



**WAKE FOREST UNIVERSITY**

Independent Auditors' Reports as Required by Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards and Government Auditing Standards and Related Information (Uniform Guidance)

(With Independent Auditors' Report Thereon)

# WAKE FOREST UNIVERSITY

## Table of Contents

	<b>Page</b>
Independent Auditors' Report	1
Basic Consolidated Financial Statements – Year ended June 30, 2016	3
Schedule of Expenditures of Federal Awards – Year ended June 30, 2016	45
Schedule of Expenditures of State Awards – Year ended June 30, 2016	51
Notes to Schedule of Expenditures of Federal Awards and Schedule of Expenditures of State Awards	52
Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	54
Independent Auditors' Report on Compliance for Each Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by Uniform Guidance and the Schedule of Expenditures of State Awards	56
Schedule of Findings and Questioned Costs	59



KPMG LLP  
Suite 400  
300 North Greene Street  
Greensboro, NC 27401

## **Independent Auditors' Report**

The Board of Trustees  
Wake Forest University:

### **Report on the Financial Statements**

We have audited the accompanying consolidated financial statements of Wake Forest University (the University), which comprise the consolidated balance sheet as of June 30, 2016, and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Wake Forest University as of June 30, 2016, and the changes in its net assets and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.



***Report on Summarized Comparative Information***

We have previously audited the 2015 consolidated financial statements, and we expressed an unmodified audit opinion on those audited consolidated financial statements in our report dated October 30, 2015. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2015 is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

***Other Matter***

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information included in the consolidated balance sheet, statement of activities, statement of cash flows, and the accompanying notes related to the College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc. (collectively, Reynolda Campus); and Wake Forest University Health Sciences (WFUHS) is presented for purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 25, 2016 on our consideration of the University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control over financial reporting and compliance.

**KPMG LLP**

Greensboro, North Carolina  
October 25, 2016

**WAKE FOREST UNIVERSITY**

Consolidated Balance Sheet

June 30, 2016

(with summarized comparative financial information as of June 30, 2015)

(Dollars in thousands)

Assets	Supplementary information			
	Reynolda Campus	WFUHS	2016	2015
Cash and cash equivalents	\$ 63,530	32,338	95,868	210,534
Accounts receivable, net	8,882	77,108	85,990	112,384
Patient receivables, net	—	57,250	57,250	38,083
Contributions receivable, net	118,095	18,002	136,097	137,500
Notes receivable, net	22,998	716	23,714	23,145
Investments	911,432	788,576	1,700,008	1,628,265
Direct investments in real estate	19,763	—	19,763	22,800
Other assets	7,029	15,146	22,175	26,424
Land, buildings, and equipment, net	513,074	303,973	817,047	752,742
<b>Total assets</b>	<b>\$ 1,664,803</b>	<b>1,293,109</b>	<b>2,957,912</b>	<b>2,951,877</b>
<b>Liabilities and Net Assets</b>				
Liabilities:				
Accounts payable and accruals	\$ 49,668	204,139	253,807	268,293
Other liabilities and deferrals	74,908	163,578	238,486	243,801
Annuities payable	24,476	2,875	27,351	27,973
Notes payable and capital leases	53,966	25,244	79,210	46,240
Bonds payable	263,026	167,192	430,218	443,112
Postretirement benefits	15,983	40,018	56,001	54,858
Government grants refundable	9,447	—	9,447	9,582
<b>Total liabilities</b>	<b>491,474</b>	<b>603,046</b>	<b>1,094,520</b>	<b>1,093,859</b>
Net assets:				
Unrestricted	541,160	466,836	1,007,996	969,458
Temporarily restricted	339,437	60,736	400,173	446,485
Permanently restricted	292,732	162,491	455,223	442,075
<b>Total net assets</b>	<b>1,173,329</b>	<b>690,063</b>	<b>1,863,392</b>	<b>1,858,018</b>
<b>Total liabilities and net assets</b>	<b>\$ 1,664,803</b>	<b>1,293,109</b>	<b>2,957,912</b>	<b>2,951,877</b>

See accompanying notes to consolidated financial statements.

**WAKE FOREST UNIVERSITY**

Consolidated Statement of Activities

Year ended June 30, 2016

(with summarized comparative financial information for the year ended June 30, 2015)

(Dollars in thousands)

	2016			2015 Total
	Unrestricted	Temporarily restricted	Permanently restricted	
Operating revenues:				
Student tuition and fees	\$ 349,467	—	—	349,467
Less student aid	(103,841)	—	—	(103,841)
Net student tuition and fees	245,626	—	—	245,626
Government grants and contracts	167,966	—	—	167,966
Private grants and contracts	2,845	21,253	—	24,098
Contributions	24,903	13,461	—	38,364
Investment return designated for current operations	39,605	28,438	—	68,043
Patient revenue, net	473,959	—	—	473,959
Other	234,613	—	—	234,613
Sales and services of auxiliary enterprises	87,319	—	—	87,319
Net assets released from restrictions	61,812	(61,812)	—	—
Total operating revenues	1,338,648	1,340	—	1,339,988
Operating expenses:				
Salaries and wages	697,815	—	—	697,815
Employee benefits	162,565	—	—	162,565
Student aid	8,001	—	—	8,001
Services	197,403	—	—	197,403
Clinical and laboratory supplies	48,821	—	—	48,821
Other operating expenses	110,716	—	—	110,716
Depreciation and amortization	64,648	—	—	64,648
Interest on debt	17,489	—	—	17,489
Total operating expenses	1,307,458	—	—	1,307,458
Operating excess	31,190	1,340	—	32,530
Nonoperating activities:				
Restricted contributions	—	19,810	18,917	38,727
Net assets released from restriction	40,304	(40,304)	—	—
Investment return less than amounts designated for current operations	(30,077)	(27,271)	(3,695)	(61,043)
Actuarial loss on annuity obligations	—	—	(1,839)	(1,839)
Unrealized loss on interest rate swaps	(8,824)	—	—	(8,824)
Postretirement related changes other than net periodic cost	2,988	—	—	2,988
Gain from affiliates, equity method	3,706	—	—	3,706
Other, net	(749)	113	(235)	(871)
Change from nonoperating activities	7,348	(47,652)	13,148	(27,156)
Change in net assets	38,538	(46,312)	13,148	5,374
Net assets at beginning of year	969,458	446,485	442,075	1,858,018
Net assets at end of year	\$ 1,007,996	400,173	455,223	1,863,392

See accompanying notes to consolidated financial statements.

**WAKE FOREST UNIVERSITY**

Statement of Activities

College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc.  
(Supplementary Information)

Year ended June 30, 2016

(Dollars in thousands)

	<u>Unrestricted</u>	<u>Temporarily restricted</u>	<u>Permanently restricted</u>	<u>Total</u>
Operating revenues:				
Student tuition and fees	\$ 304,218	—	—	304,218
Less student aid	(92,392)	—	—	(92,392)
Net student tuition and fees	211,826	—	—	211,826
Government grants and contracts	8,066	—	—	8,066
Private grants and contracts	2,589	—	—	2,589
Contributions	19,108	12,177	—	31,285
Investment return designated for current operations	16,617	21,024	—	37,641
Other	8,324	—	—	8,324
Sales and services of auxiliary enterprises	87,319	—	—	87,319
Net assets released from restrictions	31,390	(31,390)	—	—
Total operating revenues	385,239	1,811	—	387,050
Operating expenses:				
Salaries and wages	186,010	—	—	186,010
Employee benefits	49,456	—	—	49,456
Student aid	3,306	—	—	3,306
Services	42,409	—	—	42,409
Other operating expenses	54,312	—	—	54,312
Depreciation and amortization	33,798	—	—	33,798
Interest on debt	12,168	—	—	12,168
Total operating expenses	381,459	—	—	381,459
Operating excess	3,780	1,811	—	5,591
Nonoperating activities:				
Restricted contributions	—	19,810	11,001	30,811
Net assets released from restriction	40,304	(40,304)	—	—
Investment return less than amounts designated for current operations	(6,501)	(19,265)	(824)	(26,590)
Actuarial (loss) gain on annuity obligations	—	—	(2,276)	(2,276)
Unrealized loss on interest rate swaps	(7,356)	—	—	(7,356)
Postretirement related changes other than net periodic cost	882	—	—	882
Other, net	(1,134)	139	61	(934)
Change from nonoperating activities	26,195	(39,620)	7,962	(5,463)
Change in net assets	29,975	(37,809)	7,962	128
Net assets at beginning of year	511,185	377,246	284,770	1,173,201
Net assets at end of year	\$ 541,160	339,437	292,732	1,173,329

See accompanying notes to consolidated financial statements.

**WAKE FOREST UNIVERSITY**

Statement of Activities

Wake Forest University Health Sciences  
(Supplementary Information)

Year ended June 30, 2016

(Dollars in thousands)

	<u>Unrestricted</u>	<u>Temporarily restricted</u>	<u>Permanently restricted</u>	<u>Total</u>
Operating revenues:				
Student tuition and fees	\$ 45,249	—	—	45,249
Less student aid	(11,449)	—	—	(11,449)
Net student tuition and fees	33,800	—	—	33,800
Government grants and contracts	159,900	—	—	159,900
Private grants and contracts	256	21,253	—	21,509
Contributions	5,795	1,284	—	7,079
Investment return designated for current operations	22,988	7,414	—	30,402
Patient revenue, net	473,959	—	—	473,959
Other	226,289	—	—	226,289
Net assets released from restrictions	30,422	(30,422)	—	—
Total operating revenues	953,409	(471)	—	952,938
Operating expenses:				
Salaries and wages	511,805	—	—	511,805
Employee benefits	113,109	—	—	113,109
Student aid	4,695	—	—	4,695
Services	154,994	—	—	154,994
Clinical and laboratory supplies	48,821	—	—	48,821
Other operating expenses	56,404	—	—	56,404
Depreciation and amortization	30,850	—	—	30,850
Interest on debt	5,321	—	—	5,321
Total operating expenses	925,999	—	—	925,999
Operating excess (deficit)	27,410	(471)	—	26,939
Nonoperating activities:				
Restricted contributions	—	—	7,916	7,916
Investment return less than amounts designated for current operations	(23,576)	(8,006)	(2,871)	(34,453)
Actuarial gain on annuity obligations	—	—	437	437
Unrealized loss on interest rate swaps	(1,468)	—	—	(1,468)
Postretirement related changes other than net periodic cost	2,106	—	—	2,106
Gain from affiliates, equity method	3,706	—	—	3,706
Other, net	385	(26)	(296)	63
Change from nonoperating activities	(18,847)	(8,032)	5,186	(21,693)
Change in net assets	8,563	(8,503)	5,186	5,246
Net assets at beginning of year	458,273	69,239	157,305	684,817
Net assets at end of year	\$ 466,836	60,736	162,491	690,063

See accompanying notes to consolidated financial statements.



**WAKE FOREST UNIVERSITY**  
Consolidated Statement of Cash Flows  
Year ended June 30, 2016  
(with summarized comparative financial information for the year ended June 30, 2015)  
(Dollars in thousands)

	<u>Supplementary information</u>		<u>2016</u>	<u>2015</u>
	<u>Reynolda Campus</u>	<u>WFUHS</u>		
Cash flows from operating activities:				
Change in net assets	\$ 128	5,246	5,374	82,674
Adjustments to reconcile change in net assets to net cash (used in) provided by operating activities:				
Depreciation and amortization	33,798	30,068	63,866	65,350
Net (gains) losses on investments	(3,028)	4,051	1,023	5,643
Noncash gifts	(98)	—	(98)	(625)
Private gifts restricted for capital and long-term investment	(30,913)	(7,916)	(38,829)	(53,552)
Other revenue restricted for long-term investment	(810)	(308)	(1,118)	(573)
Loss (gain) on disposals of property and equipment	236	(144)	92	1,143
Gain from equity method affiliates	—	(3,706)	(3,706)	(10,749)
Unrealized loss on interest rate swaps	7,694	1,468	9,162	2,084
Bad debt expense	586	15,295	15,881	17,164
Changes in due from affiliates	—	4,293	4,293	—
Changes in operating assets and liabilities:				
Accounts and patient receivables	(572)	(7,804)	(8,376)	275,695
Contributions receivable	427	5,191	5,618	(28,175)
Notes receivable	—	116	116	(258)
Other assets and other liabilities and deferrals	(11,436)	(3,374)	(14,810)	(90,911)
Accounts payable and accruals	3,162	(35,822)	(32,660)	(4,409)
Postretirement benefits	121	1,051	1,172	(2,163)
Annuities payable	(185)	437	252	2,007
Net cash (used in) provided by operating activities	<u>(890)</u>	<u>8,142</u>	<u>7,252</u>	<u>260,345</u>
Cash flows from investing activities:				
Purchases of land, buildings, and equipment	(75,629)	(36,262)	(111,891)	(73,830)
Proceeds from sale of land, buildings, and equipment	3,392	66	3,458	3,331
Repayments of notes receivable	—	632	632	1,447
Disbursements of loans to students and other	(4,017)	(78)	(4,095)	(3,442)
Repayments of loans to students and other	3,297	138	3,435	3,184
Purchases of investments	(545,984)	(539,585)	(1,085,569)	(674,047)
Net proceeds from sales and maturities of investments	576,853	441,258	1,018,111	606,539
Decrease in deposits with bond trustee	—	—	—	25
Net cash used in investing activities	<u>(42,088)</u>	<u>(133,831)</u>	<u>(175,919)</u>	<u>(136,793)</u>
Cash flows from financing activities:				
Change in government grants refundable	(135)	—	(135)	(106)
Proceeds from notes payable	39,511	5,000	44,511	23,767
Principal payments on notes payable	(1,953)	(6,483)	(8,436)	(8,154)
Proceeds from borrowings from WFUBMC	—	—	—	9,684
Payments on borrowings from WFUBMC	—	(3,037)	(3,037)	(35,367)
Principal payments on bonds payable	(6,405)	(5,789)	(12,194)	(6,195)
Proceeds from private gifts restricted for capital and long-term investment	26,455	7,916	34,371	50,683
Net realized (gains) losses restricted for long-term investment	(2,349)	308	(2,041)	573
Other revenue restricted for long-term investment	810	152	962	658
Net cash provided by (used in) financing activities	<u>55,934</u>	<u>(1,933)</u>	<u>54,001</u>	<u>35,543</u>
Net increase (decrease) in cash and cash equivalents	12,956	(127,622)	(114,666)	159,095
Cash and cash equivalents at beginning of year	50,574	159,960	210,534	51,439
Cash and cash equivalents at end of year	<u>\$ 63,530</u>	<u>32,338</u>	<u>95,868</u>	<u>210,534</u>
Supplemental disclosures of cash flow information:				
Cash paid for interest, net of amounts capitalized	\$ 12,190	6,987	19,177	18,659
Assets acquired under capital leases	—	—	—	11,762
Transfer of assets to due to/from WFUBMC	—	—	—	36,938
Capital expenditures included in account payable	30,144	2,428	32,572	14,367

See accompanying notes to consolidated financial statements.

# WAKE FOREST UNIVERSITY

## Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

### (1) Organization and Summary of Significant Accounting Policies

#### (a) *Description of Wake Forest University*

Wake Forest University (the University) is a private, coeducational, not-for-profit institution of higher education and research located in Winston-Salem, North Carolina. The consolidated financial statements of the University include the College of Arts and Sciences, Schools of Law, Business, and Divinity, and consolidating subsidiaries including: Verger Capital Fund, LLC (Master Fund), Verger Fund I, LLC (Verger Fund I), Verger Fund II, LLC (Verger Fund II) and Reynolda House, Inc. (collectively, Reynolda Campus), and Wake Forest University Health Sciences (WFUHS), and all entities over which the University has control, including all of the subsidiaries of Reynolda Campus and WFUHS. All significant intercompany balances and transactions have been eliminated in consolidation.

On October 18, 2013, the University's Board of Trustees created an asset management company and related investment funds. These entities included Verger Capital Management LLC (VCM), Master Fund, Verger Fund I and Verger Fund II. VCM provides investment management services for the University's long-term pool. The Master Fund provides investment services for Verger Fund I and Verger Fund II. The Master Fund is controlled and consolidated by the University. Verger Fund I was created to hold the Reynolda Campus long-term endowment pool. Verger Fund II was created to hold the WFUHS and Reynolda House long-term endowment pools. The Master Fund, Verger Capital Fund, Verger Fund I, and Verger Fund II are consolidated entities.

Effective July 1, 2010, the Boards of WFUHS, North Carolina Baptist Hospital (NCBH), Wake Forest University Baptist Medical Center (WFUBMC) and the University approved the Medical Center Integration Agreement (the Integration Agreement or MCIA). The Integration Agreement allows for the leveraging of the combined resources of WFUHS and NCBH to fulfill a single mission, improve health and optimize performance of the combined organizations, while balancing patient care, education and research. The University and NCBH are the members of WFUBMC.

The Integration Agreement created an integrated academic medical center that combines clinical care, education and research under a single management and debt structure referred to as Wake Forest Baptist (WFB), which is governed by WFUBMC. One of the nation's preeminent academic medical centers, WFB is an integrated healthcare system that operates over 40 subsidiaries. It provides a continuum of care that includes primary care centers, outpatient rehabilitation, and dialysis centers. To ensure alignment across the organization, WFUHS and NCBH unrestricted operating income (deficit) are shared equally between the entities. Although the entities will be operated to maximize the value at the total WFB level, revenues, expenses, existing and new assets and debt will continue to be accounted for generally at the individual entity levels.

# WAKE FOREST UNIVERSITY

## Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The WFUBMC Board is comprised of seven directors elected by NCBH from among its Board members, seven directors elected by the University's Board of Trustees and two nonvoting directors elected by the WFUBMC Board from among the faculty of WFUHS. Subject to the reserved powers of the members, WFB operates WFUHS (including all subsidiaries and affiliates) and NCBH (including all subsidiaries and affiliates), including day-to-day management, strategic direction, managed care contracting and other business activities conferred on WFUBMC.

### (b) *Recently Adopted Accounting Standards*

In January 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU removes the requirement to disclose the fair value of financial instruments measured at amortized costs. The University adopted ASU 2016-01 in 2016 and removed the fair value disclosure for its fixed rate debt.

### (c) *Basis of Presentation*

The consolidated financial statements have been prepared on the accrual basis in conformity with U.S. generally accepted accounting principles (GAAP).

Net assets, revenues, and gains and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the University and changes therein are classified and reported as follows:

- *Unrestricted net assets* – net assets that are not subject to donor-imposed stipulations.
- *Temporarily restricted net assets* – net assets subject to donor-imposed stipulations that will be met either by actions of the University and/or the passage of time.
- *Permanently restricted net assets* – net assets subject to donor-imposed stipulations that they be maintained permanently by the University. Generally, the donors of these assets permit the University to use all, or part of, the income earned on related investments for general or specific purposes.

Revenues are reported as increases in unrestricted net assets unless their use is limited by donor-imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in unrestricted net assets unless their use is restricted by explicit donor stipulations or by law. Expirations of restrictions on net assets (i.e., the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as reclassifications between the applicable classes of net assets.

Income and realized and unrealized gains on investments of permanently restricted net assets are reported as follows:

- As increases in permanently restricted net assets if the terms of the gift require that they be added to the principal of a permanent endowment fund.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

- As increases in temporarily restricted net assets until appropriated for expenditure by the University and donor restrictions for their use are met.

Revenues earned, expenses incurred, and returns made available for the University's operating purposes of teaching, research, patient care, and other programs and services are components of the operating excess or deficit presented in the consolidated statement of activities. The University considers the following items to be nonoperating activities: restricted contributions for capital and long-term investment and the related net assets released from restriction, investment return in excess of or less than amounts designated for current operations, actuarial gain or loss on annuity obligations, unrealized gain or loss on interest rate swaps, postretirement related changes other than net periodic cost, gain or loss from affiliates (equity method), donor designation changes, and other, net.

**(d) Cash Equivalents**

Cash equivalents include highly liquid investments with original maturities at date of purchase of three months or less. Such assets, reported at fair value, primarily consist of depository account balances, money market funds and accounts. The University maintains bank accounts at various financial institutions covered by the Federal Depository Insurance Corporation (FDIC). At various times throughout the year, the University may maintain bank accounts in excess of the FDIC-insured limit. Management believes that the risk associated with these bank accounts is minimal.

**(e) Contributions**

Contributions, including unconditional promises to give, are recognized as revenues in the period received. Contributions restricted for capital projects or permanent endowment funds and contributions under split-interest agreements or perpetual trusts are reported as nonoperating activities. Conditional promises to give are not recognized until they become unconditional, that is, when the conditions on which they depend are substantially met. Contributions of assets other than cash are recorded at their estimated fair value. Contributions to be received after one year, net of an allowance for uncollectible contributions receivable, are discounted to their present value at a risk-adjusted rate. Amortization of discounts is recorded as additional contribution revenue in accordance with donor-imposed restrictions, if any, on the contributions. An allowance for uncollectible contributions receivable is provided based upon management's judgment, considering such factors as prior collection history, type of contribution, relationship with donor, and nature of fund-raising activity.

**(f) Notes Receivable**

Notes receivable, which are recorded at face value, principally represent amounts due from students under Perkins and other U.S. government sponsored loan programs. A general allowance is made for uncollectible student loans after considering long-term collection experience and current trends. Other notes receivable are evaluated individually for impairment, with allowances based on management's expectations given facts and circumstances related to each note.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

**(g) Investments**

Investments in readily marketable debt and equity securities are stated at their fair values, which are determined based on quoted market prices. Investments in private equity and absolute return funds are reported at estimated fair value, utilizing their net asset values. Those net asset values are determined by the investment managers and are reviewed and evaluated by the University's investment management company. These estimated fair values may differ from the values that would have been used had a ready market existed for these investments. Investments in equity method affiliates are accounted for using the equity method.

**(h) Investments in Real Estate**

Investments in real estate are primarily comprised of rental properties of the University and are valued at the lower of net book value or market. Accordingly, if there is a decline in market value the carrying amount of the investment is reduced to market value. The University records depreciation on rental properties over 40 years. Depreciation is calculated using the straight-line method. Real estate gifts held for sale are recorded at fair value, based on periodic external appraisals.

**(i) Split-Interest Agreements**

The University's split-interest agreements with donors consist primarily of irrevocable charitable remainder trusts for which the University serves as trustee and charitable gift annuities. Assets held in these trusts are stated at fair value and are included in investments. Contribution revenue is recognized at the dates the trusts are established. The University recognizes the change in value of split-interest agreements according to the fair value of assets that are associated with each trust and recalculates the liability for the present value of annuity obligations. Any change in fair value is recognized in the consolidated statement of activities.

The University is also the beneficiary of certain trusts and other assets held and administered by others. The University's share of these assets is recognized in investments at fair value.

**(j) Fair Value Measurements**

The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The hierarchy requires the use of observable market data when available. The three levels of the fair value hierarchy are as follows:

Level 1 – Valuations for assets and liabilities traded in active exchange markets as of the reporting date. Valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.

Level 2 – Valuations for assets and liabilities are determined through direct or indirect observations other than quoted market prices.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Level 3 – Valuations for assets and liabilities that are derived from other valuation methodologies including discounted cash flow models and similar techniques, and not based on market exchange, dealer or broker traded transactions.

Net asset value (NAV) – Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy.

In the event that changes in the inputs used in the fair value measurement of an asset or liability result in a transfer of the fair value measurement to a different categorization (e.g., from Level 3 to Level 2), such transfers between fair value categories are recognized at the end of the reporting period.

The carrying amounts of cash and cash equivalents (Level 1), patient receivables (Level 2), and accounts receivable (Level 2) approximate fair value because of the terms and relatively short maturity of these financial instruments. The carrying amounts of contributions receivable represent the present value of estimated future cash flows, which approximates fair value (Level 3). Investments (Levels 1–3, see note 8) and deposits with bond trustee (Level 1) are reported at fair value as of the date of the consolidated financial statements. A reasonable estimate of the fair value of notes receivable from students under government loan programs cannot be made because such loans are not sellable and can only be assigned to the U.S. government or its designees. The fair value of receivables from students under University loan programs (Level 2) approximates carrying value.

The carrying amounts of accounts payable and other accruals (Level 2) approximate fair value because of the relatively short maturity of these financial instruments. Annuities payable (Level 2) are recorded at fair value using a single discount rate equivalent to the University's nonexempt borrowing rate. The carrying amounts of notes and bonds payable (Level 2) with variable interest rates approximate their fair value because substantially all of these financial instruments bear interest at rates that approximate current market rates for borrowings with similar maturities and credit quality.

**(k) Land, Buildings, and Equipment**

Land, buildings, and equipment are recorded at cost at date of acquisition or estimated fair market value on the date received for donated items. Depreciation is calculated using the straight-line method over the estimated useful life of each class or component of depreciable asset. Estimated lives range from 3 to 60 years. Depreciation is not calculated on land and construction in progress. Gains or losses on the disposal of land, buildings, and equipment are included in the consolidated statement of activities. Interest cost incurred on borrowed funds during the period of construction of capital assets is capitalized as a component of the cost of constructing these assets.

**(l) Impairment of Long-Lived Assets**

The University periodically assesses the realizability of its long-lived assets and evaluates such assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. For assets to be held, impairment is determined to exist if estimated future cash flows, undiscounted and without interest charges, are less than the carrying amount. The

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

University recognizes an impairment charge when the fair value of the asset or group of assets is less than the carrying value.

**(m) *Asset Retirement Obligations***

The University has asset retirement obligations (AROs) arising from regulatory requirements to perform certain asset retirement activities at the time that certain buildings and equipment are disposed of or renovated. The liability was initially measured at fair value and subsequently is adjusted for accretion expense and changes in the amount or timing of the estimated cash flows. The corresponding asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset and depreciated over the asset's useful life. The University revalues asset retirement obligations as remediation costs are incurred or as additional cost information becomes available.

**(n) *Derivative Instruments***

The University holds certain interest rate swap agreements to manage the fixed/variable mix of its debt portfolio. The notional amounts of the agreements dictate the payments between the counterparties based on agreed-upon rates as determined in the agreements. The University records all derivative instruments on the consolidated balance sheet at their respective fair values. All changes in fair value are reflected in the consolidated statement of activities. Cash payments and receipts are included in interest on debt.

**(o) *Postretirement Plans***

The University records annual amounts relating to its postretirement plans based on calculations that incorporate various actuarial and other assumptions including discount rates, mortality, assumed rates of return, turnover rates, and healthcare cost trend rates. The University reviews its assumptions on an annual basis and makes modifications to the assumptions based on current rates and trends when it is appropriate to do so. The effect of modifications to those assumptions is recorded as a change in unrestricted net assets and amortized to net periodic benefit cost over future periods using the corridor method. The University believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience and market conditions. The net periodic benefit costs are recognized as employees render the services necessary to earn the postretirement benefits.

**(p) *Government Grants Refundable***

Funds provided by the U.S. government under the Federal Perkins Loan Program is loaned to qualified students and may be reloaned after collections. These funds are ultimately refundable to the U.S. government and are reported as liabilities.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

#### (q) *Revenue Recognition*

The University's revenue recognition policies are as follows:

**Student tuition and fees** – Student tuition and fees are recorded as revenue during the year that the related services are rendered. Student tuition and fees received in advance of services to be rendered are recorded as deferred revenue. Student aid provided by the University is reflected as a reduction of gross student tuition and fee revenue. Student aid does not include payments made to students for services rendered to the University.

**Grants and contracts** – Revenues under grants and contracts with private and governmental sponsoring organizations are deferred until related expenses are incurred. The revenues include recoveries of direct and indirect costs. Indirect costs are generally determined as a negotiated or agreed-upon percentage of direct costs with certain exclusions.

**Patient revenue, net** – WFUHS records patient revenue at the estimated net realizable amounts due from patients, third-party payers, and others for services rendered, including estimated retroactive adjustments under reimbursement agreements with third-party payers and contractual adjustments. Retroactive adjustments are accrued on an estimated basis in the period the related services are rendered and will be adjusted in future periods as interim or final settlements are determined.

**Charity care** – WFUHS provides care for patients who meet certain criteria under its charity care policy without charge or at amounts less than its established rates. WFUHS does not pursue collection of amounts determined to qualify as charity care; accordingly, such amounts are not reported in net patient revenue.

WFUHS maintains records to identify and monitor the level of charity care it provides. These records include the amount of charges foregone and estimated costs incurred for services and supplies furnished under its charity care policy and equivalent service statistics. Costs incurred are estimated based on the ratio of total operating expenses to gross charges applied to charity care charges. The amounts of direct and indirect costs incurred for services and supplies furnished under WFUHS' charity care policy totaled approximately \$24,179 and \$24,891 in 2016 and 2015, respectively.

**HITECH Incentive Funding for Meaningful Use of Electronic Health Records (EHR)** – The American Recovery and Reinvestment Act of 2009 (ARRA) established incentive payments under the Medicare and Medicaid programs for certain healthcare providers that use certified EHR technology. The program is commonly referred to as the Health Information Technology for Economic and Clinical Health (HITECH) Act. To qualify for incentives under the HITECH Act, healthcare providers must meet designated EHR meaningful use criteria as defined by the Centers for Medicare and Medicaid Services (CMS). Incentive payments are awarded to healthcare providers who have attested to CMS that applicable meaningful use criteria have been met. Compliance with meaningful use criteria is subject to audit by the federal government or its designee and incentive payments are subject to adjustment in a future period. WFUHS recognizes revenue for EHR incentive payments in the period in which it has obtained reasonable assurance that it is in compliance with the applicable EHR



## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

meaningful use requirements. Accordingly, for the years ended June 30, 2016 and 2015, WFUHS recognized EHR incentives of approximately \$1,571 and \$3,197, respectively, which are included in other revenue (separate from net patient service revenue) in the consolidated statement of activities.

**(r) Use of Estimates**

The University prepares its consolidated financial statements in accordance with GAAP that requires management to make estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include the carrying amount of land, buildings, and equipment, and the valuation of nonreadily marketable investments, investments in real estate, allowances for receivables, third-party payer settlements, AROs, professional liabilities, interest rate swap obligations and obligations related to employee benefits. Actual results could differ from those estimates.

**(s) Income Taxes**

The University is a tax-exempt organization as described in Section 501(c)(3) of the Internal Revenue Code (the Code) and is generally exempt from federal income taxes on related income pursuant to Section 501(a) of the Code. Accordingly, no provision for income taxes is made in the consolidated financial statements. If applicable, unrelated business income is reported by all member and subsidiary organizations on IRS Form 990-T. Fiscal years ending on or after June 30, 2013 remain subject to examination by federal and state tax authorities. The University has evaluated uncertain tax positions for the years ended June 30, 2016 and 2015, including a quantification of tax risks in areas such as unrelated business income and taxation of its for-profit subsidiaries. This evaluation did not identify any material items that effect the consolidated financial statements for the years ended June 30, 2016 and 2015.

**(t) Reclassifications**

Certain amounts previously reported in the 2015 consolidated financial statements have been reclassified to conform to the 2016 presentation. Such reclassifications have no effect on total assets, liabilities or net assets or operating, investing or financing cash flows as previously reported.

**(u) Comparative Financial Information**

The consolidated financial statements include certain prior year information for comparative purposes, which does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the University's consolidated financial statements for the year ended June 30, 2015 from which this information was derived.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

**(2) Accounts Receivable**

The following is an analysis of accounts receivable at June 30, 2016 and 2015:

	<b>2016</b>			<b>2015 Total</b>
	<b>Reynolda Campus</b>	<b>WFUHS</b>	<b>Total</b>	
Accounts receivable	\$ 6,538	42,695	49,233	75,969
Grants receivable	3,122	35,818	38,940	37,770
Total accounts receivable	9,660	78,513	88,173	113,739
Less allowance for bad debts	(778)	(1,405)	(2,183)	(1,355)
Accounts receivable, net	\$ 8,882	77,108	85,990	112,384

**(3) Patient Revenue and Patient Receivables**

Net patient service revenue is recorded when patient services are performed at the estimated net realizable amounts from patients, third-party payers, and others for services rendered. WFUHS recognizes patient service revenue associated with services provided to patients who have third-party coverage on the basis of contractual rates for the services rendered. For uninsured patients who do not qualify for charity care, WFUHS recognizes revenue on the basis of its standard rates for services provided (or on the basis of discounted rates, if negotiated or provided by policy). On the basis of historical experience, a significant portion of WFUHS' uninsured patients will be unable or unwilling to pay for the services provided. Thus, WFUHS records a significant provision for bad debts related to uninsured patients in the period the services are provided. The following is an analysis of net patient service revenue at June 30, 2016 and 2015:

	<b>WFUHS</b>	
	<b>2016</b>	<b>2015</b>
Third-party payers	\$ 475,552	429,156
Self-pay	13,702	15,414
Provision for bad debts	(15,295)	(15,826)
Net patient service revenue	\$ 473,959	428,744

WFUHS has agreements with third-party payers that provide for payments to WFUHS at amounts different from its established rates. Payment arrangements with nongovernmental payers are a negotiated percentage increase to the Medicare fee schedule allowable. Under the Medicare and Medicaid programs, WFUHS is entitled to reimbursement for billed current procedural terminology (CPT) codes at fee schedule rates determined by federal and state governments. Differences between established billing rates and

# WAKE FOREST UNIVERSITY

## Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

reimbursements from these programs are recorded as contractual adjustments to arrive at net patient service revenue.

Patient receivables are reduced by an allowance for doubtful accounts. In evaluating the collectability of patient receivables, WFUHS analyzes its past history and identifies trends for each of its major payer sources of revenue to estimate the appropriate allowance for doubtful accounts and provision for bad debts. Management regularly reviews data about these major payer sources of revenue in evaluating the sufficiency of the allowance for doubtful accounts. For receivables associated with services provided to patients who have third-party coverage, WFUHS analyzes contractually due amounts and provides an allowance for doubtful accounts and a provision for bad debts, if necessary (e.g., for expected uncollectible deductibles and copayments on accounts for which the third-party payer has not yet paid, or for payers who are known to be having financial difficulties that make the realization of amounts due unlikely). For receivables associated with self-pay patients (which includes both patients without insurance and patients with deductible and copayment balances due for which third-party coverage exists for part of the bill), WFUHS records a provision for bad debts in the period of service on the basis of its past experience, which indicates that many patients are unable or unwilling to pay the portion of their bill for which they are financially responsible. The difference between the standard rates (or the discounted rates if negotiated) and the amounts actually collected after all reasonable collection efforts have been exhausted is charged off against the allowance for doubtful accounts.

Patient receivables are recorded net of allowance for contractual adjustments and uncollectible accounts of \$105,309 and \$63,748, respectively, at June 30, 2016 and \$71,693 and \$76,771, respectively, at June 30, 2015.

WFUHS' allowance for doubtful accounts for self-pay patients decreased from 91% of self-pay accounts receivable at June 30, 2015 to 89% of self-pay accounts receivable at June 30, 2016. In addition, WFUHS' self-pay allowances and expenses (which include charity care charges foregone and bad debt expense) decreased \$11,254 from \$26,429 for fiscal year 2015 to \$15,175 for fiscal year 2016. WFUHS maintains an allowance for doubtful accounts for patient residuals associated with third-party payers. The allowance was \$21,611 and \$24,322 at June 30, 2016 and 2015, respectively.

### Concentration of Credit Risk

WFUHS grants credit without collateral to its patients, most of whom are insured under third-party payer agreements. The mix of receivables from patients and third-party payers was as follows as of June 30:

	<u>2016</u>	<u>2015</u>
Medicare	13%	11%
Medicaid	15	17
Self-pay	18	29
Other	54	43
	<u>100%</u>	<u>100%</u>

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

**(4) Contributions Receivable**

The following is an analysis of the maturities of the University's contributions receivable at June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
One year or less	\$ 31,882	8,544	40,426	34,823
Between one and five years	53,523	10,969	64,492	67,872
More than five years	100,000	494	100,494	105,341
Gross contributions receivable	185,405	20,007	205,412	208,036
Less estimated uncollectible amounts	(6,807)	(1,246)	(8,053)	(7,790)
Less discount to present value	(60,503)	(759)	(61,262)	(62,746)
Contributions receivable, net	\$ <u>118,095</u>	<u>18,002</u>	<u>136,097</u>	<u>137,500</u>

Contributions receivable are discounted at a rate commensurate with the scheduled timing of receipt. Such amounts outstanding as of June 30, 2016, and 2015, were discounted at rates ranging from 2.26% to 2.88% for WFU, respectively, and 1.91% to 2.26% for WFUHS, respectively.

Contributions receivable, net for Reynolda Campus included perpetual commitments from a foundation with a long-standing history of support to the University. These long-term unconditional promises to give represented 30% and 31% of Reynolda Campus' net contributions receivable as of June 30, 2016 and 2015, respectively.

**(5) Notes Receivable**

The following is an analysis of notes receivable at June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Student loans receivable	\$ 19,312	795	20,107	19,888
Other notes receivable	4,068	508	4,576	4,565
Total notes receivable	23,380	1,303	24,683	24,453
Less estimated uncollectible amounts	(382)	(587)	(969)	(1,308)
Notes receivable, net	\$ <u>22,998</u>	<u>716</u>	<u>23,714</u>	<u>23,145</u>

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The University makes uncollateralized loans to students based on financial need. Student loans are funded through Federal government loan programs or institutional resources. At June 30, 2016 and 2015, student loans receivable consisted of Federal loan programs of \$18,542 and \$18,205, respectively, and institutional loan programs of \$1,566 and \$1,683, respectively. The University participates in the Perkins federal revolving loan program. The availability of funds for loans under the program is dependent on reimbursements to the pool from repayments on outstanding loans. Funds advanced by the Federal government of \$9,447 and \$9,582 at June 30, 2016 and 2015, respectively, are ultimately refundable to the federal government and are reported as government grants refundable on the consolidated balance sheet. Outstanding loans canceled under the program result in a reduction of the funds available for loan and a decrease in the liability to the federal government. Amounts due under the Perkins loan program are guaranteed by the federal government and, therefore, no allowance for uncollectible amounts is reported under the program. Allowances for uncollectible institutional student loans are based on prior collection experience and current economic factors, which, in management's judgment, could influence the ability of loan recipients to repay the amounts per the loan terms. Institutional student loan balances are written off only when they are deemed to be permanently uncollectible. At June 30, 2016 and 2015, the allowance for uncollectible institutional student loan amounts was \$382 and \$350, respectively.

#### (6) Investments

Investments at June 30, 2016 and 2015 consist of the following:

	2016	2015
Short-term investments <sup>(a)</sup>	\$ 157,072	129,882
Absolute return <sup>(b)</sup>	279,231	273,061
Commodities: <sup>(c)</sup>	136,639	135,804
Fixed income: <sup>(d)</sup>		
Domestic	341,893	277,821
International	74,245	88,185
Private equity <sup>(e)</sup>	118,777	106,125
Public equity: <sup>(f)</sup>		
Domestic	247,682	261,143
International	160,356	157,025
Real estate: <sup>(g)</sup>	53,177	56,587
Beneficial interest in perpetual trusts and assets held by others <sup>(h)</sup>	23,909	25,837
Other	107,027	116,795
Total investments	\$ 1,700,008	1,628,265

(a) Includes short duration U.S. Treasury debt securities and other short-term, higher quality debt securities, cash and money market mutual funds.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

- (b) Includes investments in hedge funds and hedge fund-of-funds that invest both long and short on a global basis primarily in: equity securities (common stocks), credit securities (both investment grade and noninvestment grade), commodities, and currencies. In aggregate, the expectation is that the returns of this segment should not be highly correlated to the broad equity market.
- (c) Includes primarily illiquid investments in timberland, oil and gas properties, and water rights and entitlements held through limited partnership interests. While many of the investments are U.S. focused, some are more global. The category also includes more liquid allocations made to commodity (precious metals, industrial materials, and energy) mutual funds.
- (d) Includes long only, hedge strategies, and illiquid investments in various fixed income strategies (both U.S. and non-U.S.) including: investment grade securities, noninvestment grade securities, mortgage backed securities, asset backed securities, Treasury Inflation Protected Securities (TIPS), distressed debt, senior loans, and bank loans. The long only position also includes mutual funds that have daily liquidity in U.S. and non-U.S. fixed income markets.
- (e) Includes illiquid investments primarily in buyout, growth equity, and venture capital (both U.S. and non-U.S.) held through limited partnership interests.
- (f) Includes investments primarily in U.S. and non-U.S. common stocks (including emerging markets) as well as funds that invest in U.S. and non-U.S. common stocks (including emerging markets), mutual funds, and exchange traded funds. While most of the assets are invested long only, some assets are invested on a hedged basis (both long and short).
- (g) Includes illiquid investments in commercial real estate, residential real estate, and farmland held through limited partnership interests. While many of the investments are U.S. focused, some are more global.
- (h) Includes trusts and certain other assets held and administered by others which the University has an unconditional right to receive all or a portion of the specified cash flows.

In addition to the long-term pool, the University also manages other investment portfolios. Generally, these portfolios are invested in mutual funds, U.S. Treasury debt securities, and fixed income securities with daily liquidity. Each portfolio's asset allocation is customized based upon the return and risk objectives and distribution requirements of the portfolio.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The components of total investment return as reflected in the consolidated statement of activities are as follows:

	<u>2016</u>	<u>2015</u>
Investment income, net	\$ 25,817	39,666
Realized (losses) gains, net	(14,415)	41,248
Changes in unrealized depreciation	(4,402)	(54,843)
Total investment return	7,000	26,071
Endowment appropriation designated for current operations	(65,202)	(62,258)
Other investment returns designated for current operations	(2,841)	(2,330)
Investment return less than amounts designated for current operations	\$ <u>(61,043)</u>	<u>(38,517)</u>

The University incurred internal investment management costs of \$8,741 and \$7,884 in 2016 and 2015, respectively. The University reports investment returns net of internal and external management fees.

#### (7) Endowment

The University's pooled endowment consists of approximately 1,775 individual funds established for a variety of purposes including both donor-restricted endowment funds and funds designated by the Board of Trustees to function as endowments. Net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions. Gift annuities, beneficial interest in perpetual trusts and assets held by others, and contributions receivable are not considered components of the endowment.

The Board of Trustees has interpreted the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as allowing the University to appropriate for expenditure or accumulate so much of an endowment fund as the University determines is prudent for the uses, benefits, purposes, and duration for which the endowment fund is established, subject to the intent of the donor as expressed in the gift instrument. As a result of this interpretation, the University's policy is to report as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the University in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, the board of trustees considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

1. The duration and preservation of the fund
2. The purposes of the University and the donor-restricted endowment fund
3. General economic conditions
4. The possible effect of inflation and deflation
5. The expected total return from income and the appreciation of investments
6. Other resources of the University
7. The investment policies of the University

The University has adopted investment and spending policies for endowment assets that support the objectives of optimizing long-term returns and providing a sustainable level of endowment income distribution to support the University's activities through the annual operating budget while preserving the real (inflation adjusted) purchasing power of the endowment. The University's primary investment objective is to maximize total return within reasonable and prudent levels of risk while maintaining sufficient liquidity to meet disbursement needs. The endowment spending rate for the years ended June 30, 2016 and 2015 was 5.3%, calculated as a percentage of the average of the previous three-year semiannual moving market value per unit and subject to a 10% maximum annual growth or decline in per-unit spending.

The portfolio is constructed on a foundation of modern portfolio theory and strategic asset allocation. The University diversifies its investments among various asset classes incorporating multiple strategies and investment advisors to help manage risk. Major investment decisions are approved by the Board's Investment Policy Committee, which oversees the University's investments in accordance with established guidelines. Management and investment decisions are not made in isolation, but in the context of the portfolio of investments as a whole and as part of the overall investment strategy.

The University invests the majority of these assets in Verger Capital Fund. The University has established three individual unitized endowment pools for WFU, Reynolda House, and WFUHS. The internal long-term pools are reported on a fair value basis, with each individual fund subscribing to or disposing of units on the basis of the fair value per unit at the beginning of each quarter within which the transaction took place. At June 30, 2016, Reynolda Campus held units of 14,601,539, WFUHS held 11,021,932 units and Reynolda House held units of 641,689 in these long-term pools with a fair value of \$46.76, \$46.52 and \$46.46 per unit, respectively. At June 30, 2015, Reynolda Campus held units of 14,241,100, WFUHS held 10,508,099 units and Reynolda House held units of 628,863 in these long-term pools with a fair value of \$49.55, \$49.35 and \$49.51 per unit, respectively.



## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the value of the original gift. Deficiencies of this nature are reported in unrestricted net assets as follows: Reynolda Campus and WFUHS, respectively, were \$10,591 and \$2,217 as of June 30, 2016; and \$6,551 and \$1,083 as of June 30, 2015.

Endowment net assets consist of the following at June 30, 2016 and 2015:

	<b>2016</b>			<b>Total</b>	<b>2015 Total</b>
	<b>Unrestricted</b>	<b>Temporarily restricted</b>	<b>Permanently restricted</b>		
<b>Reynolda Campus:</b>					
Donor-restricted endowment funds	\$ (10,591)	212,609	259,806	461,824	475,735
Board-designated endowment funds	224,498	—	—	224,498	237,253
Endowment net assets	<u>\$ 213,907</u>	<u>212,609</u>	<u>259,806</u>	<u>686,322</u>	<u>712,988</u>
<b>WFUHS:</b>					
Donor-restricted endowment funds	\$ (2,217)	45,683	138,995	182,461	180,406
Board-designated endowment funds	272,429	—	—	272,429	274,006
Total endowment net assets	<u>\$ 270,212</u>	<u>45,683</u>	<u>138,995</u>	<u>454,890</u>	<u>454,412</u>

Changes in endowment net assets for the years ended June 30, 2016 and 2015 are as follows:

	<b>2016</b>			<b>Total</b>	<b>2015 Total</b>
	<b>Unrestricted</b>	<b>Temporarily restricted</b>	<b>Permanently restricted</b>		
<b>Reynolda Campus:</b>					
Beginning balance	\$ 230,702	233,847	248,439	712,988	713,734
<b>Investment return:</b>					
Investment income net of fees	(1,448)	(3,456)	(56)	(4,960)	2,495
Net (depreciation) appreciation	<u>(1,104)</u>	<u>3,126</u>	<u>(1,157)</u>	<u>865</u>	<u>7,144</u>
Total investment return (loss)	(2,552)	(330)	(1,213)	(4,095)	9,639
Contributions	267	191	12,742	13,200	18,028
Appropriation for expenditure	(15,010)	(21,099)	(420)	(36,529)	(29,746)
Transfers due to donor redesignations	—	—	8	8	(35)
Transfers to Board-designated funds	<u>500</u>	<u>—</u>	<u>250</u>	<u>750</u>	<u>1,368</u>
Ending balance	<u>\$ 213,907</u>	<u>212,609</u>	<u>259,806</u>	<u>686,322</u>	<u>712,988</u>

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

	2016			Total	2015 Total
	Unrestricted	Temporarily restricted	Permanently restricted		
WFUHS:					
Beginning balance	\$ 272,923	50,342	131,147	454,412	434,292
Investment return:					
Investment income net of fees	2,746	1,572	133	4,451	6,636
Net (depreciation) appreciation	<u>(3,976)</u>	<u>(1,446)</u>	<u>(179)</u>	<u>(5,601)</u>	<u>464</u>
Total investment return (loss)	(1,230)	126	(46)	(1,150)	7,100
Contributions	996	—	7,894	8,890	10,841
Appropriation for expenditure	(14,771)	(4,785)	—	(19,556)	(18,258)
Transfers to Board-designated funds	<u>12,294</u>	<u>—</u>	<u>—</u>	<u>12,294</u>	<u>20,437</u>
Ending balance	\$ <u><u>270,212</u></u>	<u><u>45,683</u></u>	<u><u>138,995</u></u>	<u><u>454,890</u></u>	<u><u>454,412</u></u>

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

#### (8) Fair Values of Assets and Liabilities

The following table summarizes the valuation of the University's assets and liabilities within the fair value hierarchy levels as of June 30:

	2016				Total
	Level 1	Level 2	Level 3	NAV	
Financial assets:					
Cash and cash equivalents	\$ 95,868	—	—	—	95,868
Investments:					
Short-term investments	157,072	—	—	—	157,072
Absolute return	16,088	—	—	263,143	279,231
Commodities	24,834	—	—	111,805	136,639
Fixed income:					
Domestic	230,494	75,971	11,912	23,516	341,893
International	2,987	28,265	5,842	37,151	74,245
Private equity	—	—	—	118,777	118,777
Public equity:					
Domestic	186,403	141	406	60,732	247,682
International	101,740	726	25	57,865	160,356
Real estate	12,179	—	—	40,998	53,177
Beneficial interest in perpetual trusts and assets held by others					
	—	—	23,909	—	23,909
Other	3,889	48,690	—	54,448	107,027
Total assets	<u>\$ 831,554</u>	<u>153,793</u>	<u>42,094</u>	<u>768,435</u>	<u>1,795,876</u>
Financial liabilities:					
Other liabilities and deferrals:					
Employee benefits	\$ —	48,690	—	—	48,690
Interest rate swap agreements	—	30,920	—	—	30,920
Annuities payable	—	27,351	—	—	27,351
Total liabilities	<u>\$ —</u>	<u>106,961</u>	<u>—</u>	<u>—</u>	<u>106,961</u>

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

	2015				
	Level 1	Level 2	Level 3	NAV	Total
Financial assets:					
Cash and cash equivalents	\$ 210,534	—	—	—	210,534
Investments:					
Short-term investments	129,882	—	—	—	129,882
Absolute return	2,260	430	—	270,371	273,061
Commodities	30,052	—	—	105,752	135,804
Fixed income:					
Domestic	221,906	27,101	16,118	12,696	277,821
International	12,876	27,503	—	47,806	88,185
Private equity	—	—	—	106,125	106,125
Public equity:					
Domestic	208,890	3,525	295	48,433	261,143
International	86,815	817	—	69,393	157,025
Real estate	5,133	—	—	51,454	56,587
Beneficial interest in perpetual trusts and assets held by others					
Other	—	—	25,837	—	25,837
	3,885	53,036	—	59,874	116,795
Total assets	\$ 912,233	112,412	42,250	771,904	1,838,799
Financial liabilities:					
Other liabilities and deferrals:					
Employee benefits	\$ —	44,186	—	—	44,186
Interest rate swap agreements	—	12,490	—	—	12,490
Annuities payable	—	27,973	—	—	27,973
Total liabilities	\$ —	84,649	—	—	84,649

The classification of investments in the fair value hierarchy is not necessarily an indication of the risks or liquidity of each investment's underlying assets and liabilities. In general, for Level 2 and Level 3 investments, the University utilizes the investment manager to provide a valuation estimate based on disclosed techniques and processes, which have been reviewed for propriety and consistency with consideration given to type and investment strategy.

As stated previously, the University adopted ASU 2015-07 and has excluded from the levels above the investments measured using net asset value per share under the practical expedient. These shares or units are generally reported at the net asset value reported by the fund managers.

The University's policy is to recognize transfers into and out of Levels 1, 2, and 3 as of the end of the year or when a change in level becomes known. There were no significant transfers between Level 1 and Level 2 securities during the year ended June 30, 2016. Transfers into and out of Level 3 are typically the result of a change in observation of significant valuation inputs required by various models.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Fair value for LIBOR-based interest rate swaps is determined using a relative price approach, by discounting the future expected cash flows at the market discount rate. For the variable leg of a swap, the expected cash flows are based on implied market forward rates for the appropriate underlying index. A credit value adjustment is applied to the total market value of the swap and quantifies the default risk of a counterparty using a default probability assumption based on the counterparty's credit default swap pricing at year-end.

Obligations under split-interest agreements reported in annuities payable were discounted at a rate that is equivalent to the University's nonexempt borrowing rate of 3.07% and 3.71% at June 30, 2016 and 2015, respectively.

The following table presents the reconciliation of Level 3 assets measured at fair value for the year ended June 30, 2016. Both observable and unobservable inputs may be used to determine the fair value of positions that the University has classified as Level 3.

	<u>Balance as of June 30, 2015</u>	<u>Total realized and unrealized losses</u>	<u>Purchases</u>	<u>Sales</u>	<u>Net transfers out of Level 3</u>	<u>Balance as of June 30, 2016</u>
Investments:						
Fixed income:						
Domestic	\$ 8,000	(531)	3,981	(829)	1,284	11,905
International	8,118	(261)	—	(2,008)	—	5,849
Public equity:						
Domestic	181	(99)	437	(113)	—	406
International	114	(4)	—	(85)	—	25
Interests in perpetual trusts and assets held by others	<u>25,837</u>	<u>(1,928)</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>23,909</u>
Total assets	<u>\$ 42,250</u>	<u>(2,823)</u>	<u>4,418</u>	<u>(3,035)</u>	<u>1,284</u>	<u>42,094</u>

The University's aggregate unfunded private capital commitments are approximately \$185,700, or 10.9%, of total investments at June 30, 2016. Of these commitments, \$92,200 relates to private equity, \$10,500 relates to real estate, \$55,300 relates to commodities, \$10,900 relates to absolute return, \$15,800 relates to fixed income and \$1,000 relates to emerging markets. These commitments are expected to be called over a multiyear time frame. The University believes it has adequate liquidity and funding sources to meet these obligations.

Private investments are generally made through limited partnership agreements where the University is normally one of many limited partners. Under the terms of such agreements, the University is required to provide funding, up to the total amount committed by the University, when capital calls are made by fund managers. These partnerships have a stated maturity date, but can provide for annual extensions for the purpose of disposing remaining portfolio positions and returning capital to investors. Alternatively, the fund may dispose of all portfolio investments and return all capital to investors before the stated maturity date. While the timing and amount of future capital calls and distributions in any particular year are inherently uncertain, the University takes these factors into consideration when allocating to private investments and believes that it has adequate liquidity to meet its obligations.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

As of June 30, 2016, redemption frequency and the corresponding notice period for all investments are as follows:

<b>Category</b>	<b>Redemption frequency (in days) (if currently eligible)</b>	<b>Redemption notice period (in days)</b>
Short-term investments	1 to 7 days	1 day
Absolute return	daily to >365	1 to 90 days
Commodities	1 to N/A	1 to N/A
Fixed income		
Domestic	1 to 180 days	daily to monthly
International	N/A	N/A
Private equity	N/A	N/A
Public equity		
Domestic	1 to 65 days	daily to quarterly
International	90 days	quarterly
Real estate	N/A	N/A
Perpetual trusts and assets held by others	N/A	N/A
Other	N/A	N/A

**(9) Land, Buildings, and Equipment**

Land, buildings, and equipment are summarized as follows at June 30, 2016 and 2015:

	<b>2016</b>			<b>2015 Total</b>
	<b>Reynolda Campus</b>	<b>WFUHS</b>	<b>Total</b>	
Land and improvements	\$ 28,996	99,937	128,933	122,592
Buildings and other improvements	685,432	395,162	1,080,594	1,009,966
Equipment and furnishings	115,673	193,727	309,400	291,295
Construction in progress	50,832	22,341	73,173	54,654
	<u>880,933</u>	<u>711,167</u>	<u>1,592,100</u>	<u>1,478,507</u>
Less accumulated depreciation	<u>(367,859)</u>	<u>(407,194)</u>	<u>(775,053)</u>	<u>(725,765)</u>
	<u>\$ 513,074</u>	<u>303,973</u>	<u>817,047</u>	<u>752,742</u>

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Total depreciation expense on buildings, improvements, equipment, and furnishings was \$64,584 and \$63,321 for the years ended June 30, 2016 and 2015, respectively.

The University reviews property, plant and equipment for recoverability whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The University recognizes an impairment loss only if the carrying amount of a long-lived asset is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. During 2015, WFUHS recorded an impairment loss of \$2,789 related to property, plant and equipment.

The University's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year. Interest cost of \$1,091 and \$495 was capitalized in the years ended June 30, 2016 and 2015, respectively.

The liabilities associated with AROs for the years ended June 30, 2016 and 2015, respectively, were \$8,414 and \$9,282 for Reynolda Campus, and \$2,756 and \$2,695 for WFUHS. These liabilities are reported in other liabilities and deferrals on the consolidated balance sheet.

#### (10) Notes, Capital Leases, and Bonds Payable

Notes, capital leases, and bonds payable at June 30, 2016 and 2015 consist of the following:

<u>Reynolda Campus</u>	<u>Years to nominal maturity</u>	<u>Interest rate at June 30, 2016</u>		<u>2016</u>	<u>2015</u>
Notes payable and capital leases:					
2013 Construction loan	2	0.64	Variable	\$ 48,973	9,646
Promissory note	4	4.00	Variable	275	500
Capital leases	5	0.81 to 7.5	Fixed	4,718	6,262
Total notes payable and capital leases				<u>53,966</u>	<u>16,408</u>
Bonds payable:					
2004 Series A tax-exempt	<1 to 5	0.06%	Fixed	20,560	23,475
2004 Series B tax-exempt	<1 to 5	0.06%	Variable	7,340	10,830
2009 Series serial tax-exempt	25	4.00 to 5.00	Fixed	49,430	49,430
2009 Series term tax-exempt	24	5.00	Fixed	60,570	60,570
2012 Series serial tax-exempt	29	2.6 to 3.1	Fixed	20,425	20,425
2012 Series term tax-exempt	29	3.45 to 3.7	Fixed	104,575	104,575
Unamortized bond premium				2,003	2,090
Unamortized bond issuance costs				(1,877)	(1,978)
Total bonds payable				<u>263,026</u>	<u>269,417</u>
Total notes payable, capital leases, and bonds payable				<u>\$ 316,992</u>	<u>285,825</u>

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Reynolda Campus has a three year construction loan financing agreement with Branch Banking and Trust Company that permits the University to borrow up to \$100,000, bearing interest at LIBOR plus 0.45% to 0.60%. The loan agreement requires annual reviews on the December 31 anniversary date with interest payable quarterly.

Reynolda Campus has outstanding \$27,900 of tax-exempt North Carolina Facilities Finance Agency Revenue Bonds, Series 2004A and Series 2004B. The obligations of the University are evidenced by a loan agreement dated December 1, 2004, by and between the University and Branch Banking and Trust Company, as trustee. The Series 2004 tax-exempt bonds are due annually through 2020 in varying amounts from \$6,625 to \$7,340. The interest rate on the bonds is determined weekly, and at the option of the University may be converted to a fixed rate. The University's obligation under the loan agreement is an unsecured, unconditional obligation.

The North Carolina Facilities Finance Agency Revenue Bonds, Series 2009, are evidenced by a loan agreement dated May 1, 2009, by and between the University and Branch Banking and Trust Company, as trustee. The Series 2009 tax-exempt bonds have final maturities of January 1, 2039 for the serial bonds and January 1, 2038 for the term bonds. The 2009 bonds maturing on January 1, 2038 are subject to mandatory redemption through 2038 in increasing annual amounts of \$7,410 to \$10,005. Interest is payable each January 1 and July 1. The University's obligation under the loan agreement is an unsecured, unconditional obligation.

The Series 2012 taxable bonds are evidenced by a loan agreement dated August 2, 2012, by and between the University and Branch Banking and Trust Company, as trustee. The Series 2012 taxable bonds have final maturities of January 15, 2027 for the serial bonds and January 15, 2042 for the term bonds. The 2012 bonds maturing on January 15, 2032 and 2042 are subject to mandatory sinking fund redemptions through 2032 and 2042 in increasing annual amounts of \$5,445 to \$6,205 and \$6,405 to \$8,830, respectively. Interest is payable each January 15 and July 15. The University's obligation under the loan agreement is an unsecured, unconditional obligation.

WFUHS	Years to nominal maturity	Interest rate at June 30, 2016		2016	2015
Notes payable and capital leases:					
Line of credit	>1	Libor plus 0.6%	Variable	\$ 11,489	13,039
Loan agreement	<1 to 10	Libor plus 0.65%	Variable	13,675	15,678
Promissory note	2			80	160
Promissory note	7		Fixed	—	955
Total notes payable				25,244	29,832



## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

WFUHS	Years to nominal maturity	Interest rate at June 30, 2016		2016	2015
Bonds payable:					
Series 2012 B	<1 to 20	2.00%–5.00%	Fixed	\$ 102,155	105,750
Series 2012 C	<1 to 20	0.74%	Variable	52,615	54,810
Unamortized bond premium				13,614	14,395
Unamortized bond issuance costs				(1,192)	(1,260)
Total bonds payable				<u>167,192</u>	<u>173,695</u>
Total notes payable and bonds payable				<u>\$ 192,436</u>	<u>203,527</u>

Effective March 26, 2011, NCBH, WFUHS, and WFUBMC formed a single obligated group (Obligated Group) under the existing NCBH MTI. New obligations were issued to WFUHS obligation holders under the NCBH MTI. In addition, substantially all of the subsidiaries of NCBH and WFUHS were included in the single credit group as Designated Members (Combined Group). Under the new credit structure, each member of the Obligated Group is jointly and severally liable for all debt and other obligations that are evidenced and secured under the MTI.

Bonds issued under the MTI are payable solely from the Obligated Group's revenues (as defined by the MTI). Additionally, the Combined Group must remain compliant with certain covenants and restrictions required by the MTI and loan agreements underlying the bonds. The Combined Group is subject to covenants under the MTI containing restrictions or limitations with respect to indebtedness, property encumbrance, consolidation or merger or transfer of assets. In addition, the Combined Group has agreed that it will not create any lien upon its property, accounts, or revenue now owned or hereafter acquired other than "permitted liens" as described in the MTI. WFUHS believes it is in compliance with such covenants and restrictions as of June 30, 2016. As of June 30, 2016, WFUHS is jointly and severally liable for \$482,971 of bonds payable borrowed by the other members of the Obligated Group and for \$14,518 and \$54,000 under WFUBMC's line of credit and notes payable. Because WFUHS does not expect to fund repayment of any of the amounts attributed to the other members of the Obligated Group under the MTI, no portion of these amounts meets the criteria for liability recognition in the accompanying consolidated financial statements.

The Series 2012 Revenue Bonds represent bonds issued by Wake Forest Baptist Obligated Group, representing funds borrowed by the entities pursuant to loan agreements with the North Carolina Medical Care Commission (NCMCC). As a conduit issuer, the NCMCC loans the debt proceeds to the borrower and the bonds are issued by the NCMCC under a MTI structure. The MTI provides the flexibility for multiple parties to participate in the debt issuances as part of an obligated group.

The Series 2012B bonds mature in full in fiscal year 2034. The fixed rate instruments bear interest at fixed coupon rates ranging from 2.00% to 5.00%. Per the bond agreements, the principal and sinking fund payments on the bonds are due on December 1 of each year beginning in 2016 and in increasing annual amounts of \$3,385 to \$7,000.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The Series 2012C bonds mature in full in fiscal year 2034. The bonds were issued in the Index Floating Rate Mode and bear interest at an Index Floating Rate based on the SIFMA Index plus a spread of 0.74%. At the option of WFUHS, the bonds may be converted to various interest rate modes. Per the bond agreements, the principal and sinking fund payments on the bonds are due on December 1 of each year beginning in 2016 and in increasing annual amounts of \$2,090 to \$4,825.

WFUHS entered into an unsecured, taxable line of credit agreement in the amount of \$125,000 to provide for the working capital needs of NCBH, WFUHS, and the Medical Center, all Borrowers under the credit facility. This line of credit refinanced the previously held \$160,000 line of credit. The line of credit is due on June 23, 2018 and bears interest at the one-month LIBOR plus 0.70%.

WFUHS entered a loan agreement during fiscal year 2013, with a variable interest rate based upon the one-month LIBOR plus a premium of 0.65% for \$20,014 to refinance two previously outstanding fixed rate notes. Fixed principal payments and accrued interest are due monthly with a final maturity date of April 1, 2023. This taxable loan is guaranteed by both NCBH and WFUBMC.

Aggregate annual maturities of notes, capital leases, and bonds payable for each of the five fiscal years subsequent to June 30, 2016 and thereafter are as follows:

	<b>Reynolda Campus</b>	<b>WFUHS</b>	<b>Total</b>
2017	\$ 8,551	8,081	16,632
2018	57,116	18,992	76,108
2019	8,084	7,743	15,827
2020	8,058	8,013	16,071
2021	14	8,298	8,312
In total thereafter	235,169	141,309	376,478
	\$ 316,992	192,436	509,428

Costs related to the registration and issuance of bonds are carried at cost less accumulated amortization and are amortized over the life of the bonds on a method that approximates the effective-interest method and are included in bonds payable on the 2016 consolidated balance sheet. Total amortization expense for issue costs and premium is included in interest expense in the consolidated statements of activities.

#### (11) Interest Rate Swap Agreements

To manage the fixed/variable allocation of its debt portfolio, including hedging exposure to increasing interest expense from variable rate debt, the University utilizes interest rate swap agreements. The University has only limited involvement with derivative instruments and does not use them for trading purposes.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Parties to interest rate swap agreements are subject to market risk for changes in interest rates as well as credit loss in the event of nonperformance by the counterparty. To minimize this exposure, the University verifies that the counterparties for these swap transactions are major financial institutions that meet the University's criteria for financial stability and creditworthiness. Additionally, the University is exposed to tax basis risk since a change in tax rate environments will change the level of correlation between the interest rate payments made on the variable rate bonds and the percentage of LIBOR payments being received from the counterparties.

The following table summarizes the general terms for each of the University's swap agreements:

	<u>Reynolda Campus</u>		<u>WFUHS</u>
	<u>November 2006</u> interest rate swap	<u>October 2008</u> interest rate swap	<u>August 2002</u> interest rate swap
Notional amount	\$ 20,560	50,000	23,350
Effective date	November 6, 2006	October 1, 2008	August 20, 2002
Maturity date	January 1, 2020	January 1, 2038	July 1, 2034
Rate received	67% of one-month LIBOR	67% of one-month LIBOR	67% of one-month LIBOR
Rate paid	3.38%	3.61%	3.67%
Collateral provisions	None	100% liability if > \$20,000	100% asset/ liability - \$250 min
Settlement frequency	Monthly	Monthly	Weekly

The University records all interest rate swap agreements in other liabilities and deferrals on the consolidated balance sheet at their respective fair values. The fair value of the interest rate swap agreements is the estimated amount the University would pay to terminate the swap agreements at the reporting date, taking into account current forward interest rates and the current forward creditworthiness of the swap counterparties. All changes in fair value are reflected as a gain or loss in nonoperating activities in the consolidated statement of activities. Periodic net cash settlement amounts with counterparties are accounted for as adjustments to interest expense on the related debt and collateral to support the swaps is included in investments on the consolidated balance sheet. Collateral held by counterparties at June 30, 2016 and 2015, respectively, was \$2,500 and \$0 for Reynolda Campus, and \$5,980 and \$4,890 for WFUHS.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The related financial information on each of these instruments is as follows:

	2016		2015	
	Fair value	Gain (loss)	Fair value	Gain (loss)
Reynolda Campus:				
November 2006 interest rate swap	\$ (1,505)	338	(1,843)	495
October 2008 interest rate swap	(23,144)	(7,694)	(15,450)	(2,330)
Total	(24,649)	(7,356)	(17,293)	(1,835)
WFUHS:				
August 2002 interest rate swap	(6,271)	(1,468)	(4,803)	(249)
Total	(6,271)	(1,468)	(4,803)	(249)
Grand total	\$ (30,920)	(8,824)	(22,096)	(2,084)

As of June 30, 2016, the University's adjusted debt portfolio, after taking into account the aforementioned swap agreements, was 100% fixed rate for Reynolda Campus, and approximately 70% fixed rate for WFUHS.

**(12) Net Assets**

Temporarily restricted net assets are composed of the following at June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Gifts and pledges	\$ 126,828	15,053	141,881	162,296
Donor-restricted endowments	212,609	45,683	258,292	284,189
	\$ 339,437	60,736	400,173	446,485

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Such temporarily restricted net assets are available for the following purposes as of June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Student scholarships	\$ 201,810	1,756	203,566	204,669
Instruction and research	59,715	35,334	95,049	103,902
Academic support	36,299	12,902	49,201	49,199
Subsequent period operations, capital, and other	41,613	10,744	52,357	88,715
	\$ 339,437	60,736	400,173	446,485

Permanently restricted net assets are composed of the following at June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Donor-restricted endowments	\$ 259,806	138,995	398,801	379,586
Gifts and pledges	21,228	3,532	24,760	26,966
Student loan funds	—	4,944	4,944	4,874
Interests in perpetual trusts and assets held by others	4,795	13,281	18,076	19,256
Annuity and other split-interest agreements	6,903	1,739	8,642	11,393
	\$ 292,732	162,491	455,223	442,075

The future return on the following donor-restricted endowments is restricted for the following purposes as of June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Student scholarships	\$ 173,006	31,211	204,217	203,266
Instruction and research	56,297	93,983	150,280	139,458
Academic support	23,371	13,801	37,172	29,782
Subsequent period operations and other	7,132	—	7,132	7,080
	\$ 259,806	138,995	398,801	379,586

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

**(13) Functional Expenses**

Expenses are reported in the consolidated statement of activities in natural categories. Functional expenses for the years ended June 30, 2016 and 2015 are categorized as follows:

	<b>2016</b>			<b>2015 Total</b>
	<b>Reynolda Campus</b>	<b>WFUHS</b>	<b>Total</b>	
Instruction and departmental research	\$ 134,855	80,405	215,260	203,328
Patient services	—	616,751	616,751	495,052
Sponsored research, training, and other programs	8,823	179,508	188,331	197,255
Organized activities	2,595	—	2,595	2,332
Academic support	27,330	13,068	40,398	44,454
Libraries	14,474	3,781	18,255	17,619
Student services	29,957	1,874	31,831	30,142
Institutional support	79,229	30,612	109,841	99,155
Auxiliary enterprises	84,196	—	84,196	76,742
Total operating expenses	\$ 381,459	925,999	1,307,458	1,166,079

Functional expenses are reported in categories recommended by the National Association of College and University Business Officers. The expenses are reported in these functional categories after the allocation of plant operation and maintenance expense, depreciation expense, accretion expense, and interest expense. The University's primary program services are instruction, patient services, sponsored research, and organized activities. Expenses reported as academic support, libraries, student services, institutional support, and auxiliary enterprises are incurred in support of these primary program services.

Plant operation and maintenance expense, depreciation expense, accretion expense, and interest expense are allocated to program and supporting activities based on a percentage allocation and periodic assessment of facilities usage, for Reynolda Campus and WFUHS, respectively.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

**(14) Contingencies and Other Commitments**

The University maintains rental properties and has entered into long-term operating lease agreements for this real estate providing for future rental income as follows:

	<b>Reynolda Campus</b>	<b>WFUHS</b>	<b>Total</b>
Year ending June 30:			
2017	\$ 10,575	1,260	11,835
2018	10,883	1,153	12,036
2019	11,096	749	11,845
2020	11,313	660	11,973
2021	11,535	691	12,226
	\$ 55,402	4,513	59,915

Total income from real estate was \$10,526 and \$10,753 for Reynolda Campus and \$1,789 and \$1,775 for WFUHS for the years ended June 30, 2016 and 2015, respectively.

The estimated cost to complete construction in progress at June 30, 2016 and 2015, respectively, were \$96,240 and \$85,064 for Reynolda Campus, and \$12,182 and \$22,124 for WFUHS.

Expenditures related to federal and state grants and contracts are subject to adjustment based upon review by the granting agencies. Amounts of expenditures that granting agencies might disallow cannot be determined at this time. These amounts affect government grants and contract revenue as well as facilities and administrative cost recovery. The University would not expect these costs to influence the consolidated financial position significantly.

Expenditures and indirect costs related to federal and state grants and contracts are subject to adjustment based upon review by the granting agencies. The amounts, if any, of expenditures, which may be disallowed by the granting agencies cannot be determined at this time, although management expects they will not have a material effect on the University's consolidated financial statements.

The University is self-insured for dental benefits, self-insured or fully insured for retiree medical benefits (depending on retiree benefit elections), and self-insured for active employees receiving medical benefits. The University provides an accrual for actual claims reported but not paid and a provision for incurred but not reported claims based on historical trends. Accrued employee health and dental costs, including estimated claims incurred but not reported, amounted to approximately \$1,473 and \$1,050 at June 30, 2016 and 2015, respectively, for Reynolda Campus and \$5,485 and \$5,575 at June 30, 2016 and 2015, respectively, for WFUHS and are included in other liabilities in the accompanying consolidated balance sheet.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The estimated liability for self-insurance claims will be significantly affected if current and future claims differ from historical trends. While management monitors reported claims closely and considers potential outcomes as estimated by its actuaries when determining its self-insurance liability accruals, the complexity of the claims, the extended period of time to settle the claims and the wide range of potential outcomes complicate the estimation. In the opinion of management, adequate provision has been made for this related risk.

The University self-insures workers' compensation liability with excess commercial insurance providing per loss and aggregate annual coverage. The University provides an accrual for actual claims reported but not paid and a provision for incurred but not reported claims based on historical trends.

The estimated liability for workers' compensation claims will be significantly affected if current and future claims differ from historical trends. While management monitors reported claims closely and considers potential outcomes as estimated by its actuaries when determining its self-insurance liability accruals, the complexity of the claims, the extended period of time to settle the claims and the wide range of potential outcomes complicate the estimation. In the opinion of management, adequate provision has been made for this related risk.

Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the federal government has authority to complete fraud and abuse investigations. HIPAA has established substantial fines and penalties for offenders. WFUHS maintains policies, procedures and requires regular training sessions to employers to monitor compliance with HIPAA, as well as other applicable local, state and federal statutes and regulations.

The University is involved in legal actions arising in the normal course of activities and is subject to periodic audits and inquiries by regulatory agencies. Although the ultimate outcome of such matters is not determinable at this time, management, after taking into consideration advice of legal counsel, believes that the resolutions of pending matters will not have a materially adverse effect, individually or in the aggregate, upon the University's consolidated financial statements.

#### **(15) Sale-Leaseback Agreement**

In 2006, WFUHS entered into a sale-leaseback agreement to sell and lease back certain assets. The initial lease term is 20 years with four 5-year renewal options. The lease is classified as an operating lease. Operating lease payments in each year from 2017 to 2021 are \$7,667, \$7,744, \$7,821, \$7,899 and \$7,978, respectively, and \$48,333 thereafter.

In 2010, WFUHS entered into another sale-leaseback agreement to sell and lease back certain assets. The initial lease term is 16 years with three 5-year renewal options. The lease is classified as an operating lease. Operating lease payments are due monthly and expected payments each year from 2017 to 2021 are \$5,501, \$5,638, \$5,779, \$5,924 and \$6,072, respectively, and \$39,754 thereafter.

WFUHS has a deferred gain related to the sale and leaseback of certain assets. The deferred gain was \$21,176 and \$23,073 for 2016 and 2015, respectively, and is included in other liabilities and deferrals in the accompanying consolidated balance sheets.



## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

#### **(16) Retirement Plans**

Substantially all employees of the University are eligible to participate in defined contribution benefit plans. The University contributes a specified percentage of each employee's salary to the plans. Contributions for the years ended June 30, 2016 and 2015, respectively, were \$12,558 and \$12,087 for Reynolda Campus and \$24,303 and \$14,603 for WFUHS.

Reynolda Campus and WFUHS have accrued \$334 and \$6,190 at June 30, 2016, respectively, and \$2,888 and \$5,090 at June 30, 2015, respectively, at June 30, 2015 for a liability associated with a defined benefit supplemental executive retirement plan. These liabilities are included in other liabilities and deferrals on the consolidated balance sheet.

#### **(17) Postretirement Benefits**

The University sponsors defined benefit postretirement medical and dental plans that cover all of its full-time employees who elect coverage and satisfy the plans' eligibility requirements when they retire. In addition, Reynolda Campus sponsors a death benefit plan which pays a \$2 benefit for each retiree. To be eligible, retired employees of Reynolda Campus must be at least 62 years of age with ten or more years of service or be at least 65 years of age with five or more years of service.

Effective January 1, 2016, retirees age 65 and over transitioned from the existing medical benefits plan to a Health Reimbursement Arrangement to provide fixed annual contributions for medical expenses. This change resulted in a prior service cost decrease of \$4,543 for the year ended June 30, 2016, which is included in the change in postretirement benefits obligation in the statements of activities.

WFUHS sponsors a defined benefit postretirement medical and dental plan that covers all WFUHS full-time employees who elect coverage and satisfy the plan eligibility requirements when they retire. On June 2, 2011, the Board of WFUHS approved that effective as of January 1, 2012, the defined benefit postretirement plan would be discontinued for most future retirees. The minimum age required for postretirement benefits will increase from 60 to 62. However, the additional requirement of the Rule of 75 (age and years of service) remains unchanged. All current retirees and currently eligible employees previously grandfathered will continue to be eligible for benefits under this plan. Any WFUHS employee who is within 5 years of meeting the new retirement eligibility of age 62 with combined age and years of service equal to at least 75 as of January 1, 2012 will be grandfathered into this benefit.

The measurement date for the defined postretirement benefit plan is June 30.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The following table provides a reconciliation of the changes in each plan's benefit obligation, fair value of plan assets, and funded status for the years ended June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 15,862	38,966	54,828	59,222
Service cost	795	136	931	1,086
Interest cost	711	1,675	2,386	2,534
Plan amendments	(4,543)	—	(4,543)	—
Participants' contributions	564	575	1,139	2,793
Actuarial loss (gain)	3,632	868	4,500	(5,517)
Benefits paid	(1,038)	(2,202)	(3,240)	(5,290)
Benefit obligation at end of year	15,983	40,018	56,001	54,828
Change in plan assets:				
Fair value of plan assets at beginning of year	—	—	—	—
Employer contributions	474	1,627	2,101	2,497
Participants' contributions	564	575	1,139	2,793
Benefits paid	(1,038)	(2,202)	(3,240)	(5,290)
Fair value of plan assets at end of year	—	—	—	—
Total liability	\$ (15,983)	(40,018)	(56,001)	(54,828)
Amounts recognized in unrestricted net assets:				
Prior service (cost) credit	\$ (4,543)	197	(4,346)	227
Net actuarial gain (loss)	1,685	(9,037)	(7,352)	(11,522)
Total decrease	\$ (2,858)	(8,840)	(11,698)	(11,295)

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

The following table provides the components of net periodic benefit cost for the years ended June 30, 2016 and 2015:

	2016			2015 Total
	Reynolda Campus	WFUHS	Total	
Service cost	\$ 795	135	930	1,086
Interest cost	711	1,675	2,386	2,534
Amortization of prior service credit	—	(30)	(30)	(5,034)
Amortization of net actuarial (gain) loss	(29)	1,378	1,349	3,035
Net periodic benefit cost	\$ 1,477	3,158	4,635	1,621

The prior service costs are amortized on a straight-line basis over the average remaining service period of active participants. Gains in excess of 10% of the greater of the benefit obligation and the market-related value of assets are amortized over the average remaining service period of active participants.

The actuarial net (gain) loss and prior service credit for the defined postretirement benefits plans that will be amortized from accumulated nonoperating income into net periodic benefit cost (credit) over the next fiscal year for Reynolda Campus and WFUHS are \$883 and \$1,362, respectively.

The weighted average discount rate used to determine the accumulated postretirement benefit obligation at June 30, 2016 for Reynolda Campus and WFUHS, respectively, was 3.85% and 3.70%, and at June 30, 2015 was 4.58% and 4.43%, respectively. The discount rate reflects the current yield curve results as of June 30, 2016 and 2015. For management purposes, Reynolda Campus used 7.0% and 8.00%, and WFUHS used 7.00% and 7.20% for 2016 and 2015, respectively, for the annual rate of increase in the per capita cost of covered healthcare benefits for the first year, and a 4.50% rate was assumed in each year as the ultimate rate.

**WAKE FOREST UNIVERSITY**

Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the postretirement benefit plan. A 1% change in assumed healthcare cost trend rates would have the following effects:

	<u>One percentage increase</u>	<u>One percentage decrease</u>
Reynolda Campus:		
Effect on total service and interest cost components of net periodic benefit cost	\$ 355	(310)
Effect on postretirement benefit obligation	57	(49)
WFUHS:		
Effect on total service and interest cost components of net periodic benefit cost	\$ 8	(7)
Effect on postretirement benefit obligation	216	(174)

Aggregate benefits expected to be paid by the University, net of participant contributions, for the postretirement benefits plans are as follows:

	<u>Reynolda Campus</u>	<u>WFUHS</u>	<u>Total</u>
2017	\$ 668	2,379	3,047
2018	605	2,464	3,069
2019	697	2,362	3,059
2020	754	2,320	3,074
2021	841	2,296	3,137
Five years thereafter	5,242	11,070	16,312
	<u>\$ 8,807</u>	<u>22,891</u>	<u>31,698</u>

The expected benefits to be paid are based on the same assumptions used to measure the University's benefit obligation at June 30, 2016 and include estimated future employee service.

Recent federal healthcare legislation includes several provisions that may affect the University's benefit plans, including imposing an excise tax on high cost coverage, eliminating lifetime and annual coverage limits, and imposing inflation-adjusted fees for each person covered by a health insurance policy for each policy plan year ending after September 30, 2012, through September 30, 2019. For the postretirement benefit plan, the changes due to recent federal healthcare legislation did not change the postretirement benefit obligation for Reynolda Campus and WFUHS.

# WAKE FOREST UNIVERSITY

## Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

### (18) Related-Party Transactions

WFUHS and NCBH each incur expenses in the course of managing WFB as an integrated academic medical center. These expenses are aggregated and allocated between WFUHS and NCBH such that each individual entity bears a share of the expenses that is proportionate to the benefit received by each entity. Additionally, WFUHS and NCBH share certain facilities, provide various services, and incur certain expenses on behalf of each other. These transactions are recorded at fair value and the costs associated with operating and maintaining jointly occupied facilities are ultimately paid by the party having beneficial occupancy.

These transactions are recorded as follows in the consolidated financial statements:

	<u>2016</u>	<u>2015</u>
Revenue from MCIA	\$ 198,796	107,946
Corporate service allocation, net	34,477	65,629
Other professional fees, net	<u>(19,509)</u>	<u>62,352</u>
Total net revenue from NCBH	<u>\$ 213,764</u>	<u>235,927</u>
Accounts (payable to) receivable from NCBH	\$ (17,089)	21,625

In the prior fiscal year, WFUBMC entered into an unsecured line of credit in the amount of \$160,000 to provide for the working capital needs of NCBH, WFUHS, and their affiliates. This line of credit was guaranteed by both NCBH and WFUHS. The outstanding balance of this unsecured loan was \$54,000 and \$60,000 as of June 30, 2016 and 2015, respectively, of which WFUHS recorded a liability of \$8,716 and \$9,684, respectively, due to WFUBMC in other liabilities that represented the portion of the unsecured loan utilized by WFUHS.

### (19) Professional Liability Insurance

WFB maintains professional liability coverage, which included a \$5,000 per occurrence and a \$25,000 annual aggregate self-insurance retention for the year ended June 30, 2016. WFUHS estimates its professional liability on an actuarial basis. WFUHS' accrued professional liability costs, including estimated claims incurred but not reported, amounted to approximately \$45,779 and \$42,145 at June 30, 2016 and 2015, respectively, and are included in other liabilities and deferrals on the consolidated balance sheet. In the opinion of management, adequate provision has been made for the related risk.

The estimated liability for self-insurance claims will be significantly affected if current and future claims differ from historical trends. While management monitors reported claims closely and considers potential outcomes as estimated by its actuaries when determining its self-insurance liability accruals, the complexity of the claims, the extended period of time to settle the claims and the wide range of potential outcomes complicate the estimation. In the opinion of management, adequate provision has been made for this related risk.

## WAKE FOREST UNIVERSITY

### Notes to Consolidated Financial Statements

June 30, 2016

(With summarized information for 2015)

(Dollars in thousands)

#### **(20) Subsequent Events**

The University evaluated events subsequent to June 30, 2016, through October 25, 2016, the date of the issuance of the consolidated financial statements. During this period, the Reynolda Campus issued \$159,100 of tax-exempt North Carolina Capital Facilities Finance Agency Educational Facilities Revenue and Revenue Refunding Bonds, Series 2016. The 2016 Series bonds were issued for the purpose of the current refunding and defeasance of the Series 2009 tax-exempt bonds (\$110,000) and financing the costs of acquisition, construction, renovation and installation of capital assets of the Reynolda Campus. The Series 2016 tax exempt bonds are evidenced by a loan agreement dated July 27, 2016, by and between the University and Branch Banking and Trust Company, as trustee. The Series 2016 tax-exempt bonds have final maturities of January 1, 2039 for the Series bonds and January 1, 2041 and 2046 for the term bonds. The 2016 bonds maturing on January 1, 2040 and 2046 are subject to mandatory sinking fund redemptions through 2041 and 2046 with annual amounts of \$1,720 to \$2,930 and \$1,290 to \$3,485, respectively. Interest is payable each January 1 and July 1. The University's obligation under the loan agreement is an unsecured, unconditional obligation.

The University did not identify any other material subsequent events for recognition or disclosure.

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
Federal award expenditures:				
Research and Development-Cluster:				
Wake Forest University Health Sciences:				
Department of Agriculture Direct Programs:				
Agriculture and Food Research Initiative	10.310		\$ —	761
Department of Defense Direct Programs:				
Department of Army:				
Military Medical Research and Development	12.420		11,998,229	17,128,491
Basic Scientific Research	12.431		—	713,185
Department of Navy:				
Integrated Organoid Testing System	12.UNKNOWN		1,317,473	2,701,485
United States Special Operations Command:				
Mitigation of Symptoms for PTSD with or without Mild TBI	12.UNKNOWN		—	102,363
Subtotal Department of Defense Direct Programs			13,315,702	20,645,524
Department of Defense Pass-Through Programs From:				
Military Medical Research and Development:				
American Burn Association: Military Medical Research and Development	12.420	ABA W81XWH-11-1-0835	—	28,539
Geneva Foundation: Military Medical Research and Development	12.420		—	(54)
Johns Hopkins University: Military Medical Research and Development	12.420	2001186134	—	201,851
Johns Hopkins University: Military Medical Research and Development	12.420	SR00002886	—	111
Johns Hopkins University: Military Medical Research and Development	12.420	VUMC37447	—	89
Johns Hopkins University: Military Medical Research and Development	12.420	2001950420	—	463
Johns Hopkins University: Military Medical Research and Development	12.420	SR00001694	—	20,741
Johns Hopkins University: Military Medical Research and Development	12.420	8399SC	—	(10,028)
Virginia Polytechnic Institute and State University: Military Medical Research and Development	12.420	450055-19541	45,000	306,514
KeraNetics, LLC: Military Medical Research and Development	12.420	W81XWH-11-C-0060 P00001	—	(25)
University of California at San Diego: Military Medical Research and Development	12.420	37253038	—	8,177
University of Texas at San Antonio: Military Medical Research and Development	12.420	155615/155536	—	194,606
University of Virginia: Military Medical Research and Development	12.420	GG11825 148187	—	101,861
Total Military Medical Research and Development			45,000	852,845
Virginia Polytechnic Institute and State University: Basic Scientific Research	12.431	450277-19541	—	136,365
Henry Jackson Foundation: Uniformed Services University Medical Research Projects	12.750	3125	—	15,665
Dana-Farber Cancer Institute: Research and Technology Development	12.910	3125	—	88,098
American Burn Association: Multicenter Trials in Burns to Improve Combat Casualties	12.UNKNOWN	ABA W81XWH-09-2-0194	—	29,149
Defense Advance Research Project: RAM - Development of a Human Memory Prosthetic	12.UNKNOWN		976,291	1,233,503
Johns Hopkins University: Warrior Injury Assessment Manikin Biomechanics Product Team	12.UNKNOWN	117216	—	467,037
Total Department of Defense			14,336,993	23,468,186
Department of Education Direct Programs:				
Education Research, Development and Dissemination	84.305		73,643	198,808
Department of Health and Human Services:				
National Institutes of Health Direct Programs:				
Area Health Education Centers	93.107		—	8,384
Maternal and Child Health Federal Consolidated Programs	93.110		—	49,927
Environmental Health	93.113		220,199	919,754
Nurse Anesthetist Traineeship	93.124		—	12,765
Community Programs to Improve Minority Health Grant Program	93.137		23,170	161,289
Human Genome Research	93.172		127,251	1,578,089
Research Related to Deafness and Communication Disorders	93.173		—	602,293
Research and Training in Complementary and Integrative Health	93.213		186,491	1,222,154
Research on Healthcare Costs, Quality and Outcomes	93.226		12,000	414,599
Mental Health Research Grants	93.242		215,152	591,327
Geriatric Academic Career Awards	93.250		—	19,448
Alcohol Research Programs	93.273		17,166	3,518,264
Drug Abuse and Addiction Research Programs	93.279		99,523	3,835,825
Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286		153	504,465
Minority Health and Health Disparities Research	93.307		79,819	1,969,170
National Center for Advancing Translational Sciences	93.350		33,377	2,505,713
Research Infrastructure Programs	93.351		—	1,728,468
Nurse Education, Practice Quality and Retention Grants	93.359		—	296,953
Nursing Research	93.361		—	73,636
National Center for Research Resources	93.389		—	(1,110)
Cancer Cause and Prevention Research	93.393		141,734	2,604,013
Cancer Detection and Diagnosis Research	93.394		13,668	927,209
Cancer Treatment Research	93.395		80,048	4,797,162
Cancer Biology Research	93.396		228,793	2,467,202
Cancer Centers Support Grants	93.397		54,142	1,818,298
Cancer Research Manpower	93.398		11,108	1,133,766
Cancer Control	93.399		—	110,668
Trans-NIH Recovery Act Research Support	93.701		72,159	106,901
Cardiovascular Diseases Research	93.837		2,907,520	10,615,034
Lung Diseases Research	93.838		188,005	948,998
Blood Diseases and Resources Research	93.839		—	58,190
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		35,476	528,612
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		2,258,610	10,010,766
Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853		361,990	2,865,725
Allergy and Infectious Diseases Research	93.855		34,408	2,204,704
Microbiology and Infectious Diseases Research	93.856		—	20,821
Biomedical Research and Research Training	93.859		134,811	3,424,810
Child Health and Human Development Extramural Research	93.865		59,507	2,372,027
Aging Research	93.866		2,538,140	9,816,733
Vision Research	93.867		72,362	1,795,179
Medical Library Assistance	93.879		—	(6,585)
Grants for Primary Care Training and Enhancement	93.884		23,063	484,814
Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease	93.918		—	126,545
Special Projects of National Significance	93.928		23,454	150,954
HIV Demonstration, Research, Public and Professional Education Projects	93.941		—	282,743
Assistance Programs for Chronic Disease Prevention and Control	93.945		20,761	337,642
International Research and Research Training	93.989		126,965	321,542
Machine Learning Analyses of Longitudinal Plasma Metabolomics Data	93.UNKNOWN		—	13,799
Accelerometer Data Collection and Analysis of REHAB-HF Participants	93.UNKNOWN		—	9,776
Regional Center for the Women's Health Initiative 2010-2015 Extension Study	93.UNKNOWN		243,284	493,916
Multi-Ethnic Study of Atherosclerosis	93.UNKNOWN		—	116,276
Sub Populations and Intermediate Outcomes Measures in COPD	93.UNKNOWN		95,337	244,616
The Systolic Blood Pressure Intervention Trial Coordinating Center	93.UNKNOWN		2,266,964	6,043,453
The Systolic Blood Pressure Intervention Trial Clinical Center Network	93.UNKNOWN		2,397,294	3,153,883
Women's Health Initiative Regional Center	93.UNKNOWN		95,788	607,547
Women's Health Initiative Memory Study	93.UNKNOWN		—	1,282,417
Action to Control Cardiovascular Risk in Diabetes Follow-On Study Coordinating Center	93.UNKNOWN		358,296	1,470,543
Subtotal National Institutes of Health Direct Programs			15,857,988	93,772,110

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
National Institutes of Health Pass-Through Programs From:				
Smoking Prevention and Tobacco Control Act:				
American Heart Association: Smoking Prevention and Tobacco Control Act	93.077	FX-ATRAC-WF-02	\$ —	7,432
American Heart Association: Smoking Prevention and Tobacco Control Act	93.077	FX-ATRAC-WF-01	—	77,483
University of North Carolina at Chapel Hill: Family Smoking Prevention and Tobacco Control Act	93.077	5033768	137,075	781,678
Total Smoking Prevention and Tobacco Control Act			137,075	866,593
Maternal and Child Health:				
Hemophilia of Georgia, Inc.: Maternal and Child Health	93.110	H30MC24046-03-00	—	(137)
Hemophilia of Georgia, Inc.: Maternal and Child Health	93.110	H30MC24046-04-00	—	18,073
Total Maternal and Child Health			—	17,936
Environmental Health:				
Johns Hopkins University: Environmental Health	93.113	2002425846	—	37,709
University of Maryland: Environmental Health	93.113	2036105	—	11,565
Total Environmental Health			—	49,274
Oral Diseases and Disorders Research:				
The Methodist Hospital Research Institution: Oral Diseases and Disorders Research	93.121	2200006-48	—	184,482
The Methodist Hospital Research Institution: Oral Diseases and Disorders Research	93.121	2200003	—	13,318
Total Oral Diseases and Disorders Research			—	197,800
Human Genome:				
Arizona State University: Human Genome	93.172	15-743	—	14,471
University of North Carolina at Chapel Hill: Human Genome Research	93.172	5033459	—	23,040
Total Human Genome			—	37,511
Research and Training in Complementary and Integrative Health:				
Massachusetts General Hospital: Research and Training in Complementary and Integrative Health	93.213	224322	—	26,014
Massachusetts General Hospital: Research and Training in Complementary and Integrative Health	93.213	206748	—	9,901
Total Research and Training in Complementary and Integrative Health			—	35,915
Healthcare Costs, Quality and Outcomes:				
Duke University: Healthcare Costs, Quality and Outcomes	93.226	2031632	—	(5,450)
University of North Carolina at Chapel Hill: Research on Healthcare Costs, Quality and Outcomes	93.226	5101347	—	149,476
Total Healthcare Costs, Quality and Outcomes			—	144,026
Mental Health:				
Duke University: Mental Health	93.242	2035157	—	246,757
Georgia Health Sciences University: Mental Health	93.242	26733-01	—	44,085
University of California at Los Angeles: Mental Health Research Grants	93.242	1580 G QC362	—	(3,160)
University of Iowa: Mental Health	93.242	1001137831	—	3,772
University of North Carolina at Chapel Hill: Mental Health Research Grants	93.242	5102665	—	19,143
University of North Carolina at Chapel Hill: Mental Health Research Grants	93.242	5101905	—	8,487
University of Washington: Mental Health Research Grants	93.242	UWSC8567	—	5,672
Total Mental Health			—	324,756
Alcohol Research Programs:				
Beth Israel Deaconess Medical Center: Alcohol	93.273	01027175	—	(584)
Oregon Health & Sciences University: Alcohol Research Programs	93.273	GPRC00872WF	—	28,622
Oregon Health & Sciences University: Alcohol Research Programs	93.273	1006932_WF	—	100,473
University of North Carolina at Chapel Hill: Alcohol Research Programs	93.273	5033209	—	23,037
University of Pittsburgh: Alcohol Research Programs	93.273	9006452 (120468-1)	—	(26,932)
University of Pittsburgh: Alcohol Research Programs	93.273	9011590 (125969-1)	—	199,970
Total Alcohol Research Programs			—	324,586
CDC Investigations and Technical Assistance:				
Community Anti-Drug Coalitions of America: CDC Investigations and Technical Assistance	93.283	CDC GHE 144405	—	47,069
Community Anti-Drug Coalitions of America: CDC Investigations and Technical Assistance	93.283	CDC GHE 144406	—	36,526
Community Anti-Drug Coalitions of America: CDC Investigations and Technical Assistance	93.283	CDCGHE 15-4406	—	44,026
Johns Hopkins University: CDC Investigations and Technical Assistance	93.283	2001586409	—	18,695
Johns Hopkins University: CDC Investigations and Technical Assistance	93.283	2002750797	—	25,358
North Carolina Department of Health and Human Services: CDC Investigations and Technical Assistance	93.283	32310	—	75,000
Total CDC Investigations and Technical Assistance			—	246,674
Cancer Cause and Prevention:				
Alliance for Clinical Trials in Oncology: Cancer Cause and Prevention	93.393	A071102	—	144
Albus Imaging LLC: Cancer Cause and Prevention	93.393	1R43CA17427ISub	—	(26,862)
Brigham & Women's Hospital: Cancer Cause and Prevention	93.393	BWH-ACOSOG	—	278
Emory University: Cancer Cause and Prevention	93.393	T014112	—	13,580
Johns Hopkins University: Cancer Cause and Prevention Research	93.393	2001668226	—	69,147
Ohio State University: Cancer Cause and Prevention Research	93.393	—	—	211
University of Alabama School of Medicine: Cancer Cause and Prevention Research	93.393	000508050	—	369
University of Miami: Cancer Cause and Prevention Research	93.393	66649Y	—	(18,460)
Total Cancer Cause and Prevention			—	38,907
Cancer Detection and Diagnosis Research:				
ECOG-ACRIN Cancer Research Group: Cancer Detection and Diagnosis Research	93.394	—	—	223
Virginia Polytechnic Institute and State University: Cancer Detection and Diagnosis Research	93.394	431850-19541	—	10,362
Total Cancer Detection and Diagnosis Research			—	10,385
Cancer Treatment Research:				
American College of Radiology: Cancer Treatment Research	93.395	—	—	16,382
Brigham & Women's Hospital: Cancer Treatment	93.395	CALGB-BWH	—	138,840
Cancer and Leukemia Group B Foundation: Cancer Treatment	93.395	CALGP-HP	—	226
Cancer and Leukemia Group B Foundation: Cancer Treatment	93.395	5-32014	—	107,357
Children's Hospital of Philadelphia: Cancer Treatment	93.395	FP00013087_SUB206_01	—	29,289
Children's Hospital of Philadelphia: Cancer Treatment	93.395	FP00013744_SUB194_02	—	612
ECOG-ACRIN Cancer Research Group: Cancer Treatment Research	93.395	IUGICA189828-01-WFU1	—	184,628
ECOG-ACRIN Cancer Research Group: Cancer Treatment Research	93.395	IUGICA189828-01-WFU2	—	17,346
Frontier Science & Technology Research Foundation: Arthritis, Musculoskeletal and Skin: Diseases	93.395	WFU039CC-00	—	13,102
Gynecologic Oncology Group: Cancer Treatment	93.395	27469 041	—	56,479
John Wayne Cancer Institute: Cancer Treatment	93.395	JWCIMSLTI	—	3,945
Johns Hopkins University: Cancer Treatment Research	93.395	ABTC1202	—	56,714
Mount Sinai School of Medicine: Cancer Treatment Research	93.395	0254-7376-4605	—	58,197
National Surgical Adjuvant Breast and Bowel Project: Cancer Treatment Research	93.395	NCIC CTG MA 32	—	16
National Surgical Adjuvant Breast and Bowel Project: Cancer Treatment Research	93.395	NSABP-SWOG-S1007	—	13,683
University of Pittsburgh: Cancer Treatment Research	93.395	0019829 (120938-1)	—	2,733
University of South Florida: Cancer Treatment Research	93.395	6119-1222-30-AI	—	7,076
Total Cancer Treatment Research			—	706,625
Cancer Control:				
NRG Oncology: Cancer Control	93.399	E4112	—	30
NRG Oncology: Cancer Control	93.399	NSABP B-55	—	91
NRG Oncology: Cancer Control	93.399	NRG-BR001	—	(20,909)
Southwest Oncology Group: Cancer Control	93.399	S1304	—	1,885
University of Texas M.D. Anderson Cancer Center: Cancer Control	93.399	00918444	—	16,132
Total Cancer Control			—	(2,771)



**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
<b>Cardiovascular Diseases:</b>				
Brigham & Women's Hospital: Cardiovascular Diseases	93.837	105963	\$ —	1,047
Brigham & Women's Hospital: Cardiovascular Diseases	93.837	109361	—	30,623
Georgia State University: Cardiovascular Diseases	93.837	SP00010936	—	5,478
Medical College of Wisconsin: Cardiovascular Diseases Research	93.837	MCW HL112270	—	(1,779)
Oregon Health & Sciences University: Cardiovascular Diseases Research	93.837	1005000-WFU	—	11,973
Oregon Health & Sciences University: Cardiovascular Diseases Research	93.837	1002459-WakeF	—	26,477
Partners Healthcare: Cardiovascular Diseases Research	93.837	225712	—	16,025
Pennsylvania State University: Cardiovascular Diseases Research	93.837	WFUHL098115GWAS	—	57,561
The Miriam Hospital & Brown Medical School: Cardiovascular Diseases Research	93.837	710-9144	3,643	75,573
University of Minnesota: Cardiovascular Diseases Research	93.837	N004944404	—	8,064
University of Mississippi: Cardiovascular Diseases Research	93.837	6610085013-WFUHS	—	39,952
University of Mississippi Medical Center: Cardiovascular Diseases Research	93.837	66105170515-WFUHS	—	10,662
University of North Carolina at Chapel Hill: Cardiovascular Diseases Research	93.837	5033553	—	156,751
University of North Carolina at Chapel Hill: Cardiovascular Diseases Research	93.837	5-30761	—	24,255
University of North Carolina at Chapel Hill: Cardiovascular Diseases Research	93.837	5101203	—	27,195
University of North Carolina at Chapel Hill: Cardiovascular Diseases Research	93.837	5033554	—	62,500
University of Utah: Cardiovascular Diseases Research	93.837	10036793-01	—	8,957
University of Utah: Cardiovascular Diseases Research	93.837	10022504-10	—	5,176
University of Washington: Cardiovascular Diseases Research	93.837	753268	—	(1,117)
University of Washington: Cardiovascular Diseases Research	93.837	UWSC6291	18,374	109,272
University of Washington: Cardiovascular Diseases Research	93.837	757043	—	78,108
University of Washington: Cardiovascular Diseases Research	93.837	UWSC8252	—	42,139
University of Washington: Cardiovascular Diseases Research	93.837	748710	—	2,185
University of Washington: Cardiovascular Diseases Research	93.837	759456	—	729
University of Washington: Cardiovascular Diseases Research	93.837	UWSC7564	—	52,457
Vanderbilt University: Cardiovascular Diseases Research	93.837	VUMC42375	—	(1,734)
Washington University, St. Louis: Cardiovascular Diseases Research	93.837	WU-14-240	—	55,288
Total Cardiovascular Diseases			22,017	901,817
<b>Lung Diseases:</b>				
Brigham & Women's Hospital: Lung Diseases	93.838	106219	—	1,122
Fred Hutchinson Cancer Research Center: Lung Diseases	93.838	0000760192	—	85,599
Massachusetts General Hospital: Lung Diseases Research	93.838	224404	—	14,810
Mayo Clinic: Lung Diseases Research	93.838	63351255	—	9,164
National Jewish Medical and Research Center: Lung Diseases Research	93.838	20095401	—	15,204
Pennsylvania State University: Lung Diseases Research	93.838	WFU U10HL109086	—	43,635
Pennsylvania State University: Lung Diseases Research	93.838	WFU HL109086	—	(23,635)
University of Alabama at Birmingham: Lung Diseases Research	93.838	000505877-001	—	54,118
University of California at San Francisco: Lung Diseases Research	93.838	6021sc	—	17,591
University of Colorado-Denver: Lung Diseases Research	93.838	FY13.299.003	—	(3,447)
University of Washington: Lung Diseases Research	93.838	UWSC8236	—	16,297
Total Lung Diseases			—	230,458
<b>Blood Diseases and Resources Research:</b>				
Washington University, St. Louis: Blood Diseases and Resources Research	93.839	WU-09-330	—	29,983
Winston Salem State University: Blood Diseases and Resources Research	93.839	211149 A	—	78,464
Total Blood Diseases and Resources Research			—	108,447
<b>Arthritis, Musculoskeletal and Skin Diseases:</b>				
Cincinnati Children's Hospital: Arthritis, Musculoskeletal and Skin Diseases	93.846	134740	—	75,433
Johns Hopkins University: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	STREAM	—	266
Miami University: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	Saul-Wake-G02135	—	9,635
University of Michigan: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	3002095782	—	726
University of North Carolina at Chapel Hill: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	5050190	—	46,256
University of North Carolina at Chapel Hill: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	5-50190	—	(40,292)
University of South Carolina: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	MUSC16-037-BA473	—	879
Virginia Commonwealth University: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	PT107007-SC104560	—	209,033
Virginia Polytechnic Institute and State University: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	431764-19541	—	6,553
Total Arthritis, Musculoskeletal and Skin Diseases			—	308,489
<b>Diabetes, Digestive, and Kidney Diseases:</b>				
Arbor Research: Diabetes, Digestive, and Kidney Diseases	93.847	Bio-PD	—	6,479
Case Western Reserve University: Diabetes, Digestive, and Kidney Diseases: Extramural Research	93.847	RESS10573	—	4,936
Dana-Farber Cancer Institute: Diabetes, Digestive, and Kidney Diseases	93.847	4503602	—	(61,052)
Dana-Farber Cancer Institute: Diabetes, Digestive, and Kidney Diseases	93.847	4802702	—	83,636
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	S-DPP1415-JB01	—	283
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	21049-43-CCL529068F	—	45,623
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	21049-41-CCL520913F	—	(595)
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	15-B02	—	56,233
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	S-GRD1314-EA43	—	(157)
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	S-GRD1415-EA43	—	9,283
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	S-GRD1516-MW43	—	116,951
George Washington University: Diabetes, Digestive, and Kidney Diseases	93.847	21049-44-CCL529189F	—	58,552
Johns Hopkins University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	200291017	—	5,058
Johns Hopkins University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	2002179504	—	1,096
Johns Hopkins University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	2001772846	—	6,111
Kaiser Permanente Southern California: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	OOS030112_WFU	—	11,925
Massachusetts General Hospital: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	218446	—	587
Mount Sinai Medical Center: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	0255-3838-4609	—	129,579
Mount Sinai Medical Center: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	0255-3837-5609	—	23,759
Pennsylvania State University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	755380	—	35,044
Stanford University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	60121461-51126-D	—	28,750
Stanford University: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	60156702-51126-E	—	23,930
The Miriam Hospital & Brown Medical School: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	710-9197	—	6,385
University of Alabama at Birmingham: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	000502646-001	—	65,134
University of Alabama School of Medicine: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	000501788-001	—	36,188
University of Michigan: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	3003482457	—	1,240
University of Michigan: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	300373940	—	16,419
University of Michigan: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	3003773938	—	35,992
University of Minnesota: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	N002174702	—	(853)
University of North Carolina at Chapel Hill: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	5-34497	—	12,865
University of North Carolina at Chapel Hill: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	5101067	—	50,931
University of Pennsylvania: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	563541	—	(5,563)
University of Pennsylvania: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	566493	—	33,862
University of Pennsylvania: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	568355	—	31,930
University of Pittsburgh: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	0026166 (122040-1)	—	20,661
University of Utah: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	10019509-05	—	12,509
University of Washington: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	UWSC8594	—	13,700
Veterans Medical Research Foundation: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847	09001001-314264	—	15,120
Total Diabetes, Digestive, and Kidney Diseases			—	932,531
<b>Neurosciences and Neurological Disorders:</b>				
Boston University: Neurosciences and Neurological Disorders	93.853	0314304	—	14,346
Emory University: Neurosciences and Neurological Disorders	93.853	T473217	—	(11,998)
Emory University: Neurosciences and Neurological Disorders	93.853	T091902	—	1,787
Emory University: Neurosciences and Neurological Disorders	93.853	T270095	—	28,626
Emory University: Neurosciences and Neurological Disorders	93.853	T423217 (Y13 T270095)	—	28,740
Johns Hopkins University: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	P0R2001948330	—	20,706
Johns Hopkins University: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	2001048936	—	4,543
Massachusetts General Hospital: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	227810	—	8,247

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
Massachusetts General Hospital: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	219314	\$ —	8
Massachusetts General Hospital: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	221606	—	636
University of Alabama at Birmingham: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	000426787-001	—	209,338
University of Cincinnati: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	006883-010	—	3,922
University of Cincinnati: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	COEUS # 006883-010	—	111,466
University of Cincinnati: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	005698-021	—	(1)
University of Medicine and Dentistry of New Jersey: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	W07B-009	—	592
University of Minnesota: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	N003439232	—	4,659
University of Texas Southwestern Medical Center: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	GMO-160603	—	45,402
University of Washington: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	762302	—	(2,853)
University of Washington: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	UWSC77779	—	128,826
Virginia Polytechnic Institute and State University: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	431861-541	—	120,508
Yale University School of Medicine: Extramural Research Programs in Neurosciences and Neurological Disorders	93.853	M07A00635 (A08383)	—	1,859
Total Neurosciences and Neurological Disorders			—	719,359
<b>Allergy and Infectious Diseases:</b>				
Benaroya Research Institute at Virginia Mason: Allergy and Infectious Diseases	93.855	FY15ITN134	—	70,147
Duke University: Allergy and Infectious Diseases	93.855	2033864	—	36,325
Duke University: Allergy and Infectious Diseases	93.855	2033866	—	59,330
Duke University: Allergy and Infectious Diseases	93.855	2034598	—	1,419,992
Duke University: Allergy and Infectious Diseases	93.855	2034582	—	369,626
Duke University: Allergy and Infectious Diseases	93.855	2034161	—	87,887
Duke University: Allergy and Infectious Diseases	93.855	2033869	—	149,732
Institute for Clinical Research, Inc.: Allergy and Infectious Disease	93.855	M52-WF-034-1101-3	—	8,080
Partners Healthcare: Allergy and Infectious Diseases Research	93.855	227111	—	800
University of Alabama at Birmingham: Allergy and Infectious Diseases Research	93.855	000506671-001	—	5,045
University of Central Florida: Allergy and Infectious Diseases Research	93.855	22206056-2	—	24,874
University of Minnesota: Allergy and Infectious Diseases Research	93.855	M661-6285-7905	—	113,231
Total Allergy and Infectious Diseases			—	2,345,069
<b>Biomedical Research and Research Training:</b>				
East Tennessee State University: Biomedical Research and Research Training	93.859	270605	—	22,133
Presbyterian College School of Pharmacy: Biomedical Research and Research Training	93.859	2013-14-03	—	15,855
The Research Institute at Nationwide Children's Hospital: Biomedical Research and Research Training	93.859	953313	—	(532)
The Research Institute at Nationwide Children's Hospital: Biomedical Research and Research Training	93.859	9533AA	—	65,253
Biomedical Research and Research Training			—	102,709
<b>Child Health and Human Development:</b>				
Emory University: Child Health and Human Development	93.865	T286198	—	1,275
Oklahoma State University: Child Health and Human Development Extramural Research	93.865	AA-5-44452-02	—	68,885
Oklahoma State University: Child Health and Human Development Extramural Research	93.865	AA-5-44452-03	—	51,660
University of North Carolina at Chapel Hill: Child Health and Human Development Extramural Research	93.865	5-39440	—	79,354
Women & Infants Hospital: Child Health and Human Development Extramural Research	93.865	9373	—	60,674
Total Child Health and Human Development			—	261,848
<b>Aging:</b>				
Boston University: Aging	93.866	4500001453	—	13,067
Brigham & Women's Hospital: Aging	93.866	111014	—	58,648
Johns Hopkins University: Aging Research	93.866	2001762074	—	(7,729)
Johns Hopkins University: Aging Research	93.866	2002345500	—	4,273
Johns Hopkins University: Aging Research	93.866	2001782645	—	(8,708)
Medical University of South Carolina: Aging Research	93.866	MUSC14-077	—	75,197
University of California at San Diego: Aging Research	93.866	42024655	99,280	279,221
University of California at San Diego: Aging Research	93.866	45895410	—	77,975
University of California at San Diego: Aging Research	93.866	59507529	—	23,755
University of California at San Diego: Aging Research	93.866	37116447	—	95,004
University of Florida: Aging Research	93.866	UF13227	—	39,084
University of Florida: Aging Research	93.866	UFDSP00011022	—	223,372
University of Florida: Aging Research	93.866	UFDSP00010698	—	756,335
University of Florida: Aging Research	93.866	UFDSP00011020	—	73,853
University of Florida: Aging Research	93.866	UFDSP0001102	—	17,693
University of Florida: Aging Research	93.866	UFDSP0010690	13,099	91,655
University of Florida: Aging Research	93.866	UFDSP0010689	45,763	71,504
University of Minnesota: Aging Research	93.866	MMRF - ASPREE	168,250	285,862
University of North Carolina at Chapel Hill: Aging Research	93.866	5-50150	—	68,522
University of Pennsylvania: Aging Research	93.866	563249	—	14
University of Pittsburgh: Aging Research	93.866	0040521 (126268-6)	—	31,886
University of Pittsburgh: Aging Research	93.866	0012200 (122381-7)	—	77,071
University of Pittsburgh: Aging Research	93.866	0038415 (125159-1)	—	11,587
University of Southern California: Diabetes, Digestive, and Kidney Diseases Extramural Research	93.866	CTAADN1137	—	225
University of Texas at Houston: Aging Research	93.866	0011496F	—	1,176
University of Washington: Aging Research	93.866	UWSC7199	—	(10,036)
Total Aging			326,392	2,350,506
<b>HIV Prevention Activities:</b>				
Central Carolina Health Network: HIV Prevention Activities	93.940	CAPUS 2016-1	—	19,446
North Carolina Department of Health and Human Services: HIV Prevention Activities_Health Department Based	93.940	00031204	—	17,847
North Carolina Department of Health and Human Services: HIV Prevention Activities_Health Department Based	93.940	00033169	—	38,820
Total HIV Prevention Activities			—	76,113
<b>Prevention and Treatment of Substance Abuse:</b>				
CenterPoint Human Services: Prevention and Treatment of Substance Abuse	93.959	536915	8,810	8,810
University of North Carolina at Greensboro: Block Grants for Prevention and Treatment of Substance Abuse	93.959	20150132.1	—	15,224
University of North Carolina at Greensboro: Block Grants for Prevention and Treatment of Substance Abuse	93.959	20140028.1	—	24
Total Prevention and Treatment of Substance Abuse			8,810	24,058
<b>PPHF Geriatric Education Centers:</b>				
University of North Carolina at Chapel Hill: PPHF Geriatric Education Centers	93.969	5-52533	—	57
University of North Carolina at Chapel Hill: PPHF Geriatric Education Centers	93.969	5102245	—	15,000
University of North Carolina at Chapel Hill: PPHF Geriatric Education Centers	93.969	5103795	—	15,000
Total PPHF Geriatric Education Centers			—	30,057
<b>American College of Emergency Physicians: HHS Programs for Disaster Relief: Appropriations Act - Non Construction</b>				
University of North Carolina at Chapel Hill: Area Health Education Centers	93.095	7-08-220575	—	23,407
University of North Carolina at Chapel Hill: Disabilities Prevention	93.107	5102890	—	80,027
University of North Carolina at Chapel Hill: Disabilities Prevention	93.184	5100497	—	406
Mercer University: Substance Abuse and Mental Health Services_Projects of Regional and National Significance	93.243	420639-WF-NCE	—	13,457
University of Nebraska Medical Center: Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286	34-2005-2071-001	—	24,785
University of Southern California: Trans-NIH Research Support	93.310	CTAFYN137	—	45,722
Duke University Medical Center: National Center for Advancing Translational Sciences	93.350	2034754	—	30,572
Oregon Health & Sciences University: Research Infrastructure Programs	93.351	9008142_WF	—	21,124
Northwestern University: Nursing Research	93.361	6032853_WF	—	5,916
University of Southern California: Cancer Biology Research	93.396	4592325	—	290,994
University of Michigan: Cancer Centers Support Grants	93.397	3003669897	—	77,703
Jaeb Center for Health Research: Vision	93.867	DRCR EY14231	—	2,341
City of Hope Comprehensive Cancer Center: Anterior Segment Diseases	93.868	23030.191490.669305	—	13,189
North Carolina Department of Health and Human Services: Special Projects of National Significance	93.928	00030899	—	2,701

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
Altamir Institute: HIV Demonstration, Research, Public and Professional Education	93.941	SC-16-001	\$ —	7,076
University of Alabama at Birmingham: Preventive Health Services, Sexually Transmitted Diseases Control Grants	93.977	000506238-002	34,357	64,158
Arterioocyte Medical Systems: Study to Demonstrate the Safety of Applying Autologous: PRP Gel to Acute Deep Partial Thickness Thermal Injuries	93.UNKNOWN	CTA BARDA	—	1,227
CenterPoint Human Services: North Carolina Coalition Initiative	93.UNKNOWN	FY 16-275	19,898	120,095
Children's Hospital of Philadelphia: ODSH as a Countermeasure for Radiation-Induced Thrombocytopenia	93.UNKNOWN	961603-RSUB	—	16,949
Children's Hospital of Philadelphia: ODSH as a Countermeasure for Radiation-Induced Thrombocytopenia	93.UNKNOWN	FP16320_SUB05_02	—	80,881
Children's Hospital of Philadelphia: Cancer Trials Support Unit	93.UNKNOWN	—	—	18
Columbia University: Statistical Analysis of Existing ACCORD Lipid Data for CVD Event: Association	93.UNKNOWN	COLUM-0000033669	—	(6,376)
Community Anti-Drug Coalitions of America: National Coalition Institute Independent Evaluation	93.UNKNOWN	TBD	—	3,738
Duke University: Pediatric Trials Network	93.UNKNOWN	173578/2039082	—	1,272
Duke University: Antibiotic Safety in Infants with Complicated Intra-Abdominal Infections	93.UNKNOWN	201316	—	18,491
Jackson State University: Jackson Heart Study	93.UNKNOWN	P0013621	—	(65)
Joslin Diabetes Center: Genetic Modifiers of the Effect of Intensive Glycemic Control on CVD Risk (ACCORD Ancillary Study)	93.UNKNOWN	JOSLIN-ACCORD	—	29,470
Modulation Therapeutics, Inc.: Targeted Radionuclide Therapy for Cancer Treatment	93.UNKNOWN	20-18285-01-01	—	15,479
National Marrow Donor Program: Lenalidomide Maintenance Therapy for Patients Enrolled on BMT CTN 0702	93.UNKNOWN	BMT CTN 0702	—	691
North Carolina Department of Health and Human Services: Hospital Preparedness Program	93.UNKNOWN	00029343	—	4,015
RTI International: Develop and Implement UCARE4LIFE Message Library	93.UNKNOWN	1-312-0213543-51884L	—	34,723
University of Alabama at Birmingham: Sexually Transmitted Infections Clinical Trials Group	93.UNKNOWN	000500918-T005-SC004	—	2,550
University of Alabama at Birmingham: Sexually Transmitted Infections Clinical Trials Group	93.UNKNOWN	000500918-7010-SC011	—	4,890
University of Kentucky: Farmworker Housing Quality and Health – A Transdisciplinary Conference	93.UNKNOWN	CRLA	—	35
University of North Carolina at Chapel Hill: Hispanic Community Health Studies	93.UNKNOWN	5-35034	—	(1,465)
University of North Carolina at Chapel Hill: Atherosclerosis Risk in Communities Study-Field Centers	93.UNKNOWN	5055129	—	27
University of North Carolina at Chapel Hill: Atherosclerosis Risk in Communities Study-Field Centers	93.UNKNOWN	5100680	—	533,122
University of North Carolina at Chapel Hill: Atherosclerosis Risk in Communities Study-Field Centers	93.UNKNOWN	5103327	—	339,955
University of North Carolina at Chapel Hill: Atherosclerosis Risk in Communities Study	93.UNKNOWN	5102906	—	46,545
University of North Carolina at Chapel Hill: SPIROMICS: Genomics and Informatics Center	93.UNKNOWN	5102903	—	54,878
University of North Carolina at Chapel Hill: SPIROMICS – Genomics Analysis	93.UNKNOWN	5-56026	—	(4,848)
University of North Carolina at Chapel Hill: AHCC Practice Support Services	93.UNKNOWN	5041567	—	185,292
University of Rochester: Enhancement of Anti-Pertussis Immune Responses by Bordetella Colonization Factor A	93.UNKNOWN	416478-G	—	175,991
University of Washington: Multi-Ethnic Study of Atherosclerosis	93.UNKNOWN	UWSC8541	—	443,911
University of Washington: Multi-Ethnic Study of Atherosclerosis	93.UNKNOWN	565261	—	4,130
Centers for Disease Control and Prevention Direct Programs: Training and Support of the Division of STD Prevention Activities to Increase Community Engagement	93.UNKNOWN	—	—	47,234
Centers for Disease Control and Prevention Direct Programs: Surveillance, Natural History, Quality of Care and Outcomes of Diabetes Mellitus with Onset in Childhood and Adolescence Coordinating Center	93.UNKNOWN	—	998,775	1,623,329
Total Department of Health and Human Services			17,405,312	109,641,750
Department of Justice Direct Programs:				
Part E – Developing, Testing and Demonstrating Promising New Programs	16.541	—	—	142,488
Department of Justice Pass-Through Programs From:				
University of California at San Diego: National Institute of Justice Research, Evaluation, and Development Project	16.560	44762022-001	—	550
Total Department of Justice			—	143,038
Department of Transportation Direct Programs:				
National Highway Traffic Safety Administration:				
Crash Injury Research and Engineering Network Center	20.UNKNOWN	—	19,282	385,809
Department of Veterans Affairs Direct Programs:				
Chronic Effects of Neurotrauma Consortium	64.UNKNOWN	—	—	74,547
Veterinary Services for VA Owned Primates	64.UNKNOWN	—	—	22,061
Subtotal Department of Veterans Affairs Direct Programs			—	96,608
Department of Veterans Affairs Pass-Through Programs From:				
Richard L. Roudebush VA Medical Center: Pain Outcomes Comparing Yoga versus Structured Exercise	64.UNKNOWN	—	—	17,977
W.G. Hefner VA Medical Center:				
Effect of PKD1-E-Cadherin Interaction in Prostate Cancer	64.UNKNOWN	—	—	140,865
Structural & Functional Neurobiology of Veterans Exposed to Primary Blast Forces	64.UNKNOWN	—	—	20,524
Veterinary Services for VA Owned Primates	64.UNKNOWN	—	—	61,246
Total Department of Veterans Affairs			—	337,220
National Aeronautics and Space Administration Direct Programs:				
Exploration	43.003	—	—	293,366
Space Operations	43.007	—	—	3,046
Subtotal National Aeronautics and Space Administration Direct Programs			—	296,412
National Aeronautics and Space Administration Pass-Through Programs:				
Baylor College of Medicine: Improving Cardiovascular Risk Prediction	43.UNKNOWN	CA03801	—	16,287
Total National Aeronautics and Space Administration			—	312,699
National Sciences Foundation Direct Programs:				
Engineering Grants	47.041	—	—	88,254
Social, Behavioral, and Economic Sciences	47.075	—	—	121,220
Subtotal National Sciences Foundation Direct Programs			—	209,474
National Sciences Foundation Pass-Through Programs:				
Engineering Grants:				
Children's Hospital of Philadelphia: Engineering Grants	47.041	Lawson No. 27065-212780414-72	—	39,049
Children's Hospital of Philadelphia: Engineering Grants	47.041	CHOPCCHiPS	—	52,147
Total Engineering Grants			—	91,196
Total National Sciences Foundation			—	300,670
Subtotal Wake Forest University Health Sciences			31,835,230	134,788,941
College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc:				
Agency for International Development Direct Programs:				
USAID Foreign Assistance for Programs Overseas	98.001	—	—	62,067
Agency for International Development Pass-Through Programs:				
USAID Pass-Through Programs from National Academy of Sciences	98.000	200006099	—	30,796
Total Agency for International Development			—	92,863
Department of Agriculture Direct Programs:				
Agriculture and Food Research Initiative	10.310	—	—	118,869
Department of Commerce Direct Programs:				
Measurement and Engineering Research and Standards	11.609	—	—	94,564
Department of Defense Direct Programs:				
Department of Navy:				
Basic and Applied Scientific Research	12.300	—	—	37,605
Department of Army:				
Military Medical Research and Development	12.420	—	30,687	308,458
National Security Agency:				
Mathematical Sciences Grants Program	12.901	—	—	13,587
Subtotal Department of Defense Direct Programs			30,687	359,650

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of Federal Awards  
Year ended June 30, 2016

Federal grantor/pass-through grantor/program or cluster title	Federal CFDA # of other grant identifying #	Pass-through entity identifying number	Passed through to subrecipients	Expenditures
Department of Defense Pass-Through Programs:				
Air Force Defense Research Sciences Program:				
Texas A&M University: Air Force Defense Research Sciences Program	12.800	C1761	\$ —	66,038
University of New Mexico: Air Force Defense Research Sciences Program	12.800	707791-874N	—	38,556
Total Air Force Defense Research Sciences Program			—	104,594
Streamline Automation, LLC: Novel Energy Harvesting Fabric	12.UNKNOWN	1116-SC-01-R0	—	48,223
Total Department of Defense			30,687	512,467
Department of Energy Pass-Through Programs:				
Lawrence Berkeley National Laboratory:	81.UNKNOWN	7228073	—	6,525
Lawrence Berkeley National Laboratory:	81.UNKNOWN	7223011	—	42,941
University of Texas at Dallas: Basic Energy Sciences University and Science Education	81.049	120063	—	115,577
Total Department of Energy			—	165,043
Department of Health and Human Services:				
National Institutes of Health Direct Programs:				
Mental Health Research:				
Drug Abuse and Addiction Research	93.242		5,518	179,377
Cancer Treatment Research	93.279		—	(495)
Cardiovascular Diseases Research	93.395		—	12,052
Blood Diseases and Resources	93.837		153,893	461,389
Arthritis Musculoskeletal and Skin Diseases Research	93.839		116,770	387,755
Clinical Research related to Neurological Disorders	93.846		370,001	1,111,628
Pharmacology, Physiology and Biological Chemistry	93.853		—	57
Aging Research	93.859		—	18,112
	93.866		3,355	54,007
Subtotal National Institutes of Health Direct Programs			649,537	2,223,882
National Institutes of Health Pass-Through Programs:				
Brigham & Women's Hospital: Arthritis, Musculoskeletal and Skin Diseases Research	93.846	109136	17,197	44,239
Emory University: Allergy and Infectious Disease Research	93.855	T405249	—	14,704
Gramercy Research Group: Minority Health and Health Disparities Research	93.307	TCCPP06-WFU	—	751
Biomedical Research and Research Training:				
Nanomedica, Inc.: Biomedical Research and Research Training	93.859	NGS-SBIR	—	37,357
Neuroglobin: Biomedical Research and Research Training	93.859	0042274 (125454-1)	—	57,386
Total Biomedical Research and Research Training			—	94,743
Northwestern University: Cardiovascular Diseases Research	93.837	60039432 WAFU	—	16,594
University of Pittsburgh: Blood Diseases and Resources Research	93.839	0034673 (123613-1)	28,400	171,142
Total Department of Health and Human Services			695,134	2,566,055
Department of Homeland Security Direct Programs:				
Homeland Security Research, Development, Testing, Evaluation, and Demonstration of Technologies Related to Nuclear Threat Detection	97.077		—	184,690
Department of Interior Fish and Wildlife Service Direct Programs:				
Partners for Fish and Wildlife	15.631		—	106
Department of State Direct Programs:				
Professional and Cultural Exchange Programs – Citizen Exchanges	19.415		—	201,578
National Aeronautics and Space Administration Direct Programs:				
Science	43.001		—	188,084
National Aeronautics and Space Administration Pass-Through Programs				
California Institute of Technology: Science	43.001	1467189	—	15,420
Total National Aeronautics and Space Administration			—	203,504
National Science Foundation Direct Programs:				
Engineering Grants	47.041		—	159,624
Mathematical and Physical Sciences	47.049		8,000	743,632
Computer and Information Science Engineering	47.070		—	2,703
Biological Sciences	47.074		—	755,572
Social, Behavioral, and Economic Sciences	47.075		8,698	71,854
Education and Human Resources	47.076		94,000	306,297
Subtotal National Science Foundation Direct Programs			110,698	2,039,682
National Science Foundation Pass-Through Programs:				
Engineering Grants:				
Clemson University: Engineering Grants	47.041	1642-206-2009110	—	41
Duke University: Engineering Grants	47.041	14-NSF-1115	—	15,407
North Carolina State University: Engineering Grants	47.041	2012-1067-06	—	8,417
Total Engineering Grants			—	23,865
Duke University:				
Geosciences	47.050	14-NSF-1032	—	33,122
Georgia State University:	47.070	TCPP/CDER	—	440
Purdue University: Education and Human Resources	47.076	4101-70770	—	20,369
University of North Carolina Chapel Hill: Mathematical and Physical Sciences	47.049	5-37044	—	5,284
Total National Science Foundation			110,698	2,122,762
Subtotal College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc.			836,519	6,262,501
Total Research and Development Cluster			32,671,749	141,051,442
Student Financial Assistance-Cluster:				
Wake Forest University Health Sciences:				
Department of Education Direct Programs:				
Federal Direct Student Loans	84.268		—	24,778,300
College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc.				
Department of Education Direct Programs:				
Federal Supplemental Educational Opportunity Grant	84.007		—	520,343
Federal Direct Student Loans	84.268		—	45,392,090
Federal Work Study Program	84.033		—	1,002,386
Federal Perkins Loan Program	84.038		—	18,569,765
Federal Pell Grant Program	84.063		—	2,150,124
Total Department of Education			—	67,634,708
Total Student Financial Assistance-Cluster			—	92,413,008
Other Programs:				
Institute of Museum and Library Services Pass-Through Programs				
Grants to States	45.310		—	18,824
Total Federal Award Expenditures			\$ 32,671,749	233,483,274

See accompanying notes to schedule of expenditures of federal awards and schedule of expenditures of state awards.

**WAKE FOREST UNIVERSITY**  
Schedule of Expenditures of State Awards  
Year ended June 30, 2016

<b>State grantors/pass-through grantors/agencies</b>	<b>State Expenditures</b>
Wake Forest University Health Sciences:	
NC Department of Health and Human Services	\$ 8,463,635
North Carolina State Education Assistance Authority:	
Forgivable Education Loans for Services (FELS)	1,553,000
State of NC pass-through funds from:	
CenterPoint Human Services	609,975
North Carolina Biotechnology Center	128,639
University of North Carolina at Chapel Hill	6,683,062
Other	259,311
Subtotal – Wake Forest University Health Sciences	17,697,622
College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc.:	
North Carolina State Education Assistance Authority (NCSEAA)	2,217
Forgivable Education Loans for Services (FELS)	12,000
Golden LEAF Scholarship Program (GOLD)	3,000
NC National Guard Tuition Assistance Program (NCTAP)	6,000
NC Need-Based Scholarships (NBS)	1,551,052
Subtotal – College of Arts and Sciences, Schools of Law, Business, and Divinity, and Reynolda House, Inc.	1,574,269
Total State Award Expenditures	\$ 19,271,891

See accompanying notes to schedule of expenditures of federal awards and schedule of expenditures of state awards.

## WAKE FOREST UNIVERSITY

### Notes to Schedule of Expenditures of Federal Awards and Schedule of Expenditures of State Awards

Year ended June 30, 2016

#### (1) Basis of Presentation

The accompanying schedule of expenditures of federal awards (the schedule) includes all grants, contracts, and similar agreements entered into directly between Wake Forest University (the University) and agencies and departments of the federal government and all subawards to the University by nonfederal organizations pursuant to federal grants, contracts, and similar agreements and is presented on the accrual basis of accounting. The information in the schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Therefore, some amounts presented in the schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements.

The accompanying schedule of expenditures of state awards includes all grants, contracts, and similar agreements entered into directly between the University and agencies and departments of the state government and all subawards to the University by nonfederal organizations pursuant to state grants, contracts, and similar agreements and is presented on the accrual basis of accounting.

#### (2) Summary of Significant Accounting Policies

Expenditures for certain federal student financial aid programs are recognized as incurred and include the federal share of students' Federal Supplemental Educational Opportunity Grant (FSEOG) program grants and Federal Work Study (FWS) program earnings, Pell grants, loan disbursements, and administrative cost allowances, where applicable.

Expenditures for other federal awards of the University's academic and other divisions are recognized following, as applicable, either the cost principles in OMB Circular A-21, *Cost Principles for Educational Institutions*, or the cost principles contained in Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

Expenditures for non-financial aid awards include indirect costs, related primarily to facilities operation and maintenance and general, divisional, and departmental administrative services, which are allocated to direct cost objectives (including federal awards) based on negotiated formulas commonly referred to as facilities and administrative cost rates. Facilities and administrative costs allocated to such awards for the year ended June 30, 2016 were based on predetermined rates negotiated with the University's cognizant federal agency, the U.S. Department of Health and Human Services. The University has elected not to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

Negative balances presented in the schedule represent programs with unfunded expenditures prior to normal close-out procedures, which were subsequently transferred to nonfederal cost centers.

**WAKE FOREST UNIVERSITY**

Notes to Schedule of Expenditures of Federal Awards  
and Schedule of Expenditures of State Awards

Year ended June 30, 2016

**(3) Summary of Facilities and Administrative Costs and Administrative Cost Allowances – Governmental Sources**

Facilities and administrative cost recoveries and administrative cost allowances for the University’s academic and other divisions for the year ended June 30, 2016 are summarized as follows:

Federal:		
Research and development	\$	33,469,994
Student financial aid		<u>222,363</u>
Total	\$	<u><u>33,692,357</u></u>

**(4) Federal Student Financial Aid Loan Programs**

The Federal Perkins Loan, Health Professions Student Loan (HPSL), and the Primary Care Loan (PCL) programs are administered directly by the University and balances and transactions relating to these programs are included in the University’s basic financial statements. The current year loaned amounts under the Federal Perkins Loan program was \$795,751. There were no current year loaned amounts under HSPL and PCL. The balance of loans outstanding under the Federal Perkins Loan program was \$18,541,604 as of June 30, 2016. There were no loans outstanding for the HPSL and PCL programs as of June 30, 2016.

The University disbursed the following amounts of new loans under the Federal Direct Student Loan Program to students of the University during the year ended June 30, 2016:

Federal Direct Student Loan Program:		
Federal Stafford loans	\$	2,772,757
Federal unsubsidized Stafford loans		40,334,260
Federal PLUS loans		<u>27,063,373</u>
Total	\$	<u><u>70,170,390</u></u>

The University is responsible only for the performance of certain administrative duties with respect to the Federal Direct Student Loan Program and, accordingly, these loans are not included in its basic financial statements. It is not practicable to determine the balance of loans outstanding to students and former students of the University under these programs as of June 30, 2016.

**(5) Matching**

Under the FWS program, the University matched \$191,269 in compensation to students for the year ended June 30, 2016 in addition to the federal share of expenditures in the accompanying schedule.

Under the FSEOG program, the University matched \$175,517 in funds awarded to students for the year ended June 30, 2016 in addition to the federal share of expenditures in the accompanying schedule.



KPMG LLP  
Suite 400  
300 North Greene Street  
Greensboro, NC 27401

## **Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards***

The Board of Trustees  
Wake Forest University:

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the consolidated financial statements of Wake Forest University (the University), which comprise the consolidated balance sheet as of June 30, 2016, and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements, and have issued our report thereon dated October 25, 2016.

### **Internal Control over Financial Reporting**

In planning and performing our audit of the consolidated financial statements, we considered the University's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of University's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's consolidated financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.





**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Greensboro, North Carolina  
October 25, 2016



KPMG LLP  
Suite 400  
300 North Greene Street  
Greensboro, NC 27401

**Independent Auditors' Report on Compliance for Each Major Federal Program; Report on Internal Control over Compliance; and Report on the Schedule of Expenditures of Federal Awards Required by Uniform Guidance and the Schedule of Expenditures of State Awards**

The Board of Trustees  
Wake Forest University:

**Report on Compliance for the Major Federal Program**

We have audited Wake Forest University's (the University) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on the University's major federal program for the year ended June 30, 2016. The University's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

***Management's Responsibility***

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

***Auditors' Responsibility***

Our responsibility is to express an opinion on compliance for the University's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of the University's compliance.

***Opinion on the Major Federal Program***

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2016.



## **Report on Internal Control over Compliance**

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on a major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for a major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

## **Report on the Schedule of Expenditures of Federal Awards Required by the Uniform Guidance and the Schedule of Expenditures of State Awards**

We have audited the consolidated financial statements of the University as of and for the year ended June 30, 2016, and have issued our report thereon dated October 25, 2016 which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the consolidated financial statements. The accompanying schedule of expenditures of state awards is also presented for purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of



expenditures of federal awards and the schedule of expenditures of state awards are fairly stated in all material respects in relation to the consolidated financial statements as a whole.

KPMG LLP

Greensboro, North Carolina  
December 21, 2016

**WAKE FOREST UNIVERSITY**

Schedule of Findings and Questioned Costs

Year ended June 30, 2016

**(1) Summary of Auditors' Results**

- (a) The type of report issued on the financial statements: **Unmodified opinion**
- (b) Significant deficiencies in internal control disclosed by the audit of the financial statements: **None reported** Material weaknesses: **None**
- (c) Noncompliance which is material to the financial statements: **None**
- (d) Significant deficiencies in internal control over major programs: **None reported** Material weaknesses: **None**
- (e) The type of report issued on compliance for major programs: **Unmodified opinion**
- (f) Any audit findings which are required to be reported under 2 CFR 200.516(a): **None reported**
- (g) Major program: **Research and Development Cluster**
- (h) Dollar threshold used to distinguish between Type A and Type B programs: **\$3,000,000**
- (i) Auditee qualified as a low-risk auditee: **Yes**

**(2) Findings Relating to the Financial Statements Reported in Accordance with *Government Auditing Standards***

None

**(3) Findings and Questioned Costs Relating to Federal Awards**

None reported