

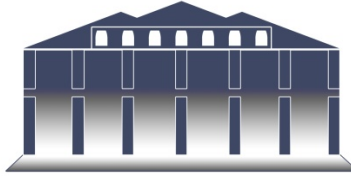
The UNC System Needs a More Comprehensive Approach and Metrics for Operational Efficiency



**Final Report to the Joint Legislative
Program Evaluation Oversight Committee**

Report Number 2013-08

December 18, 2013



Program Evaluation Division
North Carolina General Assembly
Legislative Office Building, Suite 100
300 North Salisbury Street
Raleigh, NC 27603-5925
919-301-1404
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NORTH CAROLINA GENERAL ASSEMBLY
Legislative Services Office

George R. Hall, Legislative Services Officer

Program Evaluation Division
300 N. Salisbury Street, Suite 100
Raleigh, NC 27603-5925
Tel. 919-301-1404 Fax 919-301-1406

John W. Turcotte
Director

December 18, 2013

Senator Fletcher L. Hartsell, Jr., Co-Chair, Joint Legislative Program Evaluation Oversight Committee
Representative Julia Howard, Co-Chair, Joint Legislative Program Evaluation Oversight Committee

North Carolina General Assembly
Legislative Building
16 West Jones Street
Raleigh, NC 27601

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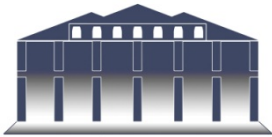
The 2013–15 Program Evaluation Division work plan directed the division to examine efforts to streamline, improve, and reduce costs of campus operations across the University of North Carolina system.

I am pleased to report that UNC General Administration and its constituent institutions cooperated with us fully and were at all times courteous to our evaluators during the evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Turcotte".

John W. Turcotte
Director



PROGRAM EVALUATION DIVISION

NORTH CAROLINA GENERAL ASSEMBLY

December 2013

Report No. 2013-08

The UNC System Needs a More Comprehensive Approach and Metrics for Operational Efficiency

Summary

As directed by the North Carolina General Assembly's Joint Legislative Program Evaluation Oversight Committee, this evaluation examines efforts to streamline, improve, and reduce costs of campus operations across the University of North Carolina system. The University of North Carolina (UNC) is a public, multi-campus university with 16 higher education institutions that differ in size, complexity, and scope. Since 2006, the UNC system has engaged in 11 operational efficiency projects that have saved \$101.2 million to date.

Despite these savings, the UNC system lacks important characteristics of a comprehensive approach to operational efficiency. These characteristics include a direct charge from the UNC Board of Governors, explicit chancellor accountability, faculty buy-in, initiatives in two major areas, a single structure for all efforts, shared governance with faculty leaders, and a formal communication strategy. In addition, campus-level efforts have not been fully incorporated into the overarching systemwide initiative. Lessons learned from other public university systems demonstrate the importance of these components to the success of operational efficiency initiatives.

The UNC system does not use specific metrics that measure the operational efficiency of its constituent institutions. The Program Evaluation Division identified three metrics that could be used to manage and track operational performance. Analyses showed that nine UNC campuses need to improve performance in at least one area.

The UNC system does not have a reliable funding source for operational efficiency efforts and most campuses do not track savings from these efforts. Documenting savings will demonstrate the level of funding required to support current and future operational efficiency efforts.

To address these findings, the General Assembly should direct the UNC system to

- adopt a board policy stating its commitment and goals for operational efficiency for the system;
- develop a more comprehensive approach to operational efficiency;
- adopt metrics to track operational performance; and
- improve chancellor accountability for the academic and operational performance of its campuses.

In addition, the General Assembly should amend state law to allow the UNC system to reinvest documented savings generated from these efforts.

Purpose and Scope

The Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to review staffing and costs of institutional operations across the University of North Carolina (UNC) system.¹ For the purpose of this evaluation, the UNC system includes UNC General Administration (UNC-GA) and the 16 higher education constituent institutions:

- Appalachian State University (ASU);
- East Carolina University (ECU);
- Elizabeth City State University (ECSU);
- Fayetteville State University (FSU);
- North Carolina Agricultural and Technical State University (NCA&T);
- North Carolina Central University (NCCU);
- North Carolina State University (NCSU);
- UNC Asheville (UNCA);
- UNC Charlotte (UNCC);
- UNC Chapel Hill (UNCCH);
- UNC Greensboro (UNCG);
- UNC Pembroke (UNCP);
- UNC School of the Arts (UNCSA);
- UNC Wilmington (UNCW);
- Western Carolina University (WCU); and
- Winston-Salem State University (WSSU).

This evaluation excludes the North Carolina School of Science and Math and the affiliated entities of the UNC system.²

Four central research questions guided the study:

- What is the status of operational efficiency efforts across the UNC system?
- How has the size and scope of institutional operations and administration across the UNC system changed over time?
- How does the UNC system ensure progress toward improved operational efficiency?
- What are the best and most promising practices in improving operational efficiency at public universities?

The Program Evaluation Division collected data from several sources, including

- review of laws and policies guiding the UNC system;
- interviews and queries with UNC system officials on their operational efficiency efforts;
- an administrative query completed by each campus;
- sources and uses of funding for each campus;
- personnel and student enrollment data for each campus;

¹ Joint Legislative Program Evaluation Oversight Committee Approved 2013–15 Work Plan, as amended August 19, 2013.

² Affiliated entities of the UNC system include Agricultural Research Service, Area Health Education Centers, North Carolina Center for International Understanding, North Carolina Cooperative Extension, North Carolina State Approving Agency, UNC Center for Public Television, UNC Healthcare, and UNC Press Online.

- site visits to eight campuses;
- expenditures and student enrollment data for public peer institutions from the Integrated Postsecondary Education Data System;
- interviews with subject matter experts in efficiency efforts in higher education;
- literature review of efficiency efforts in higher education; and
- research on public higher education institutions and university systems in other states.

Background

The University of North Carolina is a public, multi-campus university dedicated to the service of North Carolina and its people. In 1931, the General Assembly established the University of North Carolina (UNC) to include three state-supported institutions: the campus at Chapel Hill (now UNC Chapel Hill), North Carolina State College (now North Carolina State University), and Woman's College (now UNC Greensboro). By 1969, legislative action had added the campuses at Charlotte, Asheville, and Wilmington to the UNC system. In 1971, the General Assembly enacted legislation to add the ten remaining higher education institutions to the system.³ It is important to note that most UNC campuses had been established before the Legislature created the system.⁴

As described in state law, the mission of the UNC system is “to discover, create, transmit, and apply knowledge to address the needs of individuals and society.”⁵ This mission has three components—instruction, research, and public service—with instruction being the primary responsibility of each constituent institution. The statutes also direct the UNC system to seek an efficient use of available resources in the fulfillment of this mission in order to ensure the highest quality in its service to the citizens of the State.

The 16 constituent institutions of the UNC system differ in size, scope, and complexity. Starting in 1970, the Carnegie Commission on Higher Education developed a classification system of colleges and universities to describe the institutional diversity in U.S. higher education. The 16 campuses of the UNC system fall into seven different categories of the 2010 Carnegie Classification™ (see Exhibit 1). The UNC system has six doctoral research institutions—including two institutions with very high research activity—seven master’s institutions, two bachelor’s institutions, and one special-focus institution. In Fall 2012, full-time equivalent (FTE) enrollment ranged from 1,142 FTE students at UNC School of the Arts to 30,629 FTE students at North Carolina State University. In addition, the U.S. Department of Education lists six campuses as postsecondary minority-serving institutions.⁶

³ The ten institutions are Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural & Technical State University, North Carolina Central University, UNC School of the Arts, UNC Pembroke, Western Carolina University, and Winston-Salem State University.

⁴ Three institutions—UNC Charlotte, UNC School of the Arts, and UNC Wilmington—were established after 1931.

⁵ N.C. Gen. Stat. § 116-1(b).

⁶ Five campuses—Elizabeth City State University, Fayetteville State University, North Carolina Central University, North Carolina A&T State University, and Winston-Salem State University—are listed as historically black colleges and universities; UNC Pembroke is listed as a Native American-serving, non-tribal institution. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html>.

Exhibit 1: The 16 Campuses of the UNC System Differ in Size, Scope, and Complexity

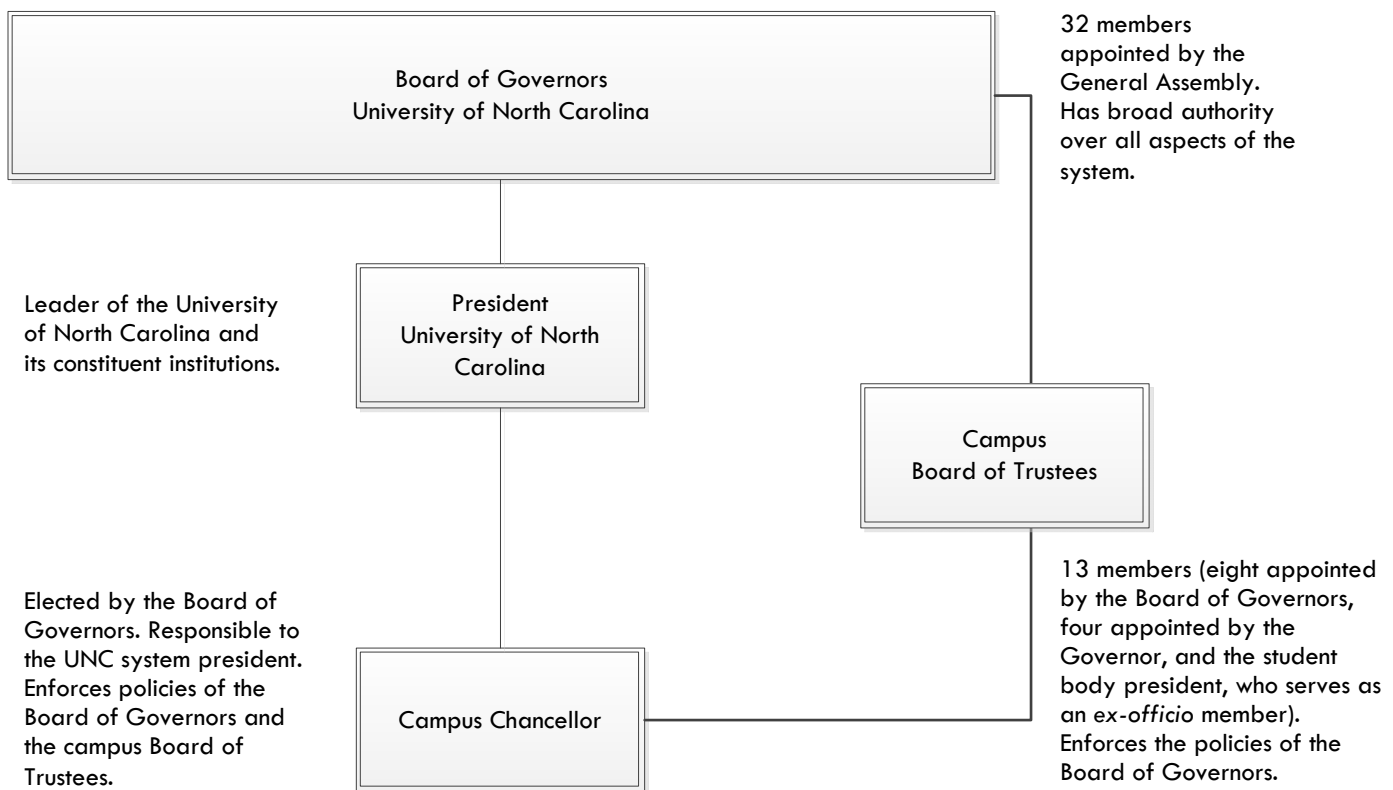
Carnegie Classification™	Institution (year established)	Total FTE (Fall 2012)	Percent FTE Grad Students	Percent Minority Students	Academic Programs	Average SAT Scores	Total Expenditures (2011–12)	Percent Research (2011–12)
Doctoral Institutions Very High Research Activity	UNC Chapel Hill (1789)	27,069	34%	36%	263	1,305	\$2,523,886,252	19%
	North Carolina State University (1887)	30,629	25%	30%	348	1,223	1,207,992,888	19%
Doctoral Institutions High Research Activity	North Carolina A&T State University (1890)	9,859	14%	93%	95	907	274,150,436	10%
	UNC Greensboro (1891)	16,754	16%	40%	181	1,033	361,996,677	5%
Doctoral Institutions Research Activity	UNC Charlotte (1946)	23,540	16%	39%	167	1,074	455,426,177	5%
	East Carolina University (1907)	24,198	18%	27%	199	1,058	756,874,569	3%
Master's Institutions	UNC Wilmington (1946)	12,871	8%	18%	98	1,175	257,081,113	5%
	North Carolina Central University (1910)	7,869	22%	89%	64	866	189,765,237	4%
	Appalachian State University (1899)	16,815	9%	13%	143	1,153	348,255,829	1%
	Western Carolina University (1889)	8,635	15%	17%	113	1,041	182,418,851	1%
	Winston-Salem State University (1892)	5,298	7%	83%	50	907	141,616,889	1%
	UNC Pembroke (1887)	5,522	10%	59%	59	933	112,880,270	1%
	Fayetteville State University (1867)	5,227	12%	83%	44	860	109,958,683	1%
Bachelor's Institutions Diverse Fields	Elizabeth City State University (1891)	2,720	3%	86%	41	856	81,509,005	4%
Bachelor's Institutions Arts and Sciences	UNC Asheville (1927)	3,379	1%	15%	53	1,194	81,003,382	3%
Special-Focus Institution	UNC School of the Arts (1963)	1,142	11%	26%	9	1,124	48,374,615	<1%
UNC System Totals or Average		201,527	18%	39%	1,927	1,091	\$7,133,190,873	12%

Notes: Institutions are listed by percentage of research expenditures and then by amount of total expenditures within each classification group. FTE stands for full-time equivalent student enrollment. Carnegie Classification describes institutional diversity in U.S. higher education. Average SAT scores are the combined scores for critical reading and mathematics of entering freshmen. Fiscal Year 2011–12 is the most recent year of audited financial data. Total expenditures for UNC Chapel Hill include Area Health Education Centers. Total expenditures for North Carolina State University include Agricultural Research Service and North Carolina Cooperative Extension. FTE students for UNC School of the Arts include high school students.

Source: Program Evaluation Division based on financial, enrollment, and academic program data from the UNC system office.

The UNC Board of Governors is the policy-making body that governs the 16 constituent institutions. It elects the president, who administers the University. The 32 voting members of the UNC Board of Governors are elected by the General Assembly to four-year terms. The Board of Governors chooses the chancellor for each campus, and the chancellor is responsible to the president. Each campus has a board of trustees consisting of 13 members, 8 elected by the UNC Board of Governors, four appointed by the Governor, and the president of the student body, who serves as *ex officio*, with all the rights and privileges of membership, except voting rights.⁷ The boards of trustees hold extensive powers over academic and other operations of their respective campuses on delegation from the UNC Board of Governors. Exhibit 2 depicts the governance structure of the system.

Exhibit 2: UNC Board of Governors Has Authority over Each Campus of the UNC System



Source: Program Evaluation Division based on North Carolina General Statutes and the University of North Carolina Policy Manual.

The UNC Board of Governors has broad authority over every aspect of the system and delegates certain authority to the campuses. As the body politic of the University, the UNC Board of Governors is charged with the general determination, control, supervision, management, and governance of all affairs of the constituent institutions, including real property and endowment funds.⁸ This authority includes

⁷ The UNC School of the Arts has two additional *ex officio* members.

⁸ Excepting any property held by trustees of institutional endowment funds under the provisions of N.C. Gen. Stat. § 116-36 or under authority delegated by the Board of Governors to a board of trustees or by trustees of any other endowment or trust fund.

- determining the functions, educational activities, and academic programs of the constituent institutions;
- determining the types of degrees awarded;
- setting enrollment levels;
- preparing the unified budget for the UNC system; and
- appropriating funds for continuing operations to each institution.

The board may delegate any part of its authority to boards of trustees, the president of the University, or campus chancellors and can rescind this authority in whole or in part at any time.

The UNC Board of Governors has designated all campuses as special responsibility institutions.⁹ With this designation, institutions:

- receive allocations in a single sum;
- have the authority to transfer between budget codes;
- can carry forward up to 2.5% of General Fund appropriations for one-time expenditures; and
- can use excess receipts (up to 10% over budgeted level) to support operations that generated the receipts.

In addition, chancellors of special responsibility institutions have the authority to create and abolish positions on their campuses.

Historically, North Carolina has provided generous support for its higher education institutions. During its first 30 years of existence (1972–2003), the UNC system improved its ranking among the 50 states in total higher education appropriations from tenth to sixth. In this time frame, North Carolina’s per capita spending for higher education and spending per student full-time equivalent (FTE) surpassed both the national average and the spending of its neighboring states. Despite this continued investment, North Carolina falls below both the national average and most neighboring states in the proportion of adults enrolled in college and adults holding college degrees.

For North Carolina, this higher level of state funding stems from the State’s constitutional provision “to provide that the benefits of the University of North Carolina and other public institutions of higher education, as far as practicable, be extended to the people of the State free of expense.”¹⁰ As a result, the State has purposely kept tuition low for its citizens. This stated goal is reflected in total educational revenues (state appropriations plus tuition) per student FTE. Whereas North Carolina falls close to the national average on this metric (\$11,418 for North Carolina versus \$11,043 nationally), state appropriations comprise a greater proportion of total educational revenues per student FTE than tuition (71% versus 29%, respectively). Nationally, total education revenues per student FTE is almost equally shared between state appropriations and tuition (53% versus 47%, respectively).

In recent years, the State has reduced funding for higher education. The General Assembly has mandated management flexibility reductions to the

⁹ 1999 N.C. Sess. Law, 1999-237, Section 10.14(a) awarded special responsibility status to UNC General Administration.

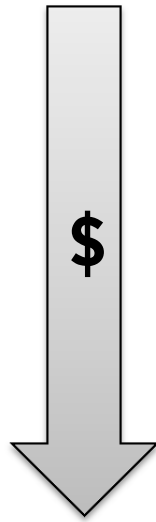
¹⁰ North Carolina Constitution, Article IX, Section 9.

operating budget almost every year since Fiscal Year 2003–04.¹¹ The largest management flexibility reductions occurred in Fiscal Years 2011–12 and 2012–13, when the Legislature reduced the system’s operating budget by over \$414 million for each year of the biennium.

This decline in state funding for higher education in North Carolina mirrors national trends. In response to the economic recession, states have reduced funding for public colleges and universities by 28% between 2008 and 2013. All but two states—North Dakota and Wyoming—are spending less per student on higher education than they did prior to the recession (see Exhibit 3).

Exhibit 3

48 States Decreased Funding for Higher Education Between 2008 and 2013



Percentage Decrease in State Spending Per Student, 2008 to 2013	Number of States	States
0% or increase	2	ND, WY
Less than 10%	1	AK
10-19%	11	AR, IN, MD, ME, MT, NE, NC , NY, VT, WI, WV
20-29%	18	CA, CT, DE, GA, HI, IA, IL, KS, KY, MO, NJ, OH, OK, RI, SD, TX, VA
30-39%	13	AL, CO, ID, MA, MI, MN, MS, NM, NV, PA, SC, TN, UT, WA
40-49%	3	FL, LA, OR
50% or more	2	AZ, NH

Note: State spending per student has been adjusted for inflation.

Source: Program Evaluation Division based on data from the Center on Budget and Policy Priorities.¹²

As state support has declined, North Carolina students and their families have paid a higher share of the cost of their education. State appropriations comprise one-third of revenues from all sources and are the largest source of funding for the UNC system. Adjusting for inflation, state appropriations to the system declined by 10% between Fiscal Years 2007–08 and 2011–12. The UNC system has increased tuition and fee revenue 23% over the same period to make up for declines in state revenue. North Carolina students, like most other students attending public institutions throughout the country, shoulder a greater portion of the cost of education than they did prior to the recession. As shown in Exhibit 4, UNC

¹¹ The General Assembly made a \$15 million efficiency reduction to the UNC campuses in Fiscal Year 2007–08 upon recommendation of the President’s Advisory Committee on Efficiency and Effectiveness (PACE).

¹² Oliff, P., Palacios, V., Johnson, I., and Leachman, M. (2013). *Recent Deep State Higher Education Cuts May Harm Students and the Economy for Years to Come*. Washington, DC: Center on Budget and Policy Priorities.

students now pay \$699 more toward their education than they did in 2007–08, whereas the State pays \$2,516 less. Cost shifting from taxpayers to students has been a driver of increased student debt and decreased college affordability, particularly for low-income students. However, tuition increases alone have not made up for lost state revenue. Public higher education institutions also have had to reduce spending in various ways to make up the difference, including

- eliminating filled and vacant positions;
- instituting employee furloughs and hiring freezes;
- consolidating or eliminating academic schools, departments, and programs; and
- reducing campus services, athletics, student scholarships, and research.

Exhibit 4

UNC System Students Pay More for Their Education as State Appropriations Have Declined and Tuition and Fees Have Increased

	2007–08	2011–12	Change	Percent Change
State appropriations	\$2,570,246,151	\$2,304,622,835	(\$265,623,316)	-10%
Tuition and fees	\$1,077,972,031	\$1,323,599,214	\$245,627,183	23%
Student FTE enrollment	185,717	203,527	17,810	10%
State appropriation per student FTE	\$13,840	\$11,323	(\$2,516)	-18%
Tuition and fees per student FTE	\$5,804	\$6,503	\$699	12%

Notes: Amounts for state appropriations and tuition and fees in 2007–08 have been adjusted for inflation using the Consumer Price Index. FTE stands for full-time equivalent enrollment. Fiscal Year 2011–12 is the most recent year of audited financial data for the UNC system. Tuition and fees includes funding used to support need-based financial aid.

Source: Program Evaluation Division based on data from UNC system office.

Protecting the core mission of the University—instruction, research, and public service—has been an important goal as state funding has declined. Management flexibility allows the UNC institutions to determine where and how to spend state appropriations. When the Legislature makes management flexibility reductions to the UNC system, the UNC Board of Governors determines the specific amount to reduce each campus’s individual operating budget. Once campus budgets have been set, UNC chancellors and other campus leaders decide exactly how these cuts will be distributed on their campuses.

Over time, the General Assembly has been more direct about specifying which university functions should and should not be affected by these reductions. Specifically, session law has directed the UNC Board of Governors to consider these actions before reducing instructional budgets:

- reduce state funding for centers and institutes, speaker series, and other non-academic activities;

- adjust faculty workloads;
- restructure research activities;
- implement cost-saving span of control measures;
- reduce the number of senior and middle management positions;
- eliminate low-performing, redundant, or low-enrollment programs;
- use alternative funding sources, including institutional trust funds and special funds; and
- protect direct classroom services.

In addition, session law has excluded or partially protected certain UNC campuses from management flexibility reductions. For example, Session Law 2013-360 exempted two campuses from these reductions based on their Carnegie group: UNC Asheville and UNC School of the Arts.¹³

In implementing reductions according to legislative directives, UNC campuses have made cuts to campus operations and other non-core functions to meet budgets. Campus operations consist of various functions that support the entire institution, including

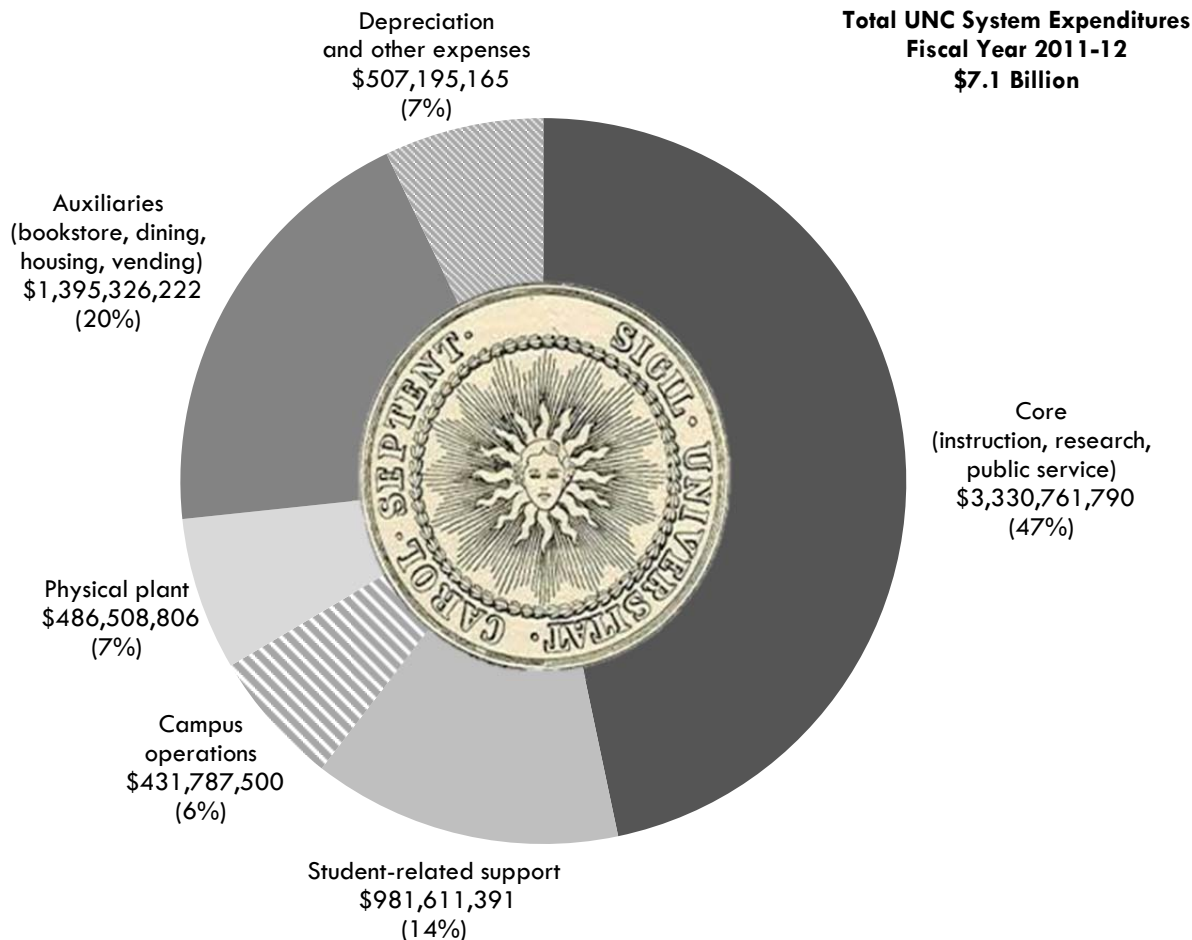
- accounting;
- payroll;
- human resources;
- information technology;
- institutional advancement;
- government and corporate relations;
- legal affairs;
- internal audit;
- facilities;
- institutional research;
- sponsored research; and
- campus safety/police.

The focus on campus operations allows universities to minimize the impact of budget cuts on students and faculty. As shown in Exhibit 5, UNC campuses spent \$431.8 million on campus operational functions in Fiscal Year 2011–12, which represented 6% of their budgets.¹⁴ Between 2003–04 and 2007–08, growth in spending on campus operations outpaced spending on core activities, with expenditures for campus operations increasing 34% compared to 28% for expenditures for instruction, research and public service combined. However as state funding has declined, this trend has reversed. Between 2007–08 and 2011–12, expenditures for campus operations increased 4% whereas spending on core functions increased by 9%.

¹³ N.C. Sess. Law, 2013-360, Section 11.5.(b) also exempted the UNC Need-Based Financial Aid program, the North Carolina Need-Based Scholarship program, and the North Carolina School of Science of Math from management flexibility reductions.

¹⁴ Fiscal Year 2011–12 is the most recent year of audited financial data for the UNC system.

Exhibit 5: Campus Operations Comprised 6% of UNC System Expenditures in Fiscal Year 2011–12



Notes: Total UNC system expenditures include Area Health Education Centers under UNC Chapel Hill and Agricultural Research Service and North Carolina Cooperative Extension under North Carolina State University. This graphic excludes expenditures for the North Carolina School of Science and Math and the UNC system office. Fiscal Year 2011–12 is the most recent year of audited financial data for the UNC system. Campus operations includes Student-related support includes academic support, enrollment management, student affairs, and scholarships/fellowships.

Source: Program Evaluation Division based on data from the UNC system office.

The decrease in state appropriations to the UNC system presents both a challenge and an opportunity to rethink basic processes and organizational structures that have developed over time and may not be organized optimally. Whereas the majority of costs at colleges and universities lie in instruction, research, and public service, campus operations are an area where there is opportunity to find savings through efficiency before cutting mission-critical areas. In the past, public universities facing financial pressure either passed on additional tuition and fees costs to students and their families or sought additional support from state and federal sources. With incomes stagnant due to the recession and slow economic recovery, students and their families are less able to absorb increased tuition and fees. At the same time, state and federal budgets are facing pressures of their own and cannot provide additional funding. The rising cost of education has become a national issue, with the White House aiming to keep college affordable through a plan that would link financial

aid to institutional performance, support academic innovation and competition, and cap student debt. College affordability is also a concern of the UNC system. In August 2013, UNC system President Tom Ross announced his intention to propose no tuition increase for undergraduate state residents at UNC campuses for the 2014–15 academic year.

Well-run higher education institutions operate with a focus on their core missions. The core activities—instruction, research, and public service—are where colleges and universities can differentiate themselves from other institutions and develop their identities. As universities look at where they can make cuts and become more efficient, while seeking to minimize the effects on students, campus operational functions are attractive areas for potential reductions. Beyond basic financial considerations, there are other reasons to support improvements to campus operations. New service delivery models combined with technology improvements offer the opportunity to improve the quality of services. Automating common operational functions can improve processing times, reduce errors, and minimize compliance risk. Colleges and universities across the nation have implemented efforts to consolidate operational functions and leverage economies of scale. Thus, operational efficiency efforts offer a way to streamline, improve, and reduce costs of campus operations in the midst of budgetary constraints.

Given the increased financial constraints facing the UNC system due to declining state resources and questions about the rate of growth in campus operations positions, this report provides an in-depth look at operational efficiency. Specifically, this report examines the success of operational efficiency efforts by the UNC system, how the system has organized and measured the effect of these efforts, how campuses perform on operational efficiency metrics, and prospects for future efficiency gains.

Findings

Finding 1. The University of North Carolina lacks a comprehensive approach to operational efficiency.

In February 2013, the Board of Governors of the University of North Carolina (UNC) issued an updated strategic plan for 2013–2018 entitled, “Our Time Our Future: The UNC Compact with North Carolina.” The board identified five goals in this plan, the fourth of which was “Maximizing Efficiencies.” Under this goal, the UNC system seeks to “streamline operations and focus resources on our core mission of teaching, research and scholarship, and public service.”

The operational efficiency efforts identified in the strategic plan incorporate two previous systemwide efforts.

- **President’s Advisory Committee on Effectiveness and Efficiency (PACE).** Under the direction of previous UNC system president Erskine Bowles, the PACE committee performed a comprehensive review of the administrative costs of the UNC system and made cost avoidance and savings recommendations.
- **UNC Finance Improvement and Transformation (UNC FIT).** In 2008, Ernst and Young completed an operational assessment that identified high-risk operations and proposed improvements in key areas to improve internal control breakdowns.

Eleven current projects contribute to the goal of maximizing efficiency. Exhibit 6 describes these projects in detail. As shown in the exhibit,

- five of these projects are ongoing efforts originating from PACE;
- two projects resulted from activities under UNC FIT;
- three projects were recommended by the Office of State Budget and Management as a result of a management analysis requested and funded by the UNC system office; and
- one project originated from an identified need on the UNC campuses.

Within the UNC system office, the UNC FIT project management office manages 8 of the 11 projects; the information technology division manages two projects; and the finance division manages the energy efficiency effort. Taken together, these projects generate \$25.7 million in recurring cost savings on an annual basis and have saved the UNC system \$101.2 million to date.

Exhibit 6: The UNC System Manages Eleven Operational Efficiency Efforts

Origin	Managed by	Operational Efficiency Project	Description	Year Started	Number of Campuses	Average Annual Cost Savings (Recurring)	Total Cost Savings to Date (Recurring)
UNC FIT	UNC FIT	UNC Strategic Sourcing	<p>This project includes three work streams. The Combined Price Initiative allows institutions to take advantage of the combined purchasing power of the UNC system for IT purchases and support and to meet state legislative requirements. The Collaborative Sourcing Project promotes cost savings by campus procurement officers and chief information officers, obtaining the best prices by negotiating contracts with vendors that apply across all UNC institutions. The Statewide Collaborative Sourcing Project is an effort started with the Department of Administration to discuss a strategic sourcing collaboration.</p> <p><u>Efficiency strategy:</u> Reduce costs by leveraging combined university spending, negotiating the best value for term contracts, and increasing the use of standardized pricing from top suppliers.</p>	2006	16	\$5,695,531	\$39,868,720
PACE	Finance	Guaranteed Energy Savings Performance Contracts	<p>Guaranteed Energy Savings Performance contracts allow an institution's future energy savings to be used to pay for the installation of energy-savings measures under contract with a competitively selected energy services company.</p> <p><u>Efficiency strategy:</u> Reduce costs by decreasing energy consumption and obtaining best pricing for utility service commodities and services.</p>	2007	12	\$10,351,600	\$24,025,600
PACE	UNC FIT	e-Procurement	<p>This project uses a third-party vendor to integrate and consolidate business-to-business electronic commerce between vendors and UNC institutions. This project allows institutions to use the same large consortia product catalogs to obtain the best prices and almost entirely eliminates the need for manual processing of invoices.</p> <p><u>Efficiency strategy:</u> Reduce costs for common items, improve processing time, and automate the purchase-to-pay business process.</p>	2006	15	\$3,530,960	\$20,206,930

Origin	Managed by	Operational Efficiency Project	Description	Year Started	Number of Campuses	Average Annual Cost Savings (Recurring)	Total Cost Savings to Date (Recurring)
PACE	UNC FIT	Human Resources and Payroll Shared Services Operations	<p>This project promotes efficiencies by consolidating nine schools' payroll platforms into a common platform. This project includes the shared services center operations and platform enhancements including web-based time entry and interfaces for third-party vendors.</p> <p><u>Efficiency strategy:</u> Increase efficiency by providing consistent processing, monitoring, and support of payroll functions.</p>	2009	9	\$2,620,351	\$5,648,705
PACE	Information Technology	Banner ERP Hosting Service	<p>This project provides institutions a secure database hosting environment for their Banner ERP systems, including installation, maintenance, upgrades, and problem resolution for various IT applications.</p> <p><u>Efficiency strategy:</u> Reduce information technology costs and improve disaster recovery support.</p>	2008	7	\$888,000	\$3,946,680
PACE	Information Technology	Shared Database Administrator Pool	<p>The Shared Database Administrator Pool allows participating institutions to share IT resources and allows campuses access to high skill sets on particular issues relating to the Banner ERP. This project allows for a consistent set of best practices and change management processes to be applied across institutions and creates a predictable IT staffing model for institutions.</p> <p><u>Efficiency strategy:</u> Improve service quality at low cost.</p>	2006	9	\$510,000	\$3,360,000
UNC FIT	UNC FIT	UNC FIT Compliance	<p>This project meets the standards of the Office of the State Controller's EAGLE program, which seeks to establish and maintain an effective system of internal control within state agencies and universities and to ensure proper accountability in key business process areas, including general accounting, contracts and grants, student accounts, and capital assets.</p> <p><u>Efficiency strategy:</u> Increase compliance and improve monitoring in key business process areas.</p>	2009	16	\$1,198,080	\$2,396,160

Origin	Managed by	Operational Efficiency Project	Description	Year Started	Number of Campuses	Average Annual Cost Savings (Recurring)	Total Cost Savings to Date (Recurring)
Campus	UNC FIT	Human Resources Data Mart	The Human Resources Data Mart provides a single repository for timely and accurate human resource information for institutions and eliminates the need for duplicate data entry into the State's Personnel Management Information System. This project also maximizes the use of IT resources and replaces the personnel data file submission process for all institutions. <u>Efficiency strategy:</u> Establish unified reporting and position classifications across the system.	2011	16	\$810,360	\$1,620,720
UNC System Office	UNC FIT	Financial Aid Verification (Pilot implementation)	The service provides a one-stop financial aid verification process for applicants and eliminates duplicate verifications for students who apply to more than one school. <u>Efficiency strategy:</u> Streamline and standardize the financial aid verification process and reduce processing costs.	2012	2	\$108,614	\$108,614
UNC System Office	UNC FIT	Residency Verification (Planning stage)	This project seeks to avoid institutions reaching different determinations of a student's residency by adopting a more centralized common approach for determining residency among institutions and partnering with the North Carolina Community College System, the State Educational Assistance Authority, and potentially with the North Carolina Independent Colleges and Universities. <u>Efficiency strategy:</u> Streamline and standardize the residency verification process and reduce processing costs.	2013	15	N/A	N/A
UNC System Office	UNC FIT	Internal Audit Shared Services (Planning stage)	This project attempts to gain efficiencies by analyzing the need for each institution to have its own internal auditor and allows for guidance and expertise on complex audit matters for schools without such staff expertise. <u>Efficiency strategy:</u> Leverage staffing and expertise to improve internal audit services.	2013	5	N/A	N/A
Total Savings for the UNC System						\$ 25,713,496	\$ 101,182,130

Notes: Banner ERP is an enterprise resource planning system used in higher education. EAGLE stands for Enhancing Accountability in Government through Leadership and Education. PACE stands for President's Advisory Committee on Effectiveness and Efficiency. UNC FIT stands for UNC Finance Improvement and Transformation. Residency Verification and Internal Audit Shared Services are in the planning stage and have not generated savings.

Source: Program Evaluation Division based on a review of documents from the UNC system office.

The UNC system's operational efficiency efforts lack important characteristics of three major components of a comprehensive approach. Based on interviews with subject matter experts and a review of documents on higher education efficiency efforts, the Program Evaluation Division identified three major components of a comprehensive approach to operational efficiency. These components consist in having

- six elements of a successful initiative;
- nine major operational areas to concentrate efficiency efforts; and
- six characteristics of a well-defined structure to manage efforts and communicate results.

The UNC system's approach to operational efficiency lacks several elements of a successful initiative. The Program Evaluation Division identified six elements of a successful operational efficiency initiative. As shown in Exhibit 7, the UNC system fully implements only one of these elements (support from campus leaders) and entirely lacks two essential elements of a successful operational efficiency initiative: charge from the top and faculty buy-in. In addition, the system needs to strengthen the metrics, transparency, and accountability of its efforts.

- **The UNC system does not have a board policy that defines the vision and goals for operational efficiency.** Instead, the UNC Board of Governors has focused on maximizing efficiencies in its strategic plan. The chair of the UNC Board of Governors has established a Committee on Strategic Planning to ensure accountability for implementing the plan and for monitoring progress toward all identified goals. The president submits regular and detailed reports to the committee as required. UNC system officials believe these actions demonstrate the president and board's commitment to operational efficiency. However, the board has not adopted a formal policy on operational efficiency to guide current and future efforts. The lack of a board policy has two adverse implications.
 - **The goal to improve operational efficiency can change under new leadership.** A strategic plan is subject to the input and feedback of the board members, system officials, and chancellors in place at the time of its development. For example, the 2004–2009 strategic plan outlined six interrelated strategic directions and twelve priorities, none of which focused on improving operational efficiency. If improving operational efficiency is an important value for the University, then it should be expressed as board policy. An official policy ensures that the UNC system and its constituent institutions are focused on seeking an efficient use of available resources in service to the citizens of North Carolina.
 - **Campuses do not have clear direction and guidance.** Discussions with campus officials during site visits confirm this finding. While campus officials understand and support the goal to maximize efficiencies outlined in the strategic plan, they do not interpret this goal as a specific charge to the campuses to improve operational efficiency. An official

policy would state and describe efficiency goals and direct the UNC system president to develop and implement best practices, guidelines, and plans necessary for the constituent institutions to achieve such goals. The board can remedy this issue on its own by adopting such a policy at an upcoming meeting.

Exhibit 7: UNC System Operational Efficiency Efforts Lack Elements of a Successful Initiative

Element	Description	UNC System Efforts	PED Assessment
Charge from the top	Vision and goals for operational efficiency from the highest level	No board resolution or policy on operational efficiency for the system	○
Support from campus leaders	Campus leaders responsible for each efficiency area	Campus participation on advisory groups for system-level projects	●
Faculty buy-in	Faculty participation or a faculty champion to promote operational efficiency	The UNC Board of Governors has not designated a faculty champion and faculty do not participate on advisory groups for system-level projects	○
Metrics	Identified metrics for each efficiency area	Metrics identified or are planned for 7 out of 11 projects: e-Procurement, UNC FIT Compliance, Guaranteed Energy Savings Performance Contracts, Human Resources and Payroll Shared Services Operations, UNC Strategic Sourcing, Residency Verification, and Internal Audit Shared Services	◐
Transparency	Publish results of operational efficiency efforts to a broad audience	Reports made to UNC Board of Governors and campuses No central place to obtain information on all operational efficiency efforts	◐
Accountability	Campus leaders held responsible Institutional performance linked to budget decisions	Progress on operational efficiency not linked to chancellor performance evaluation Institutional performance on the UNC FIT Compliance index is the only project linked to budgetary decisions, but it does not measure operational efficiency	◐

● = Fully implemented; ◐ = Partially implemented; ○ = Not implemented at all

Notes: PED stands for the Program Evaluation Division. UNC FIT stands for UNC Finance Improvement and Transformation.

Source: Program Evaluation Division based on interviews with subject matter experts and UNC General Administration and review of documents.

- The UNC system has not engaged faculty in its operational efficiency efforts.** In its review of documents, the Program Evaluation Division did not identify evidence of faculty participation in any system-level operational efficiency efforts. Faculty members do not serve on advisory groups or workgroups for specific projects, and the board has not designated a faculty champion to promote operational efficiency among UNC faculty members. While faculty did advise the UNC Board of Governors in the development of the 2013–18 strategic plan, their recommendations focused on strengthening academic quality and faculty scholarship and did not address potential areas to improve operational

efficiency. The system's previous efficiency effort, PACE, had one faculty representative as part of the eight-member committee that oversaw the review of expenditures and multiple systemwide working groups. However, the inclusion of faculty in the oversight and implementation of operational efficiency efforts did not carry forward to current projects.

- **The UNC system lacks specific performance metrics for four of its operational efficiency efforts.** Seven out of the 11 efficiency projects have metrics. The UNC FIT Compliance program and the Human Resources and Payroll Shared Services Operations use the same key performance indicators and management dashboard to monitor campus progress. System officials conduct spend analyses to determine the savings for e-Procurement and the UNC Strategic Sourcing efforts. The Guaranteed Energy Savings Performance Contracts have specified performance targets. The two projects currently in the planning stage—residency verification and internal audit—include tasks to establish baseline efficiency measures to track the future success of each effort. The four other projects are monitored by system officials, but have no explicit metrics to determine the success of each project. For example, the UNC system expects to save up to \$242,375 annually from the financial aid verification project by eliminating the number of duplicate financial aid applications processed by campuses. However, the dashboard reports used to monitor this project only provide data on the number of applications in various stages of approval. The project does not track the reduction of duplicate financial aid applications as a metric of success.
- **Data on operational efficiency is not readily accessible to the Legislature or North Carolinians.** There is no single report or area on the UNC system website to obtain descriptions and status updates of all operational efficiency efforts, cost savings associated with each effort, or a list of the system and campus officials involved. System officials present status reports on projects outlined in the strategic plan to the board, and these documents are available on the webpages of pre-meeting materials for individual board meetings. A separate webpage lists and describes projects managed under UNC FIT and provides information on the process leads and advisory teams responsible for activities. However, this webpage does not summarize cost savings generated by these projects. In addition, system officials noted that information on the UNC FIT webpage is dated.¹⁵ Lastly, the website includes a report on important indicators entitled, “The University of North Carolina: A Profile Based on Key Trend and Accountability Data” produced for 2010 and 2011, but only one metric relates to operational efficiency.¹⁶ This report has been discontinued due to a competing priority to develop a dashboard system with performance metrics, including those related to the strategic plan. System officials presented the first iteration of the dashboard to the UNC Board of

¹⁵ According to UNC system officials, the www.northcarolina.edu website is being redesigned.

¹⁶ This metric relates to facilities management.

Governors in October 2013, but have not set a date to make the dashboard accessible to the Legislature and North Carolina citizens.

- **UNC chancellor performance is not explicitly linked to the operational efficiency of their campuses.** Implementation of systemwide efforts to improve operational efficiency depends on proper execution at the campus level. UNC chancellors have broad authority over the allocation of funding and positions on their campuses. Because UNC chancellors are charged with ensuring their campuses fully participate in systemwide efforts, they should be held accountable for campus performance. UNC Policy 200.4 indicates three formal assessments of chancellor performance:
 - an annual self-assessment of goals and accomplishments reviewed by the president and placed in the chancellor's personnel file with the president's written response;
 - a board of trustees survey based on a template provided by the system office conducted every four years starting with the second spring of the chancellor's tenure, which is reviewed in a meeting with the president, chair of the board of trustees, and chancellor; and
 - a comprehensive assessment of the chancellor's performance by key campus constituencies, conducted every four years starting with the fourth spring of a chancellor's tenure, which is placed in the chancellor's personnel file with responses from the president and chancellor.

However, the policy does not specify any criteria for evaluating chancellor performance, nor does it explicitly link chancellor performance to campus performance on academic or operational efficiency measures or systemwide goals for academic or operational success. Although each member of the board of trustees provides a subjective assessment of chancellor performance in key areas, the evaluation process does not include a systematic review of objective data on which to base ratings.

- **The UNC system has tied performance on the UNC FIT Compliance index to budget decisions, but this index is not a measure of operational efficiency.** Other than the UNC FIT Compliance index, there is no consistent metric to track operational performance. Furthermore, both system and campus officials perceive this effort as measuring compliance with internal controls rather than operational efficiency. Although compliance with these standards helps to streamline and standardize key business processes, the UNC FIT Compliance index was never intended to function as an operational efficiency measure. A detailed discussion of operational efficiency performance metrics appears in Finding 3.

The UNC system's approach is not comprehensive because it does not pursue operational efficiency in two key areas: organizational spans and layers and space utilization. Subject matter experts identified nine primary areas for improving the efficiency of higher education

institutions.¹⁷ The Program Evaluation Division focused on seven out of the nine areas to determine how well UNC operational efficiency efforts met recommended practices (see Exhibit 8). This analysis excludes centers and institutes because these entities are closely associated with campus academic departments and thus can be considered part of the core mission of the University. In addition, the General Assembly reduced the budgets for UNC centers and institutes by \$12 million in Fiscal Year 2009–10 and \$14 million in Fiscal Year 2010–11.¹⁸ The analysis also excludes research support and compliance because 85% of research expenditures occur at two campuses, North Carolina State University and UNC Chapel Hill. Thus, efficiency gains for the entire system in this area may be limited.

¹⁷ The nine areas are organizational spans and layers, procurement, information technology, finance, human resources, energy services, space utilization, centers and institutes, and research support.

¹⁸ Joint Conference Committee Report on the Continuation, Expansion, and Capital Budgets (2009, August). *Report to the 2009 Session of the General Assembly*. Raleigh, NC: General Assembly.

Exhibit 8: UNC System Lacks Operational Efficiency Efforts in Two Key Areas

Efficiency Area	Recommended Strategies	UNC System Efforts	PED Assessment
Organizational spans and layers	<ul style="list-style-type: none"> • Create policies to prevent new operational layers • Engage in short- and long-term actions to decrease layers and increase spans of control across all areas 	No systemwide initiative identified	○
Space utilization	<ul style="list-style-type: none"> • Increase classroom utilization • Implement policies and standards to maximize space utilization 	Results of annual Facilities Inventory and Utilization Study not used to maximize space utilization	○
Procurement	<ul style="list-style-type: none"> • Implement strategic vendor contracts to standardize and manage demand for commonly purchased goods • Implement and drive usage of e-procurement to make purchasing easier and more efficient 	e-Procurement, UNC Strategic Sourcing	●
Information Technology	<ul style="list-style-type: none"> • Consolidate IT infrastructure • Develop standards for IT functions, including application development, support services, and procurement • Provide space and hosting and support IT systems centrally 	Banner ERP Hosting Service, Shared Database Administrator Pool, UNC Strategic Sourcing	●
Finance	<ul style="list-style-type: none"> • Determine and disseminate an exhaustive set of current policies and processes • Establish central finance capability • Invest in the appropriate systems and platforms • Build shared services functions 	UNC FIT Compliance, Financial Aid Verification, Human Resources and Payroll Shared Services Operations	●
Human Resources	<ul style="list-style-type: none"> • Invest in the appropriate systems and platforms • Build shared services functions 	Human Resources and Payroll Shared Services Operations, Human Resources Data Mart	●
Energy services	<ul style="list-style-type: none"> • Institute smart metering and performance-based contracts for energy efficiency 	Guaranteed Energy Savings Performance Contracts	●

● = Fully implemented; ○ = Not implemented at all

Notes: Banner ERP is an enterprise resource planning system for higher education institutions.

Source: Program Evaluation Division based on interviews with UNC system officials and review of documents.

As shown in Exhibit 8, the UNC system lacks operational efficiency efforts in two key areas: organizational spans and layers and space utilization.

- **Organizational spans and layers.** Achieving efficiency in this area requires the creation of policies to prevent new operational layers and short- and long-term actions to decrease layers and increase spans of control across all areas. UNC system officials shared the results of a 2012 benchmarking study of staffing ratios in selected

personnel functions with the campuses.¹⁹ This report identified methods for adjusting the number of information technology staff, but system officials have chosen to use this information to encourage changes rather than initiate a formal effort. Campuses report making personnel reductions in campus operations and other university functions, but system officials have not conducted a formal review to determine whether these changes have reduced organizational spans and layers systemwide. Within the UNC system, chancellors have the authority to create and abolish positions on their campuses. However, as discussed earlier in this finding, chancellors are not held accountable for the operational efficiency of their campuses.

- **Space utilization.** In 1998, the UNC Board of Governors set the space utilization standard for the average weekly use of student stations in classrooms at 22.75 hours per week and the average weekly use of student stations in laboratories at 15 hours per week.²⁰ However, a recent UNC system study shows that most UNC campuses fall below these standards.²¹ As shown in Exhibit 9, none of the UNC campuses met the classroom utilization standard and only two campuses met the laboratory standard in 2012. In fact, systemwide average weekly use of classrooms has declined since the UNC system started to focus on operational efficiency, dropping from 18.3% in 2006 to 16.1% in 2012. Laboratory use during this time period remained unchanged. Despite these results, the UNC system has not implemented an initiative to improve efficiency in this area. Furthermore, the 2013–15 strategic plan does not include an objective to increase space utilization on campuses as part of its Goal 4: Maximizing Efficiencies, which suggests that improvement in this area is not part of the system’s operational efficiency efforts. System officials report using space utilization data to consider new construction requests. However, the UNC system request for capital planning projects in Fiscal Year 2011–13 included a building for every campus, even though most campuses did not meet the space utilization standards for classrooms or laboratory space in Fall 2009.²² Although the Legislature makes the final decision to approve requests for capital planning, the UNC system’s practice of making requests on behalf of campuses that do not meet space utilization standards discourages better usage of classroom and laboratory space and may contribute to unnecessary spending on new capital projects.

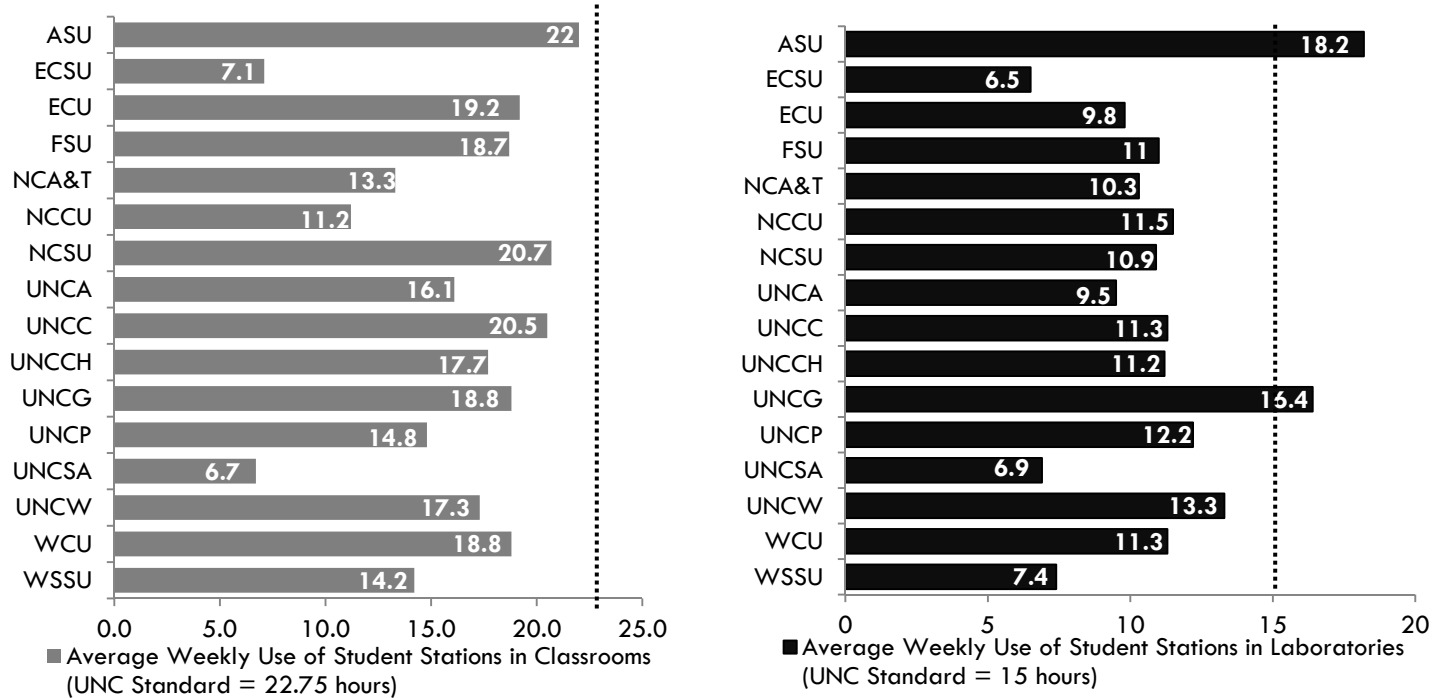
¹⁹ These functions included personnel in administrative services, business management, education administration, human resources, and information technology.

²⁰ The standard for classrooms is based on the assumption that average weekly use of classrooms is 35 hours and there is 65% utilization of student stations when classrooms are in use. The standard for laboratory use is based on the assumption that average weekly use of laboratories is 20 hours and there is 75% utilization of student stations when classrooms are in use.

²¹ Higher Education Comprehensive Planning Program (2013, September). *Facilities Inventory and Utilization Study*. Report prepared for the State of North Carolina. Chapel Hill, NC: The University of North Carolina.

²² System officials used Fall 2009 space utilization data to prioritize Fiscal Year 2011–13 capital planning requests. In this year, none of the campuses met the classroom standard and Appalachian State University and UNC Wilmington met the laboratory standard.

Exhibit 9: Most UNC Campuses Did Not Meet the Standards for Average Weekly Use of Student Stations in Classrooms and Laboratories in 2012



Source: Program Evaluation Division based on the UNC Facilities Inventory and Utilization Study (2013).

Both space utilization and organizational spans and layers represent operational efficiency areas in which campuses have a high degree of control and autonomy. The system office can set policy, but it is up to the chancellors to ensure that these policies are followed. More efficient utilization of classroom space on campuses suggests an opportunity to reduce future capital expenditures because it would reduce the need to construct new classroom buildings. However, the system has not enforced existing space utilization standards, leaving potential cost savings in this area virtually untapped. Likewise, fewer organizational layers could reduce personnel costs. Given the magnitude of budget reductions, system officials have chosen an informal approach to reduce organizational layers but have neither determined the total savings from previous personnel cuts nor whether additional savings in this area are possible.

UNC system officials report they have limited their efforts to the projects identified in the 2013–2018 strategic plan. Realizing that they “cannot be everything to everyone,” system officials noted they have selected projects with the largest return on investment and/or that could provide more consistent and better service. However, the above analysis suggests the need to reexamine this approach, particularly in operational efficiency areas that are known to produce cost savings.

The UNC system has organized many efforts under the UNC FIT project management office, but this office does not have all the characteristics of a well-defined structure. Based on input from subject matter experts and research on higher education efficiency efforts in other states, the Program Evaluation Division identified six characteristics of a well-defined

structure for implementing operational efficiency efforts. As shown in Exhibit 10, the structure supporting the UNC system's operational efficiency efforts does not house all projects under the UNC FIT structure, has limited faculty participation in a shared governance model, and does not have a formal communication strategy or recognized brand.

- **UNC FIT does not manage all operational efficiency projects.** As mentioned earlier in the finding, UNC FIT manages 8 of the 11 operational efficiency projects. The information technology division within the system office manages the projects for Banner ERP Hosting and the Shared Database Administrator Pool, and the finance division manages the Guaranteed Energy Savings Performance contracts.²³ The UNC system's chief operating officer directs the work of designated staff that lead systemwide efficiency efforts. However, because the projects managed under information technology and finance are not managed within the UNC FIT structure, these projects are not directly overseen by the UNC FIT executive steering committee and do not get the support of the UNC FIT project management office and its infrastructure. UNC FIT was created with a single financial integrity focus. The executive steering committee has co-managed information technology and energy projects but does not have the expertise to advise and manage projects in these other areas. Thus, these projects have not been placed under the scope of UNC FIT. A more comprehensive approach would bring expertise from all campus operations under one umbrella to ensure consistent oversight and to support the success of all efficiency projects.
- **UNC FIT lacks involvement of faculty leadership.** Two campus chief academic officers participate in the UNC FIT executive steering committee, but no formal mechanism exists requiring the involvement of UNC faculty leaders.²⁴ The UNC Faculty Assembly is the system-level body representing UNC faculty at all campuses. As a member of the UNC FIT steering committee, the system office's chief academic officer provides updates to the assembly but does not have a direct method to engage faculty leadership. Operational efficiency efforts often affect core university functions (instruction, research, and public service) and thus, participation and support from faculty leadership is important to achieve the types of changes that result in substantial cost savings or process improvement. A shared governance structure that includes UNC faculty leaders would allow this key stakeholder group to give voice to its unique concerns and play a role in the success of operational efficiency efforts.
- **UNC FIT does not have a communication strategy or a recognized brand.** Communication and training are critical factors for achieving success in any business transformation. Without a

²³ Banner ERP is an enterprise resource planning system used in higher education. UNC campuses use Banner ERP, with the exception of North Carolina State University and UNC Chapel Hill using PeopleSoft.

²⁴ The provost of UNC Charlotte and the provost and vice president for academic affairs of Fayetteville State University serve on the UNC FIT executive steering committee.

comprehensive communications strategy and adequate training, the system will face significant obstacles in implementing its operational efficiency efforts. While the UNC FIT project management office has started to provide training to campuses, it does not have a communications strategy in place.²⁵ Furthermore, none of the campuses visited by the Program Evaluation Division expressed an understanding of UNC FIT beyond being the collection of key performance indicators associated with the compliance program. However, when asked about specific projects managed by the UNC FIT project management office, campus officials could readily discuss how these projects have been implemented on their campuses, though they did not associate these projects with UNC FIT.

Exhibit 10

The UNC FIT Structure Does Not Have All of the Characteristics of a Well-Defined Structure

Characteristics	UNC System Efforts	PED Assessment
Involvement of the organization's leader	UNC system president participates as a program sponsor	●
Executive steering committee	Executive steering committee has representation from system- and campus-level officials responsible for operational functions	●
Project management office for operational efficiency efforts	UNC FIT is the central office to manage projects and provide support	●
Operational efficiency efforts housed under a single structure	Three out of 11 operational efficiency projects are not managed under the UNC FIT structure	◐
Shared governance model to promote involvement of faculty leaders	The UNC FIT executive steering committee includes chief academic officers but does not formally engage the UNC Faculty Assembly	◐
Clear communication strategy and brand for the effort	No communication plan or recognized brand for the effort	○
● = Fully implemented; ◐ = Partially implemented; ○ = Not implemented at all		

Notes: UNC FIT stands for UNC Finance Improvement and Transformation.

Source: Program Evaluation Division based on interviews, review of documents from UNC system office, and campus site visits.

The closest example of a comprehensive approach to operational efficiency within the UNC system is Carolina Counts at UNC Chapel Hill. In 2009, UNC Chapel Hill contracted with Bain & Company to review operating structures, processes, staffing, and expenses.²⁶ The campus developed Carolina Counts to encompass operational improvement and implement the consultant's recommendations. Carolina Counts aims to shift funding from campus operations to core functions, simplify and streamline

²⁵ UNC FIT provides updates to chancellors, chief financial officers, and chief audit officers.

²⁶ Bain & Company (2009, July). *Cost Diagnostic Final Report*. Report prepared for University of North Carolina at Chapel Hill.

processes and systems, and reduce bureaucracy while increasing collaboration. As shown in Exhibit 11, Carolina Counts has most of the features of a comprehensive approach to operational efficiency with two exceptions:

- participation in the initiative is not mandatory, and thus the campus does not tie accountability to funding or to the performance evaluation of deans; and
- Carolina Counts has a faculty champion but does not engage academic leaders in a shared governance model.

Despite these limitations, Carolina Counts has saved UNC Chapel Hill \$58.1 million over four years, or 88% of the campus target of \$66 million in recurring state dollars over the five-year period 2009–2014.

Exhibit 11

Carolina Counts Has Most Features of a Comprehensive Approach to Operational Efficiency

Features of a Comprehensive Approach	UNC Chapel Hill Carolina Counts Initiative
Five of six elements of a successful initiative	<ul style="list-style-type: none"> • Campus charge for operational efficiency set by the chancellor • Campus leads of operational areas serve as project sponsors • Designated faculty champion • Established benchmarks and metrics for operational improvement for each project • Single website for all information on Carolina Counts initiative with an internal portal to share benchmark data and compare across schools
Efficiency efforts in all nine operational areas	UNC Chapel Hill has identified 118 projects across the operational efficiency areas recommended by subject matter experts
Five of six characteristics of a well-defined structure	<ul style="list-style-type: none"> • Chancellor is the recognized leader of the Carolina Counts Initiative and participates in the oversight group • Carolina Counts oversight group consists of the chancellor, provost, vice chancellor for finance and administration, executive associate provost for financial affairs, and four members of the board of trustees including the chair • Carolina Counts has a central project management office to track progress and provide support to the campus community • All operational efficiency projects are housed under Carolina Counts • Carolina Counts is the recognized brand for operational efficiency efforts at UNC Chapel Hill

Source: Program Evaluation Division based on data and review of documents from the Carolina Counts project management office.

In sum, the UNC system has engaged in numerous efforts to improve operational efficiency since 2006. However, these efforts lack some of the features of a comprehensive approach. The UNC system lacks the charge from the top and faculty buy-in required for a successful initiative. Also, these efforts have insufficient metrics, transparency, and mechanisms for accountability at the institutional and chancellor level typical of successful

comprehensive initiatives. In addition, system officials are not pursuing efforts in all operational efficiency areas identified by subject matter experts. Lastly, the structure used to manage operational efficiency efforts lacks a shared governance model with the academic community, does not have a clear communication plan or recognized brand, and does not manage all efforts within a single unit. Without a comprehensive approach to operational efficiency, the UNC system cannot ensure the most efficient use of available resources in fulfillment of its mission.

Finding 2. The systemwide initiative does not incorporate campus-level operational efficiency efforts and misses opportunities to more fully engage campuses.

Campuses are engaged in operational efficiency efforts at the system level, within their own institutions, and with other UNC campuses. As shown in Exhibit 12, each campus participates in at least 5 of the 11 operational efficiency efforts sponsored by the UNC system. In addition, each campus has at least one official serving on advisory teams for operational efficiency efforts managed by the UNC FIT project management office. As participants in advisory committees, campuses provide subject matter expertise and validate the content of project outputs. Furthermore, each chancellor assigns an individual to serve on the UNC Shared Services Alliance Advisory Board that explores collaborative opportunities across a broad range of technology development. For example, this advisory board initiated central hosting services for the Banner ERP system for participating schools.²⁷

Participation of all campuses in systemwide operational efficiency efforts is not required for the effort to be successful. Each campus determines whether the effort will streamline, improve, or reduce costs of its operations and if it has the necessary resources to implement the effort. For example, UNC School of the Arts does not participate in e-Procurement because the campus is able to achieve savings on the goods and items it purchases via state-term contracts. Similarly, 14 out of the 16 campuses run the Banner ERP system but only 7 campuses participate in the shared hosting services (see Exhibit 12). Participating campuses gain a secure database environment that they could not otherwise afford. Non-participating campuses have the resources to pay for this level of support on their own. North Carolina State University and UNC Chapel Hill do not use the Banner ERP system and, thus, would not benefit from the efficiency efforts that rely on this system.²⁸

²⁷ Banner ERP is an enterprise resource planning system used in higher education.

²⁸ North Carolina State University and UNC Chapel Hill have implemented PeopleSoft.

Exhibit 12: UNC Campuses Participate in Systemwide Operational Efficiency Efforts

UNC System Operational Efficiency Effort	ASU	ECU	ECSU	FSU	NCA&T	NCCU	NSU	UNCA	UNCCH	UNCCL	UNCG	UNCP	UNCSA	UNCW	WCU	WSSU	Total
UNC Strategic Sourcing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
Guaranteed Energy Savings Performance Contracts	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	13
e-Procurement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	15
Human Resources and Payroll Shared Services Operations			✓	✓	✓	✓		✓				✓	✓		✓	✓	9
Banner ERP Hosting Service			✓	✓	✓	✓		✓					✓			✓	7
Shared Database Administrator Pool			✓	✓	✓	✓		✓		✓			✓		✓	✓	9
UNC FIT Compliance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
Human Resources Data Mart	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	16
Financial Aid Verification (Pilot Implementation)			✓													✓	2
Residency Verification (Planning stage)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	15
Internal Audit Shared Services (Planning stage)		✓				✓	✓	✓				✓					5
Total Campus Participation in Operational Efficiency Efforts	6	7	9	9	9	10	6	10	5	7	6	8	7	6	8	10	

Notes: Banner ERP is an enterprise resource planning system used in higher education. UNC FIT stands for UNC Finance Improvement and Transformation.

Source: Program Evaluation Division based on review of documents from the UNC system office.

Through site visits, the Program Evaluation Division identified several campus-level efforts to improve operational efficiency and effectiveness. In addition to the Carolina Counts initiative at UNC Chapel Hill (see Finding 1), other individual campuses have implemented efficiency efforts to streamline, improve, and reduce costs of campus operational functions. These efforts are described below.

- **North Carolina State University.** This campus has consolidated its equity and diversity offices into the Office of Institutional Equity and Diversity; eliminated the Office of Extension, Engagement, and Economic Development; and streamlined business processes for information technology, travel, and human resources.
- **UNC Asheville.** The campus realigned its accounting structure to track personnel costs by department. These efforts are pursued in combination with priorities outlined in the campus’ strategic plan to review organizational structures, eliminate non-core functions, and reduce expenditures.
- **UNC Charlotte.** This campus created a centralized call center to answer questions for multiple offices across three divisions. The call center offers four services: functioning as the university switchboard, providing customer service support for enrollment offices, providing notification services for the campus, and establishing phone trees.

The campus is also investigating ways to further centralize information technology resources.

- **UNC Greensboro.** As part of its continuous improvement culture, campus leaders reviewed the results of the Bain & Company report for UNC Chapel Hill to identify options to reduce expenses and improve the effectiveness and efficiency of campus operations. The campus has pursued improvements in the areas of information technology, finance, human resources, centers and institutes, and energy services.
- **UNC Wilmington.** The campus has designed and constructed a data warehouse that combines student registration and enrollment, human resources, financial data, and organizational structure information to support strategic planning and management activities. Also, the campus established the University Innovation Council to identify, develop, and analyze ideas and make recommendations to campus leaders about promising innovations that may improve program quality, save money and time, or increase revenues.

In addition, UNC campuses have achieved efficiency savings by collaborating on a small scale. These examples illustrate such efforts.

- **Winston-Salem State University and UNC School of the Arts.** These campuses have collaborated to share internal audit and property management resources. Winston-Salem State University has a three-year contract with the UNC School of the Arts to provide internal audit services. UNC School of the Arts pays \$32,000 per year for these services and has eliminated its internal audit position. In addition, UNC School of the Arts has an agreement to use Winston-Salem State University's property manager for an hourly fee to provide services when needed.
- **UNC Greensboro and UNC School of the Arts.** UNC School of the Arts has contracted with UNC Greensboro to host Blackboard Learn, a learning management software system, and provide help desk support to students and faculty. Without this collaboration with UNC Greensboro, UNC School of the Arts would not be able to afford to provide this level of service to its campus community. UNC Greensboro also hosts Blackboard Learn for North Carolina A&T State University and Fayetteville State University at cost.
- **North Carolina State University and UNC Chapel Hill.** These campuses have collaborated in the area of temporary staffing. UNC Chapel Hill's temporary staffing service closed in January 2010. By partnering with North Carolina State University (NCSU), the campus was able to reestablish these services. NCSU has an ongoing service agreement with UNC Chapel Hill to provide full-service, in-house temporary staffing with on-site staff supporting each campus. NCSU charges an administrative fee of 27% of the temporary employee's hourly pay rate compared to the 45-50% in administrative fees charged by private temporary services. A shared services model works well because these campuses recruit temporary workers from the same geographic area.

Campus- and system-level operational efficiency efforts have benefited and challenged campuses in several ways. Some specific benefits include

- focusing more attention on process and efficiency improvements;
- better allocation of scarce financial resources;
- ability to leverage economies of scale to obtain better pricing;
- use of shared services or other collaborative models to provide services that a campus could not afford to provide on its own; and
- enhanced customer satisfaction from faculty, staff, and students as campuses have automated manual processes.

In addition, improving operational efficiency has strengthened the ability of campuses to continue to maintain levels of support with declining resources. Several campuses began their operational efficiency efforts before the economic recession. With these efforts in place, campuses were able to manage the subsequent reductions in state funding.

However, campuses report that reducing campus operations presents challenges to protecting core functions of instruction, research, and public service. Through site visits and administrative queries, campuses emphasized they “can’t cut operations without affecting the core.” For example, core mission activities have been affected by decreased service levels due to reduced or insufficient resources in some areas and deferral of equipment purchases, repairs, and upgrades to facilities and campus computer and wireless networks. Campuses also report challenges with retaining campus operations staff due to increasing workloads and limited funding for salary increases and cost-of-living adjustments.

UNC system officials have begun to identify campus-initiated operational efficiency efforts that might be scaled to a system level but may be missing opportunities to more fully engage campuses. In June 2013, the UNC system office surveyed campuses to understand their efforts to outsource with a vendor and co-source with another campus to deliver services in several business areas: athletics/special events, facilities, finance and administration, human resources, student services, systems and technology, and travel. The UNC System Innovations Survey identified 30 functions in which eight or more campuses used outsourced or co-sourced solutions that could be scaled to a system level. System officials intend to discuss the results with campuses to determine the 10-12 projects that are most feasible and then select three or four projects to implement.

While this approach may help the UNC system identify campus-initiated efforts that have the largest return on investment, it misses the opportunity to engage campuses in more meaningful ways that may benefit other campuses and the system as a whole. These missed opportunities are described below.

- **Missed opportunity to identify savings for smaller campuses.** Large scale efforts to improve operational efficiency often take time to implement and realize resulting savings and usually require upfront costs to implement. Smaller projects can produce quicker returns, and small ‘wins’ keep campuses motivated to continue to identify savings. Furthermore, small efforts may result in big savings at smaller campuses. Whereas saving \$10,000 annually may not be significant systemwide, this amount is substantial to an institution

like UNC School of the Arts. A strategy for operational efficiency that uses both large-scale and small-scale efforts may be more appropriate considering the UNC system has six campuses with enrollments of fewer than 6,500 full-time equivalent students.²⁹

- **Missed opportunity to count additional savings from campus-level operational efficiency savings.** As discussed earlier, UNC campuses have achieved cost savings from their own operational efficiency efforts as well as from collaborating with their sister institutions. However, the savings generated by these efforts have not been counted toward systemwide operational efficiency targets.
- **Missed opportunity to identify other ideas from existing campus groups.** Campus workgroups meet regularly with UNC system staff to collaborate and network, share best practices, exchange ideas and information, and influence policy in their respective areas of expertise. Some workgroups, such as the CIO Council of campus chief information officers and the HR Council of campus human resources professionals, regularly propose ideas that have led to system-level changes in their areas. However, the campuses report that there is no coordinated approach across all operational areas to generate ideas that could lead to greater collaboration among the campuses.
- **Missed opportunity to increase participation by tapping campus officials to lead specific efforts.** During site visits, the Program Evaluation Division observed several campus officials with knowledge and expertise that could enhance both system-level and campus-specific operational efficiency efforts. Campus officials at Appalachian State University already lead energy and sustainability efforts in higher education across North Carolina. This campus organizes an annual summit to share goals to reduce energy expenditures, transform energy utilization, and reduce the environmental impacts of both higher education and the State. In addition, UNC campuses could take leadership roles in the ways described below.
 - **Using benchmarking data.** Campus officials at UNC Asheville regularly use benchmarking data to compare their performance on academic and operational efficiency efforts against their peer institutions. In addition, several UNC campuses participated in a benchmarking study sponsored by the Southern Association of College and University Business Officers.
 - **Implementing shared services and centralizing campus operations.** North Carolina State University, UNC Chapel Hill, and UNC Charlotte have realigned and consolidated campus operations from several departments into a single entity. UNC Chapel Hill has developed a handbook that

²⁹ The six campuses with enrollments of fewer than 6,500 full-time equivalent students are Elizabeth City State University, Fayetteville State University, UNC Asheville, UNC Pembroke, UNC School of the Arts, and Winston-Salem State University.

explains the concept of shared services and guides organizational units on how to design, implement, and staff these units. The knowledge and experiences of these campuses can help other campuses design and implement shared services.

- **Documenting savings from operational efficiency efforts.** As part of Carolina Counts, UNC Chapel Hill has developed a methodology to document cost savings from recurring state dollars in each operational area. This methodology can be applied to other campuses as well as the UNC system as a whole.
- **Building mechanisms for transparency.** North Carolina State University and UNC Chapel Hill have developed internal dashboard systems that track various metrics and performance indicators for operational efficiency.

The success of current operational efficiency efforts will depend on the system's ability to act more like a system and less like a confederation.

The President's Advisory Committee for Efficiency and Effectiveness (PACE)—the UNC system's first effort to improve operational efficiency—recognized collaboration between and among constituent institutions as a key operating principle used to foster a systemwide culture of continuous improvement. This effort engaged campuses through their participation in systemwide working groups that identified opportunities to cut costs, avoid costs, and grow revenue. Without coordination and inclusion of campus ideas into system-level efforts, each campus will continue to do what is in its best interest without considering how it can contribute to the larger system goals for operational efficiency.

In sum, campuses are engaged in operational efficiency efforts at the system level, within their own institutions, and with other UNC campuses. However, campus-level efforts have not been fully incorporated into system-level plans to improve efficiency. As a result, the UNC system has missed opportunities to engage campuses in a more meaningful way, including having campuses take the lead on specific efforts and counting campus-level savings toward systemwide targets.

Finding 3. Improved metrics would allow the University of North Carolina to better manage and track operational efficiency.

Metrics are an important management tool for assessing the performance of any organization. Within higher education, metrics can be used to identify high- and low-performing institutions, assess the performance of campus leadership, and determine funding allocations to campuses. The University of North Carolina (UNC) has incorporated five performance metrics into its methodology to allocate funding to its campuses.³⁰ Three of these metrics—six-year graduation rates, freshman-to-sophomore retention rates, and degree efficiency—track the academic performance of

³⁰ The UNC system also determines campus allocations based on the percentage of Pell grant recipients, size of student enrollment, and whether the campus charges tuition.

campuses relative to public peer institutions approved by the UNC Board of Governors (see Appendix A for a list of these institutions). The fourth metric, weighted education and related spending per degree, measures the full cost of producing each degree. This measure of efficiency captures spending related to the academic mission, including a portion of campus operations spending, but does not directly measure operational efficiency. The fifth metric is based on key performance indicators for the UNC FIT Compliance program managed by the UNC Finance Improvement and Transformation (FIT) office.

The UNC system does not use metrics that measure the operational efficiency of its constituent institutions. The UNC FIT index is an illustrative example of how operational efficiency is not being adequately measured with current metrics. The FIT index is a composite score based largely on campus compliance with a checklist and a set of key performance indicators primarily related to finance and accounting. For example, campuses are measured on timeliness of setting up a fund number when they receive a new contract or grant. The FIT index measures whether campuses comply with these standards but does not measure how efficiently they are doing so. As mentioned in Finding 1, the FIT index was never intended to function as an operational efficiency measure.

Metrics exist that would better allow the UNC system to manage and track operational efficiency. Based on a literature review of higher education efficiency, the Program Evaluation Division identified three metrics that could be used to measure operational efficiency within the UNC system:

- campus operations staff as a percentage of total staff;
- campus operations positions per student FTE;³¹ and
- institutional support spending per student FTE.

These metrics can be used to benchmark each campus against other UNC campuses of similar size and characteristics. In addition, comparison data of other public institutions is readily available either through the Integrated Postsecondary Education Data System (IPEDS) or higher education organizations such as the Southern Association of College and University Business Officers. The Program Evaluation Division analyzed data from the UNC system office and IPEDS to assess the performance of UNC campuses on the operational efficiency metrics described above. The methodology for calculating these metrics appears in Appendix B.

Analysis of campus operations staff as a percentage of total staff reveals differences in the performance of UNC campuses. Higher education institutions use this metric to gauge the size of campus operations staff relative to all staff employed at the institution.³² The number of campus operations employees needed to support core activities—instruction, research, and public service—depends on the size and scope of the institution. For example, doctoral institutions typically engage in more research than master’s or bachelor’s institutions. As a result, doctoral institutions tend to have a greater number of staff employed in research

³¹ FTE stands for full-time equivalent student enrollment.

³² Campus operations include procurement, information technology, human resources, finance, utilities, facilities management, travel, legal affairs, space utilization, and campus safety/police.

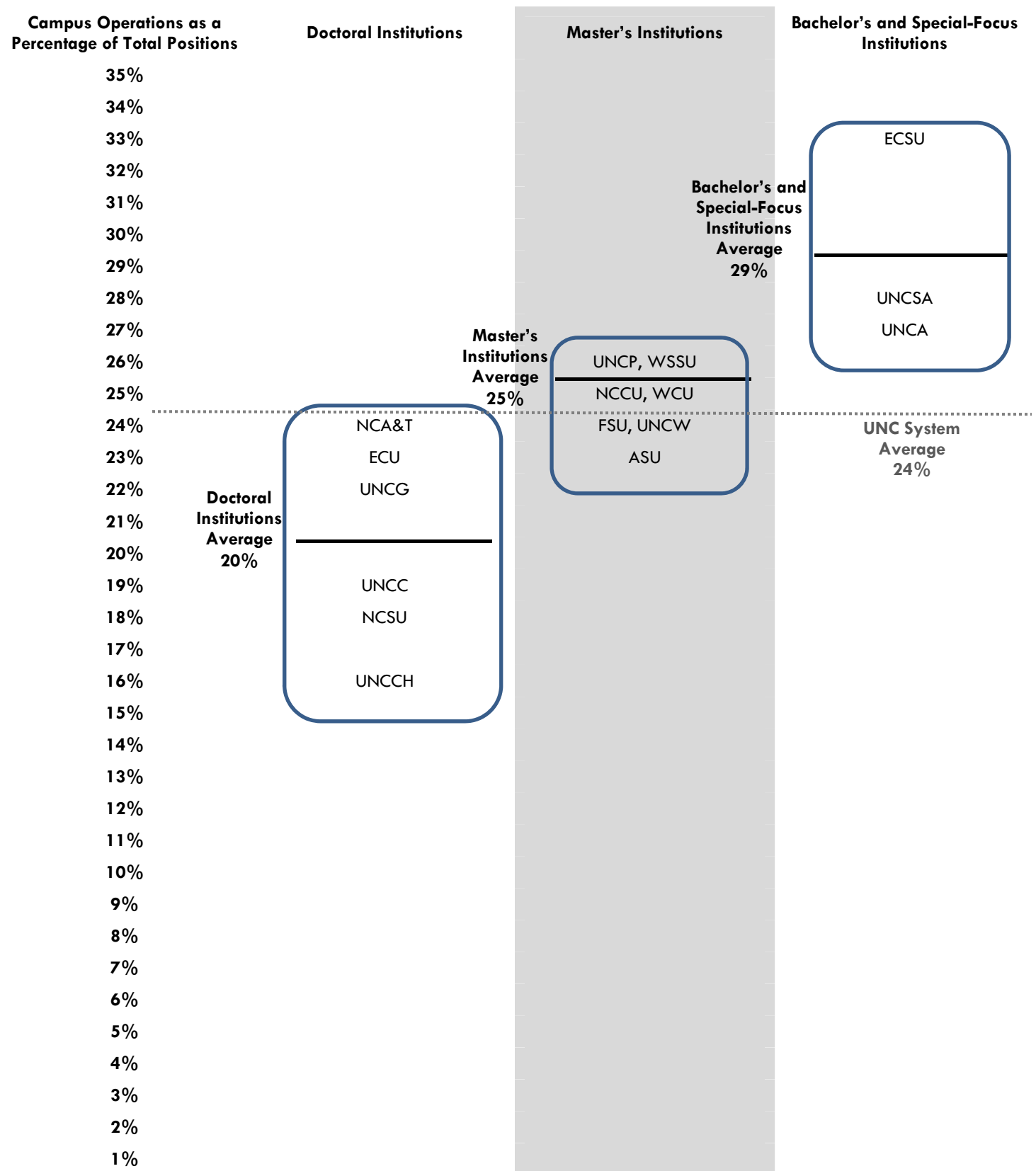
labs and centers and a greater number of staff in contract and grants and legal affairs to support the volume of this activity.

In examining the number of campus operations employees relative to the total number of employees for each UNC campus, the Program Evaluation Division grouped campuses in their broad Carnegie classification categories to take into account differences in size and scope of institutional activities. Examining the data in this way allows for comparison among campuses with similar characteristics. Exhibit 13 reveals several notable results.

- **Size and scope of the institution determines the percentage of campus operations staff.** As expected, bachelor's and special-focus institutions have the highest percentage of campus operations staff followed by master's institutions and then by doctoral institutions.
- **Using the system average penalizes smaller campuses.** The system office uses the UNC system average score on the UNC FIT index as a benchmark in its formula to allocate funding. However, using the system average may not be the best comparison. Each of the five campuses that exceed the UNC system average (24%) for campus operations as a percentage of total employees have fewer than 9,000 FTE students. However four of these campuses—North Carolina Central University, UNC Asheville, UNC School of the Arts, and Western Carolina University—perform better than other UNC campuses within their Carnegie Classification™.³³
- **Comparing performance within type of institution is preferred.** Using the system average may mask the performance of some campuses. For example, North Carolina A&T State University, Fayetteville State University, and UNC Wilmington all have the same percentage of campus operations employees (24%). However, North Carolina A&T University underperforms relative to other UNC doctoral institutions whereas Fayetteville State University and UNC Wilmington outperform other UNC master's institutions on this metric.
- **One campus has very low performance on this metric.** A third of employees at Elizabeth City State University are in campus operations. This percentage exceeds the average of other bachelor's and special-focus institutions and all other campuses in the UNC system.

³³ This classification system describes institutional diversity in U.S. higher education and is a registered trademark of the Carnegie Commission on Higher Education.

Exhibit 13: The Number of Campus Operations Staff Depends on the Size and Scope of the Institution



Source: Program Evaluation Division based on the Fall 2012 UNC system personnel data file.

Campus operations positions per student FTE also differs across the campuses. This metric compares the size of campus operations staff to the size of the student body. Higher education institutions use this metric to track progress toward operational efficiency. Student enrollment influences all aspects of a college or university because an institution requires sufficient faculty, staff, facilities, and services to support the student body. The size of each functional area will increase or decrease to the extent that these activities are close to the institution's core mission. Campus operations will change as student enrollment increases or decreases, but to a lesser extent than instruction or financial aid services.

To assess current operational performance, the Program Evaluation Division calculated the number of campus operations employees per 100 student FTE for Fall 2012. This analysis allows for the comparison of the campus operations staff among all UNC campuses. As shown in Exhibit 14, most UNC campuses had five or fewer campus operations employees per 100 student FTE in Fall 2012. Bachelor's and special-focus institutions had a higher number of campus operations employees per student than master's and doctoral institutions. This result demonstrates the economies of scale that can be achieved by larger institutions. However, UNC Chapel Hill had the highest number of campus operations staff per 100 student FTE among doctoral institutions, suggesting that this campus is not in line with similar UNC campuses.

Exhibit 14

**Campus Operations Staff per 100 Student FTE
Fall 2012**

Most UNC Campuses Had Five or Fewer Campus Operations Staff Per 100 Student FTE in Fall 2012



Source: Program Evaluation Division based on Fall 2012 UNC system personnel data file.

To determine whether operational efficiency has improved over time, trends regarding the number of campus operations staff need be examined in the context of student enrollment trends. Campuses that are operating most efficiently will be able to absorb increases in student enrollment while using fewer campus operations staff. Likewise, campuses that experience declines in the number of students should reduce campus operations in response. The Program Evaluation Division examined changes in campus operations and student enrollment for each campus between Fall 2008 and Fall 2012 to assess whether UNC campuses had improved operational efficiency over time. Campuses had improved operational performance if these trends demonstrated

- enrollment growth and a decline in the number of campus operations staff; or
- enrollment growth exceeding the growth in the number of campus operations staff.³⁴

As shown in Exhibit 15, 11 campuses demonstrated trends in student enrollment and campus operations staff in line with these criteria.³⁵ For three campuses, the growth in campus operations staff was not in line with student enrollment trends.

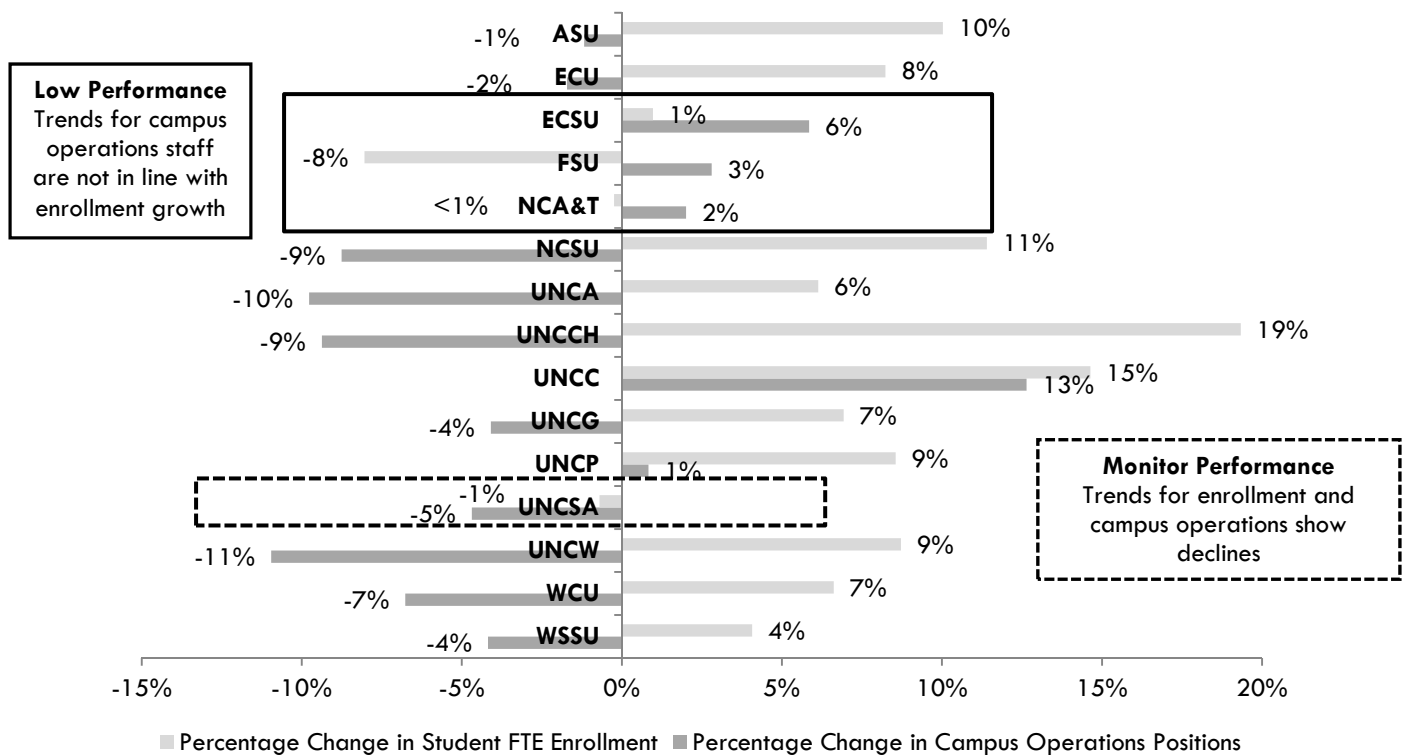
- Elizabeth City State University experienced growth in the number of campus operations staff (6%) that exceeded enrollment growth (1%).
- Fayetteville State University increased campus operations staff by 3% as student enrollment declined by 8%.
- North Carolina A&T State University increased campus operations staff by 2% as student enrollment declined slightly (less than 1%).

UNC School of the Arts experienced declines in student enrollment and in the number of campus operations staff between Fall 2008 and Fall 2012 (-1% versus -5%). This trend warrants further examination by UNC system officials.

³⁴ The UNC Ten-Year Enrollment Growth Plan: 2002–2012 projected enrollment growth for each campus.

³⁵ North Carolina Central University was excluded from these analyses because this campus had missing departmental information for 33% of positions in Fall 2008.

Exhibit 15: Most UNC Campuses Improved Operational Efficiency between Fall 2008 and Fall 2012



Notes: FTE stands for full-time equivalent student enrollment. North Carolina Central University was excluded from these analyses because this campus had missing departmental information for 33% of positions in Fall 2008.

Source: Program Evaluation Division based on Fall 2008 and Fall 2012 UNC system personnel data files.

Institutional support spending per student FTE by UNC campuses differs from their peers. This metric captures an institution’s total spending on campus operational activities.³⁶ It excludes auxiliary enterprises such as bookstores, hospitals, or other independent operations that are unrelated to student education. Although the institutional support spending does not include facilities, it is recognized as the best approximation of spending on campus operations. Lower support levels imply lower overhead or greater efficiency of campus operations. Higher education institutions use this metric because it allows for comparison with other institutions, as most institutions report these data to IPEDS.³⁷

The Program Evaluation Division analyzed institutional support spending per student FTE to understand how the cost of campus operations by each UNC campus compared to its public peer institutions. These analyses calculate the difference between what each UNC campus spent on institution support per FTE over three years (2008–09 to 2010–11) to the

³⁶ The Integrated Postsecondary Education Data System defines institutional support as expenses for general administrative services, central executive-level activities concerned with management and long-range planning, legal and fiscal operations, space management, employee personnel and records, logistical services such as purchasing and printing, public relations and development, information technology expenses related to institutional support activities, and information technology costs associated with student services and operation and maintenance of plant if not budgeted and expensed separately.

³⁷ 20 USC 1094, Section 487(a)(17) and 34 CFR 668.14(b)(19) require institutions to submit data to IPEDS if they participate or apply to participate in any federal financial assistance program authorized by Title IV of the Higher Education Act of 1965, as amended.

average spending of their peer institutions in the same three-year period.³⁸ Spending less than the average of institutional peers is an indicator of high performance on this metric, whereas spending more than the peer average is an indicator of low performance.

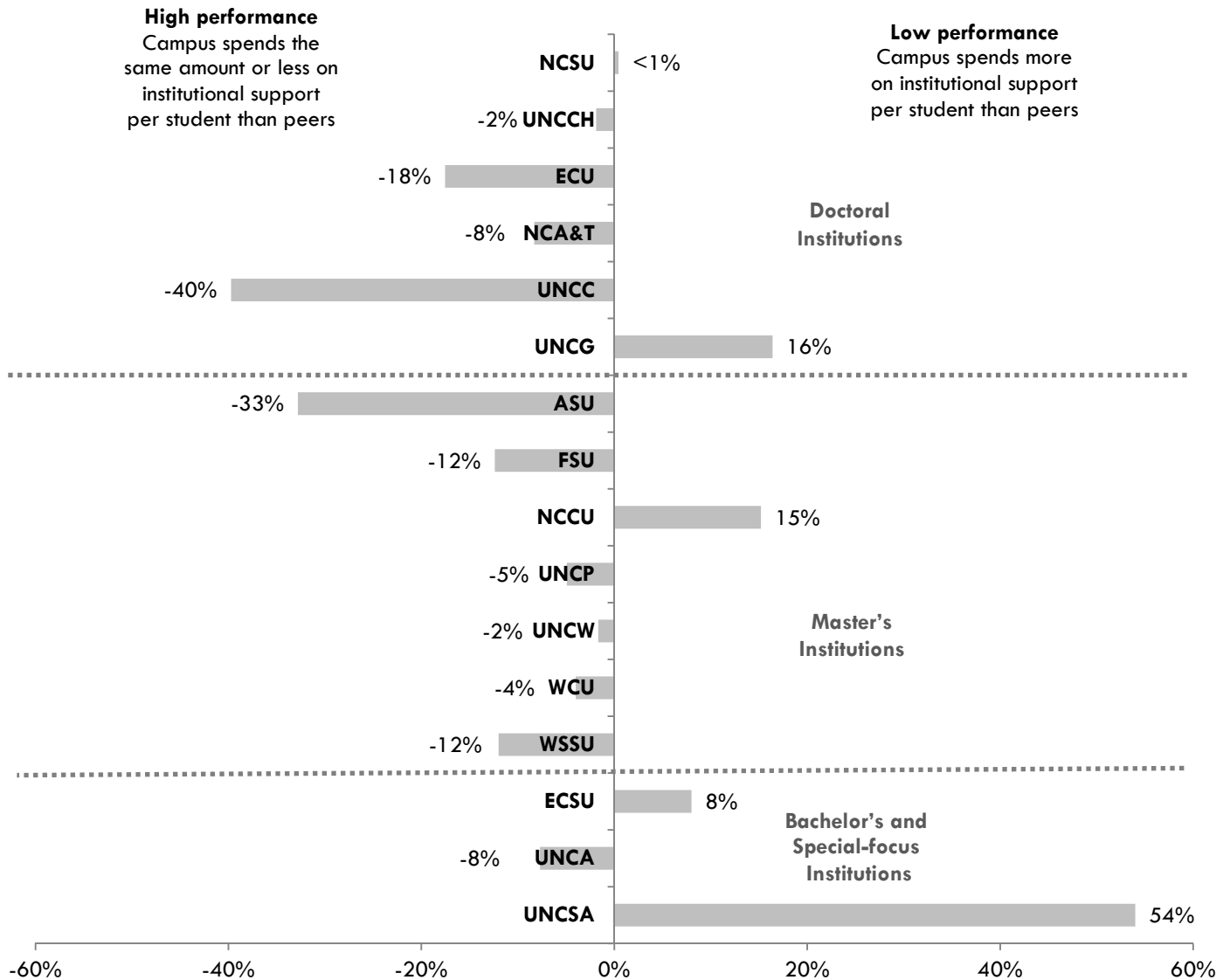
Exhibit 16 reveals several notable results.

- **Most UNC campuses perform better than their peer institutions on this metric.** Eleven campuses reported less institutional support spending per FTE than the average of their peers—Appalachian State University, East Carolina University, Fayetteville State University, North Carolina A&T State University, UNC Asheville, UNC Chapel Hill, UNC Charlotte, UNC Pembroke, UNC Wilmington, Western Carolina University, and Winston-Salem State University. The difference between institutional support spending per student FTE at North Carolina State University versus its peers was negligible (less than 1%). On the other hand, four campuses spent more and therefore performed below their peer institutions on this metric—Elizabeth City State University, North Carolina Central University, UNC Greensboro, and UNC School of the Arts.
- **Institutional size and scope are less important for this metric.** Performance on other metrics related to the size of campus operations demonstrated differences between doctoral, master's, and bachelor's and special institutions. These differences as defined by the Carnegie Classification™ are not evident for institutional support spending per student FTE.
- **Institutional peers for UNC School of the Arts should be re-examined.** Institutional support spending per student FTE for UNC School of the Arts exceeded the average of its public peer institutions by 54%. One possible reason for this result is the size of the public institutions included in the campus's peer group. The UNC Board of Governors approved 13 peer institutions for the UNC School of the Arts, but only 5 of these institutions are public universities. These public peer institutions include the University of California at Los Angeles and the University of Texas at Austin, which had FTE enrollment in Fall 2012 exceeding 40,000 students compared to 1,142 for UNC School of the Arts. Due to the special focus of this institution, a combination of public and private peer institutions of similar size may be a more appropriate comparison group.

³⁸ These data represent the three most recent years of available data from IPEDS.

Exhibit 16: Compared to their Peers, Most UNC Campuses Spent Less on Institutional Support Per Student FTE

Percentage Difference from Three-Year Average Institutional Support Spending Per Student FTE of Public Peer Institutions



Note: FTE stands for full-time equivalent student enrollment. North Carolina State University (NCSU) performs well on this metric because its institutional spending per student FTE is at the same level as its public peer institutions.

Source: Program Evaluation Division based on 2009, 2010, and 2011 data from the Integrated Postsecondary Education Data Education System.

Taken together, these results demonstrate that nine UNC campuses can improve performance on operational efficiency metrics. Exhibit 17 summarizes each campus's performance on the three metrics identified by the Program Evaluation Division.

Exhibit 17

Nine UNC Campuses Need to Improve Performance on One or More Operational Efficiency Metrics

Performance on Operational Efficiency Metrics	UNC Campus
HIGH PERFORMANCE Campus scored high on all three measures of operational efficiency	ASU, NCSU, UNCA, UNCC, UNCCH, UNCW, WCU
NEEDS IMPROVEMENT Campus needs improvement in one measure of operational efficiency	ECU, FSU, NCCU, UNCP, WSSU
LOW PERFORMANCE Campus needs improvement in two or more measures of operational efficiency	ECSU, NCA&T, UNCG, UNCSA

Note: North Carolina Central University (NCCU) was scored on two out of the three metrics and demonstrated low performance on one of these metrics, institutional support spending per student FTE.

Source: Program Evaluation Division.

As shown in the exhibit, 7 of the 16 UNC campuses performed well on all three metrics. Nine UNC campuses need to improve performance on at least one of the operational efficiency metrics. Based on these results, UNC system officials should assist campuses in bringing their institutional support spending per FTE in line with public peer institutions and monitor the size of campus operations staff relative to total employees at each constituent institution.

Going forward, the UNC system should seek timely and readily available sources of data to continue to monitor operational efficiency. Colleges and universities often use IPEDS when making comparisons with institutional peers because the data relies on audited financial information. However, IPEDS data is not publicly available until almost two years after it has been collected. In addition, IPEDS cannot be used to examine changes in campus operations positions because it categorizes these positions differently. IPEDS tracks non-instructional positions, which include staff employed in research labs and centers, public service activities, and executive and managerial positions, and thereby cuts across all functions of the University.

The Human Resources Data Mart developed by the UNC system may be useful in tracking changes in the number of campus operations staff in the future. This data source acts as a single repository for human resource information and uses the U.S. Bureau of Labor Statistics' standard occupational classification system to categorize position by job function.³⁹

³⁹ The standard occupational classification system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

As of September 2013, the Human Resources Data Mart contained almost two years of personnel data. This internal data source may be relied upon to continue this type of analysis if the UNC system can ensure that campuses provide data in an accurate and consistent manner.

The Southern Association of College and University Business Officers benchmarking study may provide a better and more timely source of data to monitor trends in operational efficiency. The study included representation from both public and private institutions in the organization's membership, including institutions both large and small. The initial data collection effort captured three years of position and expenditure data across 12 categories, including institutional support.⁴⁰ Some UNC campuses participated in the first year of the study, but full participation of the UNC system could enhance the availability of comparison data in the future.

In sum, the UNC system uses metrics to determine funding allocations, but none of these metrics directly measure operational efficiency. The Program Evaluation Division identified three metrics that could be used to measure operational efficiency within the UNC system: campus operations staff as a percentage of total staff; campus operations positions per student FTE; and institutional support spending per student FTE. Analysis of these metrics for operational efficiency revealed that nine UNC campuses need to improve performance on at least one metric. Improved metrics would allow UNC system officials to better manage and track operational efficiency. Going forward, the UNC system should seek timely and readily available sources of data to continue to monitor campus performance.

Finding 4. Other public university systems have adopted comprehensive approaches to operational efficiency and have demonstrated results.

The Program Evaluation Division identified public university systems in three states—California, New York, and Texas—that have several aspects of a comprehensive approach to improving operational efficiency at a systemwide level. Exhibit 18 compares important characteristics of each system with the University of North Carolina (UNC).

⁴⁰ The 12 categories are instruction, research, public service, academic support, student services, institutional support, hospitals, operations and maintenance of plant, scholarships and fellowships, auxiliary enterprises, independent operations, and depreciation.

Exhibit 18

Characteristics of the University of North Carolina System Compared to Three Other Public University Systems with Operational Efficiency Efforts

	University of North Carolina	University of California	State University of New York	Texas Higher Education Coordinating Board
Campuses offering 4-year degrees	16	10	30	38
Total student headcount enrollment	221,010	238,686	218,867	568,938
Statement on operational efficiency from governing body	UNC Board of Governors 2013–18 strategic plan	Board of Regents resolution (2010)	Board of Trustees resolution (2011)	Governor’s executive order (2009)

Notes: The State University of New York also governs community colleges. The Texas Higher Education Coordinating Board also governs community and state colleges.

Source: Program Evaluation Division based on enrollment data from each state. Student enrollment is based on 2012 headcount.

As shown in the exhibit, a common characteristic of the operational efficiency efforts in these states is the direction and guidance from the governing body overseeing each public higher education system. The UNC system differs from systems in the other states on this characteristic because the UNC Board of Governors has not issued a policy statement on operational efficiency. As discussed in Finding 1, such a policy would state the UNC system’s long-term and ongoing commitment to operational efficiency, describe efficiency goals, and provide direction to the constituent institutions on how to achieve such goals.

Key aspects of approaches to operational efficiency taken by other state university systems can be replicated within the UNC system. These aspects are described below.

California

- **Charge from governing body.** In 2010, the University of California (UC) Board of Regents issued a resolution stating its commitment to achieving a level of operational excellence. Also, the resolution directed the president and campus representatives to design and implement common best-practice systems for campus operations.
- **Operational efficiency areas.** “Working Smarter” serves as the brand for a wide-reaching portfolio of efficiency projects within the UC system. Working Smarter includes 34 projects such as a common, integrated financial and payroll system, data warehousing, asset management, e-procurement, and risk management. Each project has a project team responsible for planning and implementation. According to UC system officials, some projects involve long-term organizational restructuring, whereas others have been implemented more quickly.
- **Campus and academic leadership involvement.** The executive steering committee includes campus academic leadership as well as business officers. In many cases, campus officials take the lead on

projects rather than system office staff. UC system officials emphasized communication has been very important in terms of keeping stakeholders abreast of progress and elevating the importance of the initiative.

- **Efficiency savings.** The UC system office tracks the fiscal impact of all projects over time and reports saving \$460.9 million in the first three years of implementation.

In addition, the UC system has implemented a transparency initiative that aggregates data about the system and individual institutions in one place.⁴¹ The initiative aims to make information more readily available to the UC community and the public. In addition, the system produces an annual accountability report that contains over 100 indicators of performance.

New York

- **Charge from governing body.** In June 2011, the Board of Trustees of the State University of New York (SUNY) directed institutions to collaboratively develop and implement strategies to improve efficiency, generate cost savings, and increase resources available to the core academic and student service missions of campuses through shared services.
- **Operational efficiency areas.** The SUNY system office has developed a shared services initiative with a goal of \$100 million in savings. The shared services initiative has four main areas, which are described below.
 - **Strategic sourcing.** The strategic sourcing team works collaboratively to identify opportunities and, where feasible, pursue statewide, systemwide, multi-campus, or regional contracts to achieve cost savings and increase procurement efficiencies.
 - **Information technology transformation.** The top priorities for this effort include the creation of a seamless student information system with consistent data across the system, data center consolidation, a federated campus ID and security solution, a systemwide virtual desktop infrastructure, and systemwide email.
 - **Centers of excellence.** The SUNY Centers of Excellence refers to projects that include creating transaction processing centers for benefits, human resources, payroll, and procurement; centers of functional expertise in financial aid, library services, and printing; and regional hubs for legal services and the Minority and Women Owned Business Program.
 - **Campus alliance networks.** Campuses have been realigned based on regional geography and campus needs and expertise. Campuses generate additional savings and best practices through these partnerships.

⁴¹ Accessed from: <http://reportingtransparency.universityofcalifornia.edu/>

Furthermore, each functional area has a champion/executive sponsor, a functional lead, and metrics to track success.

- **Campus and academic leadership involvement.** The SUNY shared services steering committee oversees these efforts. This committee has systemwide representation from chief academic officers, chief business officers, members of faculty senates, and campus boards of trustees.
- **Efficiency savings.** SUNY system officials report saving \$20 million in savings in the first year. These savings are redirected to fund construction and direct student services.

Texas

- **Charge from a governing body.** In 2009, Governor Rick Perry issued an executive order to direct the Texas Higher Education Coordinating Board and Texas public institutions of higher education to conduct a broad and comprehensive review of systemwide opportunities for cost efficiencies. The executive order also directed the board to develop practices, policies, and recommendations for cost containment.
- **Operational efficiency areas.** The cost efficiencies plan contained numerous short and long-term recommendations to improve both academic and operational efficiency. According to the board's final report to the governor, Texas institutions reported using the following strategies most often to achieve operational efficiencies:
 - eliminating and/or consolidating positions;
 - reducing or restructuring organizational layers to streamline campus operations and academic departments;
 - using metrics and data from peer institutions and national associations to guide decision making; and
 - automating systems for campus operational functions.
- **Campus and academic leadership involvement.** Texas institutions had the flexibility to implement recommendations from the cost efficiencies review as they saw fit.
- **Efficiency savings.** Texas public higher education institutions provided self-reported cost savings of \$925 million between Fiscal Years 2010–11 and 2011–12 from cost efficiency initiatives. However, Texas does not have a standard methodology for determining cost savings, so it is not possible to make comparisons among Texas institutions, nor is it clearly defined how institutions arrived at their reported cost savings.

Lessons learned from operational efficiency efforts implemented by other public university systems can be applied to the UNC system.

During interviews, system office staff from other states described several key features of a comprehensive approach to operational efficiency from their experiences. Lessons learned include

- the importance of naming and branding the operational efficiency initiative and having a communications strategy to disseminate information and engage participants;
- involving campuses in smaller projects that result in early 'wins';

- the importance of academic leadership in advocating for operational efficiency on campuses;
- recognizing the time lag between the initial investment in improving operational efficiency and the savings that accrue as a result of that investment;
- making information more readily available to the University community and the public; and
- having a set of defined ways to account for the savings that result from efficiency improvement so that campuses are reporting savings consistently.

In sum, other public university systems have implemented operational efficiency initiatives from which the UNC System could draw ideas and lessons. These approaches demonstrate several aspects identified by subject matter experts as important to a successful, comprehensive initiative such as having a clear directive from a governing board or executive management, buy-in and involvement of the campus community, the use of data in decision-making, the use of metrics, and transparency.

Finding 5. The University of North Carolina does not have a reliable source of funding for operational efficiency efforts.

The University of North Carolina (UNC) has used various methods to fund existing operational efficiency efforts. Implementation of any large-scale efficiency effort typically involves a financial investment that precedes the actual savings generated. Primarily, the UNC system uses existing resources from nonrecurring sources to fund the development and implementation of its operational efficiency efforts (see Exhibit 19). In addition, both the campuses and the system office provide a substantial amount of in-kind support of staff resources to implement these efforts. However, none of these efforts have been funded by a direct state appropriation for the purpose of improving operational efficiency.

The UNC system has requested funding from the Legislature to support operational efficiency efforts, but these requests have been denied. In 2010–11, the board requested \$5 million for the UNC Finance Improvement and Transformation (UNC FIT) program that provides key operating performance indicators for campus and University leadership. Without state funding, the board chose to continue to support this effort with nonrecurring funds. In its 2013–15 budget recommendations, the UNC system requested funding to support campus-specific and systemwide operational efficiency efforts, but the Legislature did not fund these projects.⁴² Specifically these projects would have

- funded UNC Wilmington to finish building its data warehouse, which assists in strategic planning and management activities that

⁴² N.C. Sess. Law 2013-360, Section 11.13 authorized the UNC Board of Governors to spend up to \$15 million per year from the biennial appropriation to the UNC system to implement provisions of the 2013–18 strategic plan. The board reduced the system's operational budget to fund its strategic plan priorities by \$3 million. Each UNC institution received a reduction proportional to its share of the 2013–14 base budget. System officials plan to fund two efforts listed under Goal 4: Maximizing Efficiencies with these funds—student data mart and shared services.

would seed and scale similar analytics-capacity projects at other UNC campuses; and

- created a savings incentive program from carry-forward resources that would reinvest these funds to implement efficiency initiatives, faculty retention strategies, student success programs, academic quality improvements, and maintain critical infrastructure for campuses.

The UNC system plans to use existing resources from the president’s budget reserve to finish UNC Wilmington’s project this year, but no other funds have been identified to support expanding this project to other campuses or for the savings incentive fund.

Exhibit 19: UNC Operational Efficiency Efforts Rely on Nonrecurring Funding and In-Kind Support

Operational Efficiency Effort	UNC Campuses			UNC System Office		
	Payments via service level agreement	Other recurring funds	In-kind support	State appropriation (nonrecurring)	State appropriation (recurring)	In-kind support
e-Procurement			✓	✓		
Shared Database Administrator Pool	✓					✓
UNC Strategic Sourcing			✓			✓
Guaranteed Energy Performance Contracts		✓				✓
Banner ERP Hosting Services	✓			✓		✓
UNC FIT Compliance Program			✓	✓	✓	✓
Human Resources and Payroll Shared Services Operations	✓		✓	✓		✓
Human Resources Data Mart			✓	✓		✓
Financial Aid Verification (Pilot Implementation)		✓		✓		✓
Residency Verification (Planning)			✓			✓
Internal Audit Shared Services (Planning)			✓			✓

Notes: Banner ERP is an enterprise resource planning system used in higher education. UNC FIT stands for UNC Finance Improvement and Transformation. Human Resources and Payroll Shared Services Operations include the implementation of the shared services center, third-party vendor interfaces, and web time entry. In-kind support includes staff resources that provide subject matter expertise. Guaranteed energy performance contracts are funded by state appropriation to campus continuation budgets or auxiliary service institutional trust funds utility budgets. Financial aid verification is funded from the UNC Strategic Reserve Allocation Fund in the first two years and then funded by campus state appropriation in the third and subsequent years.

Source: Program Evaluation Division based on a review of documents from the UNC system office.

Furthermore, funding operational efficiency efforts has become increasingly problematic for campuses. Campuses report they have saved money from operational efficiency projects but management flexibility reductions have absorbed these savings. For example, North Carolina State University's effort to consolidate business operations is at high risk of being delayed and having its scope scaled back due to budget reductions. Campuses want to reinvest savings into maintaining or expanding current efforts that have created efficiency gains but do not have reliable sources of funding to continue efforts long-term. The lack of a recurring source of funding for operational efficiency efforts jeopardizes the ability of the UNC system and its campuses to continue to realize efficiency gains in campus operations needed to support the core mission.

Documenting efficiency savings can demonstrate the level of funding required to support current and future operational efficiency efforts within the UNC system. State law allows UNC campuses to retain energy savings realized and use 60% of these savings for other energy conservation measures in the next fiscal year. In addition, the law prohibits the utilities budgets for the campuses to be reduced by the amount of energy savings realized from implementing energy conservation measures, including guaranteed energy savings contracts.⁴³ This law was enacted after the UNC Board of Governors adopted a policy in 2009 that established sustainability as a core value of institutional operations, planning, capital construction, and purchasing practices for the University, including the UNC system office, the constituent institutions, and affiliated entities. To get credit for energy savings, campuses must hire a third-party engineering service to verify the savings generated from the energy conservation measures.

Although most campuses claim savings from other operational efficiency efforts, they have not documented these savings. UNC Chapel Hill's Carolina Counts is a notable exception. This initiative has developed guidelines to count recurring state-funded dollars saved in each operational area. The project management office for Carolina Counts is supported by one full-time position and two temporary positions. The project manager assists functional leaders in identifying projects, estimating savings of each project, and verifying the amount of savings generated after each project's implementation. UNC Chapel Hill invests \$379,700 in this office and has documented \$58.1 million in recurring savings from state sources thus far.

In sum, the UNC system does not have a reliable source of funding for operational efficiency efforts. Instead, the system has relied on nonrecurring sources and in-kind support to fund these efforts. Additionally, campuses find it more difficult to continue their operational efficiency efforts due to budget reductions. The Legislature has allowed campuses to retain savings from energy conservation measures and reinvest them into these efforts. However, whereas campuses have documented savings from energy conservation measures, they have not documented savings from other operational efficiency efforts.

⁴³ N.C. Gen. Stat. § 116-30.3B(a) and (b).

Recommendations

Since the implementation of the President's Advisory Committee on Effectiveness and Efficiency (PACE) in 2006, the University of North Carolina (UNC) has engaged in efforts to streamline, improve, and reduce costs in campus operations. As discussed in Finding 1, the UNC system has implemented 11 systemwide operational efficiency projects that have generated \$25.7 million in recurring cost savings on an annual basis and have saved the UNC system \$101.2 million to date. Operational efficiency efforts help campuses leverage economies of scale to obtain better pricing; provide services that a campus could not afford to provide on its own; and enhance customer satisfaction by automating manual processes. Despite these efforts, the UNC system lacks a comprehensive approach to operational efficiency, does not have good metrics to track operational performance for each campus, and lacks a stable funding source to fund projects at the system and campus levels. Addressing these deficiencies will ensure the UNC system's operational efficiency efforts meet the statutory directive to seek an efficient use of available resources in the fulfillment of its core mission.

Recommendation 1. The General Assembly should direct the University of North Carolina Board of Governors to adopt a policy that defines the vision and goals for operational efficiency for the system if the board does not remedy this issue on its own.

Under the guidance of the current board, the University of North Carolina (UNC) expressed its focus on maximizing efficiencies in its 2013–2018 strategic plan. However, strategic plans are subject to regular updates and changes in system- and campus-level leadership. A board policy would establish operational efficiency as an important value of the University; provide clear direction to the campuses on how this goal should be achieved; and direct the system president to develop and implement best practices, guidelines, and implementation plans necessary to achieve these goals. Stating its commitment to operational efficiency and outlining goals in a board policy would allow these goals to guide the future of the UNC system. Governing bodies in other states have adopted resolutions and issued executive orders to express support for operational efficiency throughout their public university systems and to direct the efforts of their constituent institutions.

If the board has not remedied this issue on its own, the General Assembly should direct the UNC Board of Governors to adopt such a policy and report to the Joint Legislative Education Oversight Committee no later than October 1, 2014.

Recommendation 2. The General Assembly should direct the University of North Carolina and its constituent institutions to develop a comprehensive approach to operational efficiency.

In addition to the lack of board policy, the Program Evaluation Division identified several deficiencies in the UNC system's approach to operational efficiency (see Finding 1). Specifically, the system needs to ensure faculty buy-in for operational efficiency efforts, improve the metrics, transparency,

and accountability of operational efforts, develop efficiency projects in two key operational areas, and develop an organizational structure to manage efforts and communicate results. In addition, many campus-level efforts to streamline, improve, or reduce costs for campus operations have not been incorporated into systemwide plans. As a result, UNC system officials have missed opportunities to more fully engage campuses. Furthermore, Finding 3 identified nine campuses that needed to improve performance on one or more operational efficiency metrics.

To improve its approach to operational efficiency, the General Assembly should direct the UNC system to develop a plan to address deficiencies, potential missed opportunities, and the disparate operational performance of UNC campuses. Elements of the plan are described below.

- **Select a faculty champion for operational efficiency efforts.** Subject matter experts emphasized the need to include faculty in operational efficiency efforts and recommended a designated faculty champion. To address this deficiency, the UNC Board of Governors should identify one or more UNC faculty members who can serve in this role.
- **Improve the metrics for operational efficiency efforts.** As discussed in Finding 1, 4 out of the 11 operational efficiency efforts do not have metrics that adequately measure the success of the project. To improve these metrics, the UNC system should
 - define how each project intends to streamline, improve, or reduce costs in campus operations;
 - set targets for optimal operational efficiency;
 - select metrics to track changes in performance against the expected targets; and
 - identify the appropriate data sources.
- **Improve the transparency of operational efficiency efforts.** Information on operational efficiency efforts within the UNC system is not readily accessible to the Legislature or North Carolina citizens. To improve transparency, the UNC system should develop a single area on its website where North Carolinians and members of the General Assembly can access the following information on all operational efficiency efforts:
 - a description of each project, including how it intends to streamline, improve, or reduce costs in campus operations;
 - the status of each project;
 - a list of the system- and campus-level officials involved;
 - performance on project-specific and systemwide metrics of operational efficiency; and
 - cost savings associated with each project.
- **Develop efficiency projects in two key operational areas.** As discussed in Finding 1, the UNC system lacks operational efficiency efforts that address organizational spans and layers as well as space utilization, efficiency areas known to produce cost savings. To address this deficiency, the UNC system should develop operational

efficiency efforts to reduce spans of control and improve utilization of classroom and lab space. In addition, system officials should ensure that campuses meet or show improvement in meeting space utilization standards before new capital projects can be considered. If the UNC system does not develop projects in these areas, it should provide justification as to why these recommendations are not being implemented.

- **Develop an organizational structure to manage efforts and communicate results.** The UNC system does not house all operational efficiency projects under the UNC FIT structure, does not include faculty leadership, and lacks a formal communication strategy and a recognized brand for operational efficiency efforts. The UNC system should adopt a brand for its operational efficiency efforts, create a communications strategy to engage campuses and report results, initiate a shared governance model with the UNC Faculty Assembly, and establish a structure to house all current and future projects.
- **Incorporate campus-level efforts into systemwide efforts and cost savings targets.** Currently, UNC campuses are engaged in operational efficiency efforts on their own or in collaboration with their sister institutions that have streamlined, improved, or reduced costs in campus operations. However, these efforts are not included in systemwide goals or counted toward system-level cost savings targets. The UNC plan for a comprehensive approach to operational efficiency should state how the system will incorporate efforts and savings from campus-initiated projects.
- **Identify strategies to address other missed opportunities.** The new approach to operational efficiency should detail the UNC system's plan to
 - create a balance between large- and small-scale efforts;
 - use existing campus workgroups and other mechanisms to generate new ideas for projects from the ground up; and
 - identify campus-level expertise to support the campuses and the system in using benchmark data, documenting savings, increasing transparency, and implementing shared services.
- **Address the disparate operational performance of UNC campuses.** As seen in Finding 3, nine UNC campuses did not perform well on at least one operational efficiency metric. The UNC system should outline the ways in which system and campus officials will work together to improve in areas where campuses had low performance.

Lastly, the plan should establish a technical assistance unit within the system office to help the campuses document savings from operational efficiency efforts undertaken alone or in collaboration with other UNC campuses. In addition, this unit can assist system and campus functional leaders in

- identifying new operational efficiency projects;
- estimating savings of each project;

- developing the methodology to document savings; and
- verifying the amount of savings generated after project implementation.

The Program Evaluation Division estimates that this unit would be comprised of a program officer and project coordinator and would cost no more than \$300,000 to implement. The UNC system can absorb these costs within its current resources until a recurring source of funding is established by the Legislature (see Recommendation 5).⁴⁴

The General Assembly should direct the UNC system to develop its plan for a comprehensive approach to operational efficiency and present it to the Joint Legislative Education Oversight Committee, House Appropriations Subcommittee on Education, and the Senate Appropriations Committee on Education/Higher Education by December 1, 2014.

Recommendation 3. The General Assembly should direct the University of North Carolina to adopt metrics to track operational performance, use these metrics in funding decisions, and identify appropriate sources of data to monitor operational efficiency.

Metrics help to manage and track operational efficiency efforts, benchmark each campus against other UNC campuses of similar size and characteristics, and compare campus performance to peer institutions outside the UNC system. However, the UNC system does not use metrics that measure the operational efficiency of its constituent institutions. The Program Evaluation Division identified three metrics for operational efficiency and found that seven campuses performed well on every metric. The UNC system should review the operational efficiency metrics identified by the Program Evaluation Division and conduct additional research to ensure these metrics are the most appropriate to measure campus operational performance on the system's goals and objectives. If the system identifies alternative metrics, it should justify its decision and present data on campuses' performance on these metrics. Once these metrics have been determined, the UNC system office should incorporate them into their methodology for determining budget allocations. Furthermore, the system should consider giving partial credit to campuses that demonstrate improved performance on each metric over time in addition to giving full credit to campuses that meet or exceed performance targets.

Going forward, the UNC system should continue to monitor operational efficiency and seek timely and readily available sources of data for this purpose. The benchmarking study conducted by the Southern Association of College and University Business Officers provides the best opportunity to obtain position and expenditure data for campus operations over time. The Association completed the initial study in 2013 and plans to conduct another benchmarking survey in 2014. The UNC system should require its constituent institutions to participate in the upcoming study.

Lastly, the system should identify more appropriate peer institutions for the UNC School of the Arts. The list of public peer institutions approved by the

⁴⁴ As authorized by N.C. Sess. Law 2013-360, Section 11.13, the UNC Board of Governors reduced the 2013–14 UNC system budget to fund its strategic plan priorities by \$3 million.

UNC Board of Governors includes large research universities. Given the special focus of UNC School of the Arts, the board should revise the list of its peer institutions to include colleges and universities of similar size. The board should consider granting an exception to the UNC School of the Arts to use public and private institutions when calculating peer averages.

The General Assembly should require the UNC system to implement this recommendation and report the approved list of operational efficiency metrics to the Joint Legislative Education Oversight Committee and the Joint Legislative Program Evaluation Oversight Committee by January 1, 2015.

Recommendation 4. The General Assembly should direct the University of North Carolina to link chancellor performance to academic and operational efficiency goals.

All chancellors have the responsibility to enforce policies set by the UNC Board of Governors and their campus board of trustees; the responsibility to ensure campus participation in systemwide operational efficiency efforts; and the authority to create and abolish positions. However, current policy on evaluating chancellor performance does not include specific criteria that hold each chancellor accountable for either the academic or operational efficiency of their campuses.

To address this deficiency, the General Assembly should direct the UNC system to develop specific criteria to link campus performance and achievement of systemwide goals for academic and operational efficiency to the performance evaluation of UNC chancellors. In addition, the General Assembly should require the UNC system to present its updated policy to the Joint Legislative Education Oversight Committee by October 1, 2014. If the UNC system chooses not to specify criteria in policy, it should justify its decision and provide a detailed description of the criteria used to evaluate chancellor performance.

Recommendation 5. The General Assembly should amend state law to allow the University of North Carolina and its constituent institutions to reinvest documented savings generated from operational efficiency efforts.

Implementing efficiency measures typically involves a financial investment that precedes the actual savings generated. Establishing a reliable source of funding will contribute to the success of the UNC system's operational efficiency efforts and ensure the highest quality in its service to the citizens of the State. The General Assembly should consider changing state law to allow the UNC system and its constituent institutions to reinvest documented savings from streamlining, improving, and reducing the costs of campus operations into other operational efficiency efforts.

Current law allows the UNC system to carry forward up to 2.5% of General Fund appropriations for one-time use.⁴⁵ To create an incentive for the UNC system and campuses to continue their operational efficiency efforts, the General Assembly should amend these statutes to increase the

⁴⁵ N.C. Gen. Stat. § 116-30.3.

carry-forward amount to 3% beginning with Fiscal Year 2014–15. Based on 2013–14 operational budgets for the UNC system office and campuses, this change could yield up to \$11.1 million dollars to support these efforts.⁴⁶ The amount transferred into this fund should not exceed the amount of documented savings realized by the UNC system and the campuses from their operational efficiency efforts or 0.5% of General Fund appropriations.

Under this proposal, the money generated by this additional 0.5% would be transferred to a special institutional trust fund at the UNC system office where the monies can be retained and exempted from future carry-forward restrictions.⁴⁷ The UNC system office should be authorized to allocate these funds to support new or existing efficiency efforts at the system or campus level and be required to report on the status of these projects annually. Once this fund is established, the General Assembly should direct the UNC system to shift the cost of the technical assistance unit from nonrecurring sources to this recurring source of funding.

Furthermore, the UNC system should be directed to implement the following measures and report on their progress to the Joint Legislative Education Oversight Committee, House Appropriations Subcommittee on Education, and the Senate Appropriations Committee on Education/Higher Education by February 1, 2015:

- adopt a board policy that states its commitment to operational efficiency;
- establish the technical assistance unit to document savings from state sources (as described in Recommendation 2); and
- document savings from campus- and system-level operational efficiency efforts.

If the UNC system has not completed these actions, the General Assembly has the option to delay implementation of the law or repeal the law authorizing the additional 0.5% in carry-forward funds.

Appendices

Appendix A: UNC Board of Governors Approved List of Peer Institutions
Appendix B: Methodology for Calculating Operational Efficiency Metrics

Agency Response

A draft of this report was submitted to the University of North Carolina for review. Its response follows the appendices.

Program Evaluation Division Contact

For more information on this report, please contact the lead evaluator, Pamela L. Taylor at pam.taylor@ncleg.net.

Staff members who made key contributions to this report include Jeff Grimes and Brent Lucas. John W. Turcotte is the director of the Program Evaluation Division.

⁴⁶ This estimate is based on 2013–14 operational budgets of UNC campuses after accounting for reductions and increases approved by the UNC Board of Governors. Operational budgets for Area Health Education Centers, Agricultural Research Service, North Carolina School of Science and Math, and UNC Center for Public Television are excluded.

⁴⁷ The first 2.5% of carry-forward funds would be subject to existing restrictions.

Appendix A: UNC Board of Governors Approved List of Peer Institutions

The UNC Board of Governors of the University of North Carolina (UNC) approved a list of 13-18 peer institutions for each campus in November 2011. According to UNC system guidelines, peer institution lists are used for comparisons along a number of dimensions relating to each campus, including tuition and fees, faculty salaries, budget, and fiscal measures. Peer institutions include both public and private institutions of higher education, and some are designated as “aspirational.” Aspirational peers are noted below with an asterisk (*).

UNC Campus	Peer Institution (State)
Appalachian State University	<p><u>Public institutions:</u> California State University-Chico (CA), University of Northern Iowa (IA), Eastern Illinois University (IL), Western Illinois University (IL), Towson University (MD), Minnesota State University-Mankato (MN), Saint Cloud State University (MN), Rowan University (NJ), State University of New York at Binghamton (NY)*, Bowling Green State University-Main Campus (OH)*, Miami University-Oxford (OH)*, West Chester University of Pennsylvania (PA), Indiana University of Pennsylvania-Main Campus (PA), College of Charleston (SC), Sam Houston State University (TX), James Madison University (VA), Western Washington University (WA), University of Wisconsin-La Crosse (WI)</p> <p><u>Private institutions:</u> None</p>
East Carolina University	<p><u>Public institutions:</u> Florida International University (FL), Northern Illinois University (IL), Southern Illinois University Carbondale (IL), University of Louisville (KY)*, Western Michigan University (MI), Central Michigan University (MI), University of Missouri-Kansas City (MO), University of Southern Mississippi (MS), University of North Dakota (ND), University of Nevada-Reno (NV), University at Buffalo (NY)*, Ohio University-Main Campus (OH), Wright State University-Main Campus (OH), University of South Carolina-Columbia (SC)*, East Tennessee State University (TN), Texas Tech University (TX), Old Dominion University (VA), Virginia Commonwealth University (VA)</p> <p><u>Private institutions:</u> None</p>
Elizabeth City State University	<p><u>Public institutions:</u> Athens State University (AL), California State University-Bakersfield (CA)*, Delaware State University (DE), University of Illinois at Springfield (IL), Bowie State University (MD), Frostburg State University (MD), State University of New York College at Old Westbury (NY)*, Ohio State University-Marion Campus (OH), Mansfield University of Pennsylvania (PA), Pennsylvania State University-Penn State York (PA), University of Puerto Rico-Humacao (PR), Christopher Newport University (VA)*, Norfolk State University (VA), Virginia State University (VA), University of the Virgin Islands (VI)</p> <p><u>Private institutions:</u> None</p>
Fayetteville State University	<p><u>Public institutions:</u> University of North Alabama (AL), California State University-San Marcos (CA), California State University-Bakersfield (CA), Eastern Connecticut State University (CT)*, Albany State University (GA), Grambling State University (LA), Bowie State University (MD), Minnesota State University-Moorhead (MN), Northwest Missouri State University (MO), State University of New York College at Oneonta (NY)*, Southwestern Oklahoma State University (OK), Western Oregon University (OR), Francis Marion University (SC), Angelo State University (TX), Norfolk State University (VA), Virginia State University (VA)</p> <p><u>Private institutions:</u> None</p>
North Carolina A&T State University	<p><u>Public institutions:</u> Florida Agricultural and Mechanical University (FL), University of Idaho (ID), Indiana State University (IN), Louisiana Tech University (LA), University of Louisiana at Lafayette (LA), University of Maine (ME), Jackson State University (MS), University of New Hampshire-Main Campus (NH), New Jersey Institute of Technology (NJ), New Mexico State University-Main Campus (NM), Cleveland State University (OH), Clemson University (SC)*, South Dakota State University (SD), The University of Texas at El Paso (TX), The University of Texas at Arlington (TX), Old Dominion University (VA)*, University of Wyoming (WY)</p> <p><u>Private institutions:</u> None</p>
North Carolina Central University	<p><u>Public institutions:</u> California State University-Bakersfield (CA), Florida Agricultural and Mechanical University (FL), The University of West Florida (FL), Valdosta State University (GA), Washburn University (KS), Murray State University (KY), Morgan State University (MD), Jackson State University (MS), New Jersey City University (NJ), Rutgers University-Camden (NJ)*, Edinboro University of Pennsylvania (PA), Shippensburg University of Pennsylvania (PA)*, Tennessee State University (TN), The University of Tennessee-Martin (TN), University of Houston-Clear Lake (TX), West Texas A & M University (TX)</p> <p><u>Private institutions:</u> Hampton University (VA)</p>

UNC Campus	Peer Institution (State)
North Carolina State University	<p><u>Public institutions:</u> Colorado State University (CO), Georgia Institute of Technology-Main Campus (GA)*, Iowa State University (IA), Michigan State University (MI), Ohio State University-Main Campus (OH), Pennsylvania State University-Main Campus (PA), Purdue University-Main Campus (IN), Rutgers University-New Brunswick (NJ), Texas A&M University (TX), University of Arizona (AZ), University of California-Davis (CA), University of Florida (FL)*, University of Illinois at Urbana-Champaign (IL)*, University of Maryland-College Park (MD), University of Wisconsin-Madison (WI)*, Virginia Polytechnic Institute and State University (VA)</p> <p><u>Private institutions:</u> None</p>
UNC School of the Arts	<p><u>Public institutions:</u> Massachusetts College of Art and Design (MA), State University of New York at Purchase College (NY)*, The University of Texas at Austin (TX), University of California-Los Angeles (CA)*, University of Cincinnati-Main Campus (OH)</p> <p><u>Private institutions:</u> Carnegie Mellon University (PA), Columbia College Chicago (IL), Cornish College of the Arts (WA), New York University (NY), Savannah College of Art and Design (GA), The Julliard School (NY)*, The University of the Arts (PA), Yale University (CT)*</p>
UNC Asheville	<p><u>Public institutions:</u> Fort Lewis College (CO), Keene State College (NH), Massachusetts College of Liberal Arts (MA), New College of Florida (FL)*, Ramapo College of New Jersey (NJ), St. Mary's College of Maryland (MD)*, State University of New York at Geneseo (NY), State University of New York at Purchase College (NY), Truman State University (MO), University of Maine at Farmington (ME), University of Minnesota-Morris (MN), University of Montevallo (AL)</p> <p><u>Private institutions:</u> Furman University (SC)*, Rhodes College (TN)*</p>
UNC Chapel Hill	<p><u>Public institutions:</u> The University of Texas at Austin (TX), University of California-Berkeley (CA)*, University of California-Los Angeles (CA)*, University of Maryland-College Park (MD), University of Michigan-Ann Arbor (MI)*, University of Minnesota-Twin Cities (MN), University of Pittsburgh-Pittsburgh Campus (PA), University of Virginia-Main Campus (VA), University of Washington-Seattle Campus (WA), University of Wisconsin-Madison (WI)</p> <p><u>Private institutions:</u> Duke University (NC), Johns Hopkins University (MD), Northwestern University (IL), University of Southern California (CA), University of Pennsylvania (PA)</p>
UNC Charlotte	<p><u>Public institutions:</u> Florida Atlantic University (FL), Florida International University (FL)*, Kent State University Kent Campus (OH), Old Dominion University (VA), Portland State University (OR), The University of Texas at Arlington (TX), The University of Texas at San Antonio (TX), University of Colorado Denver (CO), University of Louisville (KY), University of Massachusetts-Lowell (MA), University of New Mexico-Main Campus (NM), University of Nevada-Las Vegas (NV), University of Rhode Island (RI)*, University of Toledo (OH), University of Wisconsin-Milwaukee (WI), Virginia Commonwealth University (VA)*, Western Michigan University (MI)</p> <p><u>Private institutions:</u> None</p>
UNC Greensboro	<p><u>Public institutions:</u> Bowling Green State University-Main Campus (OH), Florida International University (FL), Georgia State University (GA)*, Indiana State University (IN), Indiana University-Purdue University-Indianapolis (IN), Kent State University Kent Campus (OH), Middle Tennessee State University (TN), Northern Illinois University (IL), Old Dominion University (VA), Oregon State University (OR)*, Portland State University (OR) The University of Texas at Arlington (TX), University of Central Florida (FL)*, University of Louisville (KY), University of Southern Mississippi (MS), University of Memphis (TN), Virginia Commonwealth University (VA), Western Michigan University (MI)</p> <p><u>Private institutions:</u> None</p>
UNC Pembroke	<p><u>Public institutions:</u> Austin Peay State University (TN), California State University-Stanislaus (CA)*, Eastern New Mexico University-Main Campus (NM), Francis Marion University (SC), Frostburg State University (MD), Indiana University-Southeast (IN), Morehead State University (KY), Nicholls State University (LA), Northeastern State University (OK), Northwest Missouri State University (MO), Pittsburg State University (KS), Radford University (VA)*, Southern Arkansas University Main Campus (AR), The University of Texas of the Permian Basin (TX), University of Guam (GU), University of North Alabama (AL), University of Wisconsin-Superior (WI), Western Connecticut State University (CT)</p> <p><u>Private institutions:</u> None</p>

UNC Campus	Peer Institution (State)
<p>UNC Wilmington</p>	<p><u>Public institutions:</u> California Polytechnic State University-San Luis Obispo (CA), California State University-Chico (CA), College of Charleston (SC), College of William and Mary (VA), James Madison University (VA), Murray State University (KY), Rowan University (NJ), University of Northern Iowa (IA), State University of New York at Binghamton (NY)*, The College of New Jersey (NJ), Towson University (MD), The University of Texas at Dallas (TX)*, Truman State University (MO), University of Maine (ME), University of Maryland-Baltimore County (MD)*, University of Wisconsin-Eau Claire (WI), Western Washington University (WA)</p> <p><u>Private institutions:</u> None</p>
<p>Western Carolina University</p>	<p><u>Public institutions:</u> California State University-Fresno (CA), California University of Pennsylvania (PA), Central Connecticut State University (CT), Eastern Illinois University (IL), Kennesaw State University (GA), Morehead State University (KY), Murray State University (KY), Pittsburg State University (KS), Plymouth State University (NH), Radford University (VA)*, Saint Cloud State University (MN), Salisbury University (MD)*, Sam Houston State University (TX), Southeast Missouri State University (MO), State University of New York College at Oswego (NY)*, University of Central Missouri (MO), Western Illinois University (IL), Winona State University (MN)</p> <p><u>Private institutions:</u> None</p>
<p>Winston-Salem State University</p>	<p><u>Public institutions:</u> Albany State University (GA), Alcorn State University (MS), Delaware State University (DE), Fort Valley State University (GA), Francis Marion University (SC), Jacksonville State University (AL), Morgan State University (MD), Norfolk State University (VA), Prairie View A&M University (TX), Rutgers University-Camden (NJ), State University of New York College at Old Westbury (NY), Tennessee State University (TN)*, University of Maryland Eastern Shore (MD), University of South Carolina-Aiken (SC), Virginia State University (VA), William Paterson University of New Jersey (NJ)</p> <p><u>Private institutions:</u> Spelman College (GA)*, Xavier University of Louisiana (LA)*</p>

Appendix B: Methodology for Calculating Operational Efficiency Metrics

The Program Evaluation Division (PED) reviewed benchmarks used by subject matter experts in higher education to assess operational efficiency of colleges and universities. These sources include the

- Education Advisory Board;
- Delta Cost Project; and
- Southern Association of College and University Business Officers.

PED selected three metrics based on their use by these sources, other public university systems, and the available data from the University of North Carolina (UNC) system.

Campus Operations Staff

PED obtained UNC system personnel data files from 2008–2012. These files contain information on each individual employed by each UNC campus and are submitted annually each fall. PED used the home departments specified in the files to categorize individuals by the function conducted by their respective offices. These categories were taken from the UNC system's President's Advisory Committee on Effectiveness and Efficiency study.

- Campus operations: advancement, external, facilities management, fiscal, human resources, information technology, accountability, sponsored research
- Core: instruction, research, public service activities, including museums, hospitals, radio stations, distance education, continuing education
- Academic administration and support: academic support/advising/mentoring, library, student/academic computing, faculty development/enrichment
- Auxiliary: dining/vending, student housing, athletics, bookstore, parking/transportation, motor fleet/pool
- Enrollment-related activities: student admissions/recruitment/marketing, financial aid, scholarships, student registration/records/retention
- Student services: student programs, student conduct, career planning/placement, student government and organizations, student health, recreation and intramural

Campus operations staff as a percentage of total staff. Higher education institutions use this metric to gauge the size of campus operations staff relative to all staff employed at the institution. PED computed this metric by dividing the number of campus operations staff by the total number of staff employed by each campus for Fall 2012. Campuses scored high on this metric if this percentage was at or below the average for their Carnegie Classification™.

Campus operations positions per student FTE.⁴⁸ This metric compares the size of campus operations to the size of the student body. Higher education institutions use this metric to track progress toward operational efficiency. PED computed this metric by dividing the number of campus operations staff by 100 student FTE for 2012. PED further examined the trends in student enrollment and number of campus operations staff for Fall 2008 and Fall 2012 to determine if operational efficiency had improved over time. Campuses scored high on this metric if the trends on these factors demonstrated

- enrollment growth and a decline in the number of campus operations staff; or
- enrollment growth exceeding the growth in the number of campus operations staff.

⁴⁸ FTE stands for full-time equivalent student enrollment.

Institutional Support per Student FTE

This metric captures an institution's total spending on campus operational activities. Higher education institutions use this metric because it allows for comparison with other institutions. PED collected enrollment and expenditure data for each UNC campus and its board-approved public peer institutions from the Integrated Postsecondary Education Data System (IPEDS) online database. Institutions report enrollment and expenditure data to IPEDS on an annual basis using their unique identifier.⁴⁹

For the purposes of this analysis, PED obtained data for public peer institutions in 2008–09, 2009–10, and 2010–11 on the following elements:

- Full time equivalent undergraduates (FTEUG)
- Full time equivalent graduate students (FTEGD)
- Institutional support total expenditures (F1C071)
- Peer institution name
- IPEDS ID (UNITID)

PED assigned each peer institution an identifier to ensure accurate linking to each UNC campus. Institutions identified as peer by more than one campus were assigned multiple unique identifiers specific to each UNC campus. PED calculated institutional support spending per student FTE (ISFTE) using this formula:

$$\frac{\text{Institutional support total expenditures [F1C071]}}{(\text{Full time undergraduates [FTEUG]} + \text{Full time graduate students [FTEGD]})}$$

To calculate the three-year average percentage difference from the peer mean, PED

- computed the average institutional spending per FTE for each campus's public peer institutions
- computed the percentage difference between the average peer institutional spending per FTE and the campus; and

$$\frac{\text{Campus ISFTE} - \text{Average Peer ISFTE}}{\text{Campus ISFTE}}$$

- computed the three-year average.

$$\frac{2009 \text{ percent difference} + 2010 \text{ percent difference} + 2011 \text{ percent difference}}{3}$$

Campuses scored high on this metric if their three-year average institutional support spending per FTE was at or below the average of their public peer institutions.

⁴⁹ FTE data for campus operations per student FTE and institutional support per student FTE use IPEDS data. FTE data for UNC School of the Arts are based on the UNC Institutional Summary, 2003–2012 and include high school students. These data can be accessed online at: <http://fred.northcarolina.edu/pub/output/fallnr/sdf.instsumm.20122003.pdf>.



The University of North Carolina

GENERAL ADMINISTRATION

POST OFFICE BOX 2688, CHAPEL HILL, NC 27515-2688

Charles E. Perusse – *Chief Operating Officer*

Telephone: (919) 962-4598 • Fax: (919) 962-0008 • E-mail: ceperusse@northcarolina.edu

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Elizabeth City
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Fayetteville State
University

North Carolina
Agricultural and
Technical State
University

North Carolina
Central University

North Carolina
State University
at Raleigh

University of
North Carolina
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University

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State University

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School of Science
and Mathematics

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December 2, 2013

Mr. John W. Turcotte, Director
Program Evaluation Division
300 North Salisbury Street, Suite 100
Raleigh, NC 27603

Dear Mr. Turcotte:

Thank you for the opportunity to review and respond to the Program Evaluation Division's (PED) Report on Operational Efficiency within the University of North Carolina (UNC). All UNC General Administration and campus personnel involved in the review appreciated your staff's willingness to take the necessary time and effort to understand the complexity of our great system. We are also grateful for the courtesy and professionalism they demonstrated throughout the process.

A significant portion of the report is devoted to summarizing the many operational efficiency projects UNC has undertaken since 2006. Over this time, UNC has streamlined, improved, and reduced costs in campus operations and has implemented 11 system-wide operational efficiency projects. To help guide and assist in those efforts, UNC has retained or engaged state business leaders, BAIN and Co., Ernst & Young, McKinsey & Co., and the NC Office of State Budget and Management. These projects, which currently generate \$26 million in recurring cost savings and have cumulatively saved over \$101 million, have been coordinated by a system office staff that is less than one-third the size of those found at any comparison system cited in the report.

The most comprehensive operational efficiency metric discussed in the report compares UNC campuses' institutional support spending per student FTE to that of their peers. PED's analysis reveals that 75% of UNC campuses (12 of 16) are high performers on this key measure, spending either less than (11 campuses) or on par with (1 campus) their peer institutions.

UNC does not concur with every specific finding and recommendation outlined in the report (see attached addendum). Moreover, we believe some of the statements of findings may be overly broad, particularly when viewed in the context of the full report. While we know there is room for improvement and are receptive to improved metrics and a more comprehensive approach to operational efficiency, UNC has a strong track record on which to build. We agree, however, with PED's

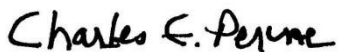
Mr. John W. Turcotte
Page Two
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emphasis on strengthening system-level procedures, reporting, and policies and believe that this will improve consistency and enhance UNC's operational efficiency efforts. We especially appreciate the recognition by PED that UNC General Administration will need additional resources to effectively implement a more comprehensive operational efficiencies program.

The University of North Carolina will provide an interim progress report to the General Assembly by May 1, 2014, as well as a final report by December 1, 2014, on any ongoing and enhanced efficiency measures resulting from this report's recommendations.

Again, thank you for your staff's dedication and for the opportunity to review and respond to this preliminary draft report.

Sincerely,

A handwritten signature in black ink that reads "Charles E. Perusse". The signature is written in a cursive style with a large initial 'C'.

Charles E. Perusse

Attachment

Recommendation 1: The General Assembly should direct the Board of Governors (BOG) to adopt a policy that defines the vision and goals for operational efficiency.

UNC Response: On February 8, 2013, the UNC Board of Governors approved a five-year strategic plan entitled “Our Time, Our Future: The UNC Compact with North Carolina.” Goal 4 of this report (“Maximizing Efficiencies”) is devoted entirely to maximizing operational and academic efficiencies system-wide. As required by the plan, the Chair has established a new BOG Committee on Strategic Planning to ensure accountability for implementing the plan and for monitoring progress toward all identified goals. The President submits regular and detailed reports to this committee at prescribed intervals. We believe this clearly signals the President’s and the Board of Governors’ strong commitment to this effort. Nonetheless, we are certainly willing to raise the issue of a more formal operational efficiencies policy with our BOG.

Recommendation 2: The General Assembly should direct the University of North Carolina and its constituent institutions to develop a comprehensive approach to operational efficiency.

UNC Response: We acknowledge that a more systematic and comprehensive approach to operational efficiency is important to the success of these efforts, and we are committed to making ongoing improvements to current practices and protocols. Specific comments about certain portions of the recommendation follow:

- **Space Utilization:** The University of North Carolina is a national leader in the collection of space utilization data. UNC General Administration produces an annual system-wide and campus Facilities Inventory and Space Utilization Study and maintains a dashboard of facility utilization on our website. These data are used in a variety of ways, including in the allocation of capital appropriations and in the performance funding metrics for several campuses. However, we concur that UNC General Administration should assist campuses in exploring more effective ways to meet the standards established by the Board of Governors.
- **Transparency:** All reports presented to the BOG are posted online in the Board’s pre-meeting materials. We appreciate the suggestion to house these efficiency reports in one place and will ensure that our redesigned website has a single location for this information.
- **Organization:** Partly in recognition of the importance of coordinating efficiency efforts, the President restructured General Administration’s senior leadership staff last year. As noted in the report, the Chief Operating Officer provides oversight for all entities currently working on efficiency projects and assigns staff as needed.

Recommendation 3: The General Assembly should direct the University of North Carolina to adopt metrics to track operational performance, use these metrics in funding decisions, and identify appropriate sources to monitor operational efficiency.

UNC Response: As outlined in detail in our five-year Strategic Plan, the President and Board of Governors are fully committed to improving and expanding operational efficiency efforts. Moreover, UNC recently transitioned from a campus funding model focused solely on enrollment changes to a model that also considers campus performance on key measures. The model is based on 10 measures that focus on student success and academic and operational efficiencies. The goal is to directly incentivize and reward improved performance on those key

Addendum to Official Response

measures – in addition to and independent of enrollment changes. Upon initial review, we also have some concerns about the specific metrics identified in the report and appreciate the opportunity to do additional research to ensure the metrics selected are the most effective ones to use. It is important to focus on the outcomes of investments made, for example. Hence, it would seem prudent to analyze spending per degree conferred, as well as per FTE; if a campus spends relatively more per FTE but has better student outcomes, it may be a worthwhile expenditure.

Recommendation 4: The General Assembly should direct the University of North Carolina to link chancellor performance to academic and operational efficiency goals.

UNC Response: We are in the early phases of re-evaluating the chancellor performance review process. While the chancellors' review form currently in use does include some aspects of operational efficiency (for example, maintaining the appropriate balance between academic and operational staff), operational efficiency could be made a more explicit and substantive component of the evaluation.

Recommendation 5: The General Assembly should amend state law to allow the University of North Carolina and its constituent institutions to reinvest documented savings generated from operational efficiency efforts.

UNC Response: We appreciate the PED's recognition, as reflected in the report, that the University of North Carolina needs additional dedicated resources to implement and execute successful operational efficiencies programs. Our five-year Strategic Plan and our 2013-15 state budget request call for the creation of incentives for campus efficiencies through performance funding and carry-forward reform.