Capital Replacement Needs: How to Plan, Budget and Fund

October 27, 2015
Michael Kinder and Sons
We Listen … We Care … We Win Together

Zech Oberlin
Routine Maintenance

- Do you have a maintenance plan?
- If so, do you have a budget to support the program?
- Who is in charge of this program?
Routine Maintenance Components

- Operation and Maintenance (O&M) is a large expense in owning and operating a facility over its life cycle.

- Maintenance programs need to be comprehensive and facility-specific. This should include all serviceable components:
  - HVAC
  - Electrical
  - Plumbing
  - Building Envelope (buildings skin and roof)
  - Painting (interior and exterior)
  - Drywall and Plaster
  - Landscaping
  - Interior Cleaning
  - Flooring
  - Hardware
  - Other
Lack of Routine Maintenance

- Lack of maintenance causes liability issues = lawsuits
  - Uneven sidewalks
  - Potholes in parking lots
  - Slip hazards – water and ice build ups
  - ADA regulations

- Lack of maintenance = equals added expense and or failures
  - Parking lots
  - Joint sealants
  - Mechanical systems
  - Drainage systems
  - Others
Lack of Routine Maintenance
Routine Maintenance Goals

- Ultimate goal of routine maintenance is to:
  - Improve the comfort and health of building occupants through a better indoor / outdoor environment
  - Extend the life expectancy of all building components
  - Gain a return on your investment through energy savings and premature failure of equipment
  - Avoids need for emergency action
  - Saves money!

- Developing or enhancing a routine maintenance program requires patience and persistence.
  - Define your process – include responsibilities and partners
  - Conduct inspections and develop checklists
  - Establish budget
  - Keep accurate records
  - Continue to repeat these steps
Life Cycle & Replacement “Planned Maintenance”

- Life Cycle & Replacement – what we like to call “Planned Maintenance” – refers to larger-scale maintenance that is not addressed under routine maintenance.
- Planned Maintenance is to replace building subsystems that are at the end of their serviceable lives.
  - Roof systems (15-25 Years)
  - Elevators (25 Years)
  - HVAC Equipment and Controls (20 Years)
  - HVAC Distribution System (40 Years)
  - Electrical Equipment (30 Years)
  - Plumbing Fixtures (30 Years)
  - Plumbing Rough-in (50 Years)
  - Fire Protection Systems (40 Years)
  - Fire Detection Systems (20 Years)
  - Built-in Specialties and Equipment (25 Years)
  - Interior Finishes (15 Years)
  - Site Development Hardscape (As needed)
  - Site Development Landscape (As needed)
Planned Maintenance vs. Unplanned Maintenance

Planned Life-Cycle Based

- Part Replacement
  - Designed-Out Unit Replacement

Maintenance

Unplanned Response-Base

- Failure Mode
  - Emergency Mode
Emergency Management
Risk Management Plan

- Even with routine and planned maintenance setup emergencies will happen from time to time.
- Is it a insurance claim or internal expense?
- Define emergency procedures and contact list.
- Are there future risks or other component issues?
Energy Management
Mechanical / Electrical Systems

- **Mechanical Systems**
  - Type of System
  - Operating as designed
  - Building Controls
  - Routine Maintenance
  - Equipment Efficiencies
  - Operational cost and Tracking
  - Defined Life-cycle
  - Spare Parts

- **Electrical Systems**
  - Type of System
  - Lighting Type
  - Lighting Controls

Programmable Thermostat
Energy Management Mechanical / Electrical Systems

- LED light bulbs now offer direct replacement without changing out the existing ballast. These bulbs are extremely efficient and can offer a short pay back period.
- HVAC efficiency are up to 95% and can vastly change operational costs.
- Utility cost summary uses the past three year’s utilities cost and compares that to the buildings square footage and use of the building to determine how efficient the building is.
Energy Management

Building Envelope

- Heating and cooling needs are effected by the performance of interrelated building systems, these include the units and their controls, the building envelope components and efficiency of each system.

- The appropriate building component solutions should be determined only when the entire team has thoroughly reviewed the requirements and contributing thermal loads of these interrelated systems and has carefully considered all efficiency gains possible through design or maintenance strategies.
How can we help?
Facilities Stewardship

Nick Wallace, CPA
Managing Director of
Higher Education Services
Stewardship over facilities is a common problem in many nonprofit organizations.

It is a particularly acute problem in organizations that have significant investments in facilities:

- Primary and secondary schools
- Colleges and universities
- Hospitals and clinics
- Long-term care
Colleges and Universities

- Enrollment growth from 2.3 million in 1950 to 17.5 million in 2000 (U.S. Census)
- Number of higher education institutions grew from 1,800 to 3,768 in that same timeframe
- Of 4 billion square feet of building space, roughly 2.5 billion (62.5%) was built between 1950 and today
- Significant debt was incurred to build new facilities with little reinvestment allocated to existing facilities
- Started a cycle that still exists today (Recently estimated to be a $36 Billion problem by NACUBO and APPA)
The Problem Identified

- Actual vs. spoken commitment (e.g., during board meetings) about facilities stewardship
  - Numerous comments in a facilities manager survey …
    - They give an “A” to intentions, but a “C” or “D” to actual funding for maintenance and renewal projects

- Biggest problem?
  - Gathering data and presenting it in a way that can make the case to administrative leaders and board
The Problem Identified – Terminology

- Concurrent needs and resulting confusion about priorities:
  - Operations – Normal daily functions (janitorial, etc.)
  - Maintenance – Work needed to realize the intended useful life of the asset
  - Repairs – Restoring damaged or worn out facilities and equipment
  - Replacements – Exchanging one asset for another (usually a complete component)
  - Alterations – Work to change the interior arrangements or other physical characteristics to meet current needs
  - Deferred Maintenance – Work needed to bring assets back to acceptable standards of presentation and usage
Possible Solutions – Prerequisites Needed

1. Full utilization of existing space before planning and funding new space and major renovations/alterations

2. An intentional capital renewal strategy with the following features:
   - Continual adjustment to the process
   - Coordinated prioritization, monitoring and funding
   - Reliable estimates of long-term capital needs and short-term needs to deal with operations, maintenance and necessary deferred maintenance

3. A funding strategy
Possible Solutions – Funding Prerequisites

1. Benchmark – How much is enough?

2. Work to move current budgets and funding sources from “here to there”
Amount Determination Strategy

- Four alternatives:
  1. Physical plant audit
  2. Use plant depreciation
  3. Use a fixed percentage of current replacement value
  4. Create a predictive model based on facility subsystems
Alternatives Analyzed

- Physical plant audit
  - Advantages:
    1. Easy to understand
    2. Provides good data
    3. In line with industry standards
  - Disadvantages:
    1. Focused on “today” not future costs
    2. Extensive detail
    3. Expensive
Alternatives Analyzed

- Plant depreciation
  - Advantages:
    1. Minimal effort (depreciation accounting already done)
    2. Inexpensive to implement
  - Disadvantages:
    1. Fails to recognize deferred maintenance, if needed
    2. Based on historical costs, so might not fund current replacement costs
Alternatives Analyzed

- Percentage of replacement value
  - Advantages:
    1. Easy to understand calculation
    2. Funding amount can be easily adjusted through the percentage used
    3. Minimal cost
  - Disadvantages:
    1. Percentage used (q.5% to 2.5% of CRV) was adopted a while ago (1989 by APPA) and may come under question
    2. Fixed percentage does NOT include deferred maintenance
    3. Does not help determine the magnitude at a given point in time.
Alternatives Analyzed

- Predictive model based on sub-systems
  - Advantages:
    1. Tailored to the specific campus and related systems
    2. Accommodates cyclical nature of facilities
    3. Benchmarked against industry standards for lifecycle and replacement cost
    4. Recommended by SCUP, APPA & NACUBO
  - Disadvantages:
    1. Not really a plant audit, so no specific details by asset
    2. Not as predictable as CRV or Depreciation
# Predictive Model Example

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Gross Sq Ft</th>
<th>Construct Date</th>
<th>Subsystems</th>
<th>Life Cycle</th>
<th>Cost to Replace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Bldg</td>
<td>500,000</td>
<td>2001</td>
<td>Roof</td>
<td>25yr</td>
<td>125,000</td>
</tr>
<tr>
<td>Dorm</td>
<td>300,000</td>
<td>1980</td>
<td>Boiler</td>
<td>15yr</td>
<td>50,000</td>
</tr>
<tr>
<td>Sports</td>
<td>150,000</td>
<td>1969</td>
<td>Floor</td>
<td>25yr</td>
<td>150,000</td>
</tr>
</tbody>
</table>
Funding Strategies Currently Used:

- Surplus designation
- Undesignated estate and other one-time gifts
- Comprehensive campaigns
- Special fundraising events or appeals
- Conversion of Quasi Endowment
- Borrowing
- Specific grants
- Budgeting “depreciation charges” to determine an annual funding level
Proposed Funding Strategy

1. Determine annual budget charge using one of the four amount determination methods

2. Add one-time unrestricted estates or gifts when needed/present

3. Total is resources available unless other fundraising or grants are planned
Proposed Funding Strategy

- Compare resources available and estimated future costs
- Either seek additional funds (if needed) and/or begin to prioritize
Prioritizing

- Three factors:
  1. Need/risk (safety/legal compliance)
  2. Faculty/staff productivity and morale
  3. Historic preservation/image
Prioritizing

- **Level I**
  - Life safety and legal compliance
  - Further damage or deterioration could lead to loss of facility
  - Cost effective: Those that could get a big return on energy consumption if corrected

- **Level II**
  - Mission support
  - Delayed level I

- **Level III**
  - Economic (energy)
  - Aesthetics/historical maintenance
  - Actions in step with long-term strategic plan
After Deferred Maintenance Prioritization

- Establish annual funding and work plan
- Work from a 3- to 5-year plan
Additional Funding Ideas

1. Generate facilities usage fees as part of the rental process for facilities like dorms, dining halls, student centers, recreation facilities
2. Student fees tied to dorms and student centers
3. Build fees into research grant proposals to the extent possible
4. Designate rental from unused land as part of the reserve funding
5. Other sources?
Questions?
Developing a Technology Plan, Assessing IT Needs, Equipment, and Budgeting

Ryan Achterberg, Chief of Technology
KSM Consulting
Agenda

- Not-for-Profit Technology Challenges
- Planning for the Future
- Technology Trends
- Not-for-Profit Resources
Not-for-Profit Technology Challenges
Common Challenges

- Technology Budget
- Outdated Equipment / Software
- Mobility / Remote Access
- Collaboration
- Ineffective Technology Support
- Security
Planning for the Future
DEF: Technology Plan

- A design for the future use of technology that contributes to the success of the organization’s mission and program delivery.
Technology Plan Includes:

- **DOCUMENTATION** of your current technology environment (strengths and weaknesses, equipment inventory, software inventory).

- **EXPLANATION** of how technology will help your organization meet its mission.

- **DESCRIPTION** of recommended technology initiatives (cost, implementation plans, timelines).
Importance:

- Provides **criteria for evaluation and prioritization** of:
  - Funding / grant decisions
  - IT investments
  - Operational and technology changes
  - Budgeting (capital and operational)
Development Process

IT Steering Committee

Budgeting

Technology Assessment

Written IT Strategic Plan (Roadmap)
1) IT Steering Committee

Include diversity of skills, role, technical savvy, and experience.

Agree upon a frequency to meet regularly.
“If you don't know where you are going, you'll end up someplace else.”

- Yogi Berra
2) Technology Assessment

Gain understanding of where you are with technology and operations. Then, plan for the future.
# Components to Evaluate

<table>
<thead>
<tr>
<th>Hardware inventory</th>
<th>Software patching</th>
<th>Content filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software inventory</td>
<td>IT policies, security policies</td>
<td>Remote access solutions</td>
</tr>
<tr>
<td>Equipment warranties</td>
<td>Use of cloud services</td>
<td>IT support services</td>
</tr>
<tr>
<td>Documentation of systems</td>
<td>Backup and disaster recovery solution</td>
<td>Website hosting / development</td>
</tr>
<tr>
<td>Phone and Internet services</td>
<td>Network equipment</td>
<td>Copiers / scanners / consumables</td>
</tr>
<tr>
<td>Licensing requirements</td>
<td>Wireless</td>
<td>Training</td>
</tr>
<tr>
<td>Compliance needs</td>
<td>Mobile device management</td>
<td></td>
</tr>
<tr>
<td>Equipment maintenance</td>
<td>Antivirus and Spam software</td>
<td></td>
</tr>
</tbody>
</table>

**Components to Evaluate**
3) Written Strategic Plan

- Considerations:
  - How does this technology help us serve our mission?
  - When is the right time to implement change?
  - What’s our anticipated budget?

- Focus: Next three years

- Roadmap: Statement of planned technology upgrade.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Organizational Importance</th>
<th>Desired Timing</th>
<th>Implementation Time</th>
<th>Budget</th>
</tr>
</thead>
</table>

Katz Sapper & Miller  
Community Foundation of Greater Fort Wayne  
KSM Consulting
4) Budget

Example costs to include:

Internet bandwidth   Antivirus software
Phone service        Spam filters
Servers             Content filters
Workstations     Remote access solutions
Warranty renewals    IT support services
Cloud Services     Website hosting / development
Applications / maintenance fees  Social media
Backup solutions    Copiers / scanners / consumables
Network equipment        Training
Wireless            Access control systems
Mobile devices – phones and tablets
# Hardware Costs

<table>
<thead>
<tr>
<th>Type</th>
<th>Expected Life</th>
<th>Avg. Cost to Replace per Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servers</td>
<td>4 – 5 years</td>
<td>$3,000 – $7,000</td>
</tr>
<tr>
<td>Desktops</td>
<td>3 – 5 years</td>
<td>$500 - $1,000</td>
</tr>
<tr>
<td>Laptops</td>
<td>2 – 4 years</td>
<td>$700 - $1,200</td>
</tr>
<tr>
<td>Operating System Software and Application Support</td>
<td>New releases every 18 months - three years</td>
<td>Varies</td>
</tr>
</tbody>
</table>

Don’t forget about associated costs (software licensing, antivirus, labor, installation support, etc.)
Other Cost Considerations

- Office Moves
- System Addition or Changes
- Staff and Volunteer Additions
- Staff and Volunteer Reduction
Development Process

1. IT Steering Committee
2. Budgeting
3. Technology Assessment
4. Written IT Strategic Plan (Roadmap)
Technology Trends
Cloud Shift

Capital vs. Operational Expense

Per-user Subscriptions

Bring Your Own Device (BYOD)
Cloud Service Models

- **SaaS: Software as a Service**
  - Software is readily available in the cloud instead of installed on local devices.
  - Users access application software through Internet browser or desktop / mobile application.

- **PaaS: Platform as a Service**
  - Computing environment (think operating system and database) hosted in the cloud.

- **IaaS: Infrastructure as a Service**
  - Servers, firewalls, storage, and networks hosted in the cloud.
Key Characteristics of the Cloud

- Flexible
  - Infrastructure restrictions are virtually eliminated.
  - Improved focus on content and functionality.

- Reliable
  - Hosted in secure datacenters.
  - Economies of scale redundant systems

- Scalable
  - On-demand provisioning of resources.
  - Automatic adjustment based on user demands.
Case Study

- **Current**
  - On-premise servers need replacing
  - Accessing through remote desktop or VPN when offsite
  - Backups on premise with hard drives
  - Security
  - Cloud CRM / Financials

- **Future**
  - Cloud Server
  - Local Server
  - Cloud Backup
  - Hosted Email
  - Cloud File Share
Not-for-Profit Resources
# Not-for-Profit Resources

## Discounts
- Discounted Software
  - Desktop OS
  - Microsoft Servers
  - Microsoft Office
  - Antivirus Software
  - Adobe Suites
  - Donor Management
  - Financial Software
- Discounted Hardware
  - Cisco

## Who’s Eligible?

### Criteria
- 501(c)(3) not-for-profit or library
- Organization's location
- Annual operating budget
- Type/subtype selected during registration

### Note
Donors have their own giving guidelines who is eligible and for how much product.
Microsoft Office 365

**Office 365 Nonprofit Business Plans < 300 users**
- Microsoft Exchange Online
- Microsoft SharePoint Online
- Skype for Business
- OneDrive for Business
- Microsoft Office Online
- Microsoft Yammer (Social Networking)
- Microsoft Office Business Premium – Desktop Version ($2/user/month)

**Office 365 Nonprofit Enterprise Plan 3 ($4.50/user/month)**
- Advanced features:
  - Video content management
  - Microsoft Office Professional Plus
  - Compliance: e-Discovery, Archiving, etc.
  - Rights Management
Microsoft Office 365

- Additional Microsoft Product Offers for Not-for-Profits:
  - Email Archiving
  - Microsoft Office Professional Plus
  - Project Pro and Project Online for Office 365 Nonprofit
  - Visio Pro for Office 365 Nonprofit
  - Power BI Pro for Nonprofit
## Office 365 Not-for-Profit Plans

<table>
<thead>
<tr>
<th>Target customer</th>
<th>NFP Business Essentials</th>
<th>NFP Business Premium</th>
<th>NFP Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price (User/Month)</td>
<td>Donation</td>
<td>$2</td>
<td>Donation</td>
</tr>
<tr>
<td>Seat Cap</td>
<td>300 (for each plan)</td>
<td></td>
<td>Unlimited</td>
</tr>
<tr>
<td>24/7 phone support from Microsoft</td>
<td>Critical issues</td>
<td></td>
<td>All issues</td>
</tr>
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<table>
<thead>
<tr>
<th>Office</th>
<th>NFP Business Essentials</th>
<th>NFP Business Premium</th>
<th>NFP Enterprise</th>
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<tbody>
<tr>
<td>Word, PowerPoint, Excel, Outlook, OneNote, Publisher</td>
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<tr>
<td>iPad, Windows RT &amp; smartphone apps</td>
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<tr>
<td>Office Online</td>
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<tr>
<td>Access</td>
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<table>
<thead>
<tr>
<th>Standard services</th>
<th>NFP Business Essentials</th>
<th>NFP Business Premium</th>
<th>NFP Enterprise</th>
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<tbody>
<tr>
<td>1TB cloud storage (OneDrive for Business)</td>
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<tr>
<td>Email, calendar (Exchange)</td>
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<tr>
<td>Online meetings, IM (Skype for Business)</td>
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<td>Team sites, internal portals (SharePoint)</td>
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<tr>
<td>Enterprise social (Yammer)</td>
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<tr>
<td>Content discovery and search (Delve)</td>
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<thead>
<tr>
<th>Advanced services</th>
<th>NFP Business Essentials</th>
<th>NFP Business Premium</th>
<th>NFP Enterprise</th>
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<tbody>
<tr>
<td>Active Directory integration</td>
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<tr>
<td>Licensed for hybrid deployment</td>
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<tr>
<td>Support for shared computer activation</td>
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<tr>
<td>Video content management</td>
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<tr>
<td>Compliance – Archiving, eDiscovery, mailbox hold</td>
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<tr>
<td>Information protection – message encryption, RMS, DLP</td>
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Questions?