



COMMITTEE OF THE WHOLE (PUBLIC)
Report No. 19-006

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Facilities Renewal Program and School Condition Improvement 2018-2019 Project Plan

**Key Contact: Michael Carson, Chief Financial Officer, 613-596-8211
ext. 8881**

PURPOSE:

1. To obtain Board approval of Facilities Renewal Program (FRP) to be implemented under the School Renewal Allocation (SRA), Temporary Accommodations (portable moves) and School Condition Improvement (SCI) for the 2018-2019 budget year.

CONTEXT:

2. The Board has approved, as part of the total OCDSB operating budget, the 2018-2019 SRA budget in the amount of \$14,271,147 which is equal to the estimated SRA grant. The 2017-2018 SRA carry forward from the previous fiscal year is \$2,896,866 The Temporary Accommodations Allocation (portable moves) for 2018-2019 is \$840,000. The Facilities Renewal Program Budget for 2018-2019 is \$18,008,013.

The 2018-2019 allocation of capital renewal funding for SCI is \$45,844,290. The 2017-2018 SCI carry forward from the previous fiscal year is \$35,514,533. The Total SCI budget for 2018-2019 is \$81,358,823.

The total combined FRP and SCI budget for the 2018-2019 year is \$99,366,836.

The recommended 2018-2019 plan includes a variety of renewal projects including:

- Site – paving and sidewalks, septic and water systems, parking areas, play areas, playgrounds, fencing;
- Building envelope – roofs, doors and windows, foundation repairs, masonry repairs, structural repairs;
- Building interior – flooring, ceilings, interior doors and hardware, millwork;

- Mechanical – heating, ventilation, air-conditioning, chillers, plumbing, controls;
- Electrical – hydro service upgrades, power distribution, generator replacements, lighting, communication cabling, network and telephone upgrades, public address and fire alarm systems;
- Portables – relocations, upgrades and repairs;
- Various functional alterations, program upgrades, renovations, and regulatory requirements;
- Environmental – asbestos abatement, oil storage tank removal and soils contamination remediation;
- Energy conservation and efficiency upgrades, multi-year energy plan projects; and
- Accessibility – 20 year accessibility plan and various barrier-free projects, elevator replacements, Accessibility for Ontarians with Disabilities Act (AODA) compliance for major renovations; a continued rollout of universal washrooms and change rooms are being undertaken based on identified needs.

KEY CONSIDERATIONS:

3. This year, the FRP and SCI include hundreds of projects of varying complexity and size. The priorities for the planned projects are based upon a multitude of inputs which are considered prior to the final determination of the FRP and SCI work plans. These inputs include: long-range building envelope reports; mechanical and electrical forecasts based upon Facilities staff experience and knowledge of the buildings; consultant reports; VFA building audits; preventative maintenance reports; school condition reports; program requirements; and accessibility needs.
4. SCI Funding Methodology
SCI funding is provided to address school renewal needs and must be used for expenditures that meet the requirement to be capitalized.

School boards are now restricted to the use of 70% of their SCI funding to address major building components (for example, foundations, roofs, windows) and systems (for example, HVAC and plumbing). School boards are allowed to use the remaining 30% of their SCI funding to address any locally-identified renewal needs that are listed in the provincial building database. Please see Table 1 below for the categories of restricted (70%) and unrestricted (30%) uses of SCI funding

Table 1: Summary of Restricted and Unrestricted Expenditures:

Categories	Restricted (70%)	Unrestricted (30%)
A. Substructure (e.g., foundations, basement walls)	Yes	Yes
B. Shell/Superstructure (e.g., roofs, exterior walls and windows)	Yes	Yes

Categories	Restricted (70%)	Unrestricted (30%)
C. Interiors (e.g., stairs, floor finishes, ceilings)	N	Yes
D. Services (e.g., plumbing, HVAC, fire protection and electrical)	Ye	Yes
E. Equipment & Furnishings	N	Yes
F. Special Construction & Demolition	N	Yes
G. Building Sitework (parking lots, site lighting)	N	Yes

5. Backlog

The current backlog of renewal projects continues to be in excess of \$613 million for the District's permanent learning facilities. Administration sites are not included in this total. Accessibility and program backlog is currently estimated at an additional \$93 million (total backlog of \$706 million). The planned projects attempt to maximize the value at each school and improve the condition of the facility for the students. The list of planned projects is subject to change due to unforeseen building component failures and program change pressures that may arise late in the school year.

6. Facility Condition Index (FCI)

The FCI is a standard benchmark that is used to compare the relative condition of a group of buildings. It compares a facility's total five-year renewal needs to the cost of rebuilding the facility.

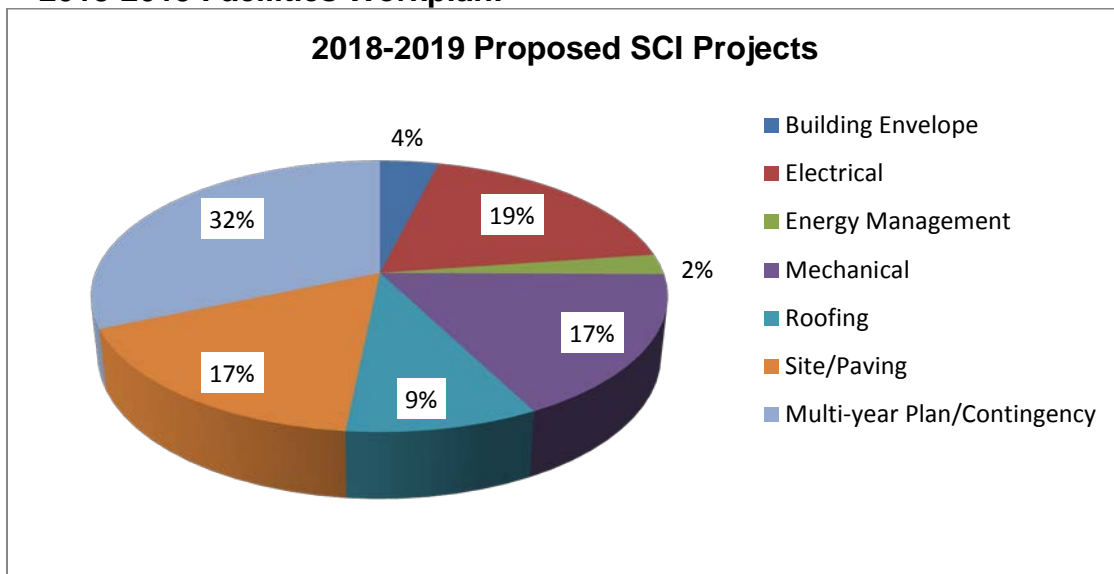
$$\text{FCI} = \frac{\text{Five year of renewal needs (year of assessment plus four (4))}}{\text{Asset Replacement Value (based on Ministry Construction Benchmarks)}}$$

In general, the higher the FCI, the more renewal needs and therefore the poorer condition of the building. For the education sector, estimated costs for the next 5 year period are used as the standard period to calculate the FCI. For example, if it costs an estimated \$1 million to rebuild a facility but \$100,000 to repair it, then the FCI would be 10%. Note that a school board may choose, for various reasons, to use an FCI over an interval of time that is not consistent with the Ministry's 5-year baseline (based on the scope of the assessment program). The interval can be, for example, longer (10 years) or shorter (3 years). A board may also choose to use a different time interval for example, for a facility assessed in 2012, the Ministry's 5-year FCI would capture the renewal needs during the years 2012 to 2016, but a board may opt to have the 5-year (or longer) interval begin from the current year (i.e., 2016 to 2020). [Link to Ministry of Education Technical Paper: School Facility Condition Assessment Data Update for 2016 Assessment Year](#)

7. Temporary Accommodation

The temporary accommodations (portables) are still an integral part of the accommodation plan and are funded by the Ministry to meet our accommodation pressures due to enrolment growth and the implementation of the Full Day Kindergarten program. With the need to do major renewal work and/or accommodation retrofits, portables may be used at some sites in order to create swing space for renovations.

8. Greenhouse Gas Reduction Funding
In collaboration with the SCI/SRA projects, the Greenhouse Gas Reduction Funding (GGRF) projects are ongoing throughout the 2018-2019 year and must be completed by 31 March 2019. GGRF projects were included in the 2017-2018 SCI Plan, and as a result of the cancellation of the GGRF program, projects that had started as of 3 July 2018, were grandfathered and continue to be funded until 31 March 2019.
9. Unforeseen Annual Needs
Certain general project portfolios have budgets established under the “various sites” location designation. Unspecified projects have historically arisen, and provisions have been made to address these annual needs through the various sites budget lines. Project lists will be refined throughout the year based on prioritized renewal needs as a result of building deterioration and failures, , roof leaks, portable condition reviews and facility condition indexes.
10. Consolidation of Projects
In order to benefit from economies of scale, multi-discipline renewal projects may be combined at a school to improve the amount of work completed in a shorter period of time and draw on multiple trades and contractors to create a larger program upgrade. These projects will be developed through the design review and will be tendered as single contracts when feasible. This will improve project delivery and ensure effective communications with all stakeholders during construction.
11. **2018-2019 Facilities Workplan:**



The 2018-2019 Facilities Workplan continues to target building infrastructure renewal projects. Historical metrics indicate that the realistic construction work that can be undertaken annually by the Board is between \$40million-\$50 million. The entire FRP/SCI budget allocation has been assigned to multiple site specific projects and also multi-year programs including classroom lighting retrofits, auditorium upgrades, boiler plants upgrades, acoustic treatments for kindergarten and music programs, learning commons and science lab upgrades. Projects will be

rolled out over a 3three-year period with anticipated schedule for the work identified in Appendix B.

2018-19 Proposed SCI Projects		
Building Envelope	\$3,150,000	4%
Electrical	\$15,340,000	19%
Energy Management	\$1,975,000	2%
Mechanical	\$14,060,000	17%
Roofing	\$7,460,000	9%
Site/Paving	\$13,750,000	17%
Multi-year plan/ Conti	\$25,623,823	31%
Total	\$81,358,823	100%

12. **Special Initiatives:**

Learning Commons

Over the last 3 years, multiple high school have had libraries converted to learning commons. In the upcoming year, conversion work is planned at AY Jackson Secondary School (SS) and Colonel By SS libraries. Additional sites will be reviewed and included in the multi-year plan as required. Investment at each of the sites will be determined based on need. Sites that have already had their libraries converted to learning commons have typically been associated with the accommodation reviews. An overall budget has been allocated for the learning commons conversions; with only the above two schools mentioned above identified for conversion during the summer of 2019. The remaining secondary school libraries will be reviewed and prioritized for retrofit in the coming years through a consultation process.

Science Labs

Over the past 5 years there have been significant investments in many science lab upgrades. The 2018-2019 Workplan includes upgrades at AY Jackson SS, Colonel By SS and Canterbury High School (HS). The science lab upgrade program at these sites will be a multi-year project due to the invasive nature of science lab work. It is not possible to complete the science lab upgrades during the summer months, as a result, they are phased over multiple years as seen recently at Gloucester HS and Bell HS. Projects at the next 3 sites will be designed over the next year. Due to the complexity and long lead time for custom cabinetry and mechanical systems, construction is planned to start in July of 2020. Please see Appendix C for the Science Lab Summary.

Elmdale SCI Budget tied into Capital Addition starting in 2019

As part of the capital investments being made at Elmdale for a new addition, there are opportunities to address renewal backlog and facility upgrades at the same time as other major construction work is underway. Investments are planned to address SCI/SRA eligible infrastructure and to undertake accessibility improvement projects. The Elmdale design team is currently developing the scope and plans to undertake major retrofit work along with the addition planned for July 2019. Total SCI/SRA work at Elmdale PS is budgeted at \$7 million. This

work will be combined as a single contract including new construction and a major facility retrofit. A future report will be presented to Committee of the Whole identifying the total scope and budget of this project. The construction work will commence in the summer of 2019 and will be completed by the fall of 2020.

Multi-year/Multi-Site Investments

Reviewing the needs of the District has identified multiple programs which require attention over a multi-year approach. Due to the many sites which need to be reviewed for scope development, funds have been identified within the report to cover the timelines associated with a phased rollout of the program. Sites will be identified as investigation and programs proceed. An outline of the multi-year/site program is as follows:

- I. **Interior Classroom Lighting Upgrades:**
Lighting quality has a direct impact on the learning environment in a classroom. Over the next 3 years, multiple sites will be reviewed and upgraded to replace existing fluorescent fixtures with new LED fixtures and controls. The new lighting and controls will not only save energy but will also provide rejuvenation to the classroom. The focus will be on improved lighting in the classrooms as well as general areas such as corridors and libraries. As entire schools cannot be updated in a single summer, a multi-year approach to implementation will take place at the schools.
- II. **Auditorium Investments:**
Part of the multi-year plan includes upgrades to some of the core lighting and electrical infrastructure within secondary school auditoriums. In addition to this work, architectural upgrades (seating etc.) will also be reviewed. Budget has been allocated within the current plan for both these areas of work. Sites will continue to be reviewed and assigned projects as necessary. An ongoing assessment is being conducted on the condition of auditorium lighting, riggings and seating. Work within the auditoriums will be prioritized based on functional and operational needs at each high school.
- III. **Steam to Hot Water Boiler Upgrades:**
Steam plants within the district are, by design, more difficult to control and are less efficient than modern day hydronic heat systems with energy efficient boilers. There are currently 6 schools within the District that have operating steam plants. These steam system replacement projects tend to be extremely invasive and therefore will be reviewed and executed over multiple years. As part of a multi-year upgrade approach, sites will have a thorough review to ensure proper planning and staging to minimize impact on occupied schools.
- IV. **Acoustic Treatments – Kindergarten and Music Rooms:**
In addition to upgrading the lighting quality within classrooms, addressing the acoustic treatments within music and kindergarten

spaces will provide an enhanced learning environment for both staff and students. Assessments have been made by the Health and Safety Department regarding sound levels in classrooms and prolonged exposure to high levels of noise to occupants. A multi-year plan will be developed and deployed to enhance acoustic treatments in spaces that have high noise levels. Schools will be prioritized based needs associated with health and safety concerns and recommendations through curriculum and Special Education.

RESOURCE IMPLICATIONS:

13. Funding

The combined approved FRP budgets (funded through the School Renewal Allocation) and SCI budgets in the Ministry's 2018-2019 estimates are:

FRP

School Renewal Allocation	\$ 14,271,147
Temporary Accommodations (Portables) Allocation	\$ 840,000
FRP Reserves 2017-2018 - Carry forward	<u>\$ 2,896,866</u>
TOTAL FRP Funding 2018-2019	\$ 18,008,013

SCI

SCI 2018-2019 Funding	\$ 45,844,290
SCI Reserves 2017-2018 – Carry forward	<u>\$ 35,514,533</u>
TOTAL SCI Funding 2018-2019	\$ 81,358,823

TOTAL FRP/SCI Funding 2018-2019 **\$ 99,366,836**

Expenditure

The FRP and SCI projects are planned for the 2018-2019 fiscal year. A summary of the FRP/SCI 2018-2019 budget by division of work is outlined in Appendix A. The detailed project list, per school or project initiative, is outlined in Appendix B. In order to meet the Broader Public Sector (BPS) procurement guidelines, projects need to be approved prior to raising commitments. A list of projects, as well as contingency plans, has been compiled in order to effectively roll out next fiscal year's funding. The following is the estimate of project expenditures:

FRP Projects

FRP Project Plan	\$ 17,168,013
Temporary Accommodations (Portables) Projects	<u>\$ 840,000</u>
TOTAL FRP Planned Projects 2018-2019	\$ 18,008,013

SCI Projects

SCI Project Plan	\$ 45,844,290
SCI Reserves 2017-2018 - Carry forward	<u>\$ 35,514,533</u>
TOTAL SCI Planned Projects 2018-2019	\$ 81,358,823

TOTAL FRP/SCI Planned Projects 2018-2019 **\$ 99,366,836**

As the 2018-2019 planned projects are tendered, based on bid results, projects will be added or removed in order to expend the full budget allocations. It is expected that SCI funding will be used for eligible facility renewal needs. During the year uncommitted FRP and SCI funds will be used to augment the projects to ensure full use of the funding available.

Original project estimates are based on initial information available and are considered Class 'D' estimates (+/- 25%). As projects evolve during the design development, the project scope may increase or decrease depending on further investigation of existing site conditions and site specific needs. Projects budgets will be increased or decreased as necessary to reflect the scope adjustments for the projects.

As part of the Ministry of Education's reporting requirements, project updates are entered into the VFA (ReCAPP) database to track work completed, monitor renewal backlog and generate new funding in subsequent years.

COMMUNICATION/CONSULTATION ISSUES:

14. Due to the number of FRP and SCI projects, Facilities staff continues to work with the school communities, childcare operators, Curriculum Services, Learning Support Services, Continuing Education and Community Use of Schools departments to prepare work plans that will allow construction to proceed safely, during the school year while minimizing the disruption to students and staff.

STRATEGIC LINKS:

15. Investments in building renewal and upgrades to facilities aid the District in optimizing learning conditions for all students through the responsible and sustainable management of resources.

RECOMMENDATION:

- A. THAT the Facilities Renewal Program and School Condition Improvement Project budget in the amount of \$99,366,836 be approved as detailed in Appendix B of Report 19-006;
- B. THAT staff be authorized to proceed with individual project tenders within the Facilities Renewal Program and School Condition Improvement Project plans;
- C. THAT as projects are tendered, based on bid results, or as priorities change, additional projects may be added or removed to suit the availability of the overall budget and these additional projects will be able to proceed without further approval as long as the total overall FRP/SCI budgets are not exceeded; and

D. THAT the Chair of the Board and Director of Education are authorized to award contracts above \$500,000 that are within this overall available uncommitted approved budget.

Michael Carson
Chief Financial Officer

Camille Williams-Taylor
Director of Education and
Secretary of the Board

APPENDICES

Appendix A 2018-2019 Facilities Renewal Program and School Condition Improvement Summary

Appendix B 2018-2019 Facilities Renewal Program and School Condition Improvement Project List

Appendix C 2018-2019 Facilities Renewal Program and School Condition Improvement Science Lab Summary