

# ADDRESSING YOUR Maintenance Backlog



## MONEY

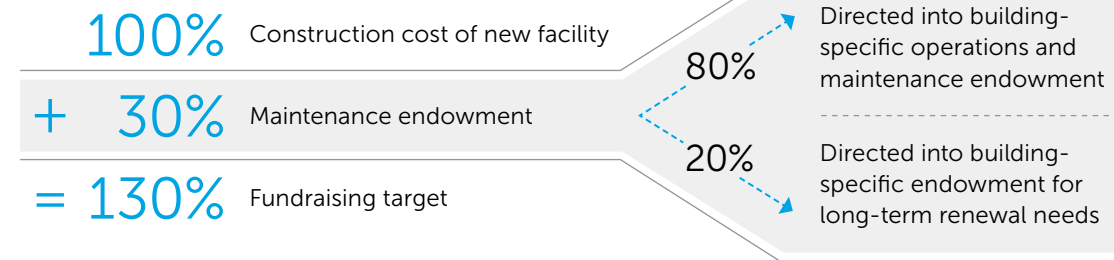
### Secure more dollars...

Vet successful funding tactics from other institutions

#### Case Study / Furman University

Advancement raises 30% more than what's necessary for construction costs

#### Representative Fundraising Goal



### ...and spend the existing budget more strategically

Measure the strategic importance of projects to put limited dollars to best use

#### Case Study / Western Illinois university

WIU evaluates projects on both condition needs and strategic importance

#### Strategic Evaluation for Building Renovations

##### Renovation Criteria

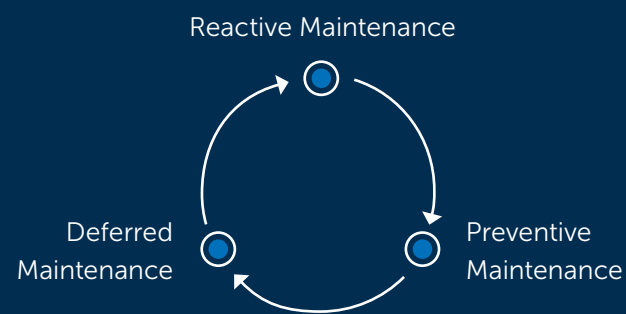
- Utilization
- Life safety and ADA
- Master plan factor
- Staff and student needs
- Visibility
- Building exterior needs
- Deferred maintenance
- FCA factor
- Other

- Members of the Master Plan Implementation Team fill out the evaluation for each building that their department occupies
- Each score (from 1 to 5) is weighted 1, 2, or 3 to reflect the metric's relative strategic importance
- The evaluation tool assigns a score up to 110, a scale sensitive enough to yield sufficiently different outcomes and facilitate comparison

## How Money, Data, and Communication Are Critical to Your Maintenance Improvement Efforts

Maintenance is already a top concern for facilities executives, but it is increasingly a focus for the broader campus leadership team. Facilities budget shortfalls amplify the issue, and maintenance needs have begun to impact the student experience, impair critical research efforts, and threaten achievement of institutions' strategic goals. Critically, maintenance activities are interrelated. The relationship between deferred, reactive, and preventive maintenance creates a complex, multifaceted problem.

### Relationship Between Deferred, Reactive, and Preventive Maintenance



When deferred maintenance backlogs grow and systems begin to fail, facilities must divert resources to reactive maintenance activities. This leaves fewer resources for preventive maintenance, likely leading to more future failures. This interrelationship means that senior leaders must advance on multiple fronts at once. This infographic highlights six money-, data-, and communication-related strategies facilities leaders must employ to escape the vicious cycle of deferred maintenance.

For more, see EAB's comprehensive set of maintenance resources and strategies at [eab.com/ff/backlog](http://eab.com/ff/backlog):

- Addressing Increasingly Complex Deferred Maintenance Decisions
- Capital Renewal Funding Playbook
- Executive Briefing: Tackling the Deferred Maintenance Crisis
- Shifting the Balance from Reactive to Preventive Maintenance



## DATA

### Gather better data to support prioritization...

Choose metrics that support higher-order analyses for capital renewal decisions

#### Data Analysis

Five analyses to maximize the utility of condition data

- Facility condition index**  
Evaluation of overall building condition
- Facility quality index**  
Evaluation of both overall building condition and how well it meets programmatic needs
- Lifecycle modeling**  
Statistical forecasting model for long-term capital renewal needs
- Financial risk of failure**  
Financial consequences based on probability of failure
- Institutional risk of failure**  
Risk to the institutional or academic mission based on the probability of failure

### ...and use data to make the case for greater investment

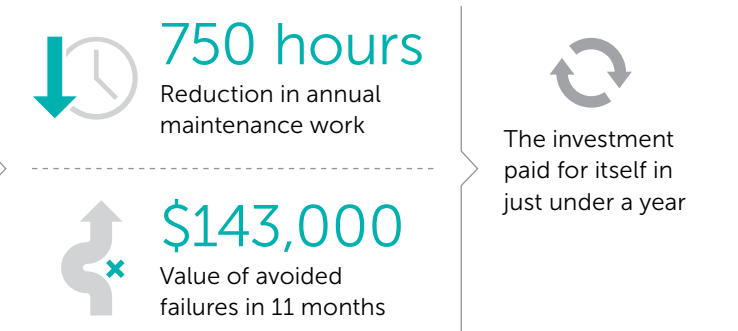
Introduce data-driven preventive maintenance scheduling

#### Case Study / NASA

Sensors provide a more complete picture of current condition

#### NASA Installed 280 Sensors

- Built into equipment or manually attached to 37 buildings
- Measure pressure, temperature, flow, current, and other metrics
- Results recorded by staff or transmitted wirelessly to CMMS\*
- Example: Monitoring battery outputs to time replacements



\* Computerized maintenance management system.



## COMMUNICATION

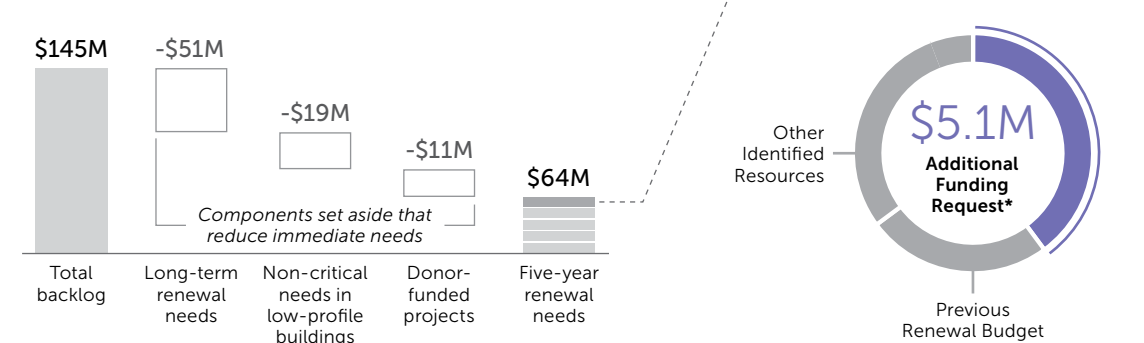
### Better engage key stakeholders...

Communicate capital renewal in a compelling way to build trust and obtain resources

#### Case Study / University of Denver

Focus the audience on a more realistic funding request

#### Breakdown of Total Capital Renewal Backlog



\* Additional funding obtained through departmental gainsharing, gifts, donations, reserves, and other resources.

### ...and drive behavior change of facilities staff

Build a culture of stewardship by introducing mission-focused town halls

#### Case Study / Emory University

Emory's VP of Campus Services moderates two complementary forums

#### Semiannual Town Halls

Large meetings hosted by Emory University's VP for Campus Services to communicate and reinforce facilities' mission statement

Format: All Campus Services employees

When: Twice a year in fall and spring

Sample Agenda Items: Share customer impact stories, launch new initiatives

#### Small Group Meetings

Small meetings with the VP for Campus Services to share experiences and connect with senior leaders

Format: 20-25 employees

When: Within the three weeks following a town hall

Sample Agenda Items: Staff encouraged to share a positive personal or professional story