Agenda

1. Change in MTCU methodology
2. Current status
3. Updated prioritization methodology
4. 2018 Investments and Impact
Deferred Maintenance

FCAP Methodology

COU Facility Condition Assessment Program (FCAP)

- MTCU has updated the FCAP methodology:
  - Systems model approach
  - Move from presenting construction costs to total project costs
  - Addition of infrastructure to DM liability
  - Introduction of cost escalation of 2% per year
- The criteria was harmonized across the higher education sector
- Third party assess each building on a 5 year rotating basis
Deferred Maintenance
Impact of new methodology – 2018 audited assets only

<table>
<thead>
<tr>
<th></th>
<th>2018 Results</th>
<th>2017 Data</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Maintenance</td>
<td>$320,756,310</td>
<td>$201,007,102</td>
<td>+59.6%</td>
</tr>
<tr>
<td>Replacement Value</td>
<td>$1,361,457,357</td>
<td>$1,278,460,843</td>
<td>+6.5%</td>
</tr>
<tr>
<td>FCI</td>
<td>23.6%</td>
<td>15.7%</td>
<td>+7.8%</td>
</tr>
</tbody>
</table>

Impact of new methodology:
- 24 Buildings assessed in 2018 (UTSG: 17, UTM: 4, UTSC:3)
- Not a representative sample due to over-representation of laboratories
Deferred Maintenance

Our Tri-Campus FCI rose from 13.4% to 15.2%.
Recent significant increases in FCI were driven by methodology changes introduced in 2009 and 2018
Deferred Maintenance
Current Allocation Methodology

COU Facility Condition Assessment Program (FCAP) definitions:

- **Priority 1:** Currently critical and require immediate action; that returns the facility to normal operations, stop accelerated deterioration, correct a cited safety hazard

- **Priority 2:** Potentially critical if not corrected could become critical; intermittent interruptions, rapid deterioration and potential safety hazards

- **Priority 3:** Not yet critical condition that needs appropriate attention to curtail the deterioration of the fabric or potential downtime and the associated damage or possible higher cost
Deferred Maintenance

DM increase primarily attributed to new methodology for 2018

Although there is an increase in DM liability, Priority one needs have been held steady due to DM funding investments
Deferred Maintenance

Overwhelming majority of Priority 1 needs are on our St George Campus
This is primarily due to the age of the assets, as compared to UTM and UTSC
Deferred Maintenance

Distribution of Building Condition by Campus

- Excellent < 5%
- Fair 5 - 10%
- Poor >10%

<table>
<thead>
<tr>
<th>Campus</th>
<th>2017 Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. George</td>
<td>15 (Excellent), 15 (Fair), 71 (Poor)</td>
</tr>
<tr>
<td>UTM</td>
<td>9 (Excellent), 2 (Fair), 3 (Poor)</td>
</tr>
<tr>
<td>UTSC</td>
<td>6 (Excellent), 0 (Fair), 4 (Poor)</td>
</tr>
</tbody>
</table>
Deferred Maintenance
Funding to maintain FCI at St George campus is 28.7M per year. At present we are investing $24M.
Deferred Maintenance

Look Ahead

### Pre-War
- 26% of St. George GSM
- Durable construction
- Some Heritage sites
- Require programmatic updates

<table>
<thead>
<tr>
<th>System</th>
<th>Standard Lifecycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roofing</td>
<td>25 Years</td>
</tr>
<tr>
<td>Electrical</td>
<td>25 Years</td>
</tr>
<tr>
<td>Exteriors</td>
<td>30 Years</td>
</tr>
<tr>
<td>HVAC</td>
<td>30 Years</td>
</tr>
<tr>
<td>Plumbing</td>
<td>35 Years</td>
</tr>
</tbody>
</table>

### Post-War/Modern
- 55% of St. George GSM
- Lower-quality construction
- Already needing more repairs and renovations

### Complex
- 19% of St. George GSM
- Complex spaces
- More expensive to maintain/repair

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**UNIVERSITY OF TORONTO**
Deferred Maintenance

Allocation Methodology

- DM program review lead to the development of a new allocation methodology that is:
  - Risk mitigation focused
  - System level renewal focused to reduce operational impacts and downtime

- Identifies needs in three focus areas:
  - **Property-specific asset renewal** (e.g. roofs, HVAC, elevators, etc.)
  - **Opportunistic initiatives** (e.g. SIF, GGRP)
  - **Emergency Contingency**
Deferred Maintenance
Allocation Model

Renewal Priority

- Building Status
- Physical Condition
- Usage
- Operational Impacts of Failure
- Fabric impacts of Failure

Each criteria is also weighted against each other, to then develop a renewal priority

\[
\text{Renewal Priority} = W_1(\text{BS}) + W_2(\text{PC}) + W_3(\text{U}) + W_4(\text{OI}) + W_5(\text{FF})
\]

New allocation model will allow for the development of a 3 year “look ahead” plan, which will improved alignment with our capital project planning process
St. George 2018 Investments - $24M

- Asset Renewal*: $6,051 (Roofs, Building Envelope, Elevators)
- Contribution to TIL Classroom Project: $4,000 (Total $8M)
- Contribution to Capital Projects and Renovations: $4,889 (Total $28.1M)
- Contribution to GGRP Projects: $10,000 (Total $28M)

*Includes FRP funding of $5.854 M

GGRP Projects
Anthropology Roof
TIL Classroom Project
Con Hall Skylight

(000’s)
Thank you