The Oregon University System

Capital Construction Program Request for 2005-2011

July 16, 2004
Scope of Presentation

• Introduction
• Project Categories
• Funding Types
• 2005-2011 Capital Request
• Capital Program Objectives
• Summary
Introduction

• Huge enterprise: 20 Million Gross Square Feet (gsf)
  – 50% of all State-owned facilities
  – $3 billion in current replacement value
  – 100,000 students affected each year

• Similar in scale to municipalities
  – Classrooms, offices, labs, libraries, Power plants, underground utility tunnels, road systems, museums
  – Operate 24/7/365
Project Categories

- Education & General
- Auxiliary
- Systemwide
- Student Building Fee
Funding Types

- **State Supported Funds**
  - **General Fund** - Cash from State Revenues
  - **Article XI-G Bonds**
    - Requires 1 for 1 Match of General Fund or Gifts/Grants
    - State Allocates General Fund in Operating Budget for Debt Service
  - **Lottery Bonds** – Lottery Revenues pay Debt Service
  - **State Energy Loan Program (SELP)**
    - Borrow Dept. of Energy’s G.O. Bond Authority (No Match!)
    - State Allocates General Fund in Operating Budget for Debt Service
Funding Types

• **Campus Supported Funds**
  – **Article XI-F Bonds**
    • Program Revenues pay Debt Service
  – **Other Funds**
    • Gifts
    • Grants
## 2005-2011 OUS Capital Program Funding Summary

<table>
<thead>
<tr>
<th></th>
<th>State 37%</th>
<th>Campus 63%</th>
<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>General Fund</td>
<td>XI-G Bond</td>
<td>Lottery</td>
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<tr>
<td>Request:</td>
<td></td>
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<tr>
<td>2005-07</td>
<td>$48</td>
<td>$264</td>
<td>$30</td>
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<tr>
<td>ETIC</td>
<td>$14</td>
<td>$28</td>
<td>$42</td>
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<tr>
<td>% of Total</td>
<td>4%</td>
<td>24%</td>
<td>3%</td>
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<tr>
<td>Projected:</td>
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<tr>
<td>2007-09</td>
<td>$81</td>
<td>$212</td>
<td>$32</td>
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<tr>
<td>2009-11</td>
<td>$56</td>
<td>$289</td>
<td>$40</td>
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<tr>
<td>TOTAL</td>
<td>$185</td>
<td>$779</td>
<td>$102</td>
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</table>

7/19/2004
Project Funding History

OUS Capital Construction Funding History
(1995-2005)

State Funding averages 18% of total budget

- Gen. Fund
- XI-G Bond
- Lottery
- Gifts/Other
- XI-F Bond
- Gifts/Other

E&G Projects

AUX Projects
Recommended Investments

• Ranked by a combination of factors:
  • Master Plan
  • Board Priorities
  • Cost Savings
  • Demonstrated Need
  • Campus Priority
Capital Program Objectives

• Access
• Excellence
• Reinvestment
• Targeted Investment for Economic Growth
Access
Top 3 Projects

1. Community College Partnership Bldg.-PSU
   • Allow Students to begin academic pursuits locally at less expensive regional Community Colleges.
   • Funding $15M G-Bond, & $15M Gift

2. Center for Health Professionals - OIT
   • Accommodate growing enrollment in Health Professions
   • Funding $10M G-Bonds, $10M Gift

3. Theatre Arts Expansion & Remodel - SOU
   • Project will increase capacity in one of SOU’s strongest programs
   • Funding $1.4M G-Bonds, $2.8M Gift
Excellence
Top 3 Projects

1. **Education Complex Alterations - UO**
   - Consolidate widely dispersed programs and replace substandard space.
   - Funding $24M G-Bond, & $24M Gift

2. **Medford Instructional Facility - SOU**
   - Extend additional campus programs to Medford in association with RCC.
   - Funding $3.4M GF, $3.9M G-Bond, & $500k Gift

3. **Gilbert Hall Expansion & Alterations - UO**
   - Rehab 2 College of Business classroom buildings, connected to the Lillis Business Center.
   - Funding $3.3M G-Bond, & $3.3M Gift
Reinvestment
Top 3 Projects

1. **New Steam Plant OSU**
   - Estimated life of existing plant = 2 years
   - Current heating capacity only to 27 degrees F
   - Funding $10m G-Bond, $10m Gift & Energy Tax Credits, $29m Equipment Leases/SELP Loans, & $6m Campus Funds.

2. **Deferred Maintenance - Systemwide**
   - Part of 5 biennia program to replace worn-out building systems at key Academic buildings.
   - Funding $70M SELP & $30M Lottery Bonds

3. **Capital Repair/Code Compliance - Systemwide**
   - Capital replacement and compliance projects for life safety and regulatory requirements.
   - Funding $40M GF, $40M G-Bond, $20M F-Bond, $10M Other
Targeted Investment for Economic Growth

Top 3 Projects

1. Integrative Science Complex - UO
   • Expansion of high technology teaching and research
   • Funding $29.1M G-Bond, & $29.1M Gift

2. Pauling Research and Education Building - OSU
   • To Provide an interdisciplinary approach to research collaborations
   • Funding $25M G-Bond, & $25M Gift

3. Research Park - OSU
   • Leverage innovative capacity at OSU and provide additional links to cutting edge industries.
   • Funding $28.2 Other Funds

Not Ranked: ETIC Proposals
   • Targeted areas of investment for Engineering at various campuses
   • Funding $13.9M G-Bond, & $28.2M Gift
Summary of Presentation

- Huge enterprise facing simultaneous need for reinvestment and growth

- OUS requires new funding strategy for Deferred Maintenance, high hurdle for XI-G bonds, insufficient gifts.
End of Presentation
50% of all OUS Facilities were constructed between 1960 and 1975

TOTAL GSF GROUPED BY CONSTRUCTION DATES IN 5 YEAR COHORT
Capital Program Objectives

• Quality:
  ➢ Keep Existing Facilities Operational

• Access:
  ➢ Add New Facilities for Enrollment Growth

• More, Better, Faster
  ➢ Modify Existing Facilities for Program Needs
Recommended Investments

III. Engineering & Technology Industry Council Projects

• 7 Projects
• Ranked by a combination of factors:
  • In Campus Plan
  • Capacity/Excellence
  • ETIC Target Areas
  • Leverage Use of Existing Space
  • Long Term Value
10 Year Capital Renewal Funding Model
State Energy Loan Program (SELP)
(Dollars in Millions)

Oregon Dept. of Energy
General Obligation Bonds
$70
Debt Service per year:
$1.6 Campus Energy Savings
$3.1 OUS Operating Budget

Lottery Bonds
$30
Debt Service per year:
$1.7 Lottery Revenue

2005-07 Total
$100

• Allows use of General Obligation Bonds without 1 for 1 match

7/19/2004
Keep Existing Facilities Operational

$40 million per Year Required

In $(000's) Future Capital Repair Needs
In $(000's) Current Funding Projection @ 1%/year
Energy Cooperative;
Strategic Approach to Guide Priorities

• Energy Use in Colleges and Universities

63% more Energy Consumption than a 1990 Building

Year Constructed

Fuel Consumption

trillion Btu

1959 or Before 1960 - 1989 1990 or After
Why is Deferred Maintenance of Concern to OUS?

- Campus growth in 1960 to 1975 = 50% of space built in 15 years
- 30-45 yrs later, these buildings need simultaneous overhaul
- Subsystems in buildings are substantially past published standards for lifecycle
Education and General Only: Deferred Maintenance by Subsystem

- Electrical-Equipment: 31%
- HVAC-Distribution: 10%
- HVAC-Equipment/Controls: 17%
- Built-in Equipment: 13%
- Interior Finishes: 9%
- Roofing: 2%
- Fire Protection: 2%
- Plumbing: 15%
- Elevator/Conveying: 2%
- Building Exteriors: 8%

Total DM = $419M
Actions Taken to Date

- Facilities Renewal Study
- Revised Campus Master Plans
- $500 million Deferred Maintenance Legislative Concept presented in 2002-03 Session
- Seismic Studies
Capital Renewal Backlog: Strategy

- Solicit a Champion
- Obtain Governor’s Support
- Include Program in 2005-07 Capital Budget
- Initiate an Energy “Co-op”
<table>
<thead>
<tr>
<th>Fund Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>General Obligation Bonds</td>
<td>$500</td>
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<tr>
<td>State Energy Loan (SELP)</td>
<td></td>
<td>$675</td>
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<tr>
<td>Private/Public Ptr.</td>
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<td>$150</td>
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<tr>
<td>Lottery Bonds</td>
<td></td>
<td></td>
<td>$150</td>
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<tr>
<td>General Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gifts &amp; Grants</td>
<td>$125</td>
<td>$25</td>
<td></td>
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<tr>
<td>XI-G Bonds</td>
<td></td>
<td></td>
<td>$275</td>
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<tr>
<td><strong>Total over 5 Biennia</strong></td>
<td>$500</td>
<td>$700</td>
<td>$700</td>
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</table>
10 Year Capital Renewal Funding Model
Plan A: Legislative Concept
(Dollars in Millions)

| General Obligation Bonds | $500 |

- Required Constitutional Amendment to use GO Bonds without 1 for 1 match
- Entire Debt Service paid by General Fund Dollars allocated to the Operating Budget
OSU New Energy Plant Funding Model
Public/Private Partnership
(Dollars in Millions)

Donors, Foundations, Employee Contributions

Energy Credits $5

Lottery Bonds $0

Gifts $5

XI-G Bonds $10

Markets Pass-thru Credits

Financial Institutions

Private/Public Partner $45

Matching

$20

OSU Energy Plant

Matching

Operating Leases
10 Year Capital Renewal Funding Model
Plan B: Public/Private Partnership
(Dollars in Millions)

Donors, Foundations, Employee Contributions → Energy Credits $100

Financial Institutions → Private/Public Partner $150

Lottery Bonds $150

Grants $25

XI-G Bonds $275

Matching

$550

Matching

EOU, PSU WOU, OSU, UO, SOU, OIT

“The Energy Cooperative”

Operating Leases
Stable Energy Cost to Universities

Utility Rates

Energy Cost

Energy Consumption

Energy/Renewal Projects Completed
Time Line for Facility Renewal Program

• 1/21/04: Present to Admin Council
• 2/04: Present to Campus Presidents
• 3/04: Solicit Champion(s)
7/04: OUS Board Approval
9/04: Solicit Governor’s Support
1/05-6/05: Legislative Presentations & Approval
Energy Cooperative; Strategic Approach to Guide Priorities

- Energy Data
  - Evaluate energy cost and consumption to guide investments and validate performance
- Procurement
  - Use cash savings to finance energy saving projects. Also configure end use systems to take advantage of current and future rate structures
Energy Cooperative;
Strategic Approach to Guide Priorities

• Energy Generation
  • Process of converting purchased energy into steam, chilled water, and electricity. Need to understand and coordinate each institution’s true needs and loads

• Energy Distribution
  • Large amounts of energy can be lost in the distribution/transmission from generation point to end use. Replace failing equipment and lines.

• Energy End Use
  • Reduce waste by replacing worn-out and inefficient equipment
Energy Cooperative;
Strategic Approach to Guide Priorities

• Procurement – Savings of 10% or More
  • Consolidate rate classes
  • Group Purchase of Wholesale Power
  • Negotiate Reduced Transmission and Delivery Contracts
Energy Cooperative; Strategic Approach to Guide Priorities

• Energy End Use – Savings of 30% or More
  • Control Systems
  • Efficient Lighting
  • Improved HVAC Equipment
  • Daylighting
Energy Cooperative; Strategic Approach to Guide Priorities

- Energy Use in Colleges and Universities

![Energy Use Pie Chart]

- Space Heating: 32%
- Water Heating: 24%
- Lighting: 5%
- Space Cooling: 17%
- Other: 22%

(2003 US DOE)
### Spectrum of Facilities Management Services

<table>
<thead>
<tr>
<th>Operating Funds</th>
<th>Capital Funds</th>
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<tbody>
<tr>
<td>Facilities Management</td>
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<tbody>
<tr>
<td><strong>Examples:</strong></td>
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<tr>
<td>Inspect, Adjust, Lubricate AHU</td>
<td>Replace air filters &amp; belts on AHU</td>
<td>Replace fan blade assembly</td>
<td>Replace Failing AHU - marginal air capacity</td>
<td>Install Fire Dampers in existing Ducts</td>
<td>Install Cooling system for Computer Lab</td>
</tr>
<tr>
<td>Inspect Corridor finishes</td>
<td>Scheduled re-painting</td>
<td>repair finishes damaged by roof leak</td>
<td>Replace Interior finishes</td>
<td>Install ADA compliant signs</td>
<td>Replace non-ADA signs</td>
</tr>
<tr>
<td>Test fire sprinkler flow alarm</td>
<td>Replace valve stem packing</td>
<td>Replace faulty flow switch</td>
<td>Replace Sprinkler system</td>
<td>Install sprinklers in unsprinklered areas</td>
<td>Fire sprinkler renovated areas</td>
</tr>
</tbody>
</table>

* Capital Repair: Replacement of building systems that have reached the end of their useful life, and can not be restored through maintenance.
Deferred Maintenance: Capital Repairs that are not made when building systems reach the end of their useful life.