## University System of New Hampshire

## Agenda Item IX.A USNH Deferred Maintenance/Facilities Condition Assessment

Board of Trustees October 20, 2017

## **USNH Deferred Maintenance Planning – FCA**

#### **Project Mission:**

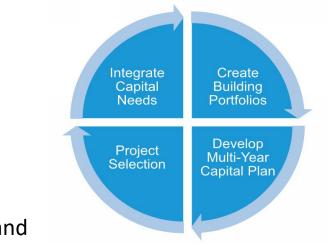
Develop a full understanding of USNH's facility's needs through a comprehensive facilities condition assessment that leverages institutional knowledge, aligns facility needs and priorities, develops a capital strategy to identify funding requirements for deferred maintenance, modernization and future lifecycle needs and creates a data-informed decision making framework to track progress of capital investments.

#### **Project Milestones:**

Background Data CollectionJune 2, 2017Data Synthesis & AnalysisJuly 31, 2017Site Level ReportingAugust 25, 2017Trustees PresentationOctober 20, 2017

#### **Current Status/Next Steps:**

Sightlines completed the Facilities Condition Assessment program and next steps include the uploading to the interactive database (4Tell), system integration, training and use.



#### Sightlines Assessment Strategy

University System of New Hampshire



# University System of New Hampshire Building Portfolios Presentation

October 2017

University of Toledo University of Vermont University of Washington University of West Florida University of Wisconsin - Madison Vanderbilt University Virginia Commonwealth University Wake Forest University Washburn University Washington State University Washington State University - Tri-Cities Campus Washington State University - Vancouver Washington University in St. Louis Wayne State University Wellesley College Weslevan University West Chester University West Virginia Health Science Center West Virginia University Western Oregon University Westfield State University Widener University Williams College Worcester Polytechnic Institute Worcester State University





## Introduction



## **Review of the Building Portfolio Solutions Process**



#### Goals and methodology

Independent and Inclusive	<ul> <li>The inventory is both independent with our staff and inclusive of the diverse knowledge of Facilities staff to verify the inventory on get buy –in from the ground</li> </ul>
Credible	• The process is comprehensive and consistent in the identification and codification of projects
Flexible	• The inventory is flexible to changes in institutional priorities and renovation coordination
Affordable	• The plan will be cognizant of the finite availability of institutional resources
Sustainable	• The BPS should become an internal planning tool for the Facilities Services organization





#### Mission

The mission of the University System of New Hampshire is to serve the higher educational needs of the people of New Hampshire. The University System strives to assure the availability of appropriate higher educational opportunities to all New Hampshire people; seeks to enroll a diverse student population to enhance educational experiences; and provides programs and activities based on a commitment to excellence. Through its institutions, the University System engages in research which contributes to the welfare of humanity and provides educational resources and professional expertise which benefit the state and its people, the region and the nation.

#### Vision

The University System of New Hampshire is one of the smallest public university systems in the United States, but our vision is to be the very best small university system in the country. We seek to achieve this vision by:

- 1. being truly student oriented.
- 2. being truly committed to excellence in selected programs and services.
- 3. being efficient and effective in the use of our resources through partnerships, both internal and external.
- 4. being widely recognized as a valued partner to the people and communities of our state.

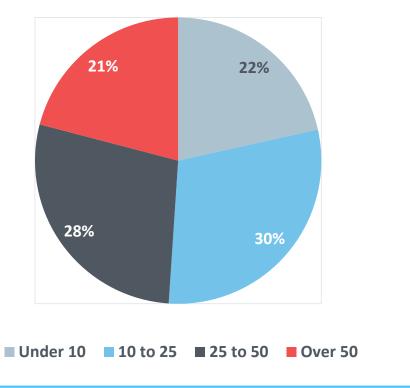




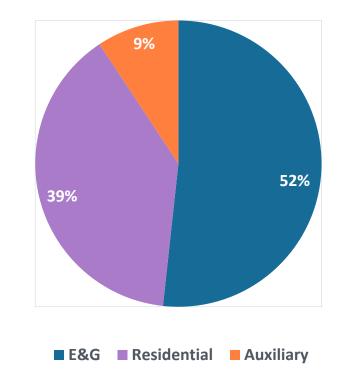
## **USNH Campus Age Profile**

#### 265 Buildings – 8.8 M GSF











#### University System of New Hampshire

## **Building Portfolio Vocabulary**

#### • Timeframe

- A: 1-3 years
- B: 4-7 years
- C: 8-10 years

#### Project Category

- **Repair/Maintenance**: Replacement of components that are failing or planned replacement at the end of a component's life expectancy
- **Modernization**: Replacement of components before the end of their life expectancy
- Infrastructure: Projects addressing systems and grounds outside of buildings

#### Investment Criteria

- Reliability Issues of imminent failure or compromise to the system that may result in interruption to program or use of space.
- Asset Preservation Projects that preserve or enhance the integrity of building systems or building structure, or campus infrastructure.
- **Safety/Code:** Code compliance issues and institutional safety priorities or items that are not in conformance with current codes, even though the system is "grandfathered" and exempt from current code.
- **Program Improvement:** Projects that improve the functionality of space, primarily driven by academic, student life, and athletic programs or departments. These projects are also issues of campus image and impact.
- Economic Opportunity: Projects that result in a reduction of annual operating costs or capital savings.





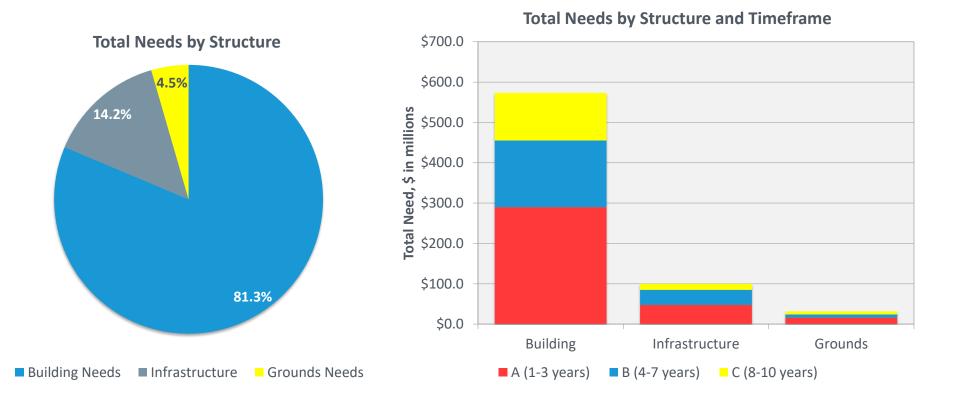
## Identified Need





## **Identified Needs by Structure**

Categorizing the \$704.4 M in campus need

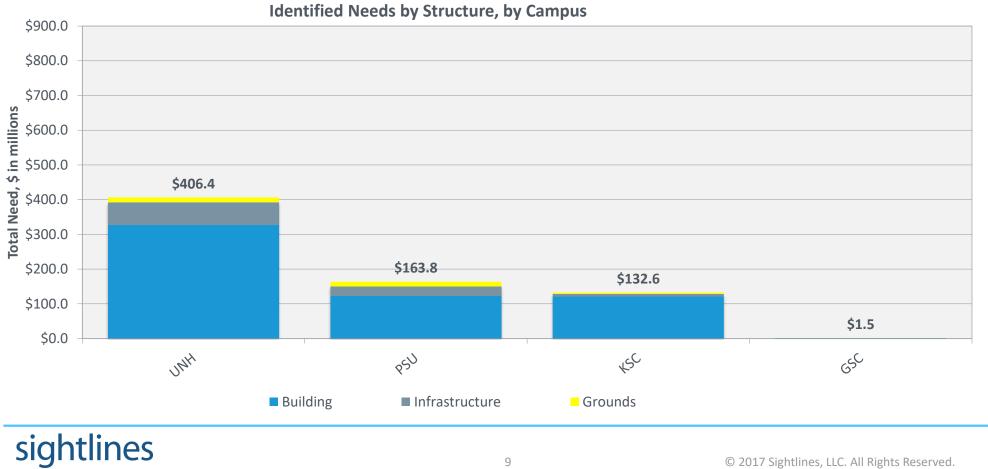






## **Identified Needs by Structure by Campus**

Includes all projects within A, B, & C timeframes





## **Identified Needs by Timeframe**

Timeframes A, B, & C only



**Identified Needs by Timeframe** 

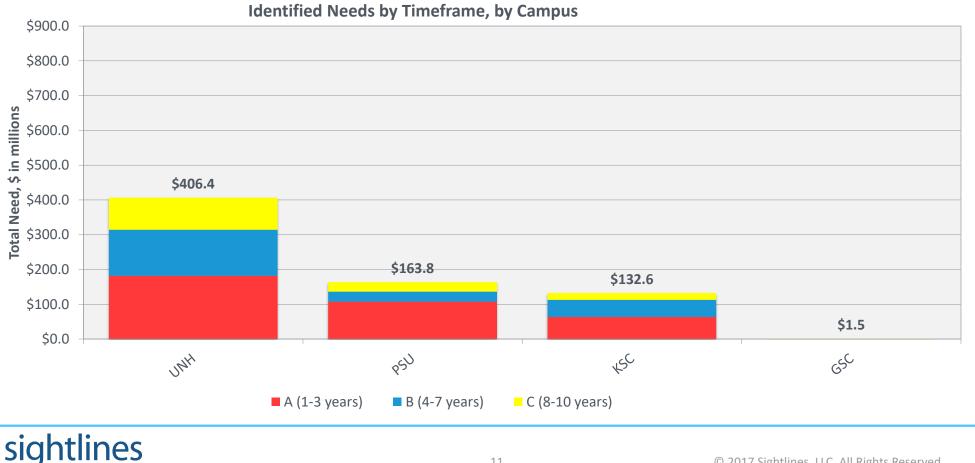




## **Identified Needs by Timeframe by Campus**

Timeframes A, B, & C only

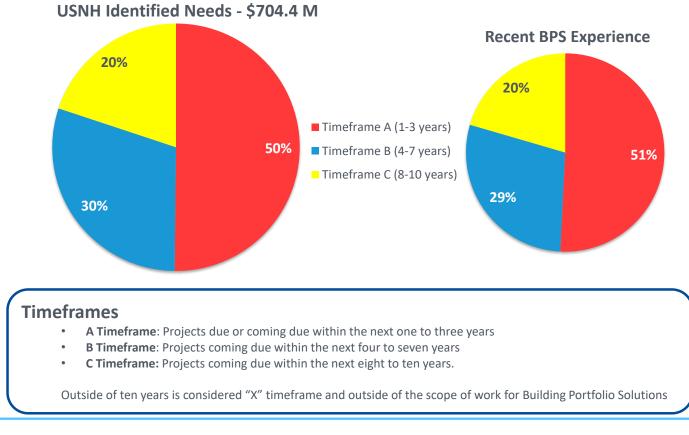
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## **Identified Needs by Timeframe**

Timeframes A, B, & C only

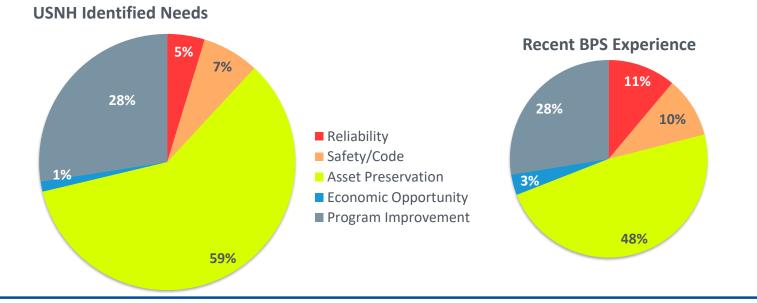






## **Identified Needs by Investment Criteria**

Timeframes A, B, & C only



- Reliability: Issues of imminent failure of compromise to the system that may result in interruption to program or use of space.
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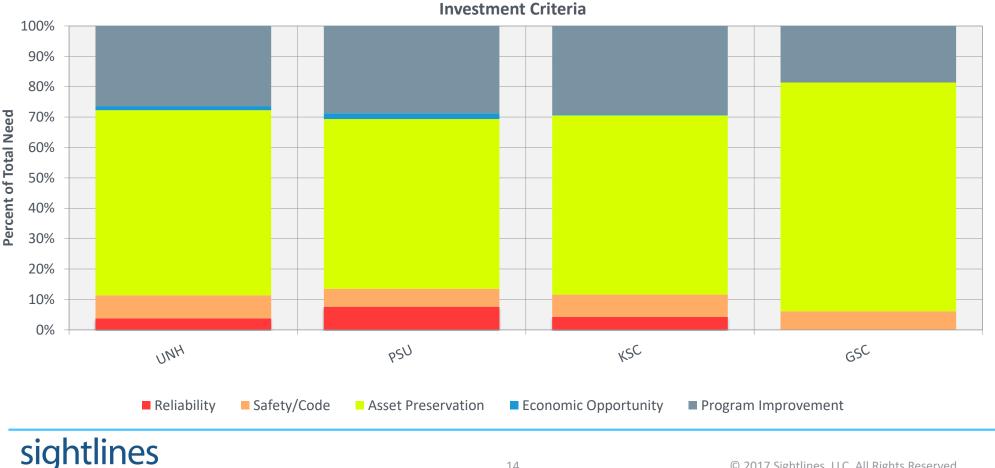




## **Identified Needs by Investment Criteria**

All projects by Investment Criteria as a percentage of total need

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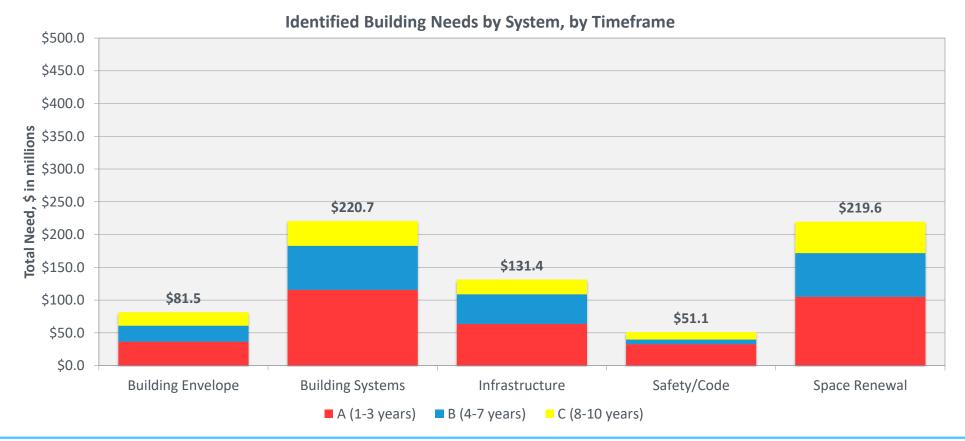


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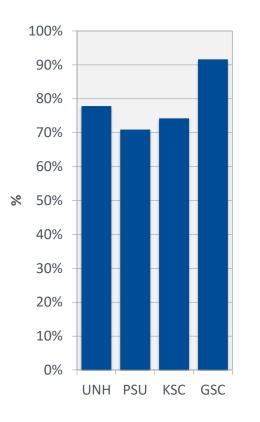
## **Identified Needs by System**

#### Timeframes A, B, & C only



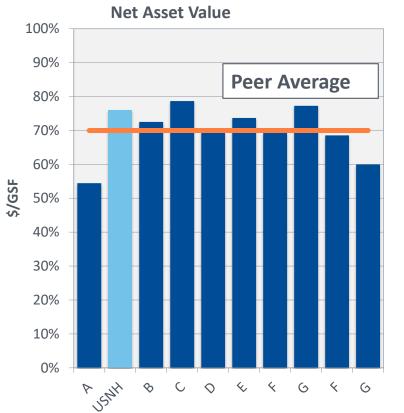


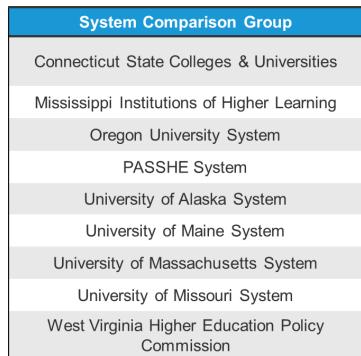
### **Benchmarking the Backlog – Net Asset Value**



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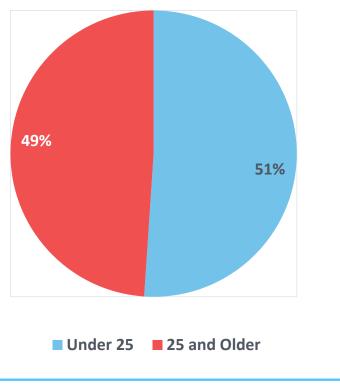




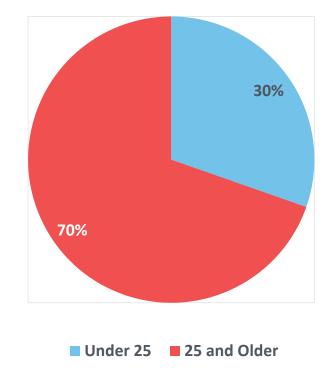
## **USNH Space Distribution vs. Needs**

#### 265 Buildings – 8.8 M GSF

#### **USNH Space Distribution**



#### **USNH Building Needs**





## Identified Needs by Building

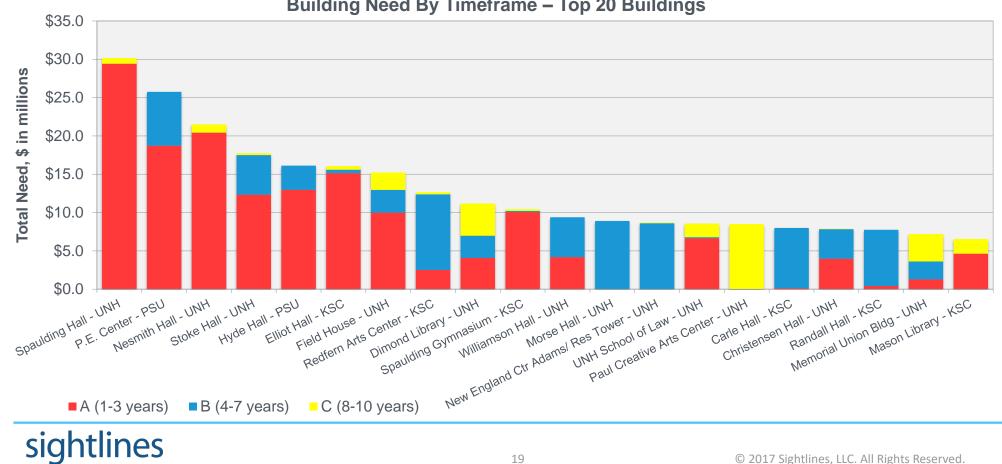




## A Look at Building Needs Over 10 Years

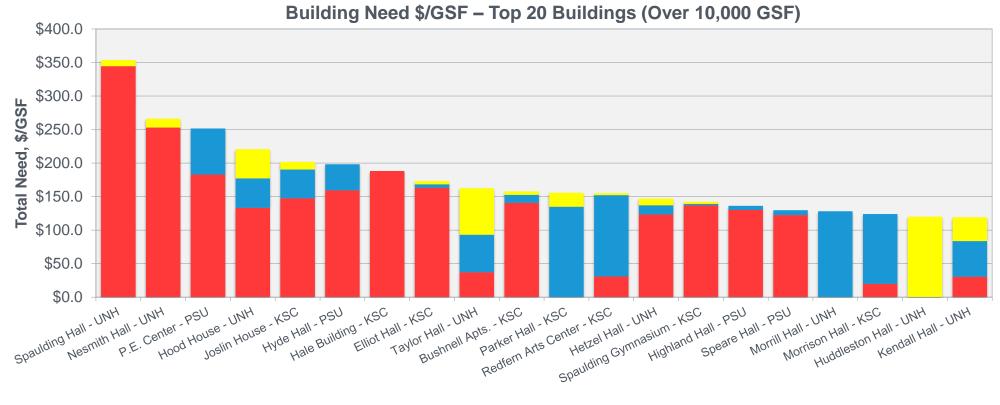
All building needs within 10 years across campuses

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Building Need By Timeframe – Top 20 Buildings

## A Look at Building Needs Over 10 Years



■ A (1-3 years) ■ B (4-7 years) ■ C (8-10 years)

## sightlines

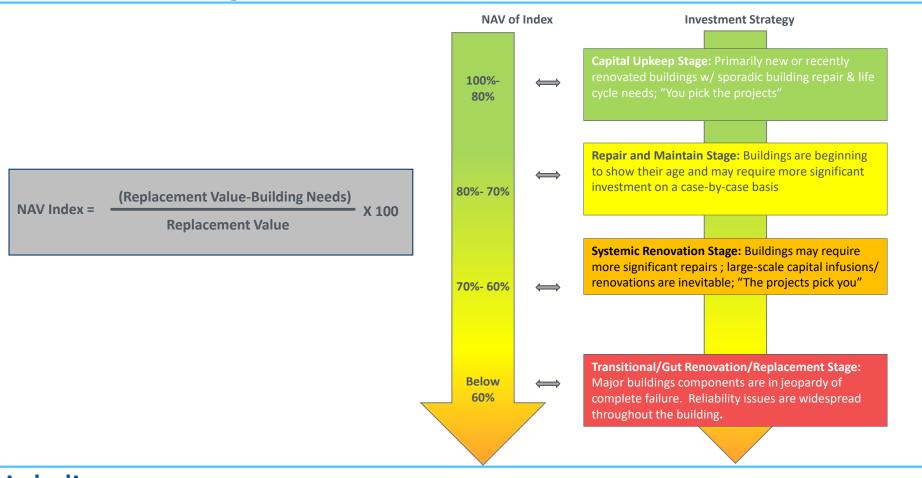
University System of New Hampshire



## Identified Needs by NAV



### **Understanding NAV**



## **NAV by Building**



#### Understanding the percent "good" throughout campus **NAV by Building** 100% 90% 80% 70% 60% **%** 50% **Capital Upkeep** 40% 100-80% 30% 20% 10% 0% Leavitt Center Library Storage Bldg Parsons Hall Mills Hall Gables Building C Kingman Main Lab New Hampshire Hall Fairchild Hall eavitt Lane (Leavitt Center Beach Woodside Apartments P - R 0 Hamilton Smith Hall Veterinary Diagnostics Lab James Hall 10 Academic Way (Housing Office) Landfill Gas Processing Plant New Castle - Pier Ops Main Bldg Peter T Paul College (Business) West Stadium Demeritt Hall Fort Constitution Marine Laboratory Whittemore Center - Hamel (Snively) Kingsbury Marine Programs loway Hall (Commons) Peterson Hall Handler Hall Community Building Keener Dairy Nutrition Center **Browne** Center Chase Ocean Engineering Building Gregg Hall Murkland Hall 10 West Edge Drive (Pams Bldg) Stillings Hall Gables Building South Smith Hall Gables Building North Dairy Bar/RR Station Congreve Hall Whittemore Center - Arena President's House Morse Hall Chiller Plant - Mcdaniel Drive Hewitt Hall Mcconnell Hall Memorial Union Bldg Gables Building A Randall Hall - UNH Dimond Library Woodside Apartments G - I Woodside Apts Community Building 1 Leavitt Lane 18 Waterworks Rd Flow Physics Facility Haaland Hal Parking & Transit Center Rudman Hall Pettee Hall Smith Equine Center Telecommunications Center Health Services Center Elliott Alumni Center Woodside Apartments D -Woodside Apartments A -Woodside Apartments J Woodside Apartments M Gables Repair and Maintain Stage: Buildings are Transitional/Gut Renovation/Replacement Stage: Major Capital Upkeep Stage: Primarily new or recently Systemic Renovation Stage: Buildings may require more significant repairs; large-scale capital infusions/ renovated buildings w/ sporadic building repair beginning to show their age & may require more buildings components are in jeopardy of complete failure. & life cycle needs; "You pick the projects' significant investment on a case-by-case basis renovations are inevitable; "The projects pick you" Reliability issues are widespread throughout the building.

## **NAV by Building**

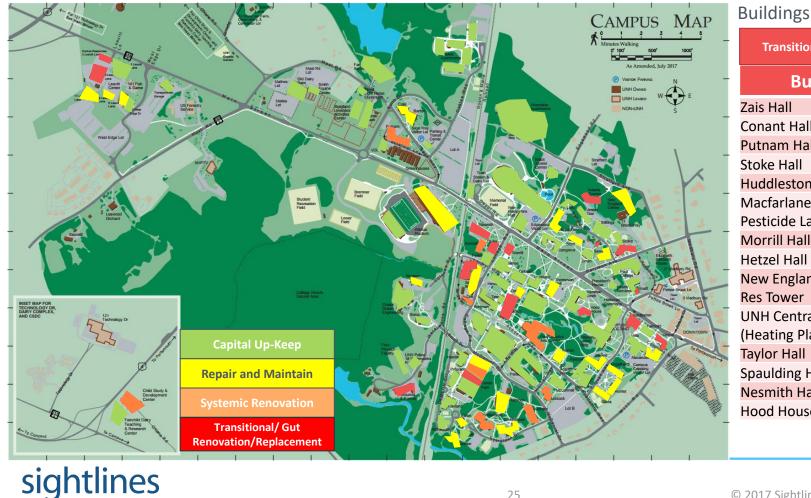


#### Understanding the percent "good" throughout campus

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Capita renova & life o	ated	buil	ding	s w/	spc	radi	c bu	ildi	ng r				beg	inni	ng t	o sh	ow	thei	r ag	: Bu e & i case	may	req	uire				mc	ore s	sign	Ren nifica	nt r	ера	irs;	larg	ge-s	cale	ca	pita	l inf	fusi	ons,	/	b	uildi	ing	s coi	mp	one	<b>tenc</b> ents re w	are	inj	еор	ard	y of	f cor	mpl	lete	fai	lure	e.

## **University of New Hampshire Campus Map**





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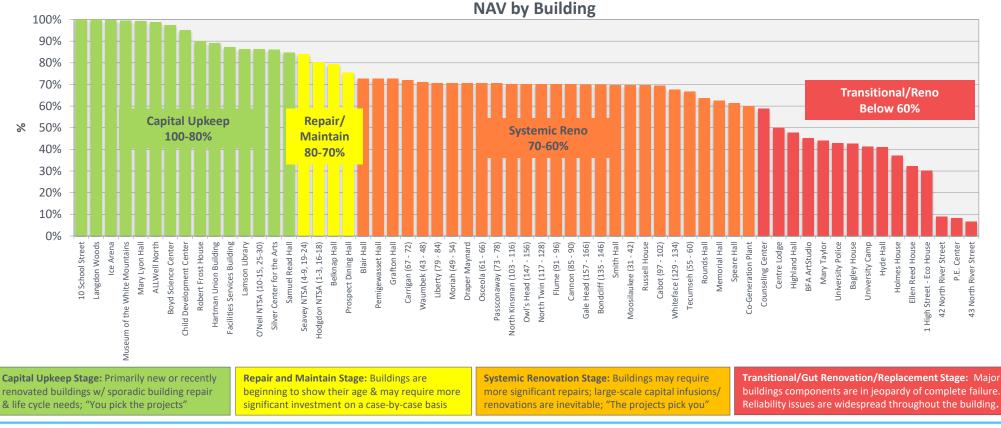
#### Buildings are colored by NAV score Transitional/ Gut Renovation/Replacement

Building	NAV
Zais Hall	59%
Conant Hall	58%
Putnam Hall	57%
Stoke Hall	57%
Huddleston Hall	50%
Macfarlane Grn/Hse &	
Pesticide Lab	49%
Morrill Hall	47%
Hetzel Hall	43%
New England Ctr Adams/	
Res Tower	39%
UNH Central Energy	
(Heating Plant)	39%
Taylor Hall	34%
Spaulding Hall	25%
Nesmith Hall	23%
Hood House	10%

## **NAV by Building**

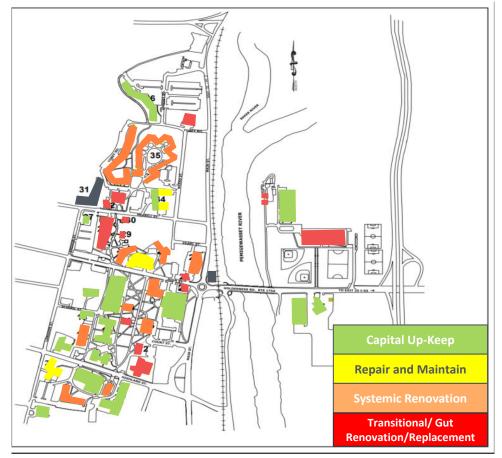


#### Understanding the percent "good" throughout campus





## **Plymouth State University Campus Map**



Buildings are colored by NAV score

Transitional/ Gut Renovation/Replacement									
Building	NAV								
Counseling Center	59%								
Centre Lodge	50%								
Highland Hall	48%								
BFA Art Studio	45%								
Mary Taylor	44%								
Bagley House	43%								
University Police	43%								
Hyde Hall	41%								
University Camp	41%								
Holmes House	37%								
Ellen Reed House	32%								
1 High Street – Eco House	30%								
42 North River Street	9%								
P.E. Center	8%								
43 North River Street	7%								

## **NAV by Building**



#### Understanding the percent "good" throughout campus **NAV by Building** 100% 90% 80% 70% 60% 50% % **Repair**/ 40% **Capital Upkeep** Systemic Reno Maintain 30% 100-80% 70-60% 80-70% 20% Transitional/Reno 10% Below 60% 0% Fiske Hall Owls's Nest 5 Owls's Nest 7 Owls's Nest 8 Huntress Hall ۵ < Carle Hall KSC Living Learning Commons 1 Butler Ct. Residence Hall Pondside III Alumni Building Fiske (non-RLO) Zorn Dining Commons Residential Life Office Owl's Stadium Grandstand Keddy House Plumbing/Mechanical Shop Cheshire House Math Building 26 Proctor Court Rhodes Hall College Camp Pondside Housing Sagendorph Art Gallery Mason Library Carroll House 23 Appleton St Holloway Hall Proctor House Presidents House Owls's Nest 3 Monadnock Hall Owls's Nest 9 Elliot Hall eation Sports Center Owl's Stadium Home Locker Room Science Center dium Visitor Locker Room 349 Main St 115 Winchester St. 81 Blake St. 27 Appleton St. Media Arts Center 83/85 Blake St. Student Center Sculpture Studio (Factory) Blake House 61 Butler Ct. Owls's Nest 4 Owls's Nest 6 Randall Hall Hale Building 361 Main St. 322 Winchester St. Parker Hal Spaulding Gymnasium Owls's Nest : Whitcomb Garage Redfern Arts Cente Morrison Hal 21 Appleton Stree Joslin Hous Bldg. Bldg. Owls's Nest Pondside Apts., Bldg. Pondside Apts., Bldg. Pondside Apts., Bldg. 3ushnell Ap Pondside Apts., Pondside Apts., Young 9 Recre hor s'IwC Capital Upkeep Stage: Primarily new or recently Repair and Maintain Stage: Buildings are Systemic Renovation Stage: Buildings may require Transitional/Gut Renovation/Replacement Stage: Major renovated buildings w/ sporadic building repair beginning to show their age & may require more more significant repairs; large-scale capital infusions/ buildings components are in jeopardy of complete failure. & life cycle needs; "You pick the projects" significant investment on a case-by-case basis Reliability issues are widespread throughout the building.

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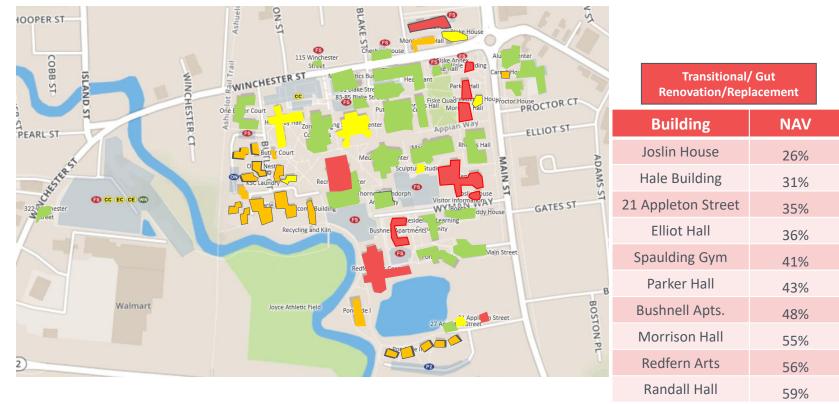
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## **Keene State College Campus Map**



#### Buildings are colored by NAV score





Systemic

Transitional/ Gut

Renovation/Replacement

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## **Prioritize Buildings To Program Value**



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### **Next Steps**

- Break down each of the campuses facilities into "portfolios of impact" groupings of facilities to attain a specific program outcome; examples include decreasing deferred maintenance, investing into student spaces, etc.
- Develop facilities investment strategies that balance the key repair, renewal and modernization priorities across each of the campuses.
- Although a focus on specific buildings will be determined by the total investment need of these spaces, the majority of work could be driven by correction to systems and infrastructure.
- Sightlines working with 4Tell will upload the information collected from the assessment to the 4Tell system where facilities and the system office will be able to update the projects continuously utilizing the online platform.





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## **Questions & Discussion**