

Building Condition Assessment and Reserve Fund Study



County of Grey Child Care Ontario Early Years Center Hanover

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Submitted by:



1. FACILITY CONDITION INDEX

The facility condition index (FCI) is an attempt to quantify the condition of a building in a portfolio and to compare it to the condition of other buildings in the portfolio. Historically it was first used by the U.S. Navy to evaluate the condition of their buildings. It is often used by universities and school boards to manage large portfolios of buildings. The strict definition is:

$$\text{FCI} = \frac{\text{Replacement Deficiencies of the Facility}}{\text{Current Replacement Value of the Facility}}$$

The replacement deficiencies of the facility are the current costs resulting in repairs which have been deferred and repairs required in the very near future. There can be some subjectivity in identifying these costs, repairs which are aesthetic in nature or non-critical can be deferred or placed in a future year which will greatly affect the FCI.

The current replacement value for this report has been determined using recent square foot costs for similar buildings, in similar geographic locations (Construction Costs Guide 2015).

The FCI usually results in a very small number and the smaller the number the better the condition. Managers who do not use FCI on a routine basis often find the small numbers confusing, however the guide lines are:

Under 0.05	= Good condition
Between 0.05 and 0.10	= Fair condition
Over 0.10	= Poor condition

To reduce some of the subjectivity in determining the replacement deficiencies we have used the sum of the repairs identified in the next 5 years as the “replacement deficiencies of the facility”. It is important that the definition used for the FCI is consistently applied if the FCI is to be used to compare one building to the next within the portfolio and to compare the changes to the condition of a building year over year.

2. RESERVE FUND FORECAST STUDY AND ANALYSIS

Reserve funds are commonly established to fund the repair and replacement of major components of buildings. To keep the Reserve Fund Study current, the BCAs and reserve fund should be reviewed every 5 years to ensure there is always a 30-year planning horizon.

The requirement for capital dollars in a building tends to follow cycles and to fluctuate from year to year. For the first 15 to 20 years after a building is constructed there should be a minimal requirement for capital dollars as all of the building components are new and should have a life expectancy greater than 15 years. As the building ages, individual building components reach the end of their useful life and require major repair or replacement.

Ideally, reserve funds are established from the first day the building is occupied and annual contributions are made for future repairs. The fund should enjoy a holiday from expenses in the first 15 to 20 years. This allows it to grow to a substantial amount, before it is necessary to draw on the fund.

The reserve fund spreadsheet builds on the data in the Building Condition Assessment spreadsheet. The present value dollar amounts are escalated for inflation. The spreadsheets were set with an inflation factor of 2% however the inflation can be changed at the discretion of the portfolio owner. The reserve fund spreadsheet also has the ability to set an interest rate for the investment of funds and to include an opening balance and an annual contribution rate. The portfolio owner supplied the reserve fund opening balances and annual reserve contribution rates used for this study.

Key to the success of a reserve fund are:

- Clearly defined types of expenditures which can draw from the fund. The fund should not be used for operational expenses or budget short falls as this would prematurely deplete the fund.
- The annual replacement reserve fund contribution must be appropriate from the very beginning of the fund.
- The Building Condition Assessment and the Replacement Reserve Fund Study should be reviewed on an annual basis. At a very minimum, work which is completed in a given year should be removed from the spread sheet and work which should have been done, but needed to be deferred should be moved on the spreadsheet from the current year to a future year, and the effect on the reserve fund balances noted. This will keep the spreadsheet current. It may be necessary to repeat the field inspections every 3 to 5 years to ensure that the estimated life expectancies continue to be accurate.

3. Ontario Early Years Center

3.1. Financial Factors

In projecting replacement cost estimates and capital reserve fund requirements, the following factors have been used:

Assumed Inflation	2%
Assumed Rate of Return	0%
Index for Contributions	2%
Opening Balance	\$217,007
Annual Contribution	\$18,600

3.2. Facility Condition Index

Property/Building Name			Building SQ/FT	Site SQ/FT	Template cost building \$/ft2 *	Template cost Site \$/acre *	Replacement costs	Expenditures 2017 to 2021	FCI
Ontario Early Years Centre	Hanover	519 9th Street	6,100	9650	\$200	\$231,350	\$1,271,237	\$231,425	0.18

FCI 0.18 is poor condition

3.3. Scenarios

Two forecast scenarios have been developed:

Scenario 1-Status Quo:

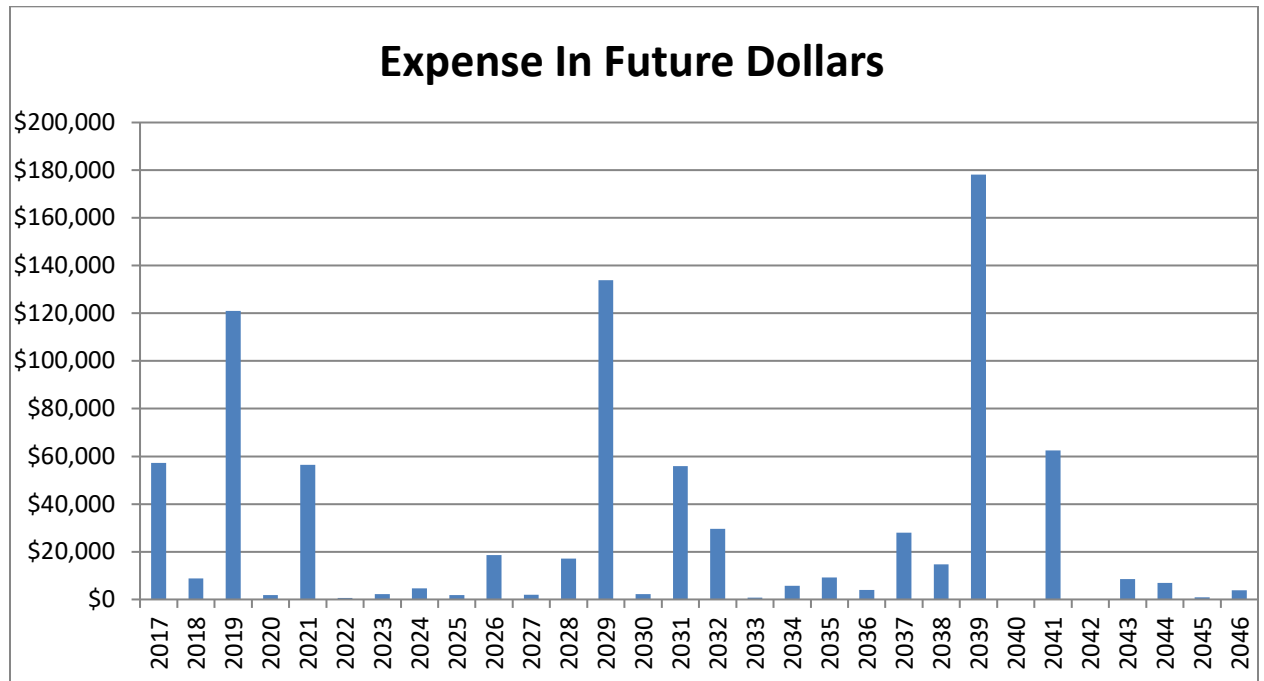
Scenario 1 shows the resulting reserve fund balances over the 30-year cycle using the existing opening balance, and existing annual replacement reserve contribution.

Scenario 2- Adjusted Annual Replacement Reserve Fund Contribution:

Scenario 2 has taken the existing situation of Scenario 1 and adjusted the annual reserve fund contribution to find a relatively constant annual reserve fund contribution, which would deal with the large fluctuations in the annual capital expenses. At the end of the 30-year period the closing reserve fund balance should deal with the expenses, not yet identified, in year 31.

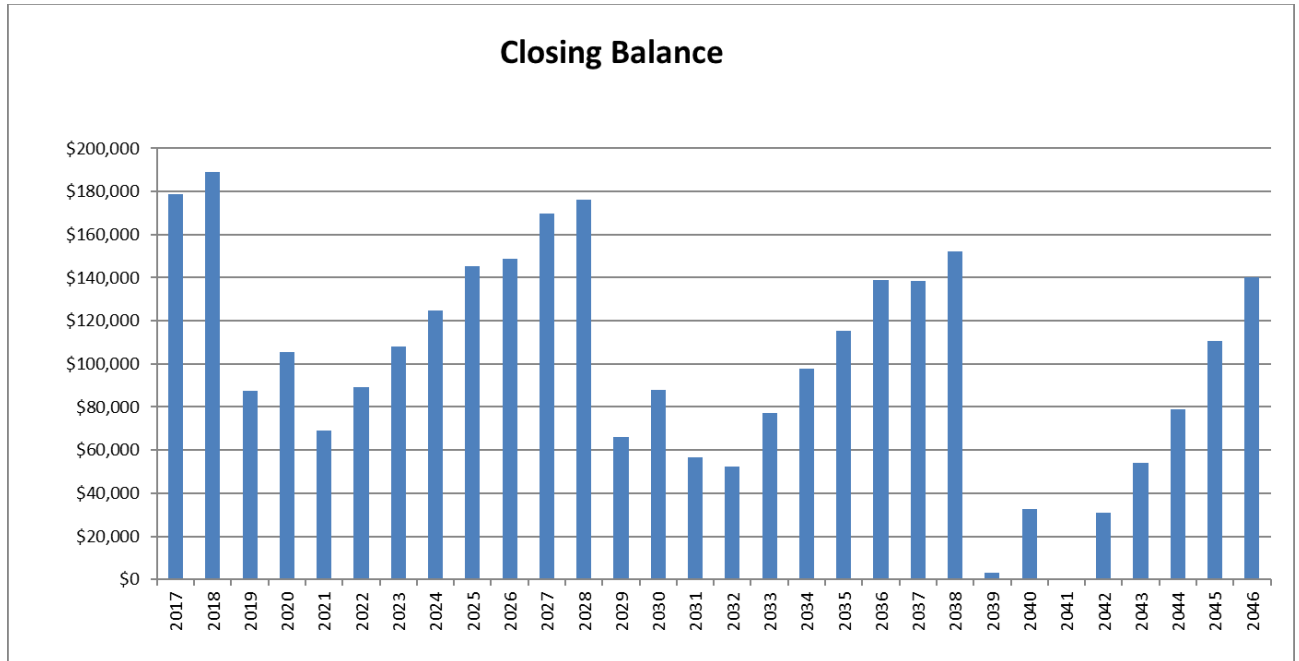
3.3.1.Future Year Expenditures (30 Years)

The following chart shows the total expenses in future dollars for each year over 30 years. The peak year is 2039.



3.3.2.Scenario # 1 – Status Quo

Scenario 1 shows the resulting reserve fund balances over the 30-year cycle using the existing opening balance of \$217,007 and an annual contribution of \$18,750. The reserve fund remains positive for the 30-year period.



3.3.3.Scenario #2 – Adjusted Annual Replacement Reserve Fund Contribution

Not applicable.