FCR 11

Office of the President
December 13, 2005

Members, Board of Trustees:

UNIVERISTY OF KENTUCKY TOP 20 BUSINESS PLAN

Recommendation: that the Board of Trustees approve the University of Kentucky Top 20 Business Plan.

Background: University of Kentucky President Lee Todd formed a Top 20 Business Plan Steering Committee to oversee the development of a plan that would provide the financial framework for UK's efforts to fulfill the Kentucky General Assembly's mandate that UK become a Top 20 public research university by 2020.

The university contracted with the Stillwater Group (a consulting firm located in Stillwater, New Jersey) to assist in the development of the plan. The Stillwater Group worked with the steering committee; the Office of Institutional Research, Planning, and Effectiveness; and the Office of Planning, Budget, and Policy Analysis to conduct educational, financial, and demographic analyses to determine the measures that define a Top 20 institution and the resources necessary for UK to reach that status. In the process, the Stillwater Group met with dozens of campus administrators, faculty, and staff. The transmittal letter of the Plan to the Board and an executive summary follows. The entire Plan is presented in a separate document.

Action taken: ☑ Approved ❑ Disapproved ❑ Other _____

MEMORANDUM

To: Members, University of Kentucky Board of Trustees

From: Lee T. Todd, Jr.

Subject: Top 20 Business Plan

Date: December 13, 2005

I am pleased to present to you this long-term Plan for change in Kentucky.

Let there be no doubt: The University of Kentucky intends to become a Top 20 public research university by 2020. We will continue to work toward this goal, as we have since 1997, because Kentucky's economic success demands it and the people of Kentucky deserve it.

The challenge we face is a Top 20 mandate that came to us without any definition or clear understanding of what it will cost. Ambitious agendas for change in Kentucky too often fall victim to vague objectives, financial constraints, and competing demands. So it is essential that we make a clear and convincing argument for why it matters for Kentucky that we make progress toward the Top 20, how we intend to measure that progress, and what resources will be needed to achieve this ambition.

Progress So Far

The first segment of our pursuit of Top 20 status, from 1997 until now, has been a time of substantial progress:

Measure	Then	Now	Change	Percent Increase
Total Enrollment	24,061 (1996–97)	26,440 (2004–05)	2,379	10%
Applications	7,547 (1996–97)	10,515 (2004–05)	2,968	39%
First-year student				
• Enrollment	2,637 (1996–97)	3,835 (2004–05)	1,198	45%
• GSP/GSA*	125 (1996–97)	313 (2004–05)	188	150%
• Valedictorians	118 (1996–97)	137 (2004–05)	19	16%
• High School GPA	3.44 (1996–97)	3.56 (2004–05)	.12	3%
Graduation Rate	48.1 percent (1991 cohort)	59.5 percent (1998 cohort)	11.4 percentage points	24%
Degrees Conferred				
• Bachelors	3,133 (1996–97)	3,285 (2004–05)	152	5%
• Graduate	1,272 (1996–97)	1,634 (2004–05)	362	28%
• First Professional	353 (1996–97)	394 (2004–05)	41	12%
Faculty Salaries	$58,660 (1996–97)	$71,026 (2004–05)	$12,366	21%
Annual Giving	$41.4 mil. (1996-97)	$67.4 mil. (2004-05)	$26 mil.	63%
Research Expenditures	$124.8 mil. (1996-97)	$297.6 mil. (2003-04)	$172.8 mil.	138%
Endowment	$195.1 mil. (June 30, 1997)	$538.4 mil. (June 30, 2005)	$343.3 mil.	176%
Endowed Chairs	22 (pre-RCTF)**	95 (June 30, 2005)	73	332%
Endowed Professorships	45 (pre-RCTF)**	210 (June 30, 2005)	165	367%

***Governor's Scholars Program/Governor's School for the Arts**
**** Research Challenge Trust Fund**

Our faculty and staff have done a remarkable job of strengthening this institution. The Commonwealth has made significant investments to recruit nationally-recognized scholars and to increase our endowments through the Research Challenge Trust Fund. However, tight operating budgets have hampered us for much of the last eight years. We have lived year-to-year with whatever state appropriation we get and whatever we are able to gather from other sources. We therefore have not managed our progress. Instead, we have been forced to react to the circumstances around us. Our faculty and staff have done that admirably.

But for the University as a whole, our work has not been planned or focused enough. A Top 20 university cannot be built through incremental budgets,

short-term solutions, and reaction to external forces. This approach has put at risk our academic ambitions for our students, the strength of our research agendas, and the force of our impact on Kentucky.

Why We Need a Business Plan

The only way to escape reactive, circumstance-driven funding is to develop a financial plan that indicates clearly and specifically the long-term cost of achieving the Top 20 mandate. This Business Plan describes the Top 20 Compact in financial terms. We will put this Plan on the table as we talk with the General Assembly and the Governor, our donors, and our faculty and staff about what it is going to take for us to become a Top 20 university.

The time for that discussion is now. It has been eight years since the Compact was formed between UK and the people of Kentucky. We have used that time to assess our programs through the Top 20 Task Force and Futures Committee and we have made progress. Over the next several years, the people of Kentucky must decide whether they are willing to do what it takes to lay the financial and capital foundation necessary for our continued success.

- We need investments in our students—we need more dollars to continue to recruit, retain and graduate a top-quality, diverse student body and give them a world-class education and the academic support they need to be successful.
- We need investments in our people—we need more faculty, and staff to support them.
- We need investments in our infrastructure—we need modernized classrooms and more research space.

We are going to ask Kentuckians to invest in their flagship university as they never have before. I don't blame those across campus and across Kentucky who are skeptical. Skepticism is a product of experience. And the recent period of lean budgets makes it hard to have confidence in our chances. But if we do not put a specific statement of cost in front of the Governor and the members of the General Assembly, we cannot blame them for not giving us the resources we need. The Business Plan will make clear the cost of the ambitious goal the General Assembly gave us in 1997.

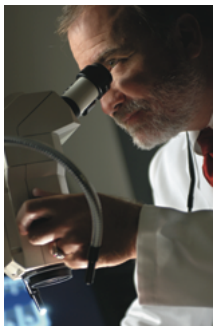
When we do this, legislators will be right to ask specific questions about what the people of Kentucky will get in return for their investment. That is the other half of the Compact. The Plan provides measures of progress that resonate with the legislature and the general public. We will add to these a list of markers of the impact we are having on the lives of the people of Kentucky through our multi-faceted outreach and engagement initiatives.

The Role of the Strategic Plan

This Business Plan is a financial, rather than strategic, document. We now can begin the hard work of plotting our strategy for the next 15 years. The next Strategic Plan (for 2006–2009) will define specific measures of quality, establish strategic goals for excellence, and direct the allocation of resources across campus. Those decisions must—and will—be made by the campus community and will appreciate the complexity and diversity of our colleges. We will begin immediately a series of internal conversations about the next Strategic Plan and how this institution moves forward. We will discuss as an academic community what our priorities and specific goals are, how we can best achieve those goals, and how resources will be allocated.

These discussions will translate the Business Plan into a plan of action. It must be a dynamic, serious, and honest conversation about what kind of university we want to be. Make no mistake about it. This institution must change if we are going to succeed. A university wedded to the status quo in a dynamic world will fail. Just as we need to force a discussion with the state about our need for more resources, we must force the internal discussion about our priorities. And those priorities must ultimately find their core in the needs of the people of Kentucky and what their flagship university is uniquely qualified to provide.

Faculty Growth, Then Enrollment Growth



Enrollment growth is an essential component of the University of Kentucky's progress because it is what Kentucky needs from us. But we will first build the infrastructure necessary to accommodate increasing numbers of students. We have made a conscious effort to focus on improving the quality of the education our students receive. We will not jeopardize that effort by growing too much too soon. It will do Kentucky little good if UK enrolls, retains, and graduates more students from an institution unable to provide high quality instruction because our classes are too big and our advising is too scarce.

The Business Plan calls for substantial increases in our faculty between now and 2020. It is essential that we front-load faculty growth before we increase our student enrollment. UK will maintain its current level of first-year student enrollment until Fall 2008. We can then grow our enrollment after appropriate preparations have been made. I understand the strain that dramatic increases in enrollment have placed on our faculty and staff and on our physical plant. It is symptomatic of the fact that we have confronted reality rather than planned for and managed it. Tight budgets made it impossible to increase our faculty to keep pace with our student growth. Our student to faculty ratio has suffered and we are putting at risk the quality of the education our students receive.

This Business Plan gives us the opportunity to make the case for increasing our faculty size to both make up for the lack of increases over the last few years and to prepare for future enrollment increases. And we need to pay our faculty better. The Business Plan calls for aggressive efforts to make our faculty salaries more competitive.

Our Responsibility to Kentucky—More College Graduates

We must increase our enrollment, but this is not about bigger being better. We know that all but three of the institutions in today's Top 20 are bigger—giving them advantages of volume, particularly in research. But other statistics make a much more compelling case for growth. Only 19 percent of Kentuckians have a bachelor's degree or higher. The national average is 27 percent. The impact is predictable: Kentucky's median household income is $36,786. That is almost $8,000 below the national average. Our poverty rate is 3.4 percentage points above the national average. One-fourth of Kentucky's children live in poverty. This is unacceptable.

The Kentucky Council on Postsecondary Education estimates that by 2020, 32 percent of the U.S. population will have a bachelor's degree or higher. Over the next 14 years Kentucky needs to increase by 210,000 its number of bachelors degree holders, just to be at the national average. Especially in a knowledge economy, a state that allows its workforce to lag behind the national average in educational attainment is a state that willingly accepts economic failure. As Kentucky's flagship university and most expansive and comprehensive institution, UK has a moral obligation to shoulder a fair and reasonable portion of the work of increasing the percentage of our citizens with college degrees. We must answer the call to increase our enrollment because the strongest undergraduate education available in Kentucky should be available to more Kentuckians. How will we do it?

- We will enroll more students from every Kentucky county because UK belongs to every part of the Commonwealth.
- We will enroll more students of color because there is strength in difference and necessity in diversity.
- We will enroll more students from every state across the U.S. and more countries across the globe, because we need to recruit more talented people to Kentucky, and keep them in Kentucky.

We will build a student body recognized across the U.S. for its diversity and academic excellence. This will not be easy. We are a poor and under-educated state. We live in a culture that does not put enough value on a college education. Our under-18 population is flattening. And we do not have enough jobs right now for the educated workforce we produce.

But for too long, Kentuckians have been gripped by a resigned and cynical acceptance of a vicious cycle. Low per capita incomes make it difficult to commit the resources we need to increase our education levels and improve our economy. But we will not have higher per capita incomes without more people with bachelor's degrees. Our struggles as a state to deal with our social, economic, and health problems will continue as long as we passively accept low levels of educational attainment as inevitable in Kentucky. It really is that simple.

We must commit ourselves to competing in the knowledge economy or resign ourselves to the same low incomes and fragile economies of the past. We are 47th in workforce education, 42nd in high-tech jobs, 33rd in the number of the fastest growing companies, 45th in the number of patents, 39th in industry investment in research and development, and 47th in the number of scientists and engineers. Kentucky needs more scientists, more engineers, more mathematicians, more biologists, and more pharmacists.

But we also need more artists, more musicians, more health care workers, more writers, and more teachers. We need more college-educated citizens enriching communities, recruiting businesses, and creating ones of their own. We need more people trained and dedicated to solving the social, economic, and health care challenges we face. We need more creators, innovators, experimenters, and dreamers. We will work harder and more

effectively with Kentucky's elementary and secondary schools to inspire more of Kentucky's children to understand the importance of a college education, believe it is possible for them, and prepare to be successful at the University of Kentucky. We will place even greater emphasis on our responsibility to train future teachers and provide professional development opportunities to our current ones.

If we choose not to grow our enrollment, we abdicate our leadership role in making life better for more Kentuckians and making the future better for all of Kentucky. And we are complicit in allowing too many of our citizens to work in a series of stagnant jobs, earn below-average wages and few benefits, and face limited futures. Our poor citizens will remain poor, the divide between the "haves" and "have nots" will expand, impoverished regions will remain impoverished, businesses will struggle or close, and our state will continue to lag far behind our competitors on nearly every measure of the quality of our lives.

And the sad truth will be that the University of Kentucky will be an instrument of the status quo rather than a catalyst for change.

There is no virtue in cynicism, and there can be no progress from timidity. The time has come for Kentucky to risk and reach, unencumbered by the hollow safety of the predictable, the accepted, and the secure. We take direct aim at Top 20 status because it forces us to do what is hard so that we might achieve something better.

Our Responsibility to Kentucky—More Intellectual Capital

Enrollment growth also will provide a more stable financial environment over the long-term. It will allow us to sustain a larger faculty. Kentucky needs its flagship university to be home to a world-class collection of faculty that is talented enough, focused enough, and large enough to take on the problems that plague too many Kentuckians for too much of their lives. This is the message we must carry to Frankfort and across Kentucky. We need a larger faculty not just to teach our students but to be the engine for change and

improvement in the health and well-being of Kentucky. Richard Florida put it best in a recent article from the "Atlantic Monthly:"

> *Concentrations of creative and talented people are particularly important to innovation, according to the Nobel Prize-winning economist Robert Lucas. Ideas flow more freely, are honed more sharply, and can be put into practice more quickly when large numbers of innovators, implementers, and financial backers are in constant contact with one another, both in and out of the office…it certainly appears that innovation, economic growth, and prosperity occur in those places that attract a critical mass of top creative talent.*

That is what the Top 20 mandate is all about - creating a synergy of talent, creativity, and innovation. We see the need for more faculty in the hard work it will take to solve Kentucky's problems. Every additional faculty member we hire is another member of a collection of talented people dedicated to fighting disease, improving products and services, and creating businesses and jobs. Every additional dollar in external funding our faculty earns is another dollar invested in research and service and another dollar infused into our economy. Every additional action our faculty take to assist businesses, provide health care, support elementary and secondary education, enlighten our society, enrich our culture, and reach out to the communities across Kentucky makes a difference across Kentucky. UK is uniquely positioned to have an impact on the life of every Kentuckian and the future of every Kentucky community. We will work harder and more effectively with the University of Louisville and Kentucky's other postsecondary institutions—public and independent, two-year and four-year—to facilitate transfer enrollment and to engage in research and service that has a substantial and lasting effect on the social, economic, and physical health of our citizens.

Our capacity to improve Kentucky rests on the shoulders of our faculty. A larger faculty can provide more instruction, research, and service. A larger faculty will generate more inventions and more patents. A larger faculty will increase our ability to preserve our culture, appreciate our history, and value our Arts. We can make an even greater difference in Kentucky by being a larger physical, intellectual, and creative presence for Kentucky.

The Next 15 Years

We know Top 20 universities go hand-in-hand with more educated and healthier populations. Average household incomes are higher in states with Top 20 universities. Unemployment rates are lower and fewer public dollars are spent on health care. These states have healthier children and fewer people living in poverty. We know that people who go to college live healthier lives, are less susceptible to poverty, and are less encumbered by disease. We know that college educated people are more likely to vote and give their time and their energy to improve the communities around them. We know they are more likely to be involved in local schools and read to their children at night.

We take direct aim at Top 20 status because it is a noble and ambitious cause. But our only sure reward is the progress we will make through aggressive plans and hard work over the next 15 years. We can and we will become a stronger university by 2020. And we will make Kentucky a much better place for our children.

Few people are fortunate enough to stand at the threshold of fundamental choice about the future. We find ourselves in such a moment. We should be willing and anxious to seek visionary objectives, to do hard things, and to act boldly.

What's Next?

I want to express our appreciation for the Stillwater Group who has provided essential consultation and perspective as we have developed this Plan. They have helped us admirably in navigating these uncharted waters. A detailed Business Plan is an unusual way to plan for the future of a public university. In fact, we know of no other public university in the U.S. that has done it.

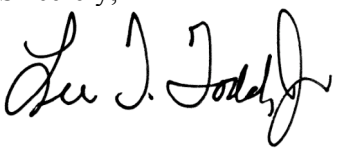
I also want to thank all the members of the University of Kentucky community who have worked to put this plan together: the members of the Top 20 Business Plan Steering Committee; the offices of the Treasurer, Undergraduate Education, Registrar and Admissions, Development, Student Affairs,

Multicultural and Academic Affairs, Public Relations, Facilities Management, and Research; the Senate Council; the Deans Council; the Provost Council; and numerous department chairs, faculty, and staff.

Pending approval of this Business Plan by the Board of Trustees, I will ask the Interim Provost and the Executive Vice Presidents to form a university-wide Committee on Academic Planning and Priorities. I will ask that Committee to take on the responsibility for overseeing the implementation of the Plan, and recommending specific steps necessary to achieve its goals. Their recommendations must—and will—include specific allocations of our operating budget, plans for capital construction, and targets for internal reallocation and operating efficiencies.

I look forward to working with you as we continue to build a Top 20 university and serve the people of Kentucky.

Sincerely,



Lee T. Todd, Jr.

The University of Kentucky Top 20 Business Plan

DECEMBER 2005

In 1997, the people of Kentucky established a Compact with their University of Kentucky...

...in return for investing the resources necessary to make UK a Top 20 public research university by 2020, the people of Kentucky would receive the benefits that come from it: an institution defined by academic excellence, world-class research, and vigorous engagement in communities across Kentucky. The Compact represents a commitment to progress because building a Top 20 research university is essential to any effort to make every Kentucky community stronger and the life of every Kentuckian better in a knowledge economy.

TOP 20 UNIVERSITIES go hand-in-hand with more educated, healthier, and financially secure populations. Average household incomes are higher in states with Top 20 universities. Unemployment rates are lower and fewer public dollars are spent on health care. These states also have healthier children and fewer people living in poverty.

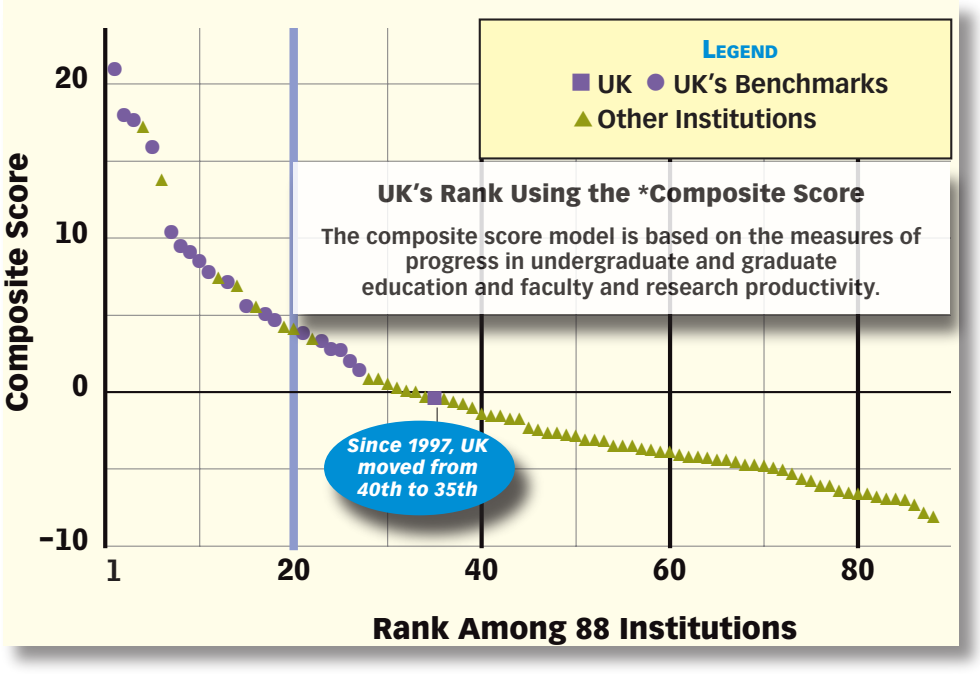
Average household incomes are higher in states with Top 20 universities. Unemployment rates are lower and fewer public dollars are spent on health care.

UK has developed a Top 20 Business Plan that puts the Compact in financial terms. It describes the character of a Top 20 institution and the resources it will take to build it. The Plan uses nine measures in four domains to create a composite score [see table].

COMPOSITE SCORE*	
DOMAINS	**MEASURES OF PROGRESS**
Undergraduate Education	**1** ACT/SAT **2** Student/Faculty Ratio **3** Six-year Graduation Rate
Graduate Education	**4** Doctorates Granted **5** Postdoctoral Appointments
Faculty Recognition	**6** Citations **7** Awards
Research	**8** Federal Expenditures **9** Non-Federal Expenditures

UK used the composite scores to determine its relative position among 88 public research-extensive universities in the United States [see chart below]. This analysis provides a valuable perspective on the quality of the effort since 1997, and the challenge of catching the current Top 20 institutions, as they continue to make progress. Since the 1997 Postsecondary Education Improvement Act, UK has moved from 40th to 35th.

And, UK will increase the impact it has on Kentuckians through outreach and engagement initiatives.



CALCULATING SUCCESS

The Business Plan calculates the investments needed to make progress. **UK needs investments in students**—more dollars to continue to recruit, retain and graduate a top-quality, diverse student body and give them a world-class education and the academic support they need to be successful. **UK needs investments in people**—more faculty dedicated to teaching more students and doing more research and public service that attack the persistent health and economic problems of the Commonwealth. **UK needs investments in research and classroom buildings,** including UK's top capital priority, Phase II of the Biological/Pharmaceutical Complex. **UK needs more flexibility to pursue capital projects**—the opportunity to issue debt for the University hospital, residence halls, cafeterias, and other auxiliaries with sufficient revenue streams.

OVER THE NEXT 14 YEARS, UK WILL:

- Increase enrollment by 7,000 students—to 34,000;
- Increase the graduation rate by 12 percentage points—to 72 percent;
- Increase the number of faculty by 625—to over 2,500;
- Increase research expenditures by $470 million—to $768 million; and
- Increase engagement in Kentucky's schools, farms, businesses, and communities.

UK will be even more active in every part of Kentucky in ways that serve the needs of Kentucky's citizens and the communities where they live, work, and raise their families.

UK WILL DO ITS SHARE

Success will require more investments from every fund source. UK will increase substantially its endowment, private fundraising, research expenditures, and internal cost savings. From these and other sources UK will provide 40 percent ($438 million) of the needed investments. Tuition and state appropriations will fund the remaining need.

KENTUCKY MUST DO ITS SHARE

The members of the Kentucky General Assembly and the Governor understand the importance to Kentucky of UK's Top 20 mandate. Even as they worked through a very difficult budget in 2005, these policymakers invested over $18 million of new State General Funds in UK. **That was an important statement of their commitment to the Top 20 Compact.** UK asks that the state make the same kind of moderate, but consistent investment over the next 14 years.

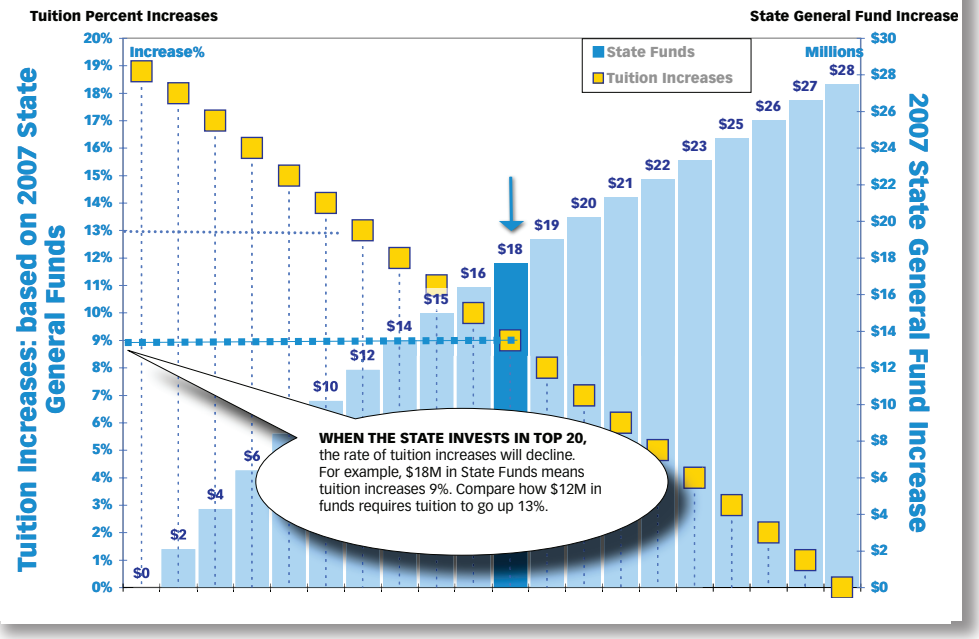
UK CAN BECOME a Top 20 university nationally recognized for the excellence of its teaching and research. But UK also will become nationally recognized because its work makes every Kentucky community stronger and the life of every Kentuckian better. ■

A Scenario for Success

The UK Business Plan calculates the additional resources needed each year for UK to become a Top 20 institution by 2020, as defined by excellence in undergraduate and graduate education, faculty and research. There is a substantial gap between UK's current budget and needed resources. UK will do its share by filling much of the gap internally. The state and UK must determine the optimal combination of state appropriations and tuition revenue to fund this gap in 2007 and beyond. For example, if the state increases appropriations by $17.7 million (5.8%), then UK would only need to increase the tuition rate by nine percent, funding a $34.3 million gap. The $17.7 million increase in state appropriations is only $4 million higher than CPE's recommendation.

A look at the relationship: Increasing 2007 state dollars and the impact on student tuition increases.

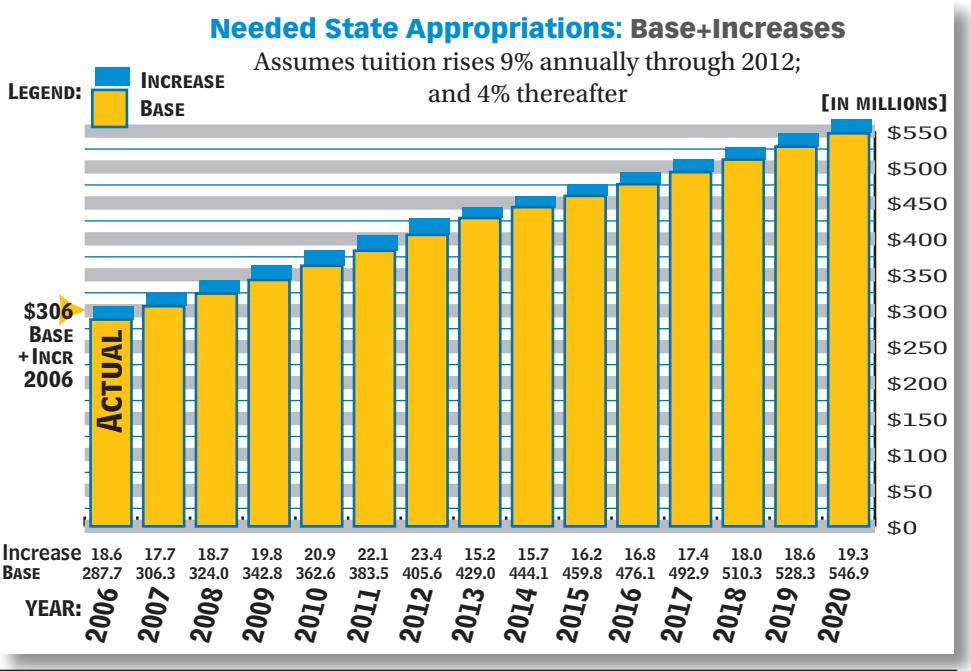
(operating dollars only, does not include capital dollars)



Consistent, moderate investment in UK is needed to build a Top 20 university. Committing an average increase of $19M to the base budget over the next 14 years will provide the necessary resources.

Needed State Appropriations: Base+Increases

Assumes tuition rises 9% annually through 2012; and 4% thereafter



Top 20 Business Plan
University of Kentucky

This Plan establishes the fiscal and capital framework for accomplishing the Top 20 Compact that UK and the people of the Commonwealth created in 1997. It identifies clear goals and explains what it means to be in the Top 20 of 88 public research universities. And it shows the investments required to achieve them.

In fulfilling the terms of this Compact, UK will:

- Increase its enrollment by 7,000 students

Improve the quality of undergraduate and graduate education

- Increase the graduation rate by 12 percentage points
- Increase research expenditures to over $700 million
- Increase by 625 the number of faculty dedicated to teaching students and doing research and public service that attack the persistent health and economic problems Kentucky faces
- Increase engagement of the UK community in improving Kentucky's schools, communities, farms, and businesses
- Increase substantially the number of inventions, patents, and start-up businesses

Kentucky will:

- Increase UK's base appropriations on a schedule characterized by consistency and shared responsibility
- Provide more capital construction support for research and educational facilities
- Grant UK authority to issue debt to support thoughtful, planned growth
- Give UK greater flexibility in the financial management of the institution

What it will mean for Kentucky:

- Increased educational attainment
- Increased wages and broader benefits
- Better health
- More locally-owned businesses
- Improved economic vitality

UK

DECEMBER 2005

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Top 20 Business Plan: Leadership and Coordination

Top 20 Steering Committee

M. Scott Smith, Co-Chair and Interim Provost and Dean, College of Agriculture
Frank A. Butler, Co-Chair and Executive Vice President for Finance and Administration and Vice President for Medical Center Operations
Wendy Baldwin, Executive Vice President for Research
Douglas Boyd, Chief of Staff to the President
Jeffrey B. Dembo, Board of Trustees Faculty Representative
Kyle Dippery, Staff Senate Chair
Rebecca Ellingsworth, Student Government Association President
David Ellis, Former Staff Senate Chair
Barbara W. Jones, General Counsel
Michael Karpf, Executive Vice President for Health Affairs
Michael D. Kennedy, Former Board of Trustees Faculty Representative
Angela S. Martin, Vice President for Planning, Budget, and Policy
Everett McCorvey, Faculty
Roy L. Moore, Board of Trustees Faculty Representative
Constance A. Ray, Vice President for Institutional Research, Planning, and Effectiveness
Michael Reid, Faculty
Ellen B. Rosenman, Faculty
Devanathan Sudharshan, Dean, College of Business and Economics
William H. Turner, Vice President for University Initiatives and Associate Provost for Multicultural Affairs
Rachel Webb, Former Student Government Association President
Carolyn Williams, Dean, College of Nursing
Russell G. Williams, Staff Board of Trustee Member
Bob Wiseman, Vice President for Facilities Management
Ernest J. Yanarella, University Senate Chair

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Ann Brand Haney
Pamela Robinette May
Billy Joe Miles
Roy L. Moore
Phillip R. Patton
Steven S. Reed
C. Frank Shoop
Myra Leigh Tobin
Billy B. Wilcoxson
Russ Williams
Barbara Smith Young

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THE UNIVERSITY OF KENTUCKY TOP 20 BUSINESS PLAN

Introduction

The University of Kentucky's Top 20 Business Plan represents the dedicated, thoughtful, and persistent efforts made by members of the UK community to develop a viable, research-based financial plan to support the mandate of House Bill 1—that the Commonwealth must have *a major comprehensive research institution ranked nationally in the top twenty public universities at the University of Kentucky*. This Plan articulates clearly and explicitly what UK must do to defend a claim that it has indeed become a Top 20 public research university—demonstrate exceptional quality and productivity in undergraduate education, graduate education, faculty recognition, and research productivity, while improving the quality of life for Kentuckians. This Plan uses a rational, well-conceived financial modeling process, grounded in aspirational yet reasonable assumptions regarding strategies of growth and quality, to project the investments needed over the next 14 years to propel UK to national prominence. This Plan also proposes a long-range funding methodology for ensuring adequate resources and facilities in support of the Top 20 goals.

This Plan represents a unique accomplishment in planning for the future among public higher education institutions, and as such, it is a reflection of the profound commitment of the UK community to the University and her mission and to the people of the Commonwealth.

UK has done its part. All the necessary components for moving forward and fulfilling the institution's share of the Top 20 Compact with the people of Kentucky are in place. We have established measures of progress toward achieving Top 20 status, identified the necessary strategies, projected needed investments, and proposed credible sources of revenue. We have done so because we believe in the Top 20 mandate of House Bill 1; because every indicator of quality applied to the lives of Kentuckians confirms the importance of a highly engaged, productive public research university within the state's borders; because we are a campus that extends to every corner of the Commonwealth; and because we believe in the future of Kentucky. Our Governor, our legislators, and the people of Kentucky themselves should do no less—believe in the importance of the Top 20 goal, believe in the University of Kentucky, and believe in our future as citizens of the Commonwealth. With this challenge, we seek your support to make all our dreams a reality.

UK Mission Statement

The University of Kentucky is a public, research-extensive, land-grant university dedicated to enriching people's lives through excellence in teaching, research, and service.

The University of Kentucky:

- Facilitates learning, informed by scholarship and research.
- Expands knowledge through research, scholarship, and creative activity.
- Serves a global community by disseminating, sharing, and applying knowledge.

The University, as the flagship institution, plays a critical leadership role for the Commonwealth by promoting human and economic development that improves lives within Kentucky's borders and beyond. The University models a diverse community characterized by fairness and social justice.

– Adopted by the Board of Trustees, April 1, 2003

Postsecondary Education Reform: The Top 20 Compact

The University of Kentucky has completed a significant effort to re-define how it goes about planning for the future. The Top 20 Business Plan provides the financial framework for establishing priorities and identifying long-term strategies—both strategic and financial—that will lead to a higher level of progress and success than ever before. The effort comprises a serious, determined, and visionary response to the mandate of *The Postsecondary Education Improvement Act of 1997* (House Bill 1).

The Top 20 Compact between UK and the people of the Commonwealth began to take shape in 1996 when the Kentucky General Assembly passed Senate Concurrent Resolution 93. The Resolution

> *…established a Task Force on Postsecondary Education to develop recommendations and an implementation plan for a system of postsecondary education in Kentucky that promotes quality instruction designed to provide students with the knowledge and skills necessary to be competitive in a global economy.*

The Task Force's report, issued in March 1997, found that:

> *Kentucky must significantly improve the postsecondary knowledge and skills of its population and its research competitiveness if the Commonwealth hopes to compete in the global economy and raise the quality of life of its citizens. The international and national economies are currently undergoing rapid transformation. These changes result from the growth of technology, the development of new products and expanding markets and the inevitable dislocations associated with the establishment of a new economic order. Kentucky's traditional economic sectors are declining and are being replaced by high-tech manufacturing and by the provision of services. As a result of this structural economic shift, the need for a skilled*

workforce has become even more important for the Commonwealth's competitive position.

The report pointed to a litany of statistics describing Kentucky's low levels of education attainment (e.g. high secondary school drop out rate, low college-going rate, relatively few bachelor's degrees) and resulting economic fragility (e.g. low per capita income, high poverty rate). Identified among the obstacles to success in the knowledge economy was that Kentucky did not have a nationally recognized doctoral degree-granting institution. In particular, the Task Force noted:

In contrast to virtually every other major research university in the country, Kentucky's major research university's mission is dispersed across far broader categories: remedial education, lower division courses, workforce training, and graduate education. No other major research university among Kentucky's competitor states has such a breadth of mission.

The result was a postsecondary education system that was not nationally competitive in terms of its research quality.

In May 1997, the Kentucky General Assembly convened to debate legislation aimed at reforming the postsecondary education system in Kentucky. Among the primary goals of that legislation was: *A major comprehensive research institution ranked nationally in the top twenty public universities at the University of Kentucky.* In addition, the legislation moved the University of Kentucky Community College System under the leadership of a new and separate organization – the Kentucky Community and Technical College System (KCTCS). A Compact was established between the University of Kentucky and the people of the Commonwealth—in return for the loss of the community colleges, UK would receive the support from the state necessary to achieve the legislation's mandate to become a Top 20 public research university by 2020.

Table 1 compares the quality-of-life in Kentucky with states that have Top 20 universities and the nation. These data confirm the Kentucky General Assembly's understanding of the importance of having a leading national research university in Kentucky.

Table 1: Measures of Quality of Life

Statewide Quality of Life Measures	National Average	Average in States With a Top 20 University*	Kentucky
Population with Bachelor's Degree or Higher (2000)	27.2%	28.4%	19.0%
Median household income (2003–04)	$44,436	$46,856	$36,786
Population Below the Poverty Level (2003–04)	12.6%	11.7%	16.0%
Percent of Population on Medicaid (2001)	17%	14.7%	19%

***States with Top 20 Universities:**

California
Colorado
Florida
Georgia
Illinois
Maryland
Michigan
Minnesota
North Carolina
Ohio
Pennsylvania
Texas
Virginia
Washington
Wisconsin

Eight years have passed since the Compact was established. The community colleges have separated from UK and are thriving in KCTCS. But the other half of the Compact has not yet been fulfilled—UK has not received the support from the state necessary to become a Top 20 public research university by 2020. Additionally, in spite of institutional efforts designed to define and assess progress toward Top 20 status, there has not been a joint agreement between the University of Kentucky and the people of the Commonwealth that sets forth clear, unambiguous goals and expectations as conditions of the Compact.

The University of Kentucky Top 20 Business Plan has two purposes: 1) to establish clear, explicit goals and expectations for what it means to be a Top 20 public research university; and 2) to project the financial investments needed through the year 2020 to achieve the goals and fulfill the agreed upon expectations. With completion of the first-ever Business Plan of the University, the state and UK enter the next phase of the pursuit of Top 20 status. This phase begins with a collaborative, long-term agreement on the mission, broad goals, strategic directions, and funding of UK as the flagship and land-grant research university of the Commonwealth of Kentucky.

PLANNING FOR THE FUTURE

Measuring Progress Toward National Prominence

Achieving the goal specified in House Bill 1 to become a Top 20 public research university and developing the long-range business plan to support that effort both require the thoughtful design of a research-based method for measuring current status and future progress. Increased financial support from the state and from University of Kentucky students must be accompanied by a series of markers of institutional progress.

Since House Bill 1 was passed in 1997, the University community has discussed what it means to be a Top 20 institution, and how the achievement should be measured. In 2001, shortly after becoming President, Lee Todd appointed and charged the *Top 20 Task Force* to answer these questions. The *Task Force* issued a report that provided the foundation for the 2003–2006 Strategic Plan—*The Dream & the Challenge*. Additionally, the *Top 20 Task Force* recommendations provided the basis for a model to measure progress over the long term, beginning with the identification of a set of key measures and an assessment of the gap between the University and other doctoral research-extensive institutions performing at a Top 20 level on those measures. The Stillwater Group (a consulting firm based in Stillwater, New Jersey) provided essential consultation and perspective in the development of the model and the Business Plan.

This section outlines the underlying assumptions, establishes measures of progress toward national prominence—including national rankings and engagement—and uses a gap analysis to identify strategic directions for the future.

Underlying Assumptions

As an initial step, design of the Top 20 ranking model considered the major findings and recommendations of the *Top 20 Task Force*:

- There should be two types of measures:

  1) those independently collected at the national level (TheCenter[1], Integrated Postsecondary Education Data System [IPEDS], National Science Foundation [NSF] surveys, and the *U.S. News & World Report* [USN&WR] undergraduate college rankings, among others), and

  2) those local measures that address UK's "higher purpose" of improving the overall quality of life and economic prosperity of Kentuckians. Local measures of the impact of engagement across Kentucky are necessary due to the current lack of national data collection efforts and consortia that facilitate comparisons of public service outcomes across institutions,

[1] TheCenter is a research enterprise at the University of Florida focused on the competitive national context for major research universities.

especially those with land-grant and/or health science missions.

- No single indicator or composite number can represent what an institution has done, can do, or will do. Therefore, a number of indicators needed to be indentified that, taken together, give the people of Kentucky a sense of the accomplishment and relative strength of their flagship university. The indicators established for such a purpose do not necessarily have to encompass all aspects of UK's programs and services.
- Any attempt to use indicators to define quality, productivity, and progress will evoke controversy and disagreement. Due to great variance both across and within institutions, it will be difficult to gain consensus on quality criteria or on measures.
- Universities of the highest quality tend to do most things very well.

In considering a variety of measures to include in a ranking model as indicators of progress toward national prominence, there are a number of caveats to clarify and qualify the use of such measures. The quality of an institution cannot be measured by only a few select quantitative or qualitative measures; however, the extent to which policies and procedures guide allocation of resources and produce expected outcomes can be a characteristic of an effective organization. Thus, a select group of measures has been identified to represent overall organizational effectiveness and success in fulfilling the institution's mission, with the following caveats:

- National data, such as those used by TheCenter, IPEDS, NSF, and USN&WR to evaluate higher education institutions are imperfect—but the best available. A certain amount of error is intrinsic in calculations based on definitions that may be interpreted differently by institutions resulting in inconsistent reporting of data. However, comparative results indicate that such data have considerable face validity.
- Rankings are inherently subjective and susceptible to a number of problems—misinterpretation, over-use, lack of reliability, and others.
- Rankings provide a means to assess current performance in relation to Top 20 institutions, assess gaps, establish targets, and measure progress, but they are not an end in themselves.
- An institution such as UK may achieve a high level of performance on select indicators, but if it does not serve the needs of the Commonwealth of Kentucky, it will have failed.

Finally, while there is no universally accepted measure of university performance, there is broad agreement on the desirable attributes of measures used in university ranking models. The UK *Top 20 Task Force* identified nine characteristics of such measures in its review of university rankings, and these were given careful consideration throughout the model-building process for the purpose of the Business Plan. Measures should be:

- well-defined;
- already collected by some entity;

- possible to change;
- important and significant to society;
- widely used nationally;
- under institutional control;
- realistic;
- reflective of the heterogeneity of UK's academic programs; and
- indicative of where the institution intends to go.

Making National Comparisons

The process of designing a ranking model for measuring progress toward national prominence included four distinct tasks:

1. COLLECT and analyze available measures;

2. BUILD a ranking model for consideration and refinement by the campus community;

3. ANALYZE previous and current performance gaps between UK and its competitors; and

4. ESTABLISH targets for future performance to guide strategic and resource planning through the year 2020.

This section provides the key decision points and the rationale associated with each of the four tasks, resulting in the design of a multi-dimensional composite score to monitor UK's progress toward national prominence.

DATA COLLECTION AND ANALYSIS. As a first step in the model-building process, UK developed a comprehensive database of key institutional measures, including data from IPEDS, TheCenter, and the USN&WR college rankings. Additionally, research was conducted on six of eight Stage 1 Membership Indicators used by the Association of American Universities (AAU) and the performance on those indicators by two institutions recently accepted into AAU—SUNY-Stony Brook and Texas A&M. Those institutions then were compared to UK (see Appendix A).

Review and analysis of the comprehensive database, AAU membership indicators, current literature, and extensive campus discussions resulted in the following key decision points:

- Give primary consideration to nine measures used by TheCenter in its annual report on the comparative performance of America's research universities:

TOTAL RESEARCH	FEDERAL RESEARCH
ENDOWMENT ASSETS	ANNUAL GIVING
FACULTY AWARDS	DOCTORATES GRANTED
POSTDOCTORAL APPOINTEES	MEDIAN SAT SCORES
NATIONAL ACADEMY MEMBERS	

The recommendations of the *Top 20 Task Force* relied heavily on TheCenter's data. Moreover, UK incorporated many of TheCenter's measures in its 2003–06 Strategic Plan, and has included a

summary of all results in the Council on Postsecondary Education's (CPE) annual accountability report to the Governor and the General Assembly.

- Further consider measures used by AAU and USN&WR in their evaluations of university quality. There is considerable correspondence between TheCenter's data and the Stage 1 indicators used by AAU. In essence, there is substantial value in using measures already researched by external organizations and widely recognized as key indicators of quality.
- To the greatest extent possible, design a ranking model that measures relative performance and includes outcome measures and excludes input measures. While adequacy of resources is a primary factor in performance, the true mark of quality is the institution's ability to use its available resources to bring about desired results. Further, national reputation and perceptions of quality appear to be more highly correlated with outcomes than with inputs. For example, in a correlation analysis that included endowment assets as an indicator of financial resources (input) as well as peer assessment ratings, research expenditures, graduation rates, doctoral degrees awarded, and faculty awards, the latter four outcomes were more strongly correlated with peer assessment ratings than were endowment assets (see Appendix B).
- In addition to faculty quality and research productivity measures readily accepted as important to comparisons among research universities, recognize the significant impact of undergraduate education measures on national reputation and perceptions of quality (see the correlation matrix in Appendix B for additional information on the relationship between graduation rates and peer assessment ratings). Although UK is striving to be among the top public research universities in the nation, a ranking model cannot ignore the substantial influence of undergraduate education measures on a university's market position and its ability to attract and retain academically prepared students and a renowned faculty that ultimately drives performance and shapes reputations and rankings.

BUILDING A RANKING MODEL. Following preliminary data analysis and discussions, analysis focused on a set of measures that represent quality in undergraduate and graduate education as well as faculty and research productivity. In keeping with a commitment to use TheCenter's data and ensuring adequate representation of undergraduate education, 9 measures were included in a draft model. Elements for building the model included:

- using a comparison population of the 88 doctoral research-extensive public universities in the U.S. that have federal research expenditures of $20 million or more per year;
- converting data on each measure to standard scores (i.e. z-scores) to allow the values to be summed to create a composite score; and
- sorting institutions by the composite score to determine UK's relative position, or rank.

The draft model then was presented to campus groups for discussion, feedback, and refinement (see Appendix C for a list of individuals and groups consulted during development of the Business Plan). Many of the deans believed strongly that a measure of faculty resources available to carry out teaching activities was essential in assessing the quality of an institution committed to success in all its mission areas. In response, the student-to-faculty ratio was added to the model. Also, the Top 20 Steering Committee expressed concern that the National Academy members measure was too stable—a reflection of the history of an institution rather than recent improvements in quality and productivity—to be useful for monitoring progress.

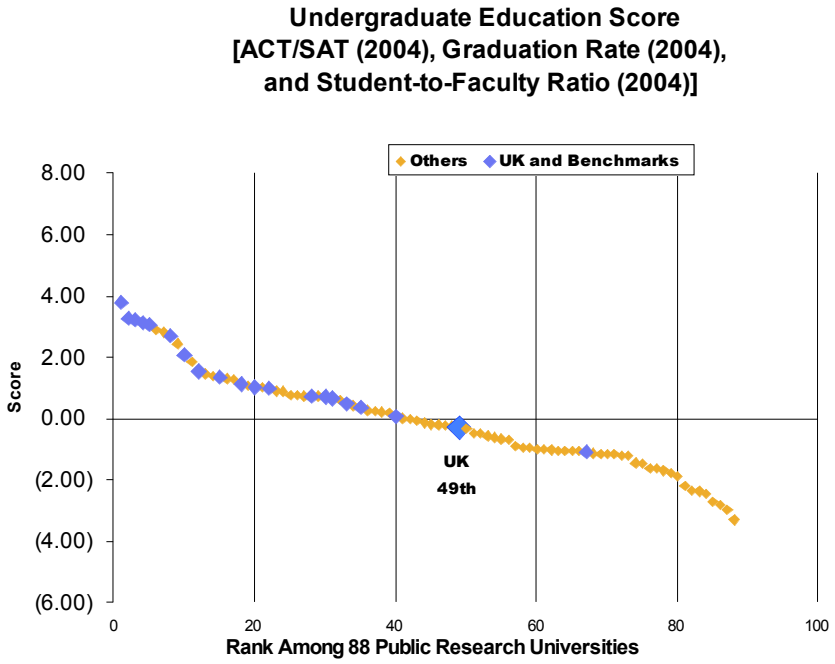
Consequently, the National Academy measure was dropped from the model. Finally, there was strong consensus for building a model that included four dimensions of quality weighted equally. (See Appendix D for key decisions and rationale for including or excluding suggested measures in the model.)

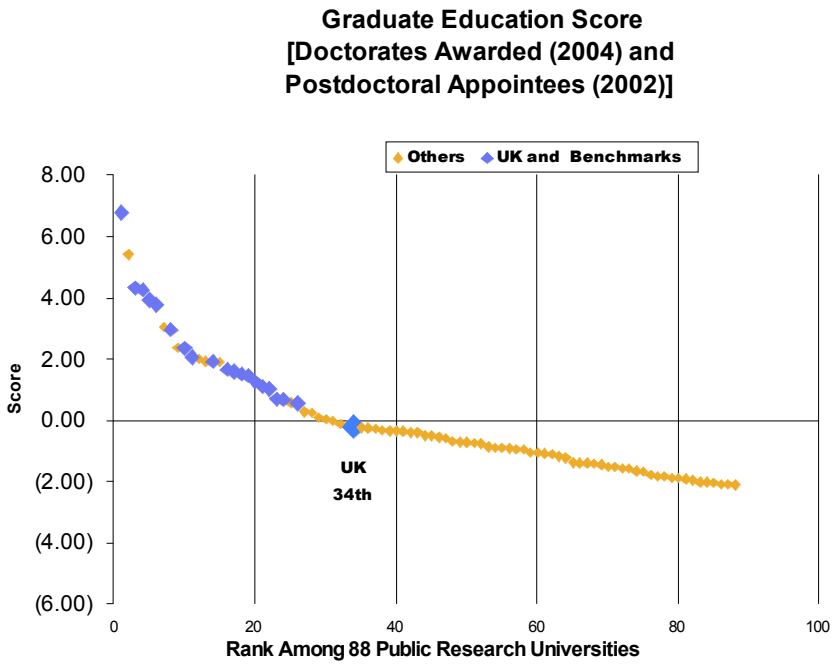
The final composite score model is comprised of nine measures within four domains: Undergraduate Education, Graduate Education, Faculty Recognition, and Research—with each domain weighted equally.

Based on ranking data available as of September 2005, UK ranks the lowest in Undergraduate Education (49th), while it ranks highest in Research Productivity (26th).

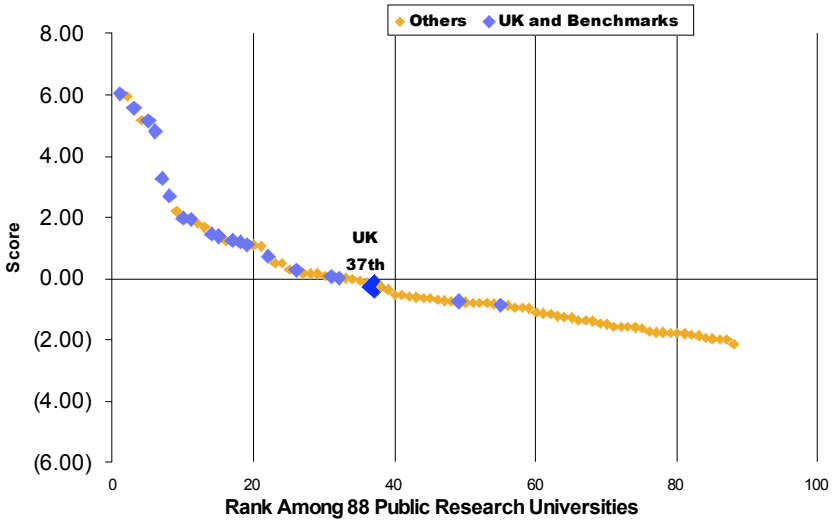
The composite scores and rankings of the 88 institutions on each domain are presented in Table 2.
(The final model and UK's position on each measure and domain relative to the 87 other doctoral research-extensive institutions are depicted in Appendix E.)

Table 2: Composite Score Rankings by Domain

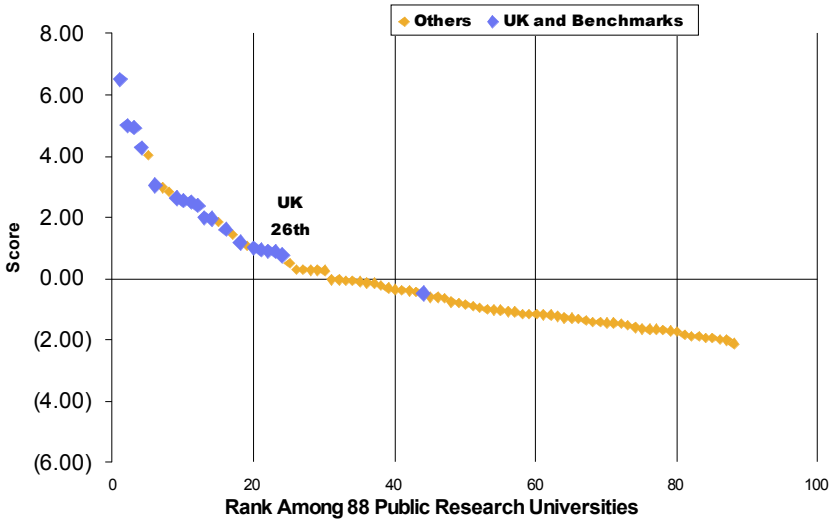




Faculty Recognition Score
[Citations (2000-04) and Awards (2003)]

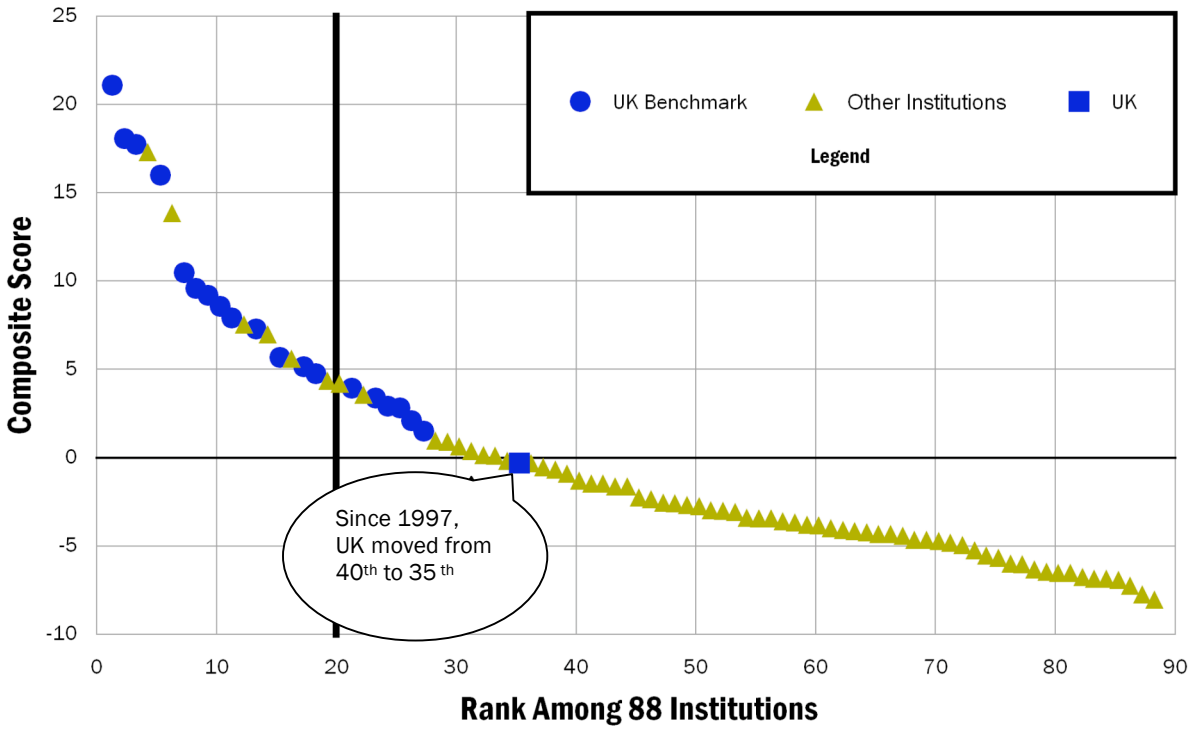


Research Score
[Federal and Non-Federal Research (2002)]



The domain composite scores were summed to obtain a total composite score. UK ranks 35th among the 88 doctoral research-extensive universities (see Figure 1). A retrospective analysis, using all measures except the student-to-faculty ratio (ranking data were not available), estimated that UK ranked 40th in 1997.

Figure 1: Composite Score and Rankings



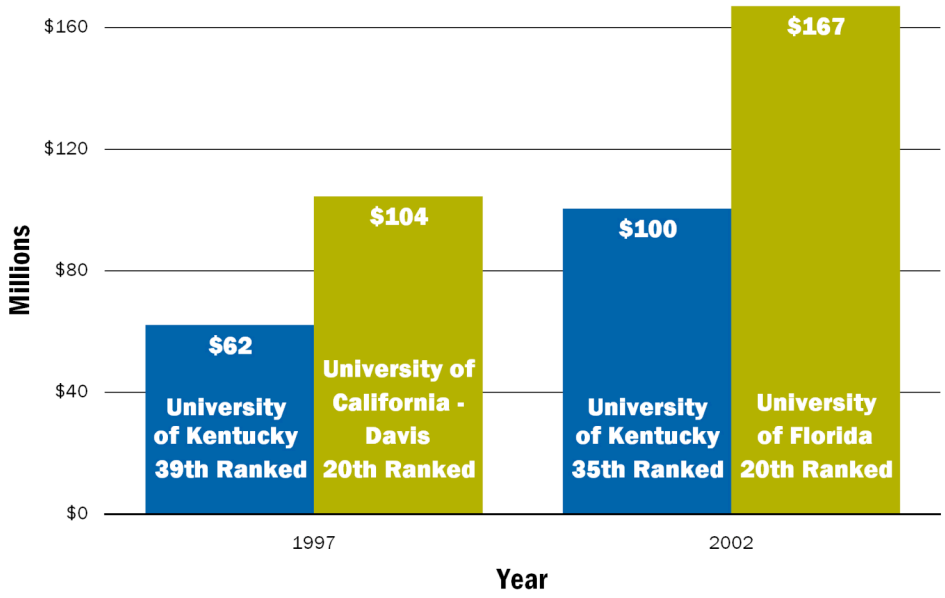
*UK's 19 benchmark institutions are highlighted. When UK selected these benchmarks in 1998, it felt strongly that these institutions should have a land-grant mission, or a medical center, or both.

GAP ANALYSIS AND FUTURE TARGETS. A gap analysis measures the difference between current performance and a desired outcome. To estimate the difference between UK's current level of performance and the level necessary to achieve national prominence as determined by the composite score model, a gap analysis was conducted on the nine measures. The gap to be determined was the difference between UK's performance and the performance of the 20th ranked institution on each measure based on data available in September 2005.

First, the analysis was conducted retrospectively to assess UK's progress toward the Top 20 goal since the 1997 passage of House Bill 1. This analysis provided a valuable perspective on the quality of effort thus far, but also brought into bold relief the fact that no research university stands still and Top 20 universities consistently make rapid progress. It is especially difficult to catch a moving target. For example, Figure 2 shows the gap between UK and the 20th institution on federal research expenditures in 1997 and in 2002. UK increased federal research expenditures by 61 percent between 1997 and 2002 and moved from 39th to 35th. However, UK fell further behind the 20th institution in actual

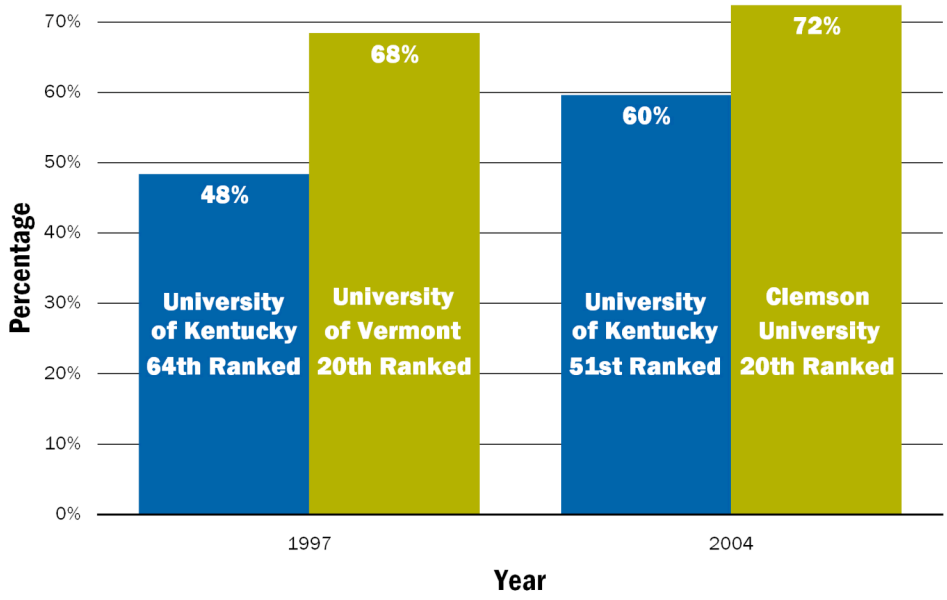
dollars spent on federal research. In 1997 the difference between UK and the 20th institution was $42 million. In 2002 the difference was $67 million.

Figure 2: Federal Research and Development Expenditures in Science and Engineering Fields



As another example, UK made significant progress on the six-year graduation rate of first-time, full-time, degree-seeking freshmen. In Figure 3, the difference between UK and the 20th institution is shown for 1997 and 2004. UK closed the gap from a difference of 20 percentage points to a difference of 12, improving from 64th to 51st in rank. Results for the remaining measures for which 1997 data were available are presented in Appendix F.

Figure 3: Six-Year Graduation Rate of First-time, Full-time Degree-seeking Freshmen



The gap analysis for UK's current performance on all measures in the four domains was based on the actual ranking data available as of September 2005, except for the student-to-faculty ratio. The student-to-faculty ratio is the one measure where a decline is expected. To account for this anticipated decline and plan appropriately, preliminary fall 2005 student-to-faculty ratio data was used to estimate the current gap. These results are summarized in Table 3. For each measure in each domain UK's most recent value is shown in addition to the current gap between UK and the 20th institution.

Next, the performance and rankings of all 88 public research universities on all measures and domains were projected for the year 2012 to give UK specific intermediary targets (see Table 3). Additional modeling of the data identified the values needed to move UK from 35th to 28th in the composite score rankings, and these values were then established as 2012 intermediary targets. To estimate future performance these projections used recent performance and other basic assumptions about the rate of inflation and capacity for improvement. Incorporated into the projection model was the assumption that the other 87 institutions will also be growing and improving on key measures of quality. The last column in Table 3 presents a number of straightforward, reasonable strategies for UK to pursue.

Table 3: Results of Gap Analysis
Using Most Recently Available Data and 2012 Performance Targets

Domain	Measure	UK	Current Top 20 Gap	2012 Target	Suggested Strategies
Undergraduate Education	ACT/SAT (2004-05)	1128	65	1160	Enhance student quality, improve undergraduate programs and services, and increase faculty size
	Six-Year Graduation Rate (2004-05)	60%	12%	71%	
	Student to Faculty Ratio (2005-06)	18 to 1 (preliminary)	3	17.2 to 1	
Graduate Education	Doctorates Granted (2003-04)	233	149	350	Increase graduate enrollment and degree productivity and external funding in doctoral programs
	Postdoctoral Appointments (2002-03)	230	71	526	
Faculty Recognition	Citations (2000–2004)	42,288	35,868	47,144	Increase faculty size, salaries, and research productivity, and promote accomplishments
	Awards (2002-04)	11	6	14	
Research Productivity	Federal Expenditures (2001-02)	$100.4 m.	$67 m.	$254.1m	Increase faculty size, salaries, and research productivity, and increase and improve research facilities.
	Non-Federal Expenditures (2001-02)	$135.8 m.	$13 m.	$221.9m	

Measures of Engagement

The University of Kentucky maintains a strong commitment to improving the lives of Kentuckians as it works to fulfill its teaching, research, and public service mission and attain national prominence. In response to the recommendation of the *Top 20 Task Force* that local measures be used to evaluate the University's progress, additional research was conducted to determine the current status of national engagement measures.

A 1999 report by the W. K. Kellogg Foundation[2] identified a wide range of terms used by institutions and scholars to define engagement—university outreach, public service, community service, public scholarship, professional outreach, and outreach scholarship. In 2000, the Kellogg Commission on the Future of State and Land-Grant Universities called upon public universities to *transform their thinking about service so that engagement becomes a priority on every campus, a central part of institutional mission*. The Commission defined engagement:

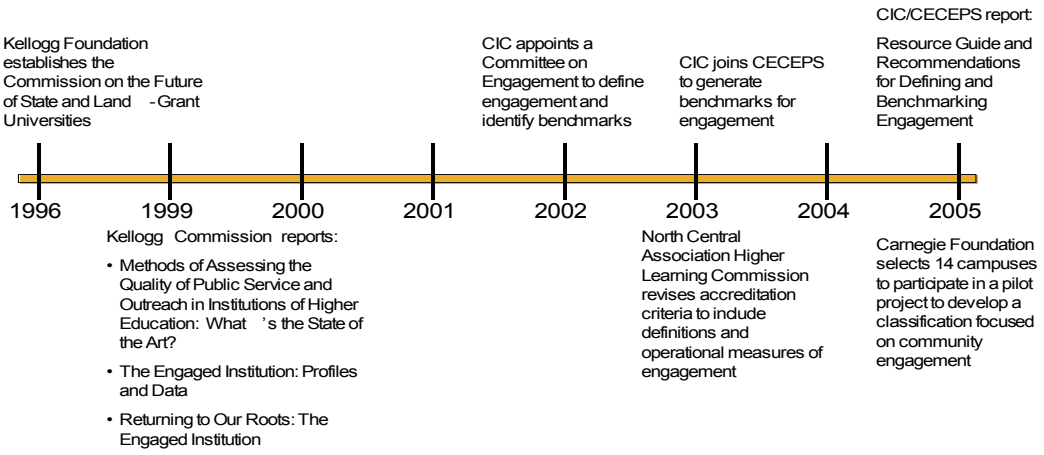
> *By engagement, we refer to institutions that have redesigned their teaching, research, and extension and service functions to become even more sympathetically and productively involved with their communities, however community may be defined.*

Since the Commission report, other higher education organizations have expanded efforts to define and benchmark engagement, including:

- The Committee on Institutional Cooperation: Committee on Engagement (CIC), an academic consortium of 12 major teaching and research universities in the Midwest.
- The National Association of State Universities and Land-Grant Colleges Council on Extension, Continuing Education, and Public Service (CECEPS) Benchmarking Task Force.
- The Higher Learning Commission of the North Central Association of Colleges and Universities (North Central), one of six regional institutional accrediting associations in the United States.
- The Carnegie Foundation, which is piloting a project to develop an elective institutional classification for community engagement.

[2] Methods of Assessing the Quality of Public Service and Outreach in Institutions of Higher Education: What's the State of the Art? W.K. Kellogg Foundation, April, 1999. November 2005. http://www.wkkf.org/pubs/YouthED/Pub577.pdf

Timeline: Recent Efforts to Define and Benchmark Engagement



Examples of engagement activities include:

- Continuing education and lifelong learning
- Access to library and educational facilities
- Access to the Arts
- Direct services through a university clinic, hospital, or lab
- Applied research focused on responding to public problems
- Teaching in the form of clinical education, service internships, or practica
- Extension education
- Economic and community development
- Technology transfer

Given the recent flurry of activity aimed at defining exactly what institutions mean by the term "engagement," it is not surprising that nationally accepted measures for evaluating engagement outcomes and their impact also are not yet defined. Measures of engagement proposed by North Central and by CIC ("Resource Guide and Recommendations for Defining and Benchmarking Engagement," February 2005), included *evidence of* institutional commitment; faculty, staff, and student involvement; efforts to assess the impact and outcomes of engagement; resource opportunities generated through engagement; and others. However, the key to using and applying the list above is the interpretation of the word "evidence." Repeated use of this word indicates both North Central and CIC are struggling to define specific measures of engagement.

A cursory review of the information available on the meaning and measurement of engagement in comparison to ongoing activities at the University of Kentucky reveals clearly that UK's faculty, staff, and students are very involved in engagement work. As a land-grant institution with a comprehensive medical center, and numerous outreach initiatives that support P–12 education, arts

and cultural programming, business and economic development, and entrepreneurship, among others, UK is well-positioned to *become even more sympathetically and productively involved* in solving Kentucky's most persistent problems and heightening the presence and value of activities such as the Arts that enhance the overall quality of life.

For example, the Commonwealth Collaboratives is an initiative to turn UK's research resources toward addressing and solving the "Kentucky Uglies," President Lee Todd's term for long-entrenched problems that are holding back the state's economic and cultural progress. The Commonwealth Collaboratives—projects that address specific issues—are taking aim at improving Kentucky's schools, business climate, environment, health care, and lifestyles. These projects bind UK's researchers, P-12 educators, independent health care providers, entrepreneurs, industries, local government officials, and private citizens in partnerships designed to implement effective solutions to regional and statewide problems. Further, UK's researchers must provide annual reports describing their progress through measures that demonstrate the actual impact of the projects on their target populations.

To be successful in attaining national prominence, UK must meet the challenge of providing evidence of engagement. A first step is to define local measures to assess progress and impact:

- Build a database of engagement and outreach activities to facilitate tracking and reporting on engagement outcomes
- Assess outcomes of projects supported by the Commonwealth Collaboratives
- Document the impact and benefits of clinical services
- Assess Extension's performance on priority indicators
- Conduct periodic analysis of the economic impact of UK's research and development activities
- Assess access to and value of the Arts

The University's next strategic plan should include measures of statewide engagement.

Strategies for Attaining National Prominence

Throughout the development of the ranking model and subsequent consideration of possible strategic directions to help UK move forward, discussion was grounded in a strong philosophy that UK cannot succeed unless it improves the lives of Kentuckians. The importance of engagement as a conceptual framework in which the University must operate was paramount. To that end, in making decisions regarding strategies for attaining national prominence, UK considered carefully the educational and economic needs of Kentucky as reflected in the 2005–2010 Public Agenda of the Council on Postsecondary Education—*Five Questions, One Mission: Better Lives for Kentucky's People*—and associated facts:

1. Are more Kentuckians ready for postsecondary education?

For every 100 ninth graders in Kentucky, only 15 will graduate with an associate or a baccalaureate degree within the standard time frames (within three years after graduating from high school for an associate degree or within six years after graduating from high school for a baccalaureate degree). From 1995–2000, 11,351 people with less than a high school diploma between the ages of 22–29 moved to Kentucky while 5,087 left the state, resulting in a net gain of nearly 6,264 undereducated young adults.

2. Is Kentucky education affordable for its citizens?

A recent affordability study found that Kentucky's public higher education institutions were within a reasonable range of affordability for most students. Average tuition and fees at Kentucky institutions in 2004–05 was 15 percent below the national average; however, Kentucky's national affordability rank slipped from 8th to 14th between 2002 and 2004.

3. Do more Kentuckians have certificates or degrees?

In 2004 Kentucky ranked 47th in the nation in the percent of the adult population with a four-year degree or higher. To reach the national average by 2020 Kentucky must more than double the number of college-educated adults within its borders.

4. Are college graduates prepared for life and work in Kentucky?

According to The National Center for Public Policy and Higher Education's *Measuring Up 2004*, four-year college undergraduates in Kentucky score below the national average on assessments of writing, critical thinking, and problem-solving skills; and not enough Kentuckians score well on examinations needed for admission to graduate school.

5. Are Kentucky's people, communities, and economy benefiting?

Although Kentucky has taken steps to improve its economic competitiveness, its ratings on the Corporation for Enterprise Development's (CFED) report card have not changed much in 15 years—earning a *D* in economic performance, a *D* in development capacity, an *F* in financial resources, and a *C* in business vitality in 2004. Federal research and development dollars per capita increased 92 percent in Kentucky from 1996 to 2002; however, Kentucky only moved from 45th to 42nd in the nation.

THE FIVE QUESTIONS ABOVE and the "cold, hard facts" presented in relation to them pose significant concerns among state policymakers and within the UK community. It is clear that Kentucky must increase the number of educated citizens within its borders; plan strategically over the long-term for financial investments in education; enroll and graduate more students; improve student learning; and greatly accelerate research and service activities that help build strong economies and communities.

According to the Council on Postsecondary Education (CPE), an increase of 211,000 baccalaureate degree holders is needed to eliminate the gap between Kentucky and the national average in baccalaureate degree attainment by 2020. In implementing the 2005–2010 Public Agenda, the CPE developed a student flow

model to assist in planning for postsecondary education enrollment growth and improved baccalaureate degree production at institutions throughout Kentucky. The student flow model is a four-step model that incorporates assumptions regarding increases in:

1. participation and quality in Kentucky's postsecondary education institutions;

2. the number of GED completers and their college-going rate;

3. enrollment in KCTCS and the number of transfers to four-year institutions; and

4. high school graduation rates.

A fifth component of the CPE planning model proposes significant migration of baccalaureate degree holders into Kentucky to fill jobs created through economic development.

Using the student flow model and a set of basic assumptions, the CPE calculated the enrollment increases and baccalaureate degree productivity needed for each public and independant four-year institution in Kentucky if the state is to achieve the national average in baccalaureate degree attainment by 2020. Draft predictions were made available in November 2005 to facilitate goal-setting activities among the public institutions; consequently, the predictions for UK were not available during development of the Business Plan. Table 4 shows the predicted enrollment and degree production needed at UK by 2020 according to the CPE model. Results of the modeling process also predict that UK's percent of the total enrollment and baccalaureate degrees awarded annually in the state would decline between 2004 and 2020. CPE's preliminary calculations show that UK would need to enroll an additional 10,160 undergraduate students by 2020. The information in Table 4 is presented to provide additional context for considering the vision, scale, and reasonableness of UK's Business Plan.

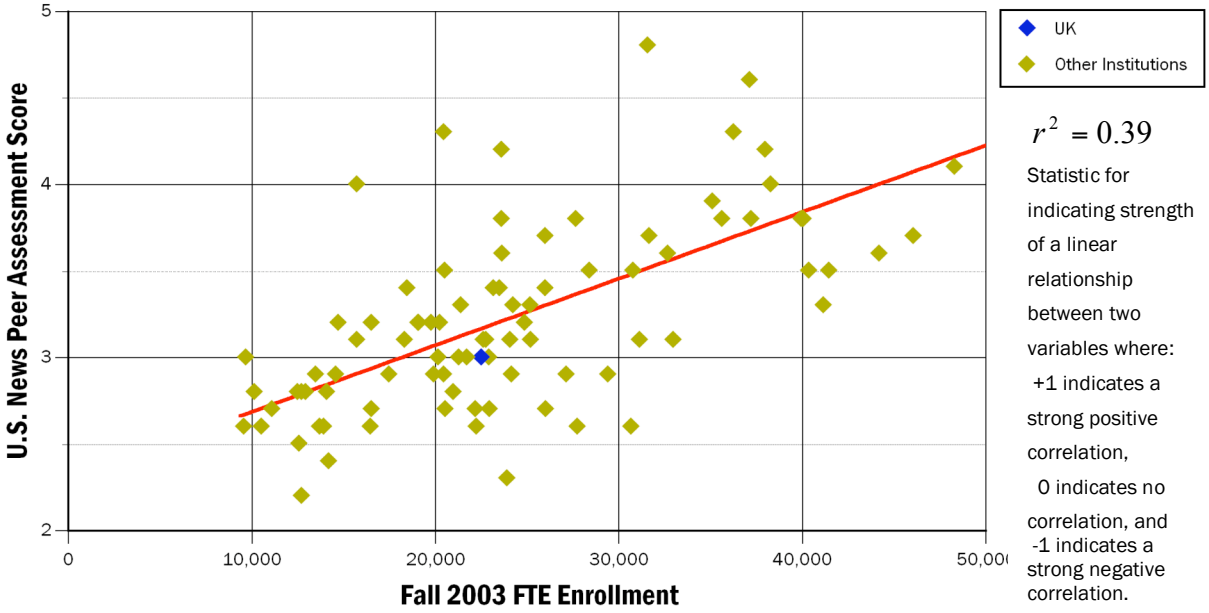
Table 4: CPE Student Flow Model Results for Increasing Undergraduate Enrollment (Headcount) and Baccalaureate Degree Productivity.

Institution	Proposed 2020 Targets		Percent of Total for Kentucky 2004		Percent of Total for Kentucky 2020	
	Headcount	Degrees	Headcount	Degrees	Headcount	Degrees
UK	28,652	5,779	15.3%	19.6%	14.2%	17.4%

In response to statewide needs, UK discussed various scenarios, including improving the quality of education while maintaining current enrollment levels; increasing the number of students enrolled while maintaining current levels of student learning; or increasing both the quality of education and the number of students enrolled. In considering the Commonwealth's critical needs and the mandate to achieve national prominence, UK's moral responsibility is to do both. UK must enroll more students, provide to them a better educational experience, and, thus, graduate more students who value life-long learning, the Arts, diversity, and engagement.

STRATEGY OF GROWTH. The key to success in a knowledge economy is creating and sustaining the intellectual capital vital to the recruitment of existing businesses and the creation of new ones. Three-quarters of economic growth in the U.S. today is the result of technological advance and nearly all of that advance is the result of university-based research. Businesses will continue to locate in close proximity to research universities with substantial intellectual and laboratory assets and the capacity to produce on a sizeable scale workers prepared to constantly shape and adapt to the rapid evolution of technology and information translation.

Figure 4: Full-Time Equivalent (FTE) Enrollment and *U.S. News & World Report* Peer Assessment Ratings



The University of Kentucky will be the inevitable centerpiece of any serious effort in Kentucky to create the critical mass of human capital and the synergy of knowledge and infrastructure increasingly attractive to 21st Century business and industry. To do that, UK must do two things. First, it must build a student body, more diverse in character, larger in size, and more anxious to seek constant advance across all fields of human knowledge, especially in those essential to economic success: science, technology, engineering, and math. UK must inspire, recruit, and retain thousands of Kentuckians willing to take on the challenges and opportunities of the knowledge economy with the aim of making their home state a leader in new business creation and a magnet for cutting edge industries. UK also must draw students from across the United States and the globe anxious to share in building a state economy that successfully competes in the 21st Century.

Second, UK must recruit and retain a faculty and support staff that is attractive to these prospective students, valued for their expertise by existing businesses, and willing to risk greatly and act boldly to discover new products and new processes, build companies, and create jobs.

Kentucky's progress in this new century will be the result of the vision, expertise, and initiative of her flagship faculty.

UK has a moral obligation to the citizens of Kentucky to grow as a university—not just enroll more students and hire more faculty for the economic gains that result from such strategies.

But UK also must harness the energy and talent of its expanding campus in the effort to attack the broad spectrum of persistent social and health problems that Kentucky has historically confronted.

UK's teaching, research, and service missions must always tack to the guiding principle that knowledge must be advanced so that Kentucky's citizens benefit, their health improves, and their quality of life prospers.

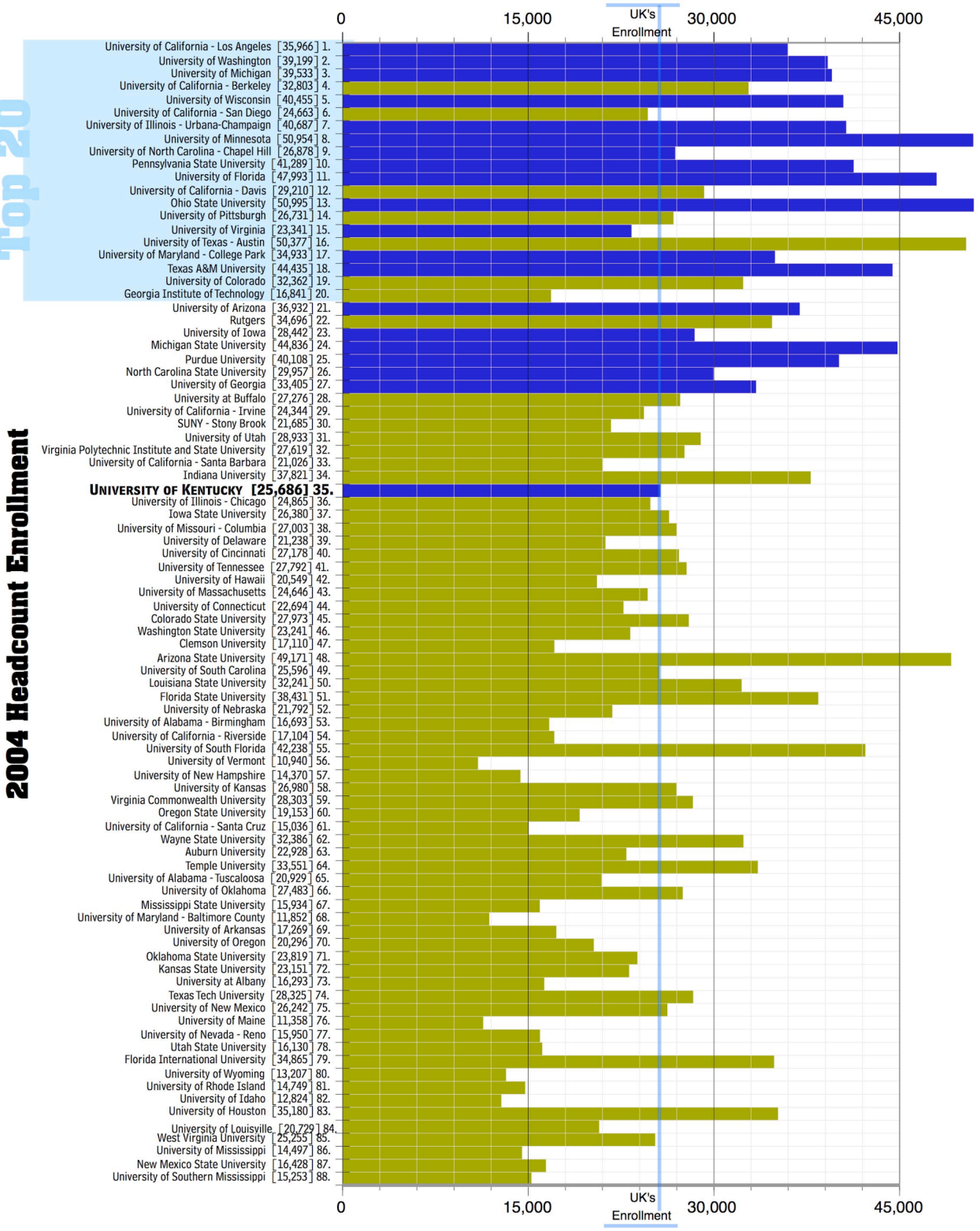
An analysis of the relationship between a university's size and its productivity, reputation, and rankings provides compelling evidence that size matters and should be a key planning priority for UK.

Figure 4 shows the strong correlation between reputation (as measured by the USN&WR peer assessment survey) and the number of full-time equivalent students enrolled.

Figure 5 depicts the Fall 2004 enrollment (headcount) of UK and its 87 competitors ordered by rank according to their composite score.

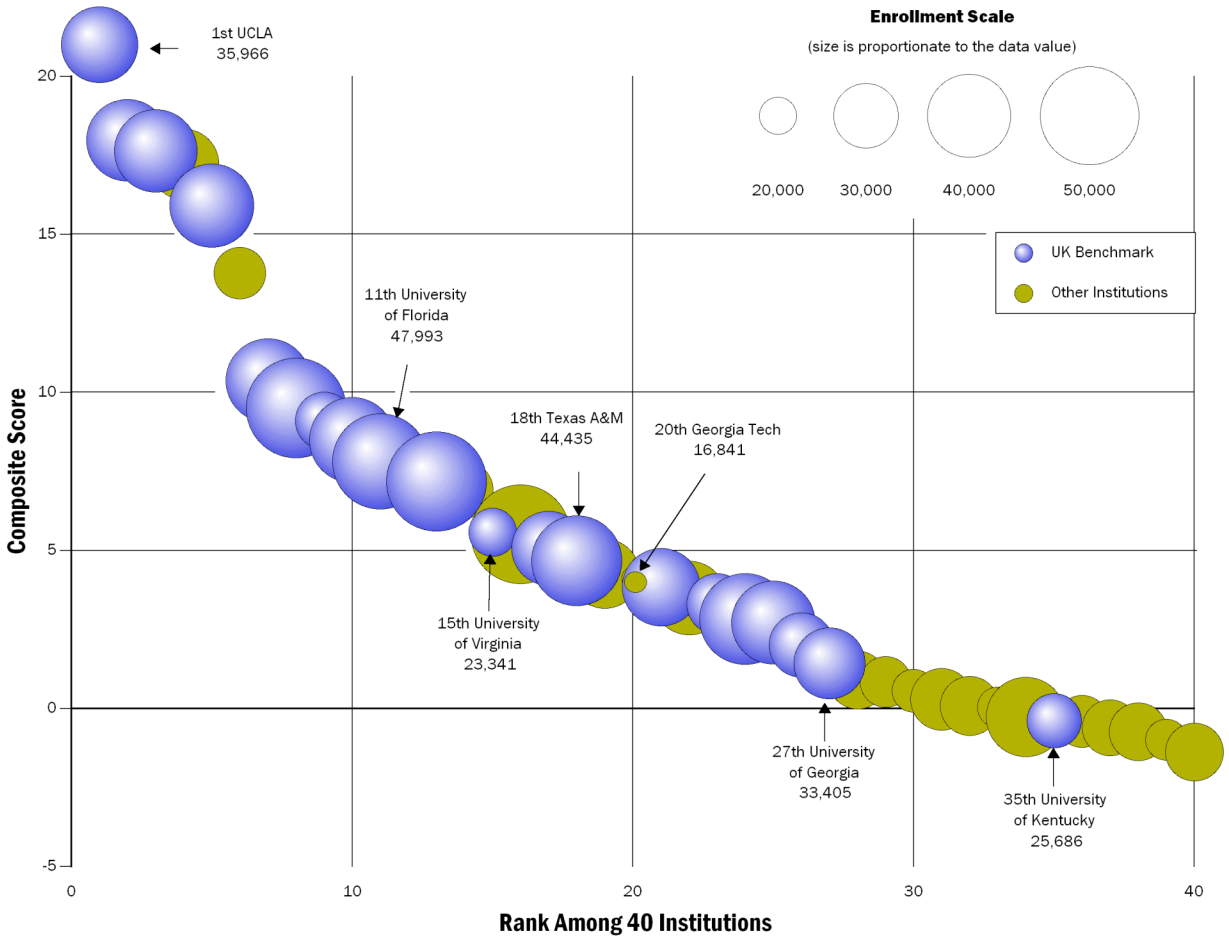
In the Top 20 only three institutions—Georgia Tech, the University of California-San Diego, and the University of Virginia—have fewer students than UK.

Figure 5: Headcount Enrollment of UK and 87 other Public Research Universities Rank Ordered by Composite Score



And finally, in Figure 6, the distribution of composite ranking scores for the top 40 shows that the more highly ranked institutions have comparatively larger enrollments (as indicated by the larger bubbles). Immediately above UK are six competitors that are similar to UK in number of students in addition to Indiana University, which is much larger. UK's short-term goal is to surpass these seven competitors, and move from its present 35th rank to 28th—or approximately half-way toward reaching the goal of attaining Top 20 status by 2012. Planned growth in a thoughtful, strategic manner will help propel UK into the top 30 institutions within a relatively short timeframe.

Figure 6: Composite Score Ranking Where Size of Bubble Represents Full-Time Equivalent Enrollment (FTE)



STRATEGY OF QUALITY. While a strategy of growth will help UK increase its capacity to have an impact on the lives of Kentuckians, a strategy of quality demands equal consideration. Kentuckians deserve and need no less than a top ranked public research university that strives continually to improve the quality and productivity of its considerable and diverse mission activities that are supported by public funds. Improved quality related to instruction, research and creativity, service, academic support,

and administration translates into greater efficiencies, additional resources, and desired outcomes. Quality is prevalent throughout the specific strategies described below.

After taking into consideration all sources of information and feedback and conducting additional analyses, UK identified specific strategies designed to promote growth and quality. To reach national prominence by 2020—as measured by a Top 20 ranking in the composite score model—UK must invest more in undergraduate education, graduate education, faculty resources, and research activities, and become more efficient.

Undergraduate Education

- Improve the quality and diversity of the undergraduate population by enhancing recruitment efforts and scholarship programs while increasing the average converted SAT score of entering freshmen from 1128 to at least 1193 by 2020.
- Improve programs and services that have an impact on the undergraduate experience and improve retention and graduation rates: recruitment and admissions, advising, the University Studies Program (the general education component of the bachelor's degree), student services, and student life activities.

  Activities aimed at recruiting and enrolling a high-quality, diverse student population must be of a caliber that attracts and persuades highly accomplished high school graduates in Kentucky and beyond its borders. Examples of needed improvements include user-friendly, web-based student services; far-reaching, creative web-based recruiting strategies; and efficient, timely scholarship strategies for need- and merit-based aid.

  Activities aimed at retaining and graduating a high-quality, diverse student population must meet a broad range of intellectual and creative interests, including enhanced academic offerings, learning communities, arts and cultural events, and opportunities for engagement.

- Contract with an external consulting firm to conduct a comprehensive recruitment analysis. This analysis will assist UK in formulating recruitment and marketing strategies designed to meet enrollment objectives related to quality, diversity, and size and improving retention and graduation rates.

- Add 500 regular, tenure-track faculty in the undergraduate colleges to support an undergraduate enrollment increase of 6,200 highly qualified students by 2020. This recommended increase in faculty is based on the number needed to reduce the current student-to-faculty ratio from 17.8:1 to 16.4:1 by 2020. The number of new students recommended was proposed by the *Top 20 Task Force* in 2002. In addition, analyses of recent trends in UK's applicant pool suggest that UK has the potential to increase enrollment of highly qualified students, especially among nonresidents.
- Provide additional support space, classroom and class lab space, and recreational facilities and construct new and renovate existing residence halls that ultimately will accommodate 30 percent of undergraduate students by 2020.

Graduate Education

- With additional faculty to support undergraduate education and increase research productivity, add 750 new graduate/first professional students by 2020.
- Improve the financial support to graduate students, especially in areas outside the sciences, by providing full funding to waive tuition and increasing and maintaining stipends at a nationally competitive amount for all current and new graduate assistants.
- By 2020, increase postdoctoral appointments by 375 to support increasing research productivity.

Faculty Recognition

Offer the strongest support possible in salaries, benefits, technology, facilities, and other programs and services. UK must provide competitive starting salaries and increase the average instructional faculty salary to the benchmark median by 2012 to attract and retain a diverse, highly productive, and achievement oriented faculty.

Research Productivity

- Add 125 full-time regular or research faculty in the graduate/first professional colleges to enhance graduate education and research productivity. This recommended increase is based on the number needed in addition to the 500 new faculty in the undergraduate colleges to increase research expenditures to $476 million by 2012 and $768 million by 2020. (See Appendix 6-8)
- Based on current CPE guidelines for research space, construct new research facilities totaling 710,000 assignable square feet by 2012 and 1,070,000 assignable square feet by 2020.

Top 20 Growth Targets

In summary, to meet the needs of the Commonwealth and position itself to achieve Top 20 status by 2020, UK must meet the growth targets presented in Table 5.

Table 5: 2020 Growth Targets for Enrollment, Number of Faculty and Total Research Expenditures

Growth Area	UK 2004	2012 Goal	2020 Goal	Variance '06–'12	Variance '06–'20
Undergraduate Enrollments	18,492	20,374	24,692	1,882	6,200
Graduate and First Professional	7,252	7,642	8,002	390	750
Postdoctoral Appointments	295	438	670	143	375
Faculty	1,920	2,133	2,545	213	625
Total Research Expenditures	$298	$476	$768	$178	$470

Staff Support. Additional funds provided in the Plan may be used to create new staff positions to support the increased enrollments and faculty, as needs are identified. However, specific targets for additional staff are not included in the Plan. The implementation of SAP, an enterprise resources planning system, provides the opportunity to redesign core business processes and generate efficiencies. The Plan assumes that some staff positions may be realigned to provide the direct support needed as a result of increased enrollments and faculty growth.

Improve Operational Efficiencies

UK must consider implementing incentives for exceptional performance at the academic unit level. The criteria and guidelines universities use to allocate resources to academic and administrative functions can have a decisive effect on overall academic quality and performance.

In recent years one resource allocation model – Responsibility Center Management (RCM) – has attracted wide attention. In essence, RCM is a tool for decentralized, incentive-based budgeting that builds market forces into the decision-making process. In the typical application of RCM, direct and indirect revenues and expenses are allocated to the academic programs within the university, giving deans the responsibility, incentive, and authority to manage resources wisely. RCM does not cut costs or increase productivity; rather, it provides a framework and incentives for increasing efficiency through better understanding of the university's cost and revenue structure. RCM enables academic decision-makers to understand the dynamics of the university's cost structure and revenue base, thereby facilitating realistic planning and sound decision-making. It is this

transparency that produces a clear understanding of the distribution of resources within the university.

UK's acquisition and installation of SAP's enterprise-wide technology has laid the foundation for a university-wide redesign of core business processes—finance, human resources, student services, procurement, and facilities management. By redesigning and streamlining its business processes, UK can improve service to the university community while reducing operating costs. Redesigned business processes, when properly conceived, enhance not only the quantity and quality of outputs – they also enhance the nature of work by empowering administrative employees to exercise judgment and initiative in problem-solving. Front-line service providers are transformed from nay-saying regulators to pro-active facilitators. The service model of customers in newly redesigned processes usually gravitates toward self-service. The paradox of self-service is that customers experience self-service as more satisfying and convenient than traditional models of customer service. To realize these benefits, UK must set targets for service improvement and operating savings across core business processes. The transition to an enterprise resource planning model, such as SAP, can yield significant savings for reinvestment in higher-priority programs—but only if the University pursues a disciplined effort to capture the cost reductions resulting from the streamlined business processes. An institution the size of the University of Kentucky should be able to capture at least 10 percent of central and college administrative costs by implementing a new enterprise system.

UK should investigate cost-saving opportunities through outsourcing (i.e., contracting with external vendors to provide improved services at lower costs). Although higher education was among the last industries to embrace outsourcing, today a wide range of major business and administrative services in higher education are delivered through outsourcing. According to a recent survey by UNICCO (an integrated facilities services company), only nine of 152 schools that responded were delivering all administrative services on a self-operating basis. The rationale for outsourcing rather than self-operating services is straightforward: the core competence of colleges and universities is research and education. Firms that provide outsourcing services typically specialize in the services they provide and typically provide service equal in quality to "in-sourced" services at a lower total cost.

UK should allocate special funding for strategies to support staff. Improving rewards, the campus environment, and the extent to which staff maintain a positive balance between work and life will promote higher levels of workplace satisfaction and productivity. Strategies should be determined based on evidence of areas of greatest need as a result of the Work-Life Survey and additional analyses to be conducted by the Office of Human Resources.

Establish a Long-Term Tuition Strategy

A long-range plan for setting tuition rates will allow parents, students, and other constituent's time to plan for the estimated total cost of education. UK's tuition plan must strike a balance between maintaining affordability for students and maximizing

revenues available to support Top 20 investments. The tuition plan should take into account:

- Projected state appropriations;
- New enrollment;
- Increase in nonresident undergraduates from 21 to 25 percent of the total undergraduate population; and,
- An increase in the tuition discount rate to provide adequate financial aid for lower socio-economic students.

The level of state support is a critical variable in this equation. In determining net funding needs, the Financial Plan is based on the assumption that tuition and fees will increase at a minimum of four percent annually for all categories of students – undergraduate and graduate/first professional, resident and nonresident. A sliding scale of tuition rate increases and corresponding increases in state appropriations to meet funding needs is included in the Financial Plan.

Scholarship funding for undergraduates must increase in order to meet the needs of low income students; enhance student diversity; and enroll the most highly qualified students.

The Plan includes increasing the undergraduate financial aid discount rate (unrestricted institutional aid as a percent of tuition) from 16.8 percent to about 20 percent by 2012. UK should determine the needed tuition discount rate more precisely based on a comprehensive study of current financial aid policies and practices. This study should be part of the comprehensive analysis of recruitment and marketing strategies described above.

The comprehensive financial aid study should recommend ways to re-structure scholarship and financial aid policies, procedures, and programs to assure that undergraduate financial aid policies are equitable and effective.

The delivery and financing of alternative instructional programs such as Evening/Weekend and Summer School should be restructured to better meet the needs of students and maximize revenues.

Top 20 Award Program

The Top 20 Steering Committee recognizes that a comprehensive, university-wide effort is needed to achieve the Top 20 goals. The Committee also recognizes that the measures included in the composite score model may not apply directly to some academic units and in most cases not at all to academic support and administrative units. Nonetheless, exemplary performance that garners national recognition constitutes an essential ingredient for UK to earn a reputation as a nationally prominent public research university. Therefore, UK should implement a Top 20 recognition award program for units that establish Top 20 goals as part of their strategic plans, achieve those goals, and gain national recognition. The Top 20 Performance Award should be an annual award with an appropriate considerable monetary reward for the unit or units that perform at such a level, based on a process and criteria to be determined by the University.

FINANCIAL PLAN

The University of Kentucky is a statewide organization with an annual operating budget approaching $2 billion and over 11,000 employees, making it one of the largest enterprises and employers in the Commonwealth of Kentucky. Long-range planning for acquiring financial resources to support successful attainment of its multiple missions must become an ongoing endeavor. To move toward Top 20 status relying on inconsistent and unpredictable state appropriations, and the related volatility of tuition revenue would be short-sighted and irresponsible. To consider state appropriations and tuition and fees as the only flexible sources of revenue for supporting growth and program improvements also would be short-sighted and irresponsible.

An organization the size and scope of UK must identify, acquire, and utilize multiple sources of revenue to turn dreams into reality. Therefore, a primary purpose of the Top 20 Business Plan is to articulate a long range financial plan that clearly and explicitly funds the strategic initiatives necessary to achieve a level of performance characteristic of a Top 20 public research university. Following identification of strategies necessary to eliminate performance gaps and achieve Top 20 status, the Business Plan focuses on the financial investments needed to implement the strategies and ensure success. This section describes the investments needed and multiple scenarios for funding them.

Needed Investments

Decisions related to needed investments followed directly from identifying the strategies necessary to improve performance—and the lives of Kentuckians.

- If research productivity is to be increased, then investments in start-up packages, equipment, research space, and administrative support will be needed.
- If more students are to be educated, then investments in recruitment and admissions, financial aid, advising, academic programs, student services, student life activities, recreational facilities, residence halls, and classrooms and class labs must be made.
- If more faculty are needed, then investments in salaries, benefits, equipment, offices, academic support, and operating budgets must be made.

Overall, the specific investments needed to support implementation of the Top 20 strategies fall into six broad categories: Faculty, Academic Support, Undergraduate Education, Student Aid, Support Services, and Facilities. A self-supporting hospital category was added to complete a comprehensive, long-range financial picture that takes into account all General Fund sources of revenue and expenditures in support of UK's mission.

As previously discussed, UK is currently ranked 35th based on the selected nine variables making up the four domains of quality—Undergraduate Education, Graduate Education, Faculty Recognition, and Research Productivity. To align achievement of

Top 20 status by 2020 to the next 14 years, intermediary goals were set for 2012. The overall objective is for UK to move from 35th to at least 28th by 2012 and then to at least 20th by 2020. Therefore, various parts of the Financial Plan will present information as of the 2012 fiscal year as well as 2020.

For each of the above six categories, a financial model was developed to predict the required cumulative investments for each year starting with the fiscal year ending June 30, 2007 and going through the fiscal year ending June 30, 2020. The University's General Fund operating budget for fiscal year 2006 provided the baseline for the modeling process. Data-driven assumptions derived from interviews with campus leaders and from analysis of existing institutional and external data were built into the models as appropriate, including estimated inflationary increases. Each of these categories is described below and shown in Table 6 along with the predicted total amount of new operating expenditures needed by 2012 and by 2020. See Appendix G for detailed tables depicting the results of the financial modeling process.

A total of $1.097 billion needs to be added to UK's annual budget by 2020 (Table 6.) While faculty are identified in a separate category below, all other personnel including staff and student workers are included in the Academic Support, Undergraduate Education, Support Services, and Facilities categories.

FACULTY: The annual cost of the 625 additional faculty required to improve UK's student-to-faculty ratio and research productivity and raise UK's faculty salaries to a competitive level will be $313 million in 2020.

ACADEMIC SUPPORT: The annual cost to support additional faculty with start-up funds, library materials, and academic support staff will be $174 million in 2020. This includes an annual 3 percent salary increase for staff and an annual $5 million Staff Enhancement Fund.

UNDERGRADUATE EDUCATION: The cost of support for enrollment growth and improving the student experience—especially as it contributes to increases in student retention and graduation rates—as well as inflationary increases will add $36 million to the base budget by 2020.

STUDENT AID: The cost of increasing undergraduate financial aid and providing nationally competitive funding for doctoral fellowships will be $85 million in 2020. This amount includes increasing the tuition discount rate for current and new undergraduate students to 20 percent by 2012.

SUPPORT SERVICES: Student and faculty growth and increased research activity will require investments in technology and additional support staff. UK also must plan for its continued investment in the Integrated Resources Information System (IRIS) and accelerating utility costs. UK will require an additional $115 million for support services by 2020.

FACILITIES: The cost of providing adequate facilities including debt service, maintenance and operations for new buildings, and capital renewal of existing facilities will add $70 million to UK's base budget by 2012 and $132 million by 2020. These amounts include $49 million for debt service for new educational and general facilities by 2012 and $88 million by 2020. Based on the

Council on Postsecondary Education's current guidelines, UK will need an estimated additional 1.8 million square feet by 2020 (excluding projected hospital facility needs). An additional 1,860 beds also will be needed to provide on-campus housing for 30 percent of undergraduate students. And most of the current student housing facilities must be renovated. The total cost to build new facilities and renovate the existing residence halls is estimated at $1.7 billion.

These projects should be funded with $1.2 million of state bonds and $452 million of agency bonds.

Sources of Funds

The University of Kentucky does not expect all additional support for Top 20 investments to come from the state. UK will contribute its share from tuition and fees, investments, gifts, indirect cost recovery, and internal reallocations. And UK will continue to operate a vital and thriving clinical enterprise. Revenue projections are depicted in Table 7. State appropriations are projected to remain flat in this model in order to determine the funding gap between the resources needed and the projected source of funds.

These projections indicate that UK can fund *40 percent* of the investments required to reach Top 20 status by 2020.

TUITION AND MANDATORY FEES: Enrollment growth and a four percent annual increase in tuition and fees will generate an additional $238 million by 2020.

PHILANTHROPY: A significant effort to increase annual giving should generate an additional $19 million.

RESEARCH RECOVERY: The growth in federal and non-federal research will increase indirect cost recovery by $54 million annually by 2020.

INTERNAL REALLOCATION: Cost reductions and efficiencies realized from strategies such as business process redesign, incentive-based budgeting, and outsourcing will produce $16 million in annual savings by 2020.

OTHER: Other sources, including investments and transfers from affiliated and non-affiliated foundations, will add up to $106 million by 2020.

HOSPITAL: Hospital revenues are projected to increase by $242 million by 2020.

UK's financial model for needed investments and projected revenues (assuming no increase in state appropriations) forecasts a $421 million funding gap by 2020 (see Table 8).

Tables 6, 7 & 8: The Financial Summary and Funding Gap

*may not total due to rounding

Table 6: Cumulative New Annual Investments Needed to Achieve Top 20 Goals (in millions)

Investment	Description	General Fund Expense Budget				
		2006	2012	2020	Variance '06-'12	Variance '06-'20
Faculty	Additional faculty and competitive compensation	$248	$388	$560	$140	$313
Academic Support	Faculty start-up funds, library materials, academic support staff, support for new graduate students	$288	$363	$462	$74	$174
Undergraduate Education	Academic advising, student services, support staff, support for new undergraduate students	$35	$48	$71	$12	$36
Student Aid	Graduate fellowships and undergraduate financial aid	$45	$80	$130	$35	$85
Support Services	Administration, technology, maintenance and operations of existing facilities	$93	$132	$208	$41	$114
Facilities	Debt service and maintenance and operations of new facilities, and capital renewal of existing facilities	$0	$70	$132	$70	$132
Hospital		$467	$576	$710	$109	$243
	Total General Fund Expense Budget	**$1,176**	**$1,657**	**$2,273**	**$481**	**$1,097**

Table 7: Cumulative Revenue Sources and Projections to 2012 and 2020 (in millions)

Source	Description	General Fund Revenue Budget				
		2006	2012	2020	Variance '06-'12	Variance '06-'20
State Appropriation	Assumes no increase in state appropriation	$314	$314	$314	$0	$0
Tuition and Fees	Assumes a 4% increase in tuition and fees	$194	$271	$432	$78	$238
Investments	Assumes a 3% increase and addition endowment return available for the Business Plan	$8	$12	$22	$5	$15
Philanthropy	Assumes aggressive efforts to raise money for the Top 20 targets	$1	$8	$21	$7	$19
Contracts with KMSF, inc.	Transfer of funds from a non-affiliated corporation for doctors' salaries	$90	$113	$141	$22	$50
Research Recovery	F&A reimbursement expected to grow with direct research	$17	$32	$71	$15	$54
Internal Reallocation	Expected savings of 10% of base Support Services Expenditures	--	$12	$16	$12	$16
Other	Sales & services of educational activities, budgeted carryforwards, county appropriations, etc.	$86	$101	$127	$15	$41
Hospital	Revenue increases at rate of expenses	$466	$575	$709	$109	$242
	Total General Fund Revenue Budget	**$1,176**	**$1,439**	**$1,852**	**$263**	**$676**

Table 8: Predicted Funding Gaps as of 2012 and 2020 (in millions)

	2012	2020
Investments Needed	$481	$1,097
Projected Revenues	$263	$676
Predicted Funding Gaps	**$218**	**$421**

Funding the Gap

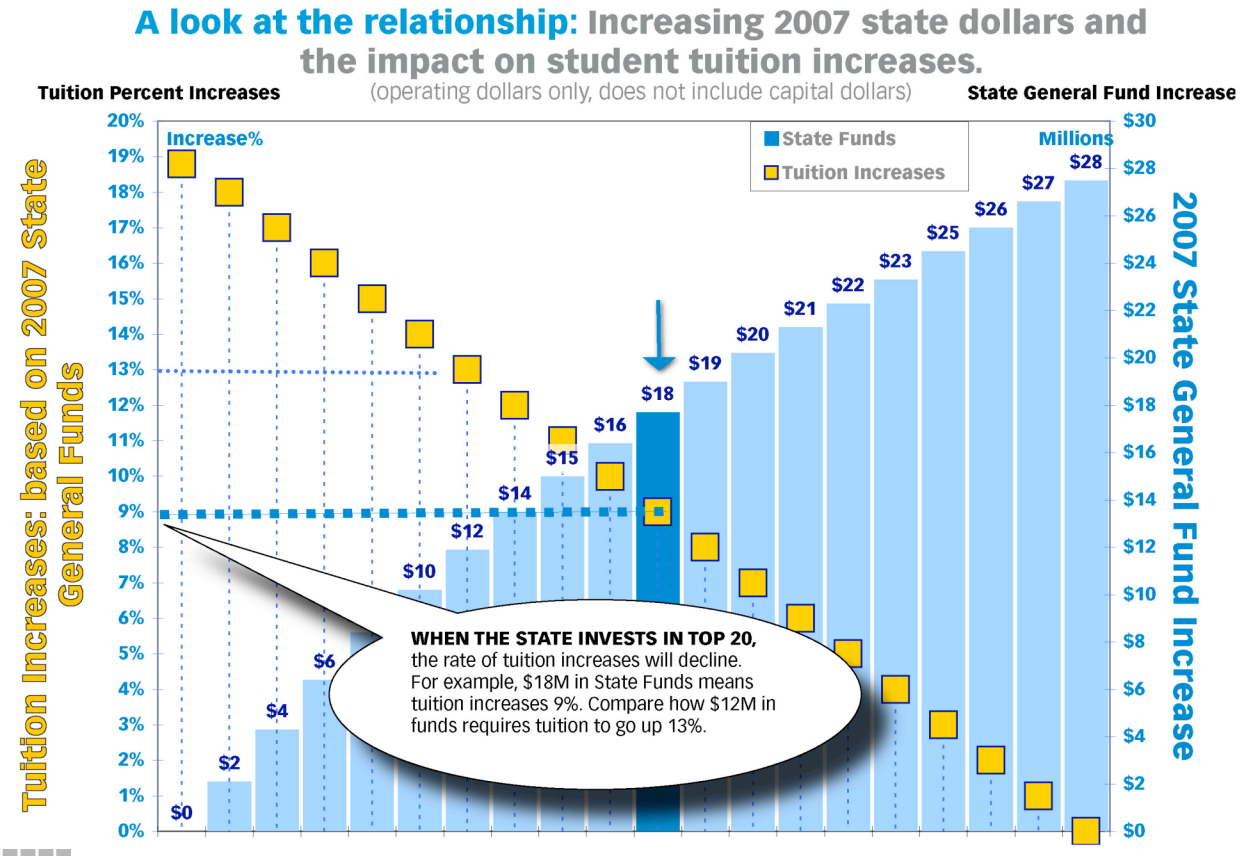
The critical issue facing UK and the Commonwealth is how to apportion fiscal responsibility for eliminating the $421 million gap by 2020. **The greater the extent to which the state supports UK, the less tuition and fees must be increased.**

There is no question that moving Kentucky's flagship university into the ranks of the Top 20 public research universities will require greater state support for facilities and operating investments. UK will need $49 million of state General Funds for debt service to build new instructional and research facilities by 2012 and $88 million by 2020. In addition, the gap in operating funds for the needed Top 20 investments will be $169 million in 2012 and $333 million by 2020.

The state and UK must determine the optimal combination of state appropriations and tuition revenue to cover the gap in operating funds. Table 9 shows the multiple scenarios of increasing tuition and fees and state appropriations for fiscal year 2007 that would close the funding gap. For example, if state appropriations increased by $17.7 million (5.8 percent), resident tuition and fee rates would need to increase by 9.0 percent, to fund the predicted $34.3 million gap.

Table 9. Schedule of Tuition Increases Relative to State Appropriations Needed (excluding debt service) to Fund Investments in Top 20 Strategies

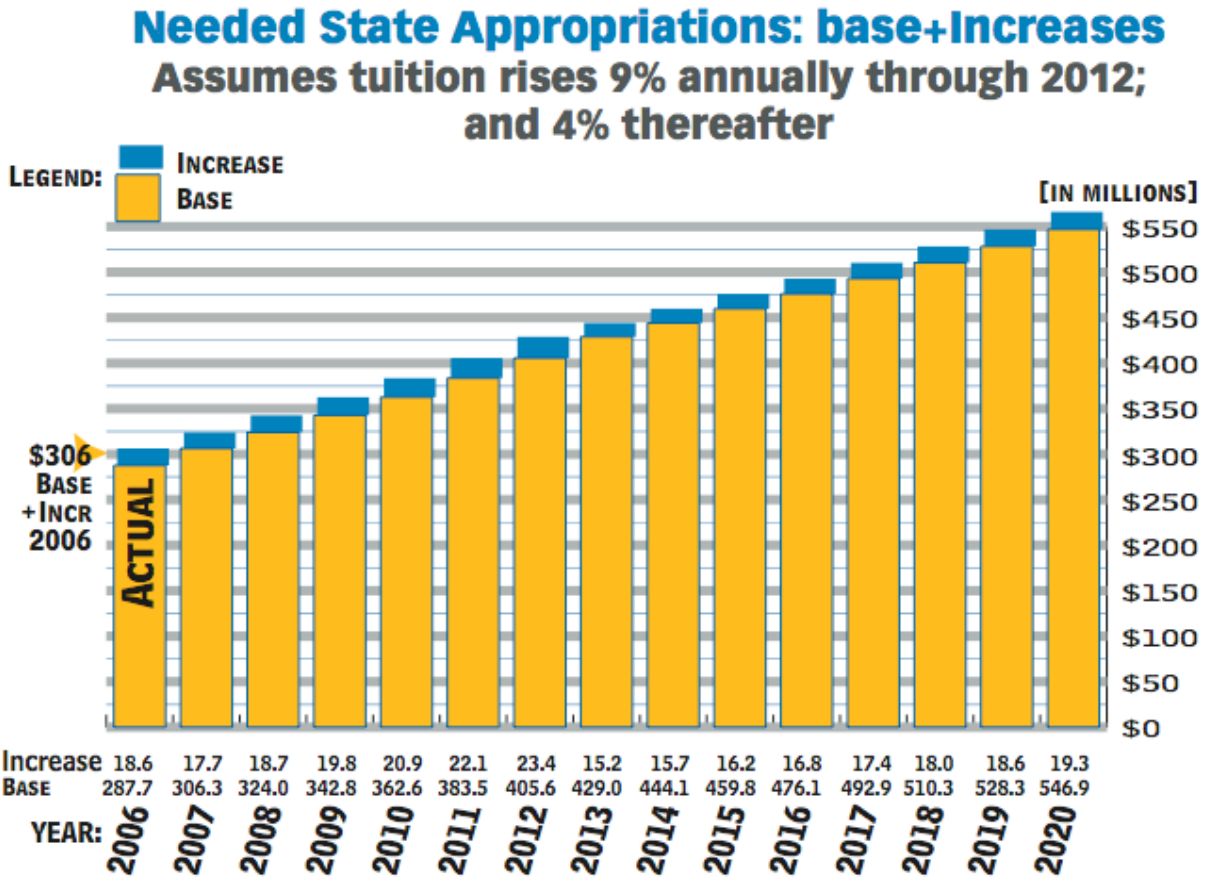
When tuition and fee rates increase more than four percent, nonresident students would be charged four percent plus half the



increase above four percent (e.g., if resident tuition and fees increase 9 percent, nonresident rates would increase 6.5 percent).

Figure 7 shows the annual increase in state appropriations required through 2020 (5.76 percent annually through 2012 and 3.5 percent thereafter) if tuition and fees for resident students increase by nine percent annually through 2012 and four percent thereafter.

Figure 7: Annual State Appropriation Increases Needed (excluding debt service) if Tuition and Fees Increase an Average of Nine Percent Through 2012 and Four Percent Through 2020



Facilities Financing Needs

UK will need a significant infusion of resources to finance its Top 20 capital needs, as shown in Table 10. The estimated cost of new research space is $846 million; classroom and related space to support growth will require $367 million; and residence halls to accommodate 30 percent of undergraduates will require $452 million. In addition to the $1.7 billion needed for new academic, research, and residence hall space, UK projects another $450 million for hospital improvements and expansion. The total estimated cost of new facilities by 2020 is $2.1 billion, including the hospital.

Table 10: New Space Needed by Type and Assignable Square Feet, Excluding the University Hospital

Type of Space	Assignable Square Feet (in thousands)		
	Existing as of 2005	New Space by 2020	Cost ($Ms)
Classrooms and Teaching Labs	554	245	$153
Research	885	1,070	$846
Recreation	113	209	$81
Support	2,328	268	$133
Sub-Total	3,880	1,792	$1,213
Residence Halls			
New		1,860 beds	$174
Renovated	6,000 beds		$278
Total			**$1,665**

Although gifts and designated hospital reserves will provide part of the capital financing, the majority of projects will be debt-financed. As shown in Table 11, UK will need to issue approximately $700 million in agency revenue bonds (for residence halls and hospital projects) and the State will have to issue $1.2 billion in state bonds over the next 14 years.

Table 11. Funding Source and Amount for Facilities Financing Needs

Funding Source		Amount
Gifts		$39 m.
Reserves		$200 m.
Debt		
	Revenue Bonds	$702 m.
	State Bonds	$1,175 m.
	Total	**$2,116 m.**

Total State Support Needed for Top 20 Mandate

The development of this Plan brings into stark reality the importance of predictable, steadily increasing state appropriations for UK to improve the lives of Kentuckians. Without intervention, the "Kentucky Uglies" will only worsen—per capita income will lag further behind the national average and the number of under-educated adults and children living in poverty will increase. The Commonwealth must make consistent, moderately increasing investments in UK to reverse these trends.

The members of the Kentucky General Assembly and the Governor understand the importance to Kentucky of UK's Top 20 mandate. These policymakers invested over $18 million of new state General Funds in UK for the current fiscal year. UK can implement the Plan if the Commonwealth provides similar annual increases.

In addition to the sustained, moderate, annual increases in state appropriations, UK needs state bonds for educational and research facilities. The other crucial component of this serious effort at achieving Top 20 status is institutional flexibility to make decisions and focus resources as needs arise. Less than 20 percent of UK's budget is funded through state appropriations. The balance of the budget comes from a multitude of sources – research grants and contracts, private gifts, hospital revenues, and others. This complicated set of sources necessitates increased institutional flexibility.

Ambitions in the Plan for substantial enrollment growth will require investment in auxiliary enterprises that serve the needs of students and insure their success. Over the next 14 years, new residence halls will be constructed and current ones will be renovated; dining halls will be expanded; and facilities for student support services will be enhanced. UK must have the flexibility to issue bonds to serve these needs when adequate revenue streams are confirmed. The Top 20 Compact's success hinges on the state's confidence in UK's ability to make appropriate decisions on bond issuances for self-financing projects.

The ability to issue bonds is emblematic of the flexibility UK needs to manage its resources. Thresholds for institution-level decisions about renovations, equipment and technology need to be increased, freeing the University to move quickly to meet immediate needs.

Finally, institutional control of the management of investments will give UK the opportunity to generate higher short-term yields. These increasing funds are an essential source of revenue to fund Top 20 initiatives.

The Top 20 Compact only works if UK and the state can agree to a relationship that gives the University greater flexibility in decision-making. In return, UK pledges to continue its capable stewardship of all resources as it makes progress toward Top 20, yielding benefits to the state that come with that status. The overall needed investments are not exorbitant.

Top 20 status is within reach.

The 2006–08 Budget Request

OPERATING FUNDS. In the funding scenario presented below, UK would be able to make the initial investments outlined in the Plan for 2006-08 if state appropriations for operations increased by 5.8 percent annually and tuition and fees increased 9 percent. CPE recommended a $13.7 million increase in base state appropriation for UK in 2006–07 and an additional $13.6 million in 2007–08, $4 million and $5.1 million less than the need calculated by the Business Plan, respectively.

CAPITAL. In addition to the investments in operating costs, the University is in critical need for physical space for research, instruction, the University Hospital, and residence halls and dining facilities. For 2006-08, the Plan includes the capital projects recommended by CPE. These projects are listed below in Table 12.

Table 12: Summary of 2006–08 Operating and Capital Needs

	Actual 2005–06		2006–07		2007–08	
Tuition and Mandatory Fees	$16.4	12.5%	$16.6	9.0%	$18.8	9.0%
State Appropriations Available for Business Plan	$16.1	5.6%	$17.7	5.8%	$18.7	5.8%
Total Operating Funds Needed	$32.5		$34.3		$37.5	
Capital: State Funded						
State Bonds Recommended by CPE:						
Biological/Pharmaceutical Complex, Phase II				$79.9		
Gatton Building Complex, Phase I				$40.5		
Bio-Medical Research Building, Design				$7.6		
				$128.0		
Capital: University Funded						
Agency Bonds Recommended by CPE						
Patient Care Facility				$150.0		
Residence Halls and Dining Renovations				$16.3		
				$166.3		

Conclusion

The University of Kentucky's Top 20 Business Plan is a serious, determined, and visionary financial roadmap for achieving status as a Top 20 public research university by 2020. This Plan establishes the fiscal and capital framework for accomplishing the Top 20 Compact that UK and the people of the Commonwealth created in 1997. It is based on extensive analysis and the identification of clear, explicit goals and expectations for what it means to be a Top 20 public research university and what investments will be required to achieve them.

In fulfilling the terms of this Compact, UK will:

- Increase its enrollment by 7,000 students
- Improve the quality of undergraduate and graduate education
- Increase the graduation rate by 12 percentage points
- Increase research expenditures to over $700 million
- Increase by 625 the number of faculty dedicated to teaching students and doing research and public service that attack the persistent health and economic problems Kentucky faces
- Increase engagement of the UK community in improving Kentucky's schools, communities, farms, and businesses
- Increase substantially the number of inventions, patents, and start-up businesses

Kentucky will:

- Increase UK's base appropriations on a schedule characterized by consistency and shared responsibility
- Provide more capital construction support for research and educational facilities
- Grant UK authority to issue debt to support thoughtful, planned growth
- Give UK greater flexibility in the financial management of the institution

What it will mean for Kentucky:

- Increased educational attainment
- Increased wages and broader benefits
- Better health
- More locally-owned businesses
- Improved economic vitality

Appendix A

Independent Evaluation of Performance on Selected* Association of American Universities (AAU) Stage I Indicators for Two New Member Institutions in 2001 Compared to the University of Kentucky (UK)

SELECTED INDICATORS	DEFINITIONS (using data through fiscal year 1999)	RANK OUT OF 68 POTENTIAL MEMBER INSTITUTIONS**		
		UK	SUNY Stony Brook	Texas A&M
Competitively Funded Federal Research Support	Using AAU's specific formula: federal expenditures – [federal expenditures x USDA obligations / total federal obligations], and adjusting the formula per faculty (including medical school faculty when applicable)	43rd	11th	29th
Membership in the National Academies	Total membership in the three academies – NAS, NAE, IOM – per faculty	44th	9th	11th
National Research Council faculty quality ratings	Individual departmental ratings used to calculate an average faculty quality rating for each institution.	37th	3rd	6th
Publications and Citations	Most recent U.S. University Science Indicators CD-ROM (2004 Edition): 1. total citations per faculty 2. total publications per faculty	 29th 28th	 7th 8th	 24th 17th
Doctoral Education	Average number of doctoral degrees awarded by each potential member institution for academic years 1987-1997, as reported on the IPEDS Completions Surveys, per faculty	37th	8th	6th
Number of Postdoctoral Appointees	Average number of postdoctoral appointees, as reported on the NSF Survey of Graduate Students and Post Doctorates in Science and Engineering from 1996 – 1998, per faculty	24th	7th	18th

* According to the AAU's public Membership Policy literature, the Phase I indicators are "used as the primary indicators of institutional breadth and quality in research and education." Only 6 of 8 Stage 1 indicators are presented here due to difficulties in accessing reliable data for the remaining two.

** The group of 68 potential member institutions includes all non-AAU doctoral research universities ranked in the top 150 institutions for federally financed research and development expenditures in fiscal year 1999.

Appendix B

Correlation Matrix for Average Peer Assessment Score and Selected Measures of University Quality

	AAU	Fresh Top10	Actual Grad	Doc Awards	Federal Res	Endow Assets	Faculty Awards	Avg Peer Asses
AAU	1.00000							
AAU MEMBER								
	101							
Fresh Top10		0.47639	1.00000					
Freshmen in top 10% of HS class (USN&WR)		<.0001						
	98	98						
Actual Grad		0.57176	0.71013	1.00000				
Actual Graduation Rate (USN&WR)		<.0001	<.0001					
	100	98	100					
Doc Awards		0.68930	0.48349	0.56922	1.00000			
2003 Doctorates Awarded (TheCenter)		<.0001	<.0001	<.0001				
	101	98	100	101				
Federal Res		0.62049	0.48851	0.49377	0.75079	1.00000		
2002 Federal Research x $1000 (TheCenter)		<.0001	<.0001	<.0001	<.0001			
	101	98	100	101	101			
Endow Assets		0.45884	0.34838	0.41843	0.63610	0.57807	1.00000	
2003 Endowment Assets x $1000 (TheCenter)		<.0001	0.0005	<.0001	<.0001	<.0001		
	98	95	97	98	98	98		
Faculty Awards		0.64143	0.57862	0.58734	0.81725	0.86125	0.49559	1.00000
2003 Faculty Awards (TheCenter)		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
	101	98	100	101	101	98	101	
Avg Peer Asses		0.76844	0.65854	0.78396	0.78727	0.72078	0.57348	0.81143	1.00000
Average Peer Assessment Score (USN&WR)		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	100	98	100	100	100	97	100	100	

Appendix C

Groups and Individuals Consulted During The Development of the Plan

James Hardymon, Chair, Board of Trustees
Lee T. Todd, President
Wendy Baldwin, Executive Vice President for Research
Frank Butler, Executive Vice President for Finance and Administration and Vice President for Medical Center Operations
Michael Karpf, Executive Vice President for Health Affairs
Mike Nietzel, Former Provost, President of Missouri State University
M. Scott Smith, Interim Provost and Dean, College of Agriculture
Jeannine Blackwell, Dean, The Graduate School
Jay Blanton, Executive Director of Public Relations and Marketing
Stephen Byars, Director of Government Relations
Dall Clark, Director of Capital Projects Management Division
Del Collins, Senior Associate Vice President for Research Infrastructure
Karen Combs, Vice Provost for Budget and Administrative Services
Lynda George, Director of Financial Aid
Philip Greasley, Associate Vice President for University Initiatives
Merl Hackbart, Associate Dean for Administration, Gatton College of Business and Economics
Thomas Harris, Associate Vice President for External Affairs
Philipp Kraemer, Associate Provost for Undergraduate Education
Marc Mathews, Controller
Terry Mobley, Vice President for Institutional Advancement
Clay Owen, Treasurer
Rebecca Scott, Former University Senate Staff; Survey Coordinator, Office of Assessment
Chuck Staben, Associate Vice President for Research
Patricia Terrell, Vice President for Student Affairs
John Thelin, Faculty, College of Education
Bill Turner, Vice President for University Initiatives
Lisa Wilson, Provost Budget Director
Bob Wiseman, Vice President for Facilities Management
Don Witt, Assistant Provost for Enrollment Management
Ernie Yanarella, University Senate Chair

Deans' Council
President's Cabinet
Provost's Council
Staff Senate
Top 20 Steering Committee
University Senate Council

Kentucky Council on Postsecondary Education
Tom Layzell, President
Jim Applegate, Vice President for Academic Affairs
Ron Carson, Senior Fellow, Policy Development
Sherron Jackson, Asst. Vice President, EEO & Finance
Sue Hodges Moore, Former Executive Vice President
Jonathan Pruitt, Senior Associate for Finance
Sandra Woodley, Vice President for Finance

Appendix D

Summary of Decisions and Rationale for Measures in the Ranking Model

Variable	Source	USED BY:			Decision	Rationale
		TheCenter	AAU	USN&WR		
Federal Research Expenditures	TheCenter	✔	✔		Include	Widely recognized as measure of competitive strength; CPE key indicator
Total Research Expenditures	TheCenter	✔			Exclude	Duplicates federal research expenditures unnecessarily
Non-federal Research Expenditures	TheCenter		✔		Include	Ensures recognition of ability to obtain other revenue sources to support research
National Academy Members	TheCenter	✔	✔		Exclude	Small numbers that change slowly; not useful to monitor progress
Faculty Awards	TheCenter	✔			Include	Recognizes faculty in arts & humanities, as well as science/engineering/health
Faculty Citations	Thomson Scientific		✔		Include	Indicator of impact of faculty scholarship; includes non-science disciplines
Doctorates Awarded	TheCenter	✔	✔		Include	Indicator of strength of graduate program, including offerings and results; CPE key indicator
Postdoctoral Appointments	TheCenter	✔			Include	Indicator of strength of faculty research and reputation
SAT / ACT Scores	IPEDS	✔		✔	Include	Outcome of successful recruitment and UG education programming; critical to improving graduation rates that weigh heavily in public perceptions of quality
National Merit Scholars	TheCenter	✔			Exclude	Too narrowly focused and easily manipulated by funding
Student-to-Faculty Ratio	USN&WR			✔	Include	Indicator of strength of commitment to quality UG education
Class Size	USN&WR			✔	Exclude	Benchmark inquiry revealed diverse interpretations and calculations; unstable
Six-Year Graduation Rates	IPEDS			✔	Include	Summative indicator of quality of students, faculty, staff, and programs; highly publicized; significant increase will be noticed; CPE key indicator
Peer Assessment Ratings	USN&WR			✔	Exclude	Highly subjective and difficult to move; increases will lag real progress

Appendix E

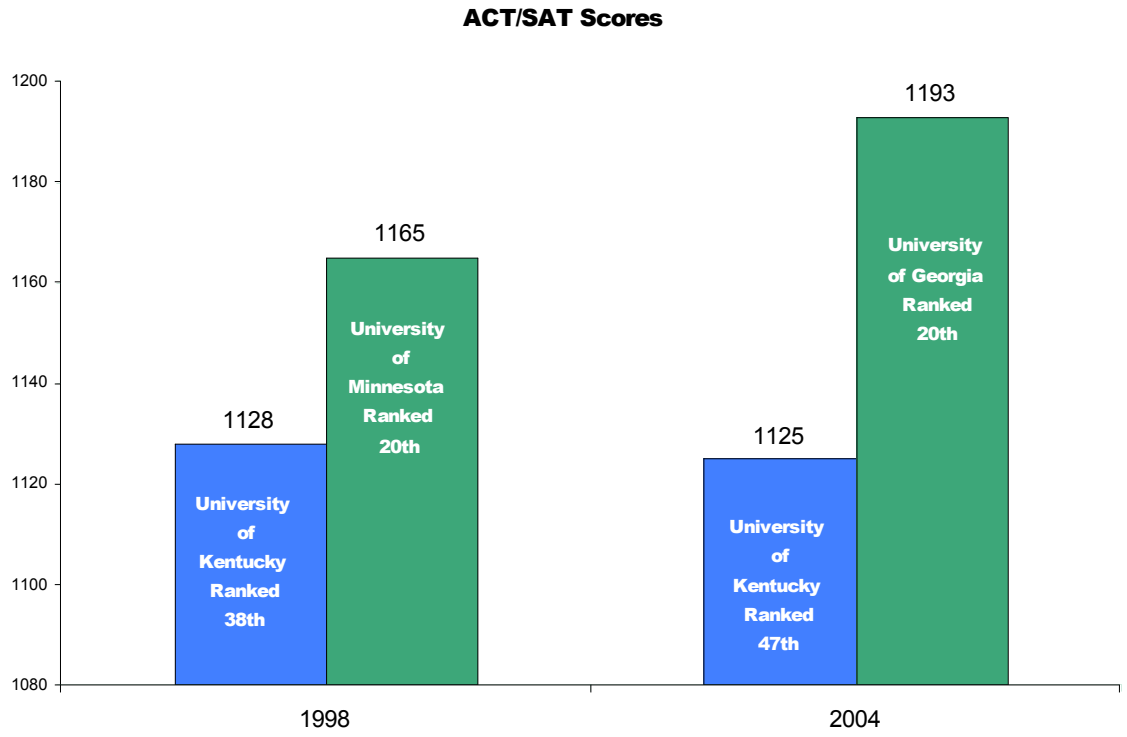
Summary of Results of the Composite Score Model*

Domain	Measure	Value	Rank	Standard Score	Domain and Total Score	Domain and Total Rank	20th Institution
Undergraduate Education	ACT/SAT (2004-05)	1128	47	-0.14	-0.27	49	University of Iowa 1.05
	Six-year Graduation Rate (2004-05)	60%	51	-0.23			
	Student-to-Faculty Ratio (2004-05)	17 to 1	35	-0.04			
Graduate Education	Doctorates Granted (2003-04)	233	44	-0.21	-0.19	34	University of Maryland –College Park 1.28
	Postdoctoral Appointments (2002-03)	230	30	0.02			
Faculty Recognition	Citations	42,288	39	-0.20	-0.24	37	University of Utah 1.12
	Awards	11	32	-0.04			
Research	Federal Expenditures	$100.4M	35	-0.13	0.31	26	North Carolina State 1.03
	Non-Federal Expenditures	$135.8M	23	0.45			
TOTAL SCORE					**-0.39**	**35**	**Georgia Tech 4.12**

*Based on ranking data available as of September 2005

Appendix F
Additional Results of Performance Gap Analysis

UNDERGRADUATE EDUCATION

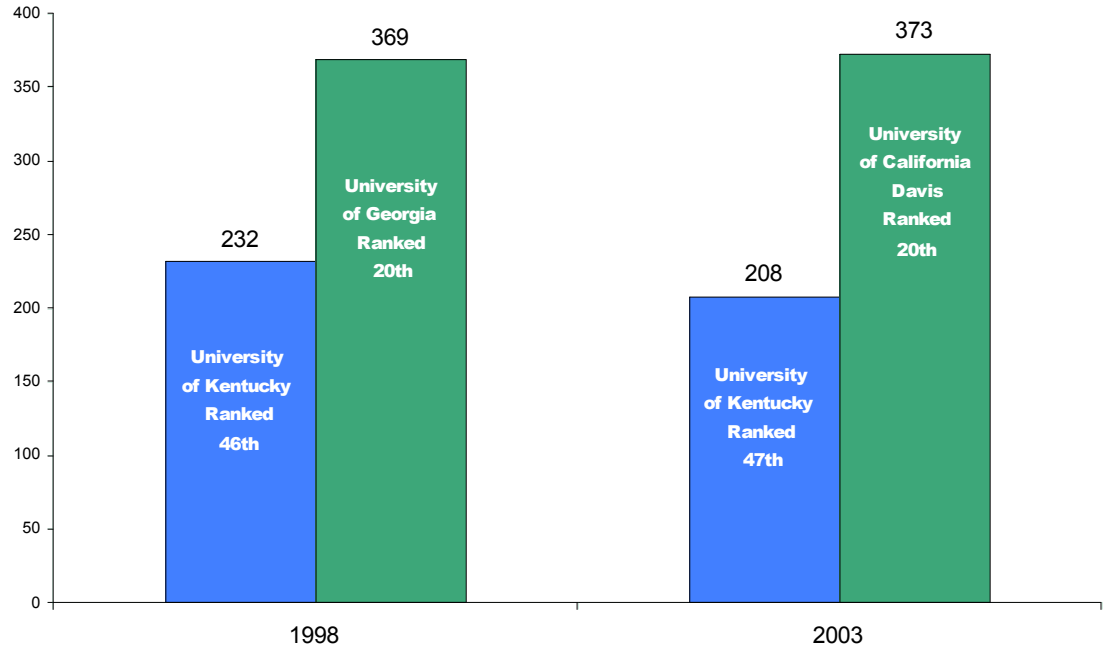


NOTE: The Undergraduate Education domain also includes a student-to-faculty ratio measure but comparable data is not available for a retrospective analysis.

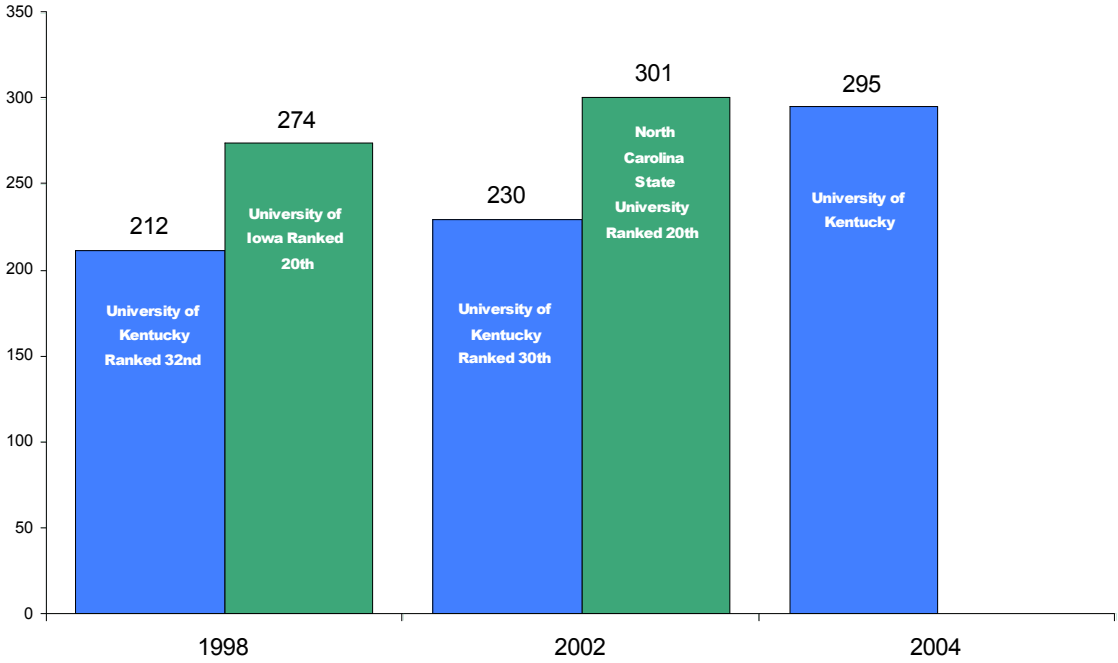
Appendix F (Continued)
Additional Results of Performance Gap Analysis

GRADUATE EDUCATION

Doctorates Granted



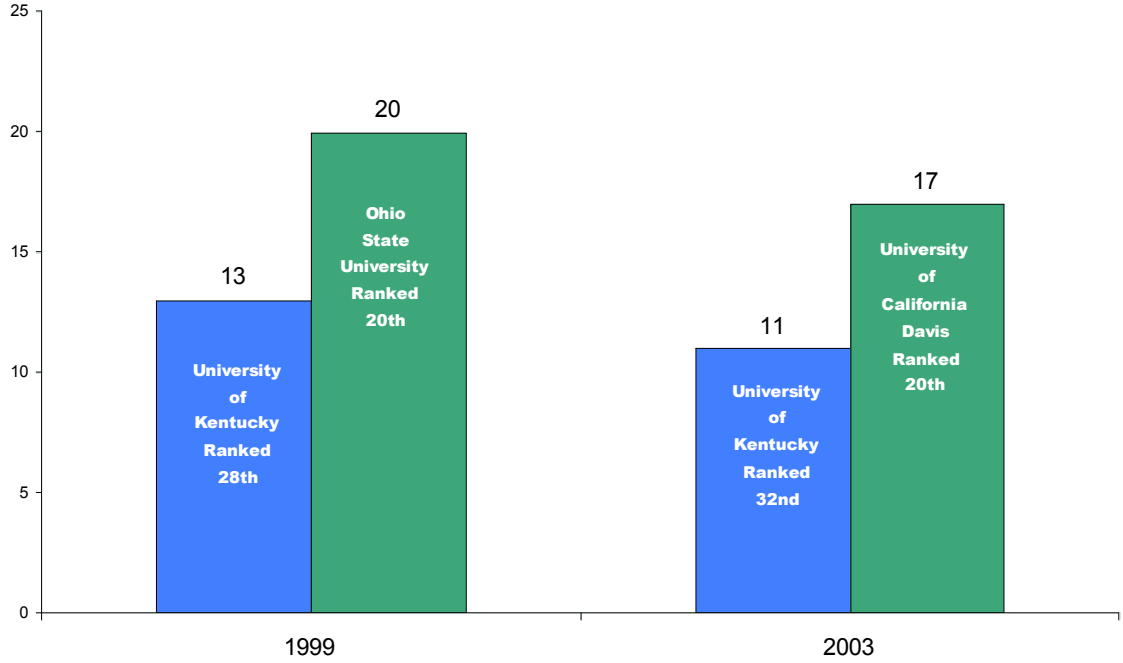
Postdoctoral Appointments



Appendix F (Continued)
Additional Results of Performance Gap Analysis

FACULTY RECOGNITION

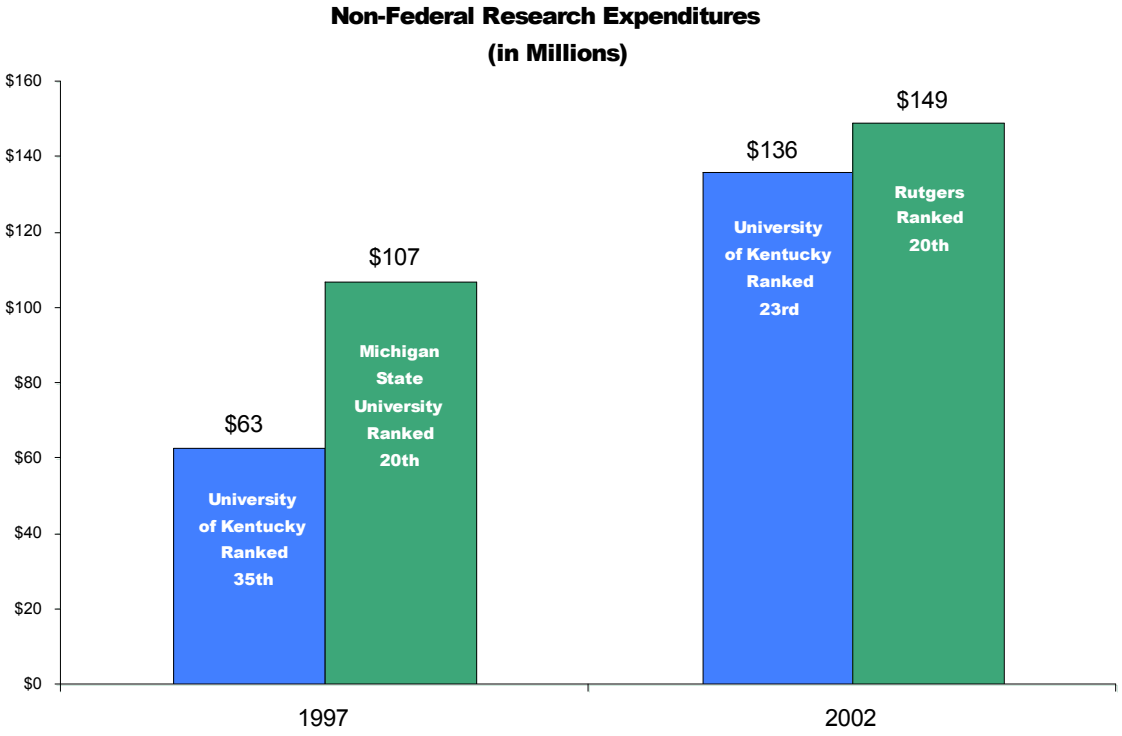
Faculty Awards



NOTE: The Faculty Recognition domain also includes a citations measure. However, comparable data is not available for a retrospective analysis.

Appendix F (Continued)
Additional Results of Performance Gap Analysis

RESEARCH



Top 20 Business Plan Key Assumptions

1. Strategies for Growth: The Business Plan's enrollment targets are based on the recommendations of the Top 20 Task Force.

A. UNDERGRADUATE ENROLLMENT:

- Increase by approximately 1,900 by 2012
- Increase by 6,200 by 2020 [see NOTE].
- No increase in the number of first-time freshmen until Fall 2008.
- Decrease the percentage of first-year students who are Kentucky residents from 79 percent to 75 percent by 2012.

B. GRADUATE AND PROFESSIONAL ENROLLMENT AND POSTDOCTORAL APPOINTEES:

- Increase graduate and first professional enrollments by 750; approximately 390 to be added by 2012.
- Increase funding for doctoral students to provide full tuition and $15,000 stipend.
- Increase postdoctoral appointments by 375 by 2020.

2. Full-time Faculty: The Business Plan's faculty targets are based on the number of instructional faculty needed to improve the undergraduate student-to-faculty ratio and the number of research and instructional faculty required to achieve research goals.

A. NUMBER OF FULL-TIME FACULTY

- Increase the number of full-time faculty in the undergraduate colleges by 500 by 2020.
- Increase will be front-loaded, i.e., the number of faculty will increase at a faster rate than student enrollments.
- Increase the number of full-time faculty in the graduate and first professional colleges by 125 by 2020.

B. COMPETITIVE FACULTY COMPENSATION -

Increase faculty salaries at a rate that will eliminate the gap between the average salary for UK faculty and the median faculty salary at UK's benchmark institutions by 2012.

3. Base Budget and Inflationary Increases: The Business Plan is based on the 2005-06 General Funds budget approved by the Board of Trustees and includes estimated inflationary increases in the projection of all costs.

4. Tuition and Financial Aid:

A. BASELINE PROJECTION

- Tuition and mandatory fees are assumed to increase at an annual rate of four percent for all categories of students—undergraduate and graduate, resident and non-resident.
- The undergraduate financial aid discount rate (unrestricted institutional aid as a percent of tuition) rises from 17% to 20% by 2012.

B. FUNDING THE GAP

- Present various combinations of increases in state appropriation and the corresponding increases in tuition and mandatory fees to close the funding gap.
- For nonresident students, tuition and mandatory fees rise by half the percentage amount as for resident students above 4 percent
- The formula to calculate the nonresident rate increase looks like this:

  [4% + (% increase – 4%) / 2)] = Nonresident Rate Increase.

  For example, if the resident tuition rate increases by 10 percent, the rate for non-residents increases by 7 percent : [4% + (10% – 4%) /2 = 7%].

5. Facility Needs. The Business Plan determines facilities needs using the Council on Postsecondary Education's space model and the projected growth in students and faculty. The model defines standards for assignable square feet required by category of space (e.g., classroom, recreation, support, and research laboratories).

- CPE's recommended state-funded projects for UK, which total $128 million, are included in the 2006-08 financing projections.

- Biological / Pharmaceutical Complex, Phase II - $79.9 million
- Gatton Building Complex, Phase I - $40.5 million
- Bio-Medical Research Building, Design - $7.6 million

NOTE: CPE is projecting enrollment goals for all institutions based on the Commonwealth's achieving the national average of educational attainment by 2020. CPE's draft model indicates that UK should be expected to enroll more than an additional 10,000 undergraduate students by 2020.

Appendix G-2
FINANCIAL PLAN SUMMARY
Cumulative Funding Required
($ Millions)

	General Expense Budget				
	2006	2012	2020	Variance '06-'12	Variance '06-'20
Faculty, including Librarians *(see Appendix G-3)*					
Base *(salaries increase 3.0% annually plus benefits)*	$248	$311	$395	$64	$147
Achieve Benchmark Median Compensation	--	$48	$61	$48	$61
(faculty salaries increase additional 2.5% thru FY12)					
Add 625 Faculty *($90k '06 salary, add 213 faculty by FY12)*	--	$30	$110	$30	$110
Portion of Faculty Costs to be Grant Funded *(5% of new positions)*	--	($1)	($6)	($1)	($6)
Sub-Total	**$248**	**$388**	**$560**	**$140**	**$313**
Academic Support					
Base: Staff Compensation *(salaries increase 3.0% annually plus benefits)*	$170	$215	$273	$45	$102
Staff Enhancements *(FY07 = $5m, increases annually at 3.0%)*	--	$6	$7	$6	$7
Base: Non-Compensation *(operating expenses increase 2.5% annually)*	$110	$122	$145	$12	$35
New Faculty Start-Ups *($150k/faculty, increases 3.0% annually)*	--	$6	$8	$6	$8
Support for New Graduate Students *(see Appendix G-4)*	--	$1	$2	$1	$2
Library: Books and Periodicals *(increase annually at 5.0%)*	$8	$11	$16	$3	$8
Library: Support for New Faculty	--	$2	$11	$2	$11
($9.8k/new faculty, 2005-06 Operating Budget pg 80 / 1,890)					
Sub-Total	**$288**	**$363**	**$462**	**$74**	**$174**
Undergraduate Education *(2005-06 Operating Budget, pages 81, 83, 86, 89)*					
Base: Staff Compensation *(salaries increase 3.0% annually plus benefits)*	$30	$37	$47	$8	$18
Base: Non-Compensation *(operating expenses increase 2.5% annually)*	$6	$7	$8	$1	$2
Support for New Undergraduate Students *(see Appendix G-4)*	--	$4	$16	$4	$16
Sub-Total	**$35**	**$48**	**$71**	**$12**	**$36**
Student Aid *(2005-06 Operating Budget, page 88 - see also Appendix G-5)*					
Graduate					
Base *(increase at rate of tuition)*	$25	$32	$43	$7	$19
Increase Stipends to Benchmark Median	--	$5	$7	$5	$7
Support for 750 New Students	--	$8	$20	$8	$20
Undergraduate					
Base *(increase at rate of tuition)*	$20	$26	$35	$5	$15
Increase Discount Rate *(from 16.8% to 20.0% by 2012)*	--	$6	$9	$6	$9
Support for 6,200 New Students	--	$4	$15	$4	$15
Sub-Total	**$45**	**$80**	**$130**	**$35**	**$85**
Support Services *(2005-06 Operating Budget, pages 5 and 7)*					
Base: Staff Compensation *(salaries increase 3.0% annually plus benefits)*	$59	$75	$95	$15	$35
Base: Non-Compensation *(increase 5.0% annually (2.5% cpi, 2.5% util./IRIS))*	$33	$45	$66	$11	$33
Support for New Faculty *(see Appendix G-6)*	--	$13	$47	$13	$47
Sub-Total	**$93**	**$132**	**$208**	**$41**	**$114**
New Facilities *(see Appendix G-7)*					
Operating	--	$8	$16	$8	$16
Capital Renewal and Deferred Maintenance	--	$13	$28	$13	$28
Debt Service	--	$49	$88	$49	$88
Sub-Total	**$0**	**$70**	**$132**	**$70**	**$132**
Hospital *(revenue increases at rate of expenses)*	$467	$576	$710	$109	$243
Total General Fund Budget*	**$1,176**	**$1,657**	**$2,273**	**$483**	**$1,096**

*may not total due to rounding

Appendix G-2 [cont.]
FINANCIAL PLAN SUMMARY
Cumulative Funding Provided
($ Millions)

	General Revenue Budget				
	2006	2012	2020	Variance '06-'12	Variance '06-'20
State Appropriation *(assumes no increase)*					
Mandated	$77	$77	$77	$0	$0
Non-Mandated	$229	$229	$229	$0	$0
Debt Service	$8	$8	$8	$0	$0
Sub-Total	**$314**	**$314**	**$314**	**$0**	**$0**
Tuition and Fees Revenue					
Tuition Rate Increases 4.0% Annually	$170	$215	$294	$45	$124
Enrollment Growth (undergraduate and graduate)		$19	$82	$19	$82
Nonresident 1st-Year Undergraduates Increases to 25% by FY12		$8	$15	$8	$15
Fees *(mandatory registration increases 4.0% annually, others 3.0%)*	$24	$30	$41	$6	$17
Sub-Total	**$194**	**$271**	**$432**	**$78**	**$238**
Investment Return					
Base *(increases annually at 3.0%)*	$8	$9	$11	$1	$4
Additional Endowment Return Available for Business Plan		$3	$11	$3	$11
Sub-Total	**$8**	**$12**	**$22**	**$5**	**$15**
County Appropriations *(increases annually at 3.0%)*	$12	$14	$18	$2	$6
Philanthropy					
Base	$1	$3	$4	$2	$3
Restricted *(50% of future incremental gifts to available for business plan)*	--	$5	$16	$5	$16
Sub-Total	**$1**	**$8**	**$21**	**$7**	**$19**
Contracts with KMSF, Inc. *(increases at same rate as salaries and operating exp., about 3.2% annually)*	$90	$113	$141	$22	$50
Research Recovery					
F&A Reimbursement *(grows with direct research)*	$17	$23	$39	$6	$22
Increase in F&A Attributable to Faculty Growth and Increased Productivity	--	$9	$32	$9	$32
Sub-Total	**$17**	**$32**	**$71**	**$15**	**$54**
Internal Reallocation *(10% of all base Support Services expenses)*		$12	$16	$12	$16
Sales and Services *(increases annually at 3.0%)*	$21	$25	$32	$4	$11
Budgeted Carryforwards *(increases with operating expenses at 2.5%)*	$27	$31	$38	$4	$11
Other *(increases annually at 3.0%)*	$26	$31	$39	$5	$13
Hospital *(revenue increases at rate of expenses)*	$466	$575	$708	$109	$242
Total General Fund Budget*	**$1,176**	**$1,439**	**$1,852**	**$263**	**$676**

*may not total due to rounding

BUSINESS PLAN UNFUNDED

Annual Funding Required	$ 482	$ 1,097
Annual Funding Provided	$ 263	$ 676
Total Unfunded or "Funding Gap"	**$218**	**$421**

Appendix G-3

PROJECTED FACULTY EXPENSES
($ Millions)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Variance 2012	Variance 2020
Base Salaries																	
Salary Growth Rate	--	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*		
Salary	$196	$202	$208	$214	$220	$227	$234	$241	$248	$255	$263	$271	$279	$287	$296		
Benefits Rate	*26.5%*	*27.8%*	*30.7%*	*32.0%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*	*33.3%*		
Benefits	$52	$56	$64	$68	$73	$75	$78	$80	$82	$85	$87	$90	$93	$96	$98		
Sub-Total	**$248**	**$258**	**$271**	**$282**	**$294**	**$302**	**$311**	**$321**	**$330**	**$340**	**$351**	**$361**	**$372**	**$383**	**$395**	**$64**	**$147**
Benchmark Median																	
Additional Salary Growth	--	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	--	--	--	--	--	--	--	--		
Salary	--	$5	$10	$16	$22	$29	$36	$37	$38	$40	$41	$42	$43	$44	$46		
Benefits	--	$1	$3	$5	$7	$10	$12	$12	$13	$13	$14	$14	$14	$15	$15		
Sub-Total	**--**	**$6**	**$13**	**$21**	**$30**	**$39**	**$48**	**$50**	**$51**	**$53**	**$54**	**$56**	**$58**	**$59**	**$61**	**$48**	**$61**
Add 625 Faculty																	
Add New Faculty	--	27	54	82	123	168	213	260	307	358	414	468	522	576	625		
Salary Growth Rate	--	--	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*		
Average Salary ($000s)	--	$90	$93	$95	$98	$101	$104	$107	$111	$114	$117	$121	$125	$128	$132		
Benefits ($000s)	--	$25	$28	$31	$33	$34	$35	$36	$37	$38	$39	$40	$41	$43	$44		
Sub-Total	**--**	**$3**	**$7**	**$10**	**$16**	**$23**	**$30**	**$37**	**$45**	**$54**	**$65**	**$75**	**$87**	**$98**	**$110**	**$30**	**$110**
5% Grant Funding	--	($0)	($0)	($1)	($1)	($1)	($1)	($2)	($2)	($3)	($3)	($4)	($4)	($5)	($6)	**($1)**	**($6)**
Total	**$248**	**$267**	**$291**	**$313**	**$338**	**$362**	**$388**	**$406**	**$425**	**$445**	**$466**	**$489**	**$512**	**$536**	**$560**	**$140**	**$313**
Student Faculty Ratio (as reported to US News)																	
Students																	
Undergraduate	*16,595*	*16,830*	*17,003*	*17,266*	*17,630*	*18,035*	*18,477*	*18,956*	*19,465*	*19,995*	*20,541*	*21,097*	*21,660*	*22,226*	*22,795*	*1,882*	*6,200*
Graduate	*2,580*	*2,580*	*2,638*	*2,696*	*2,754*	*2,780*	*2,806*	*2,832*	*2,858*	*2,885*	*2,911*	*2,937*	*2,963*	*2,989*	*3,015*	*226*	*435*
Part-Time	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*1,276*	*0*	*0*
Total	***20,451***	***20,686***	***20,917***	***21,238***	***21,660***	***22,091***	***22,560***	***23,065***	***23,599***	***24,156***	***24,728***	***25,309***	***25,899***	***26,491***	***27,086***	***2,109***	***6,635***
Instructional Faculty	*1,151*	*1,171*	*1,191*	*1,212*	*1,246*	*1,280*	*1,314*	*1,350*	*1,386*	*1,426*	*1,472*	*1,518*	*1,564*	*1,610*	*1,651*	*163*	*500*
Ratio	***17.8***	***17.7***	***17.6***	***17.5***	***17.4***	***17.3***	***17.2***	***17.1***	***17.0***	***16.9***	***16.8***	***16.7***	***16.6***	***16.5***	***16.4***		

Appendix G-4

PROJECTED ACADEMIC AND SUPPORT SERVICES FOR "NEW STUDENTS"
($ Millions)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Variance 2012	Variance 2020
Student Service Budget *(2005-06 Operating Budget, pages 81, 83, 86, 89)*																	
Salaries	$24.8																
Benefits	$6.5																
Operating Exp (net recharges)	$5.9																
Total Budget	**$37.3**																
Undergraduates	17,107																
Graduates	5,195																
Total	**22,302**																
Cost / Student ($000s)																	
Salary Growth Rate	--	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*		
Salaries	$1.1	$1.1	$1.2	$1.2	$1.3	$1.3	$1.3	$1.4	$1.4	$1.4	$1.5	$1.5	$1.6	$1.6	$1.7		
Benefits Rate	*26.4%*	*27.7%*	*30.6%*	*31.8%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*	*33.1%*		
Benefits	$0.3	$0.3	$0.4	$0.4	$0.4	$0.4	$0.4	$0.5	$0.5	$0.5	$0.5	$0.5	$0.5	$0.5	$0.6		
Operating Exp Growth Rate	--	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*		
Non-Compensation	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.4	$0.4	$0.4		
Total	**$1.7**	**$1.7**	**$1.8**	**$1.9**	**$2.0**	**$2.0**	**$2.1**	**$2.1**	**$2.2**	**$2.3**	**$2.3**	**$2.4**	**$2.5**	**$2.5**	**$2.6**		
New Graduates (cumulative)		0	100	200	300	345	390	435	480	525	570	615	660	705	750		
Additional Funding Required																	
Salaries		$0.0	$0.1	$0.2	$0.4	$0.4	$0.5	$0.6	$0.7	$0.8	$0.9	$0.9	$1.0	$1.2	$1.3		
Benefits		$0.0	$0.0	$0.1	$0.1	$0.1	$0.2	$0.2	$0.2	$0.3	$0.3	$0.3	$0.3	$0.4	$0.4		
Non-Compensation		$0.0	$0.0	$0.1	$0.1	$0.1	$0.1	$0.1	$0.2	$0.2	$0.2	$0.2	$0.2	$0.3	$0.3		
Total		**$0.0**	**$0.2**	**$0.4**	**$0.6**	**$0.7**	**$0.8**	**$0.9**	**$1.1**	**$1.2**	**$1.3**	**$1.5**	**$1.6**	**$1.8**	**$2.0**	**$1**	**$2**
New Undergraduates (cumulative)		235	408	671	1,035	1,440	1,882	2,361	2,870	3,400	3,946	4,502	5,065	5,631	6,200		
Additional Funding Required																	
Salaries		$0.3	$0.5	$0.8	$1.3	$1.9	$2.5	$3.2	$4.0	$4.9	$5.9	$6.9	$8.0	$9.2	$10.4		
Benefits		$0.1	$0.1	$0.3	$0.4	$0.6	$0.8	$1.1	$1.3	$1.6	$2.0	$2.3	$2.7	$3.0	$3.5		
Non-Compensation		$0.1	$0.1	$0.2	$0.3	$0.4	$0.6	$0.7	$0.9	$1.1	$1.3	$1.6	$1.8	$2.1	$2.3		
Total		**$0.4**	**$0.7**	**$1.3**	**$2.0**	**$2.9**	**$3.9**	**$5.0**	**$6.3**	**$7.7**	**$9.2**	**$10.8**	**$12.5**	**$14.3**	**$16.2**	**$4**	**$16**

Appendix G-5

PROJECTED STUDENT FINANCIAL AID EXPENSE
($ Millions)

Total TA, GA, Fellows	1,296
Total Stipends '04 (Ms)	$14.9
Avg Stipend (000s)	**$11.5**
Benchmark (000s)	$15.0
Difference (000s)	**($3.5)**
Total TA, GA, Fellows	1,296
Funding Need (Ms)	**$4.6**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Variance 2012	Variance 2020
Graduate																	
Tuition Growth Rate	--	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*		
Base	$24.9	$25.9	$26.9	$28.0	$29.2	$30.4	$31.6	$32.9	$34.2	$35.6	$37.0	$38.5	$40.1	$41.7	$43.4	**$7**	**$19**
Median Stipends by FY12																	
Constant Dollars	--	$0.8	$1.5	$2.3	$3.0	$3.8	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6	$4.6		
Inflation Adj. 3.0%	**--**	**$0.8**	**$1.6**	**$2.5**	**$3.4**	**$4.4**	**$5.4**	**$5.6**	**$5.8**	**$5.9**	**$6.1**	**$6.3**	**$6.5**	**$6.7**	**$6.9**	**$5**	**$7**
Add 750 Graduates																	
New Students	--	0	100	200	300	345	390	435	480	525	570	615	660	705	750		
Tuition Discount (100%)	--	$0.0	$1.2	$2.5	$3.9	$4.6	$5.5	$6.3	$7.3	$8.3	$9.3	$10.5	$11.7	$13.0	$14.3		
Stipends																	
Total	--	$0.0	$1.5	$3.2	$4.9	$5.8	$6.8	$7.8	$8.9	$10.0	$11.2	$12.4	$13.7	$15.1	$16.5		
% on General Budget	--	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%		
$ on General Budget	**--**	**$0.0**	**$0.5**	**$1.1**	**$1.6**	**$1.9**	**$2.3**	**$2.6**	**$3.0**	**$3.3**	**$3.7**	**$4.1**	**$4.6**	**$5.0**	**$5.5**		
Aid on General Budget		**$0.0**	**$1.7**	**$3.5**	**$5.5**	**$6.6**	**$7.7**	**$8.9**	**$10.2**	**$11.6**	**$13.0**	**$14.6**	**$16.2**	**$18.0**	**$19.9**	**$8**	**$20**
Sub-Total	**$24.9**	**$26.6**	**$30.2**	**$34.1**	**$38.1**	**$41.3**	**$44.7**	**$47.4**	**$50.2**	**$53.1**	**$56.2**	**$59.4**	**$62.8**	**$66.4**	**$70.2**		
Undergraduate																	
Tuition Growth Rate	--	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*		
Base	$20.3	$21.1	$21.9	$22.8	$23.7	$24.7	$25.6	$26.7	$27.7	$28.8	$30.0	$31.2	$32.4	$33.7	$35.1	**$5**	**$15**
Discount Rate	--	$0.9	$1.9	$2.8	$3.7	$4.6	$5.6	$6.0	$6.4	$6.8	$7.3	$7.8	$8.3	$8.9	$9.5	**$6**	**$9**
Enrollment Growth	--	*235*	*408*	*671*	*1,035*	*1,440*	*1,882*	*2,361*	*2,870*	*3,400*	*3,946*	*4,502*	*5,065*	*5,631*	*6,200*		
Enrollment Growth Aid	--	$0.4	$0.8	$1.3	$2.0	$2.9	$3.8	$4.9	$6.1	$7.4	$8.7	$10.2	$11.7	$13.4	$15.2	**$4**	**$15**
Sub-Total	**$20.3**	**$22.4**	**$24.6**	**$26.9**	**$29.4**	**$32.2**	**$35.1**	**$37.6**	**$40.2**	**$43.0**	**$46.0**	**$49.2**	**$52.5**	**$56.0**	**$59.7**		
Undergrad. Tuition (exc. summer)	*$120*	*$128*	*$135*	*$143*	*$153*	*$164*	*$175*	*$188*	*$201*	*$215*	*$230*	*$246*	*$263*	*$280*	*$299*		
Discount Rate	*16.8%*	*17.6%*	*18.2%*	*18.8%*	*19.3%*	*19.7%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*	*20.0%*		
Total	**$45.1**	**$49.1**	**$54.8**	**$60.9**	**$67.5**	**$73.5**	**$79.8**	**$85.0**	**$90.4**	**$96.2**	**$102.2**	**$108.6**	**$115.3**	**$122.4**	**$129.9**	**$35**	**$85**

Appendix G-6

PROJECTED SUPPORT SERVICES FOR NEW FACULTY
($ Millions)

																Variance	
Support Services																	
Salaries	$48.6																
Benefits	$13.5																
Non-Compensation	$30.5																
Total Budget	**$92.6**																
Number of Faculty	1,890																
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2012**	**2020**
Cost / Faculty ($000s)																	
Salary Growth Rate	--	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*		
Salaries	$25.7	$26.5	$27.3	$28.1	$28.9	$29.8	$30.7	$31.6	$32.6	$33.6	$34.6	$35.6	$36.7	$37.8	$38.9		
Benefits Rate	*27.8%*	*29.1%*	*32.1%*	*33.5%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*	*34.9%*		
Benefits	$7.1	$7.7	$8.8	$9.4	$10.1	$10.4	$10.7	$11.0	$11.4	$11.7	$12.1	$12.4	$12.8	$13.2	$13.6		
Operating Exp. Growth Rate	--	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*	*2.5%*		
Non-Compensation	$16.2	$16.6	$17.0	$17.4	$17.8	$18.3	$18.7	$19.2	$19.7	$20.2	$20.7	$21.2	$21.7	$22.3	$22.8		
Total	**$49.0**	**$50.8**	**$53.0**	**$54.9**	**$56.9**	**$58.5**	**$60.2**	**$61.9**	**$63.6**	**$65.4**	**$67.3**	**$69.2**	**$71.2**	**$73.2**	**$75.3**		
New Faculty (cumulative)		27	54	82	123	168	213	260	307	358	414	468	522	576	625		
Additional Funding Required																	
Salaries		$0.7	$1.5	$2.3	$3.6	$5.0	$6.5	$8.2	$10.0	$12.0	$14.3	$16.7	$19.1	$21.8	$24.3		
Benefits		$0.2	$0.5	$0.8	$1.2	$1.7	$2.3	$2.9	$3.5	$4.2	$5.0	$5.8	$6.7	$7.6	$8.5		
Non-Compensation		$0.4	$0.9	$1.4	$2.2	$3.1	$4.0	$5.0	$6.0	$7.2	$8.6	$9.9	$11.3	$12.8	$14.3		
Total		**$1.4**	**$2.9**	**$4.5**	**$7.0**	**$9.8**	**$12.8**	**$16.1**	**$19.5**	**$23.4**	**$27.9**	**$32.4**	**$37.2**	**$42.2**	**$47.1**	**$13**	**$47**

Appendix G-7

FACILITY NEEDS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cumulative 2012	Cumulative 2020
Classrooms / Labs																	
ASF Needed																	
CPE Deficit (000's)		64															
ASF Need for Growth																	
New Students		508	0	362	464	450	488	524	554	575	591	600	609	611	613	2,272	6,950
ASF Need per Student (CPE guidelines)																	
Classrooms		10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Teaching Labs		8	8	8	8	8	8	8	8	8	8	8	8	8	8		
Open Labs		8	8	8	8	8	8	8	8	8	8	8	8	8	8		
Total		**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**	**26**		
ASF for Growth (000's)		**13**	**0**	**9**	**12**	**12**	**13**	**14**	**14**	**15**	**15**	**16**	**16**	**16**	**16**		
Total ASF (000's)	**0**	**77**	**0**	**9**	**12**	**12**	**13**	**14**	**14**	**15**	**15**	**16**	**16**	**16**	**16**	**123**	**245**
Cost																	
ASF / 0.65 = GSF	0	119	0	14	19	18	20	21	22	23	24	24	24	24	25		
Cost / GSF (full-scope)	$333	$342	$353	$363	$374	$385	$397	$409	$421	$434	$447	$460	$474	$488	$503		
Total Cost ($Ms)	**$0**	**$41**	**$0**	**$5**	**$7**	**$7**	**$8**	**$9**	**$9**	**$10**	**$11**	**$11**	**$12**	**$12**	**$12**	**$68**	**$153**
Research																	
ASF Needed																	
CPE Deficit (000's)		127		438													
ASF Need for Growth																	
Research Volume																	
Nominal ($Ms)	335	355	377	399	423	449	476	505	537	570	605	642	682	723	768		
Inflation Factor	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	1.38	1.43	1.47	1.51	1.56	1.60		
Real ($Ms)	316	325	335	344	355	365	376	387	399	412	424	437	451	464	479		
Increment				10	10	10	11	12	12	12	13	13	13	14	14		
CPE ASF Guideline per $100k Research				350	350	350	350	350	350	350	350	350	350	350	350		
ASF Needed for Grouwth (000's)				**35**	**36**	**37**	**38**	**40**	**42**	**43**	**44**	**46**	**47**	**48**	**50**		
Total ASF (000's)		**127**	**0**	**473**	**36**	**37**	**38**	**40**	**42**	**43**	**44**	**46**	**47**	**48**	**50**	**710**	**1,070**
Cost																	
ASF / 0.60 = GSF		212	0	788	59	61	63	67	69	71	74	76	78	81	83		
Cost / GSF (full-scope)	$400	$412	$424	$437	$450	$464	$478	$492	$507	$522	$538	$554	$570	$587	$605		
Total Cost ($Ms)		**$88**	**$0**	**$344**	**$27**	**$28**	**$30**	**$33**	**$35**	**$37**	**$40**	**$42**	**$45**	**$47**	**$50**	**$517**	**$846**

Appendix G-7

FACILITY NEEDS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cumulative 2012	Cumulative 2020
Recreation																	
ASF Needed																	
CPE Deficit (000's)				129													
ASF Need for Growth																	
New Undergraduates																	
FTE		0	0	671	364	405	443	479	509	530	546	555	564	566	568	1,882	6,200
CPE Guideline/FTE		12	12	12	12	12	12	12	12	12	12	12	12	12	12		
ASF Need (000's)		0	0	8	4	5	5	6	6	6	7	7	7	7	7		
New Graduates																	
FTE		0	0	200	100	45	45	45	45	45	45	45	45	45	45	390	750
CPE Guideline/FTE		3	3	3	3	3	3	3	3	3	3	3	3	3	3		
ASF Need (000's)		0	0	1	0	0	0	0	0	0	0	0	0	0	0		
New Staff																	
FTE (1 per 5 student fte)		0	0	174	93	90	98	105	111	115	118	120	122	122	123	454	1,390
CPE Guideline/FTE		2	2	2	2	2	2	2	2	2	2	2	2	2	2		
ASF Need (000's)		0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ASF for Growth (000's)		**0**	**0**	**9**	**5**	**5**	**6**	**6**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**25**	**80**
Total ASF (000's)	**0**	**0**	**0**	**138**	**5**	**5**	**6**	**6**	**6**	**7**	**7**	**7**	**7**	**7**	**7**	**153**	**209**
Cost																	
ASF / 0.75 = GSF	0	0	0	184	7	7	8	8	9	9	9	9	10	10	10		
Cost / GSF (full-scope)	$250	$258	$265	$273	$281	$290	$299	$307	$317	$326	$336	$346	$356	$367	$378		
Total Cost ($Ms)	**$0**	**$0**	**$0**	**$50**	**$2**	**$2**	**$2**	**$3**	**$3**	**$3**	**$3**	**$3**	**$3**	**$4**	**$4**	**$56**	**$81**
Support																	
ASF Need for Growth																	
New Faculty		0	0	82	41	45	45	47	47	51	56	54	54	54	49	213	625
Office Guideline (per faculty)		195	195	195	195	195	195	195	195	195	195	195	195	195	195		
New Students		0	0	871	464	450	488	524	554	575	591	600	609	611	613	2,272	6,950
General Guideline (per student)		21	21	21	21	21	21	21	21	21	21	21	21	21	21		
Total ASF (000's)		**0**	**0**	**34**	**18**	**18**	**19**	**20**	**21**	**22**	**23**	**23**	**23**	**23**	**22**	**89**	**268**
Cost																	
ASF / 0.65 = GSF		0	0	53	27	28	29	31	32	34	36	36	36	36	35		
Cost / GSF (full-scope)	$250	$258	$265	$273	$281	$290	$299	$307	$317	$326	$336	$346	$356	$367	$378		
Total Cost ($Ms)		**$0**	**$0**	**$14**	**$8**	**$8**	**$9**	**$10**	**$10**	**$11**	**$12**	**$12**	**$13**	**$13**	**$13**	**$39**	**$133**

Appendix G-7

FACILITY NEEDS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Cumulative 2012	Cumulative 2020
Residence Hall																	
New Undergraduates		0	0	671	364	405	443	479	509	530	546	555	564	566	568	1,882	6,200
New Beds for 30% Students		0	0	201	109	121	133	144	153	159	164	167	169	170	171	565	1,860
Cost per Bed ($000's)	$72	$74	$76	$79	$81	$83	$86	$89	$91	$94	$97	$100	$103	$106	$109		
Cost ($Ms)		**$0**	**$0**	**$16**	**$9**	**$10**	**$11**	**$13**	**$14**	**$15**	**$16**	**$17**	**$17**	**$18**	**$19**	**$46**	**$174**
Renovation		$7		$59		$18	$46		$49		$23	$24		$26	$26	$130	$278
Total Cost ($Ms)		**$7**	**$0**	**$75**	**$9**	**$28**	**$58**	**$13**	**$63**	**$15**	**$39**	**$41**	**$17**	**$43**	**$45**	**$176**	**$452**
Financial Need ($Ms)																	
New Construction																	
Cost	$0	$135	$0	$489	$52	$73	$107	$66	$121	$76	$104	$109	$90	$119	$124	$856	$1,666
Less Residence Hall	$0	($7)	$0	($75)	($9)	($28)	($58)	($13)	($63)	($15)	($39)	($41)	($17)	($43)	($45)	($176)	($452)
Less Facilities Gifts	$0	($2)	($9)	($1)	($1)	($1)	($2)	($3)	($3)	($3)	($3)	($3)	($2)	($3)	($3)	($17)	($39)
Debt Issued	$0	$126	($9)	$413	$42	$44	$47	$51	$55	$58	$62	$65	$70	$73	$77	$663	$1,174
Debt Service *(5%, 20yr)*	**$0**	**$0**	**$10**	**$9**	**$43**	**$46**	**$49**	**$53**	**$57**	**$62**	**$66**	**$71**	**$77**	**$82**	**$88**	**$49**	**$88**
Operating Expenses																	
Research ASF	0	127	0	473	36	37	38	40	42	43	44	46	47	48	50		
Cost per ASF	$7	$7	$7	$8	$8	$8	$8	$9	$9	$9	$9	$10	$10	$10	$11		
Other ASF (x Residence)	0	77	0	181	35	35	37	40	42	44	46	46	46	46	46		
Cost per ASF	$4	$4	$4	$4	$5	$5	$5	$5	$5	$5	$5	$6	$6	$6	$6		
Sub-Total (cumulative)	**$0**	**$0**	**$1**	**$1**	**$6**	**$6**	**$7**	**$8**	**$8**	**$9**	**$10**	**$11**	**$12**	**$13**	**$14**		
Faculty Leases																	
Number of Faculty	0	27	54	82	123	168	213	260	307	358	414	468	522	576	625		
ASF per Faculty	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195		
Lease per ASF	$17	$18	$18	$19	$19	$20	$20	$21	$22	$22	$23	$24	$24	$25	$26		
Total (cumulative)	**$0**	**$0**	**$0**	**$0**	**$0**	**$1**	**$1**	**$1**	**$1**	**$1**	**$1**	**$1**	**$1**	**$1**	**$1**		
Total (cumulative)	**$0**	**$0**	**$1**	**$2**	**$6**	**$7**	**$8**	**$8**	**$9**	**$10**	**$11**	**$12**	**$13**	**$14**	**$16**	**$8**	**$16**
Restoration (2%, x Residence)	$0	$0	$3	$3	$11	$12	$13	$15	$16	$18	$20	$22	$24	$26	$28	$13	$28
Total	**$0**	**$0**	**$14**	**$14**	**$60**	**$65**	**$70**	**$76**	**$83**	**$90**	**$97**	**$105**	**$113**	**$122**	**$132**	**$70**	**$132**

Appendix G-8

PROJECTED RESEARCH EXPENDITURES REPORTED TO NSF
($ Millions)

	Actual				Projection			Annual Growth Rates '04-'12			Annual Growth Rates '12-'20		
	2002	2003	2004	...	2012	...	2020	Base	New Faculty [1]	Total	Base	New Faculty [1]	Total
Federal	100	120	130		254		437	6.8%	1.9%	8.7%	4.5%	2.5%	7.0%
CPE Goals	--	*100*	*114*		--		*414*						
Gov't / Industry	48	49	52		76		131			5.0%			7.0%
Other	14	18	22		35		60			6.0%			7.0%
Sub-Total	**162**	**187**	**203**		**365**		**627**			**7.6%**			**7.0%**
CPE Goals	--	*174*	*190*		--		*600*						
Institutional	74	85	94		111		141			2.0%			3.0%
Total	**236**	**272**	**298**		**476**		**768**	**4.7%**	**1.3%**	**6.0%**	**4.1%**	**2.1%**	**6.2%**
New Faculty (cumulative)													
Instructional					*163*		*500*						
Medicine and Professional Schools					*50*		*125*						

[1] Assumes new faculty split research 70% federal and 30% non-federal.