



Alberta Infrastructure Government of Alberta Capital Planning

October 2017

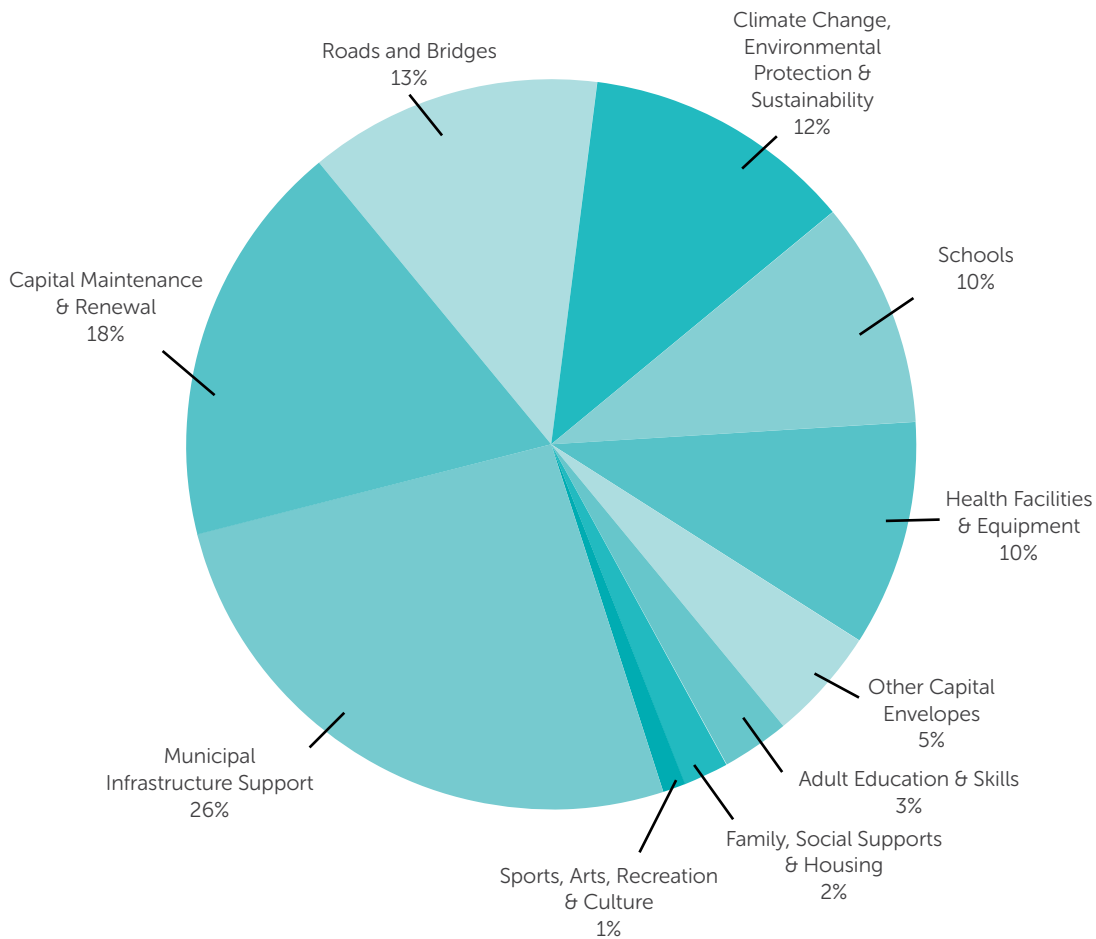
Introduction

Alberta's spending on capital (buildings, roads, schools, hospitals, etc.)

The Department of Infrastructure leads the government of Alberta's capital planning process. It coordinates the capital requests from all government departments and related organizations. In the capital planning process, the majority of the key decisions such as the overall size of the capital plan and what's included in the capital plan, are made by government committees that consist of elected officials. Infrastructure's role is to provide advice and analysis to the committees as they make their decisions.

In the April 2016 capital plan,¹ the Government of Alberta outlined a \$35-billion, five-year capital plan designed to stimulate the economy, keep people working and reduce the province's infrastructure deficit. It plans to spend the \$35 billion in the following areas over the next five years.

Budget 2016 Capital Plan



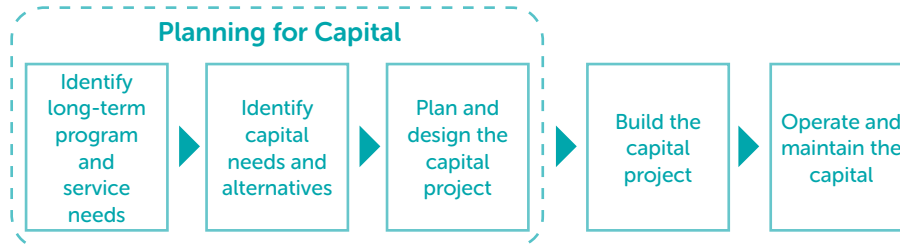
¹ Budget 2016, Fiscal Plan 2016–2019, released April 14, 2016.

What is planning for capital?

Planning for capital is a process involving the following steps:

- identify long-term program and service needs
- identify capital needs (and alternatives²) to meet the program and service needs
- plan and design the capital project

Planning for capital is essential to any long-term strategic planning process.



Planning for capital is essential to any long-term strategic planning process. Governments must have well-designed long-term planning processes so that the capital investments they make today will meet the needs of tomorrow. Capital is long term by nature. For example, a building may take several years to plan, design and construct, and have a useful life of over 40 years. Capital planning is not a discrete activity. It involves many integrated phases and depends on long-term planning for program and service needs.

As the government identifies a capital need and analyzes alternatives, a capital project may evolve. Capital projects move through several planning and design phases that refine project scope, schedule and cost.

The Summary of the Planning-for-Capital System section below has more information on what an effective capital planning system is.

Who plans for capital?

Many parties are involved in planning for capital.

The Department of Infrastructure guides departments—The Department of Infrastructure develops, implements and monitors compliance with policies and processes that support the Government of Alberta’s capital planning system. The system is complex because it requires coordinating every department and other government organizations, such as Alberta Health Services, post-secondary institutions, school jurisdictions and other boards and agencies. Infrastructure guides departments on the requirements of the annual capital submission.

Departments determine needs—They coordinate with other government organizations, such as Alberta Health Services. Departments and other government organizations should:

- determine long-term program needs
- identify long-term capital needs and alternatives to meet those program needs
- plan and design capital projects to meet their program needs

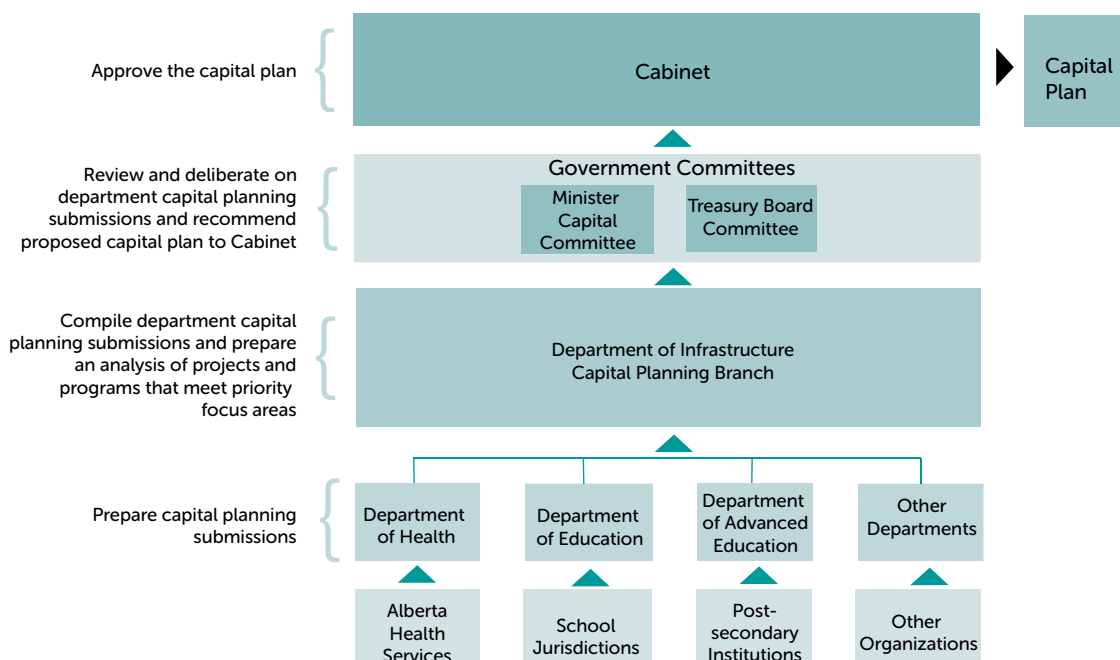
Departments are also responsible for monitoring their compliance with policies and processes that support the Government of Alberta’s capital planning system.

² To meet a capital need there may be several alternatives. Examples include building a new facility, repurposing an existing facility or leasing a facility.

Annually, departments give Infrastructure a ranked list of capital projects and programs that they need funded. Capital projects have a defined scope, schedule and cost, while capital programs don't. Instead, departments request funding and then, for the majority of capital programs, decide what capital projects to fund.

Infrastructure compiles department submissions—Infrastructure gives departments' capital planning submissions to government committees. Several government committees are involved, including the Minister Capital Committee, the Treasury Board Committee and Cabinet. The committees decide how much to spend on capital, as part of the budget process, and which programs and projects to spend it on. Departments are responsible for spending on the capital programs and projects.

Key participants involved in the annual capital planning submission



Audit Objective and Scope

The objective of our audit was to determine whether the Department of Infrastructure has an adequate capital planning system to:

- guide departments in identifying and assessing capital needs
- confirm that departments' capital needs align with their long-term program needs and service delivery plans
- make capital investment recommendations to government committees

We examined the Department of Infrastructure's systems for developing the March 2015 capital plan³ and the April 2016 capital plan.⁴ Although the government released the March 2015 capital plan as part of the March 2015 budget, Members of the Legislative Assembly did not vote on an appropriation bill because of the May 2015 election and subsequent change in government. The new government released its budget (including the capital budget) in October 2015.⁵

3 Budget 2015, Fiscal Plan 2015–2020, released March 26, 2015.

4 Budget 2016, Fiscal Plan 2016–2019, released April 14, 2016.

5 Budget 2015, Fiscal Plan 2015–2018, released October 27, 2015.

Our examination included Infrastructure’s planning systems and processes to:

- confirm that department capital requests align with long-term program needs and service delivery plans
- confirm that department capital planning submissions are supported by appropriate planning
- make capital investment recommendations to government committees
- produce the capital plan
- evaluate maintenance funding programs for government-owned facilities, health facilities, post-secondary institutions and schools

Our audit did not include the government’s systems for planning information technology, planning municipal capital programs, determining the overall size of the capital plan, or determining how to fund the capital plan (including public-private partnerships).

We developed our criteria for this audit based on Infrastructure’s accountabilities and responsibilities.

Our work was conducted in accordance with the *Auditor General Act* and the standards for assurance engagements set out in the CPA Canada Handbook—Assurance.

In 2007,⁶ we reported on Alberta’s capital planning system to assess and prioritize infrastructure needs. We made five recommendations. In 2010,⁷ we followed up on these recommendations and reported that one of the five recommendations had been implemented. In September 2016, Infrastructure told us that it had not implemented the remaining four recommendations. The outstanding recommendations from 2010 are:

- **reduce deferred maintenance**—develop a plan to reduce deferred maintenance and include information in the province’s capital plan
- **maintain assets**—establish a process that enables public infrastructure assets to be properly maintained over their life
- **evaluate infrastructure projects**—improve the process to evaluate proposed capital projects that departments submit
- **improve information for Treasury Board**—examine how the current information provided to Treasury Board can be improved

We did not complete a follow-up audit on these outstanding recommendations. Because the original audit was nearly 10 years ago, the recommendations are not implemented, and the capital planning system has changed, we can achieve more by making new recommendations to move Infrastructure’s capital planning system forward.

What We Examined

We:

- reviewed Infrastructure’s capital planning policies and processes and the 2015 and 2016 capital plans published annually as part of the government’s fiscal plan
- examined a sample of departments’ systems to assess, identify and plan for long-term programs and services
- tested a sample of capital projects and programs that departments submitted for the March 2015 and April 2016 capital plans
- examined the capital information submitted to government committees and documentation of their decisions
- reviewed the maintenance funding programs for government-owned facilities, health facilities, post-secondary institutions and schools

⁶ *Report of the Auditor General of Alberta—October 2007*, Vol. 1, p. 29–61.

⁷ *Report of the Auditor General of Alberta—October 2010*, p. 85–100.

We conducted our field work from June 2015 to April 2017. We substantially completed our audit on June 22, 2017.

Conclusion

Between the March 2015 and April 2016 capital plans, the Department of Infrastructure made improvements to the capital planning system. For the April 2016 capital plan, Infrastructure improved the capital planning system by:

- developing priority focus areas for capital—Infrastructure also provided the Minister Capital Committee with an analysis of capital project and program requests that aligned with the priority focus areas
- developing common criteria for all departments—departments had to say if a project or program met the criteria and explain how
- providing government committees with more information on capital project and program requests

Infrastructure needs to improve its capital planning processes by updating its guidance to departments, clarifying its phased approach to capital planning and approval, and examining maintenance programs and how those programs are funded.

During our audit we identified that, while several departments have done some long-term program or service delivery planning to support their capital planning submissions, the planning varies in breadth and depth. Without comprehensive long-term plans for strategic program or service delivery, Infrastructure cannot verify that departments' capital needs, which they submit to Infrastructure, align with their long-term program or service delivery plans.

We have directed our recommendations to the Department of Infrastructure as it leads the capital planning process within the Government of Alberta. However, improving the capital planning system will require the active participation of all departments.

Why This Conclusion Matters to Albertans







The Government of Alberta delivers programs and services to Albertans. Capital, such as health facilities, roads and bridges, and schools, is an important component of program and service delivery. The Department of Infrastructure must have effective capital planning systems so that the infrastructure it builds today will meet government's long-term program and service delivery needs.

Government committees rely on Infrastructure's capital planning system to make significant capital investment decisions with long-term impacts. They make these decisions in an environment with many competing capital priorities. Infrastructure needs an effective capital planning system so that it can provide the government committees with appropriate, evidence-based information and ensure the committees understand the current and future implications of their capital planning decisions.




The Department of Infrastructure must have effective capital planning systems so that the infrastructure it builds today will meet government's long-term program and service delivery needs.

Summary of the planning-for-capital system

Long-term planning varies in breadth and depth.

What Albertans should expect	What Infrastructure’s capital planning system has	Assessment
Departments estimate long-term capital needs based on their plan for long-term programs and services.	Generally, departments submit capital requests to Infrastructure without any reference to a long-term strategic program or service delivery plan. Several departments we sampled had completed some long-term program or service delivery planning to support their capital planning submissions, but long-term planning varies in breadth and depth.	
The capital planning system includes standards that stakeholders follow.	The capital planning manual is only a guideline and is outdated. Infrastructure documented the April 2016 capital planning process and provided departments with submission templates. The process and templates do not form a comprehensive set of capital planning standards.	
A phased approach to capital planning and approval is used.	In the April 2016 capital plan, Cabinet approved unallocated funding for some funding envelopes and planning funds—a good first step in supporting a phased approach. Infrastructure needs to further clarify its phased planning approach.	
Infrastructure gives government committees ranked capital planning requests.	For the April 2016 capital plan, the Minister Capital Committee received a lot of information, including each department’s prioritized capital list, an analysis of the projects and programs that aligned with the priority focus areas, an analysis of requests by funding envelope and a summary of each project or program.	
Infrastructure obtains information from departments on their maintenance needs and risks.	Departments provide their maintenance funding requests to Infrastructure as part of the annual capital planning process. But Infrastructure does not obtain sufficient information from departments on their maintenance needs or risks or the maintenance results they aim to achieve.	
The Government of Alberta periodically evaluates capital maintenance funding programs for buildings (government-owned facilities, health facilities, post-secondary institutions and schools).	Departments have completed elements of a program review, but the reviews occur in silos. Because the four building maintenance programs all have similar objectives, the government could benefit from a centralized review of these programs to assess similarities and differences, apply lessons from one program to others, and assess if these capital maintenance programs are working as effectively as possible.	

Legend

-  Significant improvement required
-  Improvement required, but not to the same extent as a red
-  No significant weaknesses identified

Findings and Recommendations

Improve capital planning standards and phased approach to capital planning and approval

Context

Because of the number of organizations involved, standards are critical for capital planning in government. Infrastructure's capital planning system coordinates large, complex systems across every department and other government organizations, such as Alberta Health Services, post-secondary institutions and school jurisdictions. Departments need standards to ensure their capital planning systems (and the organizations they oversee) align with Infrastructure's and meet future needs.

A *phased* process is one that separates the capital planning and approval process into phases. This is common practice in industry and government. Critical decisions are made at critical phases, including assessing whether a project should proceed, change or stop. Each phase has project deliverables that must be completed. Examples of planning deliverables include a needs assessment, a business case, a schematic design, detailed drawings, and regulatory and environmental approvals. The process has controls to ensure the planning deliverables are completed and decision-makers use criteria to evaluate the deliverables and decide if a project can proceed to the next phase. There can be several planning phases.

Infrastructure's capital planning manual includes a phased approach to capital planning and approval, with four project phases:

- project assessment
- project development
- detailed design and contract documents
- tender and construction

The manual describes the process as a funnel, with its widest point being the 10-year plan. This plan provides a general outlook on the driving socio-economic conditions, and identifies needs and solutions based on these conditions. The 10-year plan leads to more specific planning on key needs, funnelling into a priority-focused, five-year plan that identifies projects for more detailed planning and costing. Projects are further examined and funnelled into a three-year plan. Then, the remaining projects are approved for implementation and proceed to detailed design. The manual also identifies planning deliverables for each phase. The manual outlines that a committee of deputy ministers reviews the five-year capital requirements and identifies projects to proceed to development in the next year. The deputy minister committee then makes recommendations to the Treasury Board Committee. The deputy minister committee also recommends projects to proceed to the detailed design phase in the three-year plan.

Standards are critical for capital planning in government.

Criteria: the standards of performance and control

The Department of Infrastructure should:

- have adequate capital planning standards
- use a phased approach to capital planning and approval
- ensure departments complete the appropriate planning deliverables, based on the planning phase

Our audit findings**Key Findings**

- Capital planning standards are not up to date or sufficient.
- The capital planning and approval phases are not clear, and Infrastructure does not have adequate systems to verify and report to the Minister Capital Committee if departments have completed sufficient planning.

Capital planning standards

Capital planning manual—The capital planning manual used by Infrastructure is a guide on all capital planning matters in the Government of Alberta. It helps departments and government committees develop infrastructure strategies and projects consistent with provincial capital planning and budgeting processes.

The manual is outdated: it does not resemble the system used to develop the March 2015 or April 2016 capital plans. It's not clear which standards are still relevant and which aren't. Lastly, the manual is only a guide. It isn't clear which parts of the manual are mandatory and which are discretionary.

For the April 2016 capital plan, Infrastructure presented the capital planning process to Cabinet and deputy ministers. The process outlined the steps to complete the capital plan, who was responsible for each step, timelines, priority focus areas, department criteria and funding envelopes. Infrastructure also gave departments high-level instructions, including timelines and capital planning submission templates. The process and templates do not form a comprehensive set of capital planning standards and requirements.

Capital planning standards for mid-year approvals—Although there is an annual capital planning submission process, departments may submit new capital projects and programs to the Treasury Board Committee for approval any time of the year. Infrastructure has not defined standards for submissions outside of the annual capital planning submission process. Ministers submit these capital projects and programs in a letter to the Minister of Treasury Board. They do not have to complete the capital planning submission templates, nor do they have to provide this information to Infrastructure. In a sample of new capital projects and programs in the March 2015 capital plan, the committee approved most of them outside of the annual capital planning process. For example:

- Alberta Health Services identifies and ranks capital needs across the province and gives the Department of Health a list of priority capital needs. The Department of Health reviews the priority needs and submits capital funding requests to Infrastructure or the committee. Alberta Health Services, the Department of Health, and Infrastructure also have a Health Facilities Capital Program Manual that includes a structured planning process with defined deliverables and approvals for health capital projects.

In 2014, the committee approved a \$20-million health project that was not on AHS's priority capital needs list. The project didn't follow the planning processes or approvals outlined in the Health Facilities Capital Program Manual. Instead, an organization wrote to the Minister of Health requesting that the minister consider the replacement of its health facility an urgent priority. The minister told the organization that AHS was responsible for identifying priority capital needs and they needed to work with AHS. Shortly after the minister sent this letter to the organization, the committee approved the request.

Phased approach to capital planning and approval

April 2016 approach—Neither the March 2015 nor the April 2016 capital planning processes used the manual's phased approach to planning and approval. For the April 2016 capital plan, the deputy minister committee described in the manual did not exist. Projects were not funnelled from a 10- to 5- to 3-year plan with phases.

For the April 2016 capital planning process, Infrastructure identified several activities that various stakeholders needed to complete. For example, Infrastructure would ask departments for a ranked list of projects or programs that required planning funds, and another ranked list of projects and programs not in the capital plan. Infrastructure also asked departments to identify its priority projects that were shovel-ready. The Minister Capital Committee would review the lists and ensure they fit with the capital planning priority focus areas. The Treasury Board Committee would make recommendations to Cabinet on which projects and programs to fund. But for the April 2016 process, it's not clear what the planning phases were or how projects would move between the phases.

Planning funds—For the April 2016 capital planning submission, Infrastructure asked departments for a ranked list of projects or programs that required planning funds. It also said that departments should direct planning funds toward business case development. It gave departments examples of deliverables that planning funds could and could not be used for. Some of the deliverables that Infrastructure said departments could use funds for related to planning deliverables that departments would complete after a business case, as outlined in the manual.

Departments requested planning funds for specific projects and programs, and Cabinet approved \$145 million in planning funds for the next five years. Treasury Board and Finance gave each department a decision memo that said how much funding it had been approved for planning. Although some departments requested planning funds for specific projects and programs, the decision memos didn't specify if the approved funding was for specific projects and programs. It's not clear how much planning departments should do before they come back to the Minister Capital Committee.

Projects and programs—For the April 2016 capital planning submission, Infrastructure also asked departments for a ranked list of projects or programs. Infrastructure asked departments to provide supporting planning documents, such as a needs assessment, business case, options analysis, functional program review or schematic design report. A needs assessment is usually one of the first planning documents completed, whereas a schematic design report is normally completed after a business case and functional program review. As more planning is completed, the project scope is further defined, as is the project cost estimate accuracy. It's not clear what project planning deliverables departments had to complete for a project to be considered for inclusion in the capital plan.

Shovel-ready projects—For the April 2016 capital planning submission, Infrastructure also asked departments to identify shovel-ready projects. The term “shovel-ready” is not used in the manual. Nor is it a phase. Infrastructure told departments that if a project would be ready to go to tender by June 2016, it would be shovel-ready. But Infrastructure didn’t define the planning deliverables needed for a project to be shovel-ready. A sample of projects from the April 2016 capital plan that departments identified as shovel-ready showed that most were at more advanced phases of planning. As of August 2016, some of the projects sampled had not gone to tender because more planning was needed. For example, Cabinet approved a \$19-million project that the Department of Environment and Parks identified as shovel-ready. In the capital planning submission, Environment and Parks identified that a planning study was complete and that the construction of the facility could be expedited and considered shovel-ready if a construction management method of procurement was used. Infrastructure is building the facility and did not support this procurement approach. As of August 2016, Infrastructure needed to complete detailed design before the facility could proceed to the construction tender phase.

Verification of planning documents—For the April 2016 capital plan, Infrastructure improved the capital planning submission templates by asking departments to provide specific planning documents, such as a needs assessment, business case or schematic design report. Departments didn’t always provide these planning documents, and Infrastructure couldn’t provide us with documented evidence that it had verified that these planning documents were completed. Infrastructure said each department needed to ensure it had sufficiently planned its projects. Infrastructure also said that for the April 2016 capital plan, it only had approximately one week to prepare the submissions for the Minister Capital Committee and it didn’t have time to verify if departments had completed the planning documents.

Allocation of planning funds—The approval of planning funds in the April 2016 capital plan is a good step toward ensuring departments plan enough, at the right time. Infrastructure now needs to further clarify its phased planning approach and define the deliverables required for each phase.

RECOMMENDATION: Improve capital planning standards and phased approach to capital planning and approval

We recommend that the Department of Infrastructure improve its capital planning system by:

- updating its capital planning standards
- clarifying the capital planning phases and the planning deliverables required for each phase
- verifying if departments have completed the required planning for capital submissions and, if not, reporting this information to government committees

Consequences of not taking action

Government committees may base decisions for capital projects and programs on incomplete and inaccurate information. The committees may approve funding for projects before the project scope, cost and risks are adequately defined and understood, potentially resulting in capital projects that exceed cost or do not meet business needs.

Improve maintenance planning systems

Context

Roles—The Department of Infrastructure is responsible for the annual capital planning system. It tells departments what information it needs from them on their capital maintenance and renewal needs. Departments and other government organizations, such as Alberta Health Services, post-secondary institutions and school jurisdictions, determine their own maintenance needs and priorities.

Capital maintenance and renewal budget increases—The Government of Alberta has significantly increased its investment in capital maintenance and renewal.⁸ Between 2012 and 2015, the budget for maintenance ranged from about \$400 million to \$600 million per year. In the April 2016 capital plan, the budget for maintenance will grow significantly and range between about \$900 million and \$1.5 billion between 2017 and 2021.

Criteria: the standards of performance and control

The Department of Infrastructure should have systems to:

- obtain information on maintenance needs and risks
- evaluate the impact of its maintenance funding recommendations and provide this information to the Minister Capital Committee

Our audit findings

Key Findings

Infrastructure does not obtain adequate information from departments on their maintenance needs and risks, or on the results they aim to achieve with the maintenance funding they request. Therefore, Infrastructure cannot assess if the advice it provides to the Minister Capital Committee on maintenance funding will maintain assets or cause asset condition to deteriorate (or improve).

Maintenance funding requests

For the April 2016 capital plan, Infrastructure asked departments to provide their maintenance funding requests for the next five years. A sample of maintenance funding requests by five departments showed that their methodologies differed. For some departments sampled, it wasn't clear from their submission the methodology they used to determine the maintenance funding requested. And some departments changed their methodology annually. For example, for the April 2016 submission, one department used its supporting maintenance systems to determine maintenance needs and then adjusted the needs based on priority or capacity constraints. One department incrementally built up its requested funding based on capacity constraints, without any reference to actual maintenance needs. To determine their requested funding, two departments used one per cent of replacement cost and another department used two per cent of replacement cost. None of the departments that used the replacement cost methodology identified their actual maintenance needs. Infrastructure didn't ask departments what results they expected if they got their funding requests.

⁸ Capital maintenance and renewal includes work that maintains an asset, extends its life, or makes sure it does not become obsolete.

Departments' maintenance needs and risks

For the March 2015 proposed capital plan, Infrastructure asked departments to classify maintenance funding requests into high-, medium- and low-risk categories. But it did not define these risk categories or explain how to do this. For the April 2016 capital plan, Infrastructure did not request any information from departments on their maintenance risks. Infrastructure could not give us evidence of how departments' maintenance needs or funding requests relate to maintenance risks, because it did not ask departments for this information.

Infrastructure's maintenance funding analysis and advice

Government advice on maintenance costs—In 2008, the Government of Alberta published a strategic capital plan, saying:

“Literature on maintenance costs suggests that annual costs to maintain a building are approximately 2% of its replacement cost. In the first 25 years, the cost is more likely to be in the 0.5% range of the replacement value. It increases to approximately 3% in the second 25 years, averaging roughly 2% over the 50-year life of a building. The percentage can vary, and different buildings will have different maintenance requirements. The fact that maintenance costs increase in the second half of a building's life is significant for Alberta because the province had a significant building boom in the 1970s and 1980s. These facilities are now 25 to 35 years old and are starting to move into the range where annual maintenance costs could be in the 3% range.”⁹

For the March 2015 proposed capital plan, Infrastructure did not use departments' actual maintenance funding requests (except Transportation's¹⁰) to make maintenance funding recommendations to the Treasury Board Committee. Instead, consistent with this 2008 guidance, it used a percentage of replacement cost, but a lower percentage than the guidance suggested. Infrastructure recommended that the Treasury Board Committee incrementally build up maintenance funding it approved to one per cent of replacement cost over five years. Infrastructure told the committee that this was based on industry standards and would be sufficient to maintain existing assets at current levels—facility condition would neither improve nor worsen. Infrastructure did not have any analysis to support this assessment. The committee approved maintenance funding based on the replacement cost methodology, with some shifting of funds between years. This led to a significant increase in approved maintenance funding in the March 2015 proposed capital plan.

Funding capital maintenance and renewal based on replacement cost may be an acceptable methodology. But Infrastructure should still obtain information from departments on their actual maintenance needs, risks and expected results and analyze this information to support the funding it recommends to government committees.

Additional maintenance funds—For the April 2016 capital plan, Infrastructure gave the Minister Capital Committee the departments' maintenance funding requests and a scenario suggesting the departments could, collectively, invest an additional \$648 million in maintenance over the next five years. The \$648 million was in addition to the \$5.4 billion in maintenance funding already approved as of December 2015. There is no documentation of how Infrastructure arrived at the \$648 million. Infrastructure

9 <http://open.alberta.ca/dataset/c908860e-0603-404f-8afd-31421ea83efc/resource/ec5c517c-986d-4c9b-b7b5-280098a038d0/download/4060237-2008-20-Year-Strategic-Capital-Plan-web.pdf>, page 65.

10 Infrastructure used Transportation's request for roads and bridges. Transportation based its request on capital maintenance and renewal needs.

said the figure was based on what it felt was needed to stop the maintenance backlog from growing, while balancing the capacity of departments and other government organizations to complete additional maintenance projects.

In documents we examined, Infrastructure said it based the proposed maintenance funding projections on at least one per cent of the replacement cost or the industry standards for similar assets. Infrastructure did not have any documented analysis to support this statement. Nor did it have an analysis of how the approved capital maintenance and renewal funding compares to the one per cent replacement-cost methodology. Cabinet ultimately approved \$792 million, mostly for landslide repairs, post-secondary institutions, schools and seniors' facilities.

Although departments, together with government organizations such as Alberta Health Services, post-secondary institutions and school jurisdictions, are responsible for identifying and tracking their maintenance needs and priorities, Infrastructure has to obtain this information from them to provide its analysis and advice on maintenance funding to the Minister Capital Committee.

Infrastructure's review of maintenance

In June 2016, Infrastructure reviewed deferred maintenance in the Government of Alberta. It found significant differences in how departments and other government organizations calculate and interpret deferred maintenance. The review made several recommendations to standardize the definition of deferred maintenance, link maintenance investment to service outcomes, incorporate risk and formalize performance feedback.

Infrastructure's review of deferred maintenance was a good first step. The review produced useful recommendations that would help Infrastructure with developing better investment planning systems for existing infrastructure within the government. Infrastructure has committed to reviewing these recommendations and developing an implementation plan.

RECOMMENDATION: Improve maintenance planning systems

We recommend that the Department of Infrastructure:

- obtain information from departments on their maintenance needs and risks, and on the results they aim to achieve with the maintenance funding they request
- analyze the departments' maintenance information and provide objective advice to government committees on maintenance funding

Consequences of not taking action

Government committees will not have adequate information on departments' maintenance needs, risks or results expected when making maintenance funding decisions. This lack of adequate information could cause poor service delivery, unnecessarily high operating and maintenance costs, and unnecessary risks to Albertans' health and safety.

Evaluate building maintenance programs

Context

The Government of Alberta has several capital programs to maintain buildings. We examined the four largest programs:

- **the Infrastructure Maintenance Program (IMP)**—The Department of Infrastructure (for health facilities) and the Department of Advanced Education (for post-secondary institutions) each have their own program with this name
- **the Infrastructure Maintenance Renewal (IMR) Program**—The Department of Education has this program for school jurisdictions
- **the Government Owned Facilities Preservation Program (GOMP)**—The Department of Infrastructure runs this program for government-owned and -leased facilities

All four programs have a similar purpose: provide funding to repair building parts, such as boilers and roofs, to meet buildings’ needs and extend their lives.

Several departments and other government organizations, including Alberta Health Services, post-secondary institutions and school jurisdictions, are involved in these programs. Their responsibilities are:

	GOMP – government-owned and -leased facilities	IMP – health facilities	IMP – post-secondary institutions	IMR – schools
Capital maintenance program budget	Infrastructure	Infrastructure	Advanced Education	Education
Develop capital maintenance plan	Infrastructure	Alberta Health Services	post-secondary institutions	school jurisdictions
Review capital maintenance plan	Infrastructure	Infrastructure and Health	Infrastructure	Education ¹¹
Set capital maintenance priorities, complete maintenance and rehabilitation projects and spend the funds	Infrastructure	Alberta Health Services	post-secondary institutions	school jurisdictions
Monitor capital maintenance expenditures	Infrastructure	Infrastructure	Infrastructure and Advanced Education	Infrastructure and Education

Cabinet approves funding for these programs as part of the Government of Alberta’s capital plan. In the April 2016 capital plan, Cabinet approved \$3 billion for capital maintenance and renewal funding for government-owned facilities, health facilities, post-secondary institutions and schools for the next five years.

¹¹ Although Education requires school jurisdictions to have an annual IMR plan, they give it to Education only if asked.

Criteria: the standards of performance and control

The Government of Alberta should periodically evaluate its capital maintenance programs for buildings (government-owned facilities, health facilities, post-secondary institutions and schools) to assess whether they are meeting program goals.

Our audit findings**Key Findings**

The Government of Alberta has not reviewed its four capital maintenance programs for buildings to assess whether they are working as effectively as possible.

Capital maintenance programs for buildings

Each program has different guidelines and oversight. Infrastructure has an asset management strategy that defines asset management goals for government-owned and -leased facilities. The guidelines for other programs describe roles and responsibilities, funding formulas, project thresholds, eligible expenses, eligible facility types, and funding and reporting requirements. But they differ significantly. For example:

- Project thresholds**—School jurisdictions can use IMR Program funds for capital maintenance projects under \$1 million (unless the minister approves more). Alberta Health Services can use IMP funds for capital maintenance projects under \$5 million (unless a specific committee approves more). Post-secondary institutions do not have project thresholds under their IMP, nor does Infrastructure have project thresholds for its GOFP.

Advanced Education, Education, Health and Infrastructure submit funding requests for these programs as part of the annual capital planning submission. The departments submit these funding requests for a program, not for specific projects. It is not clear if the project thresholds for these programs meet the Government of Alberta's capital planning requirements. For example, can departments submit all capital maintenance projects, regardless of size and complexity, as part of the capital maintenance and renewal program? Or do projects that meet specific criteria, such as project size and complexity, need separate approval from Cabinet within the capital plan?
- Reporting requirements**—For example, annually, Alberta Health Services must submit a multi-year IMP plan to Infrastructure for review. The plan outlines the IMP projects underway and the anticipated IMP projects for the next two years. If AHS adds a new preservation project to its IMP plan and the project exceeds \$1 million, excluding emergency projects, or if AHS adds a new functional project to its IMP plan, AHS must submit the project to Infrastructure for review before work starts. Post-secondary institutions must also submit a multi-year IMP plan to Infrastructure for review each year. If a post-secondary institution revises its plan and the changes exceed either \$2.5 million or 50 per cent of its total IMP funding, it must also submit the change to Infrastructure for review. Although Education requires school jurisdictions to have an annual IMR plan, they give it to Education only if asked.
- Funding formulas**—Education and Advanced Education allocate IMR and IMP funding to school jurisdictions and post-secondary institutions using formulas. But the formulas differ. The formula for schools uses facility area, facility age and full-time student counts to determine the funding each school jurisdiction will receive from the IMR program. Advanced Education recently changed its formula: it uses area and the five-year deferred maintenance liability to calculate the funding each institution will receive from the IMP.

Review of capital maintenance programs for buildings

Some departments, working with other government organizations, review program guidelines periodically. And all departments have completed elements of a program review. But these reviews occur in silos: each program is reviewed separately. We could not find evidence that any department has comprehensively reviewed all these programs to assess similarities and differences, apply lessons from one program to others, or assess if these programs are working as effectively as possible.

Because there are four building maintenance programs and the program budgets are in three different departments, no one department is responsible for reviewing all of the programs. Because Infrastructure is the only department involved in all four building maintenance programs, and it is responsible for developing and implementing policies related to the capital plan, it is in the best position to lead a centralized review of the four programs. If Infrastructure does not have the authority to conduct the centralized review, it should seek the necessary authority.

RECOMMENDATION: Evaluate capital maintenance programs for buildings

We recommend that the Department of Infrastructure work with affected departments to lead a review of the four capital maintenance programs for buildings and evaluate whether they are working well.

Consequences of not taking action

If a comprehensive review of the four similar programs is not completed, there will be no opportunity to benefit from the learnings, insights and efficiencies such a review would provide.