VII. STANDING COMMITTEES

B. Finance and Asset Management Committee

Deferred Maintenance Update

BACKGROUND

The intent of this presentation is to provide information on the deferred maintenance program and status for the Seattle campus. Forty-nine percent of campus buildings are 50 years and older consisting of 12.1M gross square feet of space supported by maintenance and operations functions.

As current maintenance requirements go unmet due to funding shortfalls, these requirements are added to the deferred maintenance backlog which is comprised of two categories: Backlog of Maintenance and Repair (BMAR) and Facilities Improvements (FACIMP).

BMAR is defined as projects necessary to safely maintain facilities and related infrastructure for the current use.

FACIMP is defined as projects that are primarily program driven which intentionally modify systems and improve facility performance beyond the original design intent (or capacity) specifically to meet program needs.

The current deferred maintenance requirement for buildings is approximately $1.44B with approximately 55% in BMAR and 45% comprised of FACIMP. Together these backlogs define UW, Seattle’s deferred renewal.

Building conditions are evaluated every biennium on a 1 (superior) to 5 (marginally functional) scale and reported to the Office of Financial Management. Due to limited funding for major capital investments, level 1 (superior) space supporting research and academics has decreased by 6%. However, through a deliberate maintenance strategy focusing on buildings that support research and academic level 4 (limited functionality) space, there has been a 34% increase in level 3 (fair) space since 2008.

Attachments
1. Facilities Services Deferred Maintenance Update
2. Facilities Services Deferred Maintenance Update – Addendum
Deferred Maintenance Update

Charles Kennedy
Associate Vice President
Facilities Services
Agenda

- Seattle Campus Facts
- Building Age by Renovation Date
- Square Footage (%) over 25 Years Old (Renovation Age)
- Major Building Renovations
- Campus Maintenance GSF per FTE
- Building Envelope Work Order Completion Rate (Lean Implementation)
- Preventive Maintenance (PM) Work Order Phase Completion
- Deferred Maintenance BMAR
- Deferred Maintenance Backlog
- Deferred Maintenance Annual Investment Scenarios
- Deferred Maintenance Strategy
- Research & Academic Building Conditions
- Research & Academic Building Work Requests
- Deferred Maintenance Repair Sample Pictures
Seattle Campus Facts

- 680 acres
- Approximately 22 miles of public roads, drives, streets and pathways
- Approximately 12 million gross square feet of building maintenance and operations
- Over 8 miles walk-through utility tunnels used to distribute power, steam, chilled water, communications and other utilities to campus
- 213 buildings Facilities Services maintained
- Current average building age by renovation date: 49% over 50 years old
- Minor Capital 10 years average biennial funding: $29.6 million
- Deferred Maintenance Backlog = BMAR + FACIMP
  - BMAR (Building Maintenance and Repair): Projects necessary to safely maintain facilities and related infrastructure for the current use
  - FACIMP (Facilities Improvements): Projects that are primarily program driven which intentionally modify systems and improve facility performance beyond the original design intent (or capacity) specifically to meet program needs
Building Age by Renovation Date

- Over 25 Years Old: 76%
- Over 50 Years Old: 49%

# of Buildings

- 1895-1899
- 1900-1909
- 1915-1919
- 1920-1924
- 1925-1929
- 1930-1934
- 1935-1939
- 1940-1944
- 1945-1949
- 1950-1954
- 1955-1959
- 1960-1964
- 1965-1969
- 1970-1974
- 1975-1979
- 1980-1984
- 1985-1989
- 1990-1994
- 1995-1999
- 2000-2004
- 2005-2008
- 2010-2014
Square Footage (%) over 25 Years Old (Renovation Age)

Public Universities
- 2007: 14%
- 2008: 15%
- 2009: 15%
- 2010: 16%
- 2011: 17%
- 2012: 18%

Private Universities
- 2007: 23%
- 2008: 23%
- 2009: 23%
- 2010: 24%
- 2011: 24%
- 2012: 27%

University Of Washington
- 2007: 30%
- 2008: 31%
- 2009: 33%
- 2010: 32%
- 2011: 33%
- 2012: 34%

Legend:
- Blue: 25 to 50 Years of Age
- Red: Over 50 Years of Age
### Major Building Renovations

<table>
<thead>
<tr>
<th>Construction Date</th>
<th>Renovation Date &amp; Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLARK</strong> 31K GSF</td>
<td>1896 $17M</td>
</tr>
<tr>
<td><strong>PARRINGTON</strong> 54K GSF</td>
<td>1902 $9.5M</td>
</tr>
<tr>
<td><strong>ARCHITECTURE</strong> 47K GSF</td>
<td>1909 $24M</td>
</tr>
<tr>
<td><strong>SAVERY</strong> 102K GSF</td>
<td>1917 $62M</td>
</tr>
<tr>
<td><strong>ROBERTS</strong> 32K GSF</td>
<td>1921 $6.3M</td>
</tr>
<tr>
<td><strong>SUZZALLO</strong> 318K GSF</td>
<td>1926 $47M</td>
</tr>
<tr>
<td><strong>MARY GATES</strong> 183K GSF</td>
<td>1928 $48M</td>
</tr>
<tr>
<td><strong>GUGGENHEIM</strong> 56K GSF</td>
<td>1929 $28M</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Date</th>
<th>Renovation Date &amp; Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JOHNSON</strong> 122K GSF</td>
<td>1930 $53M</td>
</tr>
<tr>
<td><strong>JONES PLAYHOUSE</strong> 10K GSF</td>
<td>1931 $10M</td>
</tr>
<tr>
<td><strong>HALL HEALTH</strong> 58K GSF</td>
<td>1936 $8M</td>
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<tr>
<td><strong>HUB</strong> 260K GSF</td>
<td>1949 $118M</td>
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<tr>
<td><strong>CONIBEAR</strong> 48K GSF</td>
<td>1949 $16M</td>
</tr>
<tr>
<td><strong>MAG H.S.C./H</strong> 211K GSF</td>
<td>1950 $38M</td>
</tr>
<tr>
<td><strong>ODEGAARD</strong> 166K GSF</td>
<td>1972 $17M</td>
</tr>
</tbody>
</table>

**FACILITIES SERVICES**
Building Envelope Work Order Completion Rate (Lean Implementation)

- FY2010: 64%
- FY2011: 73%
- FY2012: 92%
- FY2013: 96%

(Facilities Services)
Preventative Maintenance (PM) Work Order Phase Completion
7/1/2012 - 6/30/2013

- PM Phases Completed: 3,815 (28% Completed)
- Total PM Phases: 13,609
Deferred Maintenance BMAR

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>BMAR $ In Millions</th>
<th>Sightlines $ / GSF</th>
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<tbody>
<tr>
<td>FY2007</td>
<td>749</td>
<td></td>
</tr>
<tr>
<td>FY2008</td>
<td>767</td>
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<tr>
<td>FY2009</td>
<td>781</td>
<td></td>
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<tr>
<td>FY2010</td>
<td>783</td>
<td></td>
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<tr>
<td>FY2011</td>
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<tr>
<td>FY2012</td>
<td>795</td>
<td></td>
</tr>
<tr>
<td>FY2013</td>
<td>798</td>
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</table>
Deferred Maintenance Backlog

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>FACIMP $ in Millions</th>
<th>BMAR $ in Millions</th>
<th>Total Backlog $ in Millions</th>
</tr>
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<tbody>
<tr>
<td>FY2007</td>
<td>626</td>
<td>749</td>
<td>1374</td>
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<tr>
<td>FY2008</td>
<td>635</td>
<td>767</td>
<td>1403</td>
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<td>FY2009</td>
<td>636</td>
<td>781</td>
<td>1417</td>
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<tr>
<td>FY2010</td>
<td>638</td>
<td>783</td>
<td>1421</td>
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<tr>
<td>FY2011</td>
<td>640</td>
<td>789</td>
<td>1429</td>
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<tr>
<td>FY2012</td>
<td>642</td>
<td>795</td>
<td>1437</td>
</tr>
<tr>
<td>FY2013</td>
<td>643</td>
<td>798</td>
<td>1441</td>
</tr>
</tbody>
</table>

- FACIMP $/GSF
- BMAR $/GSF
- Sightlines $/GSF
- Total Backlog $/GSF
Deferred Maintenance Annual Investment Scenarios

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Current Funding Level $15M</th>
<th>Increased Funding $15M</th>
<th>Increased Funding $25M</th>
<th>Sightline/GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2013</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>93</td>
</tr>
<tr>
<td>FY2014</td>
<td>127</td>
<td>126</td>
<td>126</td>
<td>96</td>
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<tr>
<td>FY2015</td>
<td>130</td>
<td>127</td>
<td>126</td>
<td>99</td>
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<td>FY2016</td>
<td>132</td>
<td>128</td>
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<td>103</td>
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<td>FY2017</td>
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<td>129</td>
<td>126</td>
<td>106</td>
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<td>FY2018</td>
<td>138</td>
<td>131</td>
<td>126</td>
<td>109</td>
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<td>FY2019</td>
<td>140</td>
<td>132</td>
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<td>113</td>
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<td>FY2020</td>
<td>143</td>
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<td>FY2021</td>
<td>146</td>
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<td>FY2022</td>
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<td>FY2023</td>
<td>153</td>
<td>138</td>
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<tr>
<td>FY2024</td>
<td>156</td>
<td>139</td>
<td>128</td>
<td>133</td>
</tr>
</tbody>
</table>

Note: Rate of Inflation: 3%  GSF Remains Constant
Deferred Maintenance Strategy

• Evaluate building conditions for state buildings annually, by Superior, Adequate, Fair, Limited Functionality, and Marginally Functional

• Prioritize work requests on 1 – 7 scale
  – 1, Can Wait, Little or no impact issue
  – 2, Can Wait, Low impact issue (normal building)
  – 3, Can Wait, Moderate impact issue
  – 4, Needed, Significant impact issue
  – 5, Needed, High impact issue
  – 6, Urgent, Very high impact issue
  – 7, Urgent, Extremely high impact issue

• Focus Minor Capital resources on Urgent work requests, improve building conditions on “Fair” and “Limited Functionality” buildings

• Utilize Operating resources primarily in routine maintenance of “Superior”, “Adequate” and “Fair” buildings
Research & Academic Building Conditions

The chart below shows the conditions of research and academic buildings over the years 2008, 2010, and 2013. The categories include Superior, Adequate, Fair, Limited Functionality, and Marginally Functional. The chart uses color coding to represent different conditions.

Key:
- 2008 Research
- 2008 Academic
- 2010 Research
- 2010 Academic
- 2013 Research
- 2013 Academic
## Research & Academic Building Work Requests

<table>
<thead>
<tr>
<th>Building</th>
<th>Building Condition</th>
<th>Total $ (000's)</th>
<th>Priority 7 Work Request</th>
<th>Total Work Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guthrie Annex II</td>
<td>5</td>
<td>138</td>
<td>4</td>
<td>11</td>
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<tr>
<td>Lewis Hall</td>
<td>5</td>
<td>12,482</td>
<td>3</td>
<td>53</td>
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<tr>
<td>Sieg Hall</td>
<td>5</td>
<td>22,329</td>
<td>1</td>
<td>35</td>
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<tr>
<td>Guthrie Annex III</td>
<td>5</td>
<td>38</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Guthrie Annex I</td>
<td>5</td>
<td>212</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Guthrie Annex IV</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>MHSC B-Wing</td>
<td>4</td>
<td>50,255</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td>Hutchinson Hall</td>
<td>4</td>
<td>25,435</td>
<td>12</td>
<td>83</td>
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<tr>
<td>Anderson Hall</td>
<td>4</td>
<td>20,607</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Harris Hydraulics</td>
<td>4</td>
<td>12,296</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Denny Hall</td>
<td>4</td>
<td>42,775</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>MHSC C-Wing</td>
<td>4</td>
<td>23,953</td>
<td>6</td>
<td>52</td>
</tr>
<tr>
<td>Smith Hall</td>
<td>4</td>
<td>42,095</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Miller Hall</td>
<td>4</td>
<td>44,743</td>
<td>4</td>
<td>42</td>
</tr>
<tr>
<td>Portage Bay Building</td>
<td>4</td>
<td>39,196</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>Thomson Hall</td>
<td>4</td>
<td>24,482</td>
<td>2</td>
<td>52</td>
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<tr>
<td>Mackenzie Hall</td>
<td>4</td>
<td>5,272</td>
<td>2</td>
<td>25</td>
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<tr>
<td>Eagleson Hall</td>
<td>4</td>
<td>8,224</td>
<td>1</td>
<td>34</td>
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<tr>
<td>ECC Theater</td>
<td>4</td>
<td>839</td>
<td>1</td>
<td>28</td>
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<tr>
<td>Gilman Building</td>
<td>4</td>
<td>3,199</td>
<td>0</td>
<td>16</td>
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<tr>
<td>MHSC F Wing</td>
<td>4</td>
<td>509</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Building Condition 5 – Marginally Functional
Building Condition 4 – Limited Functionality
Deferred Maintenance Repairs
Minor Capital Bien13-15 Projects

Building Envelope
Odegaard Undergraduate Library - Masonry Repairs

Building Envelope
Anderson Hall – Envelope Repair

Building Systems
Magnuson Health Sciences Center - BB Tower Hot Water Heating Bundles

Building Systems
Magnuson Health Sciences Center D, E & F Wings
Variable Frequency Drive Fan Improvements
Deferred Maintenance Repairs
Minor Capital Bien13-15 Projects

Interiors
Plant Operations Building
ACM Flooring Abatement & Replacement

Conveying Systems
Plant Services Building Lift Replacement

Grounds
Several Locations
Building Sewer Systems & Utility Renewal/Replacement

Site Work
Pend Oreille Road NE
Roadway, Pathway & Trail Paving, Repair & Improvements

F–5.1/202-14
2/13/14
Deferred Maintenance Update

Charles Kennedy
Associate Vice President
Facilities Services

(Addendum)
Facilities Services Core Functions

- **Maintenance**
  - GSF served (including UW Tower): 12 million
  - FY2014 operating budget: $13 million
  - Full-time equivalents (FTEs): 162

- **Grounds**
  - Area served: 400 acres
  - FY2014 operating budget: $3.3 million
  - Full-time equivalents (FTEs): 57

- **Campus Operations**
  - GSF served (including UW Tower): 12 million
  - FY2014 operating budget: $7.3 million
  - Full-time equivalents (FTEs): 84

- **Custodial Services**
  - GSF served: 11.0 million
  - FY2014 operating budget: $13 million
  - Full-time equivalents (FTEs): 278

- **Fleet Services**
  - Total vehicles: 705
Facilities Services 2013-15 Biennial Budgets
Total: $332M

- Grants: $22.4M (7%)
- GoF/DoF: $106.1M (32%)
- Fixed Cost: $100.3M (30%)
- Self-Sustaining: $103.2M (31%)
2011-13 Biennial Gross Expenditures by Fund Type
Total: $308.2M

- **Grants**: $15.9M (5%)
- **Fixed Cost**: $92.9M (30%)
- **Self-Sustaining**: $95.6M (31%)
- **GOF/DOF**: $103.8M (34%)
2011-13 Biennial Expenditures by Account Code

**GOF/DOF**
- Salaries $61.1M (58.8%)
- Benefits $17.6M (17.0%)
- Professional and Other Contract Services $15.9M (15.3%)

**Fixed Cost**
- Professional and Other Contract Services $84.8M (91.3%)

**Self-Sustaining**
- Salaries $18.7M (19.6%)
- Benefits $6.2M (6.5%)
- Depreciation $1.7M (1.8%)

**Grants**
- Construction $12.4M (78.0%)
- Research $1.1M (6.9%)
- Other Costs $0.3M (1.8%)
- Administrative $1.2M (7.6%)

**FACILITIES SERVICES**

F–F.2/202-14
2/13/14
Minor Capital 2011-13 Expenditure
Total: $30.5M

- Building Envelope: $9.6M (31%)
- Building Systems: $3.6M (12%)
- Interior/Security/Conveying Systems: $11.9M (39%)
- Utilities/Grounds: $4.9M (16%)
- ADA: $0.5M (2%)