

Campus Development Committee

Monday, December 16, 2024
Holladay Hall, Conference Room 18
1:30 PM – 3:00 PM

Attendance and Distribution

Committee Members Present: Warwick Arden; Charles Maimone; Alyson Wilson

Subcommittee representatives present: Alicia Knight; Allen Boyette; Barbara Moses; ~~Bill Davis~~; Cameron Smith; Dana Harris; -Doug Morton; Lisa Johnson; ~~Patrick Deaton~~; Sumayya Jones-Humienny

Guests: Greg Sparks

Approval of the Minutes

The minutes of the November 25, 2024, meeting were approved and have been posted.

Approval of the Consent Agenda (N/A)

Campus Planning Subcommittee Information Items

1. Delegated Authority Determinations: (N/A)

2. Action Items

- a. OIT New AI Data Center Study, Space Request #24-24: G. Sparks presented the attached “2024-12-16 CDC OIT Data Centers 2024v2” [pdf slide] presentation. Discussion included the following:
 - i. Demand continues to grow, primarily for research by PIs investigating more complex questions, from script submissions through NC State’s high-performing computing (HPC) portal.
 - ii. The GPU demand is in addition to the CPU demand. Typically, AI needs for campus operations would be housed on campus, but the university is running out of power.
 - iii. Three independent efforts include:
 1. A study that is underway to reinstate Data Center II in Administrative Building III as a short-term solution, with 6-12 racks that need to be operational in 24-30 months. OIT is funding this study.
 2. OIT’s request for approval is to begin in January 2025 a \$150,000 study for meeting the University’s needs over the next decade, by providing 60 racks on site that could be operational in 24-36 months. This requires looking at potential locations for a facility to be built in phases.
 3. An aspirational long-term plan for a top-tier HPC facility (most likely in RTP) that would be operational in 8-10 years and would supplement individual campus capabilities.
 4. The study will be funded jointly by University and OIT resources.
 - iv. *The Committee discussed two concepts, one that provides direct HPC access to all, and the other that provides a centrally-run portal through which to submit requests. The AVC for Research Computing would administrate the latter.*
 - v. *The Committee gave the following directions:*
 1. *Provide life-cycle cost analyses for cloud solutions compared to the realistic total cost of ownership for on-site facilities (including all infrastructure first-cost and ongoing maintenance and utility costs), plus a combination of both as a potential long-term solution. The concern is the large, continuous investment required for on-site facilities that may become obsolete quickly versus cloud facilities that continuously upgrade to stay competitive in the market.*
 2. *OIT should continue working to clearly define and document campus demand for AI infrastructure. This demand should be done with enough granularity to distinguish "need" versus "want" and to distinguish the varying requirements for AI methodological developers and AI applications users. This effort must be within NC State’s context for locations and costs.*

3. *Benchmarking should refine the peer list to more similar institutions, such as Virginia Tech.*
 4. *The governance structure should be determined for requests, like the one by the College of Sciences, to have their own stand-alone HPC facilities.*
 5. *The two biggest AI users noted are the College of Engineering and College of Agriculture and Life Sciences, but their needs should not box out others' needs.*
 6. *Include Alyson Wilson on the study committee.*
- vi. *The Committee deferred deciding on whether to proceed with the study until they discussed it further. [At their January 27, 2025, meeting, the Committee gave the study approval to proceed with the understanding OIT would fund it.]*

3. Information Items

- a. Holladay Hall Neighborhood Space Requests Update (Info. Item 21.08): L. Johnson presented the attached "2024-12-16 CDC Holladay Hall Neighborhood Space" [pdf slide] presentation. Discussion included the following:
 - i. The Administrative Space Analysis recommendations for space savings, due this month for review by C. Maimone, will require change management to implement. Scenarios for consolidating administrative units into less space will present opportunities to solve other space pressures elsewhere on campus.
 - ii. Furthermore, if the Holladay Hall Space Principles are formally extended to Winslow and Peele Halls, opportunities to move units/personnel to the Administrative Neighborhood could solve some outstanding space pressures in the Holladay Hall neighborhood for Advancement, Institutional Strategy and Analysis, Internal Audit, Admissions, and the Office of the Provost.
 - iii. To address the space consolidation recommendations, modifications will require financial investment.
 - iv. Backfill of Winslow's first floor public-facing space should be allocated to a unit that is physically present in the space during business hours. Preference will be given to those who need a front door presence.
 - v. A formal response to Advancement is needed for their request to backfill the space they vacated in Winslow.
 - vi. *The Committee stated the Holladay Hall Principles should extend to Peele and Winslow Halls. After review, they did not approve Advancement's request based on these Holladay Neighborhood Principles and will formalize their response to Advancement with a memo. The Committee directed the Campus Planning Subcommittee to review Advancement's essential needs for growth for all their currently allocated space per the forthcoming Administrative Space Analysis and hybrid work arrangement guidelines to determine alternative solutions. They asked to revisit the backfill options at a future Committee meeting for reassignment considerations.*
- b. Advanced Nuclear Research Reactor Facility Feasibility Study Update (#2023140002): D. Morton presented the attached "2024-12-16 CDC Advanced Nuclear Research Test Reactor Dec 9, 2024" [pdf slide] presentation. Discussion included the following:
 - i. The Advanced Reactor Steering Committee provided an update to the Chancellor and state legislators on December 11, 2024.
 - ii. The findings and recommendations include the recommended technology, preferred site, potential reactor designers, and anticipated cost.
 - iii. The final design will likely be a derivative of the Sodium Fast Reactor (SFR) technology to strengthen the Research and Test Reactor (RTR) sustainability with the goal of demonstrating affordable scalability. SFR technology has proven to produce 20 MW of clean energy and the focus will be on determining the benefits to the State of NC in its application for inherently safe and easier deployment that is compatible with a potential molten salt loop.
 - iv. The Steering Committee requested \$13M over the next two years for siting the SFR facility at Main Campus Drive and Trailwood Drive to be co-located with the MSL and RTR in the proposed research hub area.
 - v. If NC State does not pursue this initiative, then we will lose the ability to keep pace with nuclear engineering's evolution.
- c. 2024 Capital Development Plan Report (Info. Item 24.03): L. Johnson presented the attached "202412-16 Capital_Development_Plan_2024_Dec12_VER" [pdf slide] presentation. Discussion included the following:

i. Revisions to the final draft include:

1. All existing capital submissions remain on the list until the next call for needs, at which point they will need to be resubmitted by colleges and departments if they remain a priority.

Project Execution Subcommittee Information Items (N/A)

Other Business (N/A)

Next Meeting: Monday, January 27, 2025, from 1:30 pm to 3:00 pm

Meeting Adjourned: 3:00 PM

High Performance Computing Impacts on Data Center Capacity

Campus Development Committee

December 16, 2024

Greg Sparks
AVC, OIT-ComTech

2024 - A Year of Phenomenal Change



NEWSLETTERS SIGN IN NPR SHOP

NEWS CULTURE MUSIC PODCASTS & SHOWS SEARCH

TECHNOLOGY

Artificial intelligence's thirst for electricity

JULY 10, 2024 · 5:09 AM ET



Home · Energy & Environment · New Nuclear · Regulation & Safety · Nuclear Policies · Corporate

HOME / CORPORATE / FACEBOOK OWNER META SEEKS UP TO 4 GW NUCLEAR CAPACITY

Facebook owner Meta seeks up to 4 GW nuclear capacity

Wednesday, 4 December 2024



Network World All Things Networking

December 02, 2024

Data centers go nuclear for power-hungry AI workloads



Tuesday, December 3

HOME ISSUES TIP LINE ABOUT SUBSCRIBE

Home » Ethics » Restarting Three Mile Island — For Microsoft

ETHICS FINANCE OPINION

Restarting Three Mile Island — For Microsoft



By TERRY H. SCHWADRON — October 8, 2024 4 Mins Read

Almost 5 Years of Power and Cooling Capacity Consumed in Past Year

2025 Planning Assumptions:

150Kw per rack is “sufficient for research computing”

???Kw is “reasonable for future proofing”

Previous Planning Assumptions:

20Kw per rack is “a lot” (ie sufficient for research computing)

40Kw per rack is “plenty for long-term”



Why So Much Power Demand?



Our One Technical Slide



CPU

GPU

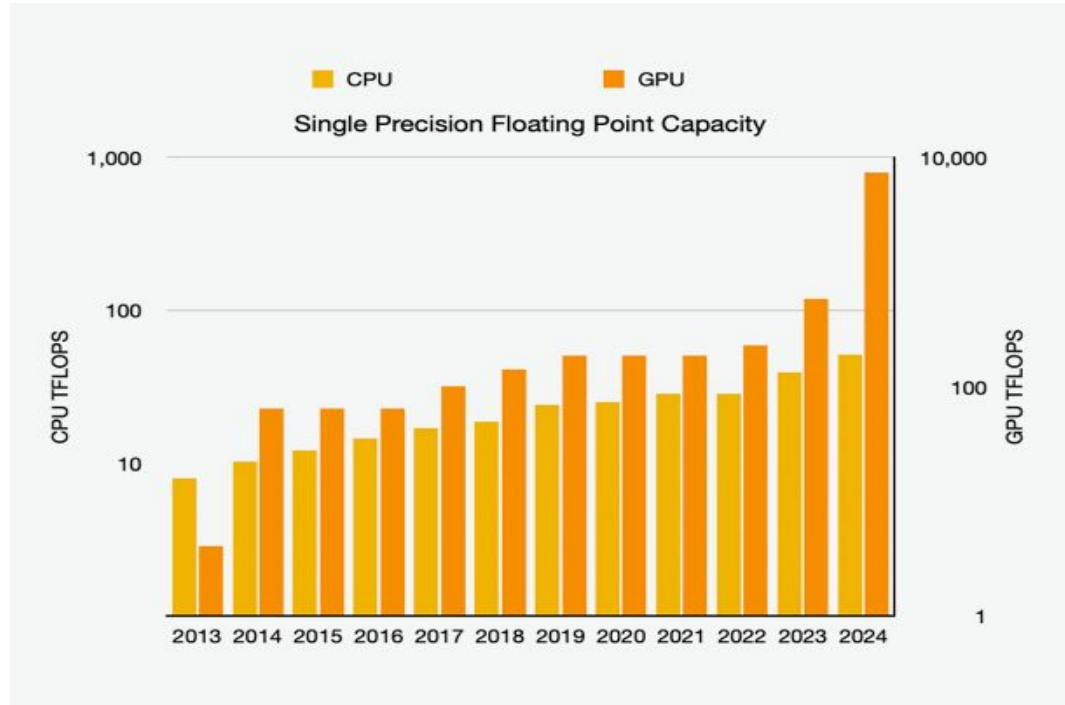
Serial Processing → Parallel Processing =
Hours/Days Minutes/Seconds

Similar power
used in way
less time

Key Concerns

- Without taking action now, NC State will be out of data center space for additional research computing capacity by the end of 2025
- Demand expected to continue growing
- NC State is way behind in research computing capabilities

NC State HPC Growth

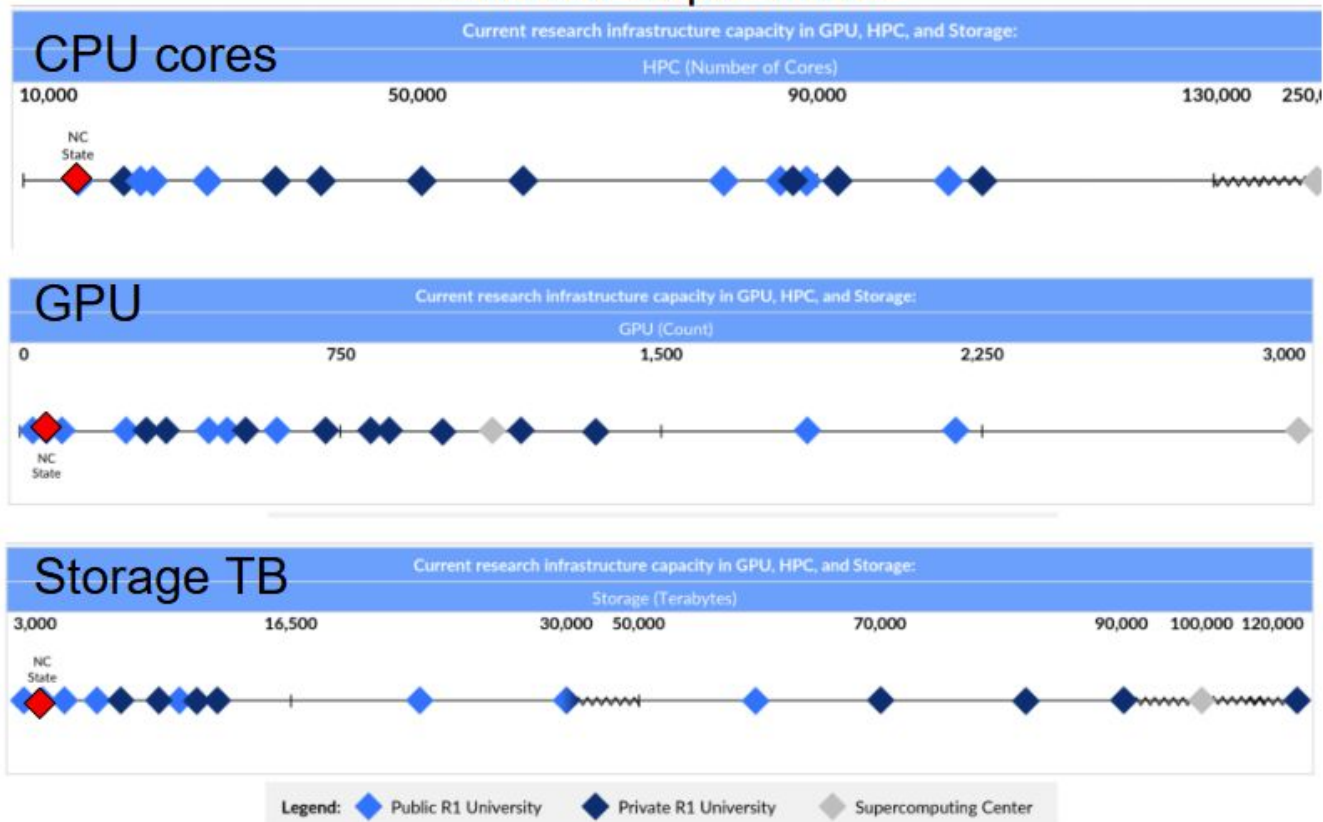


Johns Hopkins Peer List

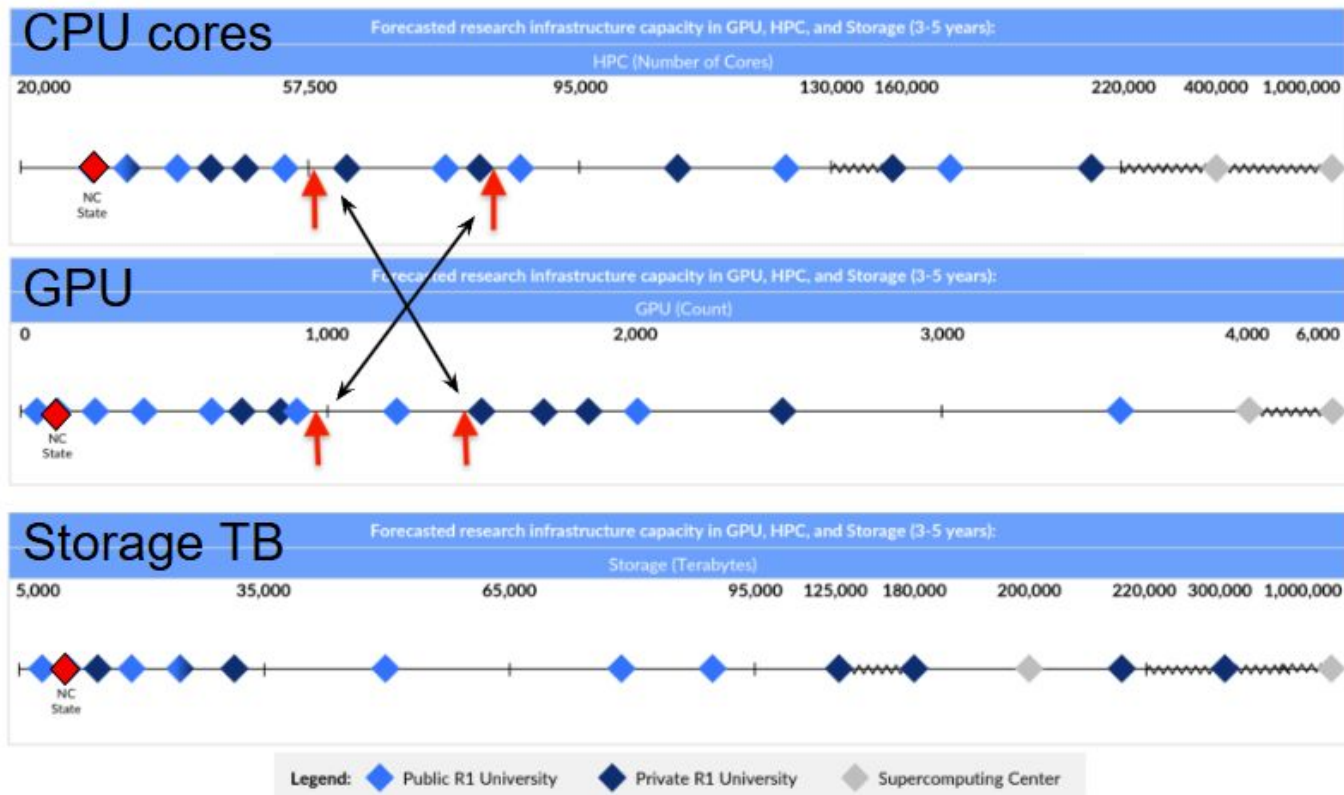
PEER LIST

Public R1 Peers	Private R1 Peers
University of Colorado (CU) Boulder	Brown University
★ Ga. Institute of Technology (GA Tech)	Columbia University
Indiana University (IU)	Duke University
North Carolina (NC) State University	Harvard University
University of CA., Los Angeles (UCLA)	Johns Hopkins University (JHU)
University of CA., San Diego (UCSD)	Mass. Institute of Technology (MIT)
★ University of Florida (UF)	Princeton University
★ University of Illinois UC	Stanford University
University of Minnesota (UMN)	University of Chicago (UChicago)
University of Texas Austin (UT)	University of Pennsylvania (Penn)
University of Pittsburgh (Pitt)	University of Southern CA. (USC)
University of Washington (UW)	
Supercomputing Centers	
Pittsburgh Supercomputing Center (PSC) - <i>affiliated with Pitt and Carnegie Mellon</i>	
San Diego Supercomputing Center (SDSC) - <i>affiliated with UCSD</i>	
Tex. Adv. Computing Center (TACC) - <i>affiliated with UT Austin</i>	

Johns Hopkins Study of Peer Institutions Current Capabilities



Johns Hopkins Study of Peer Institutions Projected Capability in 5-years



What's the Plan for Space?

#1 - Immediate relief* - Current study (results Feb 2025) to understand “low cost” interim solution in DC2 (6-12 racks)

*Buys 1-2 years of time

#2 - Meet our needs* over the next decade+ (60 racks)

*Needs to be operational in 24-36 months

#3 - Aspirational plan for the long-term (8-10 year completion) - Conversations taking place about **top-tier*** AI/research computing facility (likely in RTP)

*This supplements, not replaces, individual campus capabilities



Potential Solutions to Meet Our Needs

- Current Colocation Partnerships - Extremely limited growth
- Commercial Colocation - Long leadtimes (ie practically none readily available) and historically expensive
- Cloud - Appears to be significantly higher cost overall
- On-site Facility - Several years for new construction
- Containerized and Modular - Both require similar infrastructure as an on-site facility and only minimally reduce lead time for availability

Key Steps for On-Site Facility

- \$150k due diligence study optimistically kicking off in January to estimate cost and confirm whether on-site is our best option for the next decade+ solution
- Facility needs to be ready by 2028 (or sooner depending on interim solution)
- Identify potential campus locations
- Advanced planning money summer 2025

Planning Request Details

- 60 racks of research computing (over next 10 years)
- Bring commodity computing into same facility
- Power growth to 10MW+ in first decade
- Liquid cooling (requiring chilled water) needed day 1
- 10,000 sf of data center + 30,000-60,000 support space for first decade
- Design for phased growth to allow for technology changes
- Site plan allowing up to 20,000sf of data center + up to 80,000 support space
- Costs, phasing, best value starting options will be informed by study kicking off in January (Summer '25 completion)

Questions?

gwsparks@ncsu.edu

Holladay Hall Neighborhood Space Discussion

In June 2022, the University Space Committee approved the Holladay Hall Space Principles for space allocations in the building:

- The Chancellor's cabinet members should remain in Holladay Hall with their key support staff.
- Personnel who frequently work in person with the Chancellor take priority for remaining in Holladay Hall.
- Personnel who have a lesser need to work frequently in person with the Chancellor should relocate elsewhere.

Also noted in the minutes:

Chancellor Woodson needs direct access to the Provost and VC for Finance and Administration, and they in turn, need access to their leadership teams and support staff.

Advanced Nuclear Research and Test Reactor Feasibility Study

<https://www.ncsu.edu/clean-energy-study/>

- The 2022 CHIPS and Science Act authorized \$390 million to fund up to four U.S. universities to build advanced research reactors on their campus
- The NC State Legislature provided \$3 million in funding for NC State to conduct a feasibility study to assess the technical, financial, and operational aspects of establishing and operating an advanced research reactor

Sodium Fast Reactor (SFR) technology is emerging the likely recommendation

- The final design will likely be a derivative of the SFR technology to strengthen the Research and Test Reactor (RTR) sustainability:
Multi-purpose Advanced Sodium-cooled Mixed/Coupled Spectrum RTR
- Inherently safe
- Most mature Generation IV technology
- Would create a unique facility with large user base
- General Electric (GE) Vernova in Wilmington, NC has extensive experience with this type of reactor design, which creates an opportunity for not only DOE and/or state support, but also for industry and private funding opportunities (TerraPower, etc.)
- SFR technology is compatible with a potential molten salt loop

PRECINCT VISION

Building Improvements

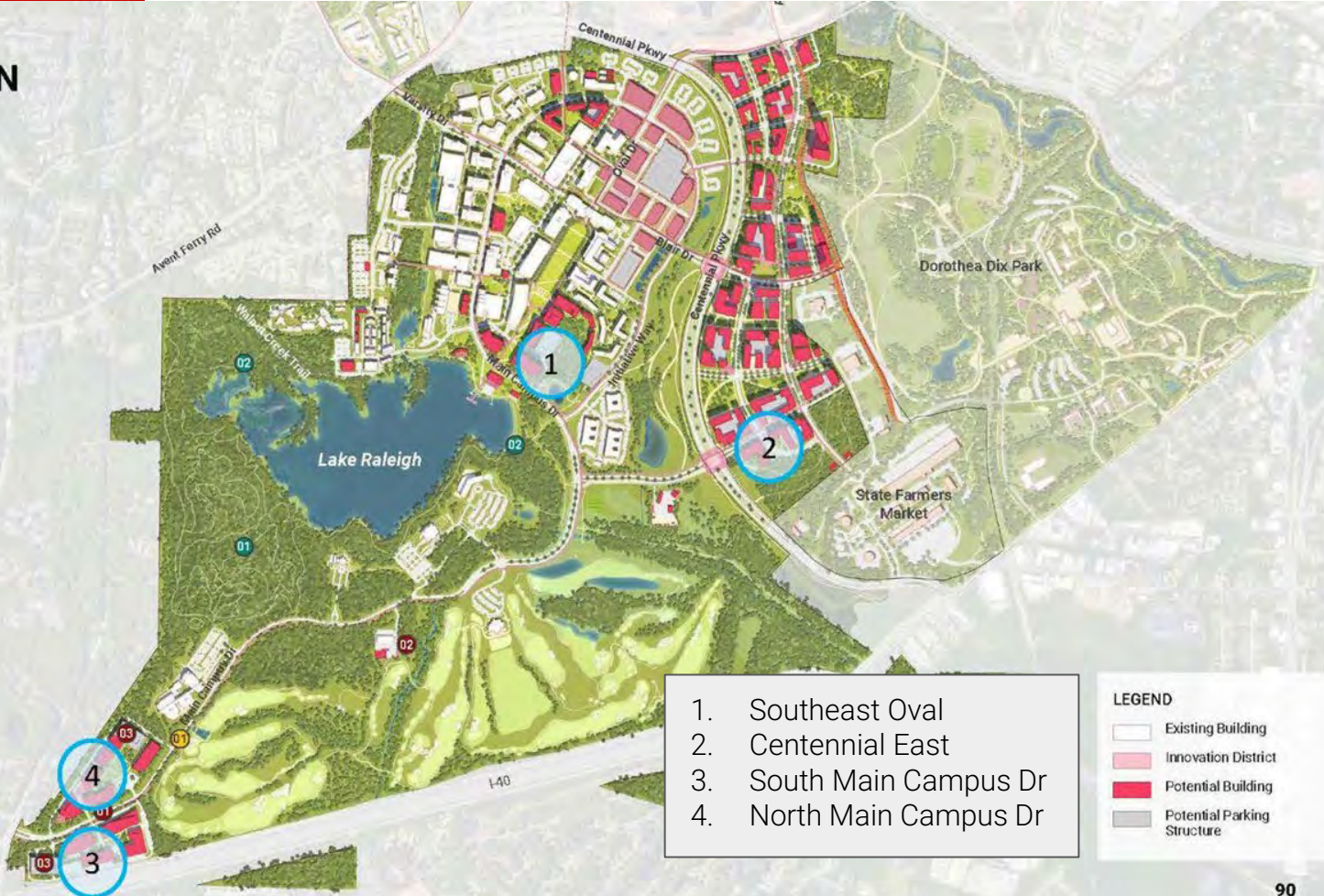
- 01 High-Bay Research Facilities
- 02 Research Support Facility
- 03 Parking Structure

Site Improvements

- 01 Lake Raleigh Woods Trail System
- 02 Lake Raleigh Loop Trail

Mobility Improvements

- 01 Main Campus Drive Conversion



1. Southeast Oval
2. Centennial East
3. South Main Campus Dr
4. North Main Campus Dr

LEGEND

	Existing Building
	Innovation District
	Potential Building
	Potential Parking Structure

2000-0628-0000-0000-0000-0000
1/11/2010



**PRELIMINARY INTERNAL DRAFT -
SHARED WITH NC STATE FOR
EARLY COMMENTS ONLY**

NOTES:
1. THIS PLOT PLAN CONFIGURATION IS BASED ON THE INITIAL CONSIDERATIONS AND WILL UNDERGO FURTHER REFINEMENT IN LATER STAGES OF THE PROJECT.



PLOT PLAN - MAIN CAMPUS DRIVE SOUTH

Reactor Building	18,900 sf
Hot Cell Complex	22,500 sf
Neutron Beam Hall	53,800 sf
Auxiliary Building	5,700 sf
Shipping + Receiving	3,500 sf
E-house	2,400 sf
Admin Building	27,000 sf
Security Building	360 sf
Guard House	360 sf
TOTAL PLOT AREA	134,520 sf 8.7 acres

- LEGEND:**
- BUILDING
 - PARKING LOT
 - ROADS
 - - - DOUBLE FENCE
 - - - - PLOT AREA
 - SIDEWALK
 - RAIL

**CONCEPTUAL LAYOUT
NOT FOR CONSTRUCTION**



NC STATE
UNIVERSITY



**CAPITAL DEVELOPMENT
PLAN REPORT**

2024

Introduction

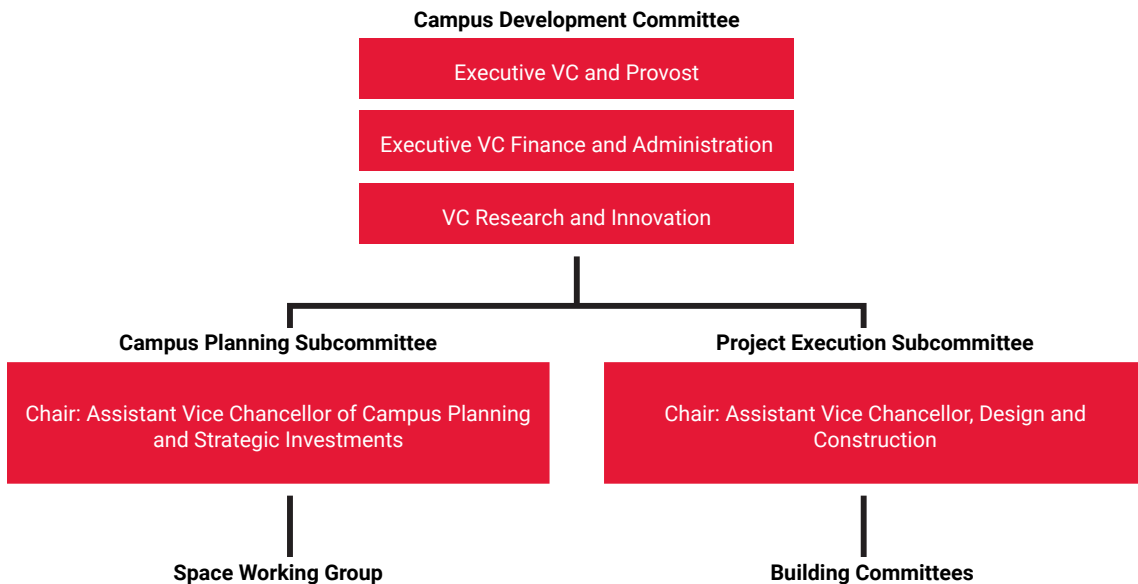
NC State University's 2024 Capital Development Plan is the university-wide roadmap of capital needs and priorities, including high-impact construction, renovation and infrastructure projects with budgets over \$4 million. This plan is the outcome of a new Campus Development Process through which the university can consider all capital needs collectively, allowing for the aggregation and prioritization of projects. First implemented in 2024, the process emerged from the university's 2023 *Physical Master Plan: Framing the Future* as a more effective, transparent and inclusive way to prioritize and implement university development projects. The Campus Development Process collects perspectives from a broad cross-section of stakeholders. It ensures that transformative projects are prioritized, input is inclusive, strategic criteria are used, and reporting on results is transparent.

Campus Development Process

The Campus Development Process is focused on new construction, renovation, and/or infrastructure projects with budgets of \$4 million or more that have a high impact, align closely with institutional priorities, university strategic goals, and the Physical Master Plan. The Campus Development Process enables all colleges, units or functions to present their top three capital needs for consideration by the [Campus Development Committee](#). These requests form the Capital Development Plan, as well as inform NC State's 2025-2027 Six-Year Capital Plan, which is submitted to the UNC System every two years.

Leadership

The Campus Development Process is led by the Campus Development Committee and its two subcommittees: the Campus Planning Subcommittee and the Project Execution Subcommittee.



- **Campus Development Committee** approves all capital projects and allocations of university space to meet the institution's overall priorities and needs.
- **Campus Planning Subcommittee** evaluates requests for space and capital needs, making recommendations to the Committee based on key drivers, value, financial impact, interdisciplinary synergies, space principles, the Physical Master Plan guiding principles and university strategic goals.
- **Project Execution Subcommittee** reviews and reports on the progress of capital projects through the design, construction, and closeout phases, providing periodic updates to the Committee and ensuring projects meet the Physical Master Plan guiding principles and expectations established during the project's planning phase.

About the Process

Each college and unit was invited to submit its top three prioritized capital needs regardless of funding status (funded, unfunded or partially funded) or funding source (appropriated or non-appropriated). After submitting written summaries of up to three prioritized need(s), colleges and units were invited to present their priorities to the Campus Planning Subcommittee, highlighting the needs, importance, impact and partnership potential.

The Campus Planning Subcommittee developed a process for evaluating and prioritizing needs based on factors such as urgency, impact, requirements, the unit or college's priority, and connection to the university's strategic goals. Top priority needs received additional analysis, including funding strategies to finance a capital project. The Campus Development Committee approved the top priorities.

Process Timeline





Financial Planning

A hallmark of the Campus Development Process is the aggregation of capital needs regardless of potential funding source. Typically, capital projects are either state-appropriated, which means they have public funding authorized by the state, or non-appropriated, which means they are funded through private sources or are self-liquidating. By evaluating all capital requests collectively, the university can prioritize requests for state appropriations, as well as its debt capacity. Priorities that emerge from the Campus Development Process are included in the university's 2025-2027 Six-Year Capital Plan, which is a biennial submission to the UNC System requesting authorization as well as state-appropriated funding (if needed).

Categories of the Six- Year Capital Plan	
Category	Description
State Capital Infrastructure Fund (SCIF) Major Repairs and Renovation Projects	Repair and replacement of major building systems and infrastructure not exceeding \$15 million
State Capital Infrastructure Fund (SCIF) Minor Repairs and Renovation Projects	Traditional repair and renovation projects less than \$4 million
Named and New Direct-Appropriated Capital Improvement Projects	New buildings and comprehensive renovations funded by state appropriations (requests to complete current authorized projects given priority over new capital projects)
Non-Appropriated Major Repairs and Renovation and New Capital Improvement Project	New construction, comprehensive renovations, and major repairs and renovation projects financed by the institution
Non-Appropriated Minor Repairs and Renovation Projects	Minor repair and renovation projects typically under \$4 million financed by the institution

2024 Submissions

A total of 38 capital needs requests were submitted from 19 academic colleges or university units.

Appropriated Funding Sources			
College or Unit	Submission	Description of Need	Update(s)
College of Agriculture and Life Sciences	Digital Agriculture and Automation Center	New facility for research and application of digital agriculture, automation, and artificial intelligence (AI) to agriculture. The next step for Plant Sciences Initiative-developed technology reaching the NC agriculture community.	
College of Agriculture and Life Sciences	CALS Varsity Research Building Renovation	Partial building renovation to relocate faculty and research from Gardner Hall, which has inadequate lab space and is proposed for future demolition. Consolidates the Department of Entomology and Plant Pathology.	
College of Agriculture and Life Sciences	Mountain Horticultural Crops Research and Extension Center	Renovation of aging lab, office and instructional facility supporting agriculture in western North Carolina.	Partial Funding Identified
College of Agriculture and Life Sciences	Metabolism & Small Ruminant Education Units Relocation	Relocates the education and research facility from Trenton Road, where the land lease expires in 2031, to Lake Wheeler Field Labs.	Partial Funding Identified
College of Education	Education Building Renovation	Renovates Poe Hall to provide a permanent home for the College of Education, housed in multiple temporary locations due to the building closure.	Funding Requested
College of Humanities and Social Sciences	Department of Psychology - Adequate Space	Provide adequate space for a large and growing academic department including faculty offices, research labs, a psychology education clinic and students.	Partial Funding Identified and Additional Funding Requested through 2025-2027 Six-Year Capital Plan
College of Natural Resources	Schenck Forest Multi-Purpose Building	New facility to enhance teaching, research, extension, wellness, recreation, and shared programs with NC Museum of Natural Sciences by providing restrooms, office and meeting space in Schenck Forest.	
College of Natural Resources	New Advanced Forest Product Manufacturing Building	Replace Hodges Wood Products Building with a new facility to address space shortages and growth needs across the college for instructional, research, office and student space, and includes pilot paper-making plant upgrades.	

College of Natural Resources	CNR Comprehensive Research and Teaching Lab Renovation	Comprehensively update teaching and research labs in Pulp & Paper Labs, Biltmore Hall, Jordan Hall, Jordan Addition, and Hodges Wood Products to address safety, security, recruitment, instruction, research and student experiences.	
College of Engineering	Engineering Expansion - Applied AI in Engineering and Computer Science	New Centennial Campus facility to support engineering student growth and research across engineering disciplines, particularly focused on applied AI.	2026 Funding Identified For Advanced Planning on 2025-2027 Six-Year Capital Plan
College of Engineering	North Carolina Facility for Advanced Biomanufacturing	A new facility to expand and enhance biopharmaceutical manufacturing education and training programs, bioprocess and analytical services, and bioprocess research.	
College of Sciences	Connect Toxicology to the Centennial Central Utility Plant	Connect the Toxicology Building to the central utility plant for thermal reliability and replace aging electrical infrastructure.	Funding Requested through 2025-2027 Six-Year Capital Plan
College of Veterinary Medicine	CVM Firestone Labs Renovation	Renovate wet and dry clinical lab space for collaborative research with shared equipment, resources and storage.	
College of Veterinary Medicine	New CVM Education Building	New facility to increase teaching, study, office, shared and support spaces.	
Division of Academic and Student Affairs	New Performing Arts Center	Create space for the new Department of Performing Arts and Technology, as well as NC State Arts programs that are currently in three separate campus locations.	
Division of Academic and Student Affairs	New Centennial Campus Student Services Building	Create space for student counseling, support services, recreation, student activities and more on Centennial Campus, which lacks services and to address a growing student population.	
Digital Education and Learning Applications	Permanent Home for DELTA Testing Services Center	Relocate the growing testing center to a more student-centered location on campus.	Funding Requested through 2025-2027 Six-Year Capital Plan
College of Design	Brooks/Kamphoefner Safety and Accessibility Project	Renovate existing facilities for accessibility, compliance with modern building code and accreditation requirements, and improved evening safety by enclosing unsecured balconies.	
College of Design	Brooks/Kamphoefner - Sustainability and Well-Being Project	Renovate the HVAC system and repair the building envelope for improved occupant comfort and energy savings.	Funding Requested through 2025-2027 Six-Year Capital Plan
College of Design	Transdisciplinary Design and Innovation Center	New space to support multi-college curricular collaboration to problem-solving through co-location of studios, classrooms, and research.	

Enrollment Management and Services	110 Classroom Maintenance and Renovation	Renovate and expand classroom facilities throughout campus to meet growing enrollment and pedagogical needs.	Funding Requested through 2025-2027 Six-Year Capital Plan
Facilities Division	Critical Campus Infrastructure - Repair and Expansion	Expansion of district energy to accommodate future campus growth, as well as significant repair projects to address critical reliability needs in numerous campus buildings.	Funding Requested through 2025-2027 Six-Year Capital Plan
Libraries	D.H. Hill Jr. Library Concourse	New addition and renovation to add 500 study seats, boost accessibility, improve the unsafe and inefficient loading dock, and address the increasing dining and library service needs associated with enrollment growth.	
Libraries	D.H. Hill Jr. Library East Wing Improvements	New addition and renovation to add a larger makerspace, experiential learning labs and additional study seats needed for enrollment growth.	
Libraries	D.H. Hill Jr. Library West Wing Improvements	Renovate two floors to provide a larger food service, multipurpose space and study space.	
Poole College of Management	PCOM New Building	New facility to address the college's outdated and lack of space in Nelson Hall.	Funding Requested through 2025-2027 Six-Year Capital Plan
Wilson College of Textiles	Textiles Complex HVAC Capacity and Lab Exhaust Issues	Increases HVAC system capacity to enable additional and more energy-efficient research.	
Wilson College of Textiles	Textiles Complex Stormwater System Improvement and Foundation/Paver Waterproofing	Repair that would stop recurrent building leaks stemming from an inadequate courtyard stormwater system.	Study Funding Identified
Wilson College of Textiles	Textiles Complex Chemistry Laboratories Renovation (Pod 1)	Renovate to provide open, flexible labs with shared support spaces, storage, and equipment for more effective collaboration and cross-disciplinary research.	

Non-Appropriated Funding Sources

College or Unit	Submission	Description of Need	Status
Athletics	Carter Finley Stadium East Side Renovation	New office building plus a renovation to add fan amenities, more concessions services and premium seating.	
Athletics	Basketball Practice Facility	New facility for men's and women's teams to relieve scheduling pressure of multiple sports in Reynolds Coliseum and to enhance training programs.	

Campus Enterprises	Dining Renovations Addressing Enrollment Growth and Support Hub Concept in Physical Master Plan	Upgrade and expand dining facilities to address current population and future growth needs, including new dining halls and refreshed retail locations.	
Campus Enterprises	Student Centers Renovations Addressing Enrollment Growth and Enhanced Functionality	Renovation to accommodate growing dining, study and meeting space needs in Talley Student Union and Witherspoon Student Center stemming from student population growth.	Study Complete for Talley Student Union
Division of Academic and Student Affairs	Cates West Redevelopment	Redevelop the residence hall area of campus at the end of Cates Avenue where new facilities would accommodate growth in student housing and dining facilities.	Partial Funding Identified Approved to Proceed with Advanced Planning
Environmental Health and Public Safety	Wolfline Bus Operations and Maintenance Facility	Acquisition and development of campus bus facility owned by the university, providing long-term stability to Wolfline operations that are currently on leased property.	Funding Identified Approved to Proceed
University Real Estate and Development	Partners 1 Lab Coworking Incubator Project	Create a modern lab incubator providing high-demand wet lab space and short-term temporary lab space when needed.	Funding Identified Approved to Proceed
University Real Estate and Development	Varsity Drive Streetscape Connectivity Project	Transform the stretch of Varsity Drive between Western Blvd. and Avent Ferry Road into a two-lane divided roadway, with cycle tracks and pedestrian walks per zoning mandate.	Funding Identified Approved to Proceed
University Real Estate and Development	South Main Campus Drive Multimodal Improvements	Redevelop a portion of Main Campus Drive between Achievement Drive and Trailwood Drive to address pedestrian and cycling needs per zoning mandate.	Funding Identified Approved to Proceed

2025-2027 Priorities

All submitted requests are important and remain part of the Campus Development Plan. The Campus Development Committee arrived at the following top priorities, which are included in the university's 2025-2027 Six-Year Capital Plan submitted to the UNC System.

-  **Space for the Department of Psychology**
Submitted by the College of Humanities and Social Sciences, the project provides adequate space for the large, growing department currently housed in multiple, temporary locations on campus. As part of the Campus Development Process, space was identified in 111 Lampe Building, which will undergo renovation.
-  **Building Renovation for the College of Education**
Submitted by the College of Education, the project comprehensively renovates Poe Hall, which is currently closed and displacing the college to multiple, temporary locations throughout campus.
-  **Classroom Building for Engineering Growth**
Submitted by the College of Engineering, the project adds a classroom facility to accommodate engineering program growth that has been mandated by the state legislature. State funding has been allocated beginning in 2026. The project will require the expansion of the Centennial Central Utility Plant.
-  **Critical Campus Infrastructure Repair and Expansion**
Submitted by the Facilities Division, the phased project addresses the need for campus infrastructure renewal and growth by expanding the district energy system, repairing the aging exterior envelopes of several buildings, and replacing obsolete building systems and technology.
-  **Cates West Redevelopment**
Submitted by Campus Enterprises and the Division of Academic and Student Affairs, the project replaces Fountain Dining Hall with a larger dining facility and removes the aging Lee, Sullivan and Bragaw residence halls to accommodate the construction of new residence halls to address enrollment growth and current building code compliance. The project will require the expansion of campus utility infrastructure.
-  **110 Classroom Maintenance and Renovation**
Submitted by Enrollment Management and Services, the project updates aging classrooms for current pedagogical methods while adding new classrooms to address a deficiency in classroom space.
-  **Brooks and Kamphoefner Renovations**
Submitted by the College of Design, the project renovates the mechanical systems in the buildings, repairs the building envelope and replaces exterior windows to boost occupant comfort and energy savings.

 **Thermal Utilities for the Toxicology Building**

Submitted by the College of Sciences, the project connects the research building to Centennial Central Utility Plant, which provides reliable thermal utilities and HVAC improvements that enable additional research within the facility.

 **DELTA Testing Center Permanent Home**

Submitted by Digital Education and Learning Applications, the project relocates the growing testing center from leased office building space on Centennial Campus to a more student-centered facility.

 **New Business School Building**

Submitted by the Poole College of Management, the project provides additional and updated space for the college, which had already received state funding for advanced planning. The project will require expansion of the Cates Utility Plant.

Next Steps

All 2024 capital needs submissions remain on the Capital Development Plan until the next call for needs. At that call, colleges and units can update, resubmit, and reprioritize their top three capital needs including collaborations, partnerships, and funding strategies. New capital needs that are time-sensitive can be submitted to the Campus Development Committee at any time for consideration. Submissions that require more study and development will be identified. The next university-wide call for capital needs will be in late Summer 2025 in preparation for the fall 2026 Biennial Six-Year Capital Plan submission.



