

Facilities Management Asset Management Strategy

The Facilities Management Department (Facilities) has committed to increasing their level of asset management maturity, which includes improving asset management processes and standards. A long-term continuous improvement strategy will be implemented based on best practices such as the Asset Management Council's Capability Delivery Model and International Facilities Management Association (IFMA) standards and benchmarking. The strategy will also meet the requirements of the Council Policy on Corporate Asset Management. The overall asset management objectives of Facilities are:

- Build a more efficient, reliable, and comprehensive asset management delivery system based on the Asset Management Council's Capability Delivery Model
- Process improvements and regular inspections of each facility to maintain safety, operations, and a comprehensive and up to date asset register database
- Determine the existing physical condition and remaining life of Facilities assets and maintain a database of condition assessment data
- Identify, quantify, prioritize, budget, schedule and deliver maintenance and capital renewal work to meet a recommended physical condition target based on long-term financial scenarios and service levels
- Quantify and report on deferred capital and maintenance work that cannot be completed based on existing budgets and corresponding risks and impacts on service levels
- Compare condition of assets to benchmarking from similar facilities/owners
- Strategically review staffing levels and roles and responsibilities, including reviewing which work is best done as operations & maintenance and which work is best done as capital renewal
- Ensure cost-recovery based services are fully recovering their costs
- Coordinate and document processes and minimum requirements for capital expenditures related to the decommissioning, expansion or replacement of existing building assets and acquisition or construction of new buildings
- Identify where new technologies or standards for more energy efficient, resilient, or accessible construction should be implemented
- Document and maintain a Department risk register that outlines strategies to mitigate known risks, including risks related to failures, emergency repairs, climate change, and compliance with environmental regulation
- Utilize technology to plan and implement work in cost-effective packages
- Present strong business cases for special projects and budget requests
- Streamline the annual operating and capital budgeting process and increase efficiency and analyst capacity

Foundational to achieving these objects are the quality of available condition assessment data, approved standards and service levels, and Asset Management

software. The remainder of this appendix focuses on these foundational components of the Asset Management strategy.

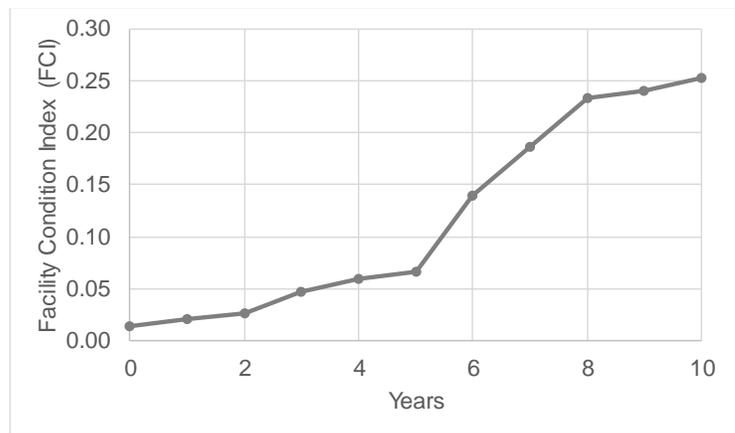
Condition Assessment Data

A Facility Condition Assessment (FCA) report is a third-party evaluation, ideally performed in accordance with a recognized standard (e.g. ASTM International), of the condition of the major assets that comprise a building and site amenities. The consultant has access to a large database of information from their portfolio of clients and have specialized expertise not available internally. The consultant discusses the building history and known concerns with operations and maintenance staff and then performs a walkthrough audit where they systematically rate the condition of each element of a building. Their resulting report provides asset management information such as condition (e.g. a score from 1-5 for each element), replacement value, items in need of immediate remediation, items forecasted to need action in the future, recommended additional studies, maintenance improvements, etc. It is recommended that a third-party physical condition assessment audit be done on a regular basis, approximately every three to five years (internal assessments occur on an ongoing basis, for example through monthly inspections). The report identifies the estimated costs for capital renewal and the estimated year the renewal is required. For example, the report may estimate that in a specific building \$1 M is required for a roof repair in ten years. When the consultant returns in 3-5 years, they will re-evaluate the roof and may adjust their forecasts. In this manner the condition of all assets are continually forecasted and updated on a cycle. Renewal and repair work that is overdue or imminent is tallied and used to calculate the Facility Condition Index (FCI). Forecasted future work is tallied for each future year and this becomes the capital renewal forecast. If current budgets are not adequate to complete all of the required work each year, the capital renewal backlog grows, and the condition of the facility degrades.

Facility Condition Index

FCI is an industry standard rating that is used as an indicator of the relative physical condition of a facility, a group of buildings, or an entire portfolio of buildings. It is the ratio of the cost of pre-existing and imminent capital renewal requirements to the current replacement value (investment required divided by value of the asset). FCI is a snapshot in time calculated on an annual basis and forecasted into the future. FCI provides a measure of the "catch-up" costs of a facility to bring it to a certain standard. The following table and figure provide an example scenario where a \$75 M building has a budget of \$0.5 M for capital renewal and has forecasted capital renewal needs that exceed this budget. The FCI increases over time as capital renewal costs are deferred.

Year	Forecasted Annual Capital Renewal	Cumulative Deferred Capital Renewal	FCI
0	\$1.5	\$1.0	0.01
1	\$1.0	\$1.5	0.02
2	\$1.0	\$2.0	0.03
3	\$2.0	\$3.5	0.05
4	\$1.5	\$4.5	0.06
5	\$1.0	\$5.0	0.07
6	\$6.0	\$10.5	0.14
7	\$4.0	\$14.0	0.19
8	\$4.0	\$17.5	0.23
9	\$1.0	\$18.0	0.24
10	\$1.5	\$19.0	0.25



There are industry benchmarks that rate a building based on its FCI score. The following table presents a rating system from the International Facility Management Association (IFMA).



As part of the Facilities Asset Management strategy, a table comparing FCI to service levels will be established. The following is an example of potential FCI targets for different facility types:

<p>FCI Target: 0-5%</p> <ul style="list-style-type: none"> Major Facilities Fire Stations Police Facilities 	<p>FCI Target: 5-10%</p> <ul style="list-style-type: none"> Recreation (Arenas, Aquatic Centres, Outdoor Pools, etc.) General Offices
<p>FCI Target: 10-20%</p> <ul style="list-style-type: none"> Satellite and Service Buildings (Maintenance Office, Field Office, Parkades, etc.) 	<p>FCI Target: 20-40%</p> <ul style="list-style-type: none"> Storage and Industrial Facilities planned to be replaced or sold

Allowing the FCI of a facility to increase past the recommended threshold would indicate an increased risk of being unable to provide the desired service level. The percentage-based capital renewal strategy utilized to manage the Civic Buildings Comprehensive Maintenance (CBCM) reserve presumes that the percentage is adequate to ensure that on average the entire portfolio of buildings are kept at a stable FCI. For this approach to be sustainable, when buildings are acquired by the City, they need to be brought up

to a minimum FCI standard before being eligible for CBCM funds. If this is not the case, then this risks there not being sufficient funding remaining for the other buildings.

Condition assessment data is very dynamic. The Project Services group in Facilities delivers 75-100 projects per year. Each project potentially impacts the FCI score for a building and there can be thousands of elements in each building. Tracking this data, keeping it up to date, and generating budget scenarios requires project close-out procedures and the use of specialized software.

Asset Management Software

The City is currently implementing the Fusion project. The scope of the Fusion project is primarily financial but also includes the Facilities asset register, asset database and work order management. As part of the Fusion project the City has not purchased the Real Estate Management or Enterprise Portfolio and Project Management modules from SAP. These modules add extra functionality for project and facility management.

Facilities currently has two databases of information on assets. One is a condition assessment database and the other is a maintenance management database. The maintenance management database is being replaced with SAP in two phases, where the financial components were replaced in January 2021, and all other aspects are replaced in 2022. The condition assessment database and associated software may partially be replaced by SAP but the most important functionality necessary to manage condition assessment data is not being provided by the Fusion Project. This service is therefore expected to be procured alongside the condition assessment services. This software will be able to provide multi-year forecasts of capital renewal requirements which will be compared to the existing CBCM budgets and reported to Council.

Asset Management Strategy Summary

In summary, Facilities has a plan in place to improve the quality of Asset Management data and set in place a continuous process to be able to manage and report this information. The figure on the following page provides a flow chart of the overall strategy components. The flow chart shows a combination of in-house expertise, consultants, software tools, business process changes, and Administrative Procedures, all combined to create a more efficient, reliable, and comprehensive AM delivery system.

Facilities Asset Management Strategy Summary

