



THE UNIVERSITY OF NORTH CAROLINA SYSTEM

2021-23 Capital Improvement Priorities

The University of North Carolina System is one of the largest property managers in the state. The System is entrusted with over 3,000 buildings, more than \$27 billion in public assets that support the System's mission of teaching, research, and public service. From the humblest maintenance shed to the grandest auditorium, these buildings belong to the people of North Carolina. The System's campuses and research facilities were built with generations of public investment, and it the System's duty to preserve that investment for generations to come.

Meeting that responsibility has been a challenge. The facilities are aging, with almost 30 percent of buildings more than 50 years old. Of the System's 84 million total gross square feet (GSF), 45 million GSF is made up of appropriated buildings. Facility assessments, called FCAP reports, conducted periodically by the State Construction Office have identified \$3.42 billion in building deficiencies in appropriated buildings, including some critical life safety and code compliance issues.

Yet repair and renovation funding has varied widely over the System's recent history, averaging only \$32 million per year over the last decade. As a result, the buildings in the UNC System are suffering from the many years of deferred maintenance. Left unaddressed, the cost of deferred maintenance escalates rapidly over time and increases the risk of critical system failures, resulting in unexpected disruption of services and costly emergency repairs. Further, as the System responds to changing student, programmatic, and research needs, how we utilize our space must change accordingly.

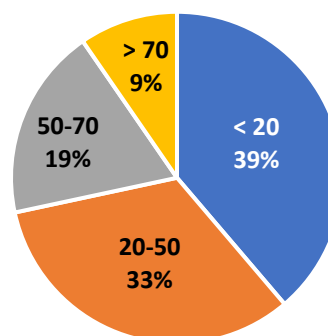
That is why we are focusing our efforts in the years ahead on caring for the University's existing space. These priorities lay out the most crucial needs across the state and our plan for a more cost-effective approach to maintenance and renovation. It is clear the System's role is not just as the trustee of valuable public infrastructure, but as a steward of North Carolina's culture and history. From Elizabeth City to Cullowhee, our campuses host architectural landmarks and centers of community life. This plan protects and preserves some of our state's most valuable places.

1. Repair, Renovation, and Rehabilitation: \$491,175,000

The System's top priority is working through the significant backlog of critical maintenance needed to preserve our existing facilities. Timely and consistent investment in facilities can reduce deferred maintenance costs for the System and the state, extend the life and efficiency of existing buildings, and reduce costly repairs due to critical system failures, unexpected disruption of services, increased urgency to restore operations, and the compounding impact of neglected maintenance and deterioration on other areas of the building or infrastructure.

Attachment A provides a list of recommended projects focused on the following priorities:

Age of Buildings (Years)



- Roof replacement, water intrusion mitigation, or building envelope repairs that allow buildings to remain in use and prevent further deterioration;
- System replacements (such as HVAC, electrical, fire alarms, elevators, etc.) of failing or obsolete systems that directly impact the continued occupancy of the building;
- Repair or replacement of critical plant operations or infrastructure that directly supports operation of critical core-mission buildings; this should not include the expansion or upgrade of any infrastructure to support new construction; and
- Demolition of vacant buildings.

In addition, the System requests the General Assembly appropriate funds to support smaller, but equally important, maintenance repairs and renovation (R&R) projects. Maintenance R&R funds would be allocated among campuses using the formula approved by the Board of Governors on September 20, 2019. This formula considers each campuses' gross square footage, total number of buildings, building condition, full-time student enrollment, and the ability to pay (based on the availability of carry-forward funds, F&A fund balances, infrastructure fees, and other funding for R&R earmarked projects). Funding would be used for the maintenance R&R priorities listed in **Attachment B** or other urgent maintenance needs that arise, subject to System Office approval.

2. **Comprehensive Renovation and Facility Modernization: \$468,050,000**

While the FCAP methodology provides an estimate of necessary repairs, it **does not** address improvements needed to improve functionality or update outdated space. Many aging facilities are simply inadequate to support current academic and research needs. For example, as institutions expand their focus on Science, Technology, Engineering, and Math (STEM) disciplines, the demand for lab space increases. Science labs require specialized ventilation, plumbing, and mechanical systems to protect building occupants and the integrity of the testing environment. Likewise, modern classrooms require technology and electrical capabilities beyond what many aging buildings can provide. Increased student enrollment and demand for more collaborative learning space require space to be repurposed and reconfigured.

Rather than spending limited resources on costly new construction, the state should invest in comprehensive renovations of existing facilities to extend their useful life, improve space utilization, and align with programmatic priorities. **Attachment C** provides a list of recommended priorities for comprehensive renovation and modernization projects.

3. **Advanced Planning Funds for New Construction Projects Previously Authorized by the General Assembly: \$35,500,000**

S.L. 2020-81

In addition to the priorities identified above, the General Assembly is expected to appropriate additional funding for two new construction projects authorized in S.L. 2020-81. This legislation enacted total project authorizations and appropriated \$7 million in advanced planning funds for each project. It also required both institutions to provide funding equal to half of the total project authorization by June 30, 2022, as a match for the intended state allocations.

S.L. 2020-81 also planned to allocate an additional \$7 million for advanced planning from the Coronavirus Relief Fund (CRF), but S.L. 2020-97 subsequently repealed this language due to federal

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limitations on the allowable uses of CRF funds. The General Assembly is expected to appropriate these additional advanced planning funds for FY 2021-22 and further funding for construction once the required non-state match has been confirmed.

| Institution | Project | Enacted Total Project Authorization | FY 2021-22 | FY 2022-23 |
|--------------------|-----------------|--|-------------------|--|
| NCSU | STEM Building | \$160,000,000 | \$7,000,000 | Additional allocations pending non-state match |
| UNC-CH | Business School | \$150,000,000 | \$7,000,000 | |

Health Science Facilities included in H.B. 966

During the 2019 Session, the General Assembly passed H.B. 966, which included a number of capital projects for the UNC System, including two new construction projects for health sciences facilities: 1) Brody School of Medicine at East Carolina University and 2) Health Science Center at UNC Pembroke. H.B. 966 was ratified, but later vetoed by the Governor and therefore, was never enacted into law. Given the state's healthcare workforce needs, the General Assembly may consider appropriating advanced planning funds for these two projects.

| Institution | Project | H.B. 966 Total Project Authorization | FY 2021-22 | FY 2022-23 |
|--------------------|--------------------------|---|-------------------|--|
| ECU | Brody School of Medicine | \$215,000,000 | \$15,000,000 | Additional allocations pending advanced planning |
| UNCP | Health Sciences Center | \$91,000,000 | \$6,500,000 | |

University of North Carolina
FY 2021-23 Capital Improvement Priorities

Attachment A
Immediate Repair, Renovation, and Rehabilitation Needs

| University | Project | FY21-23 |
|-------------------------------|--|--------------|
| Appalachian State | Wey Hall Envelope and Roof Repair | \$5,000,000 |
| Appalachian State | Wey Hall Partial Renovation - Building Systems | \$10,000,000 |
| East Carolina | Brody High Rise Code Compliance - Phase 2 | \$6,000,000 |
| East Carolina | Main Campus - College Hill Drive Steam - Phase 3 | \$2,500,000 |
| East Carolina | Whichard Building Comprehensive Renovation | \$10,000,000 |
| East Carolina | Speight Building Roof, Window, and Envelope Replacement | \$4,000,000 |
| East Carolina | Chilled Water Extension to Whichard & Graham | \$6,475,000 |
| East Carolina | Main Campus-Relocate Steam & Condensate - Phase 1 | \$5,000,000 |
| East Carolina | Health Science Building Envelope Infiltration Repairs | \$5,000,000 |
| Elizabeth City State | Repair Campus Main Switch | \$700,000 |
| Elizabeth City State | Repair Campus Pump Station | \$650,000 |
| Elizabeth City State | Infrastructure Upgrades - Water & Electrical, Phase 1 | \$12,000,000 |
| Elizabeth City State | Emergency Generator Power - Operations | \$4,900,000 |
| Elizabeth City State | Emergency Generator Power - Residence Halls | \$2,100,000 |
| Elizabeth City State | Campus-wide Lockdown System | \$2,000,000 |
| Elizabeth City State | Building Demolition - Four Buildings | \$1,500,000 |
| Elizabeth City State | Butler Residence Hall Renovations | \$2,500,000 |
| Fayetteville State | Lyons Science Renovation | \$1,500,000 |
| Fayetteville State | Butler Renovation - HVAC, Bldg Envelope, Fire Alarm | \$3,450,000 |
| Fayetteville State* | A.B. Rosenthal Building - Targeted Renovation | \$10,000,000 |
| Fayetteville State | Campuswide Utility Infrastructure | \$9,950,000 |
| NC A&T* | Carver Hall Comprehensive Modernization-Phase 1 | \$9,700,000 |
| NC A&T | Price Hall Renovation- Phase 1 | \$8,000,000 |
| NC A&T | Marteena Hall Renovation | \$9,100,000 |
| NC Central* | Lee Biology Renovation | \$8,100,000 |
| NC School of Science and Math | HVAC Campus Wide Renovations | \$2,000,000 |
| NC School of Science and Math | Chiller Replacement | \$3,000,000 |
| NC School of Science and Math | Building Envelope Repairs | \$5,850,000 |
| NC State | Page Hall - Bldg Envelope Repairs & Plumbing Upgrades | \$4,000,000 |
| NC State | Scott Hall - HVAC Renovation | \$5,000,000 |
| NC State | Mann Hall - HVAC and Plumbing Renovation | \$10,000,000 |
| NC State | Kilgore Hall - HVAC Renovation | \$10,000,000 |
| NC State | Domestic Water Line Replacement-North and Central Campus | \$4,303,000 |
| NC State | Fire Protection Systems - Poe Hall | \$3,500,000 |
| NC State | HVAC Renovation - Thomas Hall | \$4,000,000 |
| UNC Asheville | Campus Safety Improvements, Access Control, Cameras | \$2,300,000 |
| UNC Asheville | Campus Roadway Repairs | \$4,400,000 |
| UNC Chapel Hill | Wilson Library - Means of Egress | \$9,300,000 |
| UNC Chapel Hill | Swain Hall - Targeted Renovation | \$5,800,000 |
| UNC Chapel Hill | Phillips Hall - 1958 Central HVAC System | \$6,000,000 |
| UNC Chapel Hill | Hamilton Hall - Central HVAC System | \$8,800,000 |

*Project included in H966, which was ratified, but not enacted into law.

Approved by the UNC Board of Governors on February 18, 2021

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| University | Project | FY21-23 |
|------------------------|--|----------------------|
| UNC Chapel Hill | Wilson Library - 1953 Central HVAC System AHU 1 & 2 | \$7,000,000 |
| UNC Chapel Hill | Wilson Library - 1953 Central HVAC System AHU 3 | \$4,000,000 |
| UNC Charlotte | Atkins Library Tower - ADA & Elev | \$10,000,000 |
| UNC Charlotte | Smith Replace HVAC & Controls, Envelope, Replace Roof | \$5,950,000 |
| UNC Charlotte | Atkins Library Tower - Fire and Smoke Systems | \$3,840,000 |
| UNC Charlotte | Woodward Controls and Lab HVAC Modernization | \$2,700,000 |
| UNC Charlotte | Friday HVAC, Controls, and Electrical Upgrade | \$9,700,000 |
| UNC Greensboro | Coleman Fire Alarm Replacement | \$2,440,000 |
| UNC Greensboro | Steam Distribution Replacement Phase IV -B | \$1,550,000 |
| UNC Greensboro | Campus Chiller Water Infrastructure & Equip Improvemts | \$10,400,000 |
| UNC Pembroke | Demolition of Jacobs Hall with Site Restoration | \$1,250,000 |
| UNC Pembroke | Campus Roof Replacement - Various | \$1,500,000 |
| UNC Pembroke | Campus Safety and Regional Emergency Response Center | \$4,480,000 |
| UNC School of the Arts | Stevens Center - Roof, Water Intrusion, Bldg Envelope | \$4,800,000 |
| UNC School of the Arts | Gray Building - Roof, Bldg Envelope, HVAC, Fire Suppression | \$3,350,000 |
| UNC School of the Arts | Replace Roofs - Performance Place, Workplace, WPV | \$2,435,000 |
| UNC Wilmington | Coastal Marine Studies - Plumbing, Mech, Elec Renovation | \$9,930,000 |
| Western Carolina | Killian Building - HVAC Upgrades, Window Replacement | \$3,570,000 |
| Western Carolina | Reid Building - Roof Replacement | \$2,520,000 |
| Western Carolina | Moore Building - Abatement, Demo & Struct Improvmts | \$7,100,000 |
| Western Carolina | Moore Building - Infrastructure and Accessibility | \$4,200,000 |
| Winston Salem State* | Restore the Core - Hauser Hall Renovations | \$9,500,000 |
| UNC-TV | Tower Lighting, FAA Markers, Tower Elev Repair | \$2,200,000 |
| UNC-TV | Bryan Center - Replace HVAC Air Handler and Controls | \$2,707,000 |
| UNC-TV | Bryan Center - Chiller and Cooling Tower Replacement | \$1,120,000 |
| NC Arboretum | Infrastructure Restoration and Road Repairs | \$1,000,000 |
| Systemwide | Maintenance R&R Projects: Smaller projects focused only on the repair and renovation of state facilities and related infrastructure as defined in G.S. 143C-4-3(b). Attachment B provides a detailed list identified priorities by campus. | \$143,555,000 |
| Total | | \$491,175,000 |

*Project included in H966, which was ratified, but not enacted into law.

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University of North Carolina FY 2021-23 Capital Improvement Priorities

Attachment B Maintenance Repair and Renovation Projects

| Institution | R&R Category | Project | Project Total |
|-------------|--------------|---|---------------|
| ASU | 4 | Walker Hall HVAC Repair and Upgrades | \$500,000 |
| ASU | 2 | Walker Hall Envelope and Structural Repair | \$1,300,000 |
| ASU | 4 | Campus Wide Electronic Door Access Installation | \$1,500,000 |
| ASU | 1 | Chapell Wilson Gutter/Soffit/Roof Replacement | \$600,000 |
| ASU | 1 | Smith Wright Hall Roof Repair and Replacement | \$1,000,000 |
| ASU | 4 | Holmes Convocation Center Chiller | \$200,000 |
| ASU | 4 | BB Dougherty Chiller Repair | \$100,000 |
| ASU | 2 | Facilities Operations/Motorpool Wall Repairs | \$300,000 |
| ASU | 4 | John E Thomas Chiller Compressor Upgrades | \$250,000 |
| ASU | 4 | Anne Belk Hall Hot Water Piping Replacement | \$500,000 |
| ASU | 4 | Edwin Duncan Hall HVAC and Lighting Improvements | \$800,000 |
| ASU | 2 | John E Thomas Envelope | \$300,000 |
| ASU | 11 | Howard Street Hall Road Opening | \$200,000 |
| ASU | 4 | Holmes Convocation Center VAV Replacement | \$150,000 |
| ASU | 4 | Peacock Elevator Upgrade | \$200,000 |
| ASU | 6 | University Hall Sprinkler System | \$250,000 |
| ECU | 4 | Brody Building Freight Elevators - Emergency Power | \$250,000 |
| ECU | 4 | Science & Technology Replace Roof | \$400,000 |
| ECU | 11 | Old Cafeteria Building Install Steam Manhole and Replace Piping | \$300,000 |
| ECU | 2 | Health Science Campus Catwalks Central Utility Plant | \$225,000 |
| ECU | 1 | Warren Life Sciences Replace Roof Section B | \$300,000 |
| ECU | 4 | Health Science Campus Central Utility Plant Transformer 1 & Transformer 2 | \$404,000 |
| ECU | 5 | Bate Upgrade Elevators (2) | \$350,000 |
| ECU | 1 | Rivers Replace Roof | \$300,000 |
| ECU | 1 | Christenbury Replace Roof | \$410,000 |
| ECU | 2 | Brody Building Envelope Infiltration Repairs Phase 1 | \$1,500,000 |
| ECU | 11 | Brody Chilled Water Loop Valve Replacement | \$100,000 |
| ECU | 2 | Jenkins Art North Building Envelope Repairs | \$1,750,000 |
| ECU | 1 | McGinnis Scene Shop Replace Roof | \$100,000 |
| ECU | 4 | Brody - Inline Fan Replacement Phase 1 | \$200,000 |
| ECU | 4 | Jenkins Art Replace Distribution Sub Panels Westside Jenkins Art | \$225,000 |
| ECU | 5 | Messick Upgrade/Replace Elevator | \$150,000 |
| ECU | 5 | Building 127 Upgrade/Replace Elevator | \$150,000 |
| ECU | 2 | Coastal Studies Annex Repair and Coat Siding and Roofing | \$100,000 |
| ECU | 4 | School of Dental Medicine Community Service Learning Centers Upgrades (HVAC & Indoor Air Quality) | \$203,000 |
| ECU | 11 | Main Campus Steam Plant - Install Steam Blanket for Boilers | \$100,000 |
| ECU | 5 | McGinnis Auditorium Upgrade/Replace Elevator | \$300,000 |
| ECU | 4 | Brewster HVAC Controls Optimization - D Wing | \$400,000 |
| ECU | 4 | Greenville Centre HVAC Controls Upgrade (Specific Remote Terminal Unit Variable Air Volumes) | \$300,000 |
| ECU | 4 | Plate and Frame Heat Exchanger for Science & Technology Central Chiller Plant w/ Controls Upgrade | \$300,000 |
| ECU | 4 | Old Cafeteria Building Controls (Specific Direct Digital Control) Upgrade | \$300,000 |
| ECU | 4 | Carol Belk Building HVAC system (Specific Variable Air Volume integration) | \$300,000 |
| ECU | 4 | Rivers Building HVAC System (Specific Variable Air Volume) to Trane | \$300,000 |
| ECU | 4 | Austin Building Air Handlers Replacement | \$1,500,000 |
| ECU | 6 | Warren Life Sciences Extend Sprinkler System to Original Section | \$181,000 |
| ECU | 5 | Building 43 Upgrade Freight Elevator Replace Shaft and Jack | \$230,000 |
| ECU | 4 | Main Campus Replace Power Distribution System Steam Plant | \$250,000 |
| ECU | 4 | Biotechnology Building Upgrade Laboratory Exhaust System | \$452,000 |
| ECU | 4 | Biotechnology Building Replace Exhaust Fans | \$130,134 |
| ECU | 11 | Repair and Repave Service Drive at West End Dining Behind White Residence Hall | \$150,000 |
| ECU | 6 | Wright Building/Wright Auditorium Fire Alarm System Upgrade | \$300,000 |
| ECU | 1 | Old Cafeteria and Ragsdale Annex Replace Roof | \$240,000 |
| ECU | 4 | Brody School of Medicine Replace Computer Room Air Conditioning (CRAC) Units GE-99 | \$200,000 |
| ECU | 6 | Cotanche Data Center - Renovations to Improve Fire Protection System in Data Rooms (Specific FM 200) | \$210,000 |
| ECSU | 4 | Underground Infrastructure - Replace all campus plumbing gate valves/infrastructure for fire pump | \$150,000 |
| ECSU | 4 | Underground Infrastructure - Replace 6" with 8" line to improve water volume on campus north | \$300,000 |
| ECSU | 9 | Jenkins Hall (Phase 2) - Renovation Laboratory and Classroom (Phase 1 starts in 2020-21 R&R Year) | \$400,000 |
| ECSU | 9 | Vaughn Center - Repair student phys ed learning spaces (pool, flooring, ceilings & building envelope) | \$550,000 |
| ECSU | 1 | Fine Arts - Roof Replacement | \$200,000 |
| ECSU | 9 | Dixon Hall - Classroom and Laboratory Renovations | \$400,000 |
| ECSU | 4 | ITC - Air Handler Replacement | \$300,000 |

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Attachment B Maintenance Repair and Renovation Projects

| Institution | R&R Category | Project | Project Total |
|-------------|--------------|--|---------------|
| ECSU | 9 | Lester Hall - Demolition | \$495,000 |
| FSU | 1 | Barber/Collins Admin Complex: roof replacement | \$200,000 |
| FSU | 4 | Campuswide: exterior lighting retrofit | \$400,000 |
| FSU | 11 | Campuswide: brick paver & concrete walk repairs | \$500,000 |
| FSU | 1 | Telecom: roof replacement | \$150,000 |
| FSU | 1 | Butler: roof replacement | \$650,000 |
| FSU | 4 | Chesnutt: MEP (generator) | \$400,000 |
| FSU | 4 | Telecom: MEP (central plant tie, AHU, BAS, MDP, generator) | \$750,000 |
| FSU | 4 | University Advancement: MEP (AHU, Heat Pumps, BAS, MDP) | \$600,000 |
| FSU | 4 | FM complex: MEP (HVAC, MDP, generator, restrooms) | \$450,000 |
| FSU | 2 | Harris CBE: precast concrete structural repair | \$100,000 |
| FSU | 2 | Cook: exterior stairs and patio repairs | \$100,000 |
| FSU | 1 | J.Knuckles Science Annex: roof replacement | \$150,000 |
| NC A&T | 1 | Roof Repairs (General Classroom B side) | \$1,241,107 |
| NC A&T | 4 | Boiler Replacement | \$1,459,200 |
| NC A&T | 4 | Hines Hall HVAC Modifications | \$300,000 |
| NC A&T | 9 | Waterproofing Buildings | \$600,000 |
| NC A&T | 4 | HVAC Repairs/Replacement(IRC Building) | \$705,274 |
| NC A&T | 4 | HVAC Repairs/Controls Dudley | \$403,305 |
| NC A&T | 4 | MCNair Hall HVAC Repairs | \$250,000 |
| NC A&T | 5 | Elevator Repairs/Replacement | \$450,000 |
| NC A&T | 4 | Steam Leaks Campus Wide | \$500,000 |
| NC A&T | 4 | Building Steam system repairs | \$200,000 |
| NC A&T | 1 | Roof Repairs (Moore Gym, Hodgkin Hall, Fraiser Hall) | \$1,000,000 |
| NC A&T | 9 | Window Replacement (Price Hall, 1020 Wendover, Hodgkin Hall, Campbell Hall, C.H. Moore | \$200,000 |
| NC A&T | 8 | Asbestos Abatement Campus Wide(1020 Wendover, Price, Corbett Sports Center, Campbell & Carver) | \$150,000 |
| NC A&T | 4 | Back Flow preventors (Campus Wide) | \$300,000 |
| NC A&T | 4 | Electrical Improvements(Beef Barn, Bull Barn, Calf Barn, Dairy Barn) | \$100,000 |
| NCCU | 11 | BN Duke Steam to Natural Gas Conversion | \$350,000 |
| NCCU | 1 | Art Museum Roof Replacement | \$250,000 |
| NCCU | 11 | Campus-wide steam system repairs (steam traps, valves, leaks, piping & insulation replacement, MHs) | \$600,000 |
| NCCU | 2 | Robinson Science Building - Repair & Restore Brick Facade | \$300,000 |
| NCCU | 9 | Hubbard Totton Building - Elevator Replacement | \$350,000 |
| NCCU | 5 | Campus-Wide ADA Compliance Upgrades -- Phase 2 | \$100,000 |
| NCCU | 4 | William Jones Building HVAC Upgrades | \$450,000 |
| NCCU | 9 | Walker PE Complex - Elevator Replacement | \$350,000 |
| NCCU | 11 | Sanitary Sewer System: locate/ assess terra-cotta pipes to stop significant inflow and infiltration | \$100,000 |
| NCCU | 1 | Roof Gutters & Vent Repairs at multiple locations | \$310,000 |
| NCCU | 2 | Taylor Building - Repair & Restore Brick Façade | \$161,000 |
| NCCU | 11 | Water System: Re-route South and East sides for increased capacity | \$135,000 |
| NCCU | 1 | Campus Wide Annual Flat Roof Diagnostics, Preventive Maintenance and Leak Repairs | \$300,000 |
| NCCU | 6 | Fire Alarm Systems Upgrades & Repairs at multiple locations | \$250,000 |
| NCCU | 1 | Steam Plant Roof Repair | \$40,000 |
| NCCU | 8 | Asbestos/Mold remediation/Contaminants removal - Multiple locations | \$300,000 |
| NCCU | 4 | Shepard Library ITS NOC HVAC Upgrades | \$230,000 |
| NCCU | 6 | Fine Arts Building Fire Alarm System Replacement | \$495,000 |
| NCCU | 7 | Miller Morgan Building VFDs Replacement | \$80,000 |
| NCCU | 2 | BN Duke Auditorium - Repair & Restore Brick Façade | \$300,000 |
| NCCU | 2 | Edmonds Building Brick Façade Repair & ADA Access Ease of Entry and Code Compliant Steps and Handrails & Repla | \$245,300 |
| NCSSM | 9 | Cafeteria Renovation | \$2,500,000 |
| NC State | 4 | Research Bldg III - HVAC Upgrades | \$900,000 |
| NC State | 11 | Original Campus - Domestic Water Line repair under Railroad Tracks | \$270,000 |
| NC State | 9 | Dabney - Renovation - Labs | \$1,500,000 |
| NC State | 2 | Polk -2nd Floor Overhang structural repair | \$150,000 |
| NC State | 9 | Scott Hall - Renovation - Labs | \$2,500,000 |
| NC State | 9 | Brooks Hall - Renovation - Phase 1 | \$1,500,000 |
| NC State | 4 | Mann - Electrical Upgrades | \$950,000 |
| NC State | 9 | Thomas Hall - Renovation - Labs | \$1,000,000 |
| NC State | 3 | Polk - Fire Alarm Upgrade | \$600,000 |
| NC State | 4 | CVM Equine AHU replacement | \$300,000 |
| NC State | 5 | Mckimmon - ADA Improvements Restrooms | \$500,000 |
| NC State | 11 | Morrill Drive Domestic Water Line Replacement | \$661,000 |
| NC State | 6 | Fire Alarm Panel Replacement (Nelson, Park Alumni, Beef Education Unit, Schaub, CVM Research) | \$250,000 |
| NC State | 11 | Campus - Domestic Water Line and Valve Replacement Ph 11 | \$650,000 |

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Attachment B Maintenance Repair and Renovation Projects

| Institution | R&R Category | Project | Project Total |
|-------------|--------------|---|---------------|
| NC State | 4 | BAS Controls Upgrade Phase 1(Don Ellis, Brooks) | \$100,000 |
| NC State | 9 | Polk Hall - Renovation - Labs - Phase 1 | \$1,500,000 |
| NC State | 8 | Campus - Asbestos Removal Steam System | \$650,000 |
| NC State | 2 | Caldwell Hall - Pointing & Caulking | \$100,000 |
| NC State | 4 | Research Bldg #1 - AHU replacement | \$850,000 |
| NC State | 4 | Research Bldg IV - HVAC Upgrades | \$1,100,000 |
| NC State | 11 | Centennial Campus - Repair steam leaks | \$550,000 |
| NC State | 6 | CVM Main - Fire Alarm Upgrade Phase 3 o f 3 | \$400,000 |
| NC State | 6 | Mann Hall - Fire Sprinkler System | \$500,000 |
| NC State | 11 | Campus - Steam Leak Repair MH13 | \$200,000 |
| NC State | 9 | Gardner - Renovation - Labs | \$480,000 |
| NC State | 2 | Textiles - COT Pod 2 South side - Foundation Waterproofing | \$350,000 |
| NC State | 11 | Campus - Cooling Tower Refurbish at CBC | \$250,000 |
| NC State | 6 | Polk Hall - Fire Alarm Upgrade | \$600,000 |
| NC State | 3 | Biltmore - Code Deficiencies | \$2,000,000 |
| NC State | 11 | Campus - Upgrade Campus Sanitary/Storm Water System Ph 1 | \$844,000 |
| NC State | 11 | Campus - Chilled Water System improvements | \$575,000 |
| NC State | 2 | Kilgore - Foundation Waterproofing | \$350,000 |
| NC State | 2 | Cox - Pointing & Caulking | \$300,000 |
| NC State | 2 | Tompkins Hall - Above grade Waterproofing / Pointing | \$200,000 |
| NC State | 11 | Yarborough - Chiller Controls Upgrade | \$146,000 |
| NC State | 11 | Campus - Sewer Line replacement - Court of NC | \$175,000 |
| UNCA | 3 | Campus Wide: Arc Flash Compliance - Phase II | \$150,000 |
| UNCA | 3 | Replace and Upgrade Fueling Station w/ compliant storage tanks/system (FCAP #31053) | \$150,000 |
| UNCA | 5 | Replace the existing pedestrian pathways to connect main quad to Owen Hall | \$250,000 |
| UNCA | 5 | Replace walkways in Tennent Park to provide ADA accessible path to the main quadrangle/Carmichael Hall. | \$250,000 |
| UNCA | 11 | Repair concrete at Carmichael Plaza & walk along Ramsey/Tennent Park | \$200,000 |
| UNCA | 7 | Reuter Center: replace BAS, add VFD to AHU (FCAP #31131) | \$150,000 |
| UNCA | 1 | Roof Replacements: Reuter Center (EPDM) & Riverside Warehouse (single-ply) (FCAP #14433) | \$475,000 |
| UNCA | 11 | Rework intersection at Edgewood and University Heights | \$250,000 |
| UNCA | 11 | Utility Location Survey and installation of underground utility markers | \$200,000 |
| UNCA | 4 | Zageir Hall: Replace exist machineryin kind with new HE models, in-kind.(FCAP #31124) | \$225,000 |
| UNCA | 11 | Underground Waterline Repairs: replace domestic waterline, valves, and associated work | \$506,000 |
| UNCA | 3 | Campus Wide: Implement interoperable communications per 911 commission | \$250,000 |
| UNCA | 7 | Campus Wide: Install sub metering in all buildings - gas, electric, domestic hot water, rain water systems, and heati | \$150,000 |
| UNCA | 5 | Replace sidewalks at Zageir Hall | \$150,000 |
| UNCA | 1 | Weizenblatt Hall: Replace low slope roof with new membrane roof. | \$175,000 |
| UNCA | 7 | 118 WT Weaver HVAC Replacement: Replace major HVAC System equipment, update controls | \$518,974 |
| UNCA | 5 | Campus Wide: Replace deteriorated, rusted handrails with aluminum | \$250,000 |
| UNC-CH | 1 | 462 Art Studio Building Replace Roofing - Steel Roof | \$219,772 |
| UNC-CH | 1 | 12 Carroll Hall Replace Roofing - Built-Up Roof, Sector C | \$406,823 |
| UNC-CH | 1 | 209 First Dental Replace Roofing - Slate Roof | \$565,120 |
| UNC-CH | 1 | 166 General Storeroom Replace Roofing - Built-Up Roof - Sector 5 | \$577,490 |
| UNC-CH | 1 | 625 ITS Building - Manning Replace Roofing - Built-Up Roof | \$672,719 |
| UNC-CH | 1 | 27 Memorial Hall Replace Barrel Roof | \$330,000 |
| UNC-CH | 1 | 226 Old Clinic Replace Built-Up Roof | \$283,355 |
| UNC-CH | 1 | 5 South Building Replace Roofing - Replace Metal Roof, Gutters and Install Fall Protection | \$927,239 |
| UNC-CH | 4 | 228 Brinkhous-Bullitt Building Electrical Service and Distribution - Replace Main/Sub Distribution | \$4,843,986 |
| UNC-CH | 4 | 12 Carroll Hall Repair and Renovate Elevator #1618 | \$746,929 |
| UNC-CH | 4 | 12 Carroll Hall Repair and Renovate Elevator #6442 | \$464,850 |
| UNC-CH | 4 | 41 Coastal Process Environmental Health Lab Building System Cumulative Deficiencies | \$675,000 |
| UNC-CH | 4 | 13 Davie Hall Replace Air Handling Unit 1A, 1st Floor 1967 Building | \$428,865 |
| UNC-CH | 4 | 13 Davie Hall Replace Air Handling Unit 1B, 1st Floor 1967 Building | \$169,045 |
| UNC-CH | 4 | 3 Ackland Art Museum Install Building Automation System | \$236,625 |
| UNC-CH | 4 | 13 Davie Hall Replace Air Handling Unit 1C, 1st Floor 1967 Building | \$225,461 |
| UNC-CH | 4 | 14 Dey Hall Repair and Renovate Elevator #4576 | \$407,206 |
| UNC-CH | 4 | 369 Friday Center Replace Heating/Cooling Air Handling Units - AHU 01 - Office, 1st Floor | \$255,456 |
| UNC-CH | 4 | 369 Friday Center Replace Heating/Cooling Air Handling Units - AHU 02 - Mail/Book Room, 1st Floor | \$272,402 |
| UNC-CH | 6 | 462 Art Studio Building Install Fire Sprinkler System | \$326,540 |
| UNC-CH | 6 | 211 Brauer Hall Fire Alarm Systems - Replace Fire Alarm Initiating Devices and Control Panel | \$565,868 |
| UNC-CH | 6 | 13 Davie Hall Fire Alarm Systems - Replace Fire Alarm Control Panel | \$135,985 |
| UNC-CH | 6 | 498 Kenan Center Fire Alarm Systems - Replace initiating Devices and Control Panel | \$200,000 |
| UNC-CH | 4 | 3 Ackland Art Museum Air Handling Units, AHU 2, Rear Galleries, Admin, 1983 Building | \$419,748 |
| UNC-CH | 4 | 24 Wilson Library Replace AHU 7 HVAC System | \$5,086,299 |

APPENDIX H

Attachment B Maintenance Repair and Renovation Projects

| Institution | R&R Category | Project | Project Total |
|-------------|--------------|---|---------------|
| UNC-CH | 2 | 3 Ackland Art Museum Replace Windows - Painted Wood Window | \$484,785 |
| UNC-CH | 1 | 328 Bingham Facility (Building 1) Replace Roofing - EPDM Roof | \$225,560 |
| UNC-CH | 1 | 228 Brinkhous-Bullitt Building Provide Roof Fall Protection | \$156,547 |
| UNC-CH | 1 | 229 Burnett-Womack Building Provide Roof Fall Protection | \$138,419 |
| UNCC | 1 | Atkins Roof | \$911,250 |
| UNCC | 1 | Reese Roof | \$226,100 |
| UNCC | 6 | Reese Fire Systems | \$773,500 |
| UNCC | 6 | Memorial Hall Fire Systems | \$327,250 |
| UNCC | 4 | Duke HVAC & Controls | \$654,500 |
| UNCC | 1 | Friday Roof | \$1,011,000 |
| UNCC | 4 | RUP-2 HVAC & Controls | \$416,500 |
| UNCC | 6 | King Fire Systems & Abatement | \$729,000 |
| UNCC | 4 | Fretwell HVAC & Controls | \$1,574,009 |
| UNCC | 1 | Memorial Hall Envelope | \$120,311 |
| UNCC | 1 | Memorial Hall Roof | \$188,792 |
| UNCC | 1 | Reese Envelope | \$995,269 |
| UNCC | 1 | King Envelope | \$839,459 |
| UNCC | 4 | Grigg HVAC & Controls | \$561,202 |
| UNCC | 6 | Friday Fire Systems | \$631,072 |
| UNCC | 4 | Rowe Elevators | \$156,334 |
| UNCC | 4 | Rowe Electrical | \$154,042 |
| UNCC | 6 | Fretwell Fire Systems | \$362,670 |
| UNCG | 2 | Petty Bldg. Portico waterproofing | \$712,031 |
| UNCG | 6 | MHRA Building. Fire Alarm System Replacement | \$985,327 |
| UNCG | 1 | Mossman Bldg. Roof Replacement | \$773,128 |
| UNCG | 5 | ADA compliance project. Campus wide. Restrooms, entrances, etc. | \$400,000 |
| UNCG | 2 | UNCG State Building exterior envelope repairs | \$762,000 |
| UNCG | 4 | Cone Art Bldg. Replace gallery lighting and lighting controls (Phase 2 & 3) | \$861,750 |
| UNCG | 8 | Replace Generator Diesel Fuel tank | \$839,175 |
| UNCG | 12 | Campus Wide. Replace property line fences, Replace underground piping for roof drainage | \$230,000 |
| UNCG | 4 | Sullivan Science Bldg. Replace HVAC in Greenhouse | \$683,434 |
| UNCG | 12 | Campus Wide. Pedestrian crosswalks repairs and upgrades for safety. | \$486,000 |
| UNCG | 3 | Armfield-Preyer (Visitor's Center). Exterior renovation and water proofing. | \$435,000 |
| UNCG | 11 | Campus wide, Walks and hardscape improvements | \$240,000 |
| UNCG | 8 | Campus wide asbestos & Lead abatement | \$240,000 |
| UNCG | 6 | Petty Bldg. Replace EST QuickStart fire alarm system | \$400,000 |
| UNCG | 11 | Sink Bldg. Maintenance Compound - Asphalt Replacement. | \$140,000 |
| UNCG | 8 | Coleman Bldg. VCT flooring abatement and replacement. | \$250,000 |
| UNCG | 6 | Fire Alarm Upgrade. 996 Spring Garden, 1605 Spring Garden, 535 Tate Street, 2900 Oakland Ave. | \$250,000 |
| UNCG | 9 | Cone Arts. Lecture Hall, room 103 seating, flooring, lighting, others upgrade | \$187,000 |
| UNCP | 11 | Campus Gas line replacement | \$550,000 |
| UNCP | 4 | Jones Pool HVAC replacement | \$1,300,000 |
| UNCP | 6 | Livermore & Jones Generator | \$424,500 |
| UNCP | 9 | Honors College renovation | \$250,000 |
| UNCP | 9 | Jones auxiliary gym and Dance studio flooring and studio upgrades | \$625,000 |
| UNCP | 4 | Education Boiler replacement | \$110,000 |
| UNCP | 4 | Chavis Air Handlers | \$390,000 |
| UNCP | 4 | Moore Hall & Chavis boiler replacement | \$190,000 |
| UNCP | 3 | Lumbee Hall & Old Main Elevator replacement | \$465,000 |
| UNCP | 6 | Jones, Livermore, Lumbee, Old Main FACP replacement | \$682,000 |
| UNCP | 9 | Jones ceiling repaint | \$110,000 |
| UNCSA | 4 | Gray Bldg New Electrical Service Main | \$256,000 |
| UNCSA | 6 | Life Safety Code Correction - Design and Production, Workplace, Film Building 3 | \$134,000 |
| UNCSA | 6 | Install Exit/Egress Lighting - Admin, Aquarius, Facilities, D&P Storage, WorkplaceWest V, Demille | \$115,000 |
| UNCSA | 9 | Renovate Drama Studios - Workplace | \$448,000 |
| UNCSA | 12 | Drainage and Landscape Improvements - Common Area at Moore and Sanford | \$397,000 |
| UNCSA | 9 | Renovate Drama Administrative Offices - Workplace | \$323,000 |
| UNCSA | 3 | Install Shop Exhaust and Heating System - Facilities Management | \$95,000 |
| UNCSA | 8 | Gray Bldg Remove boilers | \$123,000 |
| UNCSA | 7 | Repair/Replace Windows - Film School Buildings 1 and 2 | \$202,000 |
| UNCSA | 4 | Film Archives Building A/C and controls | \$485,000 |
| UNCSA | 4 | Provide Heating and Cooling to Control Booth and Foley Booth - Performance Place, Film 2 | \$87,000 |
| UNCSA | 7 | Modifications to Heating, Ventilation and Air Conditioning System for Police - Gray | \$101,000 |
| UNCSA | 2 | Paint Rooftop Components - Film School | \$81,000 |

APPENDIX H

Attachment B Maintenance Repair and Renovation Projects

| Institution | R&R Category | Project | Project Total |
|-------------|--------------|--|----------------------|
| UNCSA | 11 | Resurface Drives and Vehicle Staging - Facilities Management | \$75,000 |
| UNCSA | 9 | Renovate Administrative and Faculty Offices - Design and Production | \$162,000 |
| UNCSA | 7 | Mechanical System Retrocommissioning - Design and Production | \$134,000 |
| UNCSA | 5 | ADA Campus-Wide Misc. Improvements | \$39,000 |
| UNCSA | 1 | Roof Replacement - Chapel St Buildings | \$34,000 |
| UNCSA | 2 | Exterior Waterproofing and Repairs - 300 Waightown | \$73,000 |
| UNCSA | 4 | Film School Bldg 3, Theater dimmers | \$232,000 |
| UNCSA | 4 | Hanes Student Commons motor control center | \$150,000 |
| UNCSA | 7 | Upgrade Air Distribution and Controls - Commons Building | \$93,000 |
| UNCSA | 9 | Partial Interior Renovation - Commons | \$75,000 |
| UNCSA | 11 | Replace Floor Slabs, Sidewalks and Stairs – Residence Halls A–F | \$118,000 |
| UNCW | 4 | West Side Energy Plant Modernization | \$3,926,440 |
| UNCW | 12 | Wagoner, Hurst, Hamilton roadways - Storm Water Refurbishment | \$2,500,000 |
| UNCW | 6 | Replace Fire Alarm System - Warehouse - Receiving | \$161,000 |
| UNCW | 6 | Replace Fire Alarm System - Telecommunications | \$62,000 |
| UNCW | 6 | Fire/Life safety Improvements - Kenan Auditorium | \$75,000 |
| UNCW | 6 | Fire Sprinkler - Isaac Bear Bldg. | \$410,000 |
| UNCW | 2 | Replace Windows - Alderman Hall | \$280,000 |
| WCU | 1 | HFR Building - Roof Replacement | \$660,000 |
| WCU | 6 | Campus Wide - Fire Alarm System Upgrades | \$300,000 |
| WCU | 8 | Reid Building - Gym Floor Replacement | \$275,000 |
| WCU | 11 | Undersized Water Mains Replacement, Non-Functioning Valves and Upgrade Lines | \$3,000,000 |
| WCU | 1 | Facilities Management Building - Roof Replacement | \$193,000 |
| WCU | 2 | Highlands Biological Station - Structural Repairs | \$250,000 |
| WCU | 5 | Ramsey Activities Center - Elevator Replacement | \$250,000 |
| WCU | 4 | HFR Building - Chiller Replacement | \$200,000 |
| WCU | 2 | Old Student Union - Foundation and Exterior Repair | \$450,000 |
| WCU | 4 | Hunter Library - Cooling Tower Replacement | \$175,000 |
| WCU | 6 | Egress Lighting and Exit Light Replacement - Campus Wide | \$100,000 |
| WSSU | 1 | Repair Roof - Computer Science | \$120,000 |
| WSSU | 1 | Replace Roof - Gaines Complex | \$660,000 |
| WSSU | 2 | Exterior Wall Repairs - Computer Science | \$110,000 |
| WSSU | 2 | Exterior Wall Repairs - W. B. Atkinson | \$125,000 |
| WSSU | 4 | Elva Jones Computer Science - HVAC Upgrades and BAS Controls Replacement | \$1,450,000 |
| WSSU | 4 | Upgrade HVAC Make-up Air System - O'Kelly Library | \$375,000 |
| WSSU | 6 | Add Fire Alarm System - 1600 Lowery St | \$125,000 |
| WSSU | 6 | Fire Alarm System Upgrades - Campus-wide | \$750,000 |
| WSSU | 1 | Replace Roof - R.J. Reynolds | \$205,000 |
| WSSU | 2 | Ext. Wall Repairs, Door and Window Repl. - Coltrane Hall | \$275,000 |
| WSSU | 4 | Upgrade Electrical System - O'Kelly Library | \$250,000 |
| | | Subtotal: | \$140,057,434 |
| | | UNC System R&R Projects | \$3,497,566 |
| | | Total for R&R Projects: | \$143,555,000 |

R&R Categories

- 1 - Roof repairs and replacements
- 2 - Structural repairs
- 3 - Repairs and renovations to meet federal and state standards
- 4 - Repairs to or installation of new electrical, plumbing, and heating, ventilating, and air-conditioning systems
- 5 - Improvements to meet the requirements of the Americans with Disabilities Act
- 6 - Improvements to meet fire safety needs
- 7 - Improvements to existing facilities for energy efficiency
- 8 - Improvements to remove asbestos, lead paint, and other contaminants, including the removal and replacement of underground storage tanks
- 9 - Improvements and renovations to improve use of existing space
- 10 - Historical restoration
- 11 - Improvements to roads, walks, drives, and utilities infrastructure
- 12 - Drainage and landscape improvements
- 13 - Building demolition

APPENDIX H

University of North Carolina
FY 2021-23 Capital Improvement Priorities

Attachment C
Comprehensive Renovation and Modernization Projects

| University | Project | Total Project Authorization | Previously Appropriated | FY21-22 | FY22-23 | Total FY21-23 Request |
|----------------------------------|---|-----------------------------|-------------------------|----------------------|----------------------|-----------------------|
| Appalachian State | Duncan Hall Renovation | 20,000,000 | | 1,800,000 | 18,200,000 | 20,000,000 |
| East Carolina | Howell Science Building South | 30,000,000 | | 3,000,000 | 27,000,000 | 30,000,000 |
| Elizabeth City State | Infrastructure Upgrades - Water & Electrical, Phase 2 | 27,000,000 | | 3,000,000 | 24,000,000 | 27,000,000 |
| Fayetteville State ¹ | H.T. Chick Targeted Renovation | 9,500,000 | | 9,500,000 | | 9,500,000 |
| NC A&T ¹ | Carver Hall Comprehensive Modernization-Phase 2 | 10,400,000 | | | 10,400,000 | 10,400,000 |
| NC A&T | Price Hall Renovation-Phase 2 | 8,500,000 | | | 8,500,000 | 8,500,000 |
| NC Central | Taylor Education Building Renovation | 13,750,000 | | 1,250,000 | 12,500,000 | 13,750,000 |
| NC School of Science and Math | Academic Commons and Dining Hall Renovation | 12,400,000 | | | 12,400,000 | 12,400,000 |
| NC State | Renovation - 111 Lampe Drive | 42,000,000 | | 17,000,000 | 25,000,000 | 42,000,000 |
| UNC Asheville | Lipinsky Renovation | 10,000,000 | | 1,000,000 | 9,000,000 | 10,000,000 |
| UNC Chapel Hill ² | Carrington Hall Renovation | 45,000,000 | 2,500,000 | 22,500,000 | 20,000,000 | 42,500,000 |
| UNC Charlotte ¹ | Cameron Second Floor Renovation | 19,100,000 | | 19,100,000 | | 19,100,000 |
| UNC Charlotte ¹ | Burson Renovation | 25,900,000 | | | 25,900,000 | 25,900,000 |
| UNC Greensboro ¹ | Jackson Library Renovation/Addition | 81,000,000 | | 7,000,000 | 74,000,000 | 81,000,000 |
| UNC Pembroke | Business Administration Renovation | 12,500,000 | | 1,000,000 | 11,500,000 | 12,500,000 |
| UNC School of the Arts | Stevens Center Renovation-Phase 1 | 25,000,000 | | 5,000,000 | 20,000,000 | 25,000,000 |
| UNC Wilmington ³ | Randall Library Renovation and Expansion | 61,500,000 | 5,500,000 | 20,000,000 | 36,000,000 | 56,000,000 |
| Western Carolina | Moore Building Renovation | 15,000,000 | | 15,000,000 | | 15,000,000 |
| Winston Salem State ¹ | Hauser Hall Renovation - Phase 2 | 7,500,000 | | 7,500,000 | | 7,500,000 |
| Total | | \$476,050,000 | \$8,000,000 | \$133,650,000 | \$334,400,000 | \$468,050,000 |

¹Project included in H966, which was ratified, but not enacted into law

² S.L. 2020-81 included the total project authorization and appropriated \$2.5 million in advanced planning funds for the Carrington Hall Renovation at UNC-CH.

³ S.L. 2018-5 appropriated \$5.5 million in advanced planning funds for the Randall Library Renovation and Expansion at UNC Wilmington.