The background of the slide features a large, semi-transparent image of the University of Louisville's iconic Ram statue on the left side. In the background, the University's main building, the Old Main building, is visible, characterized by its classical architecture with columns and a prominent dome. The overall scene is set in a cityscape, likely Louisville, Kentucky.

University of Louisville

Business Plan 2020 A Financial Roadmap

September 10, 2007

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I. Executive Summary

The University of Louisville Business Plan 2020: A Financial Roadmap

It has been 10 years since the Kentucky General Assembly passed HB1, the higher education reform act. That act mandated specific goals for all of the state's public higher education institutions; it required UofL to become "a premier metropolitan research university."

In response to the legislative mandate, UofL launched the *Challenge for Excellence*, a 10-year plan to achieve national preeminence. That 1998 plan stated specific, measurable goals in areas ranging from research funding to degrees granted to translation of university research into startup businesses that drive economic development.

UofL was one of the first state universities to develop and implement a strategic plan to achieve its mandate.

In 2006, two years early, UofL claimed victory in the Challenge. Ten of 11 goals were fully met, and the remaining goal was well within reach. The University has seen dramatic improvement in

the academic profile of its incoming students; growth in federally funded research and in the number of patents, licenses and business start-ups based on University research; hundreds of partnerships between the University and the community; and tremendous success by its students in competing for national and international scholarships.

Now it's time to take the next step.

Strategic Planning for the future

As with the *Challenge for Excellence*, the University of Louisville will follow a strategic roadmap to guide us as we fully realize the state-mandated goal of becoming a premier metropolitan research university, one that bridges the gap between campus and the community.

The strategic plan defines a premier metropolitan research university as one that:

- Provides an outstanding academic experience in which students benefit

from the community in which the university is located;

- Serves as an economic engine, driving the community through research, business development and partnerships;
- Makes a difference in the community through work with local organizations and programming that meets the particular needs of the community

The University of Louisville is doing all of these things. UofL is a transforming agent for its community and an institution of uncommon ambition that preserves the values of academic tradition while leading its community into its third century

By following its business plan, UofL will help Kentucky achieve the goals set forth in the Council on Postsecondary Education's 2020 Double the Numbers Plan by:

- Increasing the number of baccalaureate degrees awarded each year to 3024, an increment of almost 700 students;

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- Improving its six-year graduation rate by almost 20 percent to 60.4 percent;
- Increasing its retention rate to 80.3 percent;
- Increasing the number of transfer students into the University by almost 600 students, to 1,730 per year;

By 2020 the University will also:

- Invest in strategic programs aimed at increasing Kentucky's progress in producing graduates in Science, Technology, Engineering and Mathematics (STEM) disciplines;
- Increase the annual number of doctoral graduates from the present number of 130 to 350;
- Expand enrollment in medicine and dentistry to meet the healthcare needs of the Commonwealth within the limits imposed by current infrastructure;
- Create the infrastructure for medical bioinformatics and computational biology that will drive the scientific discoveries of the future;
- Attain \$100 million in annual federally-funded research awards by 2010 and \$400 million by 2020;

What will it take to get there?

Creating these benefits for the Commonwealth and success for students – Kentucky's future leaders – will require more and better infrastructure. For instance:

- Basic infrastructure, including the common technologies necessary to support faculty, staff and students, will require an additional \$10 million in funding by 2020.
- Research infrastructure, including the specialized resources for bioinformatics and computational biology – a strategic growth area – will require an additional \$25 million.
- Instructional technology, vital to delivery of classroom instruction and distance education, will require \$15 million.
- And administrative systems, including the tools to support financial aid, human resources, and other costs, will require an additional \$9.8 million.

These costs are in addition to the current costs of maintaining and continually upgrading the University's core infrastructure. At the same time, real cost savings are being shown in areas such as UofL's Voice

Over IP telephone initiative, expected to reduce the University's phone expenses by \$1.2 million per year.

Making these goals a reality will also require attracting and retaining the best faculty and staff, including funds for bringing staff salaries to the average of the regional market and offering faculty salaries that will attract and retain the best of the best.

These goals also require new and newly-renovated space for academics, research, student activities and administration. Funding needed for renovation and deferred maintenance is \$484 million over the span of the business plan and the University's capital renewal deficit and deferred maintenance continues to grow.

Funding the new initiatives

The University of Louisville realizes that funding these initiatives will require a team effort.

The business plan embraces the principles that to be successful U of L must use all of its financial resources wisely by maximizing underperforming assets, competing for new grants

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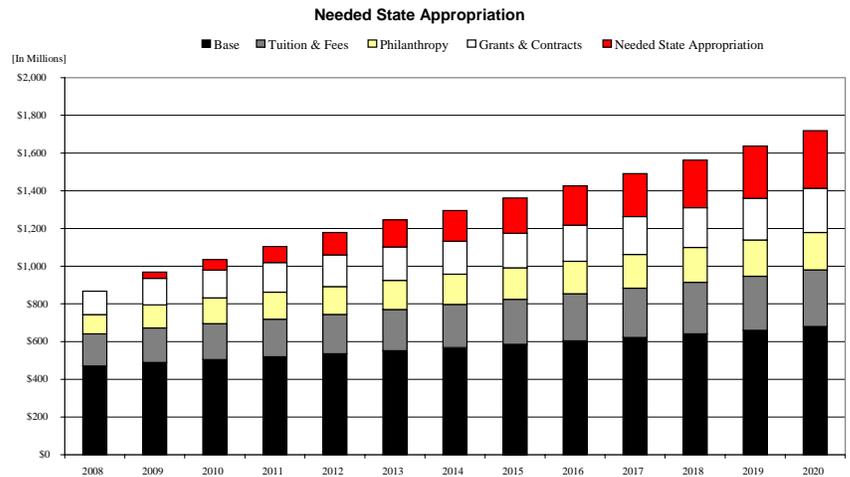
and contracts, increasing philanthropy from the private sector, pricing tuition and services competitively and working conscientiously to develop new sources of untapped revenue. In its quest for preeminence, it is hoped that while U of L will not depend solely on State support to fund its strategic plan, it will make the case that more State funds are needed.

The cyclical “up and down” trend of State funding and the uncertainty of the general business cycle are important environmental factors to consider, but the ambiguity and unpredictability of these revenue flows are cause for concern. Nonetheless, U of L embraces a comprehensive financial strategy that maximizes revenue from all sources of funds (as seen in Graph 1). And, the business plan focuses on the ear-to-year investments that will enable it to meet its long-term goals.

However, even after maximizing these revenues, there is a sizeable gap between U of L’s budget and the required resources. The University and the Commonwealth need to strike balance between state appropriation and tuition revenue to fund this

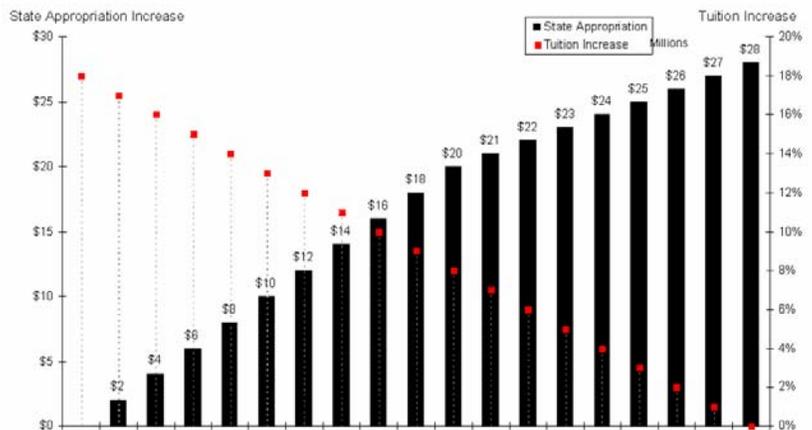
gap. The graph below (Graph 2) shows the relationship between tuition increase and increase in state appropriation.

Graph 1



Graph 2

Relationship Between State Appropriation and Tuition Increase



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The Commonwealth must team with us

The Commonwealth has set the expectations for the University of Louisville. To achieve these goals, the Commonwealth must invest in the University at significantly higher levels for the 12 years of the plan.

Our customers, the students, also must contribute to this plan. The University proposes two approaches to tuition. The preferred approach is to raise tuition each year no more than 5 percent. This approach will only be

possible, though, with a corresponding annual investment from the Commonwealth. With no or limited state funding, we would have to raise tuition above the 5 percent level.

This is something the University will do only as a last resort.

Conclusion

The University of Louisville kept its commitment to the Commonwealth by implementing the ***Challenge for Excellence***. Funding the new strategic plan is the next step on our road to

national preeminence. While not cheap, this effort will give the Commonwealth a tremendous return on investment, providing a world-class education for our students and new economic opportunities for Kentucky's citizens.

The investments we make now will ensure a bright future for our children and for the entire Commonwealth.

II. Overview:

A goal of the Commonwealth of Kentucky, as detailed in the *Kentucky Postsecondary Education Improvement Act of 1997* (House Bill 1), is for the University of Louisville to become a premier, nationally recognized metropolitan research University. To achieve that end U of L embarked on the ***Challenge for Excellence 1998 - 2008***, a forward-looking ten-year strategic plan. In 2006 at the annual retreat of the Board of Trustees it was decided that U of L had achieved nearly all of the goals established in the ***Challenge*** and charged President James R. Ramsey with moving ahead aggressively to the “next level” in the quest to be a premier, nationally-recognized metropolitan research university.

In 2006 President Ramsey charged Executive Vice President and University Provost Shirley C. Willihnganz with development of a new strategic plan for accomplishment of this goal. Through a process inclusive of all members of the University community and members of the community at large, the Provost has delivered a draft plan this summer for campus / community review and input. That review process is currently underway.

At U of L we are building a great university! The ***University of Louisville Strategic Plan 2020*** is based on this mission and on a vision of the U of L being a transforming agent for its community; an institution of uncommon ambition, preserving the values of the academic world while leading its community into its third century.

The following broad goals are outlined in the newly-drafted University's strategic plan:

- Creating a responsive, challenging, and supportive educational environment characterized by high standards, commitment to quality and student success.
- Focusing energy and resources to enhance scholarship and research and advance to national prominence areas of programmatic strength.
- Developing a seamless system of access and intercultural understanding that promotes and supports race and gender diversity, inclusively, equity and open communication.

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- Improving the effectiveness and accountability of programs and services in fulfilling the mission and vision of the University.

The new strategic plan is ambitious, but its goals are achievable. It can be fully realized through a combination of creative ideas coupled with sound resource planning. Clearly, the latter must identify new sources of funding and subsequent deployment using a rational, phased financial plan. For that reason the business plan must include a focused implementation plan for strategic student enrollment and degree granting to achieve both University goals and the Commonwealth goals for increasing the educational level of the state.

Uppermost, the strategic plan sets goals for both quantitative and qualitative improvement in its five strategic themes from now until the year 2020. These are:

- Educational Excellence – in New Instructional Faculty, Undergraduate Education and Graduate Education
- Research & Scholarship
- Diversity, Social Justice & Opportunity
- Community Engagement
- Stewardship, Productivity and Efficiency

III. The Business Model:

The University of Louisville is the Commonwealth's only metropolitan research university with an operating budget approaching \$1 billion, including its corporate affiliates. It employs over 10,000 employees and is a major contributor to the economic vitality of the Louisville metro area and the State. The business plan outlined in this document is essentially a long-range financial plan that details a realistic projection of the costs to implement the strategic plan, currently under review. It also builds the case for additional resources to fund new strategic initiatives through year 2020. It is premised on the idea that the University will need an ongoing and sustainable investment of funds for its programs and activities not only to reach its

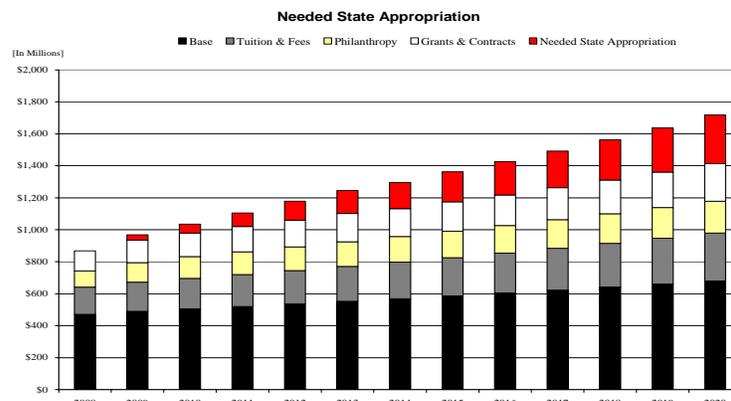
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internal goals but those of the Kentucky Council on Postsecondary Education (CPE).

During the ten-year run of the *Challenge*, U of L has done a first class job of using its scarce financial resources, within the proverbial “doing more with less.” In fact, the University has grown significantly the last ten years during the *Challenge for Excellence* in just about every revenue source, except for appropriations from the Commonwealth.

The business plan embraces the principles that to be successful U of L must use all of its financial resources wisely by maximizing underperforming assets, competing for new grants and contracts, increasing philanthropy from the private sector, pricing tuition and services competitively and working conscientiously to develop new sources of untapped revenue. In its quest for preeminence, it is hoped that while U of L will not depend solely on State support to fund its strategic plan, it will make the case that more State funds are needed. The cyclical “up and down” trend of State funding and the uncertainty of the general business cycle are important environmental factors to consider, but the ambiguity and unpredictability of these revenue flows are cause for concern. Nonetheless, U of L embraces a comprehensive financial strategy that maximizes revenue from all sources of funds. And, the business plan focuses on the year-to-year investments that will enable it to meet its long-term goals.

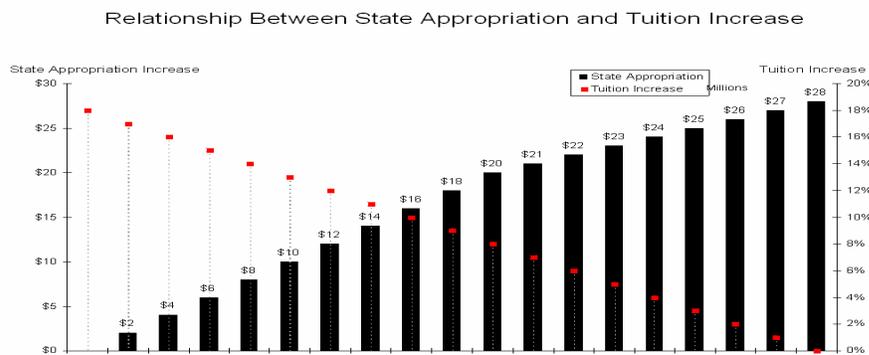
The graph that follows displays the U of L business plan projected revenues by major source of funds. It shows what the budget might be with a minimal tuition increase of 5%, other base revenues increased by moderate growth rates, new “spendable” philanthropy, new extramurally-funded grants and contracts and the new state dollars required to fill the funding gap. To be sure, the investment from all of these sources is significant, but certainly doable.



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However, even after maximizing revenues from various University-produced sources, there remains a large funding gap between U of L's current budget and the resources required to meet its strategic goals. The University and the Commonwealth will need to determine a balance between available State dollars and tuition revenue to fund this difference.

The graph below shows the relationship, or tradeoff, between possible tuition increases and corresponding increases in state appropriation.



IV. Revenue Considerations:

The business plan presumes that to reach the goals we have set for ourselves there must be a concomitant influx of new dollars to fund the enhancements to educational and research programs and the many other worthwhile strategic initiatives. The University expects that all sources of revenue must be fully exploited and subsequently realized to make the plan viable. For that reason, the business plan was designed with all major sources of revenue growing at rates above the norm that contribute to this end. Moreover, U of L does not expect the Commonwealth to fund all of the growth going forward. After considering new philanthropy, new grants and contracts with federal F&A (Facilities and Administration) allowance, new incremental tuition and internal cost savings, the State's share, for example, is reduced to 38% of the documented need, in the first year of the biennium.

State Appropriation

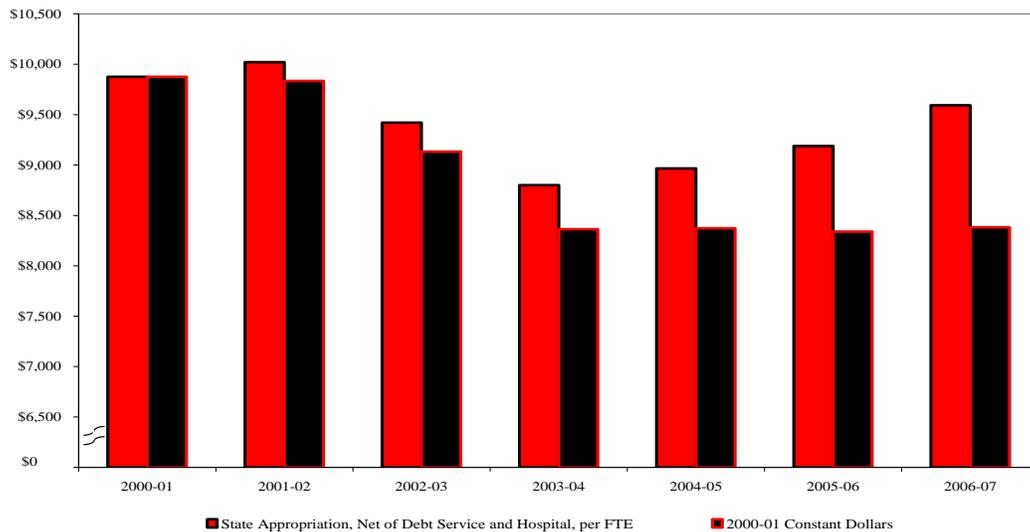
The appropriation from the Commonwealth of Kentucky is the single largest source of revenue. For purposes of illustration, the revenue estimates for that appropriation is shown at the fiscal year 2007-08 amount. That is,

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there is no growth built into the business plan model for state appropriation at this time. U of L recognizes that to attain the aggressive goals of HB1, the Commonwealth will need to invest in the University at significantly higher levels over the 12 years of the plan. To be successful, this investment must be sustainable over the long-term for it will take to year 2020 to achieve many of the goals. The following graph shows the levels of state appropriation per FTE student over time, net of debt service and indigent care (QCCT), in both nominal and constant dollars:

State Appropriation per FTE Student

(Net of Debt Service and Hospital)



Tuition Revenue

Tuition is an integral factor in the overall revenue picture. We recognize the need to balance affordability with access to higher education. Too often annual tuition increases represent a Hobson’s choice between keeping tuition low, and thus affordable, and having sufficient revenues from this source to move the institution ahead strategically. Obviously, a balance must be struck. U of L hopes to keep tuition rates reasonable for our students. At the same time, we recognize that to move the University forward there must be some amount of new funding from annual tuition increases.

The University proposes two tuition approaches in its business plan. One, and the preferred approach, is to raise tuition each year no more than 5%.

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This self-imposed limit on tuition increases, however, assumes that there will be a corresponding investment from the Commonwealth in each year of the plan. And two, without an influx of new state funds each year, above fixed costs and inflation, we would have to raise tuition above the 5% level. This is something the University will do only as a budgetary last resort.

Enrollment

Enrollment planning is important to the development of the business plan. Strategic enrollment management is seen as an institution-wide responsibility and is one of the central foci of the University's overall strategic plan. In addition, one of the key responsibilities placed on the institution by the Kentucky's *2020 Double the Numbers Plan* is to increase educational attainment. Both the University of Louisville and the Commonwealth of Kentucky recognize the need to expand educational opportunities for its youth and increase the number of its citizens achieving a college degree. Not only will this attainment produce an educated workforce but it will increase significantly the earning power for those citizens over their lifetime.

Moreover, the implementation of the CPE's *2020 Double the Numbers Plan* mirrors the University's desire to recruit and enroll students who have the best opportunity to graduate with a bachelor's degree. U of L will grow the number of first-time students each year of the plan by 1.5% in fall semesters and 5% in spring semesters. Transfer students from the community colleges and other universities will grow at 2.75% per year. Increasing the number of transfer students will provide yet another option for Kentucky's community college students, particularly Jefferson Community and Technical College students, to continue their education toward attaining a bachelor's degree. In conjunction with planned enrollment growth, more emphasis and resources will be directed to student retention, thereby enabling and stimulating matriculated students to graduate. Improving student retention is central to U of L's enrollment planning. The table that follows shows the projected full-time equivalent (FTE) undergraduate enrollment for 2008 through 2020:

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	Projected Undergraduate FTE Enrollment			
	2008	2009	2014	2020
Enrollment Increase	11,514	11,817	13,464	15,744
Transfer Increase	1,249	1,284	1,470	1,730
Retention Increase	292	300	342	400
Total	13,055	13,401	15,276	17,874

Other General Fund Revenue

There are several other sources of general fund revenue that the University currently uses to support its base operations. They include:

- Transfers from U of L Affiliated Corporations – This category of revenue represents fund transfers from the various U of L affiliated corporations primarily to support debt service payments for projects funded from those entities. The business plan includes transfers from the U of L Athletic Association Inc. and the U of L Research Foundation Inc. to cover debt service payments on the recently issued General Receipts bonds, which financed the cost of several new athletic and research facilities.
- Sales and Services of Educational Activities and Organized Activities Related to Instruction – These two categories of revenue are primarily revenue generating programs that are directly offset by expenditures of a like amount. For the purpose of the business plan, revenues from these programs are projected to increase to cover increases in their corresponding expenditure programs.
- Other Non-educational Revenue – The increase in revenue from this category is mostly attributable to an increase in investment income. As the University's operating budget continues to grow, cash available to invest on a short-term basis will grow as well. Included in the business plan is a 3% annual growth in investment income available to the University to support strategic initiatives.

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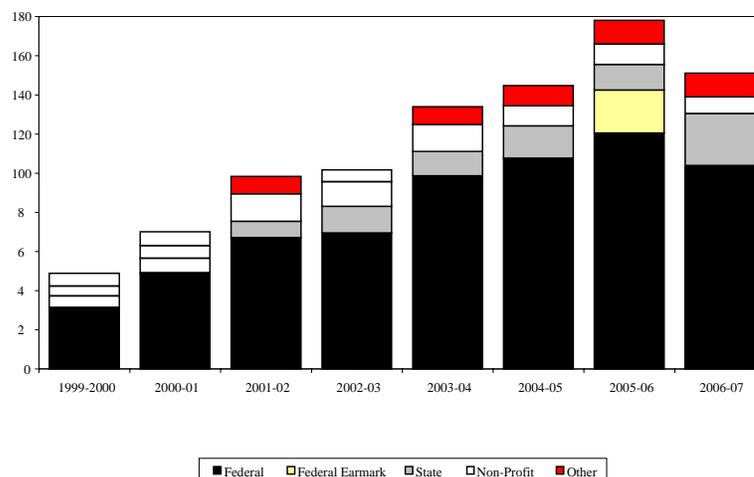
Philanthropy

As the University prepares for a comprehensive capital campaign, the Office of University Advancement was reorganized with the size of the staff and related programs expanded. This initiative is entirely funded from private sources. Under new Leadership, U of L's fund-raising operations are becoming more productive and preliminary results show the University is already seeing positive results in the form of increased pledges and outright charitable gifts. For the upcoming 2008-10 biennium, the Vice President for University Advancement projects that philanthropy will increase by approximately \$28 million. Over the life of the Plan this number is gradually increased each year. By the year 2020, U of L will solicit and take in an additional \$55 million per year, which will be applied to areas of strategic focus.

Grants and Contracts

Revenue from sponsored grants and contracts is central to the business plan. Over the first five years of the plan, we will recruit 120 new researchers and 60 scholars to enhance the funded research and scholarly portfolios on campus. Similarly, these new faculty are expected to bring at least an additional \$60 million in new federal research awards to the University. This amount is based on the current average for the standard NIH R01 grant. New federal research awards to these new investigators and scholars are expected to grow 3% annually through 2012 and 7% from 2013 through 2020. The University anticipates these additional revenues will offset a significant portion of the salaries for each new hire. Ultimately, the new and presently active researchers are expected to increase total extramurally funded research to \$400 million by FY 2020.

Grant and Contract Awards



V. Projected Expenditures

A. Projecting the Budget Base to 2020

The University of Louisville employs a five-year budget projection model to project revenues and expenditures for all sources of funds in the development of its annual operating budget. It portrays the University's overall financial picture in a concise, easy-to-understand format. This model has served the University well. To mesh with the CPE's time frame, the budget projection model was extended from five years out to the year 2020.

This model uses general assumptions for each major category of the budget to estimate future revenues and expenditures. This is done at the macro-level only. For example, the revenue assumptions include a 5% annual increase in tuition rates and an annual enrollment growth of 2.5% through 2020. In addition to tuition, the business plan estimates an annual increase of 3.5% increase in revenue from grants and contracts. This is a simple rise from \$74 million to \$100 million. Similarly, Facilities & Administration (Indirect Cost Recovery) from the sponsored agreements will increase 30% from \$24 million to \$30 million during the same time. Notable expenditure assumptions include a 3% annual salary increase for faculty and staff, a 10% annual increase for health insurance, a 5% annual increase in financial aid tied directly to the annual increases in tuition, a 2.5% increase in supplies and expenses, and a 6.5% increase for utilities. The budget base also includes the funding for deferred maintenance of 1.5% of the net asset value of its buildings and capital improvements, escalated 4% annually.

B. The Educational Experience

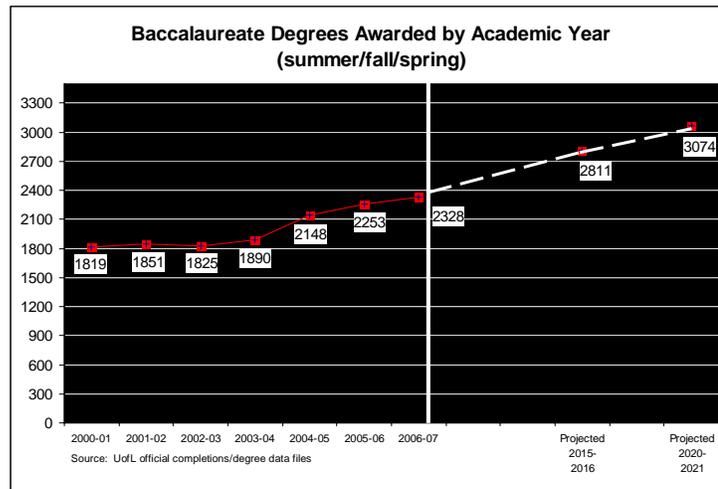
Undergraduate Education

The Kentucky Council on Postsecondary Education's 2007 assessment of progress toward meeting the goals of House Bill 1 concluded that dramatic increases are needed in educational attainment, especially in baccalaureate degree production. A key component of the *University of Louisville Strategic Plan 2020* is to continue the progress made on graduation rates and undergraduate retention. U of L will do this by increasing the number of bachelor's degrees awarded, by strengthening

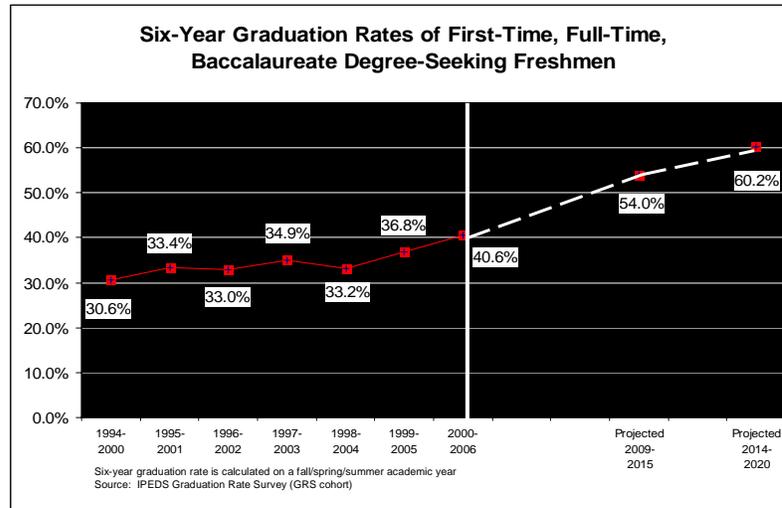
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undergraduate programs and student life experiences and by increasing enrollment over the next twelve years. To achieve these goals the University plans numerous staffing and programmatic enhancements with a cumulative investment of \$38.5 million over the same time horizon out to year 2020.

The following graph shows U of L’s progress in awarding baccalaureate degrees to date and the number of baccalaureate degrees projected through 2020:



In a similar vein, the University of Louisville has significantly improved bachelor’s degree achievement, increasing its six-year graduation rate from 34.9% in 1997 to 40.6% in 2006. Improving the graduation rate is a high priority for the University as stated in its strategic plan. This progress is depicted in the following graphic. It shows recent history and a projection going out to 2020:

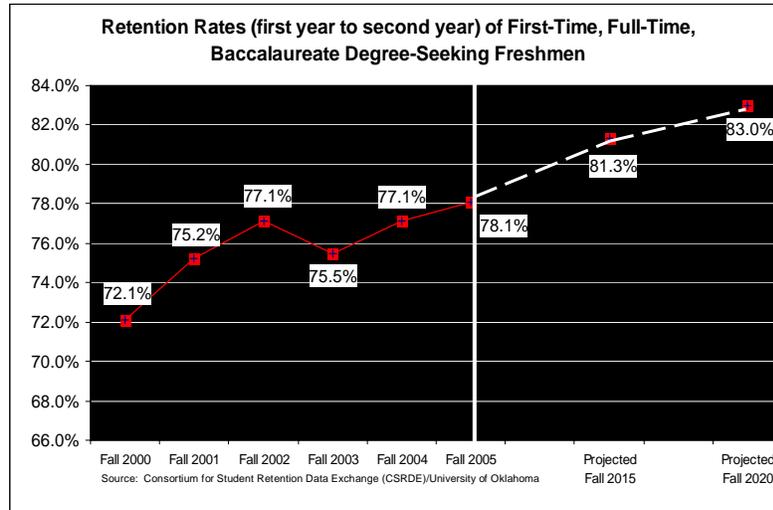


Clearly, more progress is needed and U of L is committed to doing just that.

Planned Enrollment Increases

Over the life of the plan, U of L expects to increase its enrollment by almost 5000 undergraduate students. The quantum addition of this number of new students will require new resources. Some will come from new, incremental tuition revenue. The rest will come from other sources including fund transfers from the various U of L affiliated corporations, targeted philanthropy, endowment earnings and state appropriation.

Expectedly, costs relating to class size are predicted to rise. Additional resources will be needed to improve and grow the recruitment and retention programs and services that impact student enrollment. The largest component of the projected increase, some \$21.9 million, is for salaries, fringe benefits and operating expenses of expanded student services. Beefed-up Admissions, Financial Aid, Orientations, Advising, Student Activities, Minority Recruitment and other student service operations will provide much needed support for the new students. As a direct result, larger staffs will also contribute to better retention of students from year to year, culminating in both higher numbers of graduates and a higher six-year graduation rate.



Source: Consortium for Student Retention Data Exchange (CSRDE)/University of Oklahoma

Strategic Enrollment Management

In implementing the strategic plan, we will place greater emphasis on the practice of Strategic Enrollment Management (SEM). SEM will allow the University to deal with changing demographics, economics and institutional enrollment-related priorities. Additionally, SEM will drive conversations on campus about student enrollment, resident / nonresident mix, financial aid, admission standards and program priorities. In this process, the University’s enrollment goals will be comprehensive and collaborative. They will include the setting of college-specific goals for: undergraduate students, graduate students, professional school students, first-time students, transfer students, students of color, retention rates, and graduation rates.

In addition, the University will continue its efforts to improve student services through the expansion, improvement, and use of technology -- developing new programs targeted to specific populations. It further will enhance the amount and types of scholarship and financial aid awards including transfer scholarships, study funds, and scholarship programs for middle income and continuing students. Other student-related initiatives include recruiting and retaining strong support staff, enhancing academic advising, academic support and preventative programs for “at risk” students. It also includes earlier recruitment of high school students and early awareness initiatives.

Science, Technology, Engineering, and Mathematics (STEM)

Kentucky is falling behind in the number of Science, Technology, Engineering, and Mathematics (STEM) graduates when compared to national benchmarks. This trend must be reversed for the Commonwealth to compete in the knowledge-based economy and beyond. To meet this challenge, the U of L business plan includes a \$3.6 million investment for positions and programs for newly-created degree programs in STEM. Additionally, we will create a STEM Institute with a multi-disciplinary approach to learning. The purpose of the STEM Institute will be to increase the number of Arts and Sciences graduates with STEM-related majors, increase the number of students majoring in Engineering and related technical fields, and provide capable science teachers in the K-12 classrooms of the Commonwealth. Going forward, these science and mathematics teachers must be able to motivate, train and encourage students in STEM areas across a broad and diverse student body.

Developmental Education

The business plan includes a provision for a more robust Developmental Education program. New funds are needed to strengthen these opportunities for under-prepared students. This investment includes funds for basic infrastructure and specialized preparation programs that will service the special needs of academically disadvantaged but motivated students. Frequently, these students are under prepared by their high school experience. They often lack basic college preparation prerequisite courses and have low ACT scores, which can generally predict academic success for college level work. The multi-year investment, projected at just over \$1 million, supports recommendations by the Statewide Task Force on Developmental Education, which were subsequently approved by the CPE.

Ideas to Action

The ***Ideas to Action*** strategic initiative is the University's Quality Enhancement Plan (QEP) that focuses on improving the critical thinking skills of undergraduates and prepares them to understand and solve society's real world problems. The QEP, developed as part of U of L's recent SACS reaccreditation process, is a multi-year program geared to improve overall problem solving, critical thinking and communicative

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qualities of undergraduate students. This ten-year plan also aims to improve the quality of instruction by offering students opportunities outside the classroom to solve hands-on problems. It will also improve faculty interaction with students by offering special educational modalities other than the didactic lecture and traditional classroom work. When fully up and running by the year 2012, the program is projected to cost \$560,000 annually. On-going costs are projected to increase by 5% each year after 2012.

A number of other strategic initiatives comprise the remaining \$11.2 million of the Undergraduate Education 2020 emphasis. They include:

- **Faculty Development Initiatives** – U of L's strategic plan calls for an increase in faculty development activities. In FY 2009, \$100,000 is projected for these activities; there will be annual increases of 5% after that.
- **International Initiatives** – The report of the International Task Force calls for additional investment to expand the number of offerings in international education. The cost was estimated to be \$1.75 million in FY09 followed by annual increases of 5%. While shown in this section of the plan, this cost reflected above represents the funds needed for undergraduate, graduate and professional international programs.
- **Library Enhancement** – Library enhancements, especially in the area of electronic document access, account for about \$4 million annually of the additional projected cost in this category. This item is currently included in the budget projection through 2012 and was then increased \$430,000 each year after 2012.

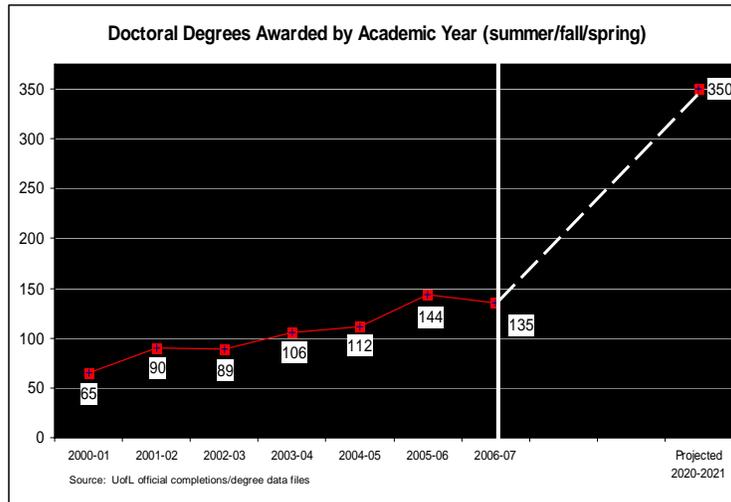
Graduate Education

Graduate education is a strategic focus area for U of L. Clearly, great graduate programs are inherent to becoming a nationally-recognized premier metropolitan research University. Since 1997, U of L has made impressive strides toward achieving this goal. It increased the number of graduate students by 10% and the number of doctoral graduates to 130 per year. This is good progress but we must do much better. This

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success was not inexpensive – it took a disciplined approach and a steady stream of new dollars for graduate stipends and scholarships.

During the recent strategic planning process, the campus had an opportunity to examine where such progress was made and determine areas in which U of L falls behind other peer institutions. One area in which the University still trails is in doctoral education. A comparative analysis of doctoral graduate enrollments at the top metropolitan research universities indicates that we would have to increase the annual number of doctoral graduates from the present number of a 130 to 350 by 2020. This is a large increase by anyone's standards.



To increase the number of doctoral graduates, there will need to be a sizeable increase in the number of graduate assistantships and fellowships. In most academic disciplines, assistantships and fellowships are necessary to attract top quality doctoral students. In some fields, the typical expectation is that faculty will support doctoral students on grants after the first two years. However, in other fields, particularly those in which the U of L is behind in number of doctoral graduates, the students will need at least three years of institutional funding support. Additionally, we will need to continue to increase the stipends associated with these assistantships and fellowships to remain competitive in the regional and national marketplace. To that end, a sustained investment of \$700,000 is needed. The graduate student cost will increase annually by 5% after 2009.

With an understanding of these factors, a cost projection was developed using a number of assumptions. First, each of these students would have a graduate assistantship or fellowship for two or three years. Second, the cost of the stipend per assistantship or fellowship would start at \$24,000 per year and increase 3% each year thereafter. The 3% per year increase would also need to be applied to current assistantships and fellowships. Third, the cost per assistantship or fellowship also includes the cost of the tuition remission and fee waiver. A 5% cost escalator for tuition increases was added each year starting in year one. Fourth, the new assistantships or fellowships were phased in as follows - 50 additional in 2009, 90 more in 2010 and 156 more each year from 2011 to 2015.

Professional Graduate Degrees

Professional graduate degrees typically fall into two distinct categories: Professional Science Master's and Professional Doctorates. U of L has two active examples of professional doctorates in the Doctor of Education (Ed.D.) program in Educational Leadership and Organizational Development in the College of Education and Human Development and the Doctor of Audiology (Au.D.) in the School of Medicine. These doctorates are designed to train and develop practitioners of the discipline, in these two cases; school superintendents and audiologists. Professional Science Master's (PSMs) are an attempt to develop degree programs that are more responsive to an identified business/industry need or opportunity. An example could be a PSM in Laboratory Management to coincide with development of the Louisville Life and Health Sciences Project (a.k.a. Haymarket) development. PSMs combine advanced, discipline related coursework with skills valued by non-academic employers (e.g., writing, communication, negotiation, and consensus building). PSMs are typically collaborative and interdisciplinary in that they combine a science related discipline with a specific set of technical skills and some business related skills. These programs require a business/industry internship so that they remain focused on the needs of the employer. U of L is currently engaged in a Council on Postsecondary Education proposal to develop PSMs state-wide through a grant from the Sloan Foundation and the CPE budget request to the Kentucky Legislature.

Professional Education – Medicine, Dentistry and Law

School of Medicine

The American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) recommend that US medical schools should increase enrollment by 5% to 30%. The essence of the argument, as presented by these organizations, is as follows:

- The United States has fewer physicians per thousand populations than some developed countries and more than others.
- The United States population is increasing.
- The United States population is aging.
- The older individuals more often seek medical treatment.
- The change in the population and the relative lack of increase of the medical workforce indicates that there will be medically underserved areas.

Therefore, the argument concludes, U.S. medical schools should graduate more physicians. There are, however, obvious flaws in the argument.

They include:

- Unless something is done about the third-party reimbursement to physicians and their geographic distribution, simply training more physicians does not mean that medical care shortages will be alleviated. We may simply end up with more psychoanalysts in the San Francisco Bay area and plastic surgeons on the upper west side of Manhattan.
- We cannot address the problem of medical workforce shortages strictly by dealing with undergraduate medical education. There will have to be adequate residency slots for these individuals to train in. If not, they will simply crowd out foreign medical graduates from residency slots but may not stay to practice in medically underserved areas where foreign medical graduates often train.
- The average U.S. medical student is now graduating with \$110,000 in debt. Adding more medical students to U.S. medical schools, without increasing the amount of financial aid, may force more students to

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compete for a limited amount of resources and simply increase average indebtedness.

The current freshman class enrollment for the School of Medicine's MD program is 155 students. By legislative edict, the entering class may be composed of no more than 124 Kentucky residents. There is no cap on the number of non-residents who may be enrolled.

Over the last seven years the School of Medicine has increased its entering class size from 125 to 155, representing a 24% increase. We expect to increase class size in fall 2008 to 158, and in fall 2009, to 160. This is a 29% increase over 9 years. At that point we will reach the maximum seating capacity of our lecture halls — even after making significant renovations. Unless or until funds are identified to construct a new instructional building, we do not project enlarging the class size beyond that point.

The construction of a new Instructional Building, currently included in the 2007 edition of the Health Sciences Master Plan, is projected to cost \$17 million. This is also included in the U of L's 2008-2014 Agency Capital Plan.

School of Dentistry

The current freshman class enrollment for the School of Dentistry's DMD program is 80 students. By state mandate, the entering class may be composed of no more than 44 Kentucky residents. There is no cap on the number of non-residents who may be enrolled. In 2007, there were 2,703 non-resident applicants, most of who were not matriculated. With the School's progress in increasing sponsored research, the allocation of space for that endeavor has markedly reduced the classroom and clinical space available. Presently, 84 is the maximum number of new dental students accepted in the first year class.

Due to a shortage of oral health care providers to meet both the need and demand, in Kentucky and across the nation, the size of the dental workforce needs to be increased. The School of Dentistry is developing a plan to renovate its 37 year old facilities to accomplish that. The major limiting factor for any enrollment increase is space for the necessary classrooms, labs, clinics and support space. The initial architectural

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proposal would permit expansion of the freshman class size by a minimum of 10%.

School of Law

The Dean of the Brandeis School of Law projects a small but steady increase in enrollment through 2020, with adjustments leading to a critical mass of about 180 full-time equivalent students. The existing capacity of the Law School facilities imposes a physical constraint on enrollment growth at the school and will need to be addressed. In the coming years, enrollment may be positively impacted by the mix of part-time and full-time students, as more part-time students participate in the day program offered by the School. Additionally, the introduction within the next five years of a Master of Laws (LL.M.) program will increase the annual enrollment at the school by up to 15 students. Tuition revenue for this program will be priced at a special market rate, which will be used to support the costs of the program.

Services for Students

As U of L's student body changes and grows a number of services and experiences for students must be addressed to best meet the expectation of the campus, the various academic colleges and schools, and the local community. These include larger and more robust counseling services, career services, health services, and disabled student services. At the same time, the University must also invest in the "out of class" experiences that are critical to increasing student retention and satisfaction. These experiences include leadership development, student activities, recreational sports, social programming, community service and service learning, and campus housing.

The investment in services and "out of class" experiences for students will return a more interconnected student. As these services have not been adequately addressed the last decade during the rapid growth of U of L, it is anticipated that \$2.25 million be invested to enhance student services and an additional \$2.0 million invested to improve the "out of class" experiences by year 2020. This investment enables U of L to address student mental health, student safety, student job placement after graduation, and student health - all issues families and students demand from this institution. For example, in the wake of campus security crises

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across the United States, the single best investment can be made in Counseling Services. Enabling counseling practitioners to outreach and assist with preventative intervention in student lives improves student retention and increases campus safety. Enhanced services for students are not just expectations of students, but also expectations of parents and local citizens. Communities expect a safe and secure campus environment that can address the demands and needs of students.

C. Research and Scholarship

The University of Louisville has achieved huge success in the growth of sponsored research in the last ten years. Since 1998, total funds for extramurally-funded research grants and contract awards increased a whopping 244% to \$109 million in fiscal year 2006. This remarkable advance resulted from the implementation of a focused plan to infuse national visibility to the University's research profile. Clearly, this took a steady, recurring and costly investment over that time period that has paid big dividends. It not only attracted new dollars into the Commonwealth but new high-paying jobs, business spin-offs and, most important, novel scientific discoveries that are breakthroughs in cures for disease.

Past success does not necessarily ensure future preeminence. More hard work lies ahead. The University is prepared to embark on a new phase of growth to increase funded research and scholarly activities to a higher level. The immediate goal is to attain \$100 million in federally-funded research awards by 2010. With NIH funding essentially flat for the foreseeable future, this will be most challenging, but still attainable with the right investment. The most direct path to this milestone is adding a critical mass of new investigators who already have funded grants and would transfer them to U of L. In that vein, we intend to meet the long-term goal of reaching \$400 million annually of total extramurally-funded grant awards by year 2020.

The institution has been busy developing a strategic plan for research. This effort has been led by the new Executive Vice President for Research. It is a determinant of the business plan, reflecting the financial requirements to accomplish the plan. It calls for adding 60 new investigators and 30 scholars in the first five years of the plan for a total of 180 new research and scholars to add to the faculty. These will be

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organized in units of 6 faculty members. These new hires are projected to bring an estimated \$59 million in new federal grants and contracts to the University while improving the overall quality of research and scholarship. This strategic initiative will be costly, particularly because it is front-loaded in the early years of implementation. The University plans to fund this important strategic endeavor thusly:

- 20% from new grant funds, both direct and indirect sources will go to help offset projected investment.
- 20% from new philanthropic gifts to specific research programs. This infusion of new dollars is an integral part of the University's major capital campaign now being planned.
- 20% from the University's endowment or other U of L Foundation funds.
- 20% from the Commonwealth, funded predominately from the Research Challenge Trust Fund and the Endowment Match Program (a.k.a. Bucks for Brains).
- 20% from hospital revenues.

Clinical and Translational Science Awards

Also included in the Plan under research is a cutting-edge initiative for Clinical and Translational Science Awards (CTSA). This NIH initiative will transform how clinical and translational research is conducted, ultimately enabling researchers to provide new treatments more efficiently and quickly to patients ("from mind to marketplace"). The new program draws on NIH's earlier initiatives to re-engineer the clinical research enterprise, one of the key objectives of the *NIH Roadmap for Medical Research*. U of L was one of fifty-two academic health centers in the nation to receive a planning grant to help it prepare applications to join the consortium of about 60 major health centers. They ultimately will be linked together to share clinical information that will boost the discipline of clinical and translational science. The annual budget for the first year is estimated at \$4 million and is increased by 5% for each subsequent year.

Center for Predictive Medicine

The proposed Center of Predictive Medicine for Bio-Defense and Emerging Infectious Diseases (CPMBEID) has emerged from the successful attraction of a NIAID funded grant for a Regional Bio-Safety Laboratory (RBL). The RBL is a facility whereas CPMBEID is the academic/research effort needed to strengthen and expand the faculty with research interests in Immunology and Microbial Pathogenesis. In addition, the Center will become a vehicle for interdisciplinary research and serve as a means for the exchange of ideas and generation of intellectual ferment for faculty using the new facility. A strong academic center in these disciplines will, in turn, assure that the RBL physical facility is an efficiently used asset.

This center is consistent with the Challenge for Excellence and the Program of Distinction in Molecular Medicine and Biotechnology, with the strategic focus of preparedness on the Shelby Campus, and with the biosciences and health strategic areas of the Commonwealth. The center will contribute to “scorecard” indicators of publications, grant funding, graduate degrees, inventions and community partnerships. The budget is estimated at \$3.5 million for FY 2009, which is increased by 5% for each subsequent year through 2020. Most of these expenses will be covered by recurring state appropriations for the biocontainment facility, university research initiative position salary lines and, eventually, contracts and grants (F&A).

Medical Bioinformatics and Computational Biology

Medical bioinformatics and Computational Biology (MBI-CB) are, respectively, the use of computational methods for handling medical and biomedical data, and the application of computational approaches to biomedical data modeling and analyses. MBI-CB is now an indispensable component of essentially all medical and biological research. The University of Louisville requires a cohesive research and educational program in these areas to remain competitive, especially as new initiatives continue to be developed under the auspices of the NIH Roadmap.

Biological and medical databases have continued to grow at an exponential rate. As the number and size of databases increases, new tools and approaches are needed to extract, analyze, display and integrate new

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information. Likewise, the ability of biomedical researchers to elucidate biological complexity and discover ways to combat diseases requires integration of information at multiple levels. Such efforts have become a bottleneck to continued progress and solutions to address this challenge and will require close cooperation among scientists from diverse disciplines, including mathematics, computer sciences, and the basic and clinical sciences, as underscored in the NIH Roadmap.

Through the various core facilities, researchers at U of L generate large amounts of cellomic, genomic, proteomic, metabolomic and epidemiological data that are reduced and analyzed on a rather ad hoc basis. Several layers of data handling are often needed, from raw automated data reduction, automated interpretation, through statistical analyses, detailed mathematical modeling and computer simulation. These require adequate frameworks for support of software engineers, database specialists and other scientists of various background to work with biomedical researchers in developing new data analysis techniques, visualization methods and modeling software platforms, to name a few.

Three major areas of need of funding in MBI-CB at U of L include:

- Building research and educational capacity in the areas of computational, mathematical and statistical modeling in accordance with the paradigm shift in research and funding opportunities in the life sciences.
- Allocation of stipends and tuition costs for graduate students and clinical research fellowships to promote translational research opportunities.
- Allocation of infrastructure funds to sustain research and educational capacity at U of L.

The proposed budget for the bioinformatics program is \$3.6 million for FY 2009 and \$3.1 million for FY 2010. In subsequent years the cost will be covered by indirect cost recovery revenue from grants.

D. Diversity, Social Justice & Opportunity

The University of Louisville has a proud tradition of being an open and caring institution. It has welcomed all races, ethnic groups, religions and sexual orientations. This is manifest in that U of L realized 8 out of 8 of

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its Equal Opportunity (EEO) goals for the past two consecutive years as required by the federal Office of Civil Rights and as reported by the CPE. That reputation and solid commitment to diversity did not happen by accident. It required many years of extraordinary attention to diversity issues and a timely infusion of funds to promote diversity goals. Nevertheless, there is more work to do in this important area.

The U of L Business Plan includes provisions for diversity, listed as follow:

- As the U of L student body grows and demographic trends call for a more diverse student population, it is critical to have an equally diverse faculty to help prepare students to live and work in a diverse and global society. To be truly effective, these faculty must include women, Hispanic/Latino, African American, and other underrepresented faculty of color. Strategic efforts through strategic recruiting such as identifying targets of opportunity at other universities and expanding the “grow-our-own” initiative will require the hiring of at least five (5) representative faculty members per year through the year 2020.
- Given the changing demographics and the increasing growth of the Hispanic/Latino population, the University needs to increase the number of Spanish-speaking support staff to help these minority students successfully transition to college life as well as provide specialized programs needed for them to be retained and graduate. To this end, the business plan includes the hiring a minimum of two (2) Hispanic/Latino staff to better serve the projected increase in Hispanic students.
- Centrally expanded programs and those within the academic units, developed to better meet the needs of minority students will require new funding. These programs will include initiatives for adult learners, first-generation college students, and Hispanic/Latino students. In addition, seed money will be needed for new programming in the Ali Institute, MAEP, the PEACC program, and the Women’s Center to meet student demand for services.
- There is a need for more diversity training on the U of L campus. Recurring funding of \$5000 will be needed to help support new initiatives that reflect the best practices in advancing diversity on

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campus. These may include campus dialogues on difficult issues, cross-cultural communication and other forms of education and training.

- Community outreach and response to requests from community organizations are an integral part of connecting with the community. These requests include sponsorship at annual community events and help with small community projects that are not a part of the Signature Partnership program.
- As the U of L student population becomes more diversified, financial support to help students remain in school and not “drop out” due to financial hardship is expected to rise. Working with the Financial Aid Office, the Vice Provost for Diversity will help augment the funding of students who are referred by Financial Aid or academic advisors.
- New student organizations and affinity groups will emerge from having a more diverse student population. Funding from the Vice Provost for Diversity will augment the funding that these student organizations receive from SGA and other units on campus.
- The Perseverance Group is creating an interactive online social networking and mentoring framework to aid campuses in student engagement and persistence. Connecting prospective students, peers, faculty, alumni and the business community will increase the likelihood of student success. This Online Student Success System is set to roll out in early Fall 2007.

Cardinal Covenant Program

The University of Louisville’s “Cardinal Covenant” program was created in response to rising tuition and housing costs and the challenge for low-income families to fund their children’s higher education. This watershed program will make college attainable for the 22.6% of Kentucky families living at or below 150% of the federal poverty level.

Beginning with the fall 2007 semester, the University made a promise, or covenant, to qualifying incoming freshmen who meet established criteria to award enough financial assistance from federal, state, private, and institutional sources to cover their direct costs including tuition, room, board, and textbooks. Students will be able to graduate debt free

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provided they graduate within five years and remain Pell grant eligible each year. Additionally, each student will also be offered the opportunity to earn extra money through work on campus 10-12 hours per week under the aegis of the Federal Work Study program. The cost for the cardinal Covenant program is \$450,000 for the first year of implementation with another \$450,000 added each year for the total of five years. The total on-going budget for the program as currently configured is \$2.1 million.

Mandated, Unfunded Tuition Remission Programs

Kentucky statutes mandate that public universities of the Commonwealth grant tuition remission benefits to certain qualifying Kentucky residents. These so called state-mandated tuition remission programs historically are not funded by the State, and universities must absorb the costs from within their own budgets. These programs provide valuable tuition remission benefits for Kentucky residents who are spouses and dependents of deceased or disabled veterans, fire fighters, police officers, certain state employees, teachers who supervise student teachers, and foster children. Over time the costs of these programs, while a wonderful benefit to many deserving Kentucky families, have increased substantially. The business plan shows the cost of these programs to be \$1.4 million in FY 2008; cost adjusted each year thereafter for tuition rate increases.

E. Community Engagement

As a leading corporate citizen of Louisville and Kentucky, the University of Louisville will be at the forefront of the region's transformation. U of L expects to become a national model for its engagement in the life of its metropolitan area, the Commonwealth, the nation, and in selected programs within the international arena. By way of strategic alliances and partnerships with public and private groups, we will share our expertise, interest, and scholarship as an involved corporate citizen. Through its innovative Center for Urban Solutions and Signature Partnership with areas of West Louisville, U of L will help transform cities, towns, and suburban areas regionally and throughout the Commonwealth.

Signature Partnership Program

The Signature Partnership initiative is a University-wide project working with community partners to help improve the quality of life of the residents of West Louisville. The primary focus of the program is improving the educational attainment level of residents in West Louisville with an emphasis on eliminating disparities in health, economic, and social status. U of L intends to leverage the pooled resources from community partners, external funding agencies and internal funds to grow this long-term initiative. Specific programmatic objectives have been identified and progress will be measured on an ongoing basis. The projected cost of the Signature Partnership program is \$770,000 for FY 2008-09. This cost will increase as new partnerships are developed in future years. At this time, another \$1 million increase is projected for FY 2009-10 and the fully-funded program will cost \$3.6 million in FY 2020.

Center for Urban Solutions

U of L currently sponsors the Center for Urban Solutions through direct investment and the sharing of resources. This multi-disciplinary center works in concert with the Kentucky League of Cities to share University expertise with cities, towns and suburban areas regionally and statewide. This resource will provide a means for sharing knowledge and developing innovative solutions to common problems, and will become a national model for meeting challenges and pursuing opportunities. The budget for the Center is projected at \$250,000 a year for FY 2009 and FY 2010. In subsequent years, the Center will become totally self-supporting. Ultimately, it will contribute to the University's goal of becoming known as a model for engagement in the life of its metropolitan area.

F. Stewardship, Accountability and General Administration:

Information Technology

Coupled with the strategic needs for health and biomedical informatics, investment in information technology is fundamental to U of L's quest to become a preeminent metropolitan research university. Over the past ten years, the University has invested in its technology infrastructure by:

- Advancing communication and collaboration

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- Enhancing business productivity
- Supporting best practices
- Providing online access to services for the university community
- Providing a competitive advantage in research grants
- Supporting economic development
- Providing an online learning infrastructure to support learning communities, enhance retention, and improve access to education

Just as information technology contributed to U of L's *Challenge for Excellence* success, information technology will be essential to supporting and empowering U of L's efforts to meet its ambitious goals for 2020. As U of L grows in number of students and research initiatives, information technology infrastructure must grow to support and sustain those initiatives. The growth in information technology support falls into four key areas: basic infrastructure, research infrastructure, instructional technology and administrative systems.

Basic infrastructure includes the common technologies that support general usage by faculty, staff, and students across the university. This infrastructure includes a variety of essential technologies and services such as:

- Campus and intercampus networks
- Wireless networks
- E-mail services (servers and spam filtering)
- Security infrastructure (firewalls, monitoring, vulnerability mitigation)
- Internet and Intenet2 networks
- Web servers and services
- Datacenter and enterprise operations, including public user centers

The proposed substantial enrollment increase at U of L will cause growth in infrastructure costs that will require additional funding. However, enrollment is not the only reason for the rise in basic infrastructure costs. The technologies used to provide today's services will change over the next decade and for U of L to remain competitive in student and faculty

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recruitment, U of L must stay current in its technology infrastructure. For example, U of L recently became a regional connection point for Internet2. This connection to the national research and education optical network provides a competitive advantage in terms of high speed, large bandwidth, dedicated network resources that will enhance U of L researchers' ability to collaborate regionally, nationally and globally. To address these needs, the budget for basic infrastructure must grow by an additional \$10 million by 2020.

Research infrastructure encompasses specialized resources that are required to support research computing. Research infrastructure includes a variety of technologies and services, including:

- Supercomputers, computer clusters, and grid computing
- Research data storage
- Research networking
- Specialized software

U of L's existing research infrastructure must be expanded to meet the University's goal of becoming a preeminent metropolitan research university. The Medical Bioinformatics and Computational Biology initiative alone will require a significant investment in new infrastructure to provide data storage for the massive databases and sufficient computing power to drive the mathematical modeling and data mining that are essential to the research effort. Annual funding for research infrastructure must reach \$25 million by 2020.

Instructional technology is the technology that is directly involved with the delivery of classroom instruction and distance education. Instructional technology includes:

- Audio and video presentation equipment
- Presentation control systems including central monitoring
- Interactive video conferencing systems
- Recording equipment (for use in creation of podcasts and streaming video)
- Virtual learning environments and community software

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Investments in instructional technology infrastructure are necessary to help students develop the technical skills needed to succeed in their chosen disciplines and professions. Given workforce expectations, services need to be provided to prepare students to be information savvy knowledge workers. Information technology has a role in retention efforts by enhancing the classroom experience to meet various learning styles as well as providing opportunities to review lectures and materials outside of the classroom. Instructional technology permeates the interactions with students both in the classroom and through online communities. To address these needs, the budget for instructional technology must grow by an additional \$15 million by 2020.

Administrative systems are the enterprise systems that support the business, record-keeping, database and reporting functions of the university. At U of L these systems are implemented primarily through Oracle/PeopleSoft modules, and support diverse areas such as:

- Human resources
- Student administration
- Financial aid
- Financials
- Grants management
- Data warehousing
- Analytics and reporting
- Enterprise portals

These applications require regular updating to keep them current, and receive periodic upgrades from the applications vendors. This area also includes the web-based technologies, which is one of the fastest growing application development areas of the University. The costs to provide administrative systems are expected to grow as the institution grows, but more importantly, these costs will grow as new technology solutions become available to replace manual business processes. For example, Enrollment Management has identified the increased use of technology as necessary to their effort to improve student services. Research support applications, such as compliance software, must be deployed to support the research efforts. To address these needs, the budget for administrative systems must grow by an additional \$7.5 million by 2020. To address the present structural imbalance in funding for enterprise systems, an additional \$2.3 million is required. In total, the budget for administrative systems must grow by \$9.8 million by 2020.

Real cost savings are being shown in stewardship category based on estimates for departmental savings from the conversion from a Centrex telephone system to a digital network using Voice over Internet Protocol (VoIP). The Voice over IP implementation demonstrates U of L's commitment to advanced technologies and good stewardship. The migration to Voice over IP is expected to reduce university phone expenses by \$1.2 million per year.

University Compliance

An effective and robust regulatory and ethical compliance program is essential for the University of Louisville to realize its goals. The recent growth of the U of L's research enterprise, success in intercollegiate athletics along with ever-increasing regulatory requirements has created a need to focus on compliance and ethical behavior.

In 2005 an external consultant made a series of recommendations to enhance compliance awareness and infrastructure. Key among these recommendations was the creation of a Compliance Oversight Council chaired by the Provost with membership consisting of vice-presidents, legal counsel, audit services and others with compliance oversight responsibilities. The Council was charged with reviewing and developing an effective institution-wide compliance program.

A compliance risk assessment was completed in 2006 that identified the most significant compliance risks to the University. This information was provided to the Compliance Oversight Council in order to take steps to reduce and manage high risk areas. A compliance officer and staffing was charged to evaluate these risks and educate the Compliance Oversight Council of new compliance risks. An anonymous helpline, administered by an outside third party, has been implemented to provide faculty and staff an easy way to report compliance and ethical behavior concerns.

As the University continues to pursue its 2020 goals, additional funds will be necessary to ensure that the University remains a responsible steward and an "accountable" corporate citizen. The additional resources address institution-wide compliance issues such as information security, risk assessments, audits and general compliance and ethics training.

Staff Salaries & Wages Catch-up

Staff salaries at the University of Louisville continue to lag behind the Louisville regional market for comparable jobs. The University is particularly vulnerable in that, if uncorrected, many talented staff will opt to work elsewhere. In the initial market-based analysis, the estimated dollar amount to raise salaries to the minimum of the regional marketplace is \$5.5 million, including positions funded from various restricted funds. The estimated dollar amount to market midpoint is a enormous \$21.5 million. At this writing, these are preliminary estimates. More detailed market analysis will be completed in FY08 and FY09. Since this information will take time to gather and synthesize, a phased approach to funding is recommended. That is, it is envisioned that there would be several rounds of staff catch-up increases similar to what was done for U of L faculty. For purposes of the business plan, an additional \$2 million was budgeted each year for the next three years. The salary projections were then increased 3% each year thereafter to account for annual inflation.

Sustainability

U of L is committed to creating a sustainable and environmentally friendly campus. Fostering a culture of sustainability that involves input from students, staff, faculty and community members, the University aims to continually improve and reduce the institution's overall impact on the environment. The University has demonstrated its commitment to sustainability through brownfield reclamation, responsible construction practices, chemical recycling, facilitating the use of public transportation, responsible energy management practices, and recycling programs.

The University's sustainability initiative also benefits greatly from a focused and dedicated capital renewal and deferred maintenance budget. Many of the University's systems are beyond their useful life and consume more energy than necessary. Replacing the outdated systems with energy efficient equipment reduces utilities usage. By addressing the capital renewal and deferred maintenance backlog, we will make progress towards our goal of being a sustainable and "Green-friendly" institution.

G. Productivity and Efficiency Savings

The University of Louisville strives to be an excellent “Citizen University.” This, in part, means conducting its business affairs productively and efficiently. Moreover, it includes good stewardship of funds – using the money entrusted to us by our taxpayers, students and donors in the most productive and efficient manner possible.

Included in the University's twelve-year business plan are new productivity and efficiency initiatives designated to offset portion of the additional resources required to reach the 2020 goals. The following details each of these initiatives:

- Increased Philanthropy – The University projects in the business plan that approximately \$1.9 million will be used to fund a portion of the cost of new strategic initiatives.
- Efficiencies/Cost Reductions – The University of Louisville continues to streamline all academic and support operations by implementing unit-specific and campus-wide strategies aimed at increasing efficiency. These efficiencies have allowed the University to avoid cost in some cases and redirect scarce resources to strategic priorities and core mission programs in others.
- Capital Renewal and Deferred Maintenance Match – The paucity of funds over an extended time to cover much needed capital renewal and deferred maintenance is a “hot button” issue on most university campuses across the country. The University of Louisville is no different in that there is a substantial backlog of these crucial maintenance projects. Currently, the CPE plans to request specific funding to address this problem in the upcoming biennium. In order to be eligible for these funds, each institution will be required to provide matching funds from internal sources. U of L's portion of this statewide pool is projected at \$843,000. U of L will fund the match from existing internal resources. The resulting total of \$1,686,000 will be used to defray a portion of the projected cost of deferred maintenance projects as acknowledged in the University's business plan.

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- **Developmental Education Infrastructure Match** – The CPE is currently planning to request funds to enhance Developmental Education statewide. U of L is only moderately involved in Developmental Education programs, as most “under-prepared” students are admitted to JCTS through the “Pathways to Success” program. The business plan includes \$65,000 that will be made available internally for use as an institutional match.

H. Major Equipment, Infrastructure and Capital Improvements:

Buildings and related physical plant are strategic assets of the University. Their condition speaks volumes about who we are as a good steward of the public trust. Looking forward, the University of Louisville must first provide much needed new space and, second, invest significantly to maintain its existing physical facilities. Both of these initiatives are necessary to achieve its 2020 strategic plan goals.

New Space

New space for academics, research, student activities and administration is projected to increase 3.2 million gross square feet by 2020. These figures come directly from the recently completed 2008-2014 Agency Capital Plan and the VFA / Paulien and Associates *2007 Facilities Condition Assessment*. The projected expenditures for new space include the cost of maintaining the new space, including custodial, maintenance and utilities. For purposes of the business plan, it does not include the capital cost of constructing the new space as these projects are requested separately through the Commonwealth’s capital budget process. Because research, health care and child care facilities require above normal maintenance, the custodial and maintenance rates for these facilities are projected at rates consistent with the current health care market. Also, due to the uniqueness of the Center for Predictive Medicine a higher rate has been applied based on the actual experience of Duke University operating a similar facility.

Renovations

The University of Louisville estimates that an average of \$40 million per year is needed to renovate and retrofit existing facilities to meet the 2020 strategic plan goals. These renovations will not only modernize existing

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facilities but make the space more useable for today's student learning environment.

The \$40 million per year average is based on a finding from the VFA / Paulien and Associates' *2007 Facilities Condition Assessment*, which strongly suggests the need for major renovation funding, in addition to funds for deferred maintenance. The study surveyed 36 of the University's oldest facilities (26% of U of L's total space) and determined that \$242 million for renovations in these facilities is needed. These are projects that are backlogged for many years and remain unattended to through 2007. For purposes of the business plan, this figure was doubled to \$484 million to account for the remaining 74% of University space, which was not included in the VFA study. The \$484 million was then applied at \$40 million per year for the twelve-year span of the business plan.

Capital Improvements

Capital renewal and deferred maintenance projects are sizable components of the business plan's stewardship category. The recent VFA / Paulien and Associates facilities and space study concluded that the University has a capital renewal deficit of \$222 million. The study further projects the deficit will grow to \$408 million by 2011. This amount far exceeds the University's ability to budget funds internally to "catch-up." Also, this amount is in addition to that needed to "regularize" an annual budget for capital renewal. The VFA study recommends alternatives to fund the backlog. Of particular interest is the possibility of having the Commonwealth issue long-term bonds to fund capital renewal and deferred maintenance for Kentucky's public universities as done in other states, such as North Carolina and New Jersey.

To maintain the space adequately, while addressing the noted backlog, the study further recommends that 1.5% to 2.0% of the replacement cost of facilities be budgeted on an annual basis for capital renewal and deferred maintenance. This action, in essence, is a form of "funded depreciation." In its present form, the business plan recommends funding capital renewal and deferred maintenance at a 1.5% of the replacement cost of facilities. If funding is identified, this will greatly improve the University's annual capital renewal and deferred maintenance capabilities. If nothing else, it will begin to address this long-standing

problem that continues to deteriorate over time. To do anything less than the 1.5% per annum will increase the capital renewal backlog and thus increase the bond issue recommended in the previous paragraph.

VI. Financial Projections:

The tables that follow outline the revenues and expenditures projected in the U of L Business Plan. The first is high-level summary that shows the revenue and cost projects in millions of dollars. The second is a more detailed and comprehensive version of the same information only displayed in thousands of dollars.

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University of Louisville

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September 10, 2007

LONG-TERM FINANCIAL PLAN

Cumulative Required Funding
(in millions)

	<u>Base Year 2008</u>	<u>Biennial Budget</u>		<u>Intermediate 2014</u>	<u>Target 2020</u>
		<u>2008-09</u>	<u>2009-10</u>		
General Fund Revenue					
State Appropriation	193.5	198.1	198.1	198.1	198.1
Tuition and Fees	170.3	182.4	190.7	228.4	300.0
Other General Fund Revenue	26.0	32.2	41.3	82.9	168.6
Auxiliaries/Service Centers	27.7	27.9	28.1	28.8	29.9
<i>Subtotal General Fund Revenue</i>	<u>417.5</u>	<u>440.6</u>	<u>458.2</u>	<u>538.2</u>	<u>696.6</u>
Restricted Fund Revenue					
UofL Research Foundation, Inc.					
Clinical Operations	188.0	193.6	199.4	224.5	268.0
Grants & Contracts	114.4	129.5	134.4	151.6	181.0
UofL Foundation, Inc.					
Philanthropy	40.4	59.9	71.7	87.1	111.4
Endowments	61.3	63.2	65.1	73.2	87.4
Other Restricted Funds	45.9	47.8	49.2	55.4	66.2
<i>Subtotal Restricted Fund Revenue</i>	<u>450.0</u>	<u>494.0</u>	<u>519.8</u>	<u>591.8</u>	<u>714.1</u>
Total Projected Revenue	<u>867.5</u>	<u>934.6</u>	<u>978.0</u>	<u>1,130.0</u>	<u>1,410.6</u>
Projected Expenditures					
Base Budget					
Salaries and Wages	412.7	425.5	438.7	495.6	594.7
Employee Benefits	98.5	104.8	111.4	141.6	202.4
Operating Expenses	238.5	246.7	258.8	292.5	351.4
Financial Aid (Institutional)	76.8	81.7	85.1	99.7	129.9
Library Books/Materials	8.7	9.2	9.7	12.0	16.6
Deferred Maintenance	1.1	1.1	1.1	1.1	1.1
Utilities	14.8	15.7	16.8	21.6	31.5
Capital Outlay - Equipment	1.1	1.1	1.1	1.1	1.1
Debt Service	15.2	16.7	16.5	12.4	6.3
Total Base Budget	<u>867.5</u>	<u>902.5</u>	<u>939.2</u>	<u>1,077.5</u>	<u>1,335.0</u>
Strategic Initiatives					
Educational Experience	0.0	20.2	37.4	107.1	193.0
Research & Scholarship	0.0	31.1	36.6	58.0	75.8
Diversity, Social Justice & Opportunity	0.0	2.4	3.3	6.4	10.4
Community Engagement	0.0	1.0	2.0	3.8	3.8
Stewardship, Accountability & General Administrative Support	0.0	11.8	16.7	42.7	100.7
Total Strategic Initiatives	<u>0.0</u>	<u>66.6</u>	<u>96.1</u>	<u>218.1</u>	<u>383.8</u>
Productivity & Efficiency Savings @ 1.5%	<u>0.0</u>	<u>(3.1)</u>	<u>(3.5)</u>	<u>(4.2)</u>	<u>(4.2)</u>
Total Projected Expenditures	<u>867.5</u>	<u>966.1</u>	<u>1,031.8</u>	<u>1,291.4</u>	<u>1,714.6</u>
Total Operating Shortfall Projection	<u>0.0</u>	<u>(31.5)</u>	<u>(53.8)</u>	<u>(161.4)</u>	<u>(303.9)</u>
Major Equipment, Infrastructure & Capital Improvements					
	<u>0.0</u>	<u>60.5</u>	<u>61.3</u>	<u>64.9</u>	<u>71.6</u>
Total Operating & Capital Shortfall	<u>0.0</u>	<u>(92.0)</u>	<u>(115.1)</u>	<u>(226.4)</u>	<u>(375.5)</u>

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LONG-TERM FINANCIAL PLAN Cumulative Required Funding

	<u>Base Year 2008</u>	<u>Biennial Budget</u>		<u>Intermediate 2014</u>	<u>Target 2020</u>
		<u>2008-09</u>	<u>2009-10</u>		
General Fund Revenue					
State Appropriation:					
Current Operations	180,899,000	195,101,000	195,101,000	195,101,000	195,101,000
CPE Pass-Thru and Matching Funds	2,126,000	3,034,000	3,034,000	3,034,000	3,034,000
Equity	10,447,000	0	0	0	0
Tuition and Fees:					
Base	135,972,000	149,689,000	157,639,000	191,385,000	256,117,000
Enrollment Increase - New Students	738,000	1,041,000	1,123,000	1,507,000	2,343,000
Enrollment Increase - Transfer Students	0	288,000	311,000	421,000	664,000
Enrollment Increase - Retention/Degree Production	0	2,468,000	2,660,000	3,588,000	5,623,000
Professional Enrollment Increases	0	314,000	550,000	1,411,000	1,891,000
Tuition Rate Change	12,978,000	7,950,000	7,829,000	9,517,000	12,753,000
Special Programs & Incidental Fees	20,607,000	20,607,000	20,607,000	20,607,000	20,607,000
Other General Fund Revenue	16,056,000	20,791,000	28,184,000	59,941,000	115,573,000
Auxiliary Enterprises	11,904,000	12,070,000	12,238,000	12,933,000	14,050,000
Service Centers	1,966,000	1,966,000	1,966,000	1,966,000	1,966,000
Hospital Surplus Proceeds (HSC)	13,866,000	13,866,000	13,866,000	13,866,000	13,866,000
F&A on Grants & Contracts	9,906,000	11,392,000	13,100,000	22,913,000	52,998,000
<i>Subtotal General Fund Revenue</i>	<u>417,465,000</u>	<u>440,577,000</u>	<u>458,208,000</u>	<u>538,190,000</u>	<u>696,586,000</u>
Restricted Fund Revenue					
UofL Research Foundation, Inc.					
Clinical Operations	188,000,000	193,640,000	199,449,000	224,482,000	268,043,000
Grants & Contracts	114,399,800	129,546,000	134,397,000	151,621,000	181,008,000
UofL Foundation, Inc.					
Philanthropy	40,362,600	59,888,000	71,695,000	87,069,000	111,421,000
Endowments	61,319,600	63,159,000	65,054,000	73,219,000	87,427,000
Other Restricted Funds	<u>45,918,000</u>	<u>47,796,000</u>	<u>49,229,000</u>	<u>55,408,000</u>	<u>66,160,000</u>
<i>Subtotal Restricted Funds Revenue</i>	<u>450,000,000</u>	<u>494,029,000</u>	<u>519,824,000</u>	<u>591,799,000</u>	<u>714,059,000</u>
Total Projected Revenue	<u>867,465,000</u>	<u>934,606,000</u>	<u>978,032,000</u>	<u>1,129,989,000</u>	<u>1,410,645,000</u>
Projected Expenditures					
Base Budget					
Salaries and Wages	412,737,400	425,546,000	438,738,000	495,584,000	594,698,000
Employee Benefits	98,549,000	104,810,000	111,384,000	141,575,000	202,440,000
Operating Expenses	238,477,100	246,655,000	258,838,000	292,472,000	351,369,000
Financial Aid (Institutional)	76,773,500	81,698,000	85,071,000	99,738,000	129,897,000
Library Books and Materials	8,727,000	9,207,000	9,713,000	12,033,000	16,591,000
Deferred Maintenance	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000
Utilities	14,787,000	15,749,000	16,772,000	21,577,000	31,484,000
Capital Outlay - Equipment	1,142,000	1,142,000	1,142,000	1,142,000	1,142,000
Debt Service	15,222,000	16,653,000	16,519,000	12,360,000	6,312,000
Total Base Budget	<u>867,465,000</u>	<u>902,510,000</u>	<u>939,227,000</u>	<u>1,077,531,000</u>	<u>1,334,983,000</u>

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	Base Year 2008	Biennial Budget		Intermediate 2014	Target 2020
		2008-09	2009-10		
Educational Experience					
<i>New Instructional Faculty & Related Staff</i>					
Faculty Expenses	0	3,733,000	7,901,000	19,288,000	38,700,000
Academic Support Expenses	0	1,600,000	1,889,000	2,324,000	3,427,000
Administrative Support Expenses	0	3,250,000	6,914,000	15,680,000	34,625,000
Instructional Technology - IT	0	1,500,000	3,000,000	9,000,000	15,000,000
<i>Subtotal New Instr. Faculty & Related Staff</i>	0	10,083,000	19,704,000	46,292,000	91,752,000
<i>Undergraduate Education</i>					
Undergraduate Education Expenses	0	798,000	1,693,000	6,387,000	17,649,000
Enhance Student Services	0	188,000	375,000	1,125,000	2,250,000
Improve "Out of Class" Experience	0	167,000	333,000	1,000,000	2,000,000
Developmental Education - Preparation	0	164,000	785,000	881,000	1,055,000
Developmental Education - Infrastructure	0	0	340,000	160,000	0
Science, Technology, Engineering & Math (STEM)	0	2,609,000	2,687,000	3,024,000	3,611,000
Ideas to Action - QEP	0	560,000	670,000	551,000	739,000
Other Undergraduate Strategic Initiatives	0	2,810,000	3,435,000	6,255,000	11,250,000
<i>Subtotal Undergraduate Education</i>	0	7,296,000	10,318,000	19,383,000	38,554,000
<i>Graduate Education</i>					
Increase Doctoral Graduates	0	2,166,000	6,301,000	40,120,000	61,005,000
Increase Existing Graduate Student Stipends	0	700,000	1,061,000	1,289,000	1,728,000
<i>Subtotal Graduate Education</i>	0	2,866,000	7,362,000	41,409,000	62,733,000
Total Educational Experience	0	20,245,000	37,384,000	107,084,000	193,039,000
Research & Scholarship					
Research Strategic Plan	0	17,076,000	19,678,000	28,884,000	34,419,000
Research Infrastructure - IT	0	3,000,000	6,000,000	16,500,000	25,500,000
Other Research Strategic Initiatives					
Clinical & Translational Science Awards (CTSA)	0	4,000,000	4,200,000	5,105,000	6,841,000
Bioinformatics Program	0	3,560,000	3,050,000	3,050,000	3,050,000
Center for Predictive Medicine	0	3,500,000	3,675,000	4,467,000	5,986,000
Total Research & Scholarship	0	31,136,000	36,603,000	58,006,000	75,796,000
Diversity, Social Justice & Opportunity					
Diversity Programs	0	505,000	851,000	2,346,000	4,948,000
Cardinal Covenant Program	0	555,000	1,055,000	2,351,000	3,150,000
Unfunded Financial Aid Mandates	0	1,371,000	1,439,000	1,750,000	2,345,000
Total Diversity, Social Justice & Opportunity	0	2,431,000	3,345,000	6,447,000	10,443,000
Community Engagement					
Signature Partnership Program	0	770,000	1,770,000	3,573,000	3,573,000
Urban Solution Center	0	250,000	250,000	250,000	250,000
Total Community Engagement	0	1,020,000	2,020,000	3,823,000	3,823,000
Stewardship, Accountability & General Administrative Support					
<i>Information Technology</i>					
Basic Infrastructure	0	1,000,000	2,000,000	5,500,000	10,000,000
Administrative Systems	0	1,000,000	2,000,000	4,500,000	7,500,000
Information Technology Catch-up	0	480,000	1,000,000	2,200,000	4,000,000
<i>Subtotal Information Technology</i>	0	2,480,000	5,000,000	12,200,000	21,500,000
Staff Salary & Wage Catch-up	0	2,000,000	2,060,000	2,319,000	2,768,000
University Compliance	0	558,000	695,000	1,019,000	1,379,000
Maintenance & Operations on New Space	0	6,765,000	8,988,000	27,197,000	75,081,000
Total Stewardship, Accountability & Gen. Adm. Spt.	0	11,803,000	16,743,000	42,735,000	100,728,000

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	Base Year	Biennial Budget		Intermediate	Target
	2008	2008-09	2009-10	2014	2020
Productivity & Efficiency Savings @ 1.5%					
New, Incremental Philanthropy	0	(1,686,000)	(1,951,000)	(1,951,000)	(1,951,000)
Deferred Maintenance Match	0	(843,000)	(976,000)	(976,000)	(976,000)
Developmental Education Infrastructure Match	0	(65,000)	(65,000)	(65,000)	(65,000)
Voice over Internet Protocol (VOIP) Savings	0	(482,000)	(522,000)	(1,232,000)	(1,232,000)
Total Productivity & Efficiency Savings	0	(3,076,000)	(3,514,000)	(4,224,000)	(4,224,000)
Total Projected Expenditures	867,465,000	966,069,000	1,031,808,000	1,291,402,000	1,714,588,000
Total Operating Shortfall Projection	0	(31,463,000)	(53,776,000)	(161,413,000)	(303,943,000)
Major Equipment, Infrastructure & Capital Improvements					
Renovation of Existing Space	0	40,000,000	40,000,000	40,000,000	40,000,000
Capital Renewal / Deferred Maintenance	0	20,505,000	21,325,000	24,947,000	31,567,000
Total Maj. Equip., Infrastructure & Cap. Improvements	0	60,505,000	61,325,000	64,947,000	71,567,000
Total Operating & Capital Shortfall	0	(91,968,000)	(115,101,000)	(226,360,000)	(375,510,000)