



OPEN SESSION

FOR ACTION

1. Site Approval
 - [Fetzer Soccer/Lacrosse Facility & Indoor Practice Facility](#) (Attachment A)
 - [Chase Hall Addition](#) (Attachment B)

Anna Wu, Associate Vice Chancellor for Facilities Services
2. Demolition Approval
 - [Fetzer Field, Belk Track, & McCaskill Soccer Center](#) (Attachment C)

Anna Wu, Associate Vice Chancellor for Facilities Services
3. Designer Selection
 - [Medical Education Building](#) (Attachment D)
 - [UNC Mountain Area Health Education Center \(MAHEC\)](#) (Attachment E)

Anna Wu, Associate Vice Chancellor for Facilities Services
4. [Final Design Approval](#) (Attachment F)
 - SECU Family House

Anna Wu, Associate Vice Chancellor for Facilities Services
5. [2016-17 Audit Plan for Approval](#) (Attachment G)

Phyllis Petree, Director of Internal Audit

FOR INFORMATION ONLY (No formal action is requested at this time)

1. [Internal Audit Report FY16-17](#) (Attachment H)

Phyllis Petree, Director of Internal Audit
2. [Development Report](#)

David Routh, Vice Chancellor for University Development
3. [Debt & Liquidity Update](#)

Brian Smith, Assistant Vice Chancellor for Finance & Accounting

COMMITTEE MEMBERS

Haywood D. Cochrane Jr., Chair
W. Lowry Caudill, Vice Chair
Donald Williams Curtis
Julia Sprunt Grumbles
Allie Ray McCullen
William (Ed) McMahan
Administrative Liaison:

Matthew (Matt) Fajack, Vice Chancellor for Finance and Administration

ATTACHMENT A

SITE APPROVAL – FETZER SOCCER/LACROSSE FACILITY AND INDOOR PRACTICE FACILITY

This project will add a new soccer and lacrosse facility, associated grandstands, press box and team facilities. The indoor football practice facility will provide a turf field and associated support facilities for the Department of Athletics and will be shared by Campus Recreation.

The project budget is \$55 million and will be funded by the Educational Foundation.

The Chancellor's Buildings and Grounds Committee approved the site on September 1, 2016.

RECOMMENDED ACTION:

A motion to approve the site.

ATTACHMENT B

SITE APPROVAL – CHASE HALL ADDITION

This project will add approximately 5,000 SF to the existing Chase Hall dining facility at Rams Head and provide an additional 150-200 seats and food venue.

The project budget is \$3.8 million and will be funded by the Student Dining receipts.

The Chancellor's Buildings and Grounds Committee approved the site on September 1, 2016.

RECOMMENDED ACTION

A motion to approve the site.

APPROVAL FOR THE DEMOLITION OF FETZER FIELD, McCASKILL SOCCER CENTER AND BELK TRACK

The demolition of the existing Fetzer Field, McCaskill Soccer Center and Belk Track is necessary for construction of the new Fetzer Soccer/Lacrosse Facility and the new Indoor Practice Facility.

The demolition project budget is \$1.2M and will be funded by The Educational Foundation.

RECOMMENDED ACTION

A motion to approve the demolition of existing Fetzer Field, McCaskill Soccer Center and Belk Track as described above.

ATTACHMENT D

DESIGNER SELECTION – MEDICAL EDUCATION BUILDING

This project will construct a 124,000 SF facility to provide a new building designed to meet the needs of modern medical education curriculum and enable the UNC Chapel Hill School of Medicine to increase enrollment by 30%, increasing class size from 180 to 230 students.

The project budget is estimated at \$90 million and will be funded by the Carolina Connect bond and gifts.

The project was advertised on June 9, 2016. Fifteen (15) proposals were received. Five (5) firms were interviewed on August 25, 2016. Members of the Board of Trustees did participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

- | | |
|--------|---------|
| 1. XXX | XXX, XX |
| 2. XXX | XXX, XX |
| 3. XXX | XXX, XX |

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with medical education facilities.

RECOMMENDED ACTION

A motion to approve the three firms in the following priority order:

- | | |
|--------|---------|
| 1. XXX | XXX, XX |
| 2. XXX | XXX, XX |
| 3. XXX | XXX, XX |

ATTACHMENT E

DESIGNER SELECTION – UNC Mountain Area Health Education Center (MAHEC)

This project will construct approximately 36,000 square feet at the MAHEC campus in Asheville, NC. The building will house a surgical simulation lab, clinical space for the MAHEC Psychiatry Residency and classroom and office space for the School of Medicine, Center for Health Professions Education and School of Public Health Programs.

The project budget is \$8,000,000 and will be funded by the State of North Carolina through the UNC School of Medicine.

This project was advertised on August 1, 2016. Five (5) proposals were received. Three (3) firms were interviewed on August 26, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

- | | |
|--------|---------|
| 1. XXX | XXX, XX |
| 2. XXX | XXX, XX |
| 3. XXX | XXX, XX |

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with campus projects.

RECOMMENDED ACTION

A motion to approve the three firms in the following priority order:

- | | |
|--------|---------|
| 1. XXX | XXX, XX |
| 2. XXX | XXX, XX |
| 3. XXX | XXX, XX |

DESIGN APPROVAL – SECU FAMILY HOUSE EXPANSION

This project will expand the current SECU Family House by adding 36 guest rooms which will provide the facility with 75 total guest rooms. In addition, the expanded site will provide walking and exercise areas, a meditation garden and a common outdoor area easily accessible to the Family House for the guests.

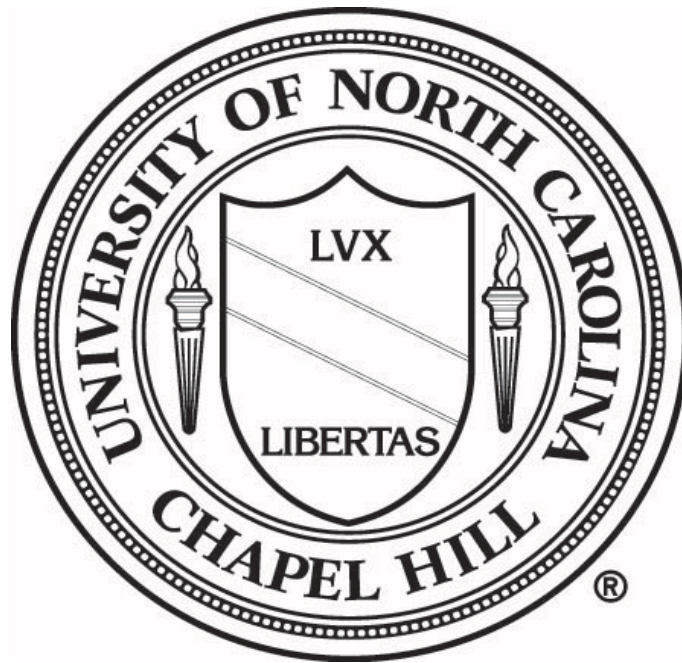
The ground lease for approximately 3.6 acres of additional area was approved by the Board of Trustees at their May 2016 meeting.

The construction budget is \$8.0M and will be funded by the SECU Family House.

The Chancellor's Buildings and Grounds Committee approved the site on September 1, 2016.

RECOMMENDED ACTION

A motion to approve the design.



Risk Assessment and Internal Audit Plan 2016/17

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Appendices:

A: Calculation of Available Work Hours

B: 2016/17 Audit Work Schedule

Introduction

Each year, the Internal Audit Department of the University of North Carolina at Chapel Hill develops an audit work plan based on a university-wide assessment of risk. This approach is in keeping with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing* (IIA Standards) and the Internal Audit Act (NCGS § 143-746) which requires internal audit functions in NC State agencies and institutions to comply with the IIA Standards. Also, basing audit work plans on risk helps ensure that audit resources are allocated effectively and efficiently and in a way that best helps manage and the Board of Trustees provide governance and fulfill the University's mission.

The primary objectives of the risk assessment process are to:

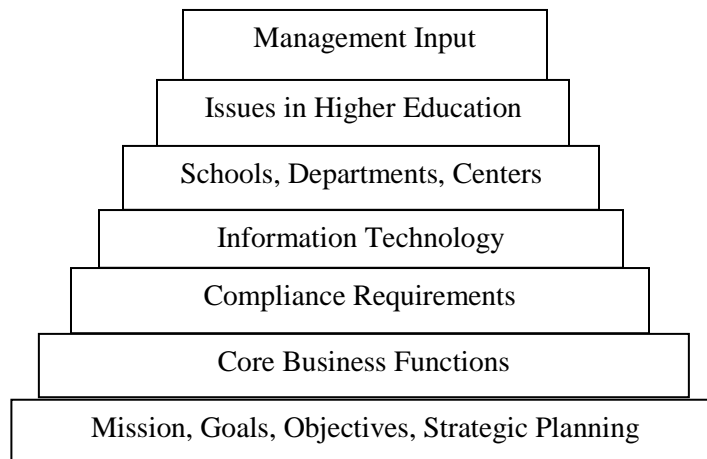
- Ensure compliance with *IIA Performance Standard 2010 – Planning* which states: “The chief audit executive must establish risk-based plan to determine the priorities of the internal audit activity, consistent with the organization’s goals” and with North Carolina’s Internal Audit Act;
- Gather information about the organizational structure of the University, its operations, and its finances and about trends and recent concerns in higher education;
- Identify expectations and risk concerns of University management and members of the Finance, Infrastructure, and Audit Committee of the Board of Trustees;
- Identify opportunities for sharing audit resources and avoiding duplication of work by coordinating audit efforts;
- Develop an audit work plan based on risks and opportunities identified during the assessment process; and
- Present the work plan and results of the risk assessment to the Chancellor of the University of North Carolina at Chapel Hill and the Finance, Infrastructure, and Audit Committee of its Board of Trustees for review and approval.

While the initial work plan is developed based on a formal risk assessment process, risks change throughout the year. Therefore, we monitor changes at the University and in higher education during the year and make revisions the work plan as needed.

Risk Assessment Process

The risk assessment and audit planning process involves developing an audit universe and considering how different components of risk affect individual auditable units and the University as a whole.

Audit Universe Development Model



Risk Components

1. Strategic risks – relate to mission and goals of the University
2. Financial risks – relate to stewardship and safeguarding of resources
3. Operational risks – relate to processes used to achieve mission and goals
4. Compliance risks – related to laws, rules, regulations, and other requirements
5. Reputational/service risk – relate to public image and the impact of service failure

Step 1: Update and Create Audit Universe

The risk assessment process begins with a review of the organization structure of the University and the identifying by various missions, functions, and financial activities of individual departments and other units. What these units are here to do and how they seek to accomplish their mission, goals, etc. forms the base of the audit universe.

- While some component units have unique or free-standing activities, they all share the same core business function such as payroll, small order purchasing, travel, etc. Responsibility for these functions is shared by departments and central offices; this shared responsibility affects both the risks associated with the functions and how they are best audited. We choose to audit core business functions university-wide – an approach that includes an assessment of processes in central offices as well as in a sample of individual units. We believe this approach provides a “birth to death” review that can better identify gaps in or redundancies in internal controls.
- Although some elements of the audit universe are based on internal factors, external compliance requirements are major issues in the University’s risk and operating environment. The University has overall policies and procedures that govern how to comply with requirements. In many cases, one or more central units have primary responsibility for monitoring compliance. Since most compliance activities are overseen, centrally, we believe that they are best audited as a central function.
- Information technology (IT) supports and enables nearly all functions and activities of the University. IT has unique audit and business risks such as disaster recovery, data and physical security, patching, access controls, change controls, data retrieval and reporting, etc. IT at the University is a hybrid function with central systems and servers managed by Information Technology Services and departmental/school servers and systems managed by those units. The IT portion of our audit universe includes a combination of audits of central systems, governance, and policy. We will assess issues related to departmental/school systems through general controls review done as part of broader audits of these units.
- Some schools, departments, and centers have unique activities or IT systems. In addition, the highly decentralized nature of the University makes it necessary to include individual units in our audit universe. This practice provides a way to assess, on a more granular level, activities and potential risks across the University. The audits will also provide an opportunity to share information with individual units and to keep the University community aware of Internal Audit as a resource for advice and guidance.
- The final steps in developing an audit universe involve tapping into and leveraging the knowledge of colleagues at other universities and of key members of University management. These individuals are a valuable resource for identifying any need to adjust audit units or approaches to better address current and future risks.

Step 2: Assess Risk

- Interview the Chairman of the Finance, Infrastructure, and Audit Committee of the Board of Trustees and key members of University management to identify their views of challenges and opportunities for the University and to get suggestion for items to be included in the audit work plan;
- Consider risk factors:
 - Significance of operations;
 - Impact of a service delay or failure;
 - Sensitivity of information managed;
 - Extent of regulation;
 - Changes in management or the operating environment;
 - Key Performance Indicators calculated each month for the UNC Business Compliance Program;
 - Amount of time since any prior audits (internal or external) and the status of findings from any prior audits;
 - Public or political sensitivity; and
 - Financial characteristics; and likelihood and impact of risks facing an area.
- Assign relative risk to auditable units: high, medium risk, or low risk.

Step 3: Develop Audit Work Plan

Determine available audit hours based on size of audit staff, available work hours per staff member, and estimates of time for administrative activities such as training, meetings, and leave. Refer to Appendix A for the calculation of available audit hours.

Allocate blocks of time for unplanned audits, investigations, advisory work, and annual projects.

To select items for the rest of the 2016/17 audit work schedule we considered:

- Available audit hours;
- Projects from the 2015/16 audit work plan that needed to be carried forward;
- Specific requests by management or members of the Board of Trustees;

- Nature and timing of any recent or anticipated changes in an area (such as a system conversion, new financial management, extensive process revisions, etc.); and
- Recent events at the University and at other colleges and universities that have raised the visibility and sensitivity of certain activities.

After possible units for the 2016/17 audit work schedule were selected, hours were budgeted for each project based on nature of the area audited and the anticipated audit work in an area. If necessary, possible units were added or dropped in order to have a work plan that fit available hours.

Refer to Appendix B for the 2016/17 Audit Work Plan.

Step 4: Finalize the Work Plan

Submit the risk assessment to the Chancellor and Finance, Infrastructure, and Audit Committee for review and approval.

Submit the approved plan to General and Administration and the Council of Internal Auditing for their records.

Appendix A **2016/17 Risk Assessment and Audit Plan** **Calculation of Available Hours**

Total Hours Available -1-	14,560
Less: hours due to vacancies -2-	<u>(3,640)</u>
Adjusted Available Hours	10,920
Less: Training and Professional Development -3-	(420)
Less: Leave -4-	(2,342)
Less: Other Administrative Time -5-	<u>(1,240)</u>
Available for projects	6,919

-1- = seven staff members at 2080 hours each

-2- = three vacant positions - one vacant position to be filled by 9/30/16
& one by 12/31/16; the other will remain vacant due to lack of funding

-3- = allow 80 training hours each per year for each staff members -
pro-rated reduction for vacant positions

-4- = estimate based on actual holidays, leave balances, and leave
taken in prior years - pro-rated reduction for vacant positions

-5- = meetings, professional reading, & other office activities
not chargeable to a project

Appendix B
UNC Internal Audit
Risk Assessment and Audit Plan
FY 2016/17

<u>Planned Audits</u>	<u>Hours Budgeted</u>
Historically Underutilized Business Program	350
Cleary Act Reporting	225
Export Controls	450
Governance - Trustee Orientation	200
Access Revocation	400
Total for Routine Audits	<u>1,625</u>
<u>Annual Projects</u>	
Follow-up for Prior Internal Audit Findings	700
Risk Assessment and Audit Plan	200
Follow-up for OSA Audit	150
UNC Business Compliance Program 2017	150
Total for Annual Projects	<u>1,200</u>
<u>Audit Related</u>	
CERTIF	200
Internal QAR	250
Office Systems	500
HIPAA Risk Assessment	80
Audit Committee	100
KPI Reporting	20
HIPAA Security Liaisons	80
Data Access and Reporting	250
UCPPD	100
Total for Annual Projects	<u>1,580</u>
<u>Requested Reviews, Consulting, and Other Unplanned Projects</u>	<u>2,800</u>
Total Hours Scheduled	<u>7,205</u>
Total Hours Available	6,919
Under/<Over>Scheduled	<u>(287)</u>

**UNC Internal Audit
Use of Audit Resources
Summary of Audit Hours Used - FY 2017 as of 08/21/16**

	<u>Budgeted</u>	<u>Pro-Rated Budget -5-</u>	<u>Hours Charged</u>	<u>Variance (Over)/Under</u>
Total Hours Available -1-	14,560	n/a	n/a	n/a
<u>Less:</u> Vacancies -2-	(3,640)	n/a	n/a	n/a
<u>Less:</u> Training & Professional Development	(420)	(43)	29	14
<u>Less:</u> Leave	(2,341)	(240)	220	20
<u>Less:</u> Other Administrative Time -3-	(1,240)	(129)	159	(30)
Total for Training, Leave, & Administrative	4,001	412	407	
Hours Available for Projects	6,919			
Routine Audits	1,625	-5-	4	
Annual Projects	1,200	-5-	305	
Audit Related -4-	1,580	-5-	211	
Unplanned Projects and Advisory Work	2,800	-5-	414	
Total Scheduled/Charged	7,205	931	934	
Under/<Over> Scheduled	(286)			

-1- = seven staff members at 2080 hours/year

-2- = one vacancy projected to be filled by 09/30/16; another to be filled by end of calendar year; one position projected to be left vacant due to lack of funding

-3- = meetings, professional reading, and other office activities

-4- = consulting and advisory work, activities that improve audit operations.

-5- = Budgeted hours for four staff members for seven weeks. Pro-rated budget for audits and other projects is shown as a total because pro-rating by project type skews data. Fewer staff resources in first part of the fiscal year and planned start dates of individual projects mean that budgeted hours cannot not be evenly allocated to each week of the fiscal year.

UNC Internal Audit
2016/17 Status of Audit Schedule as of 08/21/16

Planned Audits

In Process

Historically Underutilized Business Program
Clery Act Reporting

Scheduled

Export Controls
Governance - Trustee Orientation
Access Revocation

Annual Projects

Complete

2016/17 Risk Assessment and Audit Plan

In Process

Follow-up for Prior Internal Audit Findings
2016 State Audit
Enterprise Resource Planning

Scheduled

2nd Follow-up - 2015 OSA Financial Statement Audit
Follow-up for 2016 OSA Audit
UNC Business Compliance Program 2017

Audit Related

Complete

SACS 2016

In Process

CERTIF
Internal QAR
HIPAA Risk Assessment

Scheduled

Internal QAR

On Going

Continuous Auditing
Office Systems
HIPAA Security Liaison
University Committee on the Protection of Personal Data
Privacy Liaison
Audit Committee
Audit Process Improvement
HIPAA Risk Assessment
UNCAA Conference Planning
Board of Governors' Meetings
Multiple Short-term Advisory Projects

UNC Internal Audit
2016/17 Status of Audit Schedule as of 08/21/16

Special Projects & Management Requests

Complete

Auxiliary Equipment (referral from Office of State Auditor)
Lineberger Cancer Center Grants (referral from Office of State Auditor)
Law 2016
Health Behavior

In Process

Orthodontics
Nutrition Research Institute
Maternal and Infant Health
NC Institute of Public Health - assistance to management
Gene Therapy 2016- assistance to management
Radiology 2016

On Going

Multiple Short-term Advisory Projects

REPORT TO THE FINANCE,
INFRASTRUCTURE, AND
AUDIT COMMITTEE
OF THE
BOARD OF TRUSTEES

Internal Audit Department

University of North Carolina
at Chapel Hill

September 21, 2016

UNC - CHAPEL HILL
INTERNAL AUDIT DEPARTMENT
SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS
APRIL 18, 2016 TO AUGUST 21, 2016

REVISIONS TO 2015/16 AUDIT PLAN

Two factors, a necessary increase to hours budgeted for the Follow-up of Prior Internal Audit Findings (600 hours) and not being able to fill two vacant positions when planned (loss of approximately 1,430 hours), significantly affected our ability to complete the audit plan as it was approved in September 2015. As a result, we deferred some of the scheduled projects. Those projects as the reason they were selected for deferral are:

- Cost Transfers – Sponsored Awards: post-implementation activities for ConnectCarolina made an audit of this process inadvisable for fiscal year 2015/16. Since these activities are still in process, we will not include this project in the 2016/17 audit plan.
- Select Agents and Hazardous Materials: use of select agents and hazardous materials is well-managed here which mitigates risk associated with an area that is highly regulated and significant inherent risk. Based on discussions with management, we will replace this project with an audit of export controls in 2016/17.
- Academic Performance Monitoring: management has created several processes that are still evolving, a later audit could be more advantageous
- Title IX Monitoring: fairly new leadership and processes, a later audit could be more advantageous
- Athletics Facilities: lower relative risk. This audit unit has been combined into a broader Facilities Use project that includes other campus facilities, such as lab space.
- Departmental Audit: departmental audits are important but have lower relative risk.

The last four projects will not be carried forward to 2016/17 because of the need to do a post-implementation review of access revocation and to begin doing audits of institutional governance

COMPLETED

Auxiliary Services Equipment – referred by the Office of the State Auditor – allegations that Auxiliary Services, primarily Dining Services, used state-appropriated funds to purchase equipment used for auxiliary operations.

We determined that the allegations did not have merit. Costs of equipment, renovations, and software licensing fees for most auxiliary operations were charged to related revenue sources. Mail Services is not totally revenue-supported and some of its operating costs were charged to state funds. In our opinion, this practice is appropriate.

We also determined Auxiliary Services allocated part of the cost of the licensing fee for UNC One card software to state funds. In our opinion, this practice is also appropriate because the University uses One Cards for multiple purposes, such as building access, that are not related to a specific revenue source.

UNC - CHAPEL HILL
INTERNAL AUDIT DEPARTMENT
SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS
APRIL 18, 2016 TO AUGUST 21, 2016

Lineberger Cancer Center Grants - referred by the Office of the State Auditor – allegations of inaccurate and delayed allocations of payroll costs to sponsored funds. We determined that the allegations had merit but ended our work because a team of consultants had reviewed similar issues and a corrective action plan is in process.

Green Cart – referred by the Office of the State Auditor – allegations that participant payments were being made in keeping with terms of a program working on sustainable food systems, food access, and health disparities in North Carolina.

We determined that payments were initially delayed due to issues with obtaining the advances used to make the payments. Those issues were resolved and participant payments are up-to-date.

Follow-up to 2015 Financial Statement Audit Findings – follow-up to assess adequacy of steps taken to correct findings involving matters related to financial reporting. This project must be complete within 90 days of the date the Office of the State Auditor released its audit report.

The University made satisfactory progress toward correcting findings from the financial statement audit. Some project tasks will not be completed and most financial statement preparation and year-end tasks will not occur until after the end of the 90-day follow-up period. Therefore, we will need to perform an additional assessment of corrective action after the end of the fiscal year to take place concurrently with development of the fiscal year 2016 financial statements and preparation for the 2016 state audit.

Follow-up to 2015 Federal Compliance Audit Finding – follow-up to assess adequacy of steps taken to correct lack of certification of time and effort charged to sponsored awards.

This finding has been resolved. 100% of time and effort cards were certified by the due date set by University policy, within the 21-day grace period, or during an escalation period.

Technical Assistance to the Office of the State Auditor – data retrieval and preliminary analysis related to projects in two departments.

Law 2016 – review of allegations regarding travel expenses. We determined that the allegations did not have merit.

However, we identified the need to improve documentation and review of reimbursement requests for trips that combined work-related and personal travel, particularly in relation to cost of airfare. We found one duplicate reimbursement and actual cost reimbursement for some of the meals for a trip within the US. Travelers are eligible only for meal per diem reimbursement for domestic travel unless a meal is part of a business meeting; the meals in question did not. In our opinion, these items were due to review and approval errors. All questioned and erroneous costs have been repaid.

We recommended that found that reimbursement request for travel to a conference include documentation, such as a registration form or conference agenda that shows what meals the conference provided.

UNC - CHAPEL HILL
INTERNAL AUDIT DEPARTMENT
SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS
APRIL 18, 2016 TO AUGUST 21, 2016

This practice helps determine which per diem meals and employee should receive. We found no evidence of incorrect meal per diem payments.

Management of the School of Law is implementing these recommendations.

IN PROCESS

Orthodontics – assistance to management with a review of processes and transactions related to acquisition of dental molds and implants for patient care and instructional purposes. We found that two cases of conflict of interest involving labs used to produce dental molds for Orthodontics and the need for better processes related to how dental labs are selected to provide services. The University no longer does business with the labs involved and one of the employees who had the conflict of interest is no longer with the University. Draft report is in process.

Clery Act Reporting – a review of processes used to manage notifications and reporting required by the “Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act”. This project has been delayed by time-sensitive projects requested by management.

Historically Under-utilized Business Program – a review of processes used to promote and encourage full and open competition, promote equal access to contracting opportunities among the various contractors and vendors that do business with the University, and ensure compliance with policy a reporting requirements related to this program. This project has been delayed by time-sensitive projects requested by management.

Follow-up of Prior Internal Audit Findings – a review and evaluation of steps that management has taken to resolve issues reported from past audits. **Standard 2500 – Monitoring Progress** of *the International Standards for the Professional Practice of Internal Auditing* requires that “the chief audit executive must establish and maintain a system to monitor the disposition of results communicated to management.”

Nutrition Research Institute – a review of allegations of incorrect purchasing practices and use of requisitions when needed. Project is in early stages; we have not determined the likely validity of the allegations.

Radiology 2016 – management request - review of travel costs.

Technical Assistance to University Management – data retrieval and preliminary analysis related projects in three departments.

UNC - CHAPEL HILL
INTERNAL AUDIT DEPARTMENT
SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS
APRIL 18, 2016 TO AUGUST 21, 2016

ON-GOING ADVISORY PROJECTS AND COMMITTEE WORK

- PeopleSoft conversion
- HIPAA Security Liaisons;
- University-wide Committee on the Protection of Personal Data; and
- Multiple short-term projects done to assist management with identifying and managing risks.

**UNC Internal Audit
Use of Audit Resources
Summary of Audit Hours Used - FY 2016 as of 06/30/16**

	<u>Budgeted</u>	<u>Hours Charged</u>	<u>Variance (Over)/Under</u>	
Total Hours Available -1-	12,133			
<u>Less:</u> Training & Professional Development	(460)	688	(228)	
<u>Less:</u> Leave	(2,000)	2,446	(446)	-3-
<u>Less:</u> Other Administrative Time -2-	(1,300)	1,175	125	
Total for Leave & Administrative	(3,760)	4,308	(548)	
Hours Available for Projects	8,373			
Routine Audits	3,220	202	3,018	-4-
Annual Projects	1,250	755	495	
Audit Related	1,300	1,743	(443)	
Unplanned Projects	2,700	3,479	(779)	
Total Scheduled/Charged	8,470	6,179	2,291	
Under/<Over> Scheduled	(97)			

-1- = seven staff members at 2080 hours/year adjusted for vacancies and medical leave

-2- = meetings, professional reading, and other office activities

-3- = variance is primarily due to parental leave

-4- = budgeted hours based on being fully staffed in 2nd half of fiscal year but fewer hours available in 1st half due to two vacancies

Re: Variances

Routine audits - 600 hours re-allocated to follow-up of prior internal audit findings; 1,430 hours lost from not having vacancies filled by January 1, 2016

Annual Projects - most work related to follow-up or prior internal audit findings will be done after May 2016

Audit Related - more time than budgeted spent on developing data analysis tools and on short-term consulting

Unplanned Projects - more time needed to complete projects than initially projected; in some cases projects were reopened due to subsequent, related events.

UNC Internal Audit 2015/16 Audit Schedule as of 06/30/16

Planned Audits

Complete

Large Equipment Repair Contract

In Process

Historically Underutilized Business Program
Clery Act Reporting

Deferred - see Summary of Audit Activities for information about how projects were selected to be deferred.

Cost Transfers - Sponsored Awards
Department Audit - TBN
Athletics Facilities
Academic Performance Monitoring
Title IX Monitoring
Select Agents and Hazardous Materials

Annual Projects

Complete

2014 Office of the State Auditor A-133 Follow-up (added)
2015/16 Risk Assessment and Audit Plan
Follow-up for 2015 OSA Audit (added)

On-Going

Enterprise Resource Planning

In Process

Follow-up for Prior Internal Audit Findings
2016/17 Risk Assessment and Audit Plan (added)
2016 State Audit (added)

Cancelled - UNC-CH did not have a site visit in FY 2016

UNC Business Compliance Program 2016

Audit Related

Complete

Ethics and Integrity Task Force
Policies and Procedures Committee
Chief Privacy Officer Search Committee
Exec. Director for Enterprise Financial Reporting Search
OSR Compliance and Training Officer

UNC Internal Audit
2015/16 Audit Schedule as of 06/30/16

On Going

Continuous Auditing
Office Systems
HIPAA Security Liaison
University Committee on the Protection of Personal Data
IT Governance Committee & Data Custodian Work
Privacy Liaison
CERTIF (PCI Standards)
Audit Committee
Audit Process Improvement
HIPAA Risk Assessment
KPI Reporting
UNCAA Conference Planning (added)
Multiple short-term advisory projects

Special Projects & Management Requests

Complete

Energy Services 2015
Environmental Sciences & Engineering #2
Learn NC
Health Promotion and Disease Prevention
Coal Sorbent Contract
Anesthesiology
Health Behavior (assist Office of the State Auditor)
HPDP - Green Cart
Gene Therapy - Bamboo (new)

In Process

Orthodontics
Auxiliary Equipment (referral from Office of State Auditor)
Lineberger Cancer Center Grants (referral from Office of State Auditor)
Law 2016 (new)
Nutrition Research Institute (new)
Multiple short-term special projects



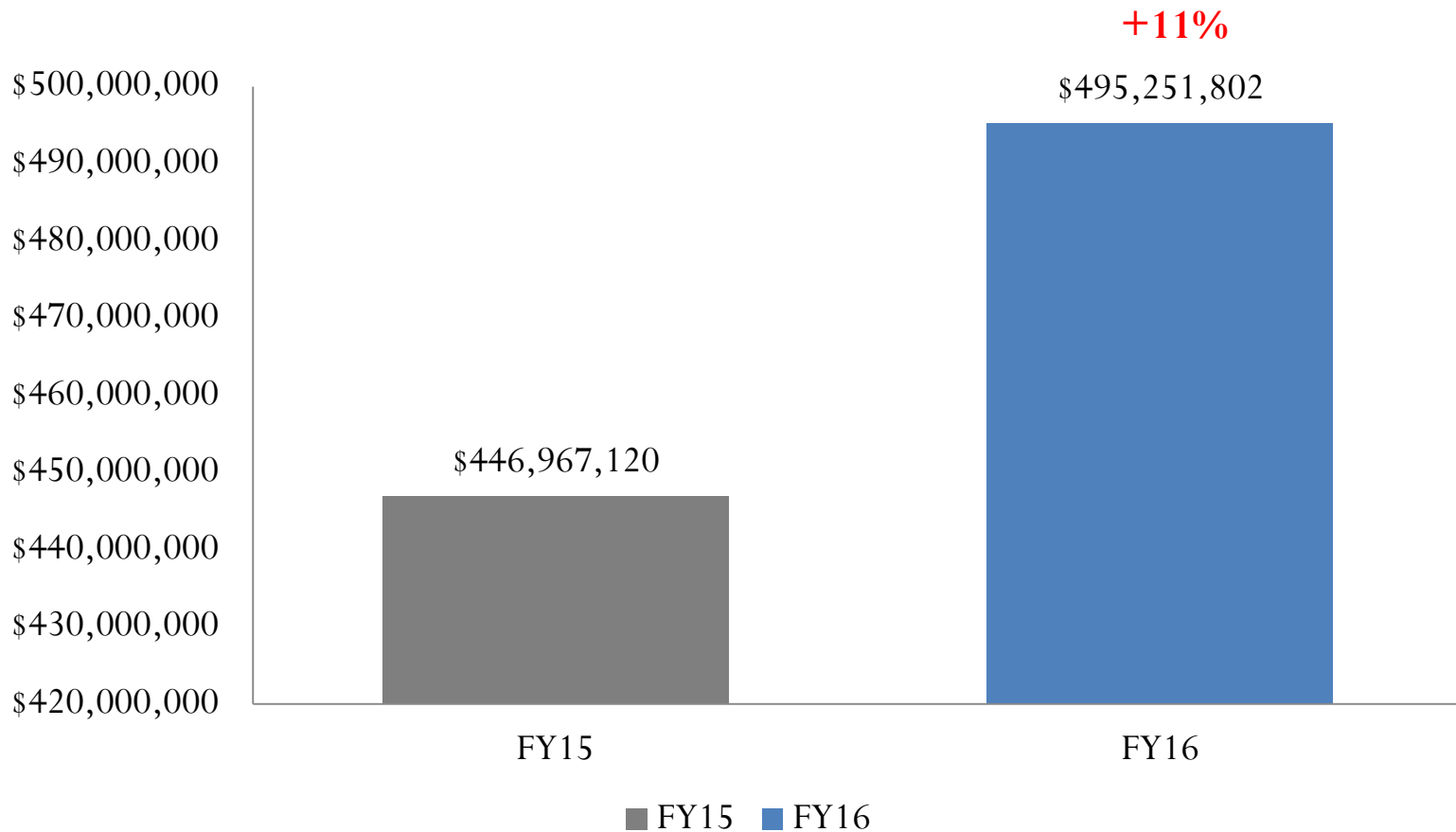
THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Finance, Infrastructure & Audit Committee

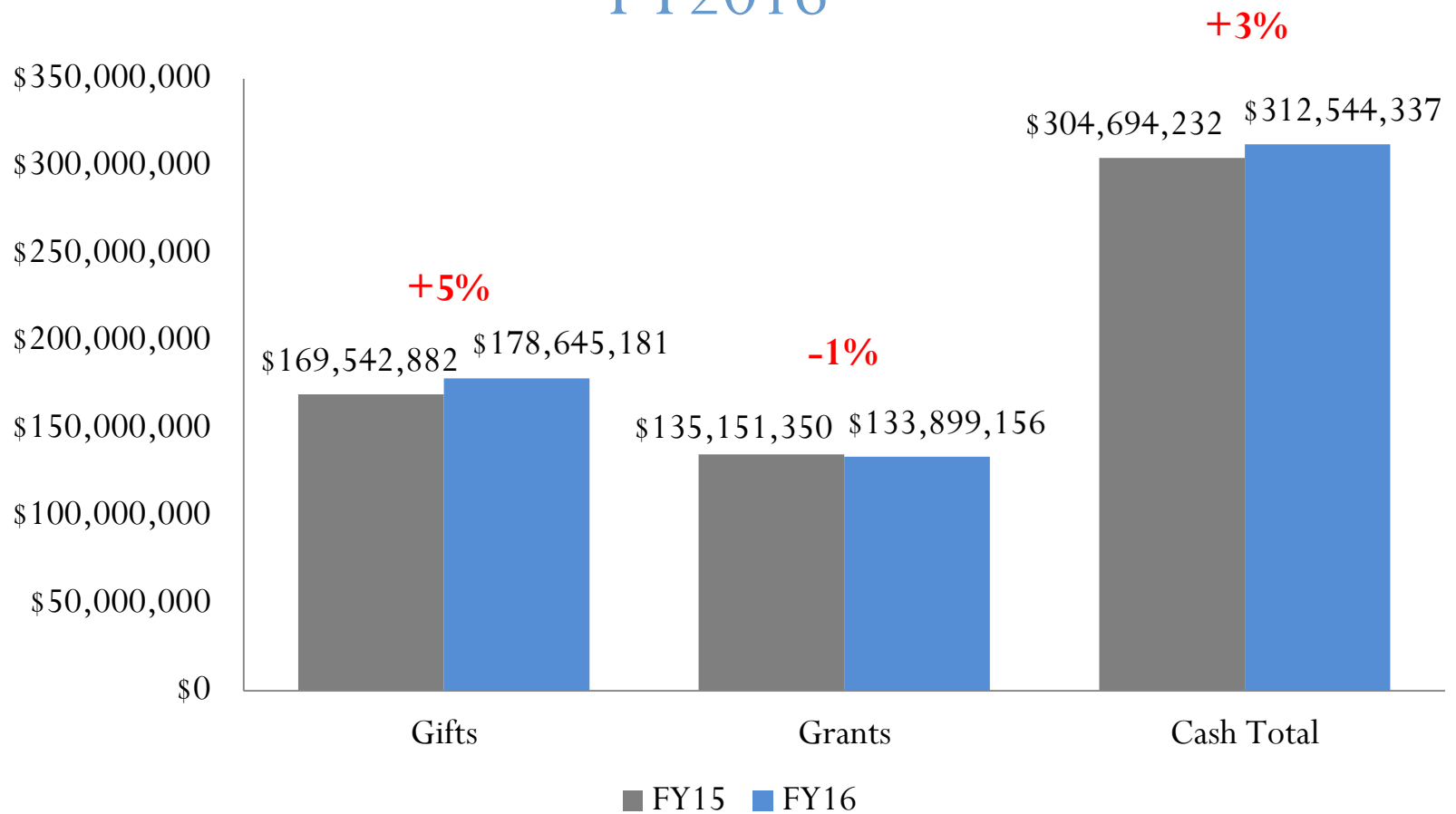
UNC Board of Trustees Meeting
September 21, 2016

David S. Routh
Vice Chancellor for Development

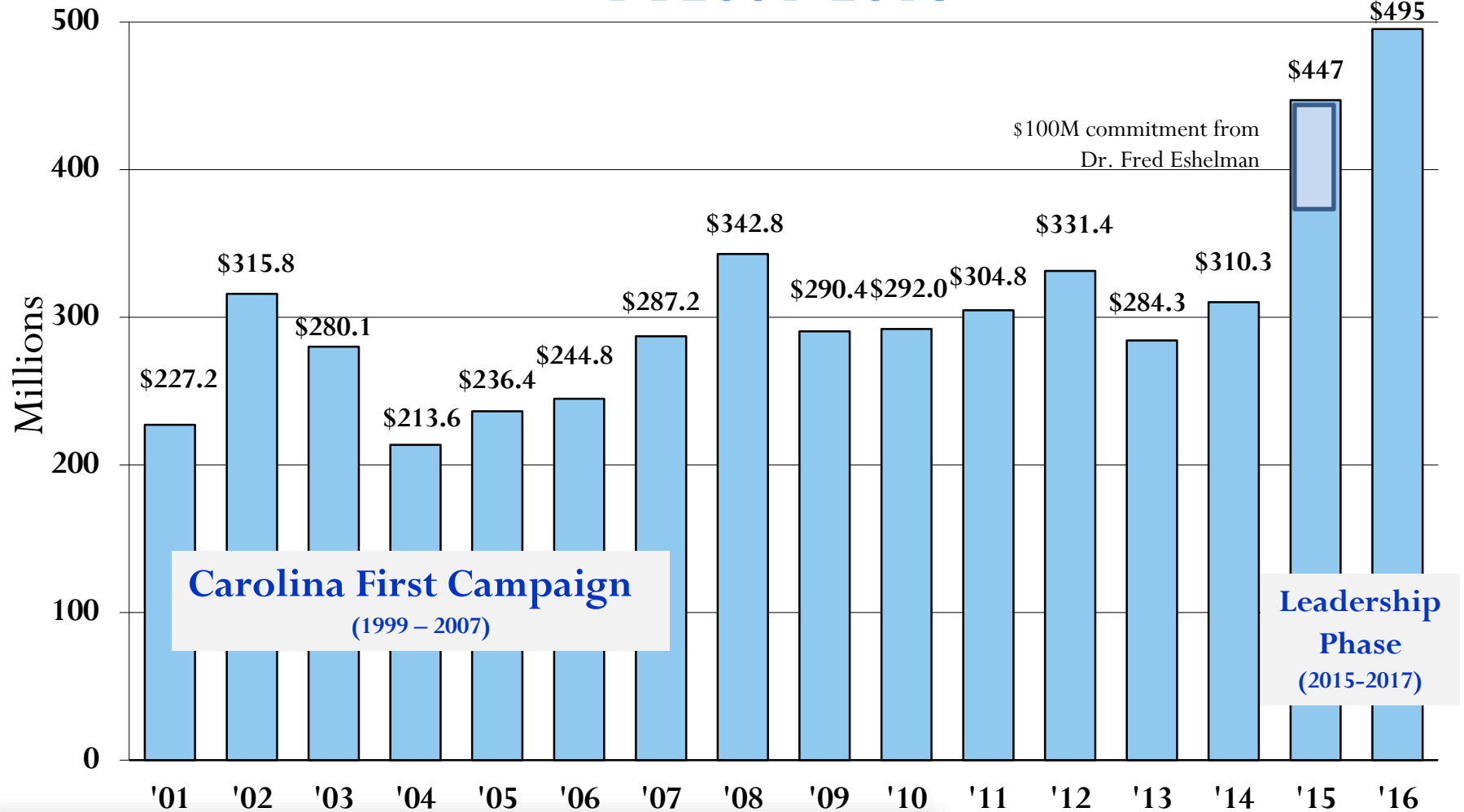
NEW CASH AND COMMITMENTS TOTALS FY2016



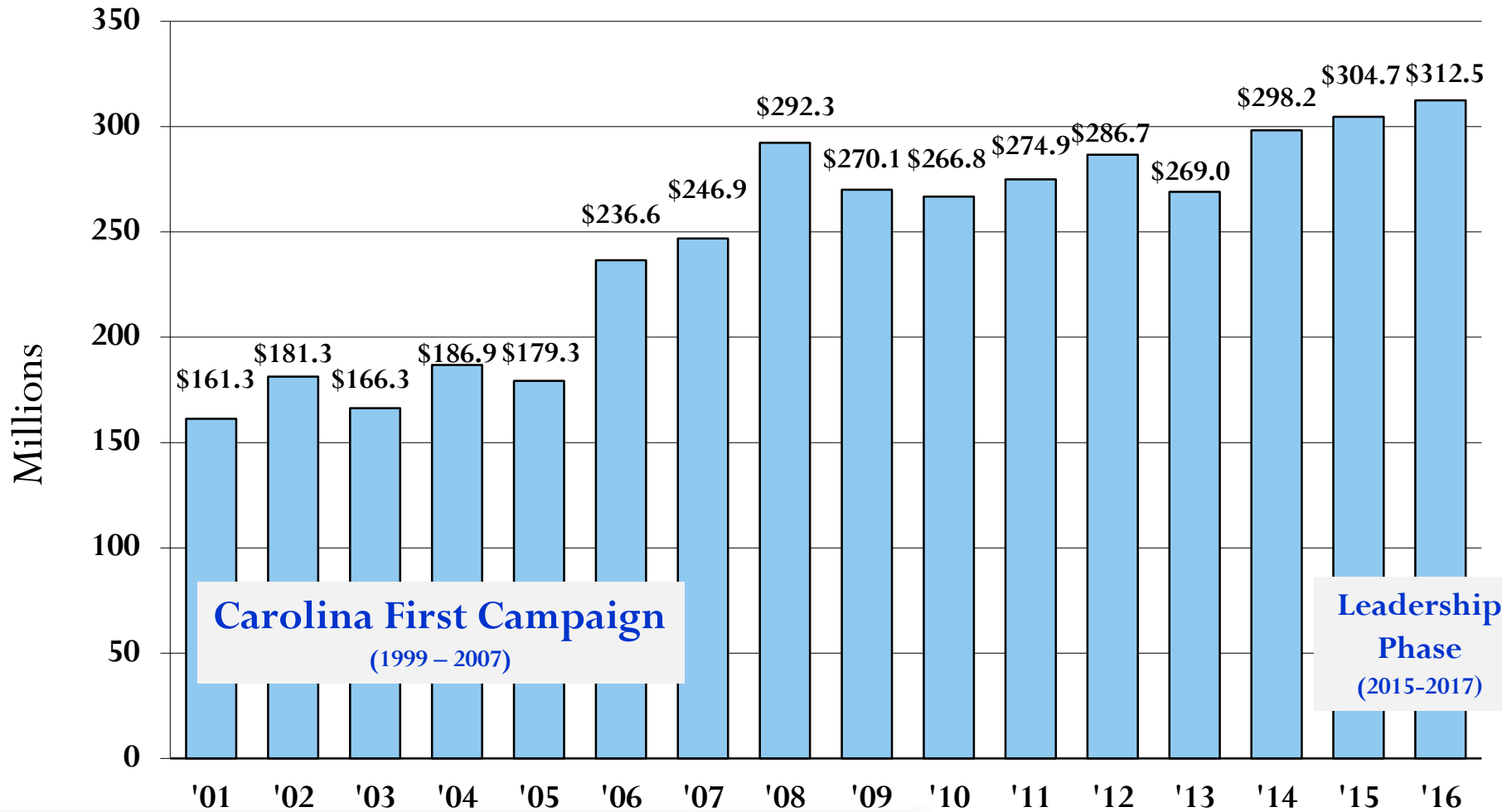
CASH TOTALS FY2016



NEW CASH AND COMMITMENTS TOTALS FY2001-2016



CASH TOTALS FY2001 - 2016



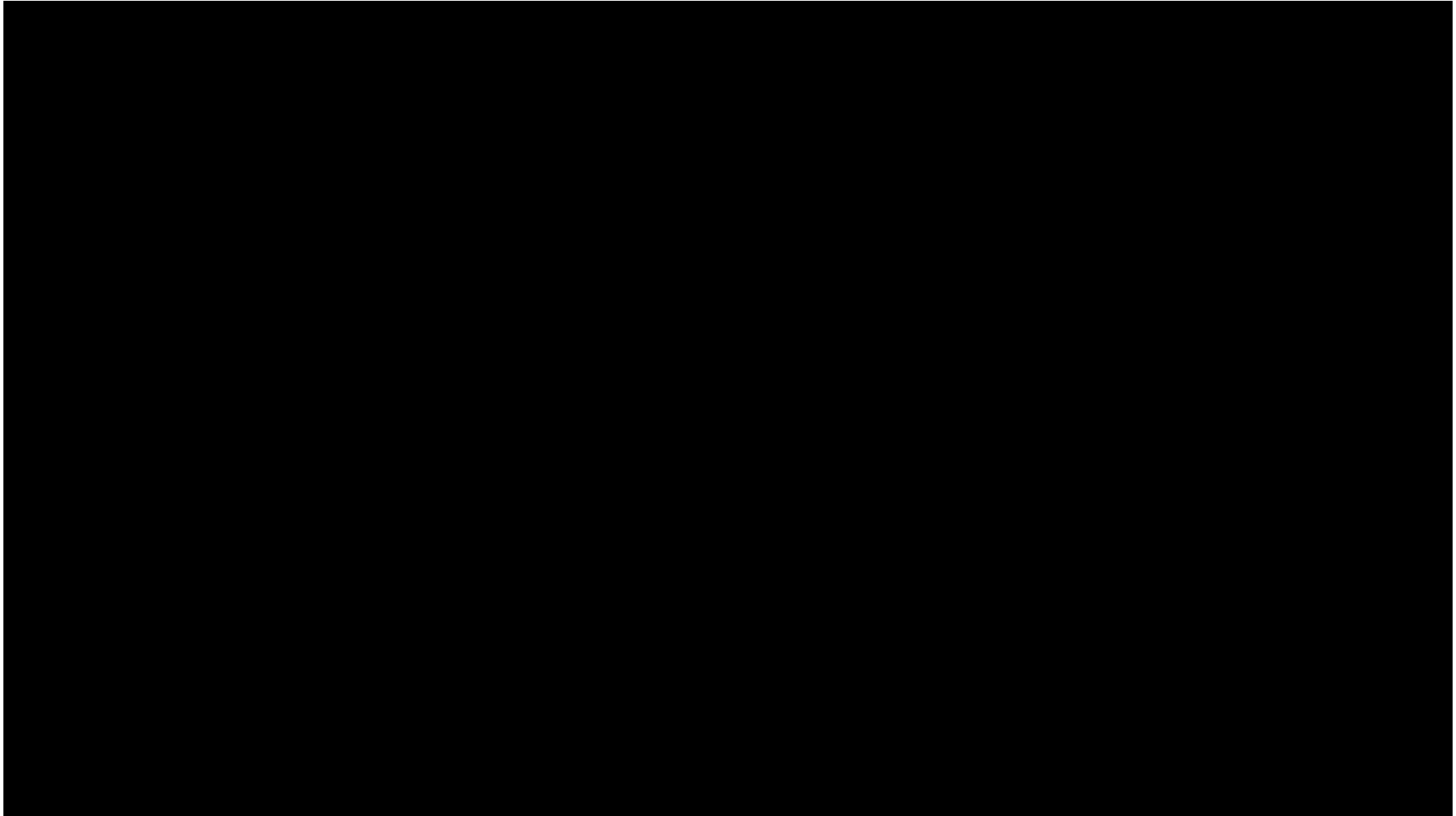
SCHOOL/UNIT SUCCESS

15 Schools/Units had double or triple year-over-year growth!

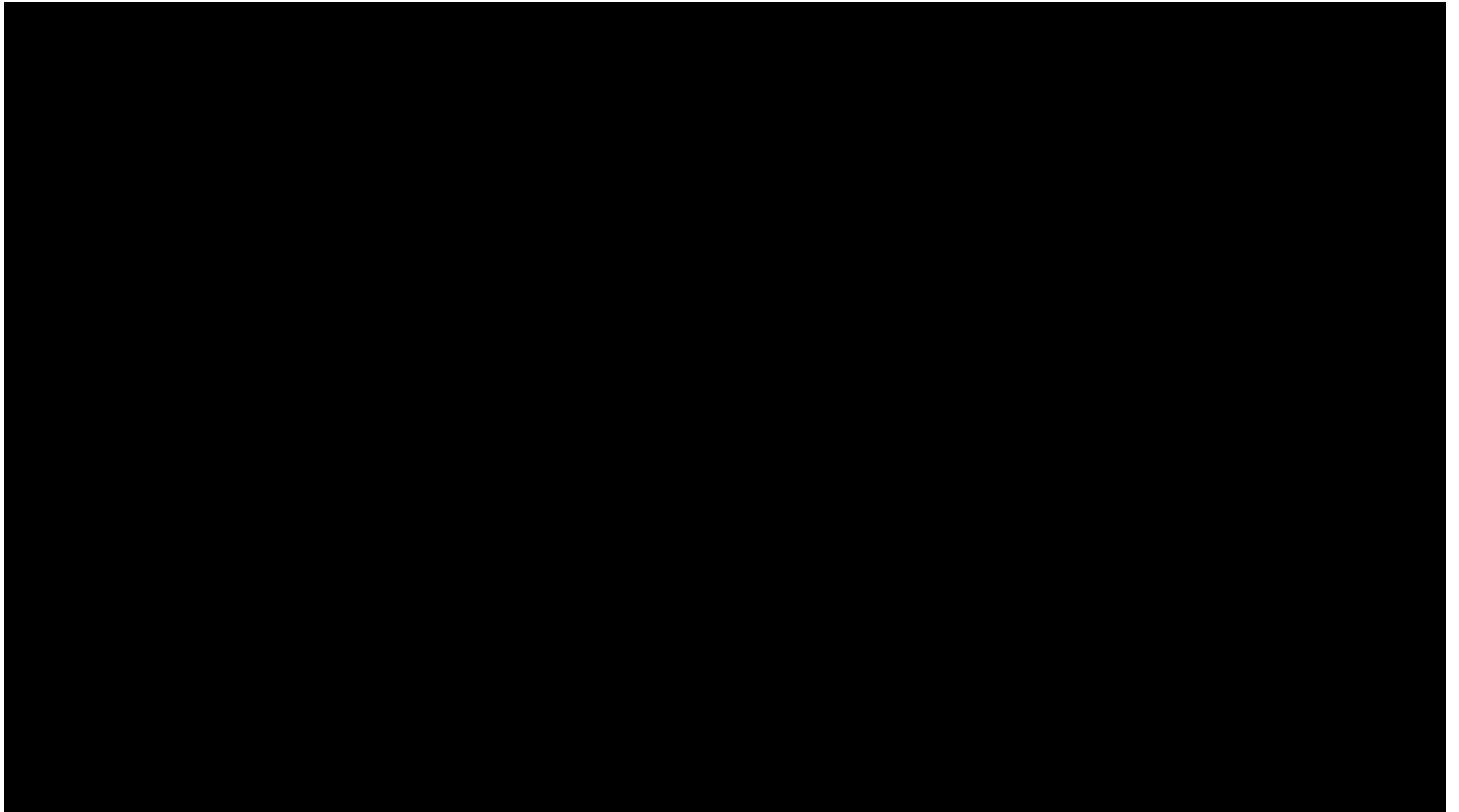
<u>Schools/Units</u>	<u>FY 2016 Fundraising Totals</u>	<u>% Increase over FY 15</u>
College of Arts & Sciences	\$68,502,572	29%
Kenan-Flagler Business School	\$35,160,673	48%
School of Law	\$6,806,296	363%
School of Social Work	\$2,494,344	162%
University Library	\$19,714,262	816%
Gillings School of Global Public Health	\$34,984,117	97%
School of Dentistry	\$6,682,884	94%
School of Nursing	\$3,649,081	45%
School of Media and Journalism	\$5,651,262	284%
UNC Medicine	\$133,024,467	13%
School of Medicine	\$72,261,056	3%
Lineberger Comprehensive Cancer Center	\$29,178,866	51%
Medical Foundation	\$31,584,546	11%
Carolina Performing Arts	\$4,632,970	404%
Morehead-Cain Foundation	\$14,523,471	312%
Scholarships & Student Aid	\$29,150,373	129%
UNC Athletics	\$62,836,869	179%



WE DO IT FOR....MARTIN HOTTELL



WE DO IT FOR....RENGATE ALSTON



Finance, Infrastructure & Audit Debt & Liquidity Update

September 21, 2016



UNC
DIVISION OF FINANCE
AND ADMINISTRATION

Debt Portfolio Review

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL -- DEBT PORTFOLIO SUMMARY					
Bond Issue	Tax Status	Coupon	Par Outstanding	Next Call Date	Final Maturity
Utility System 1997	Tax-Exempt	CABs	50,475,000	Non-Callable	02/01/2033
Series 2001B	Tax-Exempt	Variable	22,220,000	Anytime @ Par	12/01/2025
Series 2001C	Tax-Exempt	Variable	22,220,000	Anytime @ Par	12/01/2025
Series 2009A	Tax-Exempt	3.00 - 5.00%	74,120,000	12/01/19 @ Par	12/01/2028
Series 2009B	Taxable (BABs)	5.76%	112,805,000	12/01/19 @ Par	12/01/2039
Series 2012B	Tax-Exempt	67% LIBOR + 0.75%	100,000,000	Tender (12/01/2017)	12/01/2041
Series 2012C	Taxable	0.62-3.60%	115,820,000	Make-Whole Call	12/01/2033
Series 2014	Taxable	0.759 - 3.847%	265,600,000	Make-Whole Call	12/01/2034
Series 2016A	Tax-Exempt	67% LIBOR + 0.45%	100,000,000	Tender (3/01/2019)	12/01/2041
Series 2016B	Tax-Exempt	67% LIBOR + 0.45%	50,000,000	Tender (3/01/2019)	12/01/2034
Series 2016C	Taxable	0.700% - 3.327%	400,950,000	Make-Whole Call	12/01/2036
Commercial Paper	Tax-Exempt	Variable	23,500,000	N/A	N/A
Commercial Paper	Taxable	Variable	9,500,000	N/A	N/A
TOTAL			1,347,210,000		

Note: Portfolio shown as of September 1, 2016.

Principal Amortization



Note: Graph above excludes outstanding commercial paper.



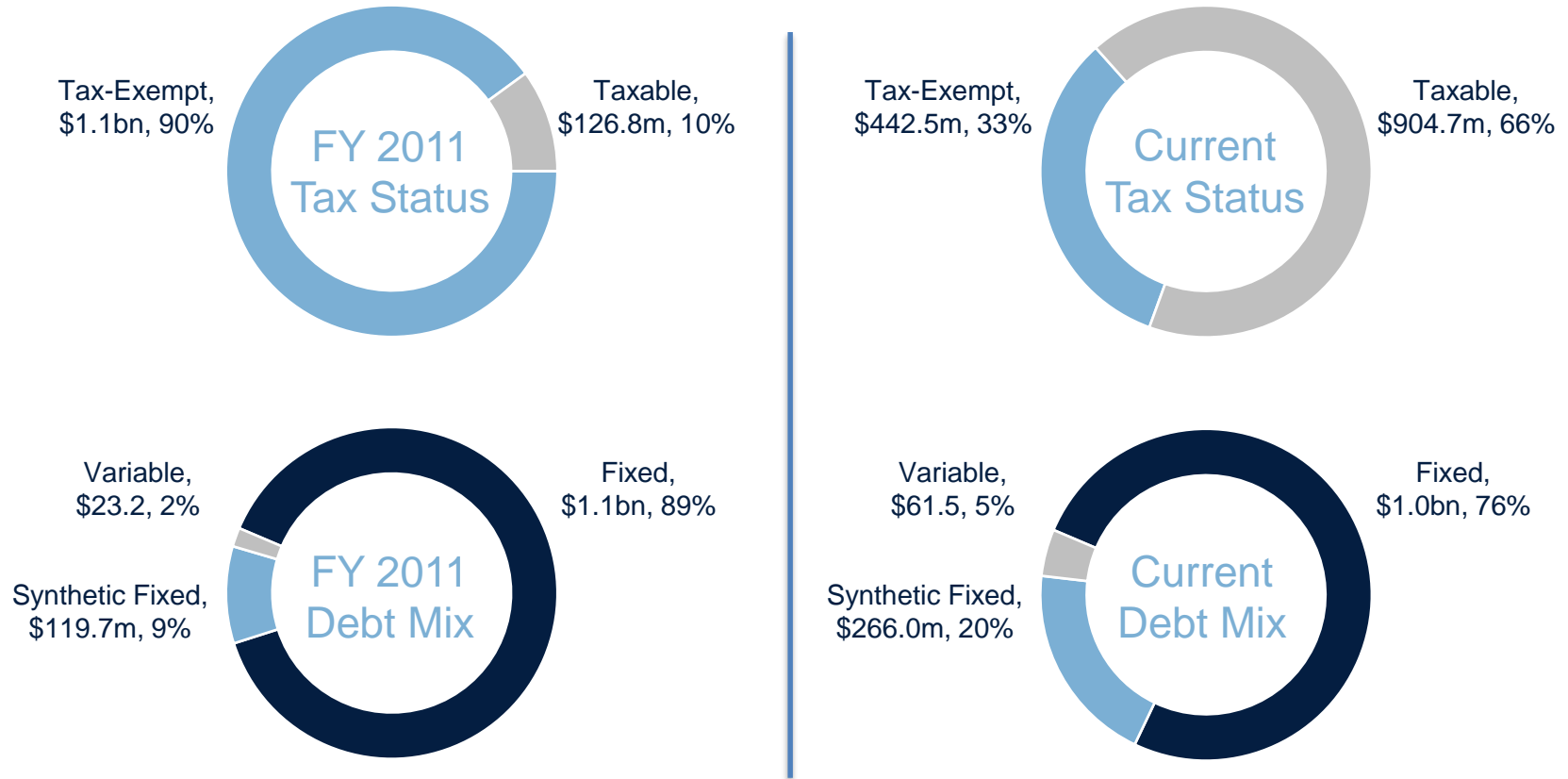
Swap Portfolio Review

- The University has three outstanding floating-to-fixed rate swaps, intended to hedge variable rate debt and the commercial paper program.
- The University is not required to post collateral with any of its counterparties unless the University's credit ratings fall below AA- or Aa3.
- The University continues to monitor market conditions for opportunities to reduce swap exposure relative to the debt portfolio.

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL -- SWAP PORTFOLIO SUMMARY						
Counterparty	Notional	Effective Date	Termination Date	UNC Pays	UNC Receives	Est. Mark-to-Market
Lehman Brothers	15,980,000	10/3/2000	11/1/2025	5.24%	100% SIFMA	(3,735,709)
Wachovia	100,000,000	12/1/2007	12/1/2036	3.31%	67% 1M LIBOR	(40,159,016)
Bank of New York	150,000,000	12/1/2011	12/1/2041	4.38%	67% 1M LIBOR	(104,740,092)
TOTAL	265,980,000					(148,634,817)

Note: Portfolio shown as of September 1, 2016.

Evolution of Debt Portfolio



Projected Expendable Resources to Debt

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
DEBT RATIOS - HISTORICAL AND PROJECTED
(As of September 2016)

(\$ in millions)

(\$ in millions)						PROJECTED				
Fiscal Year Ending	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Expendable Resources to Debt										
Expendable Resources	\$2,193	\$2,514	\$2,566	\$2,658	\$2,700	\$2,738	\$2,776	\$2,815	\$2,854	\$2,894
Debt	\$1,366	\$1,438	\$1,427	\$1,445	\$1,387	\$1,377	\$1,411	\$1,401	\$1,375	\$1,336
Measure	1.60	1.75	1.80	1.84	1.95	1.99	1.97	2.01	2.08	2.17
Policy Threshold	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Additional Debt Capacity						\$448	(\$8)	\$36	\$53	\$65
Cumulative Debt Impact							\$440	\$476	\$528	\$594

Note: Projected ratios are based upon capital projects known at this point in time and assumptions on construction timing, and assumed changes in revenue/expense growth patterns

Projected Debt Service to Operations

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
DEBT RATIOS - HISTORICAL AND PROJECTED
(As of September 2016)

(\$ in millions)

Fiscal Year Ending	2012	2013	2014	2015	2016	PROJECTED				
						2017	2018	2019	2020	2021
Debt Service to Operations										
Debt Service	\$89	\$96	\$97	\$89	\$92	\$93	\$97	\$102	\$102	\$102
Operating Expenses	\$2,449	\$2,552	\$2,983	\$2,925	\$3,275	\$3,321	\$3,367	\$3,415	\$3,462	\$3,511
Measure	3.63%	3.76%	3.24%	3.04%	2.81%	2.80%	2.88%	2.98%	2.94%	2.90%
Policy Ceiling	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Additional Debt Capacity						\$545	(\$30)	(\$39)	\$23	\$27
Cumulative Debt Impact							\$515	\$476	\$499	\$526

Note: Projected ratios are based upon capital projects known at this point in time and assumptions on construction timing, and assumed changes in revenue/expense growth patterns

Upcoming Milestones

US Bank Liquidity Facility

- Scheduled expiration date on September 19, 2017
- Facility Amount: \$100 million

Series 2012B (FRNs)

- Mandatory Tender on December 1, 2017; callable beginning June 1, 2017
- Par Amount: \$100 million

Potential Refunding Candidates

- Series 2009A: \$54.9 million callable beginning on December 1, 2019
- Series 2009B (BABs): \$112.8 million callable beginning on December 1, 2019

Rating Agency Update

- The University's ratings (Aaa/AAA/AAA) were affirmed by Moody's, S&P and Fitch in February 2016 in connection with the Series 2016 issue.

Credit Strengths

- Reputation and momentum will continue to support growth in student demand
- Ongoing research prowess with considerable scale
- Increasing donor support
- Excellent funding from State of North Carolina

Credit Challenges

- Political limits on tuition pricing and financial aid policies
- Continued pressure on state operating appropriations
- Ongoing capital needs will continue to limit the growth of flexible reserves

Moody's Scorecard

Moody's Global Higher Education Scorecard	Sub-Factor Weights	Value	Score	Implied Rating
Factor 1: Market Profile (30%)				
Operating Revenue (\$000)	15%	2,850,294	1.00	Aaa
Annual Change in Operating Revenue (%)	5%	5.50%	5.00	A1
Strategic Positioning (Qualitative Factor)	10%	Excellent	1.00	Aaa
Factor 2: Operating Performance (25%)				
Operating Cash Flow Margin (%)	10%	5.50%	6.83	A3
Revenue Diversity (Max Single Contribution) (%)	15%	33%	1.26	Aaa
Factor 3: Wealth & Liquidity (25%)				
Total Cash and Investments (\$000)	10%	3,788,000	0.98	Aaa
Spendable Cash & Investments to Operations (x)	10%	0.90	1.90	Aa1
Monthly Days Cash on Hand (x)	5%	174	3.43	Aa2
Factor 4: Leverage (20%)				
Spendable Cash & Investments to Total Debt (x)	10%	1.90	2.60	Aa2
Total Debt to Cash Flow (x)	10%	9.10	4.05	Aa3
Total Scorecard Indicated Outcome		100%	2.50	Aa1

Weighted Score Legend	
Rating	Score Range
Aaa	≤ 1.5
Aa1	$> 1.5 \leq 2.5$
Aa2	$> 2.5 \leq 3.5$
Aa3	$> 3.5 \leq 4.5$
A1	$> 4.5 \leq 5.5$
A2	$> 5.5 \leq 6.5$
A3	$> 6.5 \leq 7.5$
Baa1	$> 7.5 \leq 8.5$
Baa2	$> 8.5 \leq 9.5$
Baa3	$> 9.5 \leq 10.5$
SG	> 10.5

Scorecard Rating:	Aa1
Actual Moody's Rating:	Aaa

Note: Based on FY 2015.

Peer Comparison (Aaa)

- The University's FY2015 debt capacity and affordability metrics are relatively neutral.
- Capacity Metrics: the University is weaker than the median for spendable cash and investments to debt and right at the median for debt to revenues.
- Affordability Metrics: the University is right at the median for debt service to operations and weaker than the median for debt service coverage.

Higher is Better

SPENDABLE CASH & INVESTMENTS TO DEBT	
University of Michigan	5.20
University of Virginia	4.38
Purdue University	3.39
Indiana University	3.05
University of Texas System	2.39
UNC Chapel Hill	1.92
Texas A&M University System	1.78
University of Washington	1.69

Peer Median: 2.72

Lower is Better

DEBT TO REVENUES	
University of Michigan	0.30
Indiana University	0.34
University of Washington	0.49
Purdue University	0.49
University of Texas System	0.49
UNC Chapel Hill	0.50
University of Virginia	0.53
Texas A&M University System	0.85

Peer Median: 0.49

Lower is Better

DEBT SERVICE TO OPERATIONS	
University of Michigan	2.3%
University of Virginia	3.0%
University of Washington	3.0%
University of Texas System	3.3%
Indiana University	3.4%
UNC Chapel Hill	3.6%
Purdue University	5.3%
Texas A&M University System	6.6%

Peer Median: 3.4%

Higher is Better

DEBT SERVICE COVERAGE	
University of Virginia	5.7
University of Michigan	5.5
University of Texas System	5.4
Purdue University	4.3
Indiana University	3.7
University of Washington	3.4
UNC Chapel Hill	2.9
Texas A&M University System	2.6

Peer Median: 4.0



Peer Comparison (Aa1)

- The University's metrics looks relatively similar when compared to medians for the Aa1 public university group which suggests that broader qualitative factors contribute to the University's Aaa rating.

Higher is Better

SPENDABLE CASH & INVESTMENTS TO DEBT	
Pennsylvania State University	5.77
University of Pittsburgh	3.69
University of Delaware	2.87
University of Minnesota	2.59
University of Nebraska	2.38
University System of Maryland	2.34
Texas Tech University System	2.27
University of Utah	2.15
Michigan State University	2.14
State University of Iowa	2.06
UNC Chapel Hill	1.92
North Carolina State University	1.62
University of Missouri System	1.47
Virginia Tech University	1.45
Ohio State University	1.43

Peer Median: 2.21

Lower is Better

DEBT TO REVENUES	
Pennsylvania State University	0.18
University System of Maryland	0.24
University of Utah	0.26
Texas Tech University System	0.37
University of Nebraska	0.38
State University of Iowa	0.42
North Carolina State University	0.42
University of Minnesota	0.42
University of Pittsburgh	0.47
Ohio State University	0.50
UNC Chapel Hill	0.50
Virginia Tech University	0.52
University of Missouri System	0.53
University of Delaware	0.54
Michigan State University	0.55

Peer Median: 0.42

Lower is Better

DEBT SERVICE TO OPERATIONS	
Pennsylvania State University	2.0%
University of Utah	2.2%
North Carolina State University	2.3%
Ohio State University	2.5%
University System of Maryland	3.1%
State University of Iowa	3.3%
University of Nebraska	3.3%
UNC Chapel Hill	3.6%
University of Minnesota	3.6%
University of Delaware	3.8%
University of Pittsburgh	4.0%
Virginia Tech University	4.2%
Texas Tech University System	4.6%
University of Missouri System	4.6%
Michigan State University	5.7%

Peer Median: 3.5%

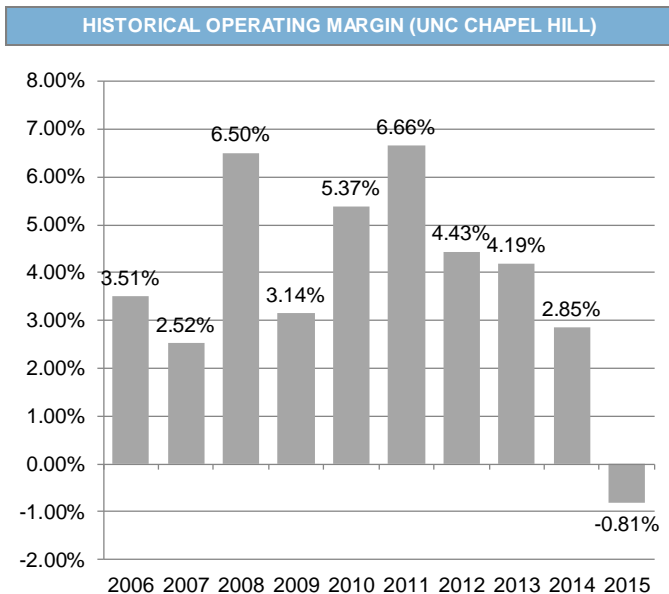
Higher is Better

DEBT SERVICE COVERAGE	
Pennsylvania State University	10.7
Ohio State University	5.8
University of Utah	5.8
University of Delaware	5.3
North Carolina State University	4.9
State University of Iowa	4.4
University of Pittsburgh	4.3
University of Nebraska	3.5
University System of Maryland	3.4
Texas Tech University System	3.2
University of Missouri System	3.2
UNC Chapel Hill	2.9
Michigan State University	2.7
Virginia Tech University	2.7
University of Minnesota	2.2

Peer Median: 3.9

Operating Performance

- Positive operating results are a key credit strength of UNC Chapel Hill. However, FY 2015 results were materially weaker than past performance.
- A return to operating surplus will be critical for future debt capacity/affordability.



PEER COMPARISON (Aaa)	
Purdue University	11.20%
University of Virginia	6.78%
Indiana University	5.51%
University of Texas System	5.00%
University of Michigan	3.71%
Texas A&M University System	3.65%
University of Washington	2.17%
<i>UNC Chapel Hill</i>	<i>-0.81%</i>

PEER COMPARISON (Aa1)	
Pennsylvania State University	9.21%
University of Delaware	6.70%
Ohio State University	6.56%
University of Utah	6.50%
North Carolina State University	6.26%
State University of Iowa	6.04%
University of Pittsburgh	6.04%
University of Missouri System	5.06%
Texas Tech University System	4.75%
University of Nebraska	4.71%
Michigan State University	3.95%
University System of Maryland	3.24%
Virginia Tech University	2.39%
University of Minnesota	1.34%
<i>UNC Chapel Hill</i>	<i>-0.81%</i>

Evaluating Liquidity

RATIO	DEFINITION	CALCULATION
Monthly Days Cash on Hand <i>Higher is Better</i>	Measures the number of days a university could continue to pay operating expenses from unrestricted cash and investments in the absence of additional revenue.	Unrestricted cash and investments that can be liquidated within one month, multiplied by 365, divided by operating expenses less depreciation and other large non-cash expenses.
Spendable Cash and Investments to Debt <i>Higher is Better</i>	Reflects ability of an institution to repay its debt from unrestricted financial reserves.	Cash and investments plus funds held in trust plus pledges receivable (restricted), less permanently restricted funds, divided by total debt.
Spendable Cash and Investments to Operations <i>Higher is Better</i>	Reflects ability of an institution to rely on wealth that can be accessed over time for a specific purpose to operate without any additional revenue.	Cash and investments plus funds held in trust plus pledges receivable (restricted), less permanently restricted funds, divided by operating expenses.



Pro Forma Analysis of Key Metrics

- Monthly Days Cash on Hand: UNC's metric has grown incrementally over the last five years, while consistently well below Aaa median levels. Further reduction in liquidity will depress this metric.
- Spendable Cash to Debt: Growth in spendable resources has outpaced the limited in growth in debt. The overall size of the University's balance sheet relative to peers results in ratios just below Aaa median levels.
- Spendable Cash to Operations: Growth in spendable resources has generally matched the growth in operating expense resulting in stability in this ratio. The University is strong relative to peer medians.

Metric	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Monthly Days Cash on Hand	120	157	162	152	174
<i>Aaa Median</i>	<i>215</i>	<i>194</i>	<i>222</i>	<i>233</i>	<i>239</i>
Spendable Cash to Debt	1.74	1.79	1.69	1.88	1.92
<i>Aaa Median</i>	<i>1.90</i>	<i>2.00</i>	<i>2.10</i>	<i>2.20</i>	<i>2.72</i>
Spendable Cash to Operations	0.92	0.92	0.98	1.02	0.95
<i>Aaa Median</i>	<i>0.80</i>	<i>0.80</i>	<i>0.80</i>	<i>0.90</i>	<i>1.39</i>

FY 2015 Less \$100M	FY 2015 Less \$200M	FY 2015 Less \$300M
161	148	134
1.85	1.78	1.71
0.92	0.88	0.85



Peer Comparison (Aaa)

Higher is Better

MONTHLY DAYS CASH ON HAND	
Purdue University	450
University of Virginia	308
Texas A&M University System	291
Indiana University	241
University of Michigan	239
UNC Chapel Hill	174
University of Texas System	165
University of Washington	129

Peer Median: 239

Higher is Better

SPENDABLE CASH & INVESTMENTS TO DEBT	
University of Michigan	5.20
University of Virginia	4.38
Purdue University	3.39
Indiana University	3.05
University of Texas System	2.39
UNC Chapel Hill	1.92
Texas A&M University System	1.78
University of Washington	1.69

Peer Median: 2.72

Higher is Better

SPENDABLE CASH & INVESTMENTS TO OPS	
University of Virginia	2.48
Purdue University	1.87
Texas A&M University System	1.56
University of Michigan	1.50
University of Texas System	1.24
Indiana University	1.08
UNC Chapel Hill	0.95
University of Washington	0.84

Peer Median: 1.37

Note: Based on FY 2015.

Peer Comparison (Aa1)

Higher is Better

MONTHLY DAYS CASH ON HAND	
University of Pittsburgh	464
Pennsylvania State University	406
University of Delaware	272
Texas Tech University System	250
University of Missouri System	241
Ohio State University	206
Michigan State University	197
University of Minnesota	178
UNC Chapel Hill	174
University of Nebraska	173
University System of Maryland	172
State University of Iowa	147
North Carolina State University	135
University of Utah	124
Virginia Tech University	115

Peer Median: 188

Higher is Better

SPENDABLE CASH & INVESTMENTS TO DEBT	
Pennsylvania State University	5.77
University of Pittsburgh	3.69
University of Delaware	2.87
University of Minnesota	2.59
University of Nebraska	2.38
University System of Maryland	2.34
Texas Tech University System	2.27
University of Utah	2.15
Michigan State University	2.14
State University of Iowa	2.06
UNC Chapel Hill	1.92
North Carolina State University	1.62
University of Missouri System	1.47
Virginia Tech University	1.45
Ohio State University	1.43

Peer Median: 2.21

Higher is Better

SPENDABLE CASH & INVESTMENTS TO OPS	
University of Pittsburgh	1.83
University of Delaware	1.67
Michigan State University	1.22
Pennsylvania State University	1.15
University of Minnesota	1.11
University of Nebraska	0.96
UNC Chapel Hill	0.95
State University of Iowa	0.92
Texas Tech University System	0.88
University of Missouri System	0.82
Virginia Tech University	0.77
Ohio State University	0.76
North Carolina State University	0.73
University of Utah	0.61
University System of Maryland	0.58

Peer Median: 0.90

Note: Based on FY 2015.

Conclusions

- The University's Aaa/AAA ratings are driven by qualitative factors such as exceptional strategic positioning aided by superior student demand, sponsored research prowess, growing donor support, and support from the State of North Carolina.
- Key metrics for debt capacity and affordability highlight that the University's operating revenue and expense base is large enough to withstand the impact of additional debt obligations from both a capacity and affordability standpoint.
 - Key factors in future debt capacity/ratings will be operating performance and liquidity.
- The University's liquidity metrics are generally weaker than peer institutions and a meaningful reduction in liquid assets will further depress certain ratios.
- Swaps are functioning in hedging capacity, but plan is to reduce that exposure over time in an orderly fashion.