



• August 15-18, 2010 • Dallas, Texas •
• Dallas Convention Center •



Sustainable Facilities: The Management Challenge

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Sustainability

In a general sense, is the capacity to **maintain a certain process or state indefinitely**. In recent years the concept has been applied more specifically to living organisms and systems. As applied to the human community, sustainability has been expressed as **meeting the needs of the present without compromising the ability of future generations to meet their own needs**.

From Wikipedia, the free encyclopedia



1. Initiate the development of a comprehensive plan to achieve climate neutrality as soon as possible.
2. Initiate two or more of the following tangible actions to reduce greenhouse gases while the more comprehensive plan is being developed.
3. Make the action plan, inventory, and periodic progress reports publicly available by providing them to the Association for the Advancement of Sustainability in Higher Education (AASHE) for posting and dissemination.



Portfolio Manager

Portfolio Manager is an interactive energy management tool that allows you to track and assess energy and water consumption across your entire portfolio of buildings in a secure online environment. Whether you own, manage, or hold properties for investment, Portfolio Manager can help you set investment priorities, identify under-performing buildings, verify efficiency improvements, and receive EPA recognition for superior energy performance.

The Green Globes system is a revolutionary building environmental design and management tool. It delivers an online assessment protocol, rating system and guidance for green building design, operation and management. It is interactive, flexible and affordable, and provides market recognition of a building's environmental attributes through third-party verification.



LEED

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction.

Fram Auto Filters Slogan

1972

- ▶ You can pay me now, or you can pay me a lot more later
- ▶ You can pay me a now, or you can pay me a lot more sooner than later

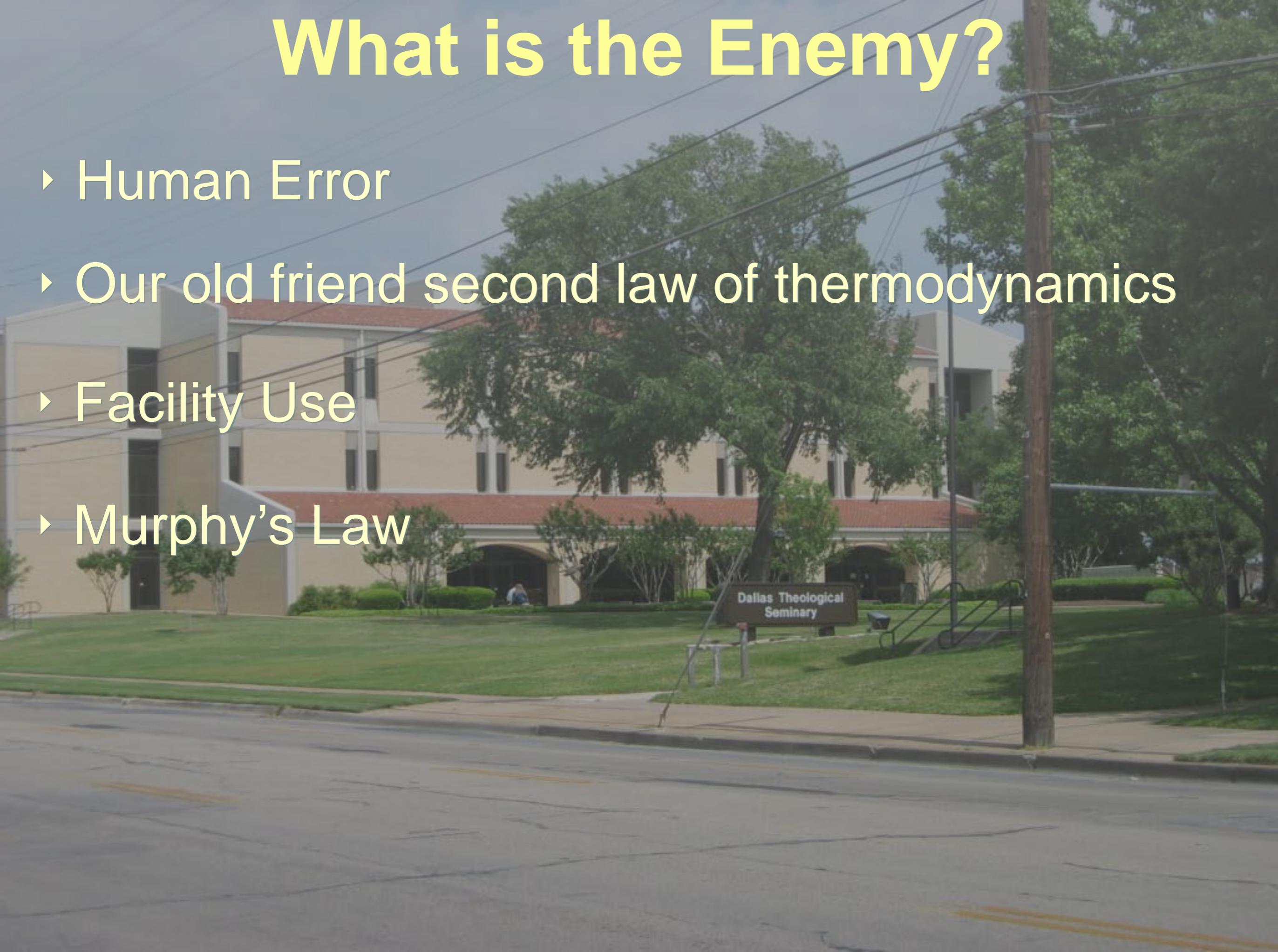


Building Component Life-Cycles

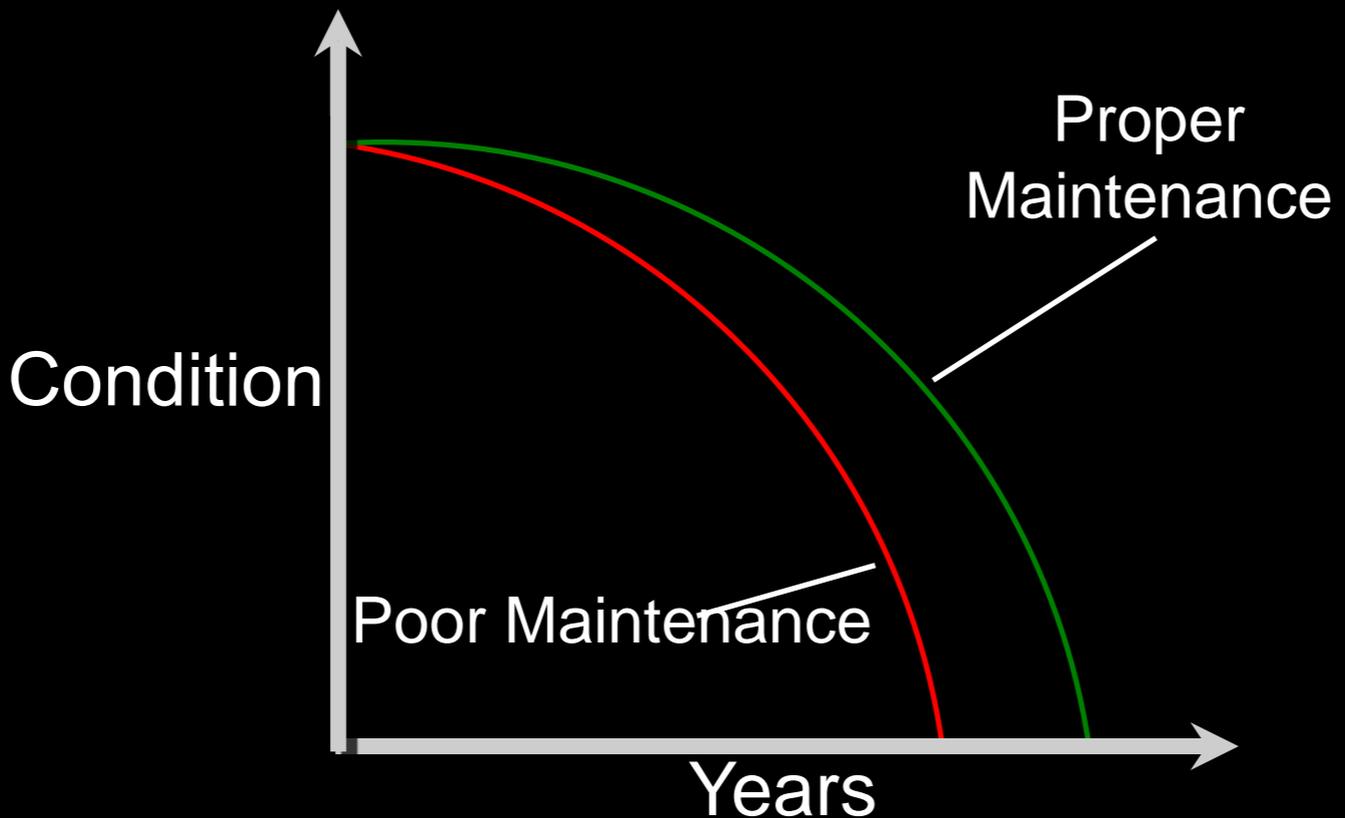
- ▶ All building components have life cycles
- ▶ Just like with a car for most is 100,000 miles
- ▶ Facilities are many times more complex and thousands times larger than automobiles

What is the Enemy?

- ▶ Human Error
- ▶ Our old friend second law of thermodynamics
- ▶ Facility Use
- ▶ Murphy's Law



Preventive Maintenance Affect on the Life-Cycle



A large military helicopter, possibly a Black Hawk, is flying over a highway. The helicopter has a prominent sensor dome on its roof and is carrying several people in its cabin. The background consists of lush green hills and a clear blue sky with scattered white clouds. A highway with a guardrail is visible in the foreground.

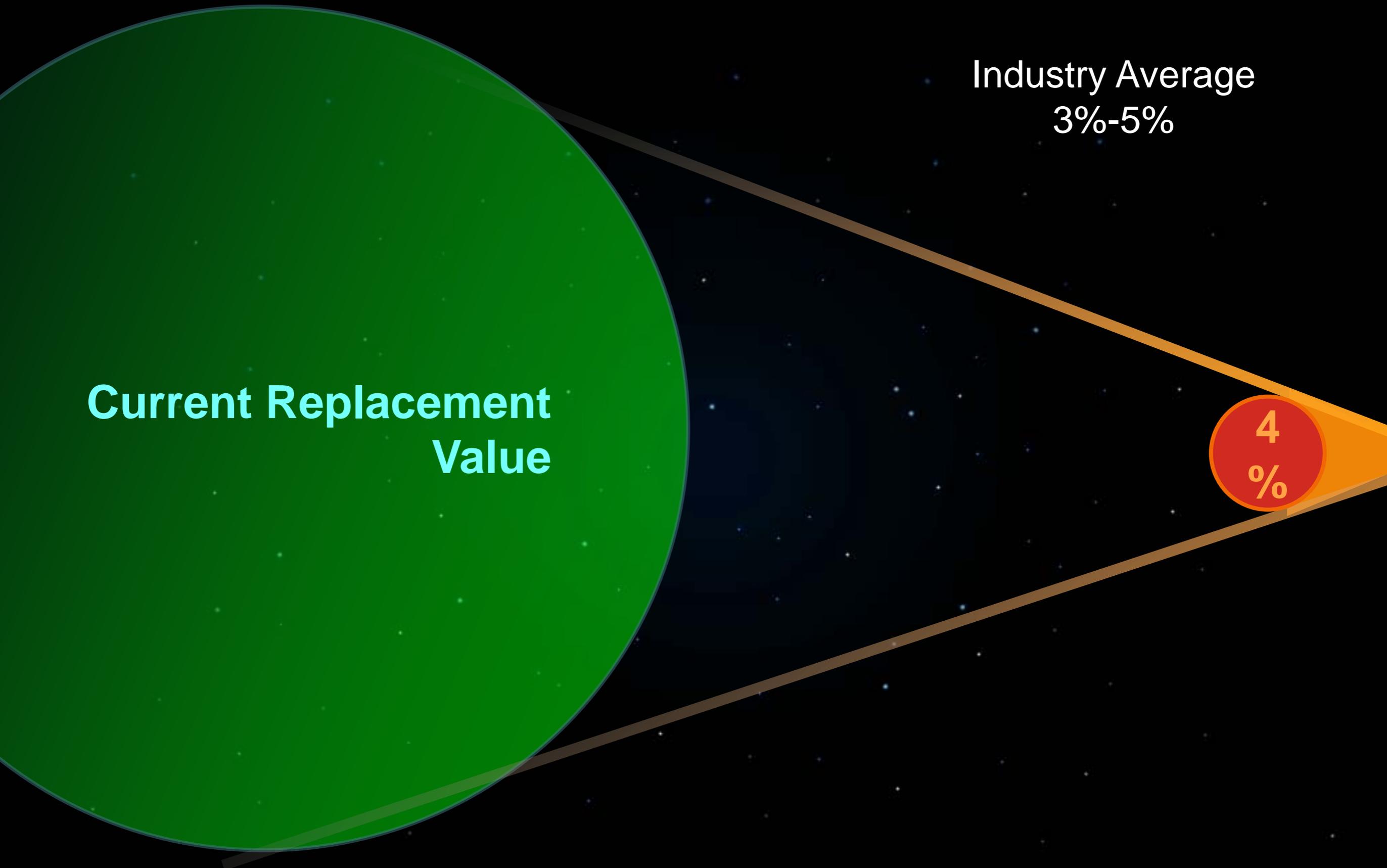
Caution: Heavy Surveillance

- ADA Compliance
- State Elevator Compliance
- Environmental Compliance

Space Allocation Study

- Our space allocation study revealed that the Seminary is at 97% utilization of its current space.
- We need to be at 80% for short-term growth

Sustainable Funding

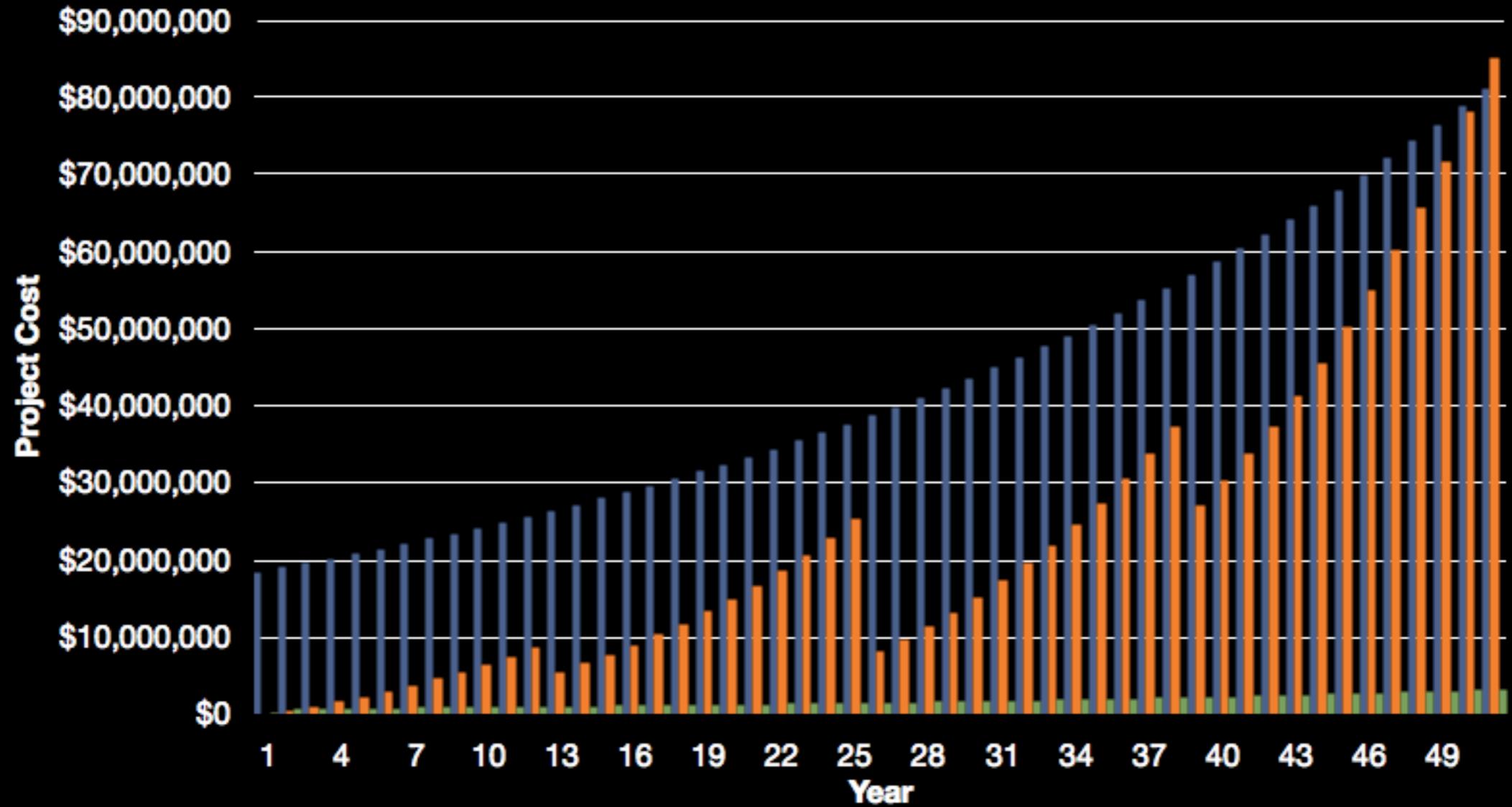


Current Replacement Value

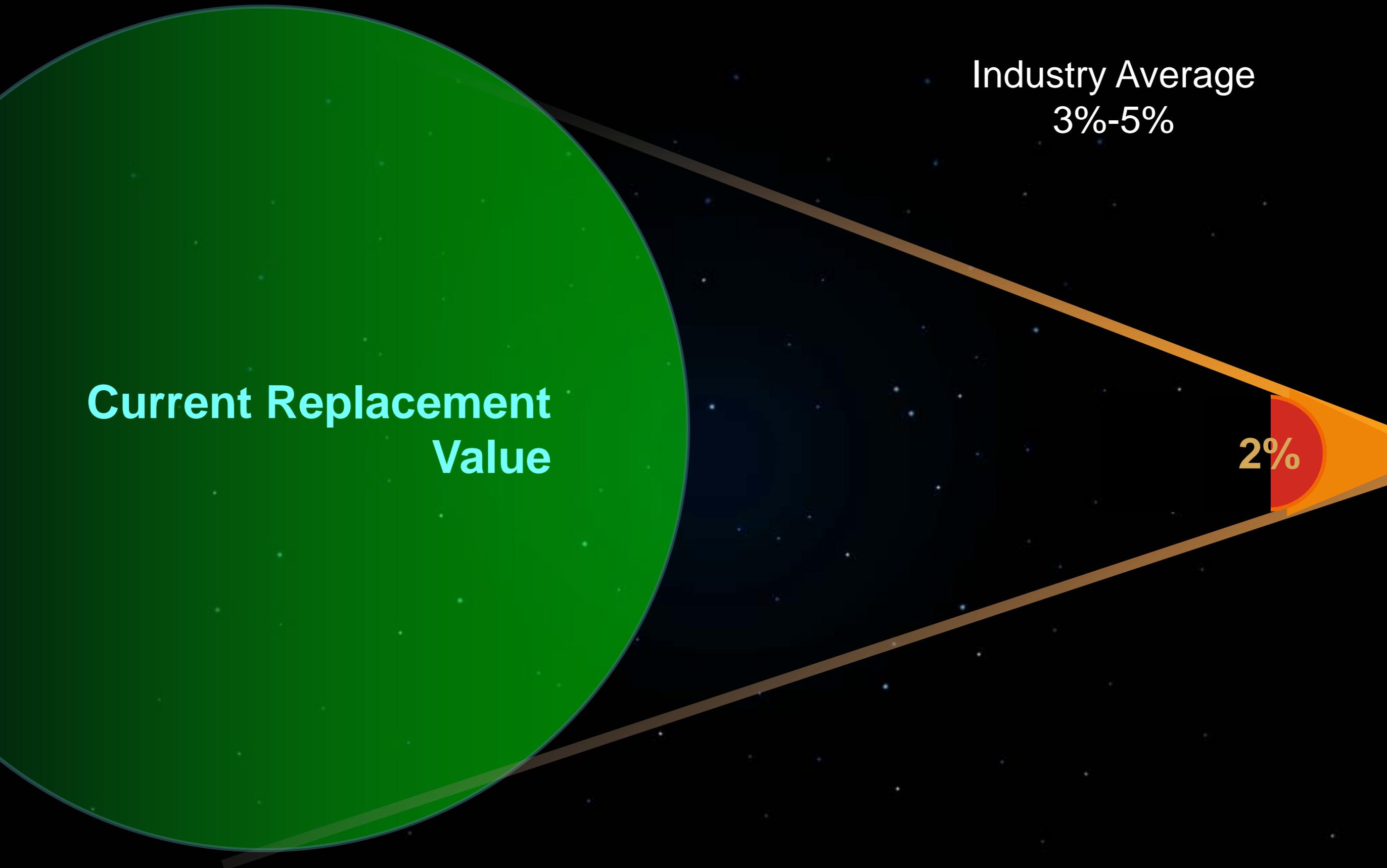
Industry Average
3%-5%

4
%

Investment Growth Over Life



Sustainable Funding



Investment Growth Over Life



Golden Rules

- ▶ **Preventive Maintenance** – Performing service on building components at scheduled intervals to maximize efficiency and life cycles
- ▶ **Facilities Auditing** – Monitoring of building component life cycles and reliability
- ▶ **Capital Renewal** – Replacement of building components that are non-renewable or can be phased out economically.

Black List

- Deferred Maintenance – When the replacement of an inefficient and/or unreliable component is deferred to a later time
- Reactive Maintenance – Performing maintenance or repairs as complications or failures arise (i.e. Band Aids...)



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Questions?

www.APPA.org

Institute for Facilities Management

Facilities Condition Index

Facilities Performance Indicators

Center for Facilities Research (CFaR)

The Facility Audit, by Harvey Kaiser

Buildings... Gifts That Keep On Taking

www.FacilityPortfolios.com

Download PPT Presentation/Handout