

*The University of North Carolina at Chapel Hill
Office of Internal Audit*

***RISK ASSESSMENT AND
FISCAL YEAR 2023
INTERNAL AUDIT
WORK PLAN***

*Board of Trustees
Audit, Compliance, and Risk Assessment Committee*

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Preface

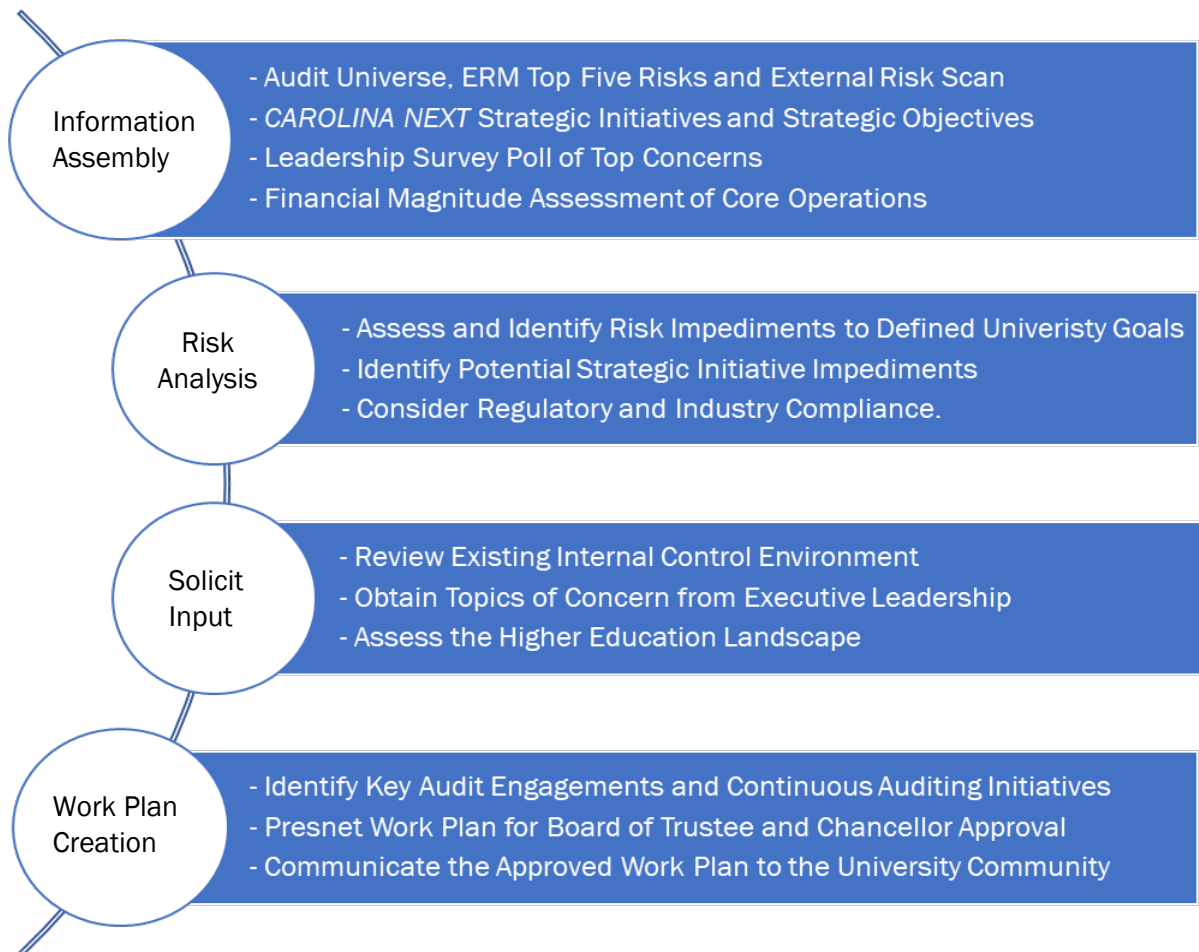
The Office of Internal Audit (OIA) developed the University of North Carolina-Chapel Hill's *Risk Assessment and Fiscal Year 2023 Internal Audit Work Plan* (Work Plan). Various risk assessment processes were employed as part of the Work Plan development phase to best allocate scarce internal audit resources directed to specific audit engagements for evaluating and assessing key business processes and risk drivers.

Purpose of the Work Plan

The document defines key areas of university operations where institutional risk mitigation is being focused through the completion of internal audit activities for the fiscal year. In addition to defined engagements, OIA project hours are provided within the Work Plan to perform advisory services, consulting, and the completion of special projects and investigations.

Work Plan Development Process

The Work Plan was established based on OIA information gathered through an analysis of existing and emerging risks. This comprised consideration of the University's *ERM Register of Top Five Institutional Risks*, potential risk impediments of the eight strategic initiatives framed within *CAROLINA NEXT – INNOVATIONS FOR PUBLIC GOOD*, input from executive leadership, a financial magnitude risk assessment, and current issues impacting higher education. The Board of Trustees, Audit, Compliance, and Risk Management Committee, members of the Chancellor's and Provost's cabinet, and certain divisional leaders were consulted for input.



North Carolina System Policy - University Enterprise Risk Management & Compliance

Creation of the University's *Fiscal Year 2023 Internal Audit Work Plan* considered UNC System Board of Governors' Policy 1300.7, *University Enterprise Risk Management and Compliance*, providing for the establishment of institution-based enterprise risk management and compliance processes. The UNC System Office required submission of the university's *Top Five ERM Institutional Risks* to their office in April 2022, The following chart details Carolina's submission.

| Risk Topic | Description | Risk Category |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Talent Management | Retaining and attracting top talent fundamental to the University's ability to operate and actively compete in a higher education marketplace. | Mission |
| Physical Infrastructure | Balancing competitive, vital large-scale capital investment programs for new facilities, existing renewals, and allocation of resources for maintenance to sustain the existing physical infrastructure footprint. | Financial |
| Attention to Well-Being and Mental Health | Resources or advocacy supporting well-being and mental health initiatives, including emerging technology and application solutions to support increased student and personnel anxiety, depression, and related concerns. | Life/Health Safety |
| Decision Support | Making informed, timely decisions such as how to allocate scarce resources to meet the strategic goals exasperated by the lack of key matrices and related data. | Strategic |
| Cyber Security | Staying on top of the wide array of cyber security threats, this includes novel ways to exploit criminal activity, ransomware, and denial of service attacks. | Technology |

The OIA supported the Office of Vice Chancellor for Institutional Integrity and Risk Management in the development and distribution of a survey to the Chancellor's and Provost's cabinet to obtain feedback and opinion on 47 potential Enterprise Risk Management (ERM) topics. Results provided an executive-level assessment of potential ERM institutional risks at Carolina for utilization by the Vice Chancellor for the formation of Carolina's Top Five ERM Topics.

In response, the OIA considered areas and departments of campus operations underpinning the five identified ERM institutional risk topics for Carolina. The following chart details the OIA's opinion of the primary campus area/department with activities pertaining to each risk topic.

The chart highlights operating areas/departments underpinning the *Top Five ERM Institutional Risks* as determined by the OIA and considered in internal audit engagement planning.

| ERM Risk Topic | Area/Department |
|-------------------------------------------|---------------------------------------------|
| Talent Management | Human Resources |
| Physical Infrastructure | Facilities/Finance & Operations |
| Attention to Well-Being and Mental Health | Leadership/Support Services |
| Decision Support | Leadership- Planning & Financial Management |
| Cyber Security | Information Technology |

CAROLINA NEXT – INNOVATIONS FOR PUBLIC GOOD

The University’s strategic plan, *CAROLINA NEXT: Innovations for Public Good*, provides the roadmap for guiding investment and decision-making. “The strategic plan aims to turn the University’s vision and aspirational goals into readily understood, significant, implementable, measurable strategic initiative and opportunities.” The plan was last updated in December 2020.

The strategic plan is built around eight major *strategic initiatives*. Each *strategic initiative* is then underpinned by three *strategic objectives* that define the key goals for each initiative. Further developing each *strategic objective* are specific *strategic opportunities* (both existing and new) intended to drive improvement and change. The eight *strategic initiatives* are detailed in the following chart.



In the development of the Fiscal Year 2023 Internal Audit Work Plan, the OIA assessed the University’s strategic plan to consider potential risks inhibiting attainment and realization.

The document’s 24 strategic objectives were scored based on OIA’s opinion of potential attainment hurdles.

Strategic opportunities were considered in determining potential audit engagement activity for each strategic objective ranked high and medium by the OIA. The chart on the right highlights the strategic objectives deemed important by the OIA for consideration in audit engagement planning.

| CAROLINA NEXT - Strategic Objective | OIA Ranking |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 8.1 Design, implement, execute, assess, and continuously improve the administrative operations that support the University's mission of teaching, research and public service. | Impediment Risk Level |
| 8.2 Implement a robust data governance structure and process to inform decision-making and drive change. | |
| 8.3 Create and maintain world-class physical facilities and infrastructure in support of our institutional mission. | |
| 4.3 Lead in solving the world's most challenging problems. | |
| 6.3 Grow partnerships with businesses, nonprofits and government to translate and implement discoveries into practical applications and public use. | |
| 7.1 Strengthen global partnerships and bring the world to Carolina with enhanced on-campus global programing. | |

Leadership’s Identification of Audit Risk Topics

An important component in the development of Carolina’s Internal Audit Work Plan included obtaining input from senior leadership regarding perspectives on key risk topics and areas where internal audit services can be effective in evaluating procedures, internal controls, and processes to strengthen operations.

An automated survey managed by the OIA was distributed to 171 senior leaders (Chancellor’s & Provost’s Cabinet, Department Leaders, Audit, Compliance and Risk Management Committee) of the university to solicit leadership’s perspective of risks. The survey focused on nine distinct operational areas comprising (1) Athletics, (2) Research, (3) Information Technology & Systems, (4) Instruction, Academics & Outreach, (5) Human Resources Management, (6) Development, (7) Student Affairs, (8) Fiscal & Asset Management, and (9) Other University Operations.

Respondents were requested to identify high-level risk topics they believed may benefit from an objective evaluation by the OIA. Survey responses were received from 60 participants. The OIA calculated response percentages for each audit risk topic based on respondents’ selections. The 124 audit risk topics were then grouped within risk categories of HIGH, MEDIUM, and LOW based on scored results. Outcomes identified 28 HIGH, 35 MEDIUM, and 61 LOW audit risk topics. The following chart details the highest-scoring risk topics.

| Audit Risk Topic | Operational Area | Response Percent | Risk Ranking |
|-------------------------------------------------------------|------------------|------------------|--------------|
| Security of data: firewalls, network infrastructure | Technology | 41% | HIGH > 20% |
| Security compliance with external guidance | Technology | 37% | |
| Compliance with regulations | Research | 33% | |
| Counseling and Psychological Services (CAPS) | Student Affairs | 33% | |
| Budget and funds management | Fiscal & Assets | 31% | |
| Centers and institutes operational and financial activities | Instruction | 31% | |
| Revenue and data | Development | 30% | |
| Security of data: password management, systems access | Technology | 30% | |
| Disaster recovery/resumption of business services | Technology | 30% | |
| Equitable employment | Human Resources | 29% | |
| Financial operations (revenues/expenses/budgeting) | Athletics | 26% | |
| Employee training and development | Human Resources | 25% | |
| Grant management/administration | Research | 25% | |
| Conflict of interest | Research | 25% | |
| Counseling Center/Student Mental Health | Other Operations | 25% | |
| Academic performance of student-athletes | Athletics | 24% | |
| NCAA compliance | Athletics | 24% | |
| Real-estate, Facilities Services, and Campus Enterprises | Fiscal & Assets | 24% | |
| Title IX | Human Resources | 24% | |
| Telecommuting | Human Resources | 24% | |
| College/School/Department activities | Instruction | 24% | |
| Provost’s Office financial or administrative functions | Instruction | 24% | |
| Schools and units | Development | 22% | |
| Financial and accounting processes | Research | 22% | |
| Remote access and security controls | Technology | 20% | |
| Program accreditation processes | Instruction | 20% | |
| Intellectual property | Research | 20% | |
| Fraternity and sorority life | Student Affairs | 20% | |

Financial Magnitude of Core University Areas

The OIA assessed financial data from the 2021 UNC-Chapel Hill Annual Financial Report highlighting 10 core components of university operations (revenues/expenses). These include significant funding sources and/or consumption of institutional resources.

| Category Area | Financial Impact FY2021 | Operational Considerations |
|---------------------------------------------------|-------------------------|---------------------------------------------------------------|
| Grants & Contracts (Operating) Revenue | \$959,214,843 | Award Compliance and Monitoring |
| State Appropriations Revenue | \$537,409,229 | Public Dollar Stewardship Institutional Reputation/Compliance |
| Patient Services Net Revenue | \$545,209,574 | Operational – Accounting for billing/receipts/bad debt |
| Student Tuition & Fee Revenue | \$412,071,788 | Core Business Function Recruitment/Diversity/Retention |
| Net Investment Income Revenue | \$1,099,206,099 | Financial Stewardship |
| Sales & Services Auxiliary Enterprise Revenue | \$304,470,018 | Ancillary Funding Streams Supporting Operations |
| Salaries and Benefits Expense | \$1,812,296,102 | Largest Resource Expenditure |
| Procurement Expense (Services/Supplies/Materials) | \$963,510,332 | State and University Regulatory Compliance |
| Scholarship/Fellowship (Financial Aid) Expense | \$121,919,611 | Federal and State Compliance |
| Utility Expense | \$79,240,505 | Operational Expense – Consumable Product, Energy Consumption |

A financial analysis of the university's 16 Colleges, Schools, and Libraries was completed. The chart to the right details the total fiscal year 2021 expenditures (including transfers) for each of the academic units listed.

Financial amounts reflect ConnectCarolina recorded expenditures on June 30, 2021, with amounts provided to the OIA by Accounting Services.

These academic units comprise a significant portion of total fiscal year institutional expenditures.

| Academic Unit | FY 2021 Expenses |
|-----------------------------------------|------------------------|
| College of Arts and Sciences | \$331,905,990 |
| Kenan-Flagler Business School | 156,166,558 |
| School of Education | 19,708,265 |
| School of Journalism | 23,235,917 |
| School of Law | 30,267,217 |
| School of Information & Library Science | 12,033,685 |
| School of Government | 25,830,826 |
| School of Social Work | 21,671,093 |
| Graduate School | 29,815,912 |
| Summer School Admin | 648,529 |
| School of Medicine | 1,601,108,920 |
| School of Dentistry | 66,655,783 |
| School of Nursing | 28,486,080 |
| School of Pharmacy | 132,918,882 |
| School of Public Health | 142,625,569 |
| University Libraries | 42,176,596 |
| Total Expenditures FY 2021 | \$2,665,255,822 |

External Risk Evaluation – Industry-wide Higher Education Environment

The Institute of Internal Auditors *ONRISK, A Guide to Understanding, Aligning, and Optimizing Risk 2022* report detailed 12 significant risks facing organizations, with the top five being Cybersecurity, Talent Management, Organizational Governance, Data Privacy, and Culture.

Additionally, the Institute of Internal Auditors released the *2022 North American Pulse of Internal Audit* report of information and perceptions from internal audit leaders on a national scale. For the educational services sector, the top five trends for risk are centered on cybersecurity, information technology, compliance/regulatory, third-party relationships, and cost/expense reduction. The steepest increase from 2020 to 2021 reporting is related to growth in cybersecurity risks.

The United Educators published *The Large Loss Report 2022*, highlighting a summary of major damage awards and settlements of more than \$500,000 affecting K-12 schools, colleges, and universities in 2021. Key areas of risk resulting in settlements include:

- Accidents or Crimes Resulting in Death
- Antitrust
- Bullying
- Concussions
- COVID-19
- Discrimination
- Equal Pay
- False Claims Act
- Freedom of Speech
- Heat-Related Illnesses and Death
- Inappropriate Fees
- Injuries not Resulting in Death
- Mental Health
- Personal Injury and Fales Advertising
- Ransomware
- Retaliation
- Retirement Plans
- Sexual Misconduct
- Sexual harassment
- Wrongful Termination

PwC published *Managing Risk in Higher Education, Higher Education Sector Risk Profile 2021*. The publication assessed potential risks based on the likelihood of occurring and the resulting impact on the institution. The top five risk themes note include Cyber Security and Information Governance, COVID-19, Student Experience Mental Well-being, and Student Recruitment.

Summary

Collectively, the OIA's risk assessment encompassed evaluation and consideration of university operations, the *Top Five ERM Institutional Risks*, potential risks impeding strategic objectives of *CAROLINA NEXT- Innovations for Public Good*, a survey of executive leadership on risk and audit perspectives, a financial magnitude assessment, and an external assessment of industry risks. Outcomes determined the 22 audit engagements populating Carolina's *Fiscal Year 2023 Internal Audit Work Plan*. Additionally, the Work Plan maintains budgeted staff hours for the completion of six special project requests arising during the year.

*University of North Carolina at Chapel Hill
Fiscal Year 2023 Internal Audit Work Plan Engagements*

| Audit Engagement | Risk Category | Audit Functional Area | Supportive Rationale |
|---------------------------------------------------------------------|----------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Student Fees (Revenues and Expenditures) | Financial | Finance and Operations | Leadership Survey–Budget and Funds Management and Financial Magnitude |
| University Recharge Centers | Financial | Procurement | Leadership Survey-Procurement & Financial Magnitude |
| Carolina Union | Financial | Student Affairs | Leadership Survey-Finance |
| Budget Modeling Assessment | Financial | Finance and Operations - Budgeting | ERM Risk-Decision Support and Leadership Survey-Fiscal and Assets |
| UNC Rapidly Emerging Antiviral Drug Development initiative (READDI) | Financial | Eshelman School of Pharmacy | Carolina Next Strategic Objective 6.3-Opportunity 5 and Financial Magnitude |
| Expenditure Review | Financial | School of Medicine | Financial Magnitude |
| Institute for Convergent Science | Financial | Carolina’s Convergence Science Institute | Carolina Next Strategic Objective 4.3 Opportunity 1 |
| Academic Program Assessment & Course Evaluations | Operational | Provost Office/UNC Schools | Leadership Survey-Standard Operating Procedures and Carolina Next Strategic Objective 8.1 Opportunity 10 |
| Student Well Being/Mental Health Services | Operational | Counseling and Psychological Services | ERM Risk-Life/Health/Safety and Leadership Survey-Other Operations |
| Equitable Employment | Operational | Human Resources | External Risk Assessment and ERM Risk-Talent Management |
| Fixed Asset Inventory and Accounting | Operational | Finance and Operations Accounting Services | Financial Magnitude– Procurement Expenses |

| Audit Engagement | Risk Category | Audit Functional Area | Supportive Rationale |
|-----------------------------------------------------------------------------------|--------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------|
| Classroom Space Utilization | Operational | University Registrar & UNC Schools | ERM-Physical Infrastructure and Carolina Next Objective 8.3 |
| UNC Centers and Institutes | Operational | Academic & Research | Leadership Survey-Instruction |
| Research Effort Reporting | Compliance | Office of Sponsored Research | Leadership Survey-Research Compliance |
| Higher Education Emergency Relief Fund – Pandemic Funds Audit | Compliance | Finance and Operations | External Risk Assessment-COVID 19 |
| Coronavirus Aid, Relief, and Economic Security Act - Pandemic Funds Audit | Compliance | Finance and Operations | External Risk Assessment-COVID19 |
| Continuous Auditing Process¹ -University Travel | Compliance | Campus-wide Operations | Financial Magnitude-Expenses |
| NCAA Compliance² -Academic Performance -Camps and Clinics | Compliance Compliance | Carolina Athletics | Leadership Survey and Division I National Collegiate Athletic Association Compliance |
| University Router Settings and Security | Technology | Information Technology- Security Infrastructure | Leadership Survey, ERM-Cyber and External Risk Assessment |
| University Switches Security and Compliance | Technology | Information Technology- Security Infrastructure | Leadership Survey, ERM-Cyber and External Risk Assessment |
| IT Systems with Tarheel Mission Ready Disaster Recovery Plans | Technology | Information Technology - General | Leadership Survey, ERM-Cyber and External Risk Assessment |
| Special Project Engagements³ | Various | Various | Needs of University Leadership |

¹ Audit assessments will be completed on a fixed interval basis covering activities spanning differing operating units of the University with individual reporting provided to local management as reviews are completed, accompanied by a final summary fiscal year-end report to the Chancellor and Board of Trustees.

² National Collegiate Athletic Association (NCAA) compliance Review for Division I Institutions based on the Association of College and University Auditors' *National Collegiate Athletic Association Division One Audit Guide*.

³ The Fiscal Year 2023 Internal Audit Work Plan maintains budgeted hours available to complete six (6) Special Project Engagements (audit requests, investigations, consultations, etc.) as the need may arise, and engagements are approved, during the course of the fiscal year.

Risk Assessment and Audit Plan

Available Audit and Project Hour Summary

While the initial work plan is developed based on a structured risk assessment process, risks may evolve throughout the year. Therefore, the OIA monitors changes at the university level and within the higher education sector. Fluctuations of a significant nature in risk and/or audit staffing levels may necessitate revisiting the Fiscal Year 2023 Work Plan with the *Audit, Compliance, and Risk Assessment Committee*, as appropriate.

At present, the OIA is professionally staffed by the Chief Audit Officer, two Audit Supervisors, one Senior Auditor, one Information Technology Auditor, and two Staff Auditors. An administrative support position is currently vacant.

The Vice-Chancellor for Finance and Operations has designated FY23 budgeted funds necessary to support the work plan providing for OIA staffing of 7.75 full-time-equivalent employees.

Work Plan Hourly Detail

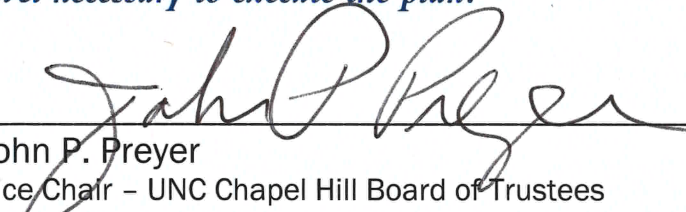
| | |
|-------------------------------|-------------|
| Total Available Audit Hours | 12,480 |
| (6 auditors @ 2,080 hours) | |
| Less Employee Leave | -1,440 |
| (Annual/Sick/Holiday) | |
| Less Work Plan Hours | -7,940 |
| Less Non-Work Plan Hours * | -2,196 |
| Less Audit Related Duties | |
| (Consulting/Committees) | <u>-890</u> |
| Project Hours Available/Short | <u>14</u> |

* Non-Work Plan Hours

| | |
|--------------------------|--------------|
| Prior Finding Follow-up | 240 |
| Work Paper Peer Review | 696 |
| Professional Development | 240 |
| UNC Training | 240 |
| Administrative Hours | <u>780</u> |
| Total Hours | <u>2,196</u> |

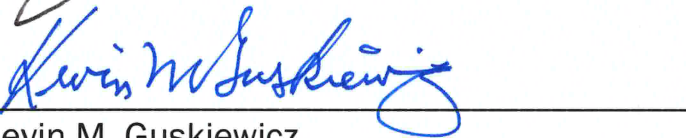
| <u>Engagement Project</u> | <u>Budgeted Hours</u> |
|-------------------------------------------|-----------------------|
| Financial (7) | |
| Student Fees Revenues and Expenditures | 280 |
| University Recharge Centers | 280 |
| Carolina Union | 280 |
| Budget Modeling Assessment | 280 |
| UNC READDI | 280 |
| Expenditure Review – School of Medicine | 280 |
| Institute for Convergent Science | 280 |
| Operational (6) | |
| Academic Program & Course Evaluations | 280 |
| Student Well Being/Mental Health | 280 |
| Equitable Employment | 280 |
| Fixed Asset Inventory and Accounting | 280 |
| Classroom Space Utilization | 280 |
| UNC Centers and Institutes | 280 |
| Compliance (6) | |
| Research Effort Reporting | 280 |
| HEERF Funds Pandemic Funds Audit | 280 |
| CARES Act Pandemic Funds Audit | 280 |
| Continuous Audit- University Travel | 280 |
| NCAA Compliance | |
| - Academic Performance | 280 |
| - Camps & Clinics | 280 |
| Technology (3) | |
| University Router Settings and Security | 280 |
| University Switches Security/Compliance | 280 |
| Tarheel Mission Ready Disaster Recovery | 280 |
| Special Projects (6 Projects @ 280 Hours) | 1,680 |
| FY22 Carry Over Engagement Work | <u>100</u> |
| Total Work Plan Hours | <u>7,940</u> |

Approval providing for completion of engagements populating the Office of Internal Audit Fiscal Year 2023 Internal Work Plan for Carolina and for the budget and staffing level necessary to execute the plan.



John P. Preyer
Vice Chair - UNC Chapel Hill Board of Trustees

5-18-22
Date



Kevin M. Guskiewicz
Chancellor

5-18-22
Date