Foundation for Excellence

A Strategic Framework for Facilities Development

University of Massachusetts Amherst
Chancellor David K. Scott

Board of Trustees Presentation
November 10, 1999
Presentation Outline

❖ Historical Context
❖ Assessment and Analysis
❖ Strategic Plan
❖ Framework for Action
The Enterprise

Public Land-Grant Research I Institution

Community of 30,000
190 buildings
9,000,000 SF

Value of buildings: $1,640,000,000
Value of infrastructure: $400,000,000
Growth of the Campus

- 1860’s-1930’s: 7%
- 1940’s-50’s: 7%
- 1960’s-70’s: 68%
- 1980’s-90’s: 18%

1999 Total Campus Square Footage: 9,000,000 SF
Escalating Liability

- Dramatic growth in higher education facilities
- Chronic under-investment in existing facilities
- Change of use of existing facilities
- Increased regulatory standards
Capital Program 1960-95

- **Infrastructure**: $37 million (10%)
- **Deferred Maintenance**: $18 million (5%)
- **Modernization**: $32 million (9%)
- **New Construction**: $281 million (76%)

**Total Capital State & UMBA**: $368 Million
Managing our Assets

- Protect current value of assets over the long term
- Invest in assets to increase their value
- Deferring problems requires greater investment later to catch up
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Facilities Condition Assessment

Purpose:

❖ Evaluate the condition of campus facilities
❖ Predict long and short term capital needs for maintenance and repair
❖ Provide tools for continued planning and management

Identified $393 Million of deficiencies in buildings at UMass Amherst campus
Facility Condition Index (FCI) is an industry standard method for comparison of relative building condition.

\[
FCI = \frac{\text{total cost of existing deficiencies}}{\text{current replacement value}}
\]

\[
FCI = \frac{\$393 \text{ Million}}{\$1.6 \text{ Billion}} = 0.25 \text{ in FY 1998}
\]
### Strategic Assessment Model

- **National standard developed by the Association for Higher Education Facilities Officers**

<table>
<thead>
<tr>
<th>Condition</th>
<th>FCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Good</td>
<td>5-10%</td>
</tr>
<tr>
<td>Fair</td>
<td>10-15%</td>
</tr>
<tr>
<td>Poor</td>
<td>15-20%</td>
</tr>
<tr>
<td>Very Poor</td>
<td>&gt;20%</td>
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</tbody>
</table>
FCI Comparisons

- Tufts University: 0.08
- University of California - Davis: 0.10
- Johns Hopkins University: 0.12
- Brandeis University: 0.14
- UMass Amherst: 0.25
- University of Missouri: 0.26
  (branch campuses only)
- Baylor University: 0.30
Current funding projections based on total capital liabilities adjusted for inflation and backlog growth.
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Comprehensive Approach

- Renewal
- Modernization
- New Construction
- Operations
- Deferred Maintenance Reduction Plan
Deferred Maintenance

- Address most urgent needs
  - Health & Safety
  - Building Envelopes
- Reduce $140M of backlog through modernization and new construction
- Take offline most deficient and least valuable facilities

Current Spending: $7 million/year

*** Target: $12 5 million/year ***
Renewal

- Maintain value of existing facilities resources
- Recognize as an on-going essential expense
- Significantly reduce the continued accumulation of deferred maintenance
- Establish endowments for new facilities

Current Spending: None

*** Target: $15 million/year ***
Modernization

- Invest in existing facilities affected by on-going change
  - Instructional programs
  - Research programs
  - Technology
  - Student Life
  - Code compliance mandates

- Contributes to the reduction of deferred maintenance

Current Spending: $7 million/year

*** Target: $18 million/year ***
New Construction

❖ Achieve strategic planning goals
  • Invest in future vision
  • Meet needs beyond existing facilities
  • Replace badly deteriorated facilities

❖ Contributes to the reduction of deferred maintenance
Year 2004 - New Facilities

6 New Buildings
358,000 Add’l SF
$176.5 Million

Heating Plant
$56.5 million
11,000 SF

Swing Space
$8 million
40,000 SF

ECSC II
$17 million
42,000 SF

SOM Addition
$12 million
40,000 SF

Nursing School
$8 million
45,000 SF

Integrative Sciences Facility
$75 million
180,000 SF

SOM Addition
Future Vision

Additional Buildings:
- Band Building Addition
- Recreational Facilities
- Library Storage/Archives
- Telcom/Computing Center
- Child Care/Child Develop.
- Social & Behavior Science
- Museum of Natural Hist.
- Housing Facilities

Current Spending:
$18.5 million/year

Target:
$20 million/year

Trustees 11/10/99
Opportunities for Outreach

North Amherst Research Park/Hotel & Conference Center

Integrative Science Facility

WestMass Development

UMass Worcester

Baystate Medical Center
Partnering for Success

- Regional leader in research and development
- Potential for continued growth in sciences
- Enhancing existing alliances
  - UMass system
  - Five College Consortium
  - Baystate Medical Center
- Developing emerging opportunities
Dedicate facilities operating budget to preventative and on-going maintenance and repair

Continue to improve operational efficiency

Link operational funding to increases in facility assets

Current Spending: 2.6% of current replacement value/year

*** Comprehensive Stewardship Target: ***

3.5% of current replacement value/year
Strategic Facilities Plan

- Renewal
- Modernization
- Operations
- New Construction
- Deferred Maintenance Reduction Plan

Funding Strategy
20-Year Strategic Funding Intent
by Project Type

- Modernization
  - $360 million
  - 27%
- Renewal
  - $300 million
  - 23%
- Deferred Maintenance
  - $250 million
  - 19%
- New Construction
  - $400 million
  - 31%

Total 20-year Strategic Intent
$1.3 Billion
20-Year Strategic Funding Intent
by Funding Source

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>General Obligation Bonds</td>
<td>$531 million</td>
<td>40%</td>
</tr>
<tr>
<td>UMA Operating Budget</td>
<td>$165 million</td>
<td>13%</td>
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<tr>
<td>Capital Campaign</td>
<td>$180 million</td>
<td>14%</td>
</tr>
<tr>
<td>Foundation and Federal Support</td>
<td>$100 million</td>
<td>8%</td>
</tr>
<tr>
<td>Public/Private Partnerships</td>
<td>$100 million</td>
<td>8%</td>
</tr>
<tr>
<td>Total 20-year Strategic Intent</td>
<td>$1.3 Billion</td>
<td></td>
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Completed Projects FY95-99
by Project Type

- New Construction
  - $30 million

- Modernization
  - $14 million

- Deferred Maintenance
  - $16 million

- ECSC Phase I
- Old Chapel
- Fine Arts Center Lobby
- Mahar Auditorium

65 projects
$60 Million
Completed Projects FY95-99
by Funding Source

UMA Operating Budget
$21 million
35%

UMBA
$8 million
14%

State GOB Supplemental
$2 million
3%

State GOB
$29 million
48%

65 projects
$60 Million

65 projects
FY1997 - 2004 Capital Plan
by Project Type

- Modernization
  - $55 million, 18%
- New Construction
  - $148 million, 46%
- Deferred Maintenance
  - $113 million, 36%
- New Heating Plant
  - $56 million
- Information Technology
  - $27 million
  - Includes $16 million for PeopleSoft
- Phase I Capital Program
  - $316 million

20-Year Intent
FY1997 - 2004 Capital Plan

by Funding Source

General Obligation Bonds
$88 million, 28%

*Federal Grants
$25 million, 8%

UMBA
$131 million, 41%

Phase I Capital Program
$316 million

UMA Operating Budget
$39 million, 12%

Information Technology
$27 million
Includes $16 million for PeopleSoft

*Private Donations
$33 million, 11%

*Includes projection of $25 million for Integrative Science Facility

20-Year Intent
Current Plan in Context

- 20-Year Strategy
- 1997-2004 Capital Plan
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Engage Stakeholders

- Campus Community
- Alumni
- President’s Office
- Board of Trustees
- Division of Capital Asset Management & Maintenance (DCAMM)
- General Public
- Legislature
Relief from Constraints

Current **fiscal** and **statutory** constraints stifle our ability to solve facilities problems

- Value of funding allocations reduced
- Funding opportunities lost
- Facilities deterioration accelerates
Targets for Reform

Capital Spending Process
Design and Construction Process
Delegation of Authority
Real Property Acquisitions & Leasing
$22 M behind in 4 years

Original State Plan
Actual Spending
(Projected FY02-04)
Goals of public construction reform:

- Assure quality in design and construction of public buildings that meets the needs of users
- Operate in a timely, efficient professional manner
- Make maximum use of existing resources
- Eliminate excessive costs and unwarranted delays
- Hold officials accountable and eliminate corruption, favoritism and political influence
Reform 20 Years Later

- Design and construction takes too long
- Unwarranted delays increase costs with no value added
- Inefficient system contributes to depreciation of existing resources
- Delays and inefficiencies compromise the needs of users
Agenda for Change

Legislative changes that will **save time**, **save money**, and **increase quality** while **maintaining controls**

- Delegated designer selection
- Integrated study/design process
- Delegated authority of $2 million
- Provide greater flexibility in acquiring and leasing real property
Increase Delegated Authority

- In-house design, construction and project management expertise
- Best knowledge of own systems and needs
- Nimble planning and implementation required for deferred maintenance and modernization

Need to base level of authority on agency’s in-house capabilities
Real Property Acquisition & Leasing Reform

- Provide flexibility in real property development
- Take advantage of public/private partnership opportunities
- Provide opportunity for a more nimble response to pressing space needs
- Attract needed private development funding
- Leverage assets to gain benefit of new development without large capital outlays
Benefits of New Reform

- Faster project delivery through more efficient design and construction process
- Better utilization of existing facilities
- Greater value for limited financial resources
- Expanded potential for outreach and development
- Enhanced opportunities for competing in increasingly competitive market
Taking up the Challenge

Champion reform

Help develop a strategy to engage all stakeholders

Take agenda to the Legislature
“Long range planning does not deal with future decisions, but with the future of present decisions.”

Peter Drucker