



REPORT: BUILDING RESERVE STUDY

June 7, 2024

University of North Carolina System
Raleigh, North Carolina

Legislative Requirement

The 2023 Appropriations Act (S.L. 2023-134, Section 8.2) requires a University of North Carolina (UNC) Building Reserve Study for FY2022-23 comparing the building reserve model to actual expenses for operation and maintenance costs of university facilities. The report includes expenditures generated by the building reserve model for all appropriated facilities at each institution broken down by personnel, utilities, custodial services, facilities maintenance, and IT, along with the full-time equivalent positions in each category. The report also includes an analysis of the alignment between the current building reserve model's calculations and actual expenditures and staffing, identifying discrepancies and suggesting improvements in funding facility operations and maintenance.

Background

Purpose of the Model

The building reserves model is designed to establish a funding baseline for operation and maintenance of new buildings, additions, and renovations for UNC Institutions, using a select group of parameters that are predictive and representative of the overall resource requirements. The model is a simplification of the actual operations and maintenance budget and consolidates multiple trades and career bands into single representative positions. The model forecasts the future budget needs by using information available during project construction and permits funds to be requested during the appropriate budget cycle so that funds are available to prepare for building occupancy.

History and Development

In 1993, the recommendations of the Government Performance Audit Committee (GPAC) led the North Carolina General Assembly to establish a Repairs and Renovations (R&R) Reserve Fund Account to provide for the routine upkeep of state capital assets. R&R funding to repair aging facilities was inconsistent and competed with other new capital funding requests.¹ Funds provided under the R&R reserve account were initially allocated by the University of North Carolina Board of Governors under an internal allocation model, developed in 1994, to provide for a consistent and reasonable distribution of funds.

S.L. 1997-443 mandated a study of capital, including the development of a 10-year capital needs and spending plan. The prospect of significant additional capital facilities fueled growing concerns about supporting operating budgets for new facilities. In addition, it was recognized that facilities that were not well-maintained and operated were more likely to fail prematurely. These concerns, in addition to the need for a consistent, systemwide approach, led to the development of the 1999-2001 Maintenance and Operating (M&O) Reserve Model. The model used building metrics to estimate the staffing, services, and other contract services costs required to maintain and operate the building. The model included two versions: a new construction model and a building renovation model. The building renovation model recognized the increased maintenance and operational needs for a modernized building such as IT-supported smart classrooms, central heating/cooling systems added to non-air-conditioned buildings, and additional central campus support functions for grounds maintenance and public safety.

Appendix A outlines the building characteristics and other factors that are used in the building reserve model calculation. The model is reviewed and revised each biennium, adjusting positions to reflect increased complexities or adding new requirements for environmental controls, health and safety, and IT.

¹ "Repair and Renovation Funding Program Review: 1993 to 2003 – August 2004" Eva Klein and Associates, Ltd.

Costs are adjusted to reflect increases to state salaries, benefits, and pricing for standard equipment and supplies. In spring 2017, the building reserves model was comprehensively reviewed by a committee including six UNC System institutions. Changes since the 2017-19 building reserves model have been limited to salary, benefits, and cost adjustments only.

FY2022-23 Building Reserves Model Outputs

The building reserve model is designed to model the operations and maintenance costs based on specific building characteristics but in order to generate the composite model, general assumptions had to be made about key inputs. Key limiting assumptions include assuming one overall building type (Building Type 2) and one overall building height (three floors) for all university buildings. While these assumptions are reasonable, the output from these two assumptions could disadvantage institutions with more research and laboratory buildings, which require more complex building systems, have more intensive and continuous use, and require a higher level of operational controls and maintenance. Likewise, institutions with taller structures would similarly be disadvantaged. Based on the assumptions outlined in **Appendix B**, the building reserve model estimated total FY2022-23 recurring expenditures of \$761.4 million to operate and maintain the university's appropriated facilities (see Table 1). Consistent with Section 8.2 of S.L. 2023-134, **Appendix C** provides a summary of the estimated expenditures and associated positions generated by the building reserves model in each of the following subdivisions: 1) personnel and fringe benefits, 2) utilities and insurance, 3) custodial and supplies, 4) facilities and maintenance, and 5) information technology.

The building reserve model includes estimated IT costs as required by S.L. 2023-134. Because IT is intrinsically linked to many aspects of building maintenance and operations, the model includes costs critical to building IT operations. However, since IT costs are not restricted or exclusive to plant operations, we cannot readily isolate actual expenditures for these activities cannot be readily isolated. To facilitate comparison with actual expenditures, Table 1 also provides estimated operations and maintenance costs.

Table 1: Estimated Recurring Expenditures Generated by the Building Reserve Model (in millions)

Institution	Personnel & Fringes	Utilities & Insurance	Custodial & Supplies	Facilities & Maintenance	Information Technology	Total	Total Excluding IT
ASU	\$26.1	\$4.7	\$2.8	\$1.3	\$3.8	\$38.7	\$32.2
ECU	\$46.0	\$11.7	\$5.2	\$2.4	\$4.6	\$69.9	\$62.2
ECSU	\$7.9	\$1.6	\$0.8	\$0.4	\$1.2	\$11.9	\$9.8
FSU	\$8.9	\$1.8	\$1.0	\$0.5	\$1.1	\$13.2	\$11.3
N.C. A&T	\$25.5	\$5.1	\$2.8	\$1.3	\$3.0	\$37.8	\$32.7
NCCU	\$15.2	\$3.3	\$1.6	\$0.8	\$2.2	\$23.1	\$19.3
NCSU	\$97.8	\$23.2	\$11.2	\$5.3	\$8.8	\$146.2	\$131.8
UNCA	\$9.6	\$1.6	\$1.1	\$0.5	\$1.1	\$13.9	\$12.1
UNC-CH	\$112.9	\$56.0	\$12.9	\$6.1	\$10.3	\$198.2	\$181.3
UNCC	\$39.1	\$6.5	\$4.4	\$2.0	\$4.6	\$56.5	\$48.8
UNCG	\$29.2	\$5.4	\$3.3	\$1.5	\$3.2	\$42.6	\$37.2
UNCP	\$13.9	\$3.0	\$1.5	\$0.7	\$1.9	\$21.1	\$17.8
UNCW	\$20.8	\$4.1	\$2.3	\$1.1	\$2.7	\$31.0	\$26.4
UNCSA	\$8.9	\$1.7	\$1.0	\$0.5	\$1.1	\$13.1	\$11.2
WCU	\$19.3	\$2.7	\$2.2	\$1.0	\$2.2	\$27.3	\$23.6
WSSU	\$11.3	\$2.2	\$1.2	\$0.6	\$1.5	\$16.8	\$14.3
TOTAL	\$492.3	\$134.5	\$55.3	\$26.0	\$53.3	\$761.4	\$672.0

FY2022-23 Actual Operation and Maintenance Expenditures

In FY 2022-23, UNC System institutions expended approximately \$753.9 million to operate and maintain appropriated facilities as well as support the institution's general IT *non-personnel* operating expenses² (see Table 2). **Appendix D** provides further expenditure details and associated employee counts. Due to the limitations of expenditure coding practices, it is impossible to isolate IT costs specifically associated with supporting facility operations. Therefore, Table 2 also provides estimated operations and maintenance costs, excluding IT, to facilitate comparison with the outputs from the building reserves model.

Table 2: FY 2022-23 Actual Expenditures

Institution	Physical Plant Salaries & Benefits	Utilities and Insurance	Custodial & Supplies	Facilities and Maintenance	IT Purchased Services	Total	Total Excluding IT
ASU	\$22.6	\$9.0	\$0.2	\$6.6	\$3.6	\$41.9	\$38.3
ECU	\$33.9	\$20.9	\$4.3	\$10.0	\$8.7	\$77.8	\$69.1
ECSU	\$5.3	\$2.6	\$0.7	\$1.6	\$0.8	\$11.0	\$10.3
FSU	\$8.1	\$2.3	\$0.6	\$2.2	\$3.0	\$16.2	\$13.2
NCA&T	\$10.6	\$9.4	\$1.6	\$8.7	\$2.2	\$32.5	\$30.3
NCCU	\$12.3	\$6.4	\$0.8	\$4.3	\$1.7	\$25.4	\$23.8
NCSU	\$63.6	\$36.6	\$11.4	\$21.2	\$13.2	\$146.0	\$132.8
UNCA	\$7.1	\$2.3	\$0.6	\$0.5	\$1.9	\$12.4	\$10.5
UNC-CH	\$51.0	\$81.6	\$2.7	\$8.9	\$4.6	\$148.8	\$144.2
UNCC	\$31.8	\$14.8	\$2.2	\$14.4	\$2.9	\$66.1	\$63.3
UNCG	\$21.1	\$10.9	\$2.0	\$2.4	\$7.7	\$44.1	\$36.4
UNCP	\$9.8	\$2.5	\$0.7	\$2.8	\$5.5	\$21.3	\$15.8
UNCW	\$20.3	\$11.5	\$1.5	\$6.6	\$2.6	\$42.4	\$39.8
UNCSA	\$7.4	\$2.6	\$0.6	\$1.6	\$1.2	\$13.4	\$12.2
WCU	\$15.3	\$5.2	\$3.3	\$3.3	\$2.4	\$29.6	\$27.1
WSSU	\$8.0	\$3.6	\$1.1	\$5.4	\$6.7	\$24.9	\$18.1
TOTAL	\$328.3	\$222.3	\$34.3	\$100.4	\$68.5	\$753.9	\$685.3

Alignment between Building Reserve Model and Actual Expenditures

In FY 2022-23, UNC institutions spent more on building operation and maintenance costs than the building reserve model estimated. For the reasons previously referenced, the outputs generated by the building reserve model can only be meaningfully compared with actual expenditures when excluding building-related IT operations. With IT excluded, actual costs in FY 2022-23 were approximately **\$13.4 million, or 2% greater** (see Table 3).

While total expenditures were very similar, actual personnel expenses were significantly lower than the model estimates and "Facility and Maintenance" costs significantly higher. Many institutions contract with third-party vendors for building maintenance or operation functions, such as janitorial services and grounds maintenance, which results in lower personnel and higher purchased services expenditures. Actual expenditures related to utilities and insurance also significantly exceeded the model outputs. This

² As a matter of general practice, institutions do not account for IT personnel that support building operations in the Physical Plant fund code. Further, due to NCAS chart of account limitations, this study was unable to isolate actual personal services expenditures associated with IT employees that support institutions' IT operations.

difference is likely due to limitations of the assumptions used by this analysis, relative differences in energy efficiency of appropriated facilities, and internal utility cost allocation practices.

Table 3: FY 2022-23 Building Reserve Outputs vs. Actual Expenditures (in millions)

Institution	Non-IT Personnel & Fringes	Utilities & Insurance	Custodial & Supplies	Facilities & Maintenance	Total (excluding IT)
Actual Expenditures	\$328.3	\$222.3	\$34.3	\$100.4	\$685.3
Model Outputs	\$456.2	\$134.5	\$55.3	\$26.0	\$672.0
Difference	(\$127.9)	\$87.9	(\$21.0)	\$74.4	\$13.4

A comparison of FY 2022-23 actual expenditures and model outputs revealed a particularly large difference for UNC-Chapel Hill (UNC-CH). This difference is likely a product of the limitations of the study's assumptions as well as UNC-CH's complexity, diversified revenue streams, and cost allocation practices. For example, federal Facilities and Administrative (F&A) or "overhead" revenues help support physical plant costs. UNC Asheville and UNC Pembroke also expended materially less than the building reserve model estimated. These institutions rely heavily on General Fund appropriations to meet core operational needs and have both experienced enrollment declines that have put added pressure on their General Fund budgets. In contrast, UNC Charlotte and UNC Wilmington (UNCW) spend significantly more than the model generates for facility maintenance and operations. In addition to limitations of the study assumptions, the difference for UNCW is partially attributable to their higher-than-average insurance costs related to hurricane-related losses.

Table 4: Building Reserve Outputs vs. Actual Expenditures by Institution (in millions)

Institution	FY23 Actual Expenditures (ex. IT)	Model Generated Expenditures (ex. IT)	Difference
App State	\$38.3	\$32.2	\$6.1
ECU	\$69.1	\$62.2	\$6.9
ECSU	\$10.3	\$9.8	\$0.5
FSU	\$13.2	\$11.3	\$1.9
NC A&T	\$30.3	\$32.7	(\$2.4)
NCCU	\$23.8	\$19.3	\$4.5
NC State	\$132.8	\$131.8	\$1.0
UNCA	\$10.5	\$12.1	(\$1.6)
UNC-CH	\$144.2	\$181.3	(\$37.1)
UNCC	\$63.3	\$48.8	\$14.4
UNCG	\$36.4	\$37.2	(\$0.8)
UNCP	\$15.8	\$17.8	(\$2.0)
UNCW	\$39.8	\$26.4	\$13.4
UNCSA	\$12.2	\$11.2	\$1.0
WCU	\$27.1	\$23.6	\$3.6
WSSU	\$18.1	\$14.3	\$3.8
TOTAL	\$685.3	\$672.0	\$13.4

Conclusions

Despite the challenges in producing an “apples-to-apples” comparison of the building reserve model outputs and actual expenditures, this study validates that the model generally provides a fair and objective way to estimate funding requirements associated with operating and maintaining appropriated facilities. Based on these results, **we recommend continued use of the model as the basis for future building reserve requests.**

To ensure the model remains relevant and valid, the System Office should convene a working group of stakeholders at least every five years to systematically review the building reserve model and recommend any needed adjustments. The System Office should also continue to monitor actual physical plant expenditures for any unusual increases or changes from previous years. The study’s analysis suggests additional analysis is warranted to better understand the differences in utility costs across institutions. It is also recognized that actual expenditures for operations and maintenance are necessarily limited by available funds and may not reflect the actual funding needed to properly maintain and operate appropriated facilities. It is also difficult to isolate the expenditures for maintenance repairs, which may be disproportionately large due to obsolete or aging equipment or continual deferred maintenance, from the expenditures for operations. Consistent SCIF R&R funding will help mitigate the large backlog of deferred maintenance.

BUILDING RESERVE MODEL INPUTS AND VALUES

The building reserves model for both new construction and renovations and additions require project specific information from the institution to estimate operations and maintenance funding. The table below summarizes the key inputs. Also, **Exhibit 1** provides a sample building reserve model worksheet for new construction.

Key General Inputs:

Field Name	New Construction	Renovation
Institution	Name of University	Name of University
Project or Building Name	Name of Project	Name of Project
Gross Square Feet	GSF for new building	GSF for addition or renovated area
Estimated Substantial Completion Date	Determines prorated amount to be funded in the current FY; assumes funding will be needed up to 90 days prior to beneficial occupancy	Determines prorated amount to be funded in the current FY; assumes funding will be needed up to 60 days prior to beneficial occupancy
Building Type	1 – Administrative, Academic, Classroom 2 – Lab/Clinic 3 – Animal Holding/Intensive Lab	Changes to a higher or lower building type category are a key factor
Number of Smart Classrooms	Number of new smart classrooms. A “smart classroom” is defined as a room with integrated technology including audio-visual, computer and other technology.	Number of renovated or additional smart classrooms
Number of floors	Number of floors in project, used to determine impervious square feet for stormwater calculation	Number of floors in project for additions to determine additional impervious square feet for stormwater calculation
Project Cost	Capital project costs for new construction	Capital project costs for addition or renovated area
Utilities	Average rate per square foot	Average rate per square foot for additional space
Real Property Insurance	Assumed DOI rate	Assumed DOI rate due to additional SF or change in use
Maintenance contracts	Estimated costs for external maintenance contracts including refuse removal, pest control, elevator maintenance, building controls maintenance, card access maintenance, chiller maintenance, fire alarm/fire extinguisher/fire sprinkler system maintenance,	Estimated costs for additional maintenance contracts required because of additional space or change to the use of space to a higher intensity

Field Name	New Construction	Renovation
	security system maintenance, and other maintenance services that are not supported by new FTEs.*	
Number of Vehicles	Estimated number of vehicles needed for staff	Estimated number of additional vehicles needed for staff increases due to additional SF or increased intensity of use
Vehicle Insurance	Insurance for additional vehicles	Insurance for additional vehicles
Vehicle Cost (non-recurring)	Cost of additional vehicles	Costs for additional vehicles
Other Equipment (non-recurring)	Additional equipment specific to the project is required to maintain and operate the building. Examples include lift for washing curtainwall glass, snow removal equipment, or special tools.	Additional equipment specific to the additional square feet or increased intensity of use as required to maintain and operate the additional area or use.

* Note: An institution may elect to use contracted services (such as housekeeping or HVAC maintenance) in lieu of hiring FTEs, but the services provided by FTEs may not be counted as maintenance contracts.

Personnel Values

The model generates the number of positions based on the gross square footage (GSF) and building type (intensity of use). For FY2022-23, the building reserves model included the following assumed staffing ratios and values:

Building Type	1	2	3	Annual Salary
Building Use	Admin, Academic, or Classroom	Laboratory or Clinic	Animal Holding or Intensive Lab	
Position				
Building Environmental Service Technician (BEST)	1 per 18,000 GSF	1 per 12,000 GSF	1 per 12,000 GSF	\$31,200
Building Environmental Service Supervisor (BESS)	1 per 12 BEST	1 per 12 BEST	1 per 12 BEST	\$36,177
Facilities Maintenance Technician Mechanical (FMTM)	1 per 25,000 GSF	1 per 23,000 GSF	1 per 21,000 GSF	\$46,681
Public Safety Officer	1 per 100,000 GSF	1 per 100,000 GSF	1 per 100,000 GSF	\$49,103
Environmental/Health Safety (EHS) Professional	1 per 300,000 GSF	1 per 200,000 GSF	1 per 100,000 GSF	\$64,377
IT Networking Analyst (IT Infrastructure)	1 per 250,000 GSF	1 per 25,000 GSF	1 per 15,000 GSF	\$76,739
IT Networking Technician (Classroom Support)	1 per 15 smart classrooms	1 per 15 smart classrooms	1 per 15 smart classrooms	\$69,931

Building Type	1	2	3	Annual Salary
Building Use	Admin, Academic, or Classroom	Laboratory or Clinic	Animal Holding or Intensive Lab	
Position				
Facilities Maintenance Technician Trades (FMTT)	1 per 57,000 GSF	1 per 57,000 GSF	1 per 57,000 GSF	\$34,180

Benefits

Benefits were calculated based on the number of positions and salaries at the following rates:

Shift differential	10%
Social Security	7.65%
State Retirement	24.1%
Medical Insurance	\$7,774 each

Supplies

Supplies include the following:

Building Type	1	2	3	Lump Sum
Building Use	Admin, Academic, or Classroom	Laboratory or Clinic	Animal Holding or Intensive Lab	
Housekeeping supplies	\$0.181/GSF	\$0.188/GSF	\$0.220/GSF	
Repair supplies	\$0.935/GSF	\$1.004/GSF	\$1.035/GSF	
Police supplies	-	-	-	\$947.00 per officer
IT supplies – infrastructure	\$0.753/GSF			
IT supplies – classroom support				\$7,761 per smart classroom
Utility factor	1.00 x utility rate	1.45 x utility rate	2.90 x utility rate	
Communications	\$0.158/GSF			

Utilities

The combined utility rate per GSF is provided by the institution. The stormwater rate is provided by the institution and is calculated on the total GSF of impervious pavement (GSF/number of stories). Communications is included in the total utilities cost.

Services

Services contracts that support the maintenance and operations include the following:

Elevator maintenance	Cost per elevator
Pest control	Cost per GSF
Refuse removal	Cost per GSF
Security systems	Cost per GSF
Building controls/chiller maintenance	Cost per GSF

Insurance:

Insurance includes real property and vehicle insurance and are determined as follows:

Real property insurance	Estimated insurance rate per GSF from NCDOT – Risk Management Division
Vehicle insurance	Estimated liability insurance rate per each new vehicle from NCDOT – Risk Management Division

Other Expenses (Non-recurring):

Other non-recurring expenses included in the building reserve model include the following:

Initial housekeeping supplies	1 month
Initial repair supplies	1 month
Initial police supplies	\$9,908 w/o body cameras \$11,024 with body cameras
Moving costs	Lump sum
Uniforms	Cost per each new employee
Vehicles	Based on number of new employees; cost determined by institution
<u>Other special equipment</u>	
Equipment for Fac. Maint. Tech – Mech. (FMTM)	\$8,556 per FMTM
Equipment for Bldg Envir Serv Tech (BEST) - Housekeeper	\$6,316 per BEST
Equipment for Fac. Maint. Tech – Trade (FMTT)	\$3,264 per FMTT
Equipment per building	\$26,678 lump sum per building
Trash cans (large)	1/7,500 GSF @ \$156 each
Recycling bins	1/25,000 GSF @ \$331 each
Floor burnisher	1/50,000 GSF @ \$7,979 each
Dumpsters/test instruments	1/75,000 GSF @ \$3895 each

Worksheet Line #	I. General inputs								
3	Institution	Sample University							
4	Budget Code								
5	Project or Building Name	Sample Building Name							
6	GSF		GSF includes total GSF for appropriated buildings over 3000 SF. (This is the same value used in the R&R allocation model.) Source is a special table created from DAVE.						
7	C.I. Code:								
8	Item:								
9	Date Project Authorized								
10	Est. Substantial Completion Date								
11	Date for Engaging Architect								
12	Beginning Construction Date								
13	Construction Completion Date								
14	Occupation Date								
15	Building Type	2	Assumed at "2" for entire campus.						
		FY2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27			
17	Number of Months Budgeted	12	12	12	12	12			
18	Number of Smart Classrooms		Number of classrooms per institution (Table 16, 2022 Facilities Inventory and Utilization Report).						
19	Number of Floors	3	Assumed at "3" for stormwater calculation.						
20	Project Cost		Estimated replacement value for appropriated buildings over 3000 SF.						
21	Fund Release Date								
22	Less Receipts to offset Operating Costs (1180-43XXX)	0	0	0	0	0			
If operation is supported from receipts, give current level of receipts, increase in rates, if necessary (from ____ to ____), and any restrictions on the use of these receipts by federal or state law.									
II. Project Description and Explanation of Special Operating Requirements (YOU MUST PROVIDE THE INFORMATION HIGHLIGHTED IN BLUE):									
Enter a description of the project, including what activities will take place in the building such as instruction, gymnasium, research, etc.									
30	Description/activities								
31	What is the source of funds for the building?								
32	Explain each of the following calculations:								
33	Utilities per square foot	Utility rates were determined from actual utility rates reported to the Department of Environmental Quality for 2021-22.							
34	Stormwater per impervious square foot	Building Reserves requests from FY2021-23 were used to determine an average stormwater rate.							
35	The funds needed for moving costs								
36	Maintenance contracts - the basis for your figures?	The Building Reserves requests from FY2021-23 were used to determine a ratio for elevators per SF and an average cost per elevator. Similar values were determined for other maintenance services including pest control, refuse removal, security, and controls/chillers.							
37	Insurance costs for real property and vehicles	Real property insurance rate was assumed at .07/100. Number of vehicles was assumed at 1:8 facility staff at a rate of \$300 per vehicle.							
38	Number/type of vehicles for the project - why needed								
39	Fund release date - provide detailed explanation.								
40	Basis for renovation requirements per instructions.								
41	Other equipment requests - what/why?								
Institution Specific Costs									
III. Line specific inputs:									
45	Initial Police Supplies	YES							
46	Utilities: \$/GSF							See Line 33 for assumption.	
47	Utilities: Stormwater: \$/ SF Impervious Pavement							See Line 34 for assumption.	
48	Moving Costs: Estimate	Est.							
49	Elev. Maint. (# of Elev.): Est.		# of Elev.						
50	Pest Control: Est.								
51	Refuse Removal: Est.								
52	Uniforms (# of New Employees): Est.							See Line 36 for assumptions.	
53	Security: Est.								
54	Controls/Chillers: Est.								
55	Real Property Insurance								
56	Vehicle Insurance-532000: Est. @		300	# of Vehicles				See Line 37 for assumptions.	
57	Vehicle Purchase Cost-534000: Est. @								
Other Equipment (Project Specific)		Equipment Description	Quantity	Unit Amount	Total Amount				
60	Item #1				0				
61	Item #2				0				
62	Item #3				0				
	Total				\$0				

Sample University	New Construction Maintenance and Operations Reserve				Annual Budget	Annual Budget	Annual Budget	Annual Budget	Annual Budget
Sample Building Name					FY2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
No. of months in FY					12	12	12	12	12
1180-531210	Building Environmental Service Technician (BEST)	12,000	GSF	0	0.0%	0	0	0	0
1180-531210	Building Environmental Service Supervisor (BESS)	12	Hskpr.	0.0	0.0%	0	0	0	0
1180-531210	Facilities Maintenance Technician Mechanical (FMTM)	21,000	GSF	0.0	0.0%	0	0	0	0
1180-531210	Public Safety Officer	100,000	GSF	0.0	0.0%	0	0	0	0
1180-531210	EHS Professional	100,000	GSF	0	0.0%	0	0	0	0
1180-531210	IT Networking Analyst (Infrastructure)	250,000	GSF	0	0.0%	0	0	0	0
1180-531210	IT Networking Technician (Classroom Support)	15	CLS	0	0.0%	0	0	0	0
1180-531210	Facilities Maintenance Technician Trades (FMTT)	57,000	GSF	0	0.0%	0	0	0	0
Subtotal-Personnel				0	0.0%	0	0	0	0
1180-531430	Shift Differential	10	%			0	0	0	0
1180-531510	Social Security	7.65	%			0	0	0	0
1180-531520	State Retirement	24.1	%			0	0	0	0
1180-531560	Medical Insurance	7,774	ea.			0	0	0	0
Subtotal-Fringe Benefits				0	0.0%	0	0	0	0
1180-533000	Initial Supplies- Housekeeping	1	Mth.		NR	0	0	0	0
1180-533000	Regular Supplies	0.220	\$/GSF			0	0	0	0
1180-533000	Repair Supplies					0	0	0	0
1180-533000	Initial Repair Supplies	1	Mth.		NR	0	0	0	0
1180-533000	Regular Supplies	1.035	\$/GSF			0	0	0	0
1180-533000	Other Supplies					0	0	0	0
1180-533000	Initial Police Supplies	9,908	\$/Officer		NR	0	0	0	0
1180-533000	Police Supplies	947	\$/Officer			0	0	0	0
1180-533000	IT Supplies (Infrastructure)	0.753	\$/GSF			0	0	0	0
1180-533000	IT Supplies (Clasm. Support)	7,761	\$/ Classroom			0	0	0	0
Subtotal-Supplies						0	0	0	0
1180-532200	Utilities	2.90					0	0	0
1180-532200	Utilities: Stormwater	1				0	0	0	0
1180-532000	Communications	0.148	\$/GSF			0	0	0	0
Subtotal-Utilities						0	0	0	0
1180-535000	Moving Costs				NR	0	0	0	0
1180-532000	Elev. Maint. (# of Elev.)					0	0	0	0
1180-532000	Pest Control					0	0	0	0
1180-532000	Refuse Removal					0	0	0	0
1180-532000	Uniforms (# of New Employees)	0.0				0	0	0	0
1180-532000	Security					0	0	0	0
1180-532000	Controls/Chillers					0	0	0	0
Subtotal-Maintenance and Service Contracts						0	0	0	0
1180-532000	Real Property					0	0	0	0
1180-532000	Vehicle					0	0	0	0
Subtotal-Insurance						0	0	0	0
1180-534000	Vehicles				NR	0	0	0	0
1180-534000	Other Equipment				NR	0	0	0	0
1180-534000	Other Equipment				NR	0	0	0	0
Subtotal-Additional Equipment						0	0	0	0
TOTAL – RESERVE FOR OPERATION AND MAINTENANCE						\$0	\$0	\$0	\$0
	Recurring costs			R		\$0	\$0	\$0	\$0
	Non-recurring costs			NR		\$0	\$0	\$0	\$0
						=====	=====	=====	=====
	SPECIAL RECURRING EXPENDITURE:								
TOTAL: AFTER SPECIAL RECURRING EXPENDITURE						\$0	\$0	\$0	\$0
	Adjusted Recurring Expenditures			R		\$0	\$0	\$0	\$0

ASSUMPTIONS USED TO ESTIMATE FY2022-23 BUILDING RESERVE MODEL OUTPUTS

To generate the estimated FY2022-23 recurring expenditures for each institution, a building reserve model for new construction was created for each individual institution using the following values and assumptions:

Gross Square Feet (GSF)	Total gross square footage for all appropriated buildings over 3000 SF as reported in systemwide asset database, DAVE. Non-appropriated buildings and appropriated buildings less than 3000 GSF do not receive state appropriations for operations and maintenance.
Building Type	For the purpose of this report, all buildings are assumed to be Building Type 2.
Number of months budgeted	12, to provide estimated recurring expenditures for a full year.
Number of smart classrooms	Total number of classrooms from “2022 Facilities Inventory and Utilization Report”, Table 16.
Number of floors	For the purpose of this report, all buildings are assumed to have 3 floors.
Estimated Replacement Value	Total estimated replacement value of non-residential buildings from “2022 Facilities Inventory and Utilization Report”, Table 19.
Utilities per square foot	Utility rates per institution were determined from actual utility rates reported to the NC Department of Environmental Quality for FY2022-23.
Stormwater per impervious SF	Average stormwater rate based on stormwater rates included in the FY2021-23 Building Reserves requests.
Elevator maintenance	Building Reserves requests for FY2021-23 were used to determine a ratio for elevators per square foot and an average cost per elevator.
Pest control maintenance	Building Reserves requests for FY2021-23 were used to determine an average cost per square foot.
Refuse removal contracts	
Security system maintenance	
Controls/chillers maintenance	
Real property insurance	Assumed a rate of .07 * total GSF/100.
Vehicle insurance	Assumed one vehicle for eight staff and insurance at \$300 per vehicle.

**Appendix C - FY2022-23 ESTIMATE OF SYSTEMWIDE BUILDING RESERVES
(RECURRING) BY INSTITUTION (including IT)**

Institution	Gross Square Feet (GSF) ²	Personnel by Position	Total Personnel	Fringe Benefits	Custodial and Supplies	Facilities/ Maint Services	Total Estimated Utilities	Insurance	IT (CR support)	IT (infrastructure)	TOTAL
App State	2,356,870	418.6	\$16,760,060	\$9,362,242	\$2,832,929	\$1,332,285	\$3,866,524	\$791,738	\$2,002,464	\$1,774,605	\$38,722,847
Building environmental service tech/supervisor		196.4	\$6,127,680								
Building environmental service supervisor		16.4	\$593,303								
Facilities maintenance technician mechanical		102.5	\$4,784,803								
Public safety officer		23.6	\$1,158,831								
Environmental health and safety professional		11.8	\$759,649								
IT networking analyst		9.4	\$721,347								
IT networking technician		17.2	\$1,202,813								
Facilities maintenance technician trades		41.3	\$1,411,634								
ECU	4,324,411	748.3	\$29,371,637	\$16,585,654	\$5,197,793	\$2,444,490	\$10,380,893	\$1,316,833	\$1,389,307	\$3,256,065	\$69,942,672
Building environmental service tech/supervisor		360.4	\$11,244,480								
Building environmental service supervisor		30	\$1,085,310								
Facilities maintenance technician mechanical		188	\$8,776,028								
Public safety officer		43.2	\$2,121,250								
Environmental health and safety professional		21.6	\$1,390,543								
IT networking analyst		17.3	\$1,327,585								
IT networking technician		11.9	\$832,179								
Facilities maintenance technician trades		75.9	\$2,594,262								
ECSU	700,287	125.3	\$5,042,359	\$2,808,837	\$841,725	\$395,856	\$1,386,941	\$213,650	\$698,534	\$527,281	\$11,915,183
Building environmental service tech/supervisor		58.4	\$1,822,080								
Building environmental service supervisor		4.9	\$177,267								
Facilities maintenance technician mechanical		30.4	\$1,419,102								
Public safety officer		7	\$343,721								
Environmental health and safety professional		3.5	\$225,320								
IT networking analyst		2.8	\$214,869								
IT networking technician		6	\$419,586								
Facilities maintenance technician trades		12.3	\$420,414								
FSU	813,963	143	\$5,678,472	\$3,185,838	\$978,326	\$460,115	\$1,612,081	\$200,787	\$496,735	\$612,873	\$13,225,227
Building environmental service tech/supervisor		67.8	\$2,115,360								
Building environmental service supervisor		5.7	\$206,209								
Facilities maintenance technician mechanical		35.4	\$1,652,507								
Public safety officer		8.1	\$397,734								
Environmental health and safety professional		4.1	\$263,946								
IT networking analyst		3.3	\$253,239								
IT networking technician		4.3	\$300,703								
Facilities maintenance technician trades		14.3	\$488,774								
NC A&T	2,365,952	413.4	\$16,347,581	\$9,194,086	\$2,843,855	\$1,337,417	\$4,283,635	\$790,935	\$1,210,792	\$1,781,444	\$37,789,745
Building environmental service tech/supervisor		197.2	\$6,152,640								
Building environmental service supervisor		16.4	\$593,303								
Facilities maintenance technician mechanical		102.9	\$4,803,475								
Public safety officer		23.7	\$1,163,741								
Environmental health and safety professional		11.8	\$759,649								
IT networking analyst		9.5	\$729,021								
IT networking technician		10.4	\$727,282								
Facilities maintenance technician trades		41.5	\$1,418,470								
NCCU	1,369,834	243.4	\$9,748,073	\$5,444,493	\$1,646,508	\$774,335	\$2,706,244	\$557,979	\$1,179,746	\$1,031,417	\$23,088,795
Building environmental service tech/supervisor		114.2	\$3,563,040								
Building environmental service supervisor		9.5	\$343,682								
Facilities maintenance technician mechanical		59.6	\$2,782,188								
Public safety officer		13.7	\$672,711								
Environmental health and safety professional		6.8	\$437,764								
IT networking analyst		5.5	\$422,065								
IT networking technician		10.1	\$706,303								
Facilities maintenance technician trades		24	\$820,320								

Appendix C - FY2022-23 ESTIMATE OF SYSTEMWIDE BUILDING RESERVES

(RECURRING) BY INSTITUTION (including IT)

NC State	9,292,132	1598.1	\$62,429,849	\$35,345,684	\$11,168,893	\$5,252,629	\$19,518,434	\$3,685,958	\$1,823,950	\$6,996,511	\$146,221,908
<i>Building environmental service tech/supervisor</i>		774.3	\$24,158,160								
<i>Building environmental service supervisor</i>		64.5	\$2,333,417								
<i>Facilities maintenance technician mechanical</i>		404	\$18,859,124								
<i>Public safety officer</i>		92.9	\$4,561,669								
<i>Environmental health and safety professional</i>		46.5	\$2,993,531								
<i>IT networking analyst</i>		37.2	\$2,854,691								
<i>IT networking technician</i>		15.7	\$1,097,917								
<i>Facilities maintenance technician trades</i>		163	\$5,571,340								
UNCA	894,047	155.8	\$6,148,947	\$3,461,522	\$1,074,584	\$505,384	\$1,430,952	\$217,362	\$411,359	\$673,173	\$13,923,283
<i>Building environmental service tech/supervisor</i>		74.5	\$2,324,400								
<i>Building environmental service supervisor</i>		6.2	\$224,297								
<i>Facilities maintenance technician mechanical</i>		38.9	\$1,815,891								
<i>Public safety officer</i>		8.9	\$437,017								
<i>Environmental health and safety professional</i>		4.5	\$289,697								
<i>IT networking analyst</i>		3.6	\$276,260								
<i>IT networking technician</i>		3.5	\$244,759								
<i>Facilities maintenance technician trades</i>		15.7	\$536,626								
UNC-CH	10,720,434	1845	\$72,105,766	\$40,814,185	\$12,885,692	\$6,060,014	\$51,999,822	\$3,982,982	\$2,235,309	\$8,071,951	\$198,155,721
<i>Building environmental service tech/supervisor</i>		893.4	\$27,874,080								
<i>Building environmental service supervisor</i>		74.5	\$2,695,187								
<i>Facilities maintenance technician mechanical</i>		466.1	\$21,758,014								
<i>Public safety officer</i>		107.2	\$5,263,842								
<i>Environmental health and safety professional</i>		53.6	\$3,450,607								
<i>IT networking analyst</i>		42.9	\$3,292,103								
<i>IT networking technician</i>		19.2	\$1,342,675								
<i>Facilities maintenance technician trades</i>		188.1	\$6,429,258								
UNCC	3,622,024	632.5	\$25,003,894	\$14,064,239	\$4,353,564	\$2,047,446	\$5,326,307	\$1,188,903	\$1,823,950	\$2,727,203	\$56,535,506
<i>Building environmental service tech/supervisor</i>		301.8	\$9,416,160								
<i>Building environmental service supervisor</i>		25.2	\$911,660								
<i>Facilities maintenance technician mechanical</i>		157.5	\$7,352,258								
<i>Public safety officer</i>		36.2	\$1,777,529								
<i>Environmental health and safety professional</i>		18.1	\$1,165,224								
<i>IT networking analyst</i>		14.5	\$1,112,716								
<i>IT networking technician</i>		15.7	\$1,097,917								
<i>Facilities maintenance technician trades</i>		63.5	\$2,170,430								
UNCG	2,720,087	473.4	\$18,663,420	\$10,513,643	\$3,269,476	\$1,537,602	\$4,054,381	\$1,336,194	\$1,179,746	\$2,048,090	\$42,602,552
<i>Building environmental service tech/supervisor</i>		226.7	\$7,073,040								
<i>Building environmental service supervisor</i>		18.9	\$683,745								
<i>Facilities maintenance technician mechanical</i>		118.3	\$5,522,362								
<i>Public safety officer</i>		27.2	\$1,335,602								
<i>Environmental health and safety professional</i>		13.6	\$875,527								
<i>IT networking analyst</i>		10.9	\$836,455								
<i>IT networking technician</i>		10.1	\$706,303								
<i>Facilities maintenance technician trades</i>		47.7	\$1,630,386								
UNCP	1,266,513	224	\$8,941,856	\$5,003,189	\$1,522,350	\$715,931	\$2,597,027	\$386,266	\$970,186	\$953,621	\$21,090,426
<i>Building environmental service tech/supervisor</i>		105.5	\$3,291,600								
<i>Building environmental service supervisor</i>		8.8	\$318,358								
<i>Facilities maintenance technician mechanical</i>		55.1	\$2,572,123								
<i>Public safety officer</i>		12.7	\$623,608								
<i>Environmental health and safety professional</i>		6.3	\$405,575								
<i>IT networking analyst</i>		5.1	\$391,369								
<i>IT networking technician</i>		8.3	\$580,427								
<i>Facilities maintenance technician trades</i>		22.2	\$758,796								

Appendix C - FY2022-23 ESTIMATE OF SYSTEMWIDE BUILDING RESERVES

(RECURRING) BY INSTITUTION (including IT)

UNCSA	815,069	143	\$5,672,517	\$3,184,998	\$979,739	\$460,740	\$1,500,161	\$192,248	\$473,451	\$613,706	\$13,077,560
Building environmental service tech/supervisor		67.9	\$2,118,480								
Building environmental service supervisor		5.7	\$206,209								
Facilities maintenance technician mechanical		35.4	\$1,652,507								
Public safety officer		8.2	\$402,645								
Environmental health and safety professional		4.1	\$263,946								
IT networking analyst		3.3	\$253,239								
IT networking technician		4.1	\$286,717								
Facilities maintenance technician trades		14.3	\$488,774								
UNCW	1,908,539	335.7	\$13,342,434	\$7,482,822	\$2,294,031	\$1,078,854	\$3,550,901	\$548,841	\$1,249,600	\$1,437,034	\$30,984,517
Building environmental service tech/supervisor		159	\$4,960,800								
Building environmental service supervisor		13.3	\$481,154								
Facilities maintenance technician mechanical		83	\$3,874,523								
Public safety officer		19.1	\$937,867								
Environmental health and safety professional		9.5	\$611,582								
IT networking analyst		7.6	\$583,216								
IT networking technician		10.7	\$748,262								
Facilities maintenance technician trades		33.5	\$1,145,030								
WCU	1,790,878	312.3	\$12,334,691	\$6,941,530	\$2,152,583	\$1,012,342	\$2,203,735	\$452,814	\$846,002	\$1,348,442	\$27,292,139
Building environmental service tech/supervisor		149.2	\$4,655,040								
Building environmental service supervisor		12.4	\$448,595								
Facilities maintenance technician mechanical		77.9	\$3,636,450								
Public safety officer		17.9	\$878,944								
Environmental health and safety professional		9	\$579,393								
IT networking analyst		7.2	\$552,521								
IT networking technician		7.3	\$510,496								
Facilities maintenance technician trades		31.4	\$1,073,252								
WSSU	1,034,382	183.3	\$7,257,940	\$4,066,463	\$1,243,259	\$584,713	\$1,934,846	\$255,445	\$721,819	\$778,838	\$16,843,323
Building environmental service tech/supervisor		86.2	\$2,689,440								
Building environmental service supervisor		8.2	\$260,474								
Facilities maintenance technician mechanical		45	\$2,100,645								
Public safety officer		10.3	\$505,761								
Environmental health and safety professional		5.2	\$334,760								
IT networking analyst		4.1	\$314,630								
IT networking technician		6.2	\$433,572								
Facilities maintenance technician trades		18.1	\$618,658								
TOTAL	45,995,422	7,995.1	\$314,849,496	\$177,459,425	\$55,285,307	\$26,000,153	\$118,352,884	\$16,118,935	\$18,712,950	\$34,632,254	\$761,411,404

¹ Based on Building Reserves New Construction Model

² Gross Square Footage (GSF) includes only appropriated buildings over 3000 GSF

FY 2022-23 Facility Operations and Maintenance Expenditures (including Institutional Support IT)

APPENDIX D

Institution	Physical Plant Employee FTE ¹	Physical Plant Personal Services ¹	Utilities & Insurance ²	Custodial & Supplies ³	Facilities & Maintenance ⁴	Information Technology ⁵	Total
App State	304.5	\$22,560,358	\$8,954,138	\$199,476	\$6,602,539	\$3,615,269	\$41,931,780
Building environmental service tech	87.0						
Building environmental service supervisor	7.0						
Facilities maintenance technician mechanical	43.0						
Public safety officer	33.0						
Environmental health and safety professional	7.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	19.0						
Other Construction-related positions	4.0						
All other positions coded to Fund 1180	104.5						
ECU	452.5	\$33,920,021	\$20,896,227	\$4,286,305	\$9,993,695	\$8,705,817	\$77,802,065
Building environmental service tech	181.5						
Building environmental service supervisor	21.0						
Facilities maintenance technician mechanical	54.0						
Public safety officer	41.0						
Environmental health and safety professional	6.0						
IT networking analyst	1.0						
IT networking technician	-						
Facilities maintenance technician trades	33.0						
Other Construction-related positions	9.0						
All other positions coded to Fund 1180	106.0						
ECSU	57.0	\$5,324,095	\$2,640,422	\$695,219	\$1,636,383	\$751,627	\$11,047,746
Building environmental service tech	15.0						
Building environmental service supervisor	3.0						
Facilities maintenance technician mechanical	7.0						
Public safety officer	11.0						
Environmental health and safety professional	1.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	4.0						
Other Construction-related positions	3.0						
All other positions coded to Fund 1180	13.0						
FSU	101.0	\$8,138,224	\$2,289,324	\$644,328	\$2,150,163	\$2,975,253	\$16,197,293
Building environmental service tech	24.0						
Building environmental service supervisor	2.0						
Facilities maintenance technician mechanical	11.0						
Public safety officer	16.0						
Environmental health and safety professional	1.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	7.0						
Other Construction-related positions	1.0						
All other positions coded to Fund 1180	39.0						

FY 2022-23 Facility Operations and Maintenance Expenditures (including Institutional Support IT)

APPENDIX D

Institution	Physical Plant Employee FTE¹	Physical Plant Personal Services¹	Utilities & Insurance²	Custodial & Supplies³	Facilities & Maintenance⁴	Information Technology⁵	Total
NCA&T	132.0	\$10,594,044	\$9,446,633	\$1,560,045	\$8,687,256	\$2,167,184	\$32,455,163
Building environmental service tech	64.0						
Building environmental service supervisor	7.0						
Facilities maintenance technician mechanical	17.0						
Public safety officer	-						
Environmental health and safety professional	1.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	3.0						
Other Construction-related positions	8.0						
All other positions coded to Fund 1180	32.0						
NCCU	149.0	\$12,270,252	\$6,396,988	\$784,290	\$4,314,603	\$1,683,243	\$25,449,376
Building environmental service tech	51.0						
Building environmental service supervisor	3.0						
Facilities maintenance technician mechanical	14.0						
Public safety officer	26.0						
Environmental health and safety professional	4.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	9.0						
Other Construction-related positions	-						
All other positions coded to Fund 1180	42.0						
NC State	792.5	\$63,647,512	\$36,588,078	\$11,372,300	\$21,196,459	\$13,218,605	\$146,022,954
Building environmental service tech	251.0						
Building environmental service supervisor	25.0						
Facilities maintenance technician mechanical	124.0						
Public safety officer	33.0						
Environmental health and safety professional	4.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	46.0						
Other Construction-related positions	22.0						
All other positions coded to Fund 1180	287.5						
UNCA	105.0	\$7,124,515	\$2,300,844	\$585,687	\$532,903	\$1,875,045	\$12,418,994
Building environmental service tech	35.0						
Building environmental service supervisor	3.0						
Facilities maintenance technician mechanical	16.0						
Public safety officer	15.0						
Environmental health and safety professional	1.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	8.0						
Other Construction-related positions	3.0						
All other positions coded to Fund 1180	24.0						

Institution	Physical Plant Employee FTE ¹	Physical Plant Personal Services ¹	Utilities & Insurance ²	Custodial & Supplies ³	Facilities & Maintenance ⁴	Information Technology ⁵	Total
UNC-CH	387.3	\$50,953,885	\$81,602,489	\$2,721,638	\$8,917,335	\$4,573,799	\$148,769,146
Building environmental service tech	133.0						
Building environmental service supervisor	24.0						
Facilities maintenance technician mechanical	26.0						
Public safety officer	32.0						
Environmental health and safety professional	10.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	8.0						
Other Construction-related positions	18.0						
All other positions coded to Fund 1180	136.3						
UNCC	631.6	\$31,843,330	\$14,827,825	\$2,192,074	\$14,416,791	\$2,852,898	\$66,132,917
Building environmental service tech	284.0						
Building environmental service supervisor	21.0						
Facilities maintenance technician mechanical	75.0						
Public safety officer	42.0						
Environmental health and safety professional	21.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	31.0						
Other Construction-related positions	7.8						
All other positions coded to Fund 1180	149.9						
UNCG	236.7	\$21,135,546	\$10,920,916	\$1,979,364	\$2,361,880	\$7,664,182	\$44,061,888
Building environmental service tech	94.0						
Building environmental service supervisor	8.0						
Facilities maintenance technician mechanical	17.0						
Public safety officer	24.0						
Environmental health and safety professional	6.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	16.0						
Other Construction-related positions	5.0						
All other positions coded to Fund 1180	66.7						
UNCP	120.0	\$9,784,672	\$2,548,071	\$737,180	\$2,760,080	\$5,514,227	\$21,344,231
Building environmental service tech	47.0						
Building environmental service supervisor	3.0						
Facilities maintenance technician mechanical	17.0						
Public safety officer	13.0						
Environmental health and safety professional	3.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	6.0						
Other Construction-related positions	1.0						
All other positions coded to Fund 1180	30.0						

FY 2022-23 Facility Operations and Maintenance Expenditures (including Institutional Support IT)

APPENDIX D

Institution	Physical Plant Employee FTE¹	Physical Plant Personal Services¹	Utilities & Insurance²	Custodial & Supplies³	Facilities & Maintenance⁴	Information Technology⁵	Total
UNCW	248.0	\$20,259,504	\$11,462,754	\$1,524,436	\$6,579,379	\$2,562,992	\$42,389,065
Building environmental service tech	94.0						
Building environmental service supervisor	8.0						
Facilities maintenance technician mechanical	24.0						
Public safety officer	23.0						
Environmental health and safety professional	4.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	7.0						
Other Construction-related positions	3.0						
All other positions coded to Fund 1180	85.0						
UNCSA	106.0	\$7,419,177	\$2,573,261	\$636,701	\$1,581,277	\$1,172,944	\$13,383,360
Building environmental service tech	35.0						
Building environmental service supervisor	4.0						
Facilities maintenance technician mechanical	12.0						
Public safety officer	14.0						
Environmental health and safety professional	1.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	7.0						
Other Construction-related positions	1.0						
All other positions coded to Fund 1180	32.0						
WCU	231.0	\$15,331,042	\$5,237,870	\$3,263,248	\$3,306,235	\$2,440,777	\$29,579,170
Building environmental service tech	70.0						
Building environmental service supervisor	17.0						
Facilities maintenance technician mechanical	33.0						
Public safety officer	23.0						
Environmental health and safety professional	2.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	17.0						
Other Construction-related positions	2.0						
All other positions coded to Fund 1180	67.0						
WSSU	114.0	\$7,993,544	\$3,648,483	\$1,089,286	\$5,387,071	\$6,748,712	\$24,867,096
Building environmental service tech	42.0						
Building environmental service supervisor	7.0						
Facilities maintenance technician mechanical	11.0						
Public safety officer	15.0						
Environmental health and safety professional	3.0						
IT networking analyst	-						
IT networking technician	-						
Facilities maintenance technician trades	3.0						
Other Construction-related positions	1.0						
All other positions coded to Fund 1180	32.0						

FY 2022-23 Facility Operations and Maintenance Expenditures (including Institutional Support IT)

APPENDIX D

Institution	Physical Plant Employee FTE¹	Physical Plant Personal Services¹	Utilities & Insurance²	Custodial & Supplies³	Facilities & Maintenance⁴	Information Technology⁵	Total
TOTAL	4,168.0	\$328,299,719	\$222,334,324	\$34,271,578	\$100,424,049	\$68,522,574	\$753,852,244

¹ Includes all Fund 1180 Personal Services expenditures per BD701 and employee FTE supported by Fund 1180 per UNC HR Datamart (HRDM).

² Includes all expenditures on utilities and insurance in all fund codes per BD701.

³ Includes 1) Fund 1180 expenditures on supplies, 2) expenditures on applicable supplies (janitorial, laundry, safety/security supplies, carpentry & hardware supplies) in all other fund codes, and 3) janitorial and laundry service agreements in all fund codes per BD701.

⁴ Includes 1) Fund 1180 Purchased Services (excluding Custodial and IT-related), 2) Fund 1180 Other Expenses, and 3) applicable Purchased Services (including service agreements for waste/recycling, security, pest control, lawns & grounds; building and other structure repairs, and building maintenance agreements) in other fund codes per BD701.

⁵ Includes all Fund 1170 and Fund 1180 expenditures in IT purchased services accounts per BD701.