Developed a tool based on:

- Common vocabulary
- Consistent analytical methodology
- Credibility through benchmarking
### Comparison Institutions

Gaining knowledge through peer context

<table>
<thead>
<tr>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol Community College</td>
<td>Fall River, MA</td>
</tr>
<tr>
<td>Bunker Hill Community College</td>
<td>Charlestown, MA</td>
</tr>
<tr>
<td>Cincinnati State Technical and Community College</td>
<td>Cincinnati, OH</td>
</tr>
<tr>
<td>Columbus State Community College</td>
<td>Columbus, OH</td>
</tr>
<tr>
<td>Cuyahoga Community College - 3 Campuses</td>
<td>Cuyahoga County, OH</td>
</tr>
<tr>
<td>Holyoke Community College</td>
<td>Holyoke, MA</td>
</tr>
<tr>
<td>Lakeland Community College</td>
<td>Kirtland, OH</td>
</tr>
<tr>
<td>Lorain County Community College</td>
<td>Elyria, OH</td>
</tr>
<tr>
<td>Owens State Community College</td>
<td>Toledo, OH</td>
</tr>
<tr>
<td>Quinsigamond Community College</td>
<td>Worcester, MA</td>
</tr>
<tr>
<td>Sinclair Community College</td>
<td>Dayton, OH</td>
</tr>
</tbody>
</table>

**Comparative Considerations**

Size, Technical complexity, Density factor.
Key ROPA Analysis Findings

Key areas of focus for Harper College

**Demanding Campus Profile:**

Campus age profile combined with high campus density and technical complexity create elevated demands for operational and capital resources.

**Strong Future Investment Plans:**

Current and future capital investments will renovate aging space, replace outdated building systems, and increase the value of the physical assets.

**Sufficient Resources Aid in Effective Operations:**

Overall, facilities services and work management process yield exceptional results and satisfied customers.
Key Physical Profile Attributes & Operational Review
Campus Profile

24 Buildings – 1.3M GSF – 3.57 technical complexity

Campus Age Profile

<table>
<thead>
<tr>
<th></th>
<th>Less than 10</th>
<th>10 to 25</th>
<th>25 to 50</th>
<th>50 to 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Age FY10</td>
<td>30%</td>
<td>16%</td>
<td>55%</td>
<td>13%</td>
</tr>
<tr>
<td>Campus Age FY20</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>13%</td>
</tr>
</tbody>
</table>

| Peer Renovation Age | 19% | 19% | 53% | 9%  |

* Campus age profile accounts for all major renovations to buildings.
Density Factor

Highly elevated total intensifies demand for Harper

Density Factor Affects:
- Wear & tear on buildings
- Daily cleaning demands within building
- Life cycles of building components

*Density factor calculation does not include uses of space for community and auxiliary purposes.*
Half of Harper’s space has a technical rating of 4 or 5.
Energy Consumption vs. Peers

Elevated consumption is partially mitigated by complexity and density.

Peers consume 70K BTUs/GSF less than Harper.

Energy Consumption

Energy Unit Cost By Fuel
## Operations Overview

Sufficient resources aid in effective operations

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>HC FY10</th>
<th>Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing (GSF/FTE):</td>
<td>62,195</td>
<td>79,536</td>
</tr>
<tr>
<td>Supervision (FTE/Super):</td>
<td>23.4</td>
<td>15.0</td>
</tr>
<tr>
<td>Materials ($/FTE):</td>
<td>22,628</td>
<td>10,218</td>
</tr>
<tr>
<td>General Repair (1-5):</td>
<td>4.1</td>
<td>3.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Custodial</th>
<th>HC FY10</th>
<th>Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing (GSF/FTE):</td>
<td>19,916</td>
<td>29,377</td>
</tr>
<tr>
<td>Supervision (FTE/Super):</td>
<td>18.7</td>
<td>15.8</td>
</tr>
<tr>
<td>Materials ($/FTE):</td>
<td>3,758</td>
<td>4,637</td>
</tr>
<tr>
<td>Cleanliness (1-5):</td>
<td>4.5</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grounds</th>
<th>HC FY10</th>
<th>Peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing (Acres/FTE):</td>
<td>15.4</td>
<td>29.7</td>
</tr>
<tr>
<td>Supervision (FTE/Super):</td>
<td>24.4</td>
<td>12.9</td>
</tr>
<tr>
<td>Materials ($/FTE):</td>
<td>17,070</td>
<td>10,091</td>
</tr>
<tr>
<td>Grounds (1-5):</td>
<td>4.5</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Excellent Service Process Results in Customer Satisfaction

94% of customers’ expectations are met

Service Process Index

“My General Satisfaction With Physical Plant”

94%

Meets Expectations

Is Below Expectations
Capital Investment Summary
Total Project Spending vs. Peers

Historically, peers spend more than Harper; investment ramps up in 2010

Total Project Spending by AS & AR

Funding difference equivalent to: $1.8 Million per year
Forecasting Future Investment - Master Plan Timeline

Significant capital investment planned over next 10 years

Harper Master Plan Timeline

- **Annual Maintenance Funding**
  (Annual Stewardship Funding)

- **Renovation Schedules through Master Plan**
  (Asset Reinvestment Funding)

- **Pending Renovation Funding**

- **New Space / Additions**
10-Year Capital Investment Plan

Significant campus investment expected during the next 10 years

<table>
<thead>
<tr>
<th>Year</th>
<th>Historical Total Dollars</th>
<th>Projected Total Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2006</td>
<td>$1.45M</td>
<td>$58.21M</td>
</tr>
<tr>
<td>FY2007</td>
<td>$1.45M</td>
<td>$58.21M</td>
</tr>
<tr>
<td>FY2008</td>
<td>$1.45M</td>
<td>$58.21M</td>
</tr>
<tr>
<td>FY2009</td>
<td>$1.45M</td>
<td>$58.21M</td>
</tr>
<tr>
<td>FY2010</td>
<td>$1.45M</td>
<td>$58.21M</td>
</tr>
<tr>
<td>FY2011</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2012</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2013</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2014</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2015</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2016</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2017</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2018</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2019</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
<tr>
<td>FY2020</td>
<td>$20.56M</td>
<td>$96.64M</td>
</tr>
</tbody>
</table>

Total Projected Spending: $154.85M

* Does not include $54M in pending state funding.
* Does not include master planning projects in the “Other Priority Work” category.
* Does not include investments into new space and building additions.
Future Investment Goals
Defining the Stewardship Investment Target

Setting goals to arrest the rate of facility depreciation

FY 2010 Annual Stewardship Target

<table>
<thead>
<tr>
<th>$ in Millions</th>
<th>3% Replacement Value</th>
<th>$14.9M Life Cycle Need</th>
<th>$7.6M Annual Stewardship Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$15.1</td>
<td>$6.2</td>
<td>$4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$8.7</td>
<td></td>
</tr>
</tbody>
</table>

Target = 75% Envelope/Mechanical + 35% Space/Programming

Straight Line Depreciation

Sightlines Methodology

- Composite
- Envelope/Mechanical Need
- Space/Programming Need
10-Year Capital Investment Plan

Strong five year investment plan; backlog is expected to grow in “out years”

Total investment plan: $ 154.85

* Does not include $54M in pending state funding.
*Does not include master planning projects in the “Other Priority Work” category.
*Does not include investments into new space and building additions.
10-Year Capital Investment Plan with State Support

Plan consistently funds in or above target zone; long-term backlog stabilized

Total investment plan: $208.79

- Includes approx. $54M in pending state funding.
- Does not include master planning projects in the “Other Priority Work” category.
- Does not include investments into new space and building additions.
Campus Asset Value Compared to Peers

Harper’s NAV is expected to increase: well above peers

Net Asset Value Index

Net Asset Value = \( \frac{\text{Replacement Value} - \text{Deferred Maintenance}}{\text{Replacement Value}} \)

- Harper NAV
- Peer Average NAV
- NAV projection without State Funding
- NAV projection with State Funding
Concluding remarks

A very appropriate capital plan is in place. Now, the coordination and integration of strategy becomes the logical and necessary next step.

**Measurable next steps:**
- manage investment mix
- develop building portfolios
- balance “keep up” and “catch up” spending

Superior operations performance should be enhanced if capital investment is targeted appropriately.

**Measurable next steps:**
- decrease energy consumption
- increase planned maintenance investment
- ensure that trades mix matches building types

Realize that the goals for the next ten years will be to coordinate the balance between “keep up” and “catch up” investment. Once this master planning initiative is completed, there will be need for additional “keep up” funding to protect the significant advancements.
Questions & Discussion
Total Project Spending

Strong spending profile; recent emphasis on building systems

Harper 5 Year Composite Spending

Peer Avg. 5 Year Composite Spending

- Code GSF: 34%
- Space GSF: 12%
- InfraStructure/GSF: 17%
- Bldg Systems/GSF: 29%
- Bldg Envelope/GSF: 8%
Maintenance Department vs. Peers

**Maintenance Staffing**

- Peer Averages
- William Rainey Harper College

**Maintenance Supervision**

- Peer Averages
- William Rainey Harper College

**Maintenance Materials $/GSF**

- Peer Averages
- William Rainey Harper College
Energy Consumption vs. Peers

Regional peer comparison

Energy Consumption

Electric Consumption

Fossil Fuel Consumption

[Charts and graphs depicting energy consumption data over the years from 2006 to 2010, comparing William Rainey Harper College to peer averages and highlighting specific years and consumption levels.]
Additional FMB&A Data Exhibits

Asset Value Change
Current Campus Asset Value

Deferred maintenance impacts campus value

Current Replacement Value

Net Asset Value

Replacement Value Range: $ 500M – 525M

NAV Range: $375M - $400M

Delta represents Parsons backlog

NAV = Current Replacement Value – Deferred Maintenance
Asset Reinvestment Project Backlog

Parsons Study Findings: Range between $120M - $130M

**AR Project Backlog- FY10**

Sightlines Project Backlog Cross-Check

- **Annual Project Deferral Model**
  - Acceptable Range
  - Values range from -40% to 40%
- **Integrated Facilities Planning Database Model**
  - Acceptable Range
  - Values range from -40% to 40%

**NOTE:** Total assumes a campus FCI of 7%
AR Project Backlog Compared to Peers

Harper’s backlog comparable to peers; below CC database average

<table>
<thead>
<tr>
<th>Total Backlog $/GSF</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Community College Average</td>
<td>$ 119</td>
</tr>
<tr>
<td>Database Average</td>
<td>$ 75</td>
</tr>
</tbody>
</table>
Total Capital Investment Over Time

Harper College’s investment level has significantly increased.

![Total Facilities Project Spending Chart]

- **Avg. $4.4M**

Examples of Major Projects:

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Building L Chiller Work</td>
<td>$2.6M</td>
</tr>
<tr>
<td>2009</td>
<td>Building L and K roof repairs</td>
<td>$740K</td>
</tr>
<tr>
<td>2007</td>
<td>Building D Remodeling</td>
<td>$840K</td>
</tr>
</tbody>
</table>
Annual Stewardship Investment - % Target vs. Peers

Total Annual Stewardship

Peer Averages
© Sightlines 2001-2011

William Rainey Harper College

% of Target

2006 2007 2008 2009 2010

Peer Averages Average (46) Your Average (4.00)
Total Capital Investment - % Target vs. Peers

Total Projects vs. Target

% of Target

2005 2007 2008 2009 2010

Other AR (Pct. tar) One-Time Capital (Pct. tar) Planned Maintenance (Pct. tar) Recurring Capital (Pct. tar) Average (111) Your Average (60.00)
Project Backlog vs. Peers

Total Asset Reinvestment Backlog $/GSF

Peer Averages © Sightlines 2001-2011

William Rainey Harper College

$/GSF

2006 2007 2008 2009 2010

2006 2007 2008 2009 2010

Peer Averages  Average (101.66)  Your Average (84.45)
## Master Plan - Project Overview

### Total Dollars: $56,657,150

<table>
<thead>
<tr>
<th>Buildings</th>
<th>Time Frame</th>
<th>GSF</th>
<th>Total Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>G &amp; H Buildings</td>
<td>FY11-FY13</td>
<td>82,157 GSF</td>
<td>$37,285,943</td>
</tr>
<tr>
<td>D Building</td>
<td>FY13-FY15</td>
<td>115,903 GSF</td>
<td>$27,949,080</td>
</tr>
<tr>
<td>Library (F Building)</td>
<td>FY12-FY13</td>
<td>107,970 GSF</td>
<td>$21,229,601</td>
</tr>
<tr>
<td>Student Center</td>
<td>FY15-17</td>
<td>53,037</td>
<td>$10,719,152</td>
</tr>
</tbody>
</table>

### Total Dollars in Model: $175,668,142

* Does not include $54M in pending state funding.
* Does not include master planning projects in the Other Priority work category.
Additional FMB&A Data Exhibits

Operations Success
Facilities Operating Budget

Above average operating budget driven by daily service needs

Facilities Operating Budget Total

Peer Averages
© Sightlines 2001-2011

William Rainey Harper College

Total Planned Maintenance
© Sightlines 2001-2010

Daily Service Budget
© Sightlines 2001-2010

Legend:
- Green: Budget Total Utilities /GSF
- Red: Budget Planned Maintenance $/GSF
- Blue: Budget Total Daily Service/GSF
Facilities Operating Actuals vs. Peers

Facilities Operating Budget Actuals

Peer Averages
© Sightlines 2001-2011

William Rainey Harper College

$GSF

Actuals Total Utilities /GSF
Actuals Planned Maintenance /GSF
Actuals Total Daily Service /GSF
Average (7.13)
Your Average (7.92)
Planned Maintenance Investment vs. Peers

Total Planned Maintenance

- Peer Averages
- William Rainey Harper College

$/GSF

- Peer Averages
- Average (.30)
- Your Average (0.21)
Custodial Department vs. Peers
Grounds Department vs. Peers

Grounds Staffing

Grounds Supervision

Grounds Materials $/Acre
Campus Inspection Indices vs. Peers

- **Grounds Inspection**
  - Index values range from 0.0 to 5.0.
  - Comparison between different years.

- **General Repair/Impression**
  - Similar format as Grounds Inspection.
  - Comparison between different years.

- **Cleanliness Inspection**
  - Similar format as Grounds Inspection.
  - Comparison between different years.

- **Exterior Inspection**
  - Similar format as Grounds Inspection.
  - Comparison between different years.
Energy Cost vs. Peers
Facilities peer comparison

Energy Total Unit Cost

Energy Unit Cost By Fuel
Energy Cost vs. Peers

Regional peer comparison

Energy Total Unit Cost

Energy Unit Cost By Fuel