrastructure Ontario from 2012/13 to 2016/17

Source of data: Infrastructure Ontario

Fiscal Year	# of Properties Sold	Total Sales Value ($ million)
2012/13	41	131.24
2013/14	32	47.01
2014/15	25	12.54
2015/16	21	23.75
2016/17	25	14.86
Total	**144**	**229.40**

2.4 Maintaining Assets Obtained through Alternative Financing and Procurement

While most government properties are acquired through traditional build, lease or purchase, about 9% of government properties, based on rentable square feet as of March 31, 2017, were procured through the Alternative Financing and Procurement (AFP) model.

The AFP model was developed by Infrastructure Ontario about 10 years ago. Under the model, project sponsors in the public sector—provincial ministries, agencies or broader public-sector entities, such as hospitals and colleges—establish the scope and purpose of the project. Construction of the project is financed and carried out by the private sector.

In some cases, the private-sector company that constructed the asset is also responsible for maintaining the asset over a 30-year contract. One of the primary goals of this type of AFP contract is that the private-sector company maintains the property to help the handover of the property in a state of good repair at the end of the contract.

For hospitals that are procured through the AFP model and maintained through the AFP agreement, each hospital is responsible for managing its own maintenance contract with the private-sector company. Infrastructure Ontario is not directly involved in managing hospitals' maintenance contracts but often offers guidance to the hospitals when requested.

3.0 Audit Objective and Scope

The objective of our audit is to assess whether the real estate division of Ontario Infrastructure and Lands Corporation (Infrastructure Ontario) has effective systems and procedures in place to ensure that:

- real estate assets are acquired, managed, and disposed of with due regard for economy and the public interest;
- the accommodation requirements of government ministries and agencies are met in a cost-effective and timely manner;
- its Alternative Financing and Procurement arrangements support cost-effective management of maintenance in buildings in the government and the broader public sector; and
- its performance is sufficiently and appropriately measured and reported on to allow for a meaningful assessment of its activities.

Before starting our work, we identified the audit criteria we would use to address our audit objective. These criteria were established based on a review of applicable legislation, policies and procedures, and internal and external studies. Senior management at Infrastructure Ontario, and the Ministry of Infrastructure (Ministry) reviewed and agreed with the suitability of our audit objective and related criteria, as listed in **Appendix 3**.

Our audit was conducted primarily at the head office of Infrastructure Ontario in Toronto. We also visited the offices of Infrastructure Ontario's external property and land manager and external project managers in Toronto and Mississauga. We conducted our fieldwork between January 9, 2017, and July 30, 2017. We obtained written representation from Infrastructure Ontario and the Ministry that, effective November 17, 2017, they have provided us with all the information they were aware of that could significantly affect the findings or the conclusion of this report.

Our audit focused on Infrastructure Ontario's management of the provincial government's general real estate portfolio, which consists of buildings and land owned by Ontario Government ministries and many of its agencies. The portfolio is referred to in this report as government properties. Our work focused on capital projects and the maintenance, use and sales of government properties during the period April 1, 2011, to March 31, 2017. We reviewed relevant data available at Infrastructure Ontario and also data from other organizations, such as the online bidding service Biddingo, and external property and land and project management companies. We did not focus on the new construction projects that Infrastructure Ontario was responsible for managing itself since some of these projects related to the Pan Am/Parapan Am Games, which we reviewed in our *Special Report: 2015 Pan Am/Parapan Am Games*.

We engaged an engineering firm to assess the reasonableness of cost estimates and escalations in capital projects.

We also reviewed the provision of maintenance services for government properties and hospitals constructed through Infrastructure Ontario's Alternative Financing and Procurement (AFP) framework. In total, we spoke to seven hospitals, which were in southern and eastern Ontario, and visited one, that all had maintenance work delivered under an AFP arrangement for at least two years at the time of our audit.

We met with staff from the City of Toronto real estate services to obtain an understanding of how they manage their properties. We also interviewed staff with the Government of Canada, Alberta and British Columbia to discuss how they manage real estate properties in their respective jurisdictions.

In addition to engaging stakeholder groups—such as the AODA (*Accessibility for Ontarians with Disabilities Act*) Alliance—we visited the Ministry of the Attorney General, Ontario Provincial Police (OPP), Ministry of Transportation, Ministry of Government and Consumer Services, Ministry of Community Safety and Correctional Services, Ministry of Natural Resources and Forestry, Ministry of the Environment and Climate Change, and Ministry of Health and Long-Term Care to obtain their feedback on the services they receive from Infrastructure Ontario. We also contacted the Ministry of Health and Long-Term Care to provide additional information on hospital funding as it pertained to the maintenance work related to AFP contracts.

We reviewed the audits completed by the Ontario Internal Audit Division in this area in planning our work.

4.0 Detailed Audit Observations: Infrastructure Ontario

4.1 Limited Competition for the Procurement of Project Management Services

4.1.1 RFP Divides Province into Only Two Zones

In 2014, Infrastructure Ontario issued a Request for Proposals (RFP) for management services for capital projects for government properties worth $900 million over five years. The RFP split the project management services across the province into only two zones: a southwest region, east region and central region in one, and the other consisting of a northern region and Toronto. The RFP stated that one project management company would be assigned to each zone, which limited the bidders to larger real estate project management companies that had sufficient resources to cover the required volume of projects.

The result was that the competition attracted only three companies to bid: Two contracts for an estimated 7,500 projects, each worth between $100,000 and $10 million were awarded to two (Project Manager A and Project Manager B) of the three companies that had bid. Both of these companies held contracts prior to 2014 for project management services with Infrastructure Ontario. The third company that had bid already had work with Infrastructure Ontario and continued in its ongoing role of external property and land manager.

This RFP was most suited for bids from larger project management companies that could manage a large amount of work across many areas of the province.

Prior to setting the requirements for the 2014 RFP, Infrastructure Ontario had spent $108,000 on a consultant to scan the industry on the best approaches for outsourcing project management services and assess market interest. The consultant's report noted that other options might have resulted in more bids. For example, the report noted that many smaller companies would have welcomed an opportunity to bid, but expressed concerns that they were not large enough to commit to the volume of work required. Despite this, Infrastructure Ontario did not consider restructuring the RFP to attract more bidders.

We noted that the management fees that the external project managers included in their 2014 bids were in most cases higher than the fees they had earned in the last contract. For example, Project Manager A's 2008 rate for projects between $500,000 and $1 million was 6.75%, and for projects $1 million to $5 million was 4.75%. Under the 2014 contract this increased to 9.5% for projects $250,000 to $5 million. This increase in management fees is reflected in **Figure 15**.

4.1.2 External Project Manager Awarded Contract despite Low Performance Scores

Infrastructure Ontario awarded the 2014 contract for one of the zones to Project Manager B, despite its poor past performance on its previous contract between 2011 and 2014 as measured by Infrastructure Ontario's own performance measures. Performance deficiencies prior to winning the second contract included projects under its management being completed late, over budget and

Figure 15: Total Management Fees, Including Performance Pay, for Each Project Manager, 2011/12–2016/17 ($)
Source of data: Infrastructure Ontario

Project Manager	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17[1]	Total
A	5,517,302	6,154,222	5,456,511	4,461,799	6,548,754	10,361,960	**38,500,548**
B	1,480,756	1,355,348	1,682,280	2,237,013	3,548,412	5,302,837	**15,606,646**
C	3,167,321	4,044,977	5,479,357	4,301,412	1,051,381	230,460	**18,274,908**
Total	**10,165,379**	**11,554,547**	**12,618,148**	**11,000,224**	**11,148,547**	**15,895,257**	**72,382,102**

1. Performance pay will be calculated in late fall 2017.
2. Reasons for the increase in management fees between 2015/16 and 2016/17 included the increase in fee rates under the new contract, with a larger portion of new fee rates applicable in 2016/17 compared to 2015/16 and an increase in project volumes.

with concerns regarding the quality of work done. For example:

- From 2011/12 to 2013/14, Project Manager B received poor scores on the customer satisfaction survey Infrastructure Ontario completed. Client ministries surveyed after projects were completed gave it scores ranging between 25% and 69% in these years: the required score to pass the performance measure was 80%.
- The key performance measure used to evaluate whether external project managers were on budget required that for a certain portion of all projects completed during the year, the actual project costs were within a certain percentage of the pre-tender estimate. Project Manager B failed this measure, with a declining score between 2012/13 and 2014/15:
  - 2012/13—69% of projects were within 20% of the pre-tender estimate (75% was the target);
  - 2013/14—66% of projects were within 20% of the pre-tender estimate (75% was the target); and
  - 2014/15—50% of projects were within 20% of the pre-tender estimate (65% was the target).

This performance measure was eliminated after 2014/15.

- The key performance measure used to evaluate whether external project managers were on time for completing projects was that project completion was within five days of planned completion for 90% of projects. Project Manager B failed this measure from 2012/13 to 2015/16 with scores ranging from 74% in 2012/13 to 88% in 2013/14. This measure is further discussed in **Section 4.3.5**.

Since then, Project Manager B has continued to perform poorly on the new contract. It has not met five of 10 performance measures since it was awarded the contract in 2014. These included measures for completing contracts on time and on budget and a lack of timely communication of "deviations," such as not complying with contractual requirements for design or construction materials or submitting an action plan to rectify such non-compliance.

4.1.3 Past Performance Not Part of Assessment of Bidders

Infrastructure Ontario did not consider past performance when it assessed the three bids in response to the 2014 RFP. It assigned scores to the bidders for each of the two zones. The scoring was based on a weighted scale as follows:

- 60% for qualifications and experience of team bidding and key personnel to be involved in the contract going forward;
- 5% for financial soundness;
- 5% for case demonstration; and
- 30% for price.

The three bidders scored as follows:

- Project Manager A—91% in both zones;
- Project Manager B—78% in both zones; and
- Project Manager C—74% in one zone and 76% in the other zone.

Despite Project Manager A scoring significantly better than Project Manager B in both zones, Project Manager B was awarded the contract for one of the two zones because Infrastructure Ontario wanted each zone to have a different project manager to guard against one company performing poorly and leaving it no alternative service delivery options.

Furthermore, the penalties that could be levied for poor performance, such as projects not on time, on budget or of poor quality, in Project Manager B's new contract were lower than in Project Manager A's new contract. Specifically, if Project Manager B failed to meet all performance measures it would lose a maximum of 25% of its annual management fee, whereas Project Manager A would lose 45% of its annual management fee. The project management companies' penalty rates were different because the RFP allowed each company to choose its own rate. The penalties were structured this way, despite the fact that Project Manager A was a better performer on the previous contract with Infrastructure Ontario. Project Manager A had failed only one of Infrastructure Ontario's performance measures over the prior four years.

In negotiating the contract with Project Manager B, Infrastructure Ontario did not attempt to negotiate to increase the amount of its penalty to bring it more in line with Project Manager A.

Infrastructure Ontario informed us that in its view it would have been inappropriate to further increase the portion of pay that could be withheld as a result of poor performance, since this was evaluated as part of the RFP and alteration of the amount prior to execution of the contract would likely have attracted legal liability.

RECOMMENDATION 1

We recommend that Infrastructure Ontario review and adjust accordingly its process for procuring project management services to:

- formally prepare a new business case on whether to enable more project management companies in the future to bid on such services;
- include standard penalties for all contract managers on future RFPs; and
- incorporate past performance in the evaluation of the bidders.

RESPONSE FROM INFRASTRUCTURE ONTARIO

In advance of the next project management services procurement, and consistent with our current practice, Infrastructure Ontario will prepare a business case that will consider approaches to ensure competitiveness in an open, fair and transparent procurement process.

Infrastructure Ontario will consider standardizing the portion of the management fee that is earned only if performance measures are met in future contracts, while maintaining competition.

As part of our due diligence, Infrastructure Ontario will also consider a past performance category in the evaluation criteria of future procurements.

4.2 Better Oversight Needed of External Project Managers' Procurement Practices

4.2.1 Infrastructure Ontario's Procurement Policies Differ from the Government's

Management Board of Cabinet's (MBC's) Ontario Public Service Procurement Directive requires that all vendors of record within a region be invited to bid for any government procurement over $600,000. Crown agencies, including Infrastructure

Ontario, are exempted from being required to follow this provision of the MBC directives on procurement, even though Infrastructure Ontario's external project managers procure capital project services on behalf of ministries that are subject to the more stringent requirements of the MBC directives. For example, the Ministry of Transportation policies require the Request for Proposals (RFP) for any construction contract over $100,000 to be public, which is even more competitive than inviting bids from a pool of vendors of record.

Prior to 2013/14, Infrastructure Ontario required all vendors of record to be invited by external project managers for projects over $100,000. In 2013/14, Infrastructure Ontario amended its policies to instead require that:

- for projects between $25,000 and $249,999, a minimum of three vendors needed to be invited;
- for projects between $250,000 and $749,999, a minimum of five vendors needed to be invited; and
- for projects over $750,000 or greater, a minimum of eight vendors needed to be invited.

Infrastructure Ontario informed us that it discontinued its requirement to invite all vendors because feedback from vendors indicated that, due to the costs associated with developing a bid, they were less likely to bid on projects with larger numbers of potential bidders because there was too much uncertainty about winning the bids.

It also introduced a policy of allowing external project managers to invite specific vendors from its vendor of record list. This practice is discussed further in **Section 4.2.3**.

Infrastructure Ontario's external project managers use Biddingo—an online bidding platform service that offers automatic vendor rotation—to select vendors to bid on client ministry and agency capital projects. All such vendors must be selected from Infrastructure Ontario's vendors of record for general contractors, architects, interior designers and engineering consultants, with the number of vendors selected set out in Infrastructure Ontario's policies. Biddingo automatically identifies the vendors to be invited through its vendor rotation process.

We could not readily determine how many companies had actually bid on each procurement due to the limited information tracked by Infrastructure Ontario. We therefore obtained data directly from Biddingo's information system and selected a sample of procurements conducted by all three project management companies since the start of 2011/12.

We found about 78% of the procurements in our sample attracted three or more bids while 22% attracted only two bids. All of our sampled procurements consisted of projects with estimated costs of over $600,000.

Infrastructure Ontario revised its vendor-of-record policies in May 2016 to instead require 10 vendors to be automatically invited for all general contractor procurements over $100,000. This change was initiated because Infrastructure Ontario's anecdotal feedback from its external project managers indicated that they were not receiving a sufficient number of bids and needed to invite additional vendors.

4.2.2 Limited Oversight of Procurements Conducted by External Project Managers

Over the last six years ending in 2016/17, Infrastructure Ontario spent over $1 billion on procurements for capital projects. Infrastructure Ontario does not normally obtain key documentation on procurements, such as bids and evaluations of vendor bid submissions, performed by its external project managers. Between 2011/12 and 2016/17, procurement staff at Infrastructure Ontario reviewed only 3% of contracts procured by external project managers from vendors of record. The contracts were chosen based on a staff person's judgment and random selection rather than on consistent risk criteria, partly because Infrastructure Ontario does not have enough information on the procurements to do a risk-based sample selection.

RECOMMENDATION 2

We recommend that Infrastructure Ontario obtain sufficient procurement data from external capital project managers, including all bids, change orders and bid evaluations to:

- establish a risk-based process to review procurements carried out by capital project managers;
- confirm that its procurement policies result in sufficient competition among bidders; and
- confirm that contracts for capital projects are awarded to the most qualified bidders.

Infrastructure Ontario should then adjust its policies accordingly if needed.

RESPONSE FROM INFRASTRUCTURE ONTARIO

The analysis of Infrastructure Ontario's procurement and project information can be enhanced. An updated procurement audit program will be introduced to provide additional insight into bids and bid evaluations for procurements that are determined, through audit program guidelines, to potentially be higher risk. Additionally, Infrastructure Ontario will consistently gather data on change orders to inform future improvements in procurement audit criteria.

At the time of this report, Infrastructure Ontario has implemented the updated vendor-of-record arrangements and is in the process of implementing updates to the vendor performance program for vendor-of-record participants. We will continue to strike a balance between ensuring a sufficient opportunity to bid, ensuring those bidders are qualified, and getting the best price on bids.

Infrastructure Ontario has confirmed that its qualification process is robust and that all bidders in its vendor-of-record program are qualified. Contracts are awarded on a competitive basis to qualified bidders that provide the best value.

Policies will be reviewed and updated if Infrastructure Ontario determines it to be an appropriate step to ensure continuous improvement.

4.2.3 Nearly $49 Million of Projects Awarded to Vendors Invited by External Project Managers in Three Years

Since 2013/14, Infrastructure Ontario has allowed external project managers to manually add vendors outside the usual vendor rotation process—that is, vendors on Infrastructure Ontario's vendor of record may be added over and above those selected automatically by the Biddingo service. Infrastructure Ontario began allowing manual adds after the discontinuance of the 2013/14 practice of inviting all applicable vendors for projects over $100,000.

Infrastructure Ontario informed us that this manual adds practice was intended to allow external project managers the opportunity to invite vendors that were uniquely well suited to a particular project. However, we found instances where an external project manager cited that a vendor should be added because it had worked on a similar project, but did not provide evidence that other such work was performed.

During the 2013/14 to 2016/17 fiscal years, vendors were manually invited by external project managers for 321 projects, and nearly half of these projects, totalling $48.6 million, were awarded to these vendors out of a total of $494 million awarded to vendors over this period.

Although Infrastructure Ontario has no formal policies on when a vendor can be manually added, it informed us that it had advised external project managers in 2013 that they must provide Infrastructure Ontario with a reason for manual additions and obtain approval before adding them.

Required Approval for Manual Adds Not Always Provided

In our review of a sample of procurements where vendors were manually added in this four-year period, we found no strong rationale and, in some cases, no rationale at all for inviting vendors outside the usual vendor rotation process. We also found cases where Infrastructure Ontario had not been advised when some vendors were manually added—even though Infrastructure Ontario informed us that its approval is required.

We found that the top 10 most manually added bidders made up over 25% of the manual adds. An external project manager invited a company 10 times, and the company was awarded nine of those contracts. Infrastructure Ontario would not have identified this because it does not review manual adds.

Infrastructure Ontario had not performed any analysis to identify whether potential conflicts of interest existed in the manual bidding process between the project manager staff and the vendor manually added. Infrastructure Ontario informed us that its vendors are expected to declare any conflicts of interest as part of the process of being included in the vendor-of-record pool.

As a result of our raising this issue with Infrastructure Ontario, Infrastructure Ontario plans to increase its internal controls over the manual adds process, including:

- as of November 1, 2017, Biddingo will roll out a new requirement to allow manual additions only if external project managers provide a rationale for the addition and Infrastructure Ontario provides approval; and
- Infrastructure Ontario staff will be receiving from Biddingo a monthly report of all manual additions.

RECOMMENDATION 3

In order to ensure the fair and economical procurement of project contractors, we recommend that Infrastructure Ontario:

- obtain sufficient information on procurements conducted by external project managers, and analyze this information to determine whether there are any trends that suggest non-cost-effective procurement practices; for example, too few vendors bidding or a large portion of projects being awarded to only a few vendors; and
- implement its planned controls over external project managers manually adding vendors to identify any potential conflicts of interest in this process.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario will continue to monitor procurements to ensure the competitiveness and participation of qualified vendors. It will do so through increased sampling, quantitative analytics and ongoing dialogue with vendor-of-record participants and/or their industry associations.

At the time of this report, Infrastructure Ontario has already implemented heightened controls regarding the manual addition of vendor-of-record participants to procurements, and will further monitor manual additions through reports from the electronic tendering platform. Additionally, Infrastructure Ontario will assess other enhancements, such as requiring conflict-of-interest screening when vendors are manually added to bid invitations.

4.3 Ineffective Measures to Hold External Project Managers Accountable for Controlling Costs and Time to Complete Projects

4.3.1 Unreliable Cost Estimates Used for Planning

At our request, Infrastructure Ontario performed an analysis of the cost estimates of 70 projects completed between April 1, 2011, and March 31, 2016, valued at $24 million in total. The sample for the analysis consisted of only projects we could track from the initial cost estimate to the final costs for projects. As seen in **Figure 16**, the weighted average cost estimates increased by 168%—from about $9 million to $24 million—between the initial estimate and the final cost. The most significant part of this—a 119% increase—occurred between the initial budget estimate and the business plan estimate.

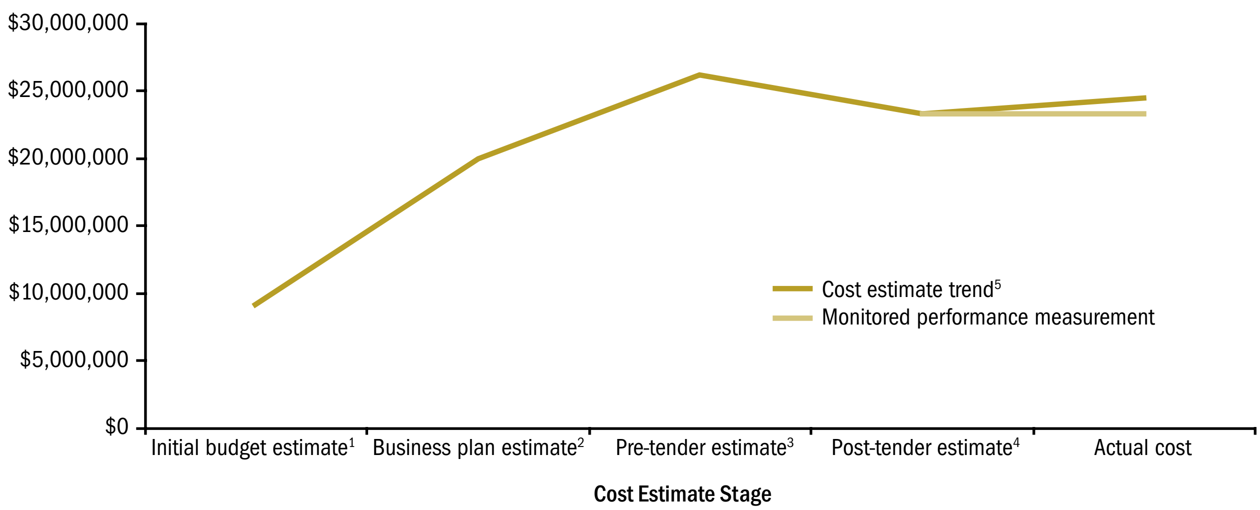
Infrastructure Ontario informed us that the initial cost estimates derived from its asset management system are incomplete because they are preliminary, and do not factor in the additional costs that might be incurred to address actual site conditions. Based on its experience with the cost-estimation system Infrastructure Ontario was using, the engineering firm that we contracted with also agreed with this assessment.

Infrastructure Ontario uses these initial cost estimates for prioritizing which projects to do for the current year and the next two years based on the estimated cost of the projects and the funding that is available. Since subsequent estimates and the actual cost of the projects tend to be significantly higher than the initial cost estimates, Infrastructure Ontario is not prioritizing projects based on reliable cost estimates and so does not have a sound basis for selecting projects that yield the highest cost-benefit.

Infrastructure Ontario's senior management informed us that the business plan estimate developed by the external property and land manager serves as a second check in deciding whether a project can be continued. However, as seen in **Figure 16**, there is also a significant difference

Figure 16: Capital Project Cost Escalations for Infrastructure Ontario–Initiated Projects

Source of data: Infrastructure Ontario



1. This is an objective cost estimate, based on industry standards.
2. The external property and land manager does the business plan estimate of cost and time for Infrastructure Ontario–initiated projects.
3. This is the external project manager's first estimate.
4. This estimate is used to measure the performance of the external project managers, based on how it compares with the actual cost of a project.
5. This trend is based on 70 projects with total actual costs to complete of $24,449,072. These projects were completed between 2012/13 and 2016/17. The number of projects completed in each fiscal year was as follows: 2012/13–21, 2013/14–34, 2014/15–10, 2015/16–4, 2016/17–1.

between the business plan estimate and the pre-tender estimate. Based on the sample, the weighted average difference between the business plan estimate and the pre-tender estimate was 31%, with differences in individual projects ranging from 86% lower to 1,509% higher.

4.3.2 Insufficient Work by External Property and Land Manager Results in Unreliable Cost Estimates

Infrastructure Ontario's Master Services Agreement with the external property and land manager states that each business plan estimate that the external property and land manager prepares, when compared with actual costs, should at the most differ by plus or minus 20%.

Infrastructure Ontario had not been tracking whether the external property and land manager is meeting this provision in the agreement. Our sample of capital projects showed that the difference between the business plan estimate and the actual costs differed by 22% ($20 million estimated cost compared to $24.4 million actual) overall. However, on a project-by-project basis, the differences were significant—actual costs ranged from being 89% less than the business plan estimate to 1,556% higher. For two-thirds of the projects sampled, the actual cost varied by over 20% of the business plan estimate. For nearly half of these, the variance was more than double.

The engineering firm we consulted with to review these cost estimates noted that the external property and land manager had not conducted sufficient work in reviewing site conditions to arrive at a reliable business plan estimate.

4.3.3 Post and Pre-tender Estimates Not a Good Measure to Control Costs

Infrastructure Ontario uses the external project managers' cost estimates to evaluate whether a project is "on budget." As per Infrastructure Ontario's agreement with the external project managers, actual costs are expected to be within 5% of the pre-tender estimates. Again, Infrastructure Ontario does not measure external project managers' compliance with this provision of the contract. Using available project management data for all projects completed during the six years ending 2016/17, we noted that the pre-tender estimates—and even post-tender estimates, which should be more accurate—varied significantly from the actual costs; for many of the projects, pre-tender and post-tender data was not tracked by Infrastructure Ontario. Of the $655 million of total project costs (1,533 projects) that we could analyze, only 15% of the costs came within 5% of their pre-tender estimates, and 38% of the costs came within 5% of their post-tender estimates. Over half of the total cost of projects had a variance greater than 20% of their pre-tender estimates and over 15% had a variance greater than 20% of their post-tender estimate.

4.3.4 Performance Pay Does Not Provide Sufficient Incentive for External Project Managers to Stay on Budget

External project managers have little incentive to contain final project costs to within budgets. Their performance pay for a project coming in on budget, that is, between the post-tender estimate and actual cost, was only about 0.5% of the total management fee for the project. Between fiscal 2011/12 and 2015/16, Infrastructure Ontario paid its three external project managers about $275,000—90% of the maximum possible performance fee for being on budget—for completing projects on budget. This compared with management fees paid during this period totalling $56.5 million, which is the total for the first five years shown in **Figure 15**.

Moreover, external project managers receive less performance pay if they underspend by more than 5% of the total amount Infrastructure Ontario allocates for projects to be spent by March 31, the end of the fiscal year. This measure was established to ensure all Infrastructure Ontario's funding is spent by the fiscal year-end because funds cannot be carried forward to the following year.

4.3.5 Completion Dates for Capital Projects Frequently Revised

Infrastructure Ontario has only one performance pay measure for external project managers for timeliness: it measures whether the contract is completed by the most recently revised completion date—but the revisions could occur at any time up to and after project completion. The performance measure requires that 90% of projects meet completion dates set in order to receive the maximum pay.

External project managers can revise project completion dates multiple times while the projects are ongoing and Infrastructure Ontario does not always ensure revisions are based on valid reasons. In some cases, circumstances beyond the project managers' control may necessitate such revisions. However, our audit work found that some date revisions did not appear reasonable and, in fact, appeared to be adjusted to ensure the performance measure on timeliness was met.

We reviewed a sample of projects that cost $143.5 million, completed between April 2013 and March 2017 where the planned completion date exactly matched the actual completion date, and found that in nearly half of our sample the project completion date had been revised after the project completion date had passed. For many of these projects, the reason provided by the external project manager was that the change was made to align the planned project completion date to the actual completion date. These projects reached project completion, on average, 330 days later than originally planned.

One of the ministries that had experienced delays for two security system installations, which were both ministry-funded, informed us that the cause was inadequate staffing provided by external project managers to oversee projects and incomplete or substandard work performed by vendors.

At the time of our audit, Infrastructure Ontario also performed an analysis to determine the frequency that the external project managers were adjusting completion dates and also found instances of project completion dates being revised after the project completion date.

RECOMMENDATION 4

In order to ensure capital projects planning uses reliable estimates to achieve cost-effective projects, we recommend that Infrastructure Ontario:

- review initial cost estimates to ensure they are reasonable for prioritizing capital projects to be funded;
- confirm that the external property and land manager and external project managers are complying with the provisions of their contracts or Master Services Agreement that expect their estimates of project costs to be within a certain percentage of actual costs, and take corrective action where necessary;
- re-evaluate and update future contracts to provide sufficient incentives to external project managers to complete capital projects on time and on budget; and
- review and confirm that external project managers have valid reasons for revising project completion dates.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Within the funding envelope, Infrastructure Ontario currently uses a robust capital planning process that prioritizes projects based on health and safety and building code compliance. This process includes a needs assessment, initial cost estimate, design development, pre-tender and post-tender estimates, and actual project cost. Infrastructure Ontario has initiated a review of best practices of capital project costing with a third-party firm and will use its recommendations to inform its continuous improvement.

Infrastructure Ontario will continue to use the Master Services Agreement with service providers to meet contractual requirements related to all steps in the capital planning process.

Infrastructure Ontario is committed to better tracking data to drive continuous improvement in the development of various classes of estimates.

Infrastructure Ontario will assess in future contracts the options to provide incentives to external project managers to complete capital projects on time and on budget.

Infrastructure Ontario will review and confirm that there is a clear approach for revisions to project completion dates.

4.4 Lack of Information Provided to Ministries and Agencies on Operating and Maintenance Services

4.4.1 Type and Frequency of Individual Services Not Explained

All operating and maintenance agreements that were created in 2007 between Infrastructure Ontario and client ministries and their agencies for services, including snow removal, cleaning, security, landscaping, and maintenance of building components, expired in 2015. One ministry never had a signed agreement. Client ministries are required to have such agreements under the Memorandum of Understanding between Infrastructure Ontario and the Ministry of Infrastructure (Ministry).

Client ministries and their agencies are required to pay Infrastructure Ontario the full cost of operating and maintenance services required for the buildings they occupy. These services are arranged by Infrastructure Ontario's external property and land manager, with minimal involvement by Infrastructure Ontario itself, and are provided by outside service providers procured by the external property and land manager or through the ministry's or agency's lease agreements if their lease includes these services.

Client ministries are provided with invoices from the external property and land manager on behalf of Infrastructure Ontario that indicate the monthly charge for services in total for a particular building, but with no breakdown of number of services or service type. Most of the client ministries we interviewed informed us that they could not determine whether they were receiving the correct amount and type of services that they were paying for.

For example, they could not confirm whether they were receiving all the cleaning services they were being charged for, or the level and type of security or snow removal services, because they did not have a current agreement that detailed what the individual services were. **Figure 17** contains comments from some ministries to us on operating and maintenance services.

By not clearly informing client ministries and agencies of operating and maintenance services to be provided, Infrastructure Ontario is missing a potentially key control in ensuring that the services that are being paid for have indeed been provided.

Infrastructure Ontario informed us that it has an ongoing pilot project on providing more information to client ministries about operating and maintenance services and before the end of 2017 client ministries and agencies will have electronic access to this type of information.

4.4.2 Escalating Operating and Maintenance Costs

Under the Enterprise Realty Service Agreement (discussed in **Section 2.1.2**), Infrastructure Ontario earns a management fee equal to 15% of the operating and maintenance costs of government-owned properties. The 15% rate was arbitrarily set by the Ministry over 15 years ago, in 2001, and has not been reviewed or amended since.

Our analysis indicated that operating and maintenance costs have increased 16% from \$186.5 million in 2011/12—when Infrastructure Ontario assumed responsibility for government properties—to \$215.7 million in 2016/17. However, given that the amount of rentable square feet of government properties has been reduced through property disposals, operating costs per square foot have actually increased 36% over this period, on

Figure 17: Client Ministries' Written Comments on Operating and Maintenance Services

Source of data: Ministries receiving operating services from Infrastructure Ontario through its external property and land manager

• "We have also found that new contracts for cleaning, snow removal, etc. are tendered by [the external property and land manager] and services have been removed or frequency of services have been changed. We have no input in these changes and in some instances the [external property and land manager's] on-site maintenance staff are not even made aware of the change. For instance I noticed that the parking area (at one building) was not being cleaned as it normally was and I mentioned it to [the external property and land manager] after some time [it] told me that the cleaning of the parking garage was removed from the last parking contract. After many months they have hired the building cleaning company on a separate contract to clean the garage."
• "[Regarding] interior cleaning, [we] have yet to see a schedule of what is done where/when even though we have asked a number of times."
• "[A Ministry] previously had an agreement (early 2000s) that detailed all the services for the building and who had the responsibilities to perform those services (Landlord or Tenant). Currently, occupancy agreements provided to [our Ministry] do not identify individual buildings or provide specific details of services provided for them. We no longer have a quick reference document that can confirm what services are provided for ministry-occupied buildings, and must contact IO [Infrastructure Ontario] or their service provider to get those details. If we request a copy of a Lease from IO, typically only a portion of the applicable segment of the agreement is provided. If we request a copy of a service contract, IO does not provide a copy, only some details as they deem relevant. This can be an issue as illustrated in a very recent example. [Our Ministry] questioned the cleaning services being provided to another building. [Our Ministry] was initially told by IO that certain services were not part of the cleaning contract, and [we] acquired a third party vendor to perform those services. It was recently discovered, after much persistence on [our] part for IO to verify the contract, that those services were in fact included in the original contract. [Our Ministry] has been paying twice and we are now in the process of rectifying this issue and hoping to be reimbursed for the error. We have estimated that we paid approximately $16,000 unnecessarily over the last five years."

average 6% per year, as shown in **Figure 18**. This is much higher than the average annual increase in the consumer price index over this period, which was only 1.6%.

Infrastructure Ontario informed us that the reason costs have been increasing so substantially on a per rentable square foot basis is because it has been selling vacant buildings with low operating costs, and thereby reducing the rentable square footage of the portfolio at a greater rate than the reduction of operating costs.

Since 2015, the Enterprise Realty Service Agreement has required Infrastructure Ontario to annually compare operating and maintenance costs against industry benchmarks: specifically, Infrastructure Ontario is to use data from the Building Owners and Managers Association (BOMA), which has such average building cost data for Toronto. At the time of our audit, Infrastructure Ontario had only performed this cost comparison once, for the 2015 calendar year, for the 17 government-owned buildings in Toronto. As of March 31, 2017, they account for 3.5 million rentable square feet, or 9%, of the 39 million rentable square feet of all occupied government properties in the province. This cost comparison can only be done on government-owned buildings in Toronto because BOMA only has complete data for Toronto.

Repair and maintenance costs and utilities are the largest components of total operating and maintenance costs, representing 60% of the total. We compared BOMA's cost data for Toronto buildings with all government-owned buildings within Toronto over the last three years. While cost categories, such as security and cleaning, in government properties were lower than BOMA's average cost, we found that the repair and maintenance costs and utilities in government-owned properties' were consistently higher than BOMA's average, as seen in **Figure 19**.

Figure 18: Changes in Government-Owned Properties' Size and Cost, 2011/12–2016/17

Source of data: Infrastructure Ontario

	Trend in Size and Operating Expenses of Government-Owned Properties						% Increase Decrease 2011/12–2016/17	Avg. % Change Each Year
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17		
Rentable square footage of government-owned properties (millions of sq. ft.)	35.6	33.1	31.8	31.5	30.9	30.3	(15)	(3)
Operating and maintenance expenses of government-owned properties* ($ million)	186.5	186.8	198.7	203.6	212.0	215.7	16	5
Operating and maintenance cost per rentable square foot ($/sq. ft.)	5.24	5.64	6.26	6.46	6.86	7.12	36	6

* Includes occupied and vacant properties.

This is consistent with concerns raised by many of the client ministries we spoke to. Staff from these ministries informed us that in some cases they had compared the costs of repairs and maintenance work arranged by the external property and land manager with other vendors and found the external property and land manager to be more expensive. Ninety percent of repairs and maintenance costs consist of many small projects costing less than $10,000. For example:

- In 2014, the external property and land manager provided a quote for $18,000 for a plumbing-related project requested by the client ministry. The client ministry, finding this price to be high, obtained its own quote for $9,000 from a vendor used by the external property and land manager. However, the client ministry was not able to use this vendor and had to pay the $18,000.
- In 2016, a client ministry required electrical work and was quoted $2,000 by the external property and land manager, but when the client ministry asked to see the bids it found that another quote had been received for $1,000 to do the same work. The client ministry was able to obtain the lower-cost work as a result.

In September 2016, the Ministry of Infrastructure retained a consulting firm to undertake the OPS Realty Model Review, which was an assessment of the Province's current model for providing real estate services. We noted that the OPS Realty Model Review report, completed in March 2017, also concluded that the "Small Works [that is, maintenance] process was reported to be causing the most dissatisfaction [from client ministries] due to requests taking too long and costing too much."

RECOMMENDATION 5

To support client ministries and agencies in confirming that they are receiving value for money on operating and maintenance services, and consistent with the requirements in the Memorandum of Understanding between Infrastructure Ontario and the Ministry of Infrastructure, we recommend that Infrastructure Ontario:

- renew all operating and maintenance agreements between itself and client ministries;

Figure 19: Comparison of Operating and Maintenance Costs between Industry Benchmark and Buildings in Toronto Owned by Infrastructure Ontario (IO)

Source of data: Building Owners and Managers Association (BOMA) and Infrastructure Ontario

Operating and Maintenance Costs Categories	2014			2015			2016			3-Year Average Comparison[2] (%)
	BOMA[1] ($/sq. ft.)	IO ($/sq. ft.)	Comparison[2] (%)	BOMA[1] ($/sq. ft.)	IO ($/sq. ft.)	Comparison[2] (%)	BOMA[1] ($/sq. ft.)	IO ($/sq. ft.)	Comparison[2] (%)	
Cleaning	2.06	1.34	(35)	2.10	1.34	(36)	1.89	1.35	(28)	(33)
Repairs and Maintenance[3]	2.99	3.62	21	3.19	3.66	15	2.87	3.68	28	21
Utilities[4]	2.93	3.95	35	3.94	3.86	(2)	3.59	3.99	11	15
Roads and Grounds[5]	0.40	0.24	(40)	0.37	0.47	25	0.59	0.61	5	(3)
Security	0.91	0.69	(24)	0.88	0.71	(19)	1.03	0.72	(30)	(24)
Admin. and Management	2.60	2.54	(2)	2.48	2.67	8	2.67	2.72	2	2
Total	**11.89**	**12.38**	**4**	**12.96**	**12.72**	**(2)**	**12.63**	**13.08**	**4**	**2**

1. The Building Owners and Managers Association (BOMA) collects information from building managers, including operating costs, through an annual survey. Over 40 government-owned and private buildings' data is aggregated here for each year. Infrastructure Ontario's figures are based on data for the 17 buildings it owns in Toronto.

2. The comparison is the percentage by which IO costs are higher or (lower) than BOMA's costs.

3. Includes repairs up to $100,000 each.

4. Includes electricity and natural gas.

5. Includes parking.

- implement its plans to provide ministries and agencies with timely information on the volume, frequency and type of operating and maintenance services that they will receive, and have received, by building; and
- actively work with its external property and land manager to review and analyze the significant increases in operating and maintenance costs, and implement improvements needed to minimize such costs for client ministries.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Good governance and strong relationships with client ministries are important to ongoing management of the realty portfolio. Infrastructure Ontario will work to renew agreements with client ministries as necessary.

At the time of this report, Infrastructure Ontario has initiated a pilot project aimed at providing client ministries with more information. We will continue to work closely with ministry Chief Administrative Officers to ensure awareness and transparency on operating and maintenance services.

Infrastructure Ontario consistently monitors and updates the state of good repair of its portfolio in consultation with its external property and land manager in order to inform short- and long-term capital planning. Due to the average age of the portfolio, operating and maintenance costs will continue to increase. Further opportunities to minimize costs will require a unified approach from the Ministry of Infrastructure, client ministries, the Treasury Board Secretariat and Infrastructure Ontario, and will also require increased investment.

4.5 Funding Shortfalls Having Detrimental Effect on Building Conditions

4.5.1 Repairs to Government-Owned Properties Increasingly Being Deferred; Building Conditions Deteriorating

Infrastructure Ontario's funding for lifecycle maintenance of government-owned properties consists of all base rents (which are supposed to approximate expected future capital repairs) charged to client ministries and their agencies, as well as funding from the Ministry of Infrastructure (Ministry). As seen in **Figure 20**, between 2011/12 and 2016/17, Infrastructure Ontario has received $1.05 billion in funding from these two sources for lifecycle maintenance.

Infrastructure Ontario's management informed us that base rents of about 90% of rentable square feet of government-owned property have been unchanged since 1998. Base rents are only revised when a new building is acquired or when government-owned buildings undergo extensive renovations. Infrastructure Ontario informed us that it would like to update these rents but this

Figure 20: Total Life-Cycle Maintenance Funding Received by Infrastructure Ontario from 2011/12 to 2016/17 ($ million)

Source of data: Infrastructure Ontario

Source of Funds	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	Total
Base rent* from client ministries and agencies	101.73	101.70	102.94	104.10	102.70	101.88	**615.05**
Ministry of Infrastructure funding for life-cycle maintenance	79.03	64.18	67.24	72.10	84.10	68.31	**434.96**
Total Funded	**180.76**	**165.88**	**170.18**	**176.20**	**186.80**	**170.19**	**1,050.01**

* Based on rentable square feet.

would require the Ministry to obtain approval from Treasury Board. Some base rents are as low as $1 to $5 per square foot, according to the OPS Realty Model Review report commissioned by the Ministry in 2017.

The effect of this shortfall in funding is that an increasing amount of maintenance work on government-owned buildings has been deferred, which has led to the condition of buildings deteriorating. In addition, Infrastructure Ontario indicated that, because of insufficient revenue, it has had to fund its operating costs for managing government properties from base rent payments instead of using these funds to repair government-owned buildings—which has led to a further deterioration of government-owned buildings (discussed in **Section 4.5.2**).

Under the Ontario Realty Corporation, deferred maintenance grew from $258 million in 2007/08 to $364 million in 2010/11 (about $35.6 million a year growth, on average). Since then, the amount of lifecycle maintenance work that has been deferred has more than doubled, from $420 million as of March 31, 2012, to $862 million as of March 31, 2017 (about $74 million a year, on average). The rise in the deferred maintenance is as follows:

- 2011/12: $420 million;
- 2012/13: $483 million;
- 2013/14: $502 million;
- 2014/15: $565 million;
- 2015/16: $663 million; and
- 2016/17: $862 million.

This has resulted in a worsening overall condition of government properties, as measured by the industry standard noted earlier in **Section 2.2.3** called the Facilities Condition Index (Index). As seen in **Figure 21**, the condition of government properties has deteriorated from an Index reflecting excellent condition to one that is good, but only just above the poor range.

As discussed earlier in **Section 2.2.3**, Infrastructure Ontario uses the Ontario government's standard for measuring the relative condition of buildings. This standard divides the cost of repairs required in the current and the next two years by the cost to replace the building. The Enterprise Realty Services Agreement between the Ministry and Infrastructure Ontario includes a performance target for Infrastructure Ontario to ensure that, based on the Ontario government standard, core government-owned buildings should be at an index of 0% to 10% (good condition) and at an index of 11% to 20% (fair condition) for transition buildings. The agreement, however, does not contain a timeline for when the standard should be met. Using this standard, as seen in **Figure 22**, 52% of the rental square feet of core buildings and 39% of transition buildings were in worse condition than the target set in the Enterprise Realty Service Agreement.

Infrastructure Ontario informed us that because funding has not kept pace with required maintenance costs, it has had to prioritize maintenance based on critical needs, such as those that impact health and safety, building code compliance and other emergency repairs. This has resulted in delays of at least five years in completing a large portion of planned preventive maintenance.

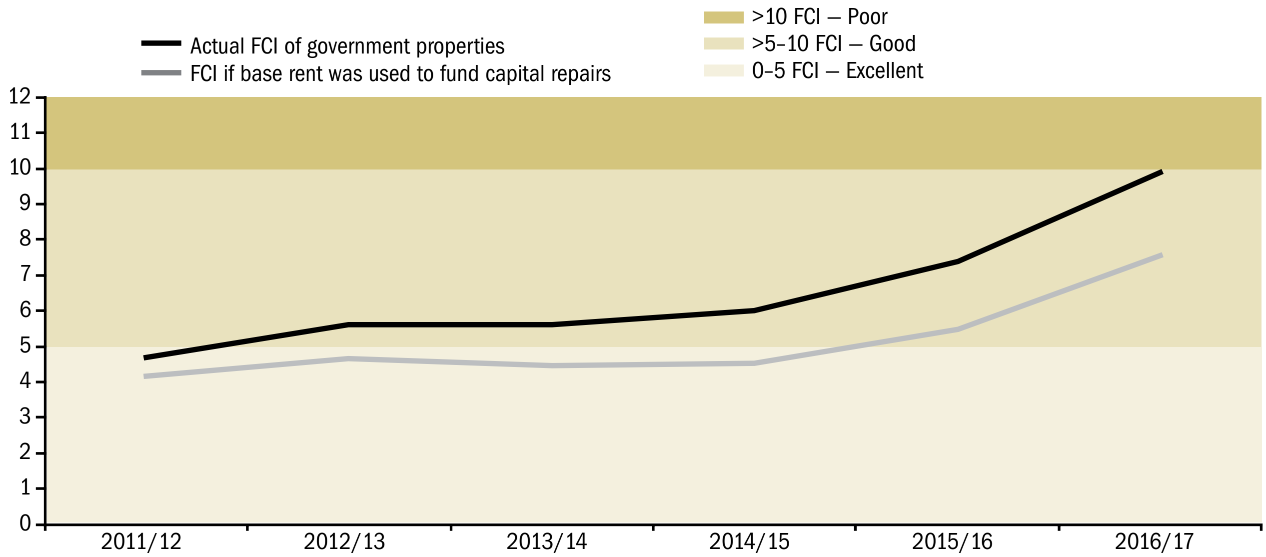
Deferring Maintenance Can Impact Service Delivery and Result in Additional Costs

Preventive maintenance, if done on a timely basis, can result in savings from avoiding costly repairs, as well as savings from other costs. Infrastructure Ontario senior management agreed that preventive maintenance is a cost-saving practice.

For example, capital repairs at the Ministry of the Environment and Climate Change's laboratory for testing drinking water have been deferred for at least five years. The Ministry of the Environment and Climate Change now spends about $20,000 annually on bottled water for the staff there because of elevated lead levels in the drinking water identified in 2012. Staff occupying this building informed us they are also facing other challenges in coping with the poorly maintained

Figure 21: Deferred Maintenance Translated to Facility Condition Index (FCI)

Source of data: Infrastructure Ontario



21a: Actual FCI of government properties

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Deferred Maintenance (A) ($ million)	420	483	502	565	663	862
Replacement Value (B) ($ million)	8,962	8,680	8,955	9,436	8,993	8,745
FCI (A/B) (%)	**4.7**	**5.6**	**5.6**	**6.0**	**7.4**	**9.9**

21b: FCI if base rent was used to fund capital repairs

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Deferred Maintenance (C) ($ million)	375	404	400	427	492	660
Replacement Value (B) ($ million)	8,962	8,680	8,955	9,436	8,993	8,745
FCI (C/B) (%)	**4.2**	**4.7**	**4.5**	**4.5**	**5.5**	**7.5**

facilities, such as a ceiling collapse in 2013 and another in 2017.

In the last three years, Infrastructure Ontario spent about $1 million on emergency repairs in the building related to electrical services and distribution. Infrastructure Ontario informed us that these repairs were a result of being unable to fund a $2.5-million electrical and service distribution renewal project that was first identified as requiring repair in 2013.

The poor condition of the building has also impacted the lab's ability to fulfill its mandate to protect the environment. Due to the poor condition of power systems—including back-up generators and distribution systems—between 2012 and 2015 the building experienced 46 power outages, 10 of which lasted longer than half a day. As a result, 200 high-priority samples, including legal samples, could not be tested. These samples were important since they were intended to be used either as evidence to support a potential prosecution in court regarding companies suspected of non-compliance with Acts such as the *Environmental Protection Act* and the *Ontario Water Resources Act*, or to support the Ministry's regulatory decisions. Samples in some cases had to be re-collected and tested, and, in a small number of cases, the samples were no longer acceptable to be used in court to support

Figure 22: Comparison of the Condition of Government-Owned Buildings[1] Using the Ontario Government Standard[2] Set in the Enterprise Realty Services Agreement[3] as of March 31, 2017

Source of data: Infrastructure Ontario

	Core				Transition				Total	
FCI	# of Buildings	% of Total	Area (RSF)	% of Total	# of Buildings	% of Total	Area (RSF)	% of Total	# of Buildings	Area (RSF)
0%–10%	435	59.1	9,626,917	48.4	46	64.8	458,233	47.1	**481**	**10,085,150**
11%–20%	184	25.0	5,699,515	28.7	15	21.1	134,265	13.8	**199**	**5,833,780**
21%–29%	71	9.6	2,404,861	12.1	5	7.1	107,825	11.1	**76**	**2,512,686**
30%–59%	39	5.3	1,293,880	6.5	2	2.8	258,988	26.6	**41**	**1,552,868**
≥ 60%	7	1.0	853,864	4.3	3	4.2	13,738	1.4	**10**	**867,602**
Total	**736**	**100.0**	**19,879,037**	**100.0**	**71**	**100.0**	**973,049**	**100.0**	**807**	**20,852,086**

1. This figure does not include 51 core and 61 transition buildings (total RSF of 1,057,682) because Infrastructure Ontario did not have their Facility Condition Index.
2. The Ontario government standard is the “Facility Condition Index” (FCI). The FCI is a percentage arrived at by dividing the cost of repairs required in the current and next two years by the cost to replace the building.
3. The Enterprise Realty Services Agreement states that core government-owned buildings should be at an index of 0% to 10%; while the Enterprise Realty Services Agreement states that transition buildings should have an FCI between 11% and 20%, the Ministry of Infrastructure informed us that the intention of this section is that transition buildings not exceed an FCI of 20%.

a potential prosecution. Also in 2015, the laboratory lost more than 3,000 microbiological cultures obtained from water quality studies as a result of prolonged power failure and no adequate backup power. These cultures could not be recovered.

4.5.2 Portion of Base Rent Spent on Infrastructure Ontario Operating Expenses

According to Infrastructure Ontario’s guidelines, the base rent it charges client ministries and agencies is to be used to cover the cost of required lifecycle maintenance for government-owned properties. However, as noted earlier, Infrastructure Ontario indicated that it has had to use a portion of base rent to fund its operating costs related to managing government-owned properties (primarily salaries, as shown in **Figure 8**).

Over the past six years, Infrastructure Ontario has used $201.7 million of base rent to fund operating costs as follows:

- $45.0 million in 2011/12 (44% of base rent funding);
- $33.9 million in 2012/13 (33%);
- $23.3 million in 2013/14 (23%);
- $35.9 million in 2014/15 (35%);
- $32.6 million in 2015/16 (32%); and
- $31.0 million in 2016/17 (30%).

While this is not explicitly prohibited under the Enterprise Realty Service Agreement between Infrastructure Ontario and the Ministry, it has led to a further deterioration of government-owned buildings.

As seen in **Figure 21**, if Infrastructure Ontario had used all base rent funding for the purposes for which it was intended, the current Facility Condition Index of government properties would be 25% lower; that is, in the middle of the “good” condition range.

4.5.3 Low Rent Influences Ministries’ Decisions to Stay in Buildings Needing Repairs

The “charge for accommodation” client ministries and agencies are charged consists of the following four components:

- base rent;
- operating and maintenance costs;
- payments in lieu of property taxes; and
- Infrastructure Ontario’s facility management fee.

Base rent makes up almost one-third of the "charge for accommodation." The purpose of the "charge for accommodation" was to make ministries and agencies accountable for the cost of occupying the buildings. If base rents were updated regularly and were based on future capital repair costs—as was originally intended—client ministries and agencies would be basing their decisions on whether to stay or leave properties on actual expected costs of occupying the properties. This could translate to better decisions for the Ontario Government, because ministries would be more reluctant to be located in buildings that have a high base rent because extensive repairs are required.

Our analysis indicates that if base rents reflected the future capital repair costs required on government-owned buildings, in total, they would need to be increased by about $63 million, or 61%. We did our assessment by calculating the present-value of the cost of all planned capital projects for government-owned buildings across the province over the next 10 years and calculated this on a rentable-per-square-foot basis for each building. We compared these with actual base rents, and found significant discrepancies due to outdated base rents that no longer reflected expected capital repair costs in those government-owned buildings.

The OPS Realty Model Review that was commissioned by the Ministry of Infrastructure and finalized in March 2017 also noted, "the current legacy model of charging nominal rents ($1 to $5 per square foot) is not an effective tool to influence behaviours. Non-market rents do not enforce pricing discipline on programs, and the notional rent is insufficient to cover basic, needed capital repairs."

RECOMMENDATION 6

For government properties to be economically and efficiently maintained, we recommend that the Ministry of Infrastructure work with Infrastructure Ontario to:

- assess and revise base rents to match the projected cost of future capital repairs to properties and funding parameters for Infrastructure Ontario's fees; and
- establish and implement a plan to reduce deferred maintenance in government-owned buildings.

(We made a similar recommendation in our *2006 Annual Report*.)

MINISTRY OF INFRASTRUCTURE RESPONSE

The Ministry of Infrastructure's capital repair program is funded to ensure government buildings are safe and in compliance with all regulatory requirements. The Ministry is currently undertaking a review of the realty operating model and its associated financial model. As part of this review, the Ministry is working closely with Infrastructure Ontario and all ministry tenants to examine the funding required for proactive building maintenance and to pay for the provision of services in a more transparent manner. Additionally, the Ministry is committed to developing a plan for the government's consideration to decrease deferred maintenance in government-owned buildings.

4.6 Government Properties Could Be Used More Efficiently

4.6.1 Government Office Space in Excess of Ministry's Office Accommodation Standard

The Ministry of Infrastructure (Ministry) established the Office Accommodation Standard (Standard) in 2012, which sets the optimal usage of office space in order to minimize the footprint of government properties. This standard states that the size of an office in government properties should not exceed 180 rentable square feet for each person occupying it. This standard is lower than the Alberta Government's standard of nearly 195 usable square feet, and higher than British Columbia's target of 112 usable square feet and the City of Toronto's of 140 rentable square feet.

The Ministry has not set a deadline by which Infrastructure Ontario must meet this standard. In 2012, the Ministry set an office space reduction target of 1.3 million rentable square feet in government properties for Infrastructure Ontario to meet by 2022. Infrastructure Ontario had achieved almost two-thirds of this by March 31, 2016. However, this represents less than a quarter of the 5.5 million rentable square feet that infrastructure Ontario would need to have eliminated in order to achieve the standard.

Ministries and agencies have reduced the rentable square feet per person from 364 as of March 31, 2013, to 288 square feet as of March 31, 2016. However, this is still 1.6 times higher than the standard of 180 square feet.

We analyzed the cost of building occupancy, including operating and maintenance costs and property taxes for government-owned and leased buildings, and costs for third-party leases. Our analysis indicated that if the standard of 180 rentable square feet per person was applied across all government-owned office buildings—and assuming the current cost information for each building—$174 million could be saved on an annual basis. This is slightly more than half the current office space cost of $346 million. This reduction in operating and maintenance costs would significantly reduce Infrastructure Ontario's management fee since this fee is based on 15% of operating and maintenance costs on government-owned buildings. Reconfiguring office space to realize such efficiencies would usually require one-time costs—such as to reposition office equipment and purchase less space-consuming furniture. However, Infrastructure Ontario has not conducted a cost-benefit analysis on achieving the standard across all government properties.

Infrastructure Ontario Required to Provide Ministries with Office Space Options

Furthermore, we did not find that Infrastructure Ontario was taking available opportunities to reduce office space used by client ministries and agencies. Infrastructure Ontario is required by the Ministry of Infrastructure's Realty Policy to present client ministries and agencies with an analysis of office space options at the time of a lease renewal or when a client ministry or agency is moving.

Of the 102 such opportunities in the 2015/16 year, Infrastructure Ontario did not produce an options analysis in 43% of the cases. In 38% of the cases where Infrastructure Ontario produced such an analysis, it did not recommend an option that reduced the space usage to meet the standard. For example, in 2016 Infrastructure Ontario recommended that a ministry renew a third-party lease for office space in Ottawa with a footprint of 398 square feet per person; the ministry accepted this option because it was already leasing the property and the renewal presented an opportunity to maintain the same lease rate.

We also noted that Infrastructure Ontario could enhance its data on building occupancy. Specifically, while it has data on the number of people within a building, this data is not consistently broken down by the number of people occupying each floor. Such information would allow Infrastructure Ontario to readily identify which floors within a building are vacant or underutilized so that they could be offered to other tenants as part of an office space options analysis.

RECOMMENDATION 7

To improve the efficiency of the use of office space by government ministries and agencies, we recommend that Infrastructure Ontario consistently prepare and present client ministries and agencies with an office space options analysis at the time of a lease renewal or when a client ministry or agency is moving. Such an analysis should be informed by up-to-date and complete occupancy data for buildings within the Province's real estate portfolio. (We made a similar recommendation in our *2006 Annual Report*.)

RESPONSE FROM INFRASTRUCTURE ONTARIO

In conjunction with client ministries, Infrastructure Ontario will perform Real Estate Options Analysis when new space requests are made or when existing leases expire.

Enhanced availability of data on building occupancy can contribute to further rationalization of vacant and underutilized space. Infrastructure Ontario will continue to create occupancy master drawings for the office portfolio and work with ministries to receive better quality building occupancy information.

4.6.2 High Carrying Costs of Vacant Buildings

As seen in **Figure 1**, as of March 31, 2017, there were a total of 812 buildings, consisting of 5.1 million rentable square feet that were not used. These buildings incurred $18.9 million in costs, including operating costs, property taxes and maintenance, in the 2016/17 fiscal year.

We could not readily determine how long about a quarter of these buildings had been vacant because Infrastructure Ontario did not consistently track all building vacancies. Infrastructure Ontario started to track building vacancies in 2016. We calculated that the remaining 604 buildings had been vacant for almost eight years on average.

Infrastructure Ontario developed a 10-year divestment plan in 2015/16 to sell or otherwise dispose of about 907 buildings (421 buildings are included in the 812 vacant buildings noted above). Infrastructure Ontario has decided to divest these buildings for reasons such as significant repairs being needed to some buildings, or the locations of other buildings no longer serving the needs of the occupants.

Infrastructure Ontario plans to sell 80% of these buildings and demolish the rest. However, its divestment plan for these buildings is behind schedule. We found that Infrastructure Ontario had sold 40% of the 54 properties that it planned to sell in 2016/17. Reasons for not selling the properties included lengthy negotiations and consultation with prospective buyers and stakeholders, and the government deciding to retain some buildings.

RECOMMENDATION 8

To save on the annual operating cost of vacant buildings, we recommend that Infrastructure Ontario:

- track the dates of all vacancies; and
- follow its current building divesting plan and revise the plan, as necessary, to include all vacant buildings intended for disposal.

(We made a similar recommendation in our *2006 Annual Report*.)

RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario currently tracks the date buildings become vacant.

Infrastructure Ontario will follow and revise its 10-year divestment plan in a way that also considers other government priorities, such as duty to consult, environmental protection, heritage preservation and other government policy objectives.

4.7 No Plan Yet to Make Government Properties More Accessible

Infrastructure Ontario confirmed to us that it has not assessed the accessibility of its current government properties. However, it has indicated that it is compliant with the current requirements of the *Accessibility for Ontarians with Disabilities Act, 2005* (Act) and the Ontario Building Code (Code) because these do not require that existing assets be retrofitted according to current accessibility standards. The Code requires that newly constructed buildings and buildings that undergo extensive renovations must meet accessibility standards enhanced in 2015. Despite owners not having to currently retrofit buildings, the Act's stated purpose is to "achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025."

In 2016/17, Infrastructure Ontario informed the Ministry that it did not have the funds to support the Act's 2025 accessibility goal. This is as a result of the Ministry's direction and decision in 2013/14 to end funding for inspecting buildings for accessibility and retrofitting existing buildings.

In 2014, the City of Toronto's Facilities Management Division commenced work toward meeting the Province's goal of making Ontario accessible for people with disabilities by 2025. The City of Toronto has 427 owned buildings consisting of 12 million square feet. It is currently in the process of inspecting the level of accessibility in all buildings to determine the work required and cost to complete this work. As of September 2017, it had assessed almost half of its buildings for accessibility and anticipated assessing all buildings by April 2018. The City of Toronto informed us that, due to the size of the portfolio, timeline and industry constraints, it will be difficult to meet the 2025 deadline.

RECOMMENDATION 9

We recommend Infrastructure Ontario, in conjunction with the Ministry of Infrastructure:

- assess the current level of accessibility of government properties; and
- review and prioritize properties for potential and future investment to improve accessibility.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario will remain in compliance with the *Accessibility for Ontarians with Disabilities Act* (Act) and specifically with the requirements that all new buildings and major retrofits comply with the Act. Infrastructure Ontario will work in conjunction with the Ministry of Infrastructure to assess the current level of accessibility of government properties. Funding will be required for the assessment.

4.8 Ministry Has Not Assessed the Cost of Managing Government Properties

The Ministry has not assessed the true cost of efficiently and economically managing government properties, including, for example, whether the increases Infrastructure Ontario has incurred in managing government properties, discussed earlier, are reasonable and necessary. This is the first step that is required before setting reasonable and attainable performance metrics that support cost minimization, including the more efficient use of space.

The March 2017 Ministry-commissioned OPS Realty Model Review report also noted value-for-money concerns with the current delivery method: "Despite one of the proposed benefits of the current model to be cost effectiveness, it is not yet perceived that the current implementation of the OPS Realty model has fully achieved this. In fact, a number of Client Ministries expressed the perception that service via formal channels is slow and too expensive. The question of value for money was raised in most interviews."

The report further noted: "In general, there is no evidence to suggest that there is a formal performance measurement program in place to effectively monitor IO [Infrastructure Ontario] per the terms and conditions of the [agreement between Infrastructure Ontario and the Ministry]." The OPS

Realty Model Review also noted that the Ministry should assess whether the management of government properties is best served by Infrastructure Ontario or the Ministry.

RECOMMENDATION 10

To ensure government properties are well managed and maintained in an efficient and economical manner, we recommend that the Ministry of Infrastructure study and implement improvements to the management of government properties, including, as noted in the OPS Realty Model Review, different delivery options. (We made a similar recommendation in our *2006 Annual Report*.)

MINISTRY OF INFRASTRUCTURE RESPONSE

The Ministry is currently undertaking a review of the realty operating model and the associated financial model. As part of this review, the Ministry is working closely with Infrastructure Ontario and all ministry tenants to examine different options for effective service delivery in the management of government properties.

5.0 Detailed Audit Observations: Alternative Financing and Procurement

5.1 Hospitals Finding Maintenance under Alternative Financing and Procurement Expensive

As discussed in **Section 2.4**, the Alternative Financing and Procurement (AFP) model was developed by Infrastructure Ontario about 10 years ago. In an AFP, a public-sector entity, such as a hospital, establishes the scope of a project and a private-sector company finances and constructs the project. In some cases, the private-sector company contracts with the public-sector project sponsor to provide maintenance for the facility for 30 years. Currently there are 16 hospitals maintained under an AFP agreement. In addition, 10 other AFP agreements set out the maintenance of government-owned properties, including court houses and detention centres.

Two of the primary benefits that hospitals expected from an AFP maintenance agreement are that:

- the monthly payments hospitals must make for maintenance would cover all maintenance within the scope of the AFP agreement, including all lifecycle maintenance work throughout the hospital over the life of the agreement; and
- in exchange for payments to the private-sector company, hospitals transfer the risk of maintaining the hospital—such as if a piece of equipment breaks down—to the private-sector company.

However, all the hospitals we contacted informed us that, due to the way that private-sector companies have interpreted the AFP agreements, the hospitals are not realizing these benefits.

5.1.1 Hospitals Dispute Reasonableness of Cost of Work outside Original Agreement

The hospitals we spoke to informed us that their AFP agreements have not been structured to cover all maintenance work that hospitals require. Any work not originally included in the AFP agreement is categorized as a variation, which must be paid for over and above the annual AFP payments originally agreed upon.

While hospitals can use an outside vendor to complete work that is considered a variation under the AFP agreement, doing so transfers the risk associated with maintaining the related hospital assets from the private-sector company back to the hospital. Consequently, this creates practical difficulties for the hospital to maintain the asset resulting from the variation separately from the rest of the hospital. Also, the hospital would become responsible for the lifecycle maintenance of any components that are procured from an outside third-party vendor, such as repairs and general upkeep of this component.

Because of the practical difficulties inherent in using an outside contractor, the hospitals we spoke to rarely elected to do this. Consequently, the hospitals we interviewed are all dependent on the AFP contractor to carry out variation work. Three of the hospitals we spoke to had been disputing with a private-sector company regarding what costs it should be allowed to charge for variations. As of July 2017, none of the three hospitals had reached an agreement with this private-sector company over this issue.

The hospitals indicated to us that, based on their experience, the market rate for providing variations is higher with the AFP contractor than if the hospital was to tender for these services outside of the agreement. The hospitals informed us that disputes over what constitutes appropriate costs are ongoing. For example, one hospital has had 166 variations, including installing automatic door openers, window tinting and additional lighting, and constructing a temporary overflow parking lot, for a total capital cost of $1.2 million. The hospital is disputing about $65,000 of charges from the private-sector company because the private-sector company has allocated the full market rate (that is, the rate charged to external clients) of head office staff, even though the AFP agreement stipulates that only direct costs may be allocated.

One of the hospitals we spoke to decided to construct a parking lot outside of the AFP agreement because the private-sector company was slow in providing cost estimates and plans; this early planning had already taken over two years, with little progress made. The hospital also found some of the cost estimates to be higher than reasonable in some areas. After deciding to go outside of the AFP agreement, the hospital is now waiting for Ministry of Health and Long-Term Care approval to competitively procure a contractor. Consequently, after the parking lot is constructed, this hospital will be responsible for the parking lot's upkeep and maintenance.

While the AFP agreement provides several types of escalating dispute resolution methods, hospitals informed us that the processes are collectively time-consuming, as detailed in **Section 5.1.2**, and ineffective at resolving disputes. For example, while the AFP agreement allows for an independent certifier (paid 50/50 by the hospital and the private-sector company), who is intended to be impartial, to help resolve a particular dispute, hospitals informed us that the independent certifiers assigned may not always be impartial because their ongoing work comes from the private-sector companies and not the hospitals.

Infrastructure Ontario senior management have informed us they have been working since summer 2014 to amend the template for future agreements to help hospitals control costs associated with variations over the term of agreements.

5.1.2 Hospitals Want Clearer Definition of Failures

All hospitals that we interviewed indicated that a clearer definition is needed in the AFP agreements to categorize types of failures by the AFP contractors that can occur during the maintenance phase of the AFP agreement. Failures can include a lack of availability of a section, room or equipment; for example, an elevator stops working, or an automatic door will not automatically open.

The AFP agreement levies a more severe penalty on the contractor, possibly 100 to 1,000 times greater, for availability failures compared with other types of failures. However, the onus is on the hospitals to prove to the independent certifier that a particular failure is an availability failure versus another failure with lesser penalties. As a result, the private-sector company is motivated to designate failures as something other than an availability failure.

The following are examples of disputes that have arisen between hospitals and the AFP contractor:

- In one of the hospitals we interviewed, 30 out of 84 negative pressure rooms were not in use from May 2015—when the construction of the hospital was determined to be substantially complete—to July 2017, when the private-sector company finally acknowledged and started to address the deficiency. Making these rooms available is the responsibility of the AFP contractor under the maintenance portion of the agreement. According to the CEO of the hospital, this is a serious matter because negative pressure rooms are used for infection control, and the hospital has been required to find suitable infection-free space for patients elsewhere in the hospital. The CEO indicated that although no patient-care-related incidents have been attributable to the non-functioning negative pressure rooms, the unavailability of these rooms exposes the hospital and patient care to a higher level of risk. The CEO informed us that the hospital was unable to persuade the private-sector company to acknowledge that the problem existed until 15 months after substantial completion. The hospital CEO further noted that, even after acknowledging the availability failure, the private-sector company was still very slow to respond to and resolve the failure, causing the hospital to suggest that it appeared that the penalties were not significant enough to incentivize faster resolution. To date, the hospital has withheld $139,000, which represents two months' worth of penalties. As of July 2017, this situation remained largely unchanged.
- In another hospital, the Personal Alarm System, which is a central monitoring system that is intended to ensure the health and safety of patients, staff and visitors, experienced repeated failures since January 2014; these persisted into 2017. Examples of the failures include false alarms, system slowdowns, security office camera problems, and door lock issues. The hospital and the private-sector company are in dispute regarding the amount of penalty, in the form of deductions against payments to the private-sector company. The hospital has asserted that the amount of deductions allowed under the AFP agreement totals over $71.4 million over the three-year period, but the private-sector company has not recognized any failures. In addition, the hospital has incurred over $2.3 million in legal, consulting and other professional fees since January 2014 to deal with this issue.

Infrastructure Ontario informed us that, in its view, hospitals were interpreting the AFP agreement differently and that a consistent approach could help hospitals manage their AFP agreements more efficiently.

RECOMMENDATION 11

We recommend that Infrastructure Ontario:

- support hospitals with Alternative Financing and Procurement (AFP) project agreements to ensure these arrangements result in more cost-effective maintenance for hospitals; and
- expedite its review of the AFP agreement based on the experience and feedback of project owners and revise the agreement to be used in future AFP projects to minimize future contract disputes with respect to variations and the costs associated with them.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario has a mandate from the Ministry of Infrastructure to oversee the management of AFP contracts in the operations phase for government properties such as courthouses and detention centres. The benefit of this approach is the consistent application of the AFP agreements in order to fully leverage the tools available in the agreements. Infrastructure

Ontario has an agreement in principle with the Ministry of Health and Long-Term Care to play a similar role for AFP contracts within hospitals that are in the operations phase and Infrastructure Ontario would require a mandate from the Ministry of Infrastructure to do this.

Infrastructure Ontario has completed its review of the variation schedule of the AFP agreement, and the resulting improvements are being introduced into all future AFP projects.

5.1.3 Private-Sector Companies Win New AFP Contracts despite History of Disputes

When evaluating bids for AFP projects, we found that Infrastructure Ontario had not considered the private-sector companies' disputes with project owners during the maintenance phase of existing AFP projects. As a result, private-sector companies in the consortia that have performed poorly in maintaining buildings—in that they have had many failures and disputes with hospitals and other government entities—have been members of other consortia that have been awarded additional AFP contracts.

One private-sector company has been awarded 13 AFP projects since 2008, valued at about $9.3 billion. Of these 13 projects, nine are hospitals that have been in operation as early as June 2010. Staff from some of these hospitals informed us that they have experienced problems with this company. For example, one of the hospitals managed by this private-sector company has been in dispute over costs associated with variations—work that the AFP contractor argues is not part of the agreement—since 2013, and the issues remained unresolved as of July 2017. Despite this evidence of an ongoing dispute with the hospital, this private-sector company was awarded a contract in October 2016 for $1.3 billion and again in March 2017 for $685 million to design, build, finance and maintain two other hospitals.

The AFP agreement has been amended over the years based on the experience of past project owners to attempt to prevent a repeat of similar disputes, but it does not appear to have been revised adequately. In March 2017, a one-time discussion forum was held consisting of Infrastructure Ontario (IO) and CEOs of hospitals maintained under the AFP framework. One hospital CEO noted: "IO does not act in a punitive enough capacity to truly shut down private-sector company antics, allowing them to bid on additional projects when they are causing issues in existing contracts." Another CEO informed us that this view is shared among the other hospitals.

RECOMMENDATION 12

In order to improve the delivery of maintenance services through Alternative Financing and Procurement agreements, Infrastructure Ontario should:

- institute a formal evaluation program of private-sector companies' performance during the Alternative Financing and Procurement maintenance phase in existing agreements; and
- incorporate their performance when evaluating future bids by the private-sector companies.

RESPONSE FROM INFRASTRUCTURE ONTARIO

Infrastructure Ontario was the first public procurement agency in the world to implement a vendor performance program for construction of AFP projects. The complexity around AFP consortia resulted in Infrastructure Ontario applying the vendor performance program to 12 objective criteria during the construction phase. Infrastructure Ontario will explore the potential to develop a method to assess vendor performance of the maintenance service provider within the consortia. In doing so, Infrastructure Ontario will continue to balance the need to provide incentives for good performance with the need for a vendor performance program to be based on criteria that are objective, defensible, reasonable, consistent, commercially viable and practically administrable.

5.1.4 Hospitals Experience Funding Shortfalls for AFP Maintenance Agreements

Four hospitals that we spoke to with AFP maintenance agreements have either requested additional funding from the Ministry of Health and Long-Term Care or informed us that they had experienced a funding shortfall, but had not made a request for additional funding from the Ministry. These hospitals advised us that the total funding shortfall was $8.1 million in 2015/16.

According to the hospitals, these shortfalls are due to higher operating costs associated with the AFP maintenance agreements. The Ministry was aware that hospitals with AFP maintenance agreements had funding concerns, based on communications from hospitals dating back to 2012. Consequently, the Ministry surveyed many of the hospitals to request information on their maintenance costs and in 2016/17, the Ministry provided an additional $5.3 million in top-up funding to six hospitals with AFP maintenance agreements that had received less-than-average funding for maintenance compared with other hospitals maintained under AFP agreements.

The hospitals used the additional funding to support:

- the higher cost of maintenance in the early years of the AFP agreement. This happens because maintenance payments are equally spread out over the term of the AFP agreement. However, a new hospital maintained under the traditional method would usually have lower costs in the earlier years and higher maintenance needs as the building and equipment age; and
- higher administrative costs needed to manage the AFP framework, such as the legal costs incurred in resolving disputes over variations and failures with the AFP contractor described in **Section 5.1.1**. Also, the hospitals we spoke to have noted that they have had to hire full-time staff to manage the AFP agreement.

However, according to the hospitals we spoke to, the additional funding provided by the Ministry does not cover the entire amount of the shortfall. One hospital we contacted during the audit indicated it was short $1 million annually, despite the Ministry providing $1.3 million top-up funding. Another hospital indicated it was short $1.65 million annually, but the Ministry did not provide any additional funding because it was not one of six below-average-funded hospitals.

The Ministry informed us that it has conducted extensive analysis, and consultation with hospitals, which resulted in the additional funding being provided. Existing policies are also being updated to provide clarity on any future funding shortfalls. However, management at the hospitals informed us that they have been required to reduce funding in other areas within their existing budgets to make up these shortfalls.

RECOMMENDATION 13

In order to ensure hospitals are able to fund required maintenance, we recommend the Ministry of Health and Long-Term Care continue to work with hospitals, and in co-ordination with Infrastructure Ontario, assess whether hospitals are experiencing funding shortfalls and devise strategies to mitigate their impacts under Alternative Financing and Procurement maintenance agreements.

MINISTRY OF HEALTH AND LONG-TERM CARE RESPONSE

The Ministry of Health and Long-Term Care agrees with the recommendation and will continue to work with hospitals and Infrastructure Ontario.

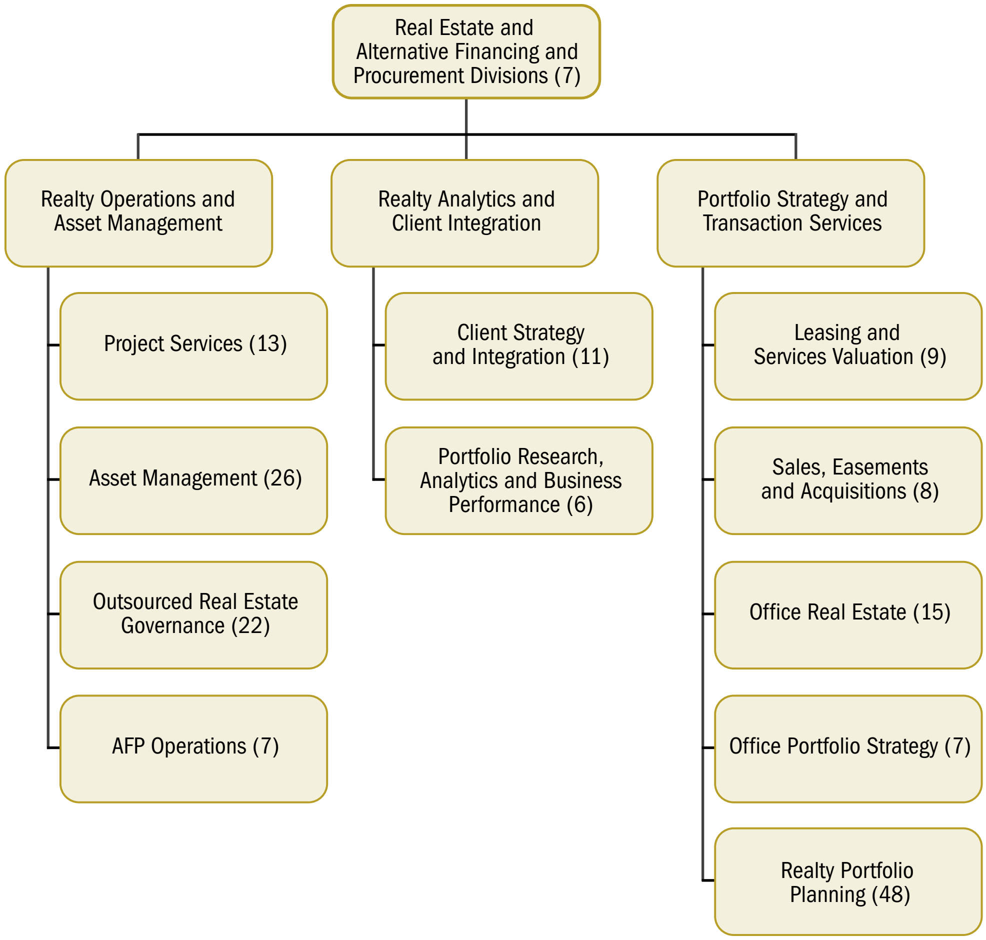
Appendix 1: The 34 Agencies That Manage Their Government-Owned Property

Prepared by the Office of the Auditor General of Ontario

1.	AgriCorp
2.	Agricultural Research Institute of Ontario
3.	Alcohol and Gaming Commission of Ontario
4.	Algonquin Forestry Authority
5.	Education Quality and Accountability Office
6.	Higher Education Quality Council of Ontario
7.	Legal Aid Ontario
8.	Liquor Control Board of Ontario
9.	McMichael Canadian Art Collection
10.	Metrolinx
11.	Metropolitan Toronto Convention Centre Corporation
12.	Nawiinginokiima Forest Management Corporation
13.	Niagara Escarpment Commission
14.	Niagara Parks Commission
15.	Ontario Agency for Health Protection and Promotion
16.	Ontario Clean Water Agency
17.	Ontario Educational Communications Authority (TVO and TFO)
18.	Ontario Energy Board
19.	Ontario Food Terminal Board
20.	Ontario Heritage Trust
21.	Ontario Mortgage and Housing Corporation
22.	Ontario Northland Transportation Commission
23.	Ontario Place Corporation
24.	Ontario Public Service Pension Board
25.	Ontario Science Centre
26.	Ontario Trillium Foundation
27.	Ottawa Convention Centre Corporation
28.	Owen Sound Transportation Company
29.	Province of Ontario Council for the Arts (Ontario Arts Council)
30.	Royal Ontario Museum
31.	Science North
32.	St. Lawrence Parks Commission
33.	Toronto Islands Residential Community Trust Corporation
34.	Walkerton Clean Water Centre

Appendix 2: Staffing Chart of Infrastructure Ontario Real Estate Service

Prepared by the Office of the Auditor General of Ontario



Appendix 3: Audit Criteria

Prepared by the Office of the Auditor General of Ontario

1.	Management information systems provide timely, accurate and complete information on real estate holdings within the Province's general real estate portfolio, and their use to support decision-making for real estate and accommodation activities.
2.	The Province's real estate assets are effectively and economically maintained and managed to: a) provide a healthy and safe environment; b) maximize their service life; and c) provide service levels that meet the requirements of client ministries and agencies.
3.	The framework used to maintain real estate assets under an Alternative Financing and Procurement arrangement ensures that such assets are effectively maintained in an economical manner throughout the lifecycle of the Alternative Financing and Procurement contract.
4.	Accommodation needs are satisfied in a timely, efficient and economical manner in compliance with relevant legislation and policies following a proper analysis of needs, costs and alternatives.
5.	The lease, acquisition and disposition of real estate assets are fair, open and competitive and sales to the private sector result in maximizing returns for the Province. Procurements of goods and services are properly justified, approved, and competitively sourced and vendor performance is effectively monitored with appropriate measures taken for poor performance.
6	Roles, responsibilities and accountability requirements are clearly defined between both Infrastructure Ontario and the Ministry of Infrastructure and Infrastructure Ontario and client ministries/agencies.