

Chapter 4

Section 4.06

Ministry of Training, Colleges and Universities

Infrastructure Asset Management at Colleges

Follow-up to VFM Section 3.06, *2010 Annual Report*

Background

Over the decade from the 2000/01 to 2009/10 fiscal years, the Ministry of Training, Colleges and Universities (Ministry) provided Ontario's 24 colleges of applied arts and technology with facility renewal funding totalling \$13.3 million a year, supplemented by periodic additional allocations for renewals totalling \$270 million. The combined annual and additional funding amounted to \$403 million over the 10-year period.

In addition to funding facility maintenance, the Ministry also provides capital grants to enhance and expand the colleges' capital needs. In recent years, the Ministry has provided this funding primarily for new facilities space so that colleges can accept more students. In 2009, the federal government initiated the Knowledge Infrastructure Program (KIP), a two-year infrastructure program for Canadian colleges and universities.

The federal and provincial governments together provided capital grants to colleges for new facilities totalling \$300.5 million between the 2006/07 and 2009/10 fiscal years to create local short-term employment and increase the number of students that colleges could accommodate. Facilities space includes classrooms, laboratories, cafeterias, offices, libraries, and other such required areas.

Our 2010 audit focused on the adequacy of endeavours by the Ministry and selected colleges to maintain college assets in a good state of repair. Along with our work at the Ministry, we visited the following colleges: Algonquin and La Cité in Ottawa; Confederation in Thunder Bay; and George Brown and Humber in Toronto. We also contacted six other colleges to obtain their input on specific issues and met with various stakeholders, including Colleges Ontario and the Council of Ontario Universities.

Our work indicated that although colleges have benefitted from the new-facility capital funding, ongoing funding for maintenance of existing facilities had not been sufficient to maintain the aging college infrastructure, and the backlog of deferred maintenance was increasing. Some of our more significant observations were:

- The Ministry was in the process of implementing a long-term capital planning process but did not have a formal plan in place at the time of our audit for overseeing the colleges' investment in infrastructure.
- Many colleges had not maintained adequate asset management systems to facilitate effective capital planning and performance reporting on the condition and use of their capital infrastructure.

- As of April 2010, the deferred maintenance backlog—the cost to perform all needed maintenance and repairs—exceeded \$500 million and had been increasing annually. More than \$70 million in capital repairs were in the critical category and needed to be dealt with in the next year.
- As of April 2010, about half of the college system’s infrastructure assets were likely in poor condition when rated according to a recognized industry standard that measures the state of infrastructure.
- Applying the funding guideline of 1.5% to 2.5% of asset replacement cost outlined by the U.S.-based Association of Higher Education Facilities Officers, annual ministry funding to all colleges over the 2006/07–2009/10 fiscal years would have needed to be in the \$80 million to \$135 million range. However, actual capital renewal funding has remained at \$13.3 million annually for many years; even with the periodic additional funding of \$270 million, the total barely adds up to half of this guideline amount.
- Administrators at all of the colleges we visited indicated they had to supplement ministry renewal funds with operating funds to help address their most urgent priorities or run the risk of assets deteriorating prematurely.
- Until very recently, ministry funding decisions often lacked transparency and consistent criteria to evaluate funding requests, and there was insufficient documentation to demonstrate compliance with eligibility criteria.

We made a number of recommendations for improvement and received commitments from the Ministry and the colleges that they would take action to address our concerns.

Status of Actions Taken on Recommendations

According to information provided by the Ministry and the five colleges we visited as part of our 2010 audit, some progress has been made on implementing the recommendations from our *2010 Annual Report*, with substantial progress on a few. The Ministry informed us that it has improved its capital-project selection process and is continuing to develop its capital planning process for colleges. In addition, as a prerequisite for infrastructure funding, every college will be required to develop an asset management plan that will outline the condition of its existing assets and the institution’s plan for addressing its renewal needs. To this end, the Ministry has initiated projects to create a comprehensive college facility space inventory and establish utilization standards, and complete a system-wide assessment of the condition of college facilities across the province. Establishing space standards and assessing the condition of facilities are key first steps in developing a sustainable long-term asset management plan, including priorities for addressing deferred maintenance. As this work is expected to be completed in two years, deferred maintenance will remain a significant issue in the foreseeable future.

CAPITAL PLANNING

Recommendation 1

To help ensure that capital infrastructure grants are allocated on the basis of clearly identified needs and province-wide priorities, the Ministry of Training, Colleges and Universities needs to continue developing a formal long-term capital planning process using current and reliable information obtained from the colleges and make funding decisions based on more predictable, rigorous, and clear criteria.

Status

The Ministry informed us that it is continuing to develop its capital planning process, and in May 2010 sent out a memo to all colleges asking them to identify their capital planning priorities. The memo requested that each college provide an update of its inventory of capital projects and major strategic infrastructure initiatives, including asset management strategies and a ranking of project proposals. Ministry priorities for projects included criteria such as the capacity for growth in high-demand areas, a contribution to long-term economic development, and demonstrated linkages with provincial priorities in post-secondary education, including growth in the college sector and the provision of quality education.

The Ministry has developed a project-selection framework to assess all project proposals received from the colleges with an approach focused on assessing the alignment of the proposals with its own priorities and those of the Ministry of Infrastructure. In June 2011, the Ministry selected 10 capital projects at colleges and committed funding of \$245 million with an estimated incremental enrolment of more than 9,200 students.

In May 2011, the government announced “Putting Students First: Ontario’s Plan for Postsecondary Education.” The plan is designed to support enrolment growth by providing space and operating funding for 60,000 more students at colleges and universities over the next five years. The plan also emphasizes strategic and well-planned growth in the post-secondary education sector.

In June 2011, the Ministry of Infrastructure released Ontario’s long-term infrastructure plan, *Building Together: Jobs and Prosperity for Ontarians*, which outlines the government’s plans for the next 10 years. The plan notes that Ontario will work with colleges and other post-secondary institutions to:

- ensure that infrastructure investments respond to demand, align with the aims of “Putting Students First” and support the goal of a 70% attainment rate for post-secondary education;

- introduce a satellite campus policy to help manage growth in the system and give priority to areas where rapid growth is expected;
- develop a more comprehensive funding policy for major capital projects, including procurement approaches and a framework for determining the appropriate provincial share; and
- emphasize asset management planning and facilities renewal and repurposing.

As a prerequisite for infrastructure funding, every college and university will be required to develop an asset management plan that outlines the condition of its existing assets and its plan for addressing the renewal needs identified. When seeking funding for expansion, institutions will need to provide a clear rationale to opt for new construction instead of renewing or repurposing existing space.

In collaboration with the Ministry of Infrastructure, the Ministry intends to ensure that institutions comply with the new requirements set out in the provincial 10-year infrastructure plan, including developing and publishing detailed institutional asset management plans as a prerequisite to receiving provincial capital funding. The Ministry has also initiated projects to create a comprehensive college facility space inventory, develop space standards and assess the condition of facilities across the province.

The colleges informed us that the Ministry had asked them to submit updates to their proposed capital projects in 2008 and 2010, but there had been no further requests since then. One college noted that these requests represent an excellent foundation for a possible province-wide capital planning process. However, the same college also expressed concern that the process needed to be ongoing in order to provide current and reliable planning information. Another college noted that the Ministry promised to continue consulting with colleges regarding asset management planning and that it subsequently had a number of meetings with ministry staff regarding growth and facilities planning.

FACILITIES RENEWAL AND MAINTENANCE

Recommendation 2

To preserve the taxpayer's investment in the college infrastructure and maintain these assets in good condition so that colleges can provide an adequate learning environment, the Ministry of Training, Colleges and Universities should continue to work with Ontario colleges to:

- *ensure that the asset management information system is regularly and consistently maintained to enable both the Ministry and colleges to make informed decisions based on current, accurate, and complete information; and*
- *develop strategies, targets, and timelines to address the deferred maintenance backlog.*

Status

The Ministry's facilities renewal program is intended to assist post-secondary institutions in addressing ongoing maintenance, repairs and renovations of existing facilities. Recurring annual facilities renewal funding had been \$13.3 million over the previous 10 years and was provided to supplement the colleges' own annual capital maintenance programs. Ministry funding for capital maintenance decreased in 2011/12 and is not expected to increase, as we were informed that funding for facilities renewal was budgeted at \$8.7 million for the 2012/13 fiscal year. Estimates provided by the colleges indicate that components of the 10 approved major capital projects (totalling \$245 million) are projected to contribute an additional \$14 million to address the colleges' current deferred maintenance backlog.

The Ministry and colleges are working to develop an inventory of college spaces that support student enrolment, as well as to develop related standards, consistently assess facility conditions across the college sector and determine the appropriate priorities for addressing deferred maintenance given available funding. Establishing space standards and assessing the condition of facilities

are key first steps to developing a sustainable long-term asset management plan.

Ontario colleges currently maintain their space inventory data in a variety of formats. Furthermore, there is no common definition for different categories of college student space, nor are there standards for the amount of space required for each category. To address this issue, the Ministry and Colleges Ontario (the advocacy organization for the province's colleges of applied arts and technology) signed a transfer-payment agreement in October 2011 to work on the development of system-wide space standards and utilization benchmarks, and to complete a system-wide space inventory.

In November 2011, Colleges Ontario engaged a consultant to lead the work to develop a space inventory, utilization and planning framework for Ontario's 24 colleges. Key deliverables stipulated in the agreement include completion of a system-wide space inventory by September 2012; implementation of a common space inventory database; and development of standards, benchmarks and a reporting system for space utilization. On February 27, 2012, the Ministry received a progress report on the work accomplished to date, which largely focused on the development of a common space inventory database. At the time of our follow-up, the Ministry was expecting another progress report on the space inventory and database by September 15, 2012. Colleges Ontario was planning to deliver its final report by January 31, 2013.

In April 2012, the Ministry received approval to procure a vendor to refine and standardize the existing facility condition assessment systems in use by Ontario's colleges. To ensure that the results of the procurement meet the needs of all decision-makers, a working group with representatives from the Ministry, the colleges, the Ministry of Infrastructure and Colleges Ontario was set up to provide advice. The project is expected to ensure consistent standards in key areas such as replacement values and unit costs, and to undertake system-wide facility condition assessments with related data updates. The project will be funded by

the Ministry and is expected to be completed within two years. At that time, consideration will be given to initiating a cycle of updates to the assessment for up to 20% of facilities per year.

Establishing space standards and assessing the condition of facilities provide the information needed to make good investment decisions. Once better information on the demand for space and the condition of existing space is available, updated estimates on the funding required to meet identified needs can be prepared.

Several of the colleges advised us that they were actively participating in the Ministry's assessment of space utilization and/or facility condition. One college noted that consistently updating the space inventory and utilization data for all colleges was an excellent step toward effective asset management, and it anticipated that all colleges would be up to date by the end of March 2013. The college also noted that, since no system-wide strategies appeared to be emerging and there was no new money and even less facilities renewal funding, it is continuing to develop its own strategies to cope with its deferred maintenance backlog. This often results in addressing only the most urgent needs.

MAJOR CAPITAL PROJECT MANAGEMENT

Recommendation 3

To help ensure that new construction and major renovations efficiently and cost-effectively achieve both college capacity goals and ministry economic objectives, the Ministry of Training, Colleges and Universities should:

- *implement fair and transparent procedures, similar to those developed for the Knowledge Infrastructure Program, for its project proposal, evaluation, and selection process;*
- *enter into an agreement with each college to indicate the Ministry's and college's respective responsibilities for completing the project and the necessary reporting requirements;*
- *advance funds to colleges as the work progresses; and*

- *maintain adequate documentation throughout the process to demonstrate that the program is transparent, fair, and achieves value for money, as well as college and ministry objectives.*

Status

In May 2010, the Ministry requested that colleges identify their capital planning priorities and provide an update to their inventory of capital projects and major strategic infrastructure initiatives, including institutions' asset management strategies and a ranking of their project proposals. To assess all project proposals received, the Ministry developed a project selection framework with an approach focused on assessing the alignment of the proposals with overall provincial infrastructure priorities and initiatives, as well as their fit with the strategic priorities of Ontario's post-secondary education sector.

Project assessment criteria included the estimated total and provincial cost (including cost per each new student enrolled); the type of project (for example, renewal, expansion); the impact on capacity growth in underserved regions; alignment with key government initiatives, such as the province's growth plans; and links to key sectors outlined in Ontario's innovation agenda (such as health services, science and technology, and skilled trades).

These project assessment criteria were included in the evaluation templates that ministry staff completed in order to evaluate all the project proposals received from the institutions. After the initial project assessment, ministry staff met with representatives from the colleges to review their project proposals and their alignment with institutional priorities and ministry capital planning objectives. Following these meetings, the Ministry identified 10 capital projects for funding.

The Ministry entered into transfer payment agreements with all institutions whose infrastructure projects were selected, with the exception of three large and complex infrastructure projects approved for Alternative Financing and

Procurement (AFP), a construction delivery model developed and managed by Infrastructure Ontario. The Ministry will enter into transfer payment agreements for the AFP projects once the projects are at the appropriate stage. No funding will be flowed to these three institutions until agreements are in place. The Ministry's transfer payment agreements stipulate that each institution is required to comply with the Procurement Directive that came into effect on April 1, 2011, under the *Broader Public Sector Accountability Act, 2010*. The agreements were reviewed and approved by the Ministry of the Attorney General to ensure they protect, to an appropriate degree, the interests of the province.

The Ministry's project oversight includes monitoring progress on the projects and ensuring compliance with the government's Transfer Payment Accountability Directive and with the Cash Management Directive. The latter directive requires payments be made at or close to the time money is needed by the recipient. As part of the process, in addition to the pre-existing annual and close-out reporting requirements, the Ministry has implemented a quarterly reporting cycle that captures expenditure reporting and provides details that enable the Ministry to monitor project progress and provide transfer payments as the construction phase progresses.

The Ministry also introduced a new requirement for institutions to provide a cost consultant's report reviewing the projected costs of the projects. In addition to the pre-existing requirement that each institution provide a copy of the Certificate of Substantial Performance in accordance with subsection 2(1) of the *Construction Lien Act* upon completion of the project, colleges are now required to provide a commissioning agent's report to confirm that the building systems work as they are intended to.

The Ministry intends to refine its existing project selection and project oversight to reflect the long-term capital planning objectives and provincial fiscal realities. Given limited capital funding flex-

ibility, the Ministry has not issued a request to colleges for updated or new proposals since 2010.

With respect to submissions, project selection, funding agreements, cash flow and monitoring, one of the colleges responded that there has been a noticeable increase in rigour in the requirements related to the documentation and reporting for its funded capital projects. The college also noted that these projects still necessitated a significant amount of effort to solicit support for approvals, and it would like to see a process that would help provide more predictable funding decisions.

MEASURING AND REPORTING ON PROGRAM EFFECTIVENESS

Recommendation 4

To help ensure that all stakeholders have a good understanding of the condition of the province's college infrastructure assets, the Ministry of Training, Colleges and Universities and the colleges should continue to develop and report long-term performance indicators on the management and condition of their facilities.

Status

The Ministry is engaged in ongoing discussions with the sector on the data requirements for the asset management framework, including defining the most suitable asset management performance indicators. The outcomes from the space standards and facility condition assessment projects, to be completed over the next two years, will guide the development of performance indicators.

In December 2011, the Ministry established the Deferred Maintenance Working Group with representation from the Ministry of Infrastructure, Colleges Ontario and various colleges. The Working Group had a general discussion of the capital-related decision-making processes of colleges, the Ministry and the Ministry of Infrastructure. The aim was to determine what sorts of data were required to improve decision-making at all levels. A second meeting focused on the facilities condition assessments, specific pieces of data that would

need to be collected and the mechanics of collecting such data.

Before the facilities condition assessments begin, a meeting will be held with the working group and the consultant engaged to refine and standardize the existing facilities condition assessment systems in use by Ontario's colleges. Data requirements will be finalized at this meeting and performance indicators discussed. The practical experience of the successful consultant will be combined with the reporting needs of colleges and the provincial government to arrive at a final suite of indicators. While the working group is currently focused on implementing the facility condition assessment project, the focus will shift to how best to use the resulting data when the project is complete.

Several colleges indicated that the two major initiatives in progress, the space standards and facility condition assessment projects, will contribute to the development of performance indicators and reporting mechanisms to ensure consistent and comparable reporting for both the condition and utilization of college assets.