



# How to Create a Capital Renewal Plan



Lisa Berglund  
Senior Analyst  
[LBerglund@eab.com](mailto:LBerglund@eab.com)

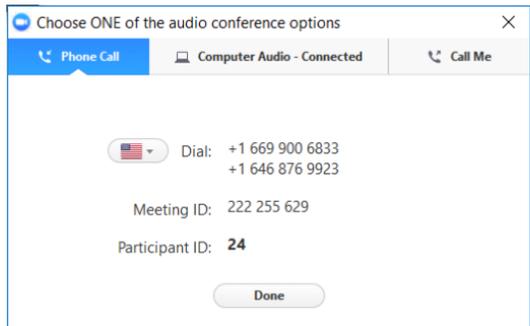
Facilities Forum

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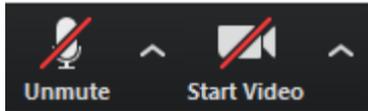
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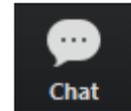
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1

Quantify Impact of Individual Capital Projects  
on Strategic Goals

2

Improve Transparency of Capital Project Prioritization

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# Condition Information Only One Piece of the Puzzle

## Institutions Must Consider Strategic Goals When Prioritizing Projects

### Sample List of Buildings Ranked by FCI

Building	FCI
Science Lab Building	66%
Administration Building	64%
Upperclass Res Hall	51%
Academic Office Building	48%
Student Center	40%
Classroom Building	33%
Dining Hall	28%
Undergraduate Gym	28%
Lecture Hall	25%
Freshman Res Hall	23%

### Sample List of Buildings Ranked by Impact on Strategic Priorities

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Administration Building	64%



Poor condition impeding undergraduate learning

Central to academic mission; historic value

Important for first-to-second year retention

Repairs not crucial to achieve strategic goals

# Competing Goals Complicate Prioritization Process

Facilities Leaders Seek a Better Way to Evaluate Investment Tradeoffs

## Many Strategic Inputs Necessary for Capital Renewal Prioritization



### Struggling to Assess Importance

Strategic goals and institutional mission are more challenging to quantify than FCI, making it difficult for campus leaders to compare the relative priority of different maintenance projects.



### Trickle-Down Prioritization

“The importance of a roof depends on who it’s leaking on.”

*Academic Leader  
Private Research University*



# What's Most Important to You?

## Prioritization Is Simplified When One Factor Takes Center Stage



### **Curb Appeal**

Elon prioritizes projects that maintain and enhance curb appeal, aiming to attract prospective students with a beautiful campus from the moment they arrive.



### **Student Success**

UWG moving to a system where they prioritize renovations of buildings that provide highest number of student contact hours, leveraging academic and space utilization data to identify spaces with high academic impact.

# Straight from the Source

## Partnering with the Academy to Understand Academic Priorities



### Whitefall University<sup>1</sup> Scores Academic Departments

- 1 Facilities develops a condition-based project list, categorized by building subsystem
- 2 Subsystems ranked using 250-point algorithm evaluating age and current condition
- 3 Facilities executive asks assistant provost to confidentially prioritize departments by program growth
- 4 Facilities cross-checks project list and department rankings to develop mutually prioritized list of renewal investments

“Many academic leaders think it’s academic political suicide to prioritize certain buildings over others, especially if it’s enshrined in a paper trail.”

*Facilities Leader  
Public Flagship University*



### UCI’s Academic Prioritization Process

- 
- Facilities creates project list based on condition, knowledge of buildings, and risk of failure
  - Facilities executive meets with 50 academic building facility managers to adjust the list based on academic input
  - Facilities sends list to assistant deans for review and approval
  - Oversight Committee (25 senior-level members) meets to review list; committee does not have approval authority, but meeting provides opportunity for members to give input into prioritization process



**Project priority list finalized**

1) Pseudonym.

# Quantifying Considerations to Facilitate Comparison

## WIU's Matrix Evaluates Projects on a Consistent Scale

### Western Illinois University's Strategic Building-Wide Renovation Matrix



Building		Waggoner Hall	Horrabin Hall	
Building Type		Academic	Academic	
STRATEGIC RENOVATION CRITERION	Utilization	2.0	5	3
		WT	10	6
	Life Safety and ADA	3.0	3	2
		WT	9	6
	Fundable	1.0	1	5
		WT	1	5
	Master Plan Factor	2.0	4	3
		WT	8	6
	Staff and Student Needs	3.0	3	5
		WT	9	15
	Visibility	2.0	4	5
		WT	8	10
	Building Exterior Needs	2.0	2	3
		WT	4	6
	Deferred Maintenance	3.0	5	5
		WT	15	15
	FCA Factor**	2.0	2.75	2.4
		WT	5.5	4.8
	Other	2.0	4	2
		WT	8	4
Comments				
Strategic Renovation Factor out of 110 possible points		77.5	77.8	

Members of the Master Plan Implementation Team fill out matrix for each building their department occupies

Each score (from 1 to 5) weighted 1, 2, or 3 to reflect metric's relative strategic importance

Matrix assigns score up to 110, a scale sensitive enough to yield sufficiently different outcomes and facilitate comparison

For a complete version of WIU's Building Renovation Matrix, please access the full research study [here](#).

# Not Reinventing the Wheel

## Many Facilities Leaders Draw on Military Experience in Higher Ed Work



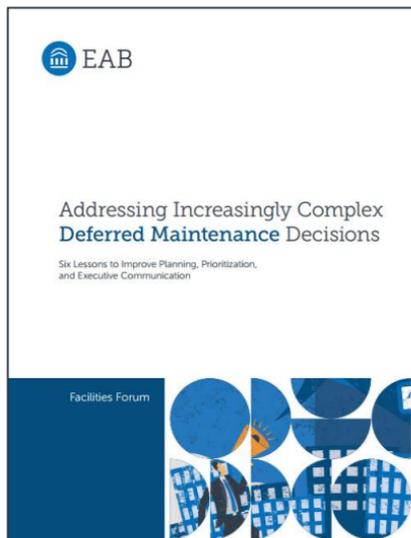
ARIZONA STATE UNIVERSITY

ASU is developing a prioritization model based on the U.S. Navy's Mission Dependency Index, which evaluates a building's priority level based on the projected repercussions of its failure.



USF uses a scoring matrix inspired by the U.S. Air Force for prioritizing projects, assessing and scoring projects on five criteria: life safety, operational impact, condition, user priority, and quality.

## Access the Full Research Study Online



### Addressing Increasingly Complex Deferred Maintenance Decisions

To learn more about how institutions can reduce deferred maintenance backlogs through communication, assessment, prioritization, and planning, access the full research study [here](#).

**1**

Quantify Impact of Individual Capital Projects on Strategic Goals

**2**

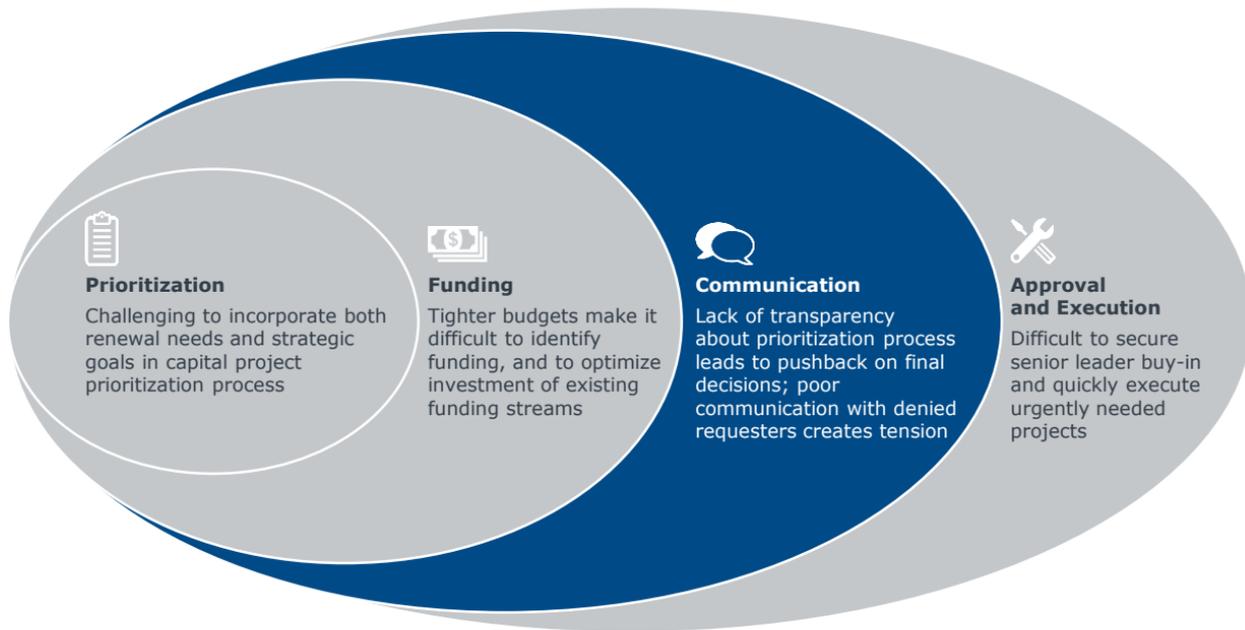
Improve Transparency of Capital Project Prioritization

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# Improve Transparency of Capital Project Prioritization to Demonstrate Strategic Alignment



## Four Key Components and Challenges of Capital Planning

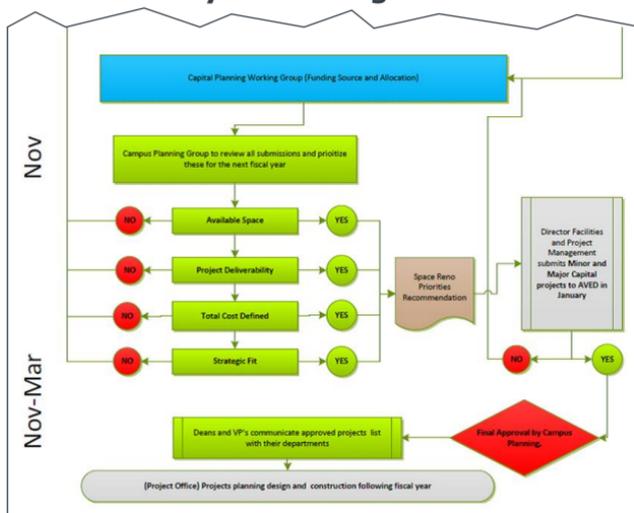


# Showcasing Principled Prioritization

## UFV Codifies Updated Planning Process With Single-Page Flowchart



### Screenshot of the University of the Fraser Valley's Planning Process



### Elements of Effective Prioritization Flowchart



#### Highlight Stakeholders Involved

UFV highlights Capital Planning Working Group, which includes cross-campus representation (e.g., deans, SFO, Provost, VP of Students)



#### Succinctly Outline Key Process Steps and Timeline

Depicts step-by-step prioritization process with general timeline and stakeholders involved in one page



#### Preview High-Level Decision-Making Criteria

Provides high-level depiction of project prioritization criteria and decision-making process

Download the University of the Fraser Valley's Planning Process Map [here](#).

# Communicate Both Process and Outcome

## UBC Illustrates Procedure, Prioritization Criteria, and Final Project List

### Screenshots of the University of British Columbia's Capital Planning and Prioritization Process Presentation



### Topics Covered in Presentation

- Capital planning governance and responsibilities
- Description of capital planning principles that inform decisions
- High-level capital planning and prioritization process map
- List of stakeholders who provide input into capital planning
- Detailed explanation of prioritization model and criteria with weightings
- Table of five-year capital plan with deferred maintenance reduction for each project

Capital Planning & Prioritization Process

UBC Capital Planning Principles

Approved Five-Year Capital Plan Projects

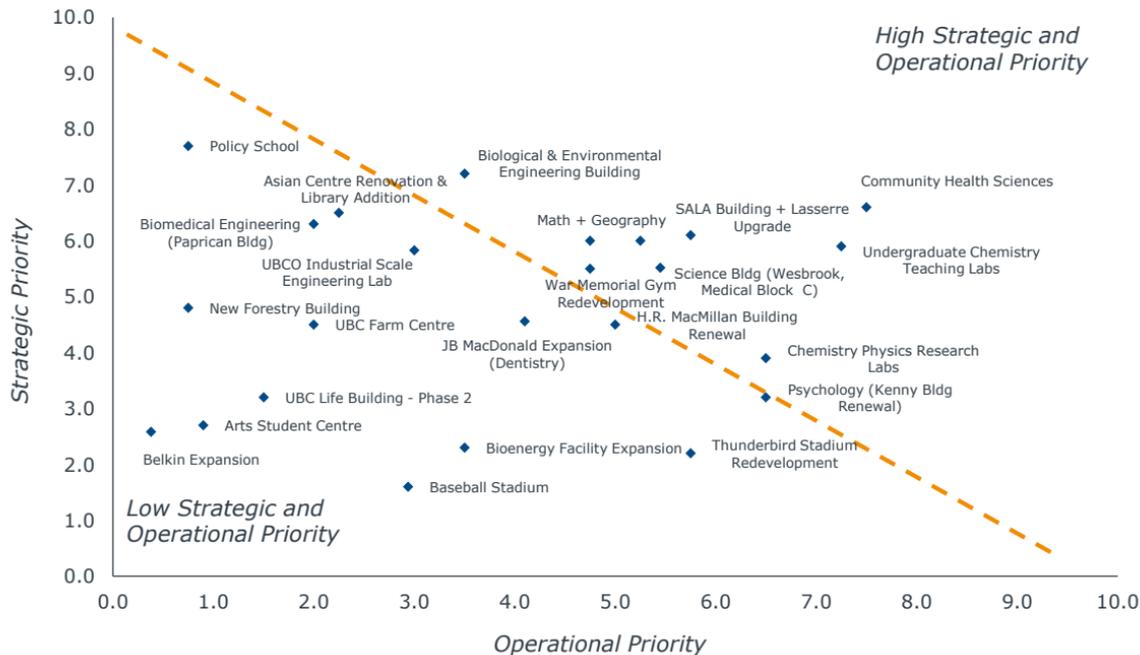
UBC Campus	Project	Delivery	Cost in \$Ms	Funding	Request to AVED in \$Ms	Reduced Deferred Maintenance in \$Ms
Vancouver	Biological, Environmental, and Biomedical Engineering Building	Jun-21	\$90	Government \$45M UBC \$45M	\$45	\$10.4
Vancouver	Chemistry Laboratory Complex (Undergraduate Chemistry Teaching Labs + Chemistry Physics Research Labs)	Sep-21	\$140	Government \$85M UBC \$55M	\$85	\$39.0
Okanagan	UBCO Industrial Scale Engineering Lab	Jun-20	\$10	Government \$5M UBC \$5M	\$5	\$0
Vancouver	Community Health Sciences + Recreation Facility + War Memorial Gym Renewal	Sep-21	\$190	Government \$80M Fundraising \$20M UBC \$90M	\$80	\$45.8
Vancouver	Math Building Renewal/Replacement (including Sklinc Building)	Sep-21	\$100	Government \$80M Fundraising \$13M UBC \$5M	\$80	\$9.7
Vancouver	Geography Building	Sep-21	\$50	Government \$45M Fundraising \$2M UBC \$3M	\$45	\$10.3
Vancouver	Asian Centre Renovation & Library Addition	Mar-21	\$16	Government \$8M Fundraising \$8M	\$8	\$9.47
Vancouver	UBC Farm Centre	Dec-20	\$20	Government \$9M Fundraising \$11M	\$9	\$1.2
<b>Total</b>			<b>\$616</b>		<b>\$357</b>	<b>\$153.9</b>

Download UBC's Capital Planning and Prioritization Process Presentation [here](#).

# Visualizing Prioritization for Stakeholders

## UBC's Matrix Depicts Inputs and Outputs of Prioritization

### University of British Columbia's Strategic and Operational Scoring Matrix



# Quantifying Strategic and Operational Factors

UBC Leverages Scoring Model to Evaluate Capital Projects on Uniform Scale

## University of British Columbia's Project Prioritization Criteria



	Contribution to University Strategic Priorities						Contribution to Operational Risk Mitigation and Performance				
Criteria	Teaching & Learning	Research & Innovation	Student Experience	Community Engagement	Other Key Priorities	Total Weighted Strategic Score (out of 10)	Health & Safety	Operational Performance and Reliability	Legal, Regulatory, Reputation	Business Case	Total Weighted Operational Score (out of 10)
Criteria Weighting	30%	30%	20%	10%	10%		25%	25%	25%	25%	

## Sample Capital Project Scoring

Capital Project	Raw Score (out of 10)	Total (out of 10)	Raw Score (out of 10)	Total (out of 10)							
Biological & Environmental Engineering Building	10	10	3	3	3	7.20	3	3	0	8	3.50
Undergraduate Chemistry Teaching Labs	10	3	6	3	5	5.90	10	10	3	6	7.25
UBC Life Building	2	0	10	3	3	3.20	0	3	0	3	1.50
Biomedical Engineering	10	10	0	0	3	6.30	0	0	0	8	2.00
UBCO Industrial Scale Engineering Lab	7	9	3	3	0	5.83	3	3	0	6	3.00
Asian Centre Renovation & Library Addition	6	6	6	8	9	6.50	6	3	0	0	2.25

## Access the Full Research Study Online



### Capital Project Planning Toolkit

For strategies to better educate stakeholders about capital projects, access the full toolkit [here](#).



## Contact Information



**Lisa Berglund**  
Senior Analyst  
[L.Berglund@eab.com](mailto:L.Berglund@eab.com)

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