

Committee Minutes
BUILDINGS AND GROUNDS COMMITTEE

Tuesday, April 9, 2024

Open Session Tour

The Buildings and Grounds Committee of the Board of Visitors of Virginia Polytechnic Institute and State University convened on Tuesday, April 9, 2024 at 8:45 a.m. in open session in Lobby of the Inn at Virginia Tech and Skelton Conference Center to depart for a tour. A quorum of the Committee was present. Chair Harris presided.

Board members present: Greta Harris (Committee Chair), David Calhoun, Sandy Cupp Davis, Bill Holtzman, Tish Long, Jeff Veatch, Janice Austin (A/P Faculty Representative), and Will Storey (Undergraduate Student Representative)

University personnel and guests: Bob Broyden, Greg Canaday, Alisha Ebert, Mark Gess, Ricky Johnston, Mark Owczarski, Justin Sheppard, John Tarter, Jon Clark Teglas, and Anthony Watson.

- # + **1. Tour of the Hokie Stone Quarry:** The Committee toured the Hokie Stone Quarry. The random ashlar patterned stone facades (Hokie Stone) used on campus buildings are constructed of native limestone quarried and surfaced by university personnel. Virginia Tech's quarry operations produce some 60 tons of Hokie Stone per week, or about 3,000 tons per year. A single ton of the stone will cover about 24 to 30 square feet on a building. The 40-acre quarry provides 85 percent of the stone used in campus construction.

The tour concluded at 10:15 a.m.

Open Session Meeting

The Buildings and Grounds Committee of the Board of Visitors of Virginia Polytechnic Institute and State University convened on Tuesday, April 9, 2024 at 10:30 a.m. in open session in 2124 Gilbert Place. A quorum of the Committee was present. Chair Harris presided.

Board members present: Ed Baine (Rector), Greta Harris (Committee Chair), David Calhoun, Carrie Chenery, Sandy Cupp Davis, Nancy Dye, Bill Holtzman, Tish Long, Chris Petersen, John Rocovich, Jeff Veatch, Janice Austin (A/P Faculty Representative), LaTawnya Burleson (Staff Representative), Joseph Merola (Faculty Representative), Will Storey (Undergraduate Student Representative), and Emily Tirrell (Graduate Student Representative)

University personnel and guests: President Tim Sands, Lynsay Belshe, Bob Broyden, Cyril Clarke, Lance Collins, Joe Cooley, Al Cooper, Jeff Earley, Alisha Ebert, Mark Gess, Emily Gibson, Alan Grant, Chelsea Haines, Patrick Hilt, Frances Keene, Sharon Kurek, Lu Liu, Rob Mann, Elizabeth McClanahan, Ken Miller, Laurel Miner, Justin Noble, Kim O'Rourke, Kelly Oaks, Mark Owczarski, Sharon Pitt, Amy Sebring, Brennan Shepard, Ken Smith, Jon Clark Teglas, Tracy Vosburgh, and Chris Wise

2. Welcome and Introductions: The Committee Chair convened the meeting and provided welcoming remarks.

3. Consent Agenda: The Committee approved the items listed on the Consent Agenda.

a. **Minutes from the November 2023 Committee Meeting:** The Committee approved the minutes from its November 2023 meeting.

* b. **Resolution to Approve an Appointment to the Montgomery Regional Solid Waste Authority:** The Committee reviewed for approval a resolution to appoint a joint representative to the Montgomery Regional Solid Waste Authority (Authority). The Authority consists of five directors who are responsible for its management and operation. One director is appointed by each of the four political subdivisions, and the other director is appointed jointly by all governing bodies. Sharon G. Scott currently serves as a joint representative and has expressed her desire to continue in that role. The local political subdivisions and Virginia Tech desire to re-appoint Sharon G. Scott, as the joint representative for a term of four years.

The Committee recommended the resolution to the full Board for approval.

c. **Acceptance of the Capital Project Status Report:** The Committee accepted the quarterly capital project status report. The current active portfolio of projects includes 18 authorized projects -- active and complete (within a 1-year warranty phase), has a total value of approximately \$1.1 billion, adds approximately 1.3 million gross square feet (GSF) of new construction, and renovates nearly 300,000 gross square feet of existing space.

+ **4. Discussion of Facilities Condition Assessments and Facility Maintenance Programs:** The Committee participated in a discussion of facilities condition assessments and facility maintenance programs led by Bob Broyden, Interim Vice President for Campus Planning, Infrastructure, and Facilities. Virginia Tech is committed to providing a safe, inclusive, accessible, sustainable, mission-centric, partner-focused, and cost-effective infrastructure that preserves, fosters, complements, and advances the university's distinct senses of place and service. Extensive land holdings, effectively maintained and growing facilities, and a modern inventory of equipment and systems provide a sound foundation for current programs and future initiatives. With 250,000 living alumni and students who have come to Tech from every state and more than 100 countries, Virginia Tech is rooted in many places.

* Requires Full Board Approval

Discusses Enterprise Risk Management Topic(s)

+ Discusses Strategic Investment Priorities Topic(s)

Virginia Tech has a 2,800-acre campus in Blacksburg; a significant presence across the commonwealth, including the Innovation Campus in Northern Virginia, the Health Sciences and Technology Campus in Roanoke, and sites in Newport News and Richmond; educational and research facilities across the state; a study-abroad site in Switzerland; and an 1,800-acre agriculture research farm near the main campus. As the university meets the global demands of the future, the 'campus' is constantly adapting to fulfill learning and research needs. The university's facilities management function strives to ensure assets are available for service and continuity of operations.

- # + **5. Update on Agricultural Facilities:** The Committee received an update from Alan Grant, Dean of the College of Agriculture and Life Sciences, on agricultural facilities planning and construction.
- 6. Update from the Vice President of Campus Planning, Infrastructure, and Facilities:** The Committee received an update from Bob Broyden, Interim Vice President of Campus Planning, Infrastructure, and Facilities.
- 7. Future Agenda Items and Closing Remarks:** The Committee discussed potential topics for inclusion on future meeting agendas.

There being no further business, the meeting adjourned at 11:46 a.m.

Open Session Agenda

BUILDINGS AND GROUNDS COMMITTEE

Tuesday, April 9, 2024

*Bus departs for tour at 8:45 a.m.
from the Lobby of the Inn at Virginia Tech and Skelton Conference Center.*

<u>Agenda Item</u>	<u>Reporting Responsibility</u>
# + 1. Tour of the Hokie Stone Quarry	Bob Broyden

*Open session meeting resumes at 10:30 a.m.
in Room 2124 Gilbert Place.*

<u>Agenda Item</u>	<u>Reporting Responsibility</u>
2. Welcome and Introductions	Greta Harris
3. Consent Agenda	Greta Harris
a. Minutes from the November 2023 Committee Meeting	Bob Broyden
* b. Resolution to Approve an Appointment to the Montgomery Regional Solid Waste Authority	
c. Quarterly Capital Construction Status Report	
# + 4. Discussion of Facilities Condition Assessments and Facility Maintenance Programs	Bob Broyden
# + 5. Update on Agricultural Facilities	Alan Grant
6. Update from the Vice President of Campus Planning, Infrastructure, and Facilities	Bob Broyden
7. Future Agenda Items and Closing Remarks	Greta Harris

* Requires Full Board Approval

Discusses Enterprise Risk Management Topic(s)

+ Discusses Strategic Investment Priorities Topic(s)

Tour of the Hokie Stone Quarry
BUILDINGS AND GROUNDS COMMITTEE

Tuesday, April 9, 2024

The Committee will tour the Hokie Stone Quarry. The random ashlar patterned stone facades (Hokie Stone) used on campus buildings are constructed of native limestone quarried and surfaced by university personnel. Virginia Tech's quarry operations produce some 60 tons of Hokie Stone per week, or about 3,000 tons per year. A single ton of the stone will cover about 24 to 30 square feet on a building. The 40-acre quarry provides 85 percent of the stone used in campus construction. To ensure variations in color, the university purchases the remaining 15 percent from a farm in Montgomery County, but Virginia Tech quarry employees process it.

Consent Agenda

BUILDINGS AND GROUNDS COMMITTEE

Tuesday, April 9, 2024

The Committee will consider for approval and acceptance the items listed on the Consent Agenda.

Consent Agenda

- a. Minutes from the November 2023 Committee Meeting
- * b. Resolution to Approve an Appointment to the Montgomery Regional Solid Waste Authority
- c. Quarterly Capital Construction Status Report

* Requires full Board approval.



CAPITAL PROJECT STATUS REPORT

PREPARED FOR THE BUILDINGS AND GROUNDS COMMITTEE OF THE BOARD OF VISITORS

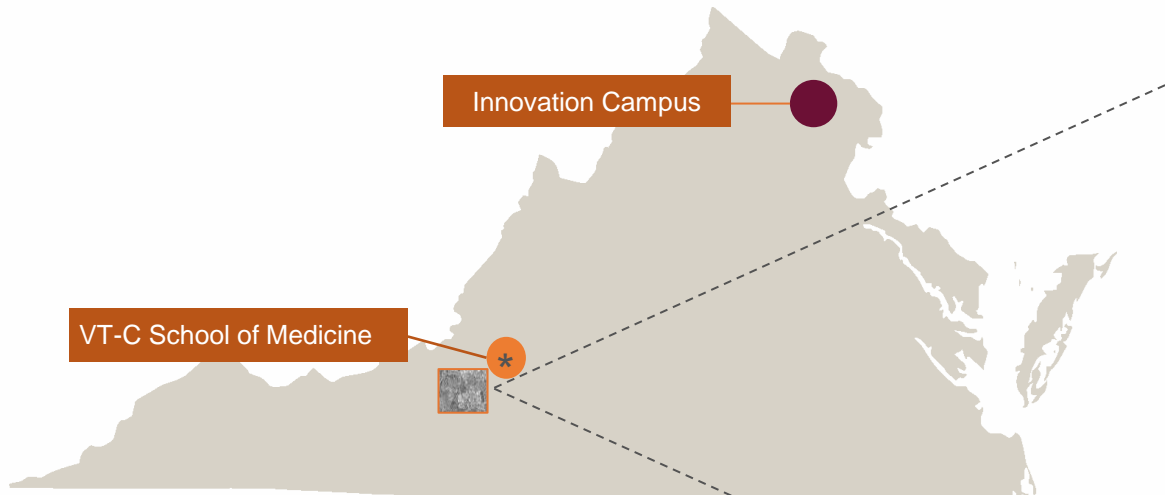
April 9, 2024

CAPITAL PROJECT PORTFOLIO





- 18 authorized projects -- active and complete (w/in 1-year warranty phase)
- Total value of ~\$1.1B
- Generates ~1.3M gross square feet (GSF) of new construction
- Renovates nearly 300K GSF of existing space



CAPITAL PROJECT PORTFOLIO



LEGEND

-  In Design
-  Under Construction
-  Warranty/Complete
-  * Design Only

CAPITAL CONSTRUCTION EXECUTIVE SUMMARY (PROGRESSIVE)

Date Prepared: 11 MAR 2024



Project Title	Total Project Budget (\$M)	Construction Budget (\$M) (Construction Contract Value)	New Const. (GSF)	Renovation (GSF)	CY 2023		CY 2024				CY 2025					
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Dietrick Renovation	\$9.1	\$6.8	6,298	11,960												
Data & Decision Sciences Building (D&DS)	79.0	58.9	120,000													
Corps Leadership & Military Science Building	52.0	37.9	65,428	8,449												
New Upper Quad Residence Hall	42.0	32.0	56,650													
Slusher Hall Repairs	7.5	5.6		38,000												
Building Envelope Improvements (Note 2)	47.2	41.9	N/A													
HITT Hall	85.0	65.5	101,000													
Student Wellness Improvements	70.0	56.3		204,000												
Football Locker Room Renovations	5.9	4.1		4,200												
Transit Center (Note 1)	N/A	N/A	13,606													
Undergraduate Science Laboratory Building	90.4	69.5	120,746													
Innovation Campus – Academic Building	302.1	226.3	299,733													
Life, Health, Safety, Accessibility, & Code Compliance (Note 3)	10.4	3.9	N/A													
Livestock & Poultry Research Facilities (Ph I) – Various Locations	25.3	18.2	129,100													
Mitchell Hall (Replace Randolph Hall) (Note 4&5)	292.3	229.3	285,500													
New Business Building (Planning – Design Only)	8.0	TBD	92,295													
Student Life Village Phase I (Planning – Design Only)	19.5	TBD	TBD													
Virginia Tech-Carilion School of Medicine Expansion (Planning – Design Only)	9.0	TBD	TBD													
Improve Center Woods Complex (Planning – Design Only)	846K	TBD	TBD													
Totals	\$1,155.5		1,290,356	266,609												

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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NOTE 1 Non-Virginia Tech project

NOTE 2 Building Envelope Improvements includes four (4) phases: (1) Lane Stadium (Scheduled to complete in spring 2024) followed by (2) Torgerson, (3) Hahn, and (4) Inn at Virginia Tech which are currently unscheduled

NOTE 3 Life, Health, Safety Acc. & Code Compliance includes three (3) phases: (1) Derring Steps Elevator Towers (scheduled to complete in December 2024) followed by Green Link Priorities 2 & 3 which are currently unscheduled

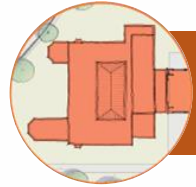
NOTE 4 Multiple GMPs results in design/construction overlap (fast track)

NOTE 5 Estimated construction completion of Mitchell Hall is December 2027



IN DESIGN

PROJECTS IN DESIGN



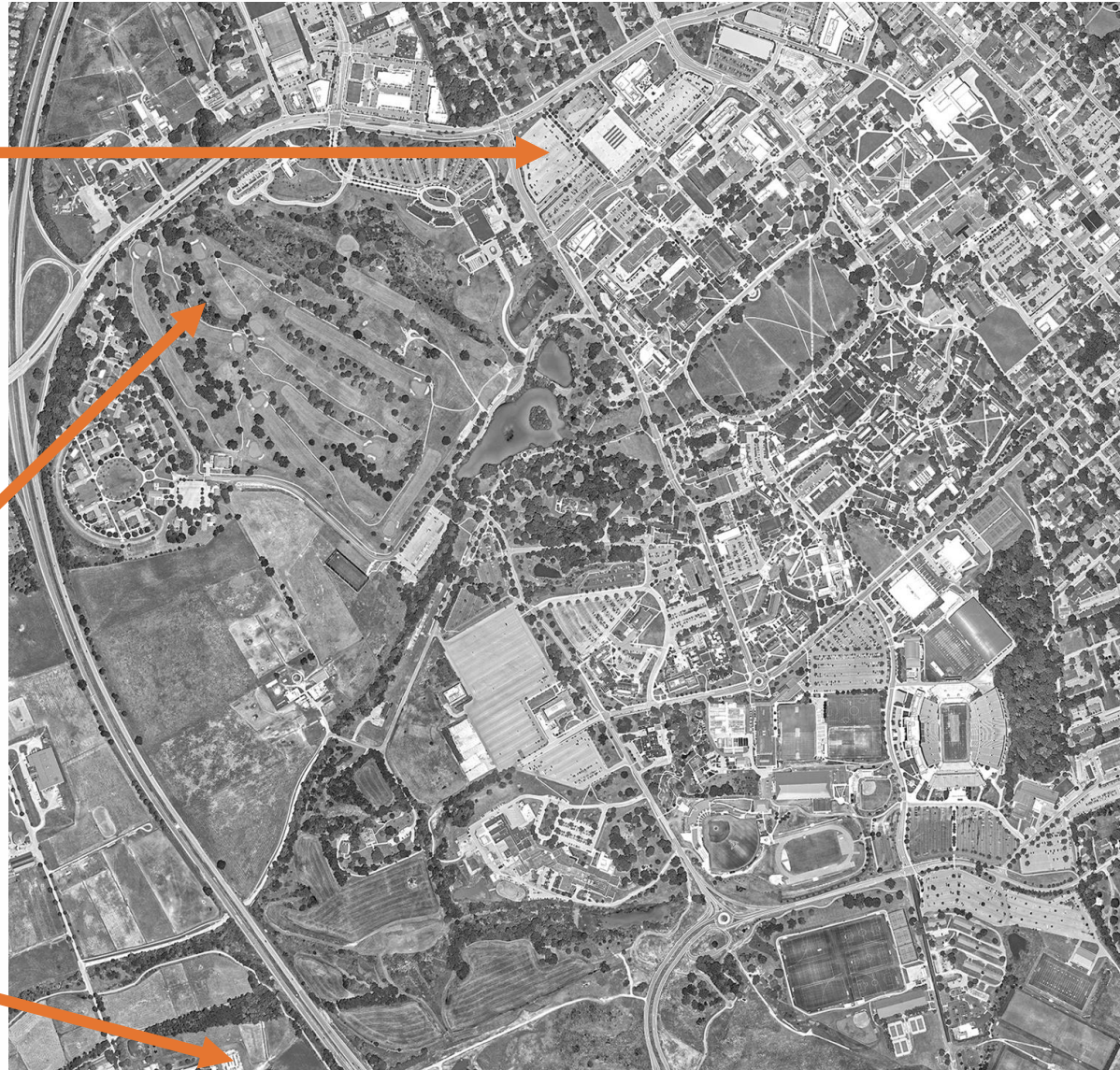
New Business Building



Student Life Village
(Phase I)*



Improve Center Woods
Complex

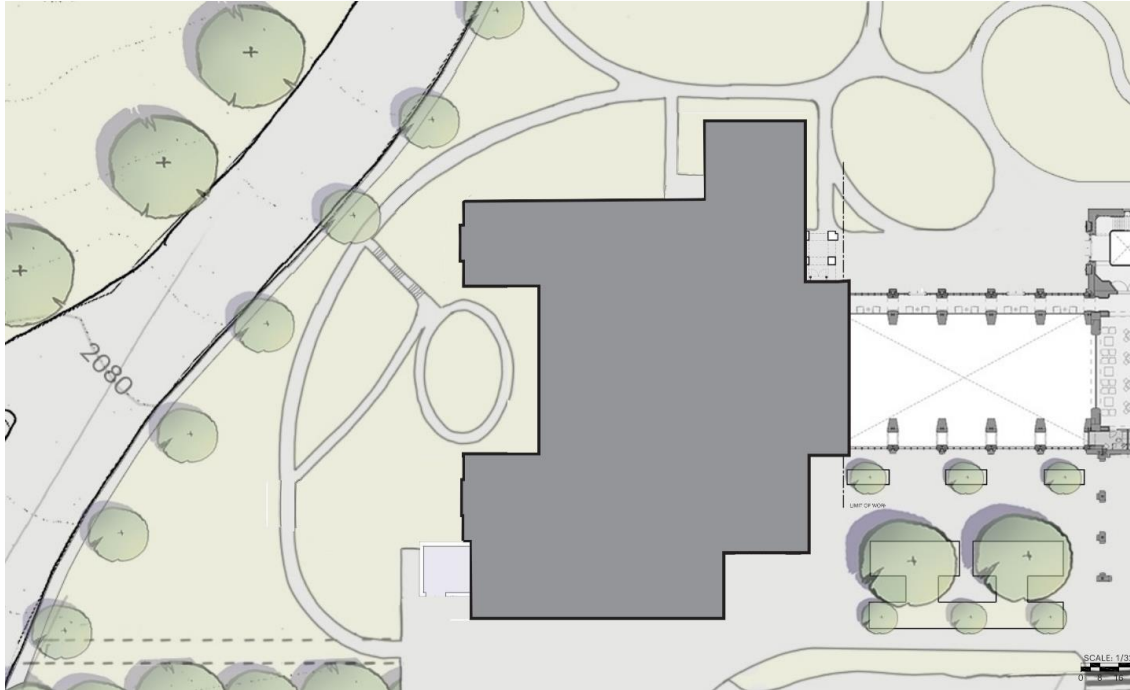


Virginia Tech-Carilion
School of Medicine
Expansion*
(Roanoke, VA)



PLANNING:NEW BUSINESS BUILDING

CM at Risk – BOV Authorized



Status

- ▶ In Preliminary Design Phase

Next Actions

- ▶ Targeting BOV Construction Authorization in fall 2024

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
New Business Building (<i>Planning – Design Only</i>)	\$8.0	TBD	92,295													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Moseley

Builder: Kjellstrom & Lee

STUDENT LIFE VILLAGE – PHASE 1

CM at Risk – BOV Authorized



Status

- ▶ Schematic design phase initiated

Next Actions

- ▶ Finalize procurement of CMAr preconstruction services contract

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025				
					FY23		FY24		FY25		FY26				
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>
Student Life Village – Phase I (<i>Planning-Design Only</i>)	\$19.5	TBD	TBD												

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Little/Boudreaux

Builder: TBD

VIRGINIA TECH-CARILION SCHOOL OF MEDICINE EXPANSION

CM at Risk – BOV Authorized



Status

- ▶ Procurement of A/E for design services underway

Next Actions

- ▶ Finalize procurement of A/E and begin initial design
- ▶ Procure CMaR preconstruction services contract

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Virginia Tech-Carilion School of Medicine Expansion <i>(Planning-Design Only)</i>	\$9.0	TBD	TBD													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: TBD

Builder: TBD

IMPROVE CENTER WOODS COMPLEX

Design-Bid-Build – BOV Authorized



Status

- ▶ Procurement of A/E for design services underway

Next Actions

- ▶ Finalize procurement of A/E and begin initial design

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025					
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Improve Center Woods Complex	\$846K	TBD	TBD													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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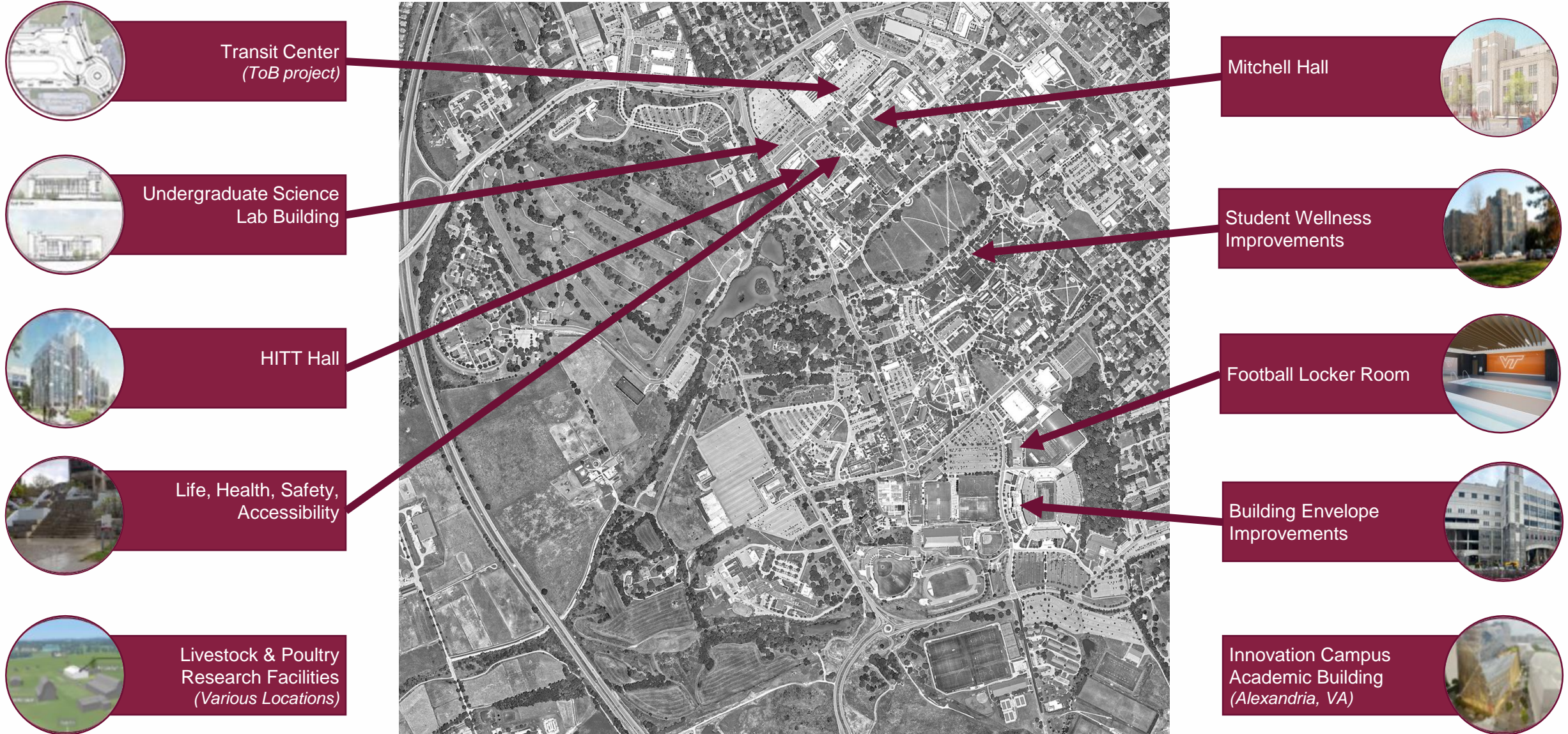
Designer: TBD

Builder: TBD



UNDER CONSTRUCTION

ACTIVE CONSTRUCTION PROJECTS



BUILDING ENVELOPE IMPROVEMENTS

Design-Bid-Build – BOV Authorized

Status

- ▶ Envelope improvements planned for four buildings
- ▶ Construction on first building 87% complete

Next Actions

- ▶ First building targeted for completion summer 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>
Building Envelope Improvements	\$47.2	\$41.9	N/A													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: WJE

Builder: Carolina Restoration

HITT HALL

CM at Risk – BOV Authorized

Status

- ▶ Construction 92% complete



Next Actions

- ▶ Anticipated completion summer 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
HITT Hall	\$85.0	\$65.5	101,000													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Cooper Cary

Builder: WM Jordan

STUDENT WELLNESS IMPROVEMENTS

CM at Risk – BOV Authorized

Status

- ▶ Construction 80% complete



Next Actions

- ▶ Anticipated completion July 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025			
					FY23		FY24		FY25		FY26			
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun
Student Wellness Improvements	\$70.0	\$56.3		204,000										

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Cannon Design

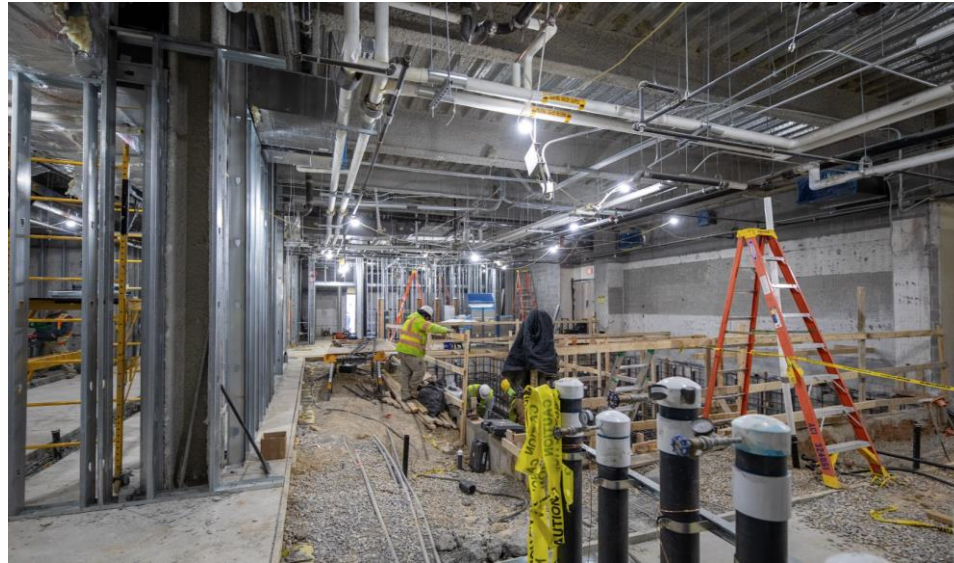
Builder: Whiting-Turner

FOOTBALL LOCKER ROOM RENOVATIONS

Design-Bid-Build – BOV Authorized

Status

- ▶ Construction 47% complete



Next Actions

- ▶ Anticipated completion summer 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Football Locker Room Renovation	\$5.9	\$4.1		4,200												

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: HNTB

Builder: Thor

UNDERGRADUATE SCIENCE LAB BUILDING

CM at Risk – State Authorized

Status

- ▶ Construction 80% complete

Next Actions

- ▶ Anticipated completion summer 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>
Undergraduate Science Laboratory Building	\$90.4	\$69.5	120,746													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: ZGF

Builder: Skanska

INNOVATION CAMPUS-ACADEMIC BUILDING

CM at Risk – State Authorized

Status

- ▶ Construction 79% complete



Next Actions

- ▶ Anticipated completion late fall 2024/early 2025



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025			
					FY23		FY24		FY25		FY26			
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun
Innovation Campus – Academic Building	\$302.1	\$226.3	299,733											

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Smith Group

Builder: Whiting-Turner

LIFE, HEALTH, SAFETY, ACCESSIBILITY, & CODE COMPLIANCE

Design-Bid-Build – State Authorized



Status

- ▶ Multi-phase execution
- ▶ Priority 1 Derring Steps Elevators construction 95% complete
- ▶ Priority 2 Green Link in construction procurement
- ▶ Priority 3 Green Link under design

Next Actions

- ▶ Anticipated Phase 1 completion in summer 2024

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>
Life, Health, Safety, Accessibility, & Code	\$10.4	\$3.9	N/A													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Various

Builder: Various

LIVESTOCK & POULTRY RESEARCH FACILITIES (PHASE I, BID PACKAGE 5)

Design-Bid-Build – State Authorized

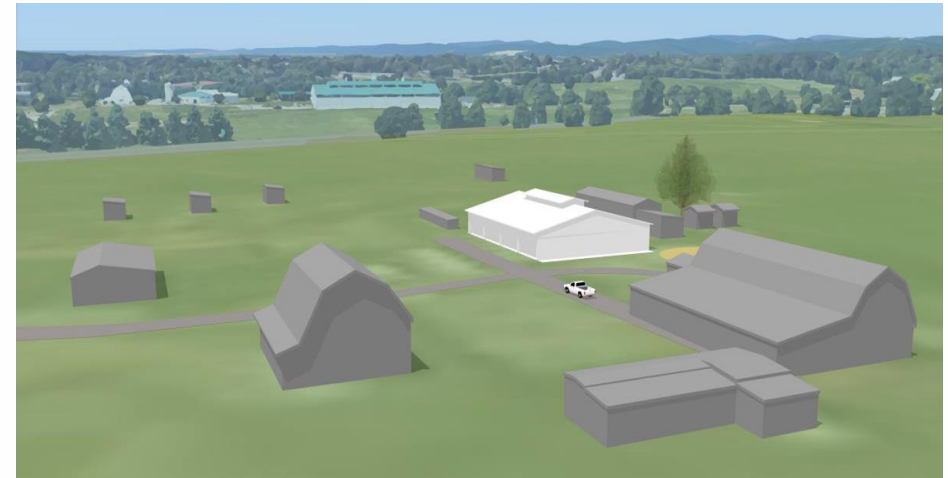
Status

- ▶ Bid package #5: 1st of 3 barns under construction (10% complete)



Next Actions

- ▶ Complete 3 barns in sequence



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025					
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Livestock & Poultry Research Facilities (Ph I) – Various Locations	\$25.3	\$18.2	129,100													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Spectrum Design

Builder: Various

MITCHELL HALL

CM at Risk – State Authorized



Status

- ▶ Interior abatement activities underway
- ▶ GMP-1 (demolition & early site package) mobilization scheduled for 13 MAY 2024
- ▶ GMP-2 (building construction) working drawings being finalized

Next Actions

- ▶ Procure GMP-2 construction contract (spring/summer 2024)

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY24		FY25		FY25		FY26	
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Mitchell Hall (Replace Randolph Hall)	\$292.3	\$229.3	285,500			WD										

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Perkins & Will

Builder: Skanska

TRANSIT CENTER

Design-Bid-Build – Town of Blacksburg (ToB)

Status

- ▶ Construction 85% complete



Next Actions

- ▶ Anticipated completion in summer 2024
- ▶ Anticipated operational use in fall 2024



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>
Multi-Modal Transit Facility	N/A	N/A	13,606													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Wendel (ToB Contract)

Builder: WM Schlosser (ToB Contract)



PROJECTS RECENTLY COMPLETED

PROJECTS UNDER WARRANTY



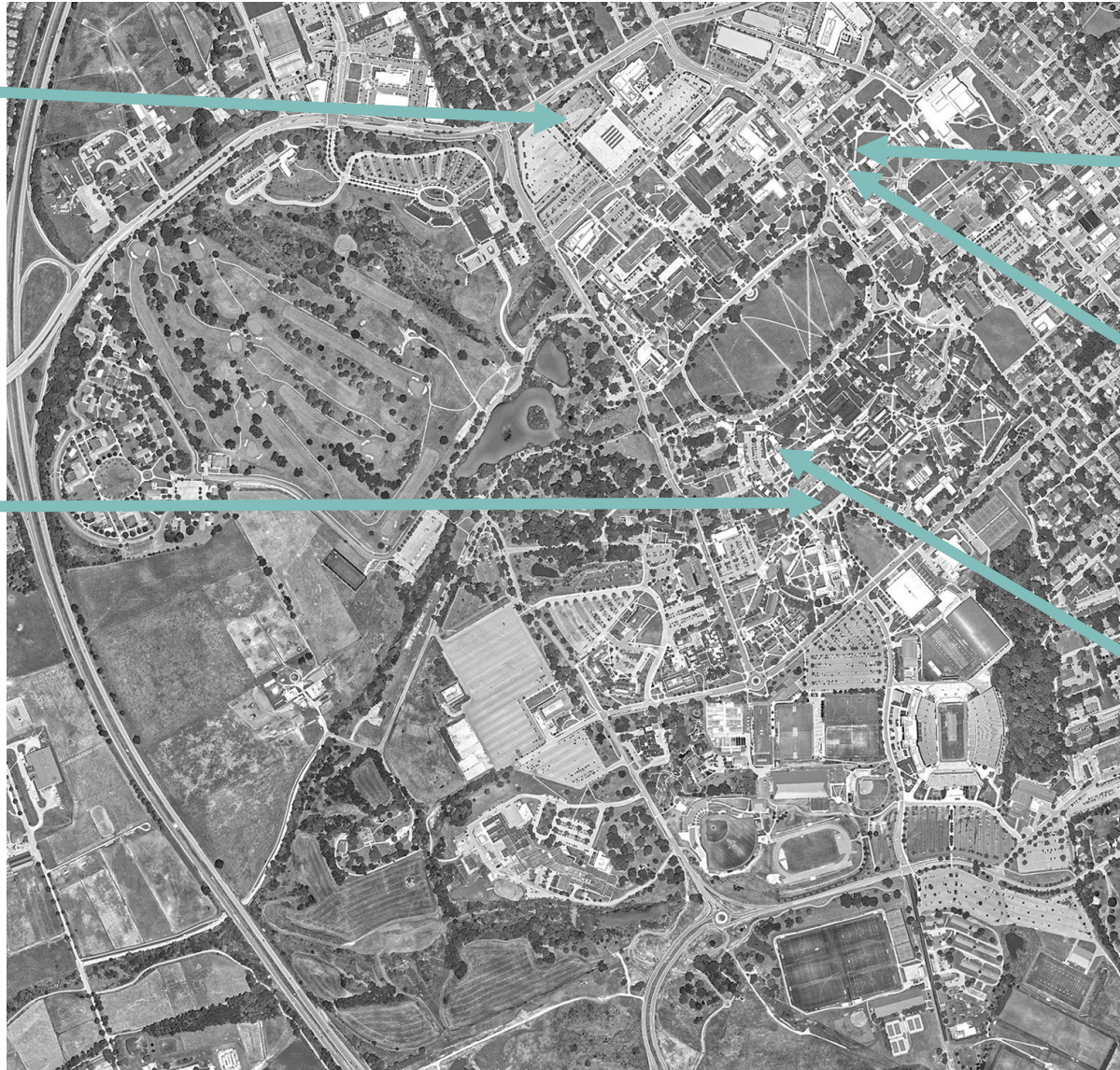
Data & Decision Sciences Building



Dietrick Renovation & Spirit Plaza



Livestock & Poultry Research Facilities
(Various Locations)



Corps Leadership & Military Sciences Building



New Upper Quad Residence Hall



Slusher Hall Repairs

DIETRICK RENOVATION

(And Quillen Spirit Plaza)
Design-Bid-Build – BOV Authorized
COMPLETE

Status

- ▶ Project complete



Next Actions

- ▶ Close out project



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Dietrick Renovation	\$9.1	\$6.8	6,298	11,960												

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Hanbury

Builder: Branch Builds

DATA & DECISION SCIENCES BUILDING

CM at Risk – State Authorized
COMPLETE

Status

- ▶ Project complete

Next Actions

- ▶ Close out project



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Data & Decision Sciences Building	\$79.0	\$58.9	120,000													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Moseley

Builder: Kjellstrom & Lee

CORPS LEADERSHIP & MILITARY SCIENCE BUILDING

CM at Risk – BOV Authorized
COMPLETE

Status

- ▶ Project complete



Next Actions

- ▶ Close out project



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023		CY 2024				CY 2025				
					FY23		FY24		FY25		FY26				
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep
Corps Leadership & Military Science Building	\$52.0	\$37.9	65,428	8,449											

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Clark-Nexen

Builder: Vannoy

NEW UPPER QUAD RESIDENCE HALL

CM at Risk – BOV Authorized
COMPLETE

Status

- ▶ Project complete



Next Actions

- ▶ Close out project



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
New Upper Quad Residence Hall	\$42.0	\$32.0	56,650													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Clark-Nexen

Builder: Vannoy

SLUSHER HALL REPAIRS

Emergency – BOV Authorized
COMPLETE

Status

- ▶ Project complete



Next Actions

- ▶ Close out project



PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	Q1 Jul-Sep	Q2 Oct-Dec
Slusher Hall	\$7.5	\$5.6		38,000												

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Gresham Smith

Builder: Kesler

LIVESTOCK & POULTRY RESEARCH FACILITIES (PHASE I, BID PACKAGES 1-4)

Design-Bid-Build – State Authorized
COMPLETE



Status

- ▶ Construction complete on bid packages 1 - 4



Next Actions

- ▶ Close out of bid packages 1 - 4

PROJECT TITLE	TOTAL PROJECT BUDGET (\$M)	CONSTRUCTION BUDGET (\$M) <small>(Construction Contract Value)</small>	NEW CONST. (GSF)	RENOVATION (GSF)	CY 2023				CY 2024				CY 2025			
					FY23		FY24		FY25		FY26					
					Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>	Q3 <small>Jan-Mar</small>	Q4 <small>Apr-Jun</small>	Q1 <small>Jul-Sep</small>	Q2 <small>Oct-Dec</small>
Livestock & Poultry Research Facilities (Ph I) – Various Locations	\$25.3	\$18.2	129,100													

LEGEND	Design	Construction	Warranty	Construction Phase TBD	SD= Schematic Design	PD= Preliminary Design	WD= Working Drawings
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Designer: Spectrum Design

Builder: Various

DEFINITIONS

AUTHORIZATION:

- ▶ **State Authorized:** Authorized and funded (whole or in part) by the Virginia General Assembly.
- ▶ **BOV Authorized:** Authorized and funded by the Virginia Tech Board of Visitors.

DELIVERY METHODS:

- ▶ **Schematic Design Phase** = 0% to approximately 20% design complete
 - ▶ **Preliminary Design Phase** = Approximately 20% to approximately 50% design complete
 - ▶ **Working Drawing Phase** = Approximately 50% to 100% design complete
-
- ▶ **GMP** = Guaranteed Maximum Price

CONSTRUCTION METHODS

DESIGN-BID-BUILD (DBB):

- ▶ A/E completes full design.
- ▶ Invitation For Bid (IFB) issued. Contract awarded to lowest bidder.

CONSTRUCTION MANAGER AT RISK (CMaR):

- ▶ A/E completes full design.
- ▶ Prospective CMaR's compete for project during early stage of design.
- ▶ CMaR selected based upon "best value" during Schematic Design phase.
- ▶ When final designs are complete CMaR develops Guaranteed Maximum Price (GMP)

DESIGN-BUILD(D/B):

- ▶ A/E completes partial design ("criteria docs").
- ▶ D/B team (builder + A/E) compete for project and propose full price for project delivery.
- ▶ Selection based upon "best value".
- ▶ D/B team completes design and executes construction.

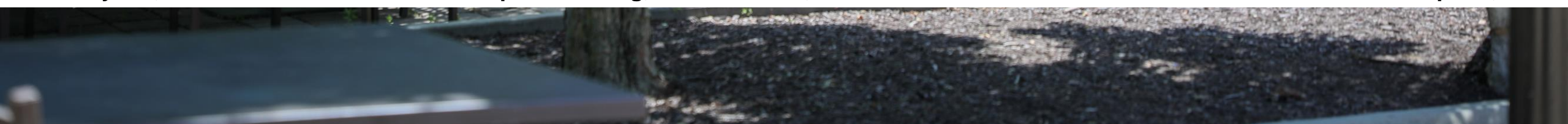


DISCUSSION OF FACILITIES CONDITION ASSESSMENTS AND FACILITY MAINTENANCE PROGRAMS

PREPARED FOR THE BUILDINGS AND GROUNDS COMMITTEE

Bob Broyden, Interim Vice President for Campus Planning, Infrastructure, and Facilities

April 9, 2024



**GOAL:**

- Ensure assets are available for service and continuity of operations.

OBJECTIVES:

- Identify and conduct maintenance work in a manner such that no asset is unexpectedly removed from service because of deferred maintenance.
- Provide a 10-year forward looking horizon for assets that will require major refurbishment, renovation, or replacement.

ASSET OVERVIEW

ACRES

15,684

BUILDINGS

851 Structures

12,400,000 GSF

SIDEWALKS &
PATHWAYS

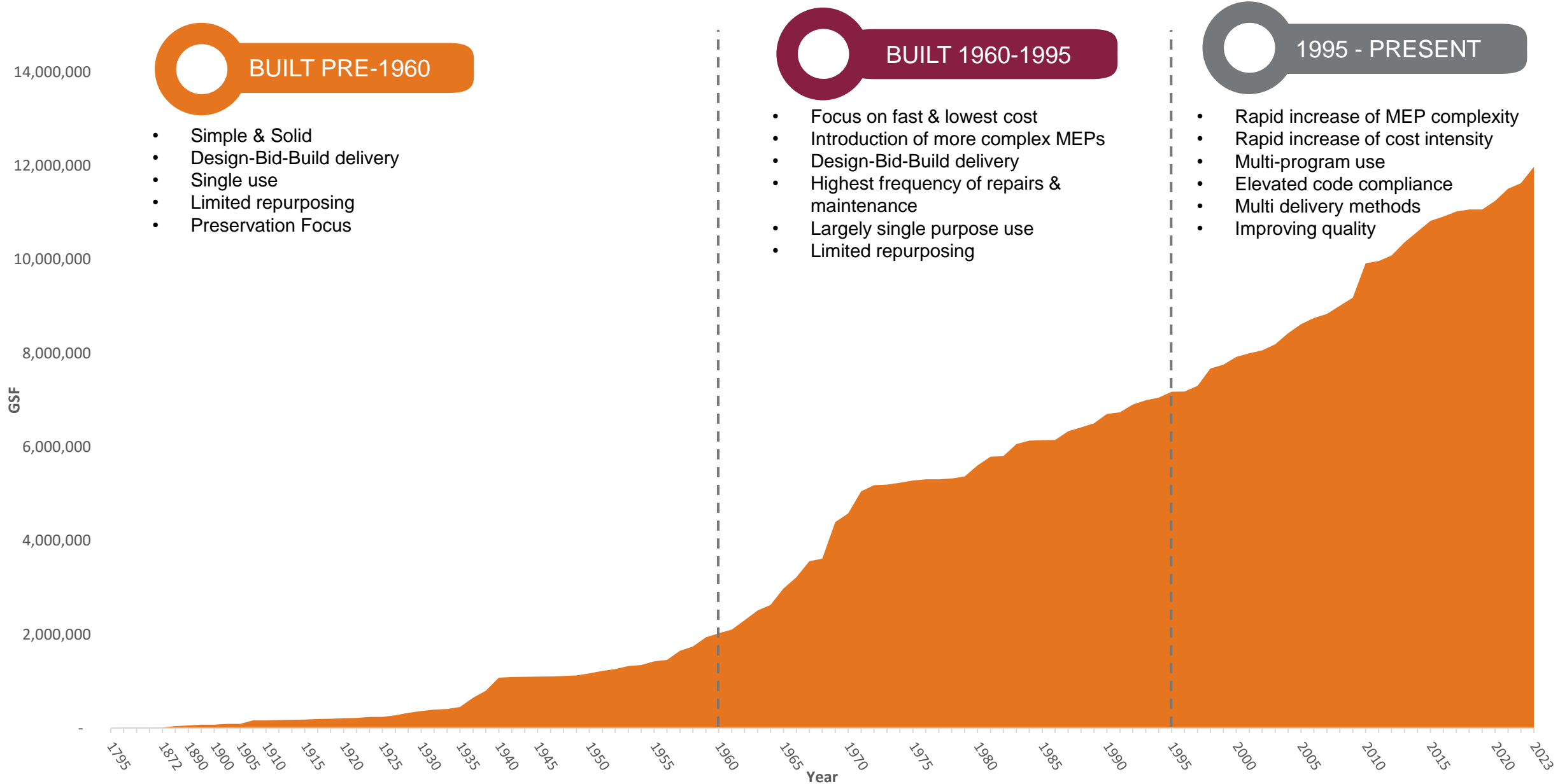
54 Miles

UTILITY TUNNELS

15 Miles



ASSET TIMELINE



BUILT PRE-1960

- Simple & Solid
- Design-Bid-Build delivery
- Single use
- Limited repurposing
- Preservation Focus

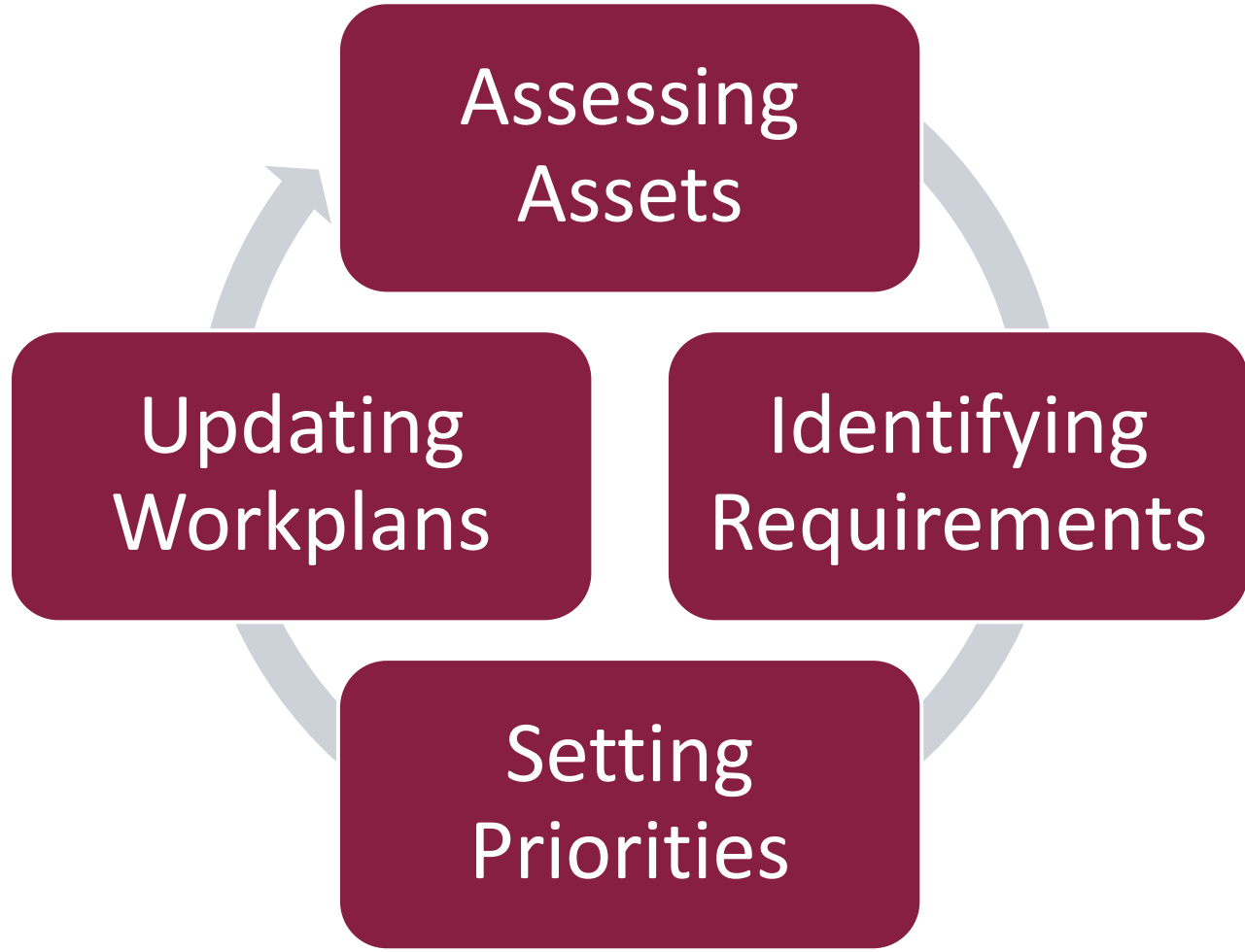
BUILT 1960-1995

- Focus on fast & lowest cost
- Introduction of more complex MEPs
- Design-Bid-Build delivery
- Highest frequency of repairs & maintenance
- Largely single purpose use
- Limited repurposing

1995 - PRESENT

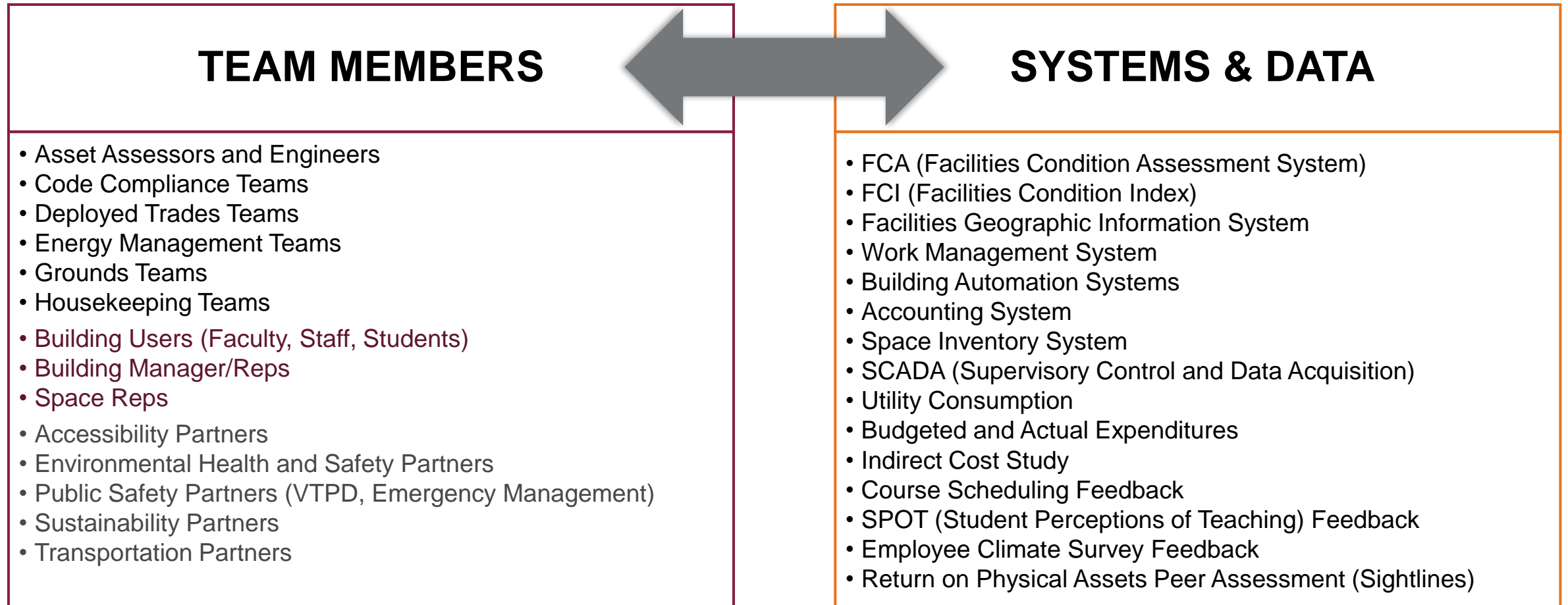
- Rapid increase of MEP complexity
- Rapid increase of cost intensity
- Multi-program use
- Elevated code compliance
- Multi delivery methods
- Improving quality

CONTINUOUS CYCLE



CONDITION ASSESSMENT PROGRAM

Attachment H



IDENTIFYING REQUIREMENTS

UTILITY
SYSTEMS



ENVELOPE &
FOUNDATION



BUILDING
SYSTEMS



CODE
COMPLIANCE



SPACE
REFRESH



PRIORITY AND PLANNING CONSIDERATIONS



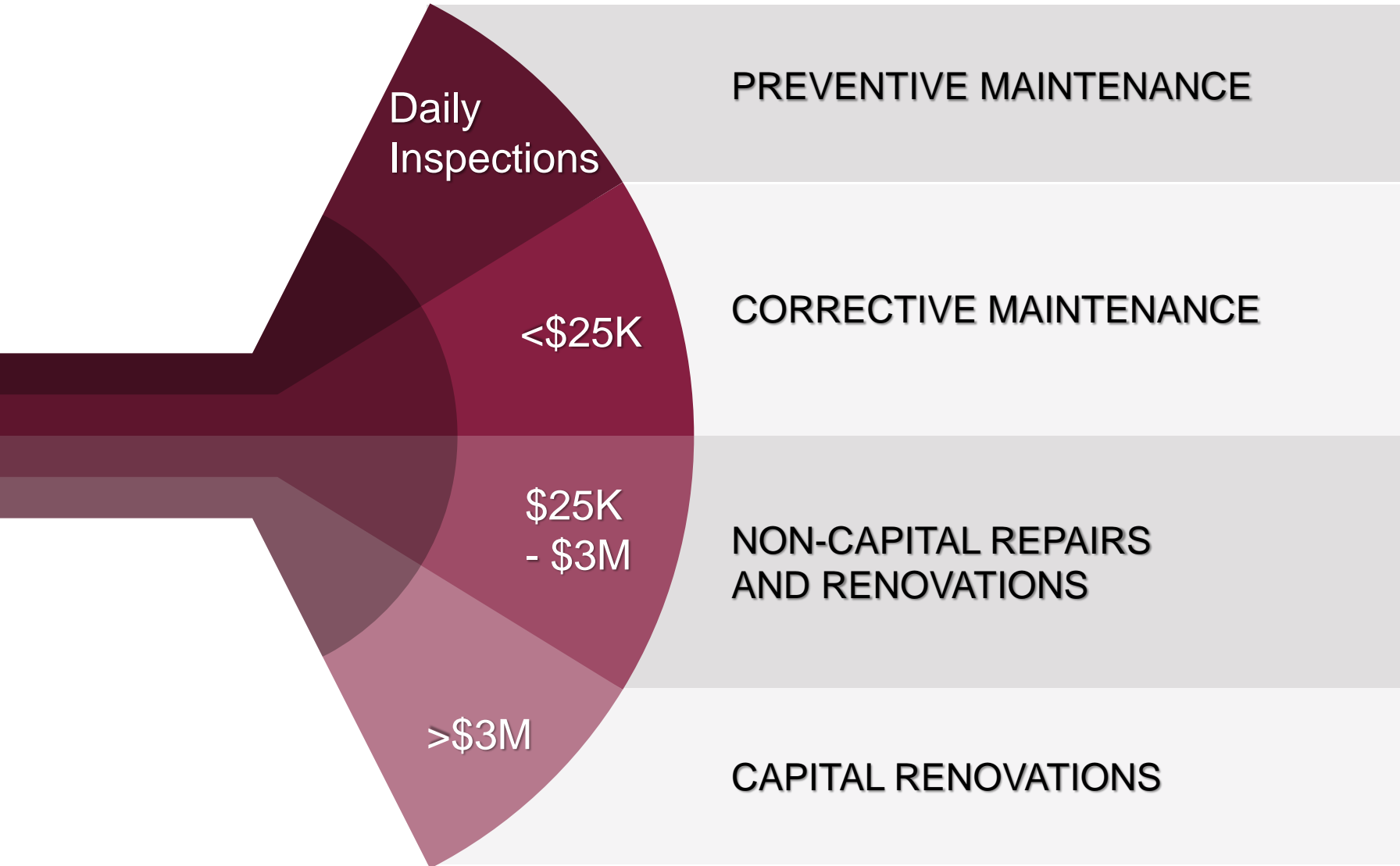
- Less than 1 year
- 1 to 2 years
- 2-6 years
- 6+ years

- Within or Beyond 10 Years

- Academic
- VCE/VAES
- Auxiliary
- Administration

- Subcontractor Capacity
- Facility Schedules
- Work Density
- Academic Disruption

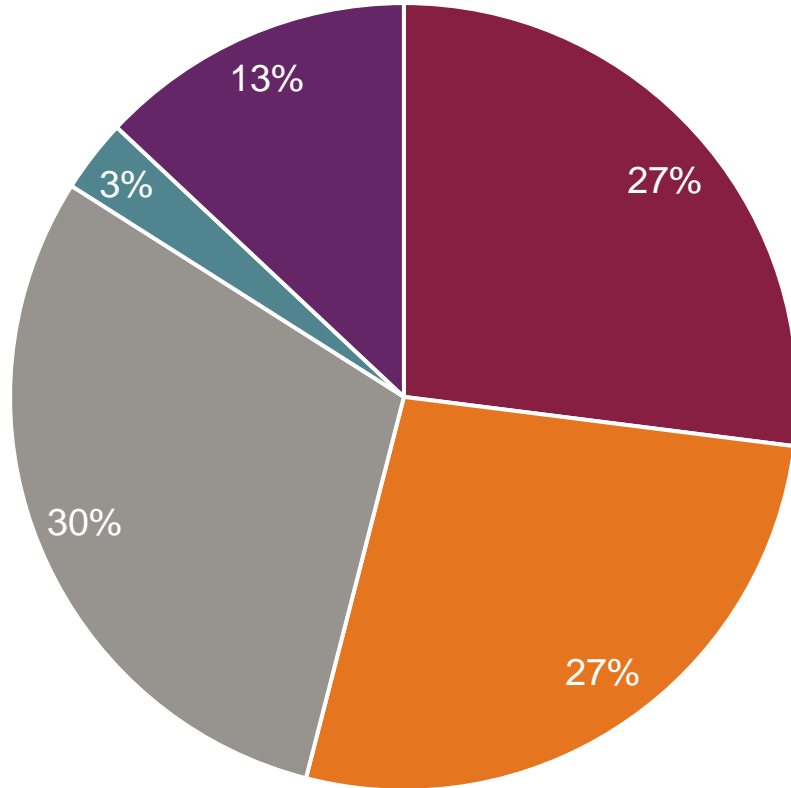
WORKPLANS



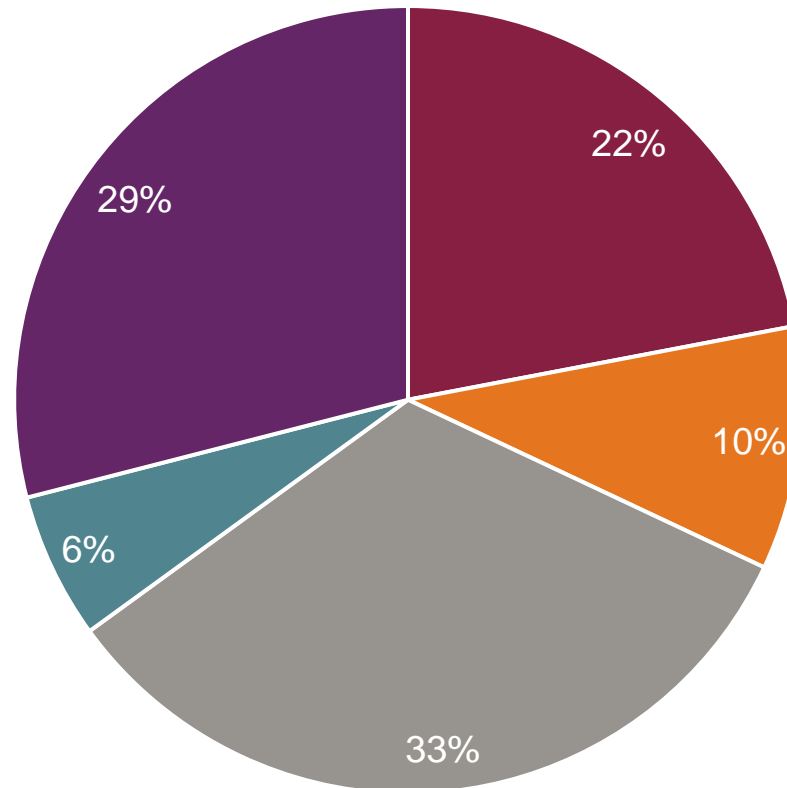
WORKPLANS THAT ADDRESS REQUIREMENTS

SPENDING COMPARISON

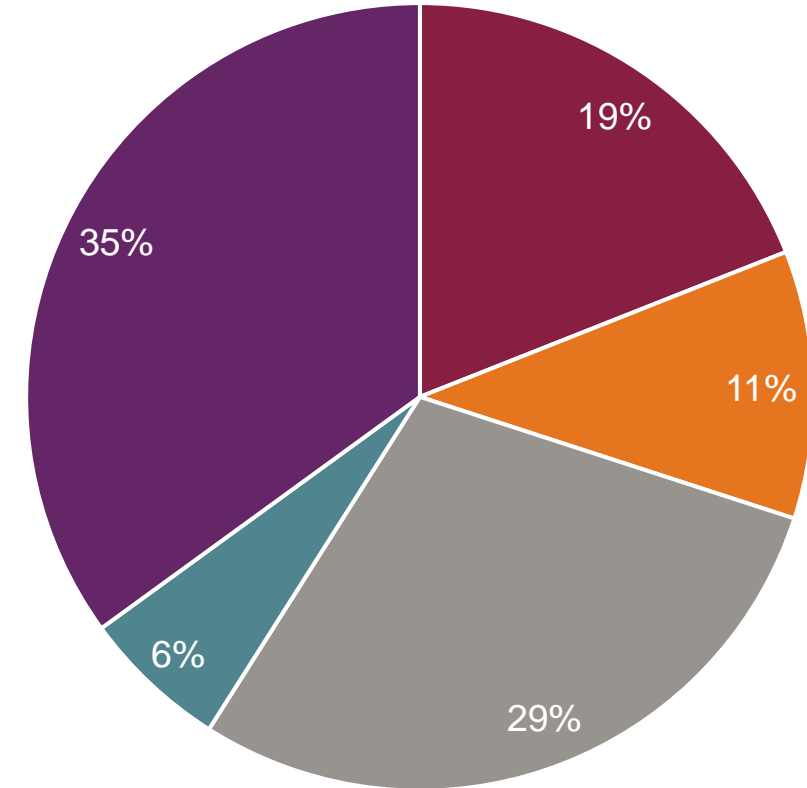
VT - 6YR AVG



Peers - 6YR AVG



AAU - 6YR AVG



■ Utility Systems ■ Envelope and Foundation ■ Building Systems ■ Code Compliance ■ Space Refresh

CLOSING THOUGHTS AND DISCUSSION



UPDATE ON **AGRICULTURAL FACILITIES**

ALAN L. GRANT, PH.D.

DEAN OF THE COLLEGE OF AGRICULTURE AND LIFE SCIENCES

April 9, 2024

NON-CAPITAL PROJECT PROGRESS - COMPLETED



Shenandoah Valley AREC
Security Camera Installation



PFRC BIQL Autoclave



Hampton Roads AREC Signage

NON-CAPITAL PROJECT PROGRESS - COMPLETED

MIDDLEBURG
AREC



Stable Repairs



Annex Freeze Damage Repairs



HVAC Replacement



Interior Repairs



Plumbing Repairs

Employee House 815

NON-CAPITAL PROJECT PROGRESS - COMPLETED

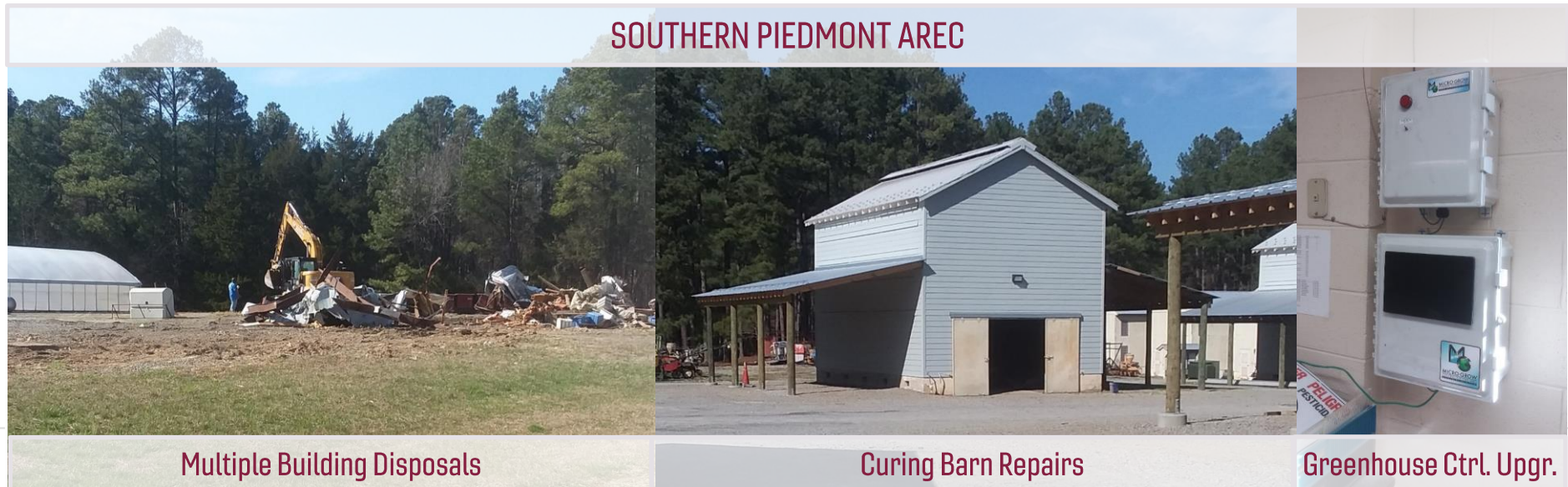


ALSON H. SMITH JR. AREC

Cold Storage Room Repairs

Building Chiller Replacement

Lab Equipment Installation



SOUTHERN PIEDMONT AREC

Multiple Building Disposals

Curing Barn Repairs

Greenhouse Ctrl. Upgr.

NON-CAPITAL PROJECT PROGRESS

Key Projects Under Construction

- Hahn Horticulture Garden Marquee
- Middleburg AREC Clinic HVAC Replacement (MR)
- Tidewater AREC Main Office and Lab Roof Replacement (MR)
- Southern Piedmont AREC New Storage Building
- Reynolds Homestead Forest Resources Research Center Signage



Hahn Horticulture Garden Marquee

NON-CAPITAL PROJECT PROGRESS



SVAREC Hay Storage Hoop Barn - Example



HRAREC Greenhouse Interior Rendering

Key Projects in Design or Bid phase:

- Southern Piedmont Main Building LED lighting conversion
- Etgen Large Animal Learning Center Arena Upgrades
- Southern Piedmont AREC Modular Housing
- Southern Piedmont AREC Irrigation Pond Repairs
- Shenandoah Valley AREC Mass Timber Facility Planning Study
- Shenandoah Valley AREC Hay Storage Hoop Barn
- Tidewater AREC Security System Installation
- Hampton Roads Greenhouse Complex Expansion
 - USDA-funded Greenhouse
 - ODU Orchid Collection Greenhouse
 - Federal Excess Greenhouse

NON-CAPITAL PROJECT PROGRESS

Requested projects awaiting funding approval

- Moore Farm Barn Repairs (MR)
- Moore Farm Shed Repairs (MR)
- Judging Pavilion Repairs (MR)
- Tidewater AREC Interior Repairs (MR)
- Washington Street Greenhouse 9 Cooling Pad System repairs (MR)
- Alson H. Smith Jr. AREC Controlled Environment Facility
- Eastern Virginia AREC Drying Room Renovation



Moore Farm Barn



Judging Pavilion

CAPITAL PROJECT PROGRESS - CONSTRUCTION

LIVESTOCK AND POULTRY RESEARCH FACILITIES, Phase 1, Bid Package Updates:

- BP 1 Swine: Complete and in use.
- BP 2 Beef Nutrition and Kentland Hay Shed: Complete and in use.
- BP 3 Turkey and Broiler Grow-out Facilities: Complete.
- BP 4 Equine and Equipment Storage: Complete and in use.
- BP 5 Three Hay Sheds and Final Demolition: Under Construction at Smithfield site. Four buildings demolished



Smithfield Hay Shed Site



Smithfield Hay Shed Site

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	FUND SOURCE	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
CAPITAL PROJECTS						
Updates through March 31, 2024						
PROJECTS IN CONSTRUCTION						
Improve Kentland Facilities, Phase II	Applied Reproduction Facility (APR): 4,510 SF barn at Vet-Med for palpation and breeding instruction. Bovine Extension, Teaching and Research (BETR) Facility: 3,500 SF classroom building and 5,100 SF demonstration arena at livestock center on Plantation Road. Metabolic Research Laboratory (MRL): 11,330 SF animal laboratory at the Dairy Center at Kentland Farm.	\$12,463,000	Capital Outlay	Spectrum Snyder, CPPI	Fall 2020	All projects have reached substantial completion and have certificate of occupancy. Minor corrective work at the Metabolic Research Lab is ongoing.
Livestock and Poultry Research Facilities, Phase I	Pkg 1: New Swine Center at Kentland Farm. Pkg 2: New Beef Nutrition Facility & Hay Shed at Kentland Farm Pkg 3: New Broiler & Turkey Grow-out facilities at the Turkey Research Center (Glade Rd.) Pkg 4: New Equitation Barn & Equipment Storage Building at Livestock Center (Plantation Rd.) Pkg 5: 3 New Hay Sheds at Smithfield Horse Center, Fields west of US 460, and Heth Farm plus demolition of existing swine center	\$31,074,000	Capital Outlay	Spectrum Pkg 1: SIMCON Pkg 2: CPPI Pkg 3: CPPI Pkg 4: Clark Nexsen Pkg 5: Price Buildings	Packages 1-4: Fall 2023 Packages 5: Spring 2026	Packages 1 through 4 are complete, with some remaining owner-provided work to finish in Package 3. Package 5 is underway with the demolition of several buildings at Smithfield Horse Center. Priority 1 Equipment buy-out is complete; Priority 2 equipment buy-out is in progress.
PROJECTS IN DESIGN						
(none)						
PROJECT INITIATION / PLANNING STAGE						
2024-2030 6-Year Capital Outlay Plan	Capital budget requests for five projects: CNRE Center Woods Improvements, System-Wide AREC Improvements Phase I, Glade Road Relocation, Human and Agricultural Biosciences Building II, and Livestock and Poultry Research Facilities, Phase II	\$213,000,000	Capital Outlay	TBD TBD	TBD	Following approval of the 2024-2030 Capital Outlay Plan by the Board of Visitors, program and cost validation is underway for selected projects. Two submitted for state funding consideration summer 2023. Others held for future requests.
System-Wide AREC Improvements, Phase I	Renew and expand aging and deteriorating AREC facilities. Phase 1 project to address entirety of capital renewal needs at Eastern Shore and Southern Piedmont ARECs.	\$25,200,000	Capital Outlay	TBD TBD	TBD	Phase 1 capital budget request submitted June 2023.
Replace Plant and Animal Facilities at Glade Road	Relocate existing facilities away from the Glade Road Research Facility.	\$41,000,000	Capital Outlay	TBD TBD	TBD	Reviewing program and budget with CPIF for future budget submission
Plant & Animal Environmental Sciences Research Facility (HABB-II)	Construct new research lab facility for the School of Plant and Environmental Sciences to co-locate numerous research teams in one location with modernized facilities to focus on studying climate change.	\$91,000,000	Capital Outlay	EYP TBD	TBD	Re-programming effort completed with a \$53.5 M construction target. Draft Feasibility report is under review.
NON-CAPITAL PROJECTS						
Updates through March 31, 2024						
PROJECTS COMPLETED SINCE LAST REPORT						
Minor Projects (<\$25,000 each): Middleburg AREC Freeze Damage Repairs So. Piedmont AREC Greenhouse Controls Upgrade Shenandoah Valley AREC Security Camera Installation AH Smith Jr. AREC New Lab Equipment Connections AH Smith Jr. AREC Cold Room Repairs Middleburg AREC House 815 Interior Repairs Middleburg AREC House 815 HVAC Replacement Middleburg AREC House 816 Plumbing Repairs Middleburg AREC House 816 HVAC Replacement	Repairs in 812 Annex due to frozen pipes bursting during 2022 holiday break. Installation of modernized controls for Greenhouse. Addition of security cameras to monitor historic area. Power connections for new lab equipment. Replace aging refrigerations equipment and controls for two cold storage rooms. Patch and paint interior wall and ceiling damage. Replace aging heat pump. Repairs to various components of plumbing systems throughout the house. Replace aging heat pump.	\$169,000	CALS / VAES	- -	Various	Complete
Beef Barn Repairs	Exterior and interior demolition followed by the installation of new roofing, hay loft flooring, doors, windows and lighting. This work was originally included in LPRF Phase 1, but removed due to scope concerns.	\$1,064,000	Maintenance Reserve	HDH, FEA Thor, SRC, Lilly	Fall 2023	Work is complete.

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	FUND SOURCE	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
Prices Fork Quarantine Lab Autoclave installation	Installation of new 3-phase electric service and new autoclave for more reliable sterilization process.	\$165,000	CALS	5 Design Kessler	Fall 2023	Work is complete.
Alson H. Smith Jr. AREC Chilled Water System repairs	Existing chillers are leaking and utilize a refrigerant that is no longer readily available. System condition is deteriorating and in need of major repair and replacement.	\$438,000	Maintenance Reserve	- Blauch Brothers	Fall 2023	Work is complete.
Middleburg AREC Stable exterior repairs	Existing roof and windows are leaking. Several stalls are unusable due to leaks. Several windows are rotten.	\$314,000	Maintenance Reserve	5 Design Hammerhead	Spring 2024	Work is substantially complete
Southern Piedmont AREC - Curing Building Repairs	Repair/replace siding and five deteriorated lean-to equipment storage sheds attached to four tobacco curing barns (0893A, 0893B, 0893C, 0893D)	\$482,000	Maintenance Reserve	Thompson & Litton Stoker Construction	March 2024	Construction is complete.
Kentland Dairy Center Water Hammer Repair	Water hammer problem has developed in well-supplied non-potable water system at the Dairy Center. Initial troubleshooting could not resolve the problem so a consultant is being engaged to provide further evaluation and design the corrective measures.	\$16,000	CALS / CPIF	LPA Atlantic Constructors	January 2024	Work is complete.
Hahn Garden Pavilion LED Lighting Retrofit	Convert existing lighting to LED.	\$11,000	Energy Action Plan	- US Energy Management	March 2024	Project is complete.

PROJECTS IN CONSTRUCTION

<p><u>Minor Projects (<\$25,000 each):</u> Reynolds Homestead FRRC Exterior Repairs Shenandoah Valley AREC Working Pens Middleburg AREC Laundry Hookup Hampton Roads AREC Water Heater Installation</p>	Repair deteriorating eaves and trim on main AREC building. Installation of new working pens and open shed. Washer and dryer connections for one building. Add supplemental water heater to meet usage demands.	\$34,000	CALS / VAES	- Multiple	Ongoing	In Progress
AREC Exterior Signage Upgrades	Installation of 2 new exterior signs at each AREC with refreshed design to match current branding.	\$81,000	CALS / VAES	- Westview, Gropen	Varies	Signage installation complete at Tidewater, Southwest Virginia, Alson H. Smith Jr., Eastern Virginia, Middleburg, Southern Piedmont, Shenandoah Valley, and Eastern Shore ARECs. 4 of 5 new signs have been installed at Hampton Roads. Final Design approved for Reynolds Homestead and contracting is underway.
Middleburg AREC Clinic/Admin Building HVAC repairs	Two existing heat pump systems have failed during critical and ongoing research projects.	\$164,000	Maintenance Reserve	5 Design Stoker Construction	Fall 2024	Submittal review in progress. Construction schedule is being developed. Equipment lead time will dictate final completion.
Tidewater AREC Main Office and Lab Roof Replacement	Existing roof is leaking causing damage to main lobby interior walls and classroom area.	\$122,000	Maintenance Reserve	HDH SRC Construction	Spring 2024	Construction is underway.
Tidewater AREC - Water system repair	Water line from well to main office complex is failing in multiple locations and requires frequent repairs, creating water quality concerns. Project is to connect to public water system with 2-inch water line, add backflow preventer, and re-connect non-potable water line to well for irrigation purposes.	\$94,000	Maintenance Reserve / CALS	- Lewis Construction	Spring 2024	City water line is complete to new meter. New water line from meter to building installed. Backflow Preventer and new non-potable irrigation line to be installed spring 2024.
Employee House 318 Repairs	Misc. interior repairs needed to 5 bedroom house on Southgate Drive to refurbish for future occupancy.	\$26,000	CALS	- Various	Spring 2024	Work is in progress
NI&S Communication antennae installation and power connection	New antennae to be installed at the Beef Barn and HABB1 for enhanced coverage along Stroubles Creek research bed.	\$21,000	Division of IT	- Shively	Spring 2024	Work is complete at HABB1. Work is underway at the Beef Barn.

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	FUND SOURCE	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
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PROJECTS IN DESIGN / PERMITTING

<p><u>Minor Projects (<\$25,000) each:</u> Tidewater AREC Peanut Storage Shed Tidewater AREC RTK Tower Installation Southern Piedmont Lab Freezer Generator Installation Eastern Shore AREC Fume Hood Replacement Hampton Roads AREC Fume Hood Replacement Southern Piedmont AREC Fume Hood Replacement Southern Piedmont AREC Storage Building Tidewater AREC Security System Installation</p>	<p>960 square foot prefabricated structure for field storage of harvested peanuts. Power and data connections for new GPS and Wi-Fi tower. Add backup power generator to serve circuits for critical lab freezers. Replace an aging fume hood in Soils Wet Lab. Replace an aging fume hood in Horticulture Lab. Replace an aging fume hood in Lab 104. Purchase and install a new 20'x50' storage shed. Install security cameras to monitor parking areas.</p>	\$135,000	CALs / VAES	-	Various	In Progress
				Multiple		
Heth Farm Shed and Silo Demolition	Demolish two structures that are currently unsafe and operationally unnecessary	TBD	CALs	-	TBD	Lead and asbestos study complete. Obtaining quotes for demolition. Permit approved.
				TBD		
Southern Piedmont AREC Irrigation Pond Dam Repairs	Discharge pipe through existing embankment has failed due to corrosion of bottom of the barrel. Pipe needs to be replaced and dam reconstructed in between growing seasons.	TBD	Maintenance Reserve	H2R	TBD	Dam is stable and showing no signs of seepage around pipe. Temporary measures are in place, approved by Va. Dept. of Conservation and Recreation (DCR) Dam Safety Engineer. Weekly inspections being conducted and reports filed with DCR via VT Site and Infrastructure Development. 2-phase design documents are in progress.
				TBD		
Judging Pavilion Repairs	Exterior and interior demolition followed by installation of new flooring, doors, windows, HVAC system, lighting, a covered walkway and exterior paint. This work was originally included in LPRF Phase 1, but removed due to scope concerns.	\$362,000	Maintenance Reserve	TBD	TBD	Funding confirmed. Final scope development underway.
				TBD		
Campbell Arena Repairs	New enclosure of the existing open-air steel structure constructed of metal panel siding over steel girts and posts. This work was originally included in LPRF Phase 1, but removed due to scope concerns. Existing equitation barn to be repurposed for small animal research and extension activities.	\$93,000	Maintenance Reserve, CALs	Hughes	TBD	A/E Proposal under review.
				TBD		
Eastern Shore AREC Lab 08B Renovation	Upfit of existing space to accommodate new research lab.	\$100,000	CALs	TBD	TBD	Project scope is being reassessed to better align with budget.
				TBD		
Etgen Learning Center Animal Arena Upgrades	Modifications to the Etgen Arena to provide pens and short-term housing for heifers. Upgrades include new calf pens, bedded pack pens, sidewall curtains, and power upgrades.	TBD	CALs	LPA / Prosim	TBD	Design is nearly complete.
				-		

PROJECT INITIATION / PLANNING STAGE

Compost Facility (to support main campus & surrounding farms)	CALs is experiencing significant and growing land pressure to meet nutrient management plan requirements, which would be greatly eased by the proposed compost facility. This initiative also has an extremely high level of student support as well as potential partnerships with Dining Services, Athletics and Facilities. Project is included in 228-2 Capital Budget Request, but is a high priority for separate, earlier funding, if possible, due to regulatory risk exposure from limited manure storage during winter months.	\$1,823,000	TBD	Coker Composting & Consulting, Reduction in Motion	TBD	Zero Waste consultant team has submitted evaluation report. CALs, DCA, CPIF evaluating next steps.
				TBD		
Turkey Farm Processing Building Repair	Interior Demolition followed by the installation of new cold-formed steel stud interior partitions, new doors and a window, fiberglass reinforced plastic paneling and epoxy painted floors. This work was originally included in LPRF Phase 1, but removed due to scope concerns.	\$140,000	Maintenance Reserve	TBD	TBD	Scope and budget development.
				TBD		
Moore Farm Barn 0501 Repairs	This highly visible and prominent barn is for many purposes such as lambing of sheep, loafing facility, hay bale storage, emergency storage for weather-affected crops, and equipment and parts storage. The condition of the roof and siding is poor, failing to provide the necessary weather protection. Without mitigation soon, the condition will deteriorate to the point of loss.	TBD	Maintenance Reserve	TBD	TBD	Scope and budget development.
				TBD		

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	FUND SOURCE	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
Moore Farm Shed 0508 Repairs	This hay shed was built in the 1950's and received heavy use for that purpose. Over the years its condition has continued to worsen and recent wind and snow storms have accelerated the deterioration. In order to execute research projects utilizing recently renovated fields, the Beef Cattle unit now needs to utilize this shed as a working facility for cattle. This would involve pouring a concrete floor and moving in cattle working equipment. However, the structural condition of this facility is poor and should be addressed prior to additional use. It may be more cost effective to rebuild than to repair this structure.	TBD	Maintenance Reserve	TBD TBD	TBD	Scope and budget development.
Alson H. Smith AREC - Repair paving and parking	Existing asphalt parking lot and drives are deteriorating and in need of repaving.	\$56,000	CALS / VAES	TBD TBD	TBD	Scope and budget development. Construction funds requested for FY 2024.
Tidewater AREC - Repair paving and parking	Existing asphalt parking lot and drives are deteriorating and in need of repaving.	\$150,000	CALS / VAES	TBD TBD	TBD	Scope and budget development. Construction funds requested for FY 2024.
Southern Piedmont AREC Modular Housing	Addition of a new 4-bedroom modular employee housing unit at Southern Piedmont AREC.	TBD	CALS / VAES	TBD TBD	TBD	Scope and budget development.
Middleburg AREC - Exterior Repairs	Siding on several buildings is in need of repair/replacement due to advanced age: Annex (0812), Frame Beef Barn (0807), Milking Barn and Milk House (0809), Loafing Barn (0810), Clinic/Admin Building (0823), Stable (0824). 8 run-in sheds (0799) are deteriorating and in need of repair or replacement. Corn House and Machinery Shed (0803) is in need of structural repairs. Basement of Annex (0812) floods and needs drainage corrections.	\$158,000	Maintenance Reserve	TBD TBD	TBD	Scope and budget development.
Shenandoah Valley AREC - Repair/Replace Sheep Barn	Sheep Barn (0854) has rotten posts at ground level and leaking roof. The building should be evaluated for repair or replacement.	\$76,000	Maintenance Reserve	TBD TBD	TBD	Scope and budget development.
Shenandoah Valley AREC - Mass Timber Multi-Purpose Building	Construct a new 4,800 gross square feet multi-purpose facility near the historic McCormick Farm site to serve as an educational facility (seating up to 160 people) and self-service visitor center with restrooms. When not in use for events the space could be used for large equipment storage, workshop, or short-term animal holding areas. The facility is envisioned to be built using mass timber construction method and will be case study for development of similar projects.	TBD	CALS / VAES	AECOM TBD	TBD	Architect's proposal for planning effort is under review.
Smithfield Equine Complex	Develop new facilities for Equine Complex on Plantation Road including covering outdoor arena, add bleachers, restrooms, announcer stand, fencing, quarantine facility.	TBD	Private	TBD TBD	TBD	Scope and budget development.
Southern Piedmont Main Building LED Conversion	Lighting system is failing in main building and is in need of replacement.	TBD	CALS / VAES	- US Energy Management	TBD	Funding is confirmed, but final scope, cost, and project management method is still to be determined
Greenhouse 9 Cooling System Repairs	Repair or replacement needed for cooling pad system in 4 greenhouse rooms due to failing infrastructure.	\$36,000	Maintenance Reserve	- Puckett Greenhouses	TBD	Funding has been requested.

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED TOTAL PROJECT COST	FUND SOURCE	PROJECT TEAMS	CONTRACT COMPLETION DATE	PROJECT STATUS
Smithfield Equine Classroom Renovations, Phase 2	Completion of building envelope repairs, restroom repairs, accessibility improvements.	\$110,000	Maintenance Reserve, CALS	TBD	TBD	Scope and budget development.



UPDATE FROM THE VICE PRESIDENT OF CAMPUS PLANNING, INFRASTRUCTURE, AND FACILITIES

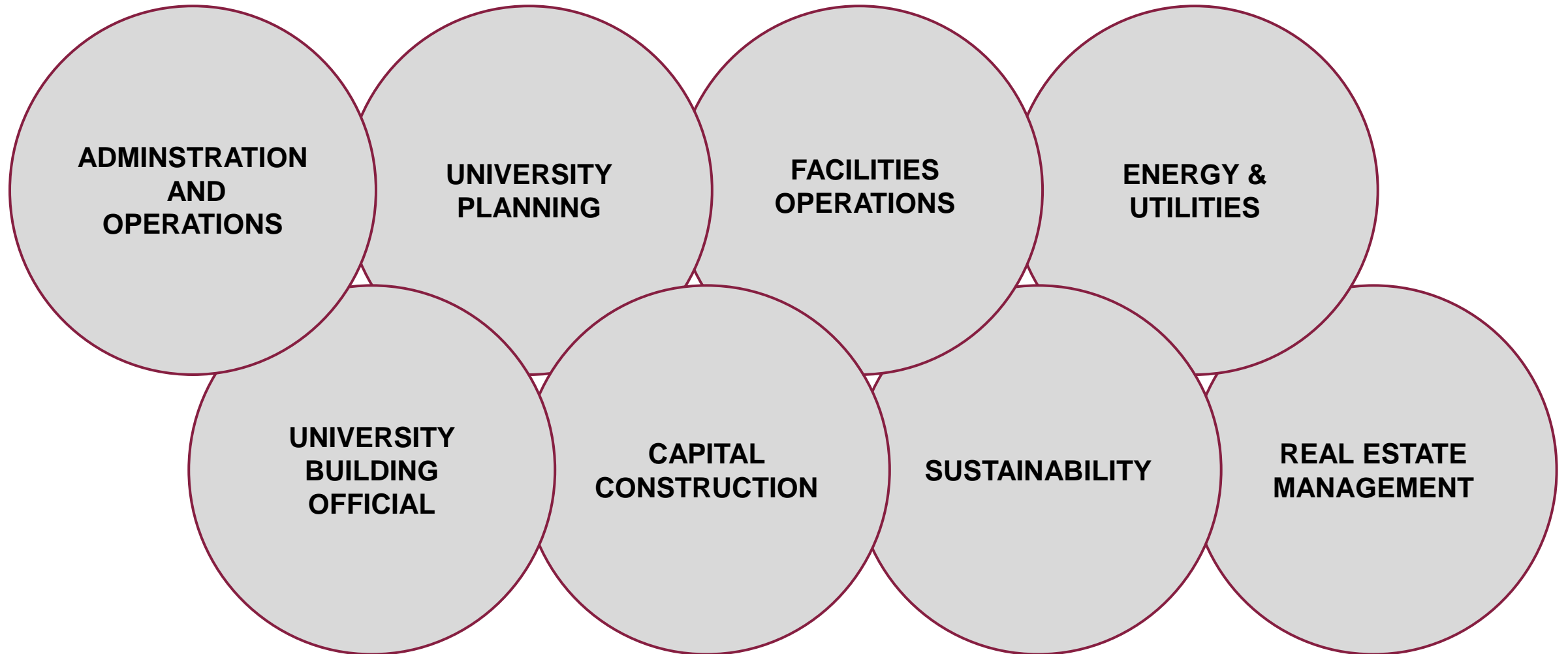
PREPARED FOR THE BUILDINGS AND GROUNDS COMMITTEE

Bob Broyden, Interim Vice President for Campus Planning, Infrastructure, and Facilities

April 9, 2024



DIVISION OF **CAMPUS PLANNING, INFRASTRUCTURE, & FACILITIES**



PREPARING FOR TRANSITION

