



Hamilton

INFORMATION REPORT

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	July 12, 2018
SUBJECT/REPORT NO:	Capital Lifecycle Renewal - Strategic Renewal of Facilities (PW18065) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Robyn Ellis (905) 546- 2424, Extension 2616
SUBMITTED BY:	Rom D'Angelo, C.E.T.; CFM Director, Energy, Fleet and Facilities Management Public Works Department
SIGNATURE:	

Council Direction:

Emergency and Community Services Committee, at its meeting of September 3, 2008 (Item 3(d), E&CS Report 08- 011) and February 11, 2013 (Item 8, E&CS Report 13-002) provided direction in relation to Strategic Renewal of Facilities:

“That Staff be directed to review and update Option 4 - in the Strategic Renewal and New Construction strategy (every five years).”

Information:

History and Introduction:

September 12, 2016, Emergency and Community Services Committee was informed of the results of the Indoor Study Phase One Update (respecting public-use Recreation Facilities) and provided considerations for future phases of the Indoor Study through Report ECS07068(d) (City Wide). This report built upon earlier Council Reports including the Use, Renovation and Replacement Study of Hamilton Recreation and Public-Use Facilities - Recommendations (Report ECS07068(b)) (City Wide) in 2008, which identified factors impacting the use and condition of current Recreation Facilities, and examined future Facility priorities. Since 2008, 53% of the shorter term recommendations have been completed, partially completed, or are in progress. However, achieving the balance of the larger Recreation Facility recommendations from the 2008 report is currently out of reach from a 10 year capital funding perspective.

During the 2017 capital budget process, staff identified that there is a significant capital funding gap in Facilities across all portfolios: Recreation Facilities, Corporate Facilities and Entertainment Facilities. This funding gap is an obstacle to the achievement of the

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: Capital Lifecycle Renewal - Strategic Renewal of Facilities
(PW18065) (City Wide) - Page 2 of 9**

10 year Facility priorities identified through Report ECS07068(d) (City Wide) respecting Recreation Facilities, as well as keeping up with the increasing backlog of facility infrastructure renewal across all portfolios. This funding gap in lifecycle renewal is contrary to recommendations by the Canadian Infrastructure Report Card (CIRC), who recommend an infrastructure renewal rate between 1.7% and 2.5% of the replacement value of buildings. The CIRC is supported by four organizations as follows: Canadian Construction Association, Canadian Public Works Association, Canadian Society for Civil Engineering, Federation of Canadian Municipalities.

October 20, 2017 at the Tax Capital Workshop, Public Works Staff delivered a presentation on Facilities Asset Management. The presentation also reported results of staff work regarding Strategic Renewal of Facilities. Public Works Staff identified a shortfall to sustain existing infrastructure at recommended reinvestment, as well a shortfall for constructing new, future Recreation Facility priorities. Additionally, Bill 6, “The Infrastructure for Jobs and Prosperity Act” was introduced as a legislative mandate to report capital renewal against benchmarks.

Staff identified the importance of updating Council regarding this funding gap, therefore in 2016 the project team engaged an architectural consultant to do a high level analysis of the current state of strategic renewal of Facilities portfolio including Recreation, Corporate and Entertainment Facilities. This included an analysis of known funding gaps and assisting in the development of recommendations and guidelines around renovations, expansions and new construction of Facilities, completed Q4 2017 and presented at the October 20, 2017 Tax Capital Workshop.

Current State:

Infrastructure Renewal Standards and Bill 6:

Bill 6, “The Infrastructure for Jobs and Prosperity Act”, is a proposed municipal asset management planning regulation change with a comment period between May 25, 2017 and July 24, 2017 through the Ministry of Economic Development, Employment and Infrastructure.

“The Infrastructure for Jobs and Prosperity Act, 2015, was proclaimed on May 1, 2016 and includes an authority for the province to regulate municipal asset management planning. The purpose of the proposed regulation is to implement best practices throughout the municipal sector and provide a degree of consistency to support collaboration between municipalities and among municipalities and the province. This regulation would aim to help municipalities more clearly identify what their infrastructure needs are and therefore help them work towards a more sustainable position regarding the funding of their infrastructure. Municipalities would also be required to report on implementation annually.”

The City of Hamilton is ahead of other municipalities in terms of our asset information system. Facilities has infrastructure renewal data for all of its over 450 owned sites and a measured baseline to track against called a Facilities Condition Index (FCI). Data is

measured against an industry standard and recorded in Information Management System: Ameresco Asset Planner. Questions that have yet to be addressed by the City of Hamilton: What is the municipality's minimum standard for state of good repair? What is the funding required to maintain that standard to prevent assets from deteriorating further? Canadian Infrastructure Report Card (CIRC) indicates that the recommended target infrastructure renewal rate is between 1.7% and 2.5% of the replacement value of buildings (which would provide funding to replace the building on average 40-59 years). The City of Hamilton block funds fall short at a rate of only 0.47% of total replacement value (212 year replacement cycle, considering total project costs). The current state of "B"- average Facility condition (between "fair" and "poor" and declining) is unsustainable and will result in an average Facility condition of "poor" by 2019 and "critical" by 2039. Critical facility conditions come with the risk of unplanned Facility closures, service disruptions and increasing operating costs (e.g. for repairs). As an example, there are 135 roofs which are currently overdue for replacement in the Facilities portfolio and that number continues to grow. Deferral of replacement eventually results in roof leaks which cause damage to the rest of the Facility.

Bill 6 will set out requirements to improve asset management planning. Municipalities will be required to adopt strategic asset management policies that would promote best practices and link asset management planning with budgeting, etc. There will be new reporting requirements to higher levels of government with respect to asset management planning.

Current Funding Gaps in Facilities:

There are significant gaps in the current level of annual capital funding required to sustain the condition of the City's facility infrastructure over time. In 2017, there is a total deferred capital backlog in Facilities of approximately \$216M project costs. An increase in annual capital funding to Facilities would be needed in order to sustain Facility infrastructure at the current level "B"- and declining and address accessibility considerations. The Facilities Capital Block is currently the only source of funding for infrastructure renewal. Increasing reinvestment rates would stop (or slow) the deterioration of municipal infrastructure, according to the 2016 Canadian Infrastructure Report Card (CIRC).

Strategies to Address Funding Gaps

City staff has developed strategies in order to assist in managing the Facilities funding gap including:

1. Increase Facilities Block Funds;
2. Establish Facilities Capital Reserves;
3. Minimum Facility Condition Standards;
4. Prioritize and Schedule Projects;

**SUBJECT: Capital Lifecycle Renewal - Strategic Renewal of Facilities
(PW18065) (City Wide) - Page 4 of 9**

5. Guidelines for Funding Projects;
6. Consolidate and Divest Assets (non-core facilities);
7. Partner and Seek Funding Opportunities.

These strategies are discussed in more detail as follows:

1. Increase Block Funds

An increase to \$44M in the Facilities Capital Block would be required in order to sustain the current Facility condition, which represents a 2.1% reinvestment rate, bringing the assets within CIRC targets. This rate, 2.1% is also the rate required in order to sustain Facilities at their current condition and slow the decline below the “B-” Facility condition and also to address majority of the AODA accessibility considerations over 10 years. Please refer to Appendix A for 10 year needs vs. funding and Appendix F for Options to Increase Facilities Capital Block Funding.

2. Establish Facilities Capital Reserves

Another strategy to bridge the annual capital funding gap in city-owned facilities is to establish Facilities Capital Reserves.

Reserves, funded through periodic operating and capital contributions, can help fund lifecycle renewal funding to over 450 existing, owned facilities to supplement capital renewal block programs, AODA upgrades and Facilities compliance issues. They also serve the purpose of supplementing Recreation DCs to build the top priority new and expanded facilities sooner.

Most current sources of capital funding for large Recreation construction and expansion are unpredictable. These include funding sources such as the Unallocated Reserve and funding from higher levels of government such as Infrastructure Stimulus Funds. Some funding sources are simply very limited, such as Recreation DC’s which fund only \$3M annually. Debt funding tends to have limited applications, for example where there is a business case (e.g. through annual revenues or savings).

In order to realize the benefits of reserves, staff identifies that operating budget from the closure of non-core facilities can be directed to a Facilities Capital Reserve. It is also possible in select cases that facility and property sales be directed to reserve through Council approval, in addition to a nominal annual funding amount added to the Facilities Reserves. Facilities Capital Reserves will be drawn as a funding source as part of the annual capital budget. This will allow available funding to be focussed on top priorities.

3. Minimum Facility Condition Standards

The average condition of the over 450 owned Facilities at the City of Hamilton is a “B-“ average Facility condition (between “fair” and “poor”) and declining annually. This current state of “B-“ average Facility condition (between “fair” and “poor”) is unsustainable and will result in an average Facility condition of “poor” by 2019 and “critical” by 2039. This is based on its Facilities Condition Index (FCI) and the annual

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

gap in infrastructure renewal funding. The FCI is a ratio of deferred capital replacement over Facility replacement value. The FCI speaks mainly to the current lifecycle condition of the assets. Assets which have components past their useful life, as indicated by the FCI, carry risk and reliability implications for continued operations and programming.

Canadian Infrastructure Report Card (CIRC) indicates that the recommended target infrastructure renewal rate is between 1.7% and 2.5% of the replacement value of buildings (which would provide funding to replace the building on average 40-59 years). Please refer to Appendix G for an excerpt from CIRC. The City of Hamilton block funds fall short at a rate of only 0.47% of total replacement value (which would provide funding to replace the building in approximately 212 years).

Setting a Minimum Building Condition Standard means that funding would need to be allocated to address conditions such as leaky roofs or end of life mechanical systems exist at some Facilities without deferral to subsequent budget years.

What is the minimum acceptable Facility condition and what are the corresponding funds required in order to maintain that condition? An increase in the Facilities Capital Block would be required in order to significantly slow the decline in Facility Condition below the current “B-” rating and shorten the 212 year replacement cycle closer to the industry recommendation.

4. Prioritize and Schedule Projects

There is a lack of clarity on funding and scheduling when reading the Council-approved 10 year Facilities capital plan. The 10 year capital plan consists of projects which are funded from block, reserves, Development Charges (DC’s), and there are also a large number of un-funded projects. Including un-funded projects on the 10 year capital plan has the advantage of identifying these projects as “asks”, however it unfortunately sets up a false expectation that un-funded projects can be implemented or have Council approval. These un-funded projects are often not possible within a 10 year timeframe. Based on high cost and limited available funding sources for new builds and expansions (few DC’s collected), lower priority projects are achievable within a 35 year timeframe, rather than 10 years. This leaves many projects in the 10 year capital plan in a precarious position of not being funded unless external funding is identified. This is where it becomes important to prioritize funding to the top projects.

Once a large project is approved by Council, it normally requires a 3-6 year planning cycle. A typical schedule for an approved capital project includes several steps such as feasibility and concept design, public site plan approval, detailed design, building permit, public tender, followed by around 12-18 months of construction. Additional time is required if rezoning is required. Please refer to Appendix B for further detail of planning cycles for Capital Construction. While these lengthy timelines are standard across the industry, they present both an opportunity and a challenge. The opportunity is that the capital funding of projects can be saved over several budget years, for example in a reserve.

One of the challenges that the 3-6 year timeline presents is that the project schedule spans over several one year capital budget approval cycles at the City of Hamilton. Also, since the budgets for Facility capital construction are significant (as industry standard rates for construction), it has not been normally feasible for Council to approve the required funds to complete a Facilities Capital Project from beginning to end through the capital budget process in a single year. This means that staff has often been in a position on significant projects where they must commit approximately 10% of the soft costs for a capital project, without knowing for certain that Council will approve the remainder of the funding for project construction in subsequent years. Starting a project this way is an uncomfortable risk because detailed design only has value if the project is implemented. With limited funding, it is a risk the City cannot afford to take. Typically, staff has mitigated the risk of unfunded construction by going to Council with a report to approve funding for the entire project to fund the entire project prior to the start of detailed design.

Other challenges of a capital project planning schedule include the fact that the City's capital budget planning process is only 10 years. Although 10 years may seem like a long time to wait for a project, putting it in perspective, it can be less than two capital project planning cycles. Even a single capital project planning cycle of 3-6 years can also exceed one term of Council which is 4 years.

Planning ahead on Facilities' capital projects is valuable. This is clear when looking at the 3-6 years to complete a capital project, including early planning/feasibility. When investing in a renovation at one Facility, it is important to incorporate all deferred work at that Facility into the project. Since the timeline of a capital planning cycle is lengthy, it is best to design and implement all deferred work together at one site. This way, the City and taxpayers can also save funds on contractor mobilization costs. Mobilizing as much construction as possible together also minimizes operating impacts and closures by planning projects at the same site together where possible. Unfortunately, under current funding levels, it is often the case that there are insufficient funds available to complete all deferred items at one site during a planned renovation, therefore some work is left for future phases.

Besides the importance of lining up funding in advance, it is also important to line up expectations, processes, and resources in accordance with 3-6 year capital project timelines. Setting an expectation for a quick project delivery in the hopes that the project can be fast-tracked is not recommended since there are very few opportunities to expedite the standard schedule on a large project. Frequently, there are complex touchpoints and mandated processes to be negotiated with Site Plan (including site servicing), By-Law, natural and cultural heritage and the like prior to being eligible to apply for building permit. Once construction is underway, unforeseen site conditions can easily lead to schedule delays. Very rarely are there opportunities to expedite a large capital project schedule in less than 3-6 years.

Exceptions to the 3-6 year capital project timeline may include small interior renovation projects where no Site Plan approval is required. These types of projects can be hand-

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

picked for quick delivery against tight deadlines, such as a 2 year federal funding deadline. Another way to complete a project within a 2 year federal funding deadline, possibly on a larger project, is to have already completed the 2-3 years of feasibility, design, Site Plan approvals and permits ahead of time to have a “shovel-ready” design prior to entering into time-limited funding agreements. The financial commitment of getting a project “shovel-ready is approximately 10% of the project value. It is recommended that along with this investment there is a Council-approval to complete the full project scope at some point in the future, otherwise the “shovel-ready” design has little value. Please refer to Appendix C for next Recreation Facilities Priorities and funding shortfalls, Appendix D for Corporate Facilities Priorities and funding shortfalls and Appendix E for Entertainment Facilities Priorities and funding shortfalls.

5. Guidelines for Funding Projects

The establishment of capital guidelines for Facilities is an important strategy to assist in providing clarity during the annual capital planning process. Guidelines provide assistance with:

- Setting and achieving annual infrastructure renewal targets;
- Better management of the “state of good repair” of Facilities;
- Clarity in capital budgeting allows project funding to be properly planned in advance;
- Common understanding of standard uses for funding.

The Facilities Capital Block is limited and the only available source of funds for infrastructure renewal, therefore it is not an appropriate source of funding for large expansions or new Facility construction.

6. Consolidate and Divest Assets

Assets are consolidated through replacement, repurpose, sale or demolition. Consolidation and divestiture of assets allows the City to:

- Fill portion of the capital funding shortfall;
- Divest of non-core facilities;
- Save on annual operating funds (e.g. Rec indoor pool closure saves \$700k-\$1M annually);
- Cost avoidance on deferred and ongoing lifecycle renewal;
- Offload facilities past their useful life;
- Redirect limited funds from non-core Facilities to core Facilities;
- Create opportunities to fund priority projects; and,
- Advance the schedule of renovations, expansions and new construction of Facilities.

A possible disadvantage of consolidating assets would be to decrease the service standard and therefore decrease the eligibility for collection of DCs.

7. Partnerships and Opportunities

Benefits of pursuing capital partnerships and other opportunities include:

- Cost savings/avoidance in operating, capital and real estate costs;
- Community Hubs;
- Renewed infrastructure.

Potential partners include Hamilton Public Library, School Boards (HWDSB, HWCDSB) and CityHousing Hamilton.

Ongoing Work:

Ongoing work regarding the Strategic Renewal of Facilities completed in parallel and which will continue subsequent to this report is as follows:

- Master Office Accommodation Planning (MOAP) Committee;
- Non-Public Facing Portfolio Strategy Review;
- Land Development Task Force; and,
- Phase Two of the Indoor Recreation Study Update.

It is important to note that the findings and recommendations of the MOAP Committee, as well as the Non-Public Facing Portfolio Strategy Review and Land Development Task Force, involve consultations with a wider list of stakeholders (e.g. from additional Departments, Divisions, Agencies and Boards) and will report to Council at the conclusion of their initiatives. These initiatives focus around the Corporate Facilities portfolio and the business cases required for decisions around leases and ownership of non-public facing facilities assets. Their findings and reports to Council will drive future construction or lease projects within the Corporate Facilities Portfolio.

Ongoing work also includes retaining 3rd party engineers to conduct Building Condition Assessments on a 5 year cycle through the entire Facilities portfolio to ensure that there are records of life cycle renewal requirements to compare against industry benchmarks and that these records are kept up to date in an information management system, Asset Planner.

Finally, ongoing work includes conducting feasibility studies on projects identified by clients or Council for inclusion into short or long term capital budgets to ensure that funding sources are planned in advance and funding gaps identified.

A benefit of completing the Strategic Renewal Report was to develop a methodical process from which to compare the City's existing multi-year asset management strategies with current data and recommendations as gathered from industry professionals including building condition assessments, cost consultants, Architects and

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: Capital Lifecycle Renewal - Strategic Renewal of Facilities
(PW18065) (City Wide) - Page 9 of 9**

Engineers. The intent of Report PW18065 is to identify process gaps and identify improvements to the overall multi-year capital planning process in line with Council's direction towards a Corporate Multi-year Asset Management Strategy.

Appendices and Schedules Attached

Appendix A – 10 Year Infrastructure Needs vs. Funding

Appendix B – 3-6 year Planning Cycle for Capital Construction

Appendix C – Next Recreation Facility Priorities, Phasing and Shortfall

Appendix D – Next Corporate Facility Priorities and Funding Shortfall

Appendix E – Next Entertainment Facility Priorities and Funding Shortfall

Appendix F – Options to Increase Facilities Capital Block Funding

Appendix G – Canadian Infrastructure Report Card (CIRC)

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.