FY 2020 BUDGET REQUEST

FOR
OPERATING
AND
CAPITAL FUNDS

PREPARED FOR THE BOARD OF TRUSTEES NOVEMBER 15, 2018





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UNIVERSITY OF ILLINOIS SYSTEM URBANA-CHAMPAIGN · CHICAGO · SPRINGFIELD

Office of the President 364 Henry Administration Building 506 South Wright Street Urbana, IL 61801-3689

Timothy L. Killeen
President

November 15, 2018

Dear colleagues:

We are proud of the long, fruitful partnership with the state of Illinois that built the University of Illinois System and nurtured a culture of excellence that has earned it a place as a world leader in education and innovation.

The attached documents outline the fiscal year 2020 appropriations and capital requests to support the continued growth of a system that enrolled nearly 86,000 students this fall across its universities in Urbana-Champaign, Chicago and Springfield. It marked our sixth straight year of record enrollment and brought another increase in Illinois undergraduates, who comprise more than 80 percent of undergraduates system-wide.

Our fiscal year 2020 appropriations request seeks an increase in state funding to help support best-in-class universities that pump \$17.5 billion into the state's economy every year and account for over 171,300 Illinois jobs—one in every 46 jobs across the state.

The proposals are detailed in the pages that follow, but here is a brief overview:

- Annual appropriation: Our request for \$692.5 million represents a 16.5 percent increase in our state appropriation compared with fiscal year 2019. It is critical to maintain a world-class academic, research and health-care enterprise that employs more than 29,600 FTEs and offers programs that touch literally every corner of Illinois. State funding also would support a commitment to affordability that has frozen tuition for Illinois freshmen for four straight years, and our ongoing efforts to increase enrollment of in-state and underrepresented students.
- Capital: Our request for \$722.4 million seeks to address only the most urgent priorities at our three universities. The greatest need is funding for repair and renovation, which would enable us to reduce a backlog of projects that has grown in recent years.

The U of I System is an engine of progress that transforms lives one-by-one and, through its immense scale, collectively supplies the next-generation workforce to move Illinois forward. A record 22,000-plus students earned degrees last year, adding to a global alumni base of more than 740,000 that includes more than 380,000 who are supporting their communities and our

economy right here in Illinois. The system is also a leader in pioneering research discovery that will create the new products, businesses and jobs of tomorrow, and add to a legacy of achievement that includes the first graphical internet browser, life-saving HIV drugs and the technology behind MRIs and home air conditioning.

But, with your help, the U of I System has carved its place among the very best by never resting on its laurels and always reaching higher to serve our students and the public good. And we are determined to continue our rise, through a new Strategic Framework that seeks to make the U of I System a model for the world.

Thank you for your consideration and for your dedicated service to the people of Illinois.

Sincerely,

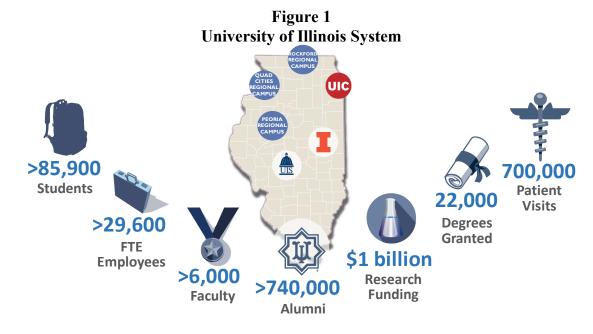
Timothy L. Killeen

OPERATING BUDGET REQUEST FOR FY 2020

OPERATING EXECUTIVE SUMMARY

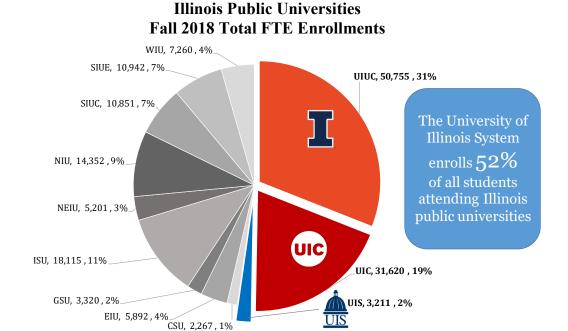
Operating Executive Summary

The University of Illinois System is the premier higher education system in the state. With three best-in-class universities, a robust healthcare enterprise, and a celebrated legacy, the U of I System transforms lives and enhances public good for tens of thousands of citizens in the state (see Figure 1).

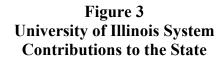


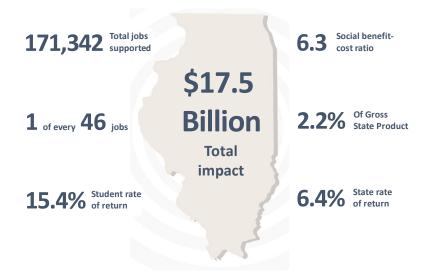
The University of Illinois System enrolls more than 85,900 students and graduates more than 22,000 of them each year. In 2018, the U of I System enrolled more than 52% of all students attending Illinois public universities, as shown in Figure 2.

Figure 2



As with other public universities, the greatest challenge we face is supporting the excellence of our academic programs while maintaining affordability for students. A modest increase in state support will ensure that the University of Illinois System remains a national leader in preparing the next generation of entrepreneurs, innovators, engaged community citizens, and business leaders. With adequate and steady state funding, the University of Illinois can focus on preserving the core missions of teaching, research, public service, and economic development. And, as it turns out, we are a tremendous investment for our students and for the state! A recently released 2018 study conducted by Economic Modeling Specialists International (EMSI) documented that the University of Illinois System pumps almost \$17.5 billion into the state economy each year (see Figure 3).





To ensure our continued excellence and impact, the University of Illinois System requests a \$97.9 million increase in its annual appropriation for FY 2020. Compared to FY 2019, this amount represents a 5.2% increase in our combined state and tuition funds budget and a 16.5% increase in state funds (GRF & EAF). Of the \$97.9 million, \$55.7 million will restore core state support to the original FY 2017 appropriation level, with the rest providing a modest level of additional funds (\$42.2 million) that will be used to enhance our academic competitiveness, support the state's economic development, continue to provide world-class education to Illinois students, and prepare the next generation of leaders. As shown in Table 1, the requested increase in funds will be used to support three broad areas. First, and most importantly, we will strengthen academic quality by providing a competitive salary program, and recruiting a greater number of talented students and faculty.

Table 1 University of Illinois System FY 2020 Operating Budget Request (Dollars in Thousands)

I.	Ensuring Competitiveness A. Competitive Compensation 1. Salary Improvements - 2.0% 2. Compression, Market, Equity and B. Undergraduate Scholarship Program C. Recruiting and Rebuilding Faculty	,	\$23,795.0 35,692.5	\$ 59,487.5 10,000.0 10,000.0	\$ 79,487.5
II.	Infrastructure Maintenance				\$ 13,614.8
	A. 0 & M New Areas			\$ 3,214.8	
	B. Facility Maintenance Support			10,400.0	
III.	Meet Inflationary and Other Cost Incre A. Payroll Cost Increases 1. Medicare B. Information Technology & Security U		\$ 800.0	\$ 800.0 4,000.0	\$ 4,800.0
	Total Request				\$ 97,902.3
	% of FY 2019 State Funds and Tuition	!			5.2%
	% of FY 2019 State Funds				16.5%
	019 Base: ase = EAF/GRF + Tuition	\$1,899,582.3			

Specifically, we propose to devote \$10 million for additional scholarships for Illinois students in order to stem the flow of high school graduates to out-of-state universities. Special emphasis will be given to attracting underrepresented students, including those from low-sending counties in Illinois. Funds also will be devoted to a new program to hire hundreds of faculty over the next five years to keep pace with our system-wide record enrollment, as well as provide competitive salary compensation to retain current faculty and staff.

Second, we will use the requested funding to address our facility maintenance needs. The University of Illinois System has over \$2 billion in deferred maintenance projects, many of which require urgent attention. Too many of our classrooms, labs, studios, and faculty offices suffer from leaks, structural damage, poor heating and air flow, and disability access challenges. Over the years, the three universities have been investing a portion of their operating fund as well as philanthropic gifts to address such needs as best as possible but it is not enough. The proposed request will provide crucial resources to bolster and enhance academic spaces. The final category requested is to address unavoidable inflationary cost increases.

INTRODUCTION

Introduction

Overview



The University of Illinois System's FY 2020 operating budget request will help us to accomplish two important goals. The first is to restore core state support to original FY 2017 appropriation levels (\$55.7 million) in order to protect our in-state students, guarantee our overall academic competitiveness, and contribute to the state's economic development. The second is to provide the University of Illinois System with additional capacity (\$42.2 million) to implement our Strategic Framework.



The University of Illinois: World-class university, statewide impact.

This document presents an overall budget plan for FY 2020 that will ensure the continued preeminence of the University of Illinois System. Now more than ever, the State of Illinois needs public higher education to flourish. Investing in the University of Illinois System is an investment in the families of Illinois, the economic future of our state, and the innovation required to tackle society's most pressing social issues.

University Strategic Framework

In May 2016, the University of Illinois Board of Trustees approved a Strategic Framework that serves as a roadmap for the university's future (see Figure 4).



The University of
Illinois System must
safeguard its
longstanding
excellence in
teaching, research,
public service and
economic
development for
future generations.

Figure 4 Strategic Framework Pillars



An Institution of and for Our Students



Research and Scholarship with Global Impact



A Healthy Future for Illinois and the Midwest



Tomorrow's University Today

The framework, titled *The Public's University: Optimizing Impact for the Public Good*, sets collective priorities for the University of Illinois System and each of its three universities. The Framework pledges to organize university resources around four strategic pillars. For more information on each of these pillars and the overall strategic planning process, visit the Strategic Framework website here: https://www.uillinois.edu/strategic framework.

BACKGROUND

The University of Illinois System has tremendous and broad-based impact, serving a multitude of people throughout the state. The system includes a Big Ten flagship university at Urbana-Champaign; a public urban research university as well as hospital and health sciences system in Chicago; and a liberal arts university located in the state's capital. The U of I System's three universities each provide academic programs that attract students from every county in the state. Each university also has distinct academic and research strengths: Urbana boasts world-class engineering, science, agriculture, data science and technology, and interdisciplinary programs in the arts and humanities; Chicago hosts one of the nation's largest medical schools as well as cutting-edge programs in nursing, pharmacy, dentistry, and social work; and Springfield is home to strong programs in public policy, political science, and online education (see Figure 5).

The University of
Illinois System: three
distinct universities
with different
missions that all
have statewide

impact.

Figure 5
University of Illinois Strengths: Urbana-Champaign



Figure 5 (continued) University of Illinois Strengths: Chicago

UIC



The University of Illinois System is making a difference every day in every

one of Illinois'

counties.





Practical research



Highly diverse student body



Top rankings for Nursing Programs

University of Illinois Strengths: Springfield



Strong Liberal Arts core



Leader in Online Education



Engagement emphasis on community and public affairs



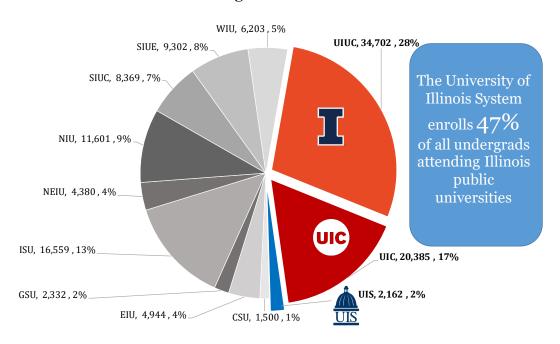
Active Public Policy Programs

The University of Illinois System has a long legacy of commitment to Illinois families. Currently, we admit more than 70% of Illinois students who apply to our universities. Moreover, across our three universities, 80% of our undergraduates are Illinois residents. Collectively, the University of Illinois System enrolls more than half of all students (undergraduate and graduate) and 47% of all undergraduate students that attend a public university in the state, as shown in Figure 6.

Figure 6 Illinois Public Universities Fall 2018 Undergraduate FTE Enrollments



The University of Illinois System enrolls more than half of all students that attend an Illinois public university and 47% of undergraduates.





The University of
Illinois System is a
dynamic treasure for
our State because of
the transforming
power of education
in people's lives.

As one part of our commitment to affordability, the University of Illinois System has frozen tuition for resident undergraduate students for four consecutive years and we have held the line on mandatory fee increases as well. Furthermore, we are committed to continuing our efforts to provide robust scholarships and financial aid to Illinois students. Last year, we provided over \$185 million in scholarships and financial aid to Illinois undergraduates, which represents roughly 85% of all the aid we offer to students.

In addition to educating students from across the state, the University of Illinois System has a substantial impact on families statewide through our Cooperative Extension as well as our robust health care services in Chicago, Peoria and Rockford. Cooperative Extension, housed in the College of Agriculture, Consumer and Environmental Sciences (ACES) at Urbana-Champaign, offers educational programs in every county in the state. In the past year alone, Cooperative Extension has touched the lives of nearly 1.5 million Illinois residents. Programs fall into five broad categories: healthy society; food security and safety; environmental stewardship; sustainable and profitable food production and marketing systems; and enhancing youth, family and community well-being.

As another measure of our impact, the University of Illinois System's research is creative and cutting edge, solving societal problems at the state and national level. In FY 2018 alone, our faculty produced 331 technology disclosures, 90 patents, and 87 licenses and options to commercialize new technologies. Some of these innovations will become the products, industries and job-creating companies of the future. In addition, the University of Illinois System licensed 12 new start-up companies in FY 2018. Currently, business incubation facilities at Urbana-Champaign and at Chicago house dozens of companies that involve faculty and students in innovative research, internships, and discovery.

The University of Illinois System also sponsors several outreach and training programs that ensure the safety of Illinois citizens. For example, the Illinois Fire Service Institute at Urbana-Champaign offers on-campus and online instruction and certifications for the state's firefighters. Courses offering college credit range from firefighting basics to rescue techniques to disaster response preparation. In 2017, the Illinois Fire Service Institute provided training to more than 57,933 firefighter students from all 102 counties—training that translates into lives saved and property damage minimized throughout the state.

Ultimately, the greatest impact of the University of Illinois System is on the lives of students

Last but not least, the University of Illinois System is one of the largest employers in the State. Across our three universities as well as in the System offices, we employ over 29,600 FTE. In terms of economic impact, the added income created by the University of Illinois System and its robust student populations support over 171,300 jobs. Altogether, the system spends over \$6.5 billion on payroll, supplies and services. According to a 2018 study conducted by EMSI, the return-on-investment for every dollar spent shows the following results:

- Taxpayer level: for every dollar invested in the U of I System, \$2.40 is added to state taxes and public-sector savings
- Societal level: for every dollar invested in the U of I System, \$6.30 is added to state income and social savings

In total, the University of Illinois System pumps an estimated \$17.5 billion into the state's economy each year.

Clearly, the University of Illinois System is a treasure for our state and its people. And it is a dynamic treasure, transforming lives through the power of education in

an ever-changing environment and for an increasingly diverse population.

Ultimately, the greatest impact of the University of Illinois System is on the lives of students. Students learn in our classrooms, interact with our faculty, study in our libraries and laboratories, and graduate to go on to make their own contributions to society. In fact, research shows that compared to those with a high school education, college graduates:

- Earn \$1 million more in lifetime wages
- Volunteer more in their communities
- Are healthier and live longer
- Are more likely to vote and participate in civic activities

In the midst of an explosion of new technologies and rapid globalization, a high-quality education is more important today than ever before, enabling people to achieve their dreams and change their economic conditions. University of Illinois students help build our society, shape our culture, and fuel our economy. They are the engaged and informed citizens on whom our democracy depends. The University of Illinois System is also a crucial treasure because of the cutting-edge research being conducted in our labs, studios, and libraries, much of which is aimed at solving societal problems such as poverty, healthcare disparities, food shortage, global warming, and pollution. These discoveries also translate into the foundation of the new economy. In short, our award-winning scholarship creates new jobs and industries for the 21st century economy.

As evidenced by our broad and deep impact, the University of Illinois System makes a difference in the prosperity and quality of life of tens of thousands of Illinoisans every day. Many of these citizens depend upon and care deeply about the quality of the University and its future. Stewardship requires that all of our stakeholders—from trustees, faculty and staff to students, alumni, legislators and citizens—share a deep commitment to the values of public higher education and particularly to the University of Illinois System.

INVESTMENT, PERFORMANCE AND ACCOUNTABILITY COMMITMENT (IPAC)



IPAC will stabilize in-state undergraduate tuition and mandatory fees, limiting increases to no more than the rate of inflation over the 5 years.

IPAC is a five-year compact we have proposed between the state and the University of Illinois System. IPAC puts state funding as well as university performance metrics into a formal agreement that each partner would endorse (see Figure 7), establishing a binding statutory partnership based on mutual trust and state law. IPAC would provide the university with a stable level of state financial support and in turn would ensure the state that the flagship system is affordable, accessible and successful for Illinois students. In March, Northern Illinois University signed onto the IPAC pending legislation, demonstrating that the framework can work to benefit other public universities in the state.

Figure 7 Our Performance-Based Funding Plan













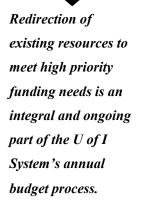
With the state's help, IPAC can be the most comprehensive agreement of its kind, to ensure that Illinois public higher education is both affordable and accessible.

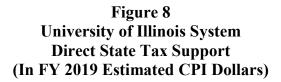
IPAC serves the needs of Illinois families by promising robust in-state admissions as well as high graduation and retention rates for enrolled students. The compact allows for a more transparent appropriations process that directly ties state funding to university metrics and goals related to student affordability and enrollment. In essence, it holds public universities accountable to the people of Illinois. In turn, predictable state funding would allow Illinois universities to operate more efficiently and effectively in the very competitive higher education arena. It would also help us to compete for talented Illinois students and world-class faculty. Finally, IPAC supports and protects the \$17.5 billion pouring into the state's economy each year from the U of I System.

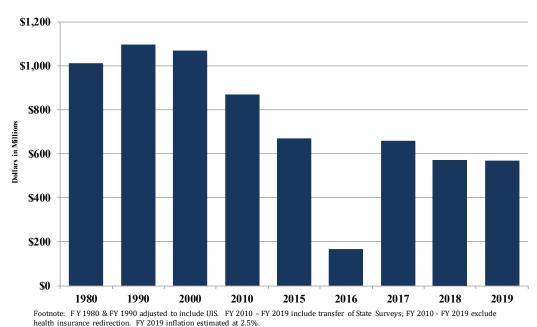
This innovative and transformational partnership would immediately position the state of Illinois to be a national leader in supporting higher education. And it would ensure that the U of I System and other universities joining the compact can continue to be among the best in the world in educating students and in conducting innovative research that solves society's most pressing problems.

THE BUDGET FRAMEWORK

During the fiscal challenges in recent years, the University of Illinois System has worked closely with our Board of Trustees to address key issues of resource management, administrative reorganization, and tuition and financial aid policies. Although education is often cited among the state's highest budget priorities, an examination of direct state tax appropriations (shown in Figure 8) reveals the declining investment in University of Illinois students.







Direct state support now represents less than one-fourth of the university's total operating budget. However, in combination with tuition revenue, state support

represents virtually the entire funding for instructional programs. The University of

Illinois System cannot sustain, let alone enhance, quality without a foundation of strong and reliable state support.

FY 2016 - FY 2019 BUDGET OUTCOMES

The state's budget impasse in FY 2016 presented a distinct set of challenges. In FY 2016, the University of Illinois System received just \$180 million, leaving a shortfall of \$467 million compared to FY 2015 levels. That \$467 million has never been recovered. The following year, the impasse was resolved, and the state appropriated \$650.3 million to the University of Illinois for FY 2017 and \$583.0 million for FY 2018 (representing a 10% cut from the final FY 2017 appropriation). This year, the legislature passed the FY 2019 budget on time, but the 2% increase to \$594.6 million for the University of Illinois still represents a 9% cut from our FY 2017 appropriation.

During these challenging years, we have used increased tuition income as well as internal reallocations to cope with shrinking state support. For example, our tuition revenues will grow modestly in FY 2019, due to small tuition increases for nonresidents over the past few years as well as increasing enrollments. All along, we have been careful to contain costs for Illinois residents, instituting a four-year tuition freeze for undergraduates. The result is that we have had to prioritize carefully on expenditures, permitting us to address only our most urgent needs.

The FY 2019 budget included our first capital budget in nine years, consisting mainly of reappropriations for previously halted projects. We also received funds amounting to \$28 million for crucial repair and renovation projects spread across the three universities. It should be noted that there are still many repair and renovation projects on each of the three universities that have yet to be funded. We have over \$2 billion in deferred maintenance across our universities. In addition, a number of new construction projects are needed in key areas to maintain our competitive position as a leader in higher education.

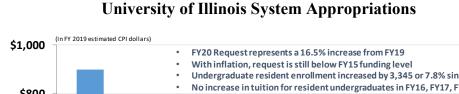
Representing an exciting and first-ever commitment of its kind, the FY 2018 capital appropriation included \$500 million for a University of Illinois-led Illinois Innovation Network (IIN), a set of virtually connected clusters across the state

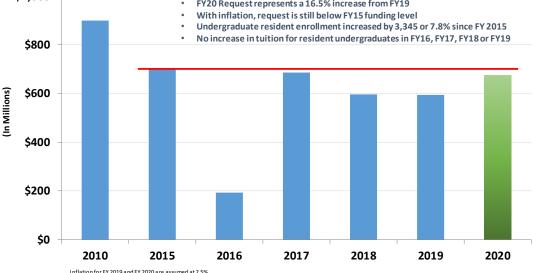
designed to catalyze economic growth. At its center will be a newly-launched Discovery Partners Institute (DPI) in Chicago, an interdisciplinary public-private research institute allowing faculty, students and companies to work side-by-side to develop solutions, promote entrepreneurship, and empower inventors of the future.

SUMMARY OF THE FY 2020 BUDGET REQUEST

The University of Illinois System's FY 2020 operating budget request is modest but essential. As shown in Figure 9 it will help us restore core state support to original FY 2017 appropriation levels (\$55.7 million) in order to protect our in-state students, guarantee our overall academic competitiveness, and contribute to the state's economic development. It will also provide the University of Illinois System with additional capacity (\$42.2 million) to implement our Strategic Framework.

Figure 9





Our 2016 Strategic Framework calls on us to serve more students, conduct research that addresses state and national challenges, and ensure that the Midwest is a vibrant and healthy region of the country. The State of Illinois needs its flagship system now, more than ever. We can help attract and retain talent to Illinois and grow the state's infrastructure and economy. To do all this, we urgently need a modest and healthy FY 2020 budget (see Figure 10).

Figure 10 University of Illinois System FY 2020 Operating Budget Request

FY 2019 State appropriation: \$594.6M FY 2020 Incremental request: \$97.9M







FY 2020 State appropriation request: \$692.5M

ENSURING COMPETITIVENESS

COMPETITIVE COMPENSATION

(\$59,487,500)

Overview



Salary Improvements \$23,795,000 Compression, Market, Equity and Retention \$35,692,500 The University of Illinois System is consistently among the nation's top public institutions of higher education. Our three best-in-class universities provide transformational education for students as well as intellectually vibrant environments for faculty who are experts in their respective fields. As national leaders, our three universities face a continuous challenge: to sustain national standing we must attract and retain top-quality faculty, staff and students; yet that same national prominence marks our universities as prime targets for other institutions seeking to enhance their own quality through recruitment of top faculty. Since 2005, the Urbana and Chicago campuses in particular have lost numerous faculty to competitors. The University of Illinois System must remain aggressive in the highly competitive market for top-quality faculty or risk falling behind. Our respective compensation levels are among the crucial factors that affect our ability to attract and retain personnel at all levels.

Loss of state support for salary increases poses perhaps the greatest challenge to the University's overall quality since the late 1980s. In the last few years, many states across the nation have experienced budget pressures brought on by slow revenue growth and rising costs, presenting policymakers with difficult decisions. Despite this constrained budgetary environment, most states have approved modest salary increases for faculty and staff each year since FY 2008. In contrast, the State of Illinois has provided little or no support for salary increases between FY 2008 and FY 2018, forcing the University of Illinois System to fund or supplement modest salary programs internally through tuition revenues and reallocation of other funds. During this period, decreased state support has undermined our ability to compete for and retain talent. To provide context for this retention issue, losing one stellar faculty member to a peer institution translates to a) the loss of thousands and sometimes millions of external research dollars, b) an exodus of talented graduate students and post-doctoral researchers who work in the professor's lab, c) reduced morale among faculty who collaborate with the exiting professor, and d) reputational damage to the department and college. It is difficult to overestimate the detrimental results of such faculty loss.

In such an environment, the need to monitor the U of I System's competitive standing is more crucial than ever. Numerous salary analyses are performed annually for that purpose. The discussion that follows provides background information concerning the three universities' standing relative to their peers.

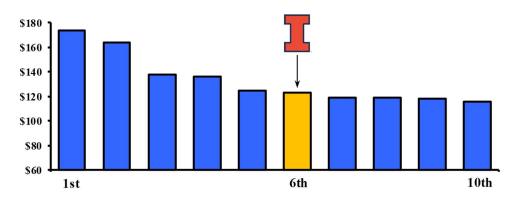
FACULTY SALARIES

Specific peer groups were developed in 2011 for Urbana-Champaign, Chicago, and Springfield for use in the Board of Trustees performance metric dashboards. These peer groups were reviewed and updated in October 2018 and are used to compare the universities in many areas, including faculty salaries.

The competitive standing of each university indicates how well its faculty salaries have fared relative to the dashboard peers. The analyses examine salaries before and after cost of living adjustments are made, for both Urbana-Champaign and Chicago peers; cost of living data are currently unavailable for Springfield peers. It is important to note that cost of living is only one factor to consider in such comparisons; we do not have good ways of assessing more intangible factors such as safety, cultural venues, and other quality of life indicators that also impact overall competitiveness.

As shown in Figure 11, without adjusting for the cost of living, Urbana-Champaign ranks 6th among its peers. Applying a cost of living adjustment to the salaries has very little effect on Urbana-Champaign's position relative to its peers, moving it up only a single spot into a crowded middle position with little stratification among surrounding peers.

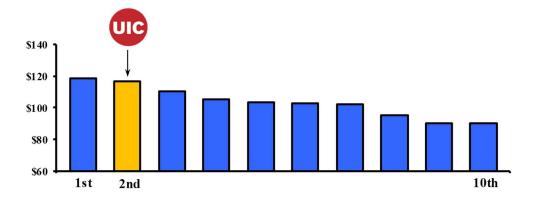
Figure 11
FY 2018 Faculty Salary Competitive Standing
Urbana-Champaign Dashboard Peers
(Dollars in Thousands)

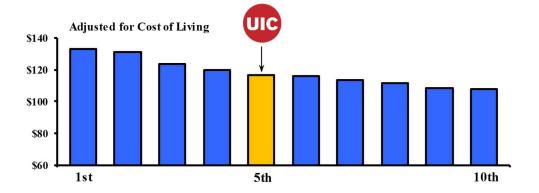




As shown in Figure 12, without adjusting for the cost of living, Chicago ranks 2nd among its peers. When the cost of living is taken into account, Chicago drops from 2nd to 5th among its peers. This puts them squarely in the middle of the peer group.

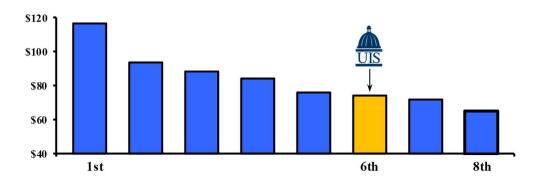
Figure 12
FY 2018 Faculty Salary Competitive Standing
Chicago Dashboard Peers
(Dollars in Thousands)





As shown in Figure 13, Springfield ranks 6th out of 8 peers with available faculty salary data. Only a single graph is provided in this case, as cost of living comparison data for Springfield peers are not available at this time.

Figure 13
FY 2018 Faculty Salary Competitive Standing
Springfield Dashboard Peers
(Dollars in Thousands)



As all of these figures show, our universities lag behind several of their peers in terms of faculty salary. Although Urbana-Champaign is among the nation's most academically competitive institutions (routinely ranked among the top 10 public institutions in the U.S.), salaries for faculty at Urbana-Champaign are in the middle of the pack among its peer group, regardless of cost of living. Chicago fares better at first glance, but when cost of living is factored in, faculty salaries fall to the middle of the peer group. Springfield is near the bottom of its peer group in terms of faculty salary.

Progress toward more competitive faculty salaries is likely to be modest in FY 2019 because we were able to offer only a 2% salary program for Urbana-Champaign and Springfield; collective bargaining determined the salary program for Chicago. Meanwhile, many of our public peer institutions continue to provide moderate and regular faculty pay increases.

An important point to underscore is that lack of funding also causes internal salary discrepancies among faculty ranks. Beginning salaries for newly hired assistant professors typically increase over time in accord with inflation and the marketplace.

Without competitive salary programs, our long-standing tenured faculty, especially at the mid-level associate professor rank, are experiencing salary compression compared to newly hired assistant professors. In other words, the salaries of more senior faculty are falling further and further relative to those of colleagues at junior ranks. Without adequate state appropriations, such difficulties could reach critical levels, weakening the overall quality of the University of Illinois System.

To re-cap, the University of Illinois System cannot sustain excellence unless it remains a go-to destination place for top faculty. A multi-year strategic, statewide commitment to fund salary increases is required to restore competitiveness that has diminished over the last decade.

FACULTY SALARIES BY DISCIPLINE



If Illinois' constrained budget climate persists, the University will experience increased difficulty attracting and retaining faculty in high demand disciplines.

Another way to gauge competitiveness is to examine salaries by discipline. Attracting exceptional faculty is particularly challenging in high-demand disciplines, where private enterprises often can offer lucrative alternatives to academic service.

The Association of American Universities Data Exchange (AAUDE) serves as a useful reference for detailed salary data by discipline for many of the Urbana-Champaign and Chicago peer institutions. Institutions included in the AAUDE Salary Study that are appropriate for University of Illinois System comparisons are:

> Univ. of Arizona Univ. of Minnesota Univ. of Colorado - Boulder Univ. of Missouri

Univ. of Florida Univ. of North Carolina - Chapel Hill

Indiana University Ohio State University Univ. of Iowa Univ. of Oregon Iowa State University Penn State University Univ. of Kansas Purdue University Univ. of Maryland - College Park Univ. of Texas - Austin

Univ. of Michigan Univ. of Virginia

Michigan State University Univ. of Wisconsin - Madison

The study allows us to look at the years between 2008 and 2018 when economic conditions and funding levels fluctuated significantly and, in turn, affected salary levels. The data indicate that by FY 2015, both Urbana-Champaign and Chicago

had recovered a good portion of ground lost from the 2008 economic recession. By FY 2015, Urbana-Champaign had regained or improved from its FY 2008 rank in 15 of the 18 examined disciplines. These include: Architecture, Business, Communications, Computer & Information Sciences, Education, Engineering, Family and Consumer Sciences, Foreign Languages, Law, Mathematics, Philosophy, Physical Sciences, Psychology, Social Sciences, and Visual/Performing Arts. During these same years (between FY 2008 and FY 2015), Urbana-Champaign lost ground in only three disciplines: Agriculture, English Language and Literature/Letters, and Social Work.

The University of
Illinois System
comparisons looked
at 18 disciplines at
Urbana-Champaign
and 13 disciplines

at Chicago.

In comparison, Chicago too had regained or improved its rank in 11 of the 13 examined disciplines by FY 2015. These include: Architecture, Business, Education, Engineering, Foreign Languages, English Language and Literature/Letters, Mathematics, Philosophy, Psychology, Social Sciences and Social Work. During these same years (between FY 2008 and FY 2015), Chicago lost ground in only two disciplines: Physical Sciences and Visual/Performing Arts.

After FY 2015, the State of Illinois experienced a two and a half year budget impasse. Without a budget, the state legislature was unable to appropriate funding for higher education. Public universities were especially hard hit, with many struggling to make payroll, much less provide salary increases for faculty. Between FY 2015 and FY 2018, Urbana-Champaign faculty salary rankings lost ground in 17 of the 18 disciplines, including high-demand disciplines such as Business, Computer & Information Science, and Engineering. Social work was the only discipline that did not lose ground. Faculty salary rankings at Chicago fared better, maintaining or increasing rankings in 10 of the 13 disciplines examined from FY 2015 to FY 2018, including Architecture, Business, Engineering, Mathematics, and Physical Sciences. Faculty salary rankings fell in only three disciplines (Social Sciences, Social Work, and Visual/Performing Arts).

It is clear that declines in state funding have hampered the University of Illinois System's ability to stay competitive in certain disciplines, and the impact has been greater at Urbana-Champaign than at Chicago. The magnitude of loss at Urbana-Champaign between FY 2015 and FY 2018 is unprecedented and will take years to

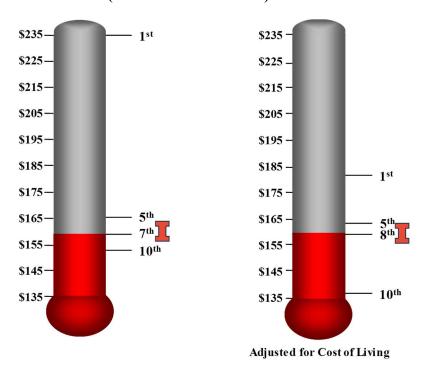
overcome. It is critically important that we resume the road to recovery in FY 2019 and beyond.

TOTAL COMPENSATION

Total compensation represents the combination of average cash salary plus employer contributions to fringe benefits. The following figures show FY 2018 average total compensation for tenure-system faculty at each university relative to its dashboard peers. For Urbana-Champaign and Chicago, a cost of living adjustment is applied to each graph on the right; cost of living data are currently unavailable for Springfield peers.

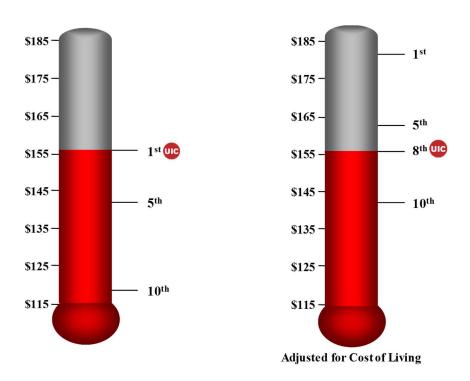
As shown in Figure 14, without adjusting for the cost of living, Urbana-Champaign ranks 7th among its peers for faculty average total compensation. Factoring in the cost of living, Urbana-Champaign drops to 8th place.

Figure 14
FY 2018 Faculty Average Total Compensation
Urbana-Champaign Dashboard Peers
(Dollars in Thousands)



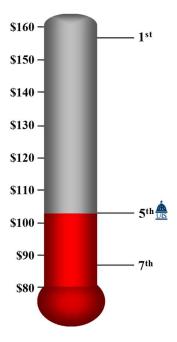
As shown in Figure 15, without adjusting for the cost of living, Chicago was best among its peers in terms of faculty average total compensation. However, when adjusting for cost of living, Chicago drops significantly, down to 7th out of 10.

Figure 15
FY 2018 Faculty Average Total Compensation
Chicago Dashboard Peers
(Dollars in Thousands)



As shown in Figure 16, Springfield ranks 5th out of 7 peers with available faculty total compensation data. Only a single graph is provided in this case, as cost of living comparison data for Springfield peers was not available at this time.

Figure 16
FY 2018 Faculty Average Total Compensation
Springfield Dashboard Peers
(Dollars in Thousands)



Here too, the University of Illinois System is losing ground. When adjusted for cost of living, Urbana-Champaign ranks third lowest at 8th out of 10, and Chicago ranks fourth lowest at 7th out of 10. Springfield, without adjusting for cost of living, ranks 5th out of 7. Clearly the University of Illinois System employer contributions for fringe benefits are not competitive enough to compensate for the drag on total compensation caused by salary deficits. Consequently, the total compensation package must be considered a vital part of an overall strategy to strengthen our competitive position.

In sum, budgetary constraints prior to FY 2008 hurt the University of Illinois System in the faculty salary market. Between 2008 and 2015, modest state funding as well as internal reallocation produced salary programs that kept pace with inflation, but were below the three universities' top competitors in many cases. In the last several years, though, the lack of funding for a salary program has rendered our three

institutions extremely vulnerable in terms of competitiveness. Furthermore, because we have had to do a good amount of juggling of funds to cope with the substantial decrement in our FY 2016 state allocation, we have very little financial flexibility to continue to reallocate internal funds into the future.

Given this situation, we are requesting incremental funds totaling \$23.8 million for FY 2020, to be used for a robust faculty and staff salary program that will halt the downslide compared to our peers. Moreover, we are requesting \$35.7 million in additional funding to help recover slippage in particular disciplines and ranks of faculty. This "compression, market, equity and retention" (CMER) allocation will allow us to retain world-class faculty who continue to be targeted by other universities and to ensure our salaries are competitive up, down and across the ranks as well as by particular demographics such as gender and race/ethnicity.

STATE UNIVERSITIES RETIREMENT SYSTEM

The health of the State Universities Retirement System (SURS) has been a matter of prime concern for many years. The University of Illinois System's competitiveness among peer institutions with respect to retirement benefits is essential for the recruitment and retention of talented faculty and staff. Any discussion of compensation policy for higher education in Illinois should include a strong call for continued adequate funding of the SURS program to ensure that existing benefits will remain secure.

It should be understood, however, that while achieving and maintaining adequate SURS funding remains a key concern for FY 2020 and beyond, funding improvements will not, in and of themselves, improve either the benefits available to U of I System employees or our competitive position among peer institutions in total compensation. The adequacy of SURS' fiscal support must be assured, and improvements in our universities' competitive position in total compensation must be achieved.

UNDERGRADUATE SCHOLARSHIP PROGRAM FOR ILLINOIS RESIDENTS

PROGRAM (\$10,000,000)

Overview

The University of Illinois System has a strong commitment to the citizens of Illinois whose taxes contribute to the support of this premier public institution. Our goal is to ensure access for all qualified Illinois students, regardless of their income level. Toward that end, the U of I System assists students with a wide range of financial aid programs including grants and loans from federal, state and private sources; federal work study funds; and grants and loans from institutional resources. Over 32,300 undergraduates across our three universities (55.4%) received some form of gift aid, the largest portion consisting of need-based financial aid.

All three of our universities annually survey admitted students who choose to go elsewhere for college and the evidence is clear—financial support is at the heart of how students make choices about which college to attend. In fact, 8 of the top 10 reasons our admitted students cite for choosing other schools are related to financial barriers.

A crucial component of financial aid packages for Illinois residents is the Monetary Award Program (MAP) grants from the Illinois Student Assistance Commission (ISAC). For many years the maximum MAP grant awarded to those students with greatest financial need was sufficient to cover the full tuition and mandatory fees at Illinois public universities. By FY 1996, however, tuition and mandatory fees at Urbana-Champaign and Chicago exceeded the maximum MAP award. For years, Pell and MAP program maximum awards have not kept pace with increases in tuition and fees, as shown in Figure 17. Consequently, our universities began supplementing MAP grants for these students to cover the difference.

\$18,000 \$16,000 \$14,000 \$12,000 \$10,000 \$8,000 \$6,000 \$4,000 \$2,000 \$0 2001 1997 1999 2003 2005 2007 2009 2011 2013 2015 2017 2019

UIUC

-uic

UIS

Figure 17
Federal Pell Grants and Illinois MAP Maximum Award Levels vs.
Entering General Undergraduate Tuition and Mandatory Fees

FY 2019 ISAC MAP formula changed uses 2009-2010 tuition levels. FY 2012 through FY 2017 MAP formula uses max of \$4,968 and reduces all awards by 5%. FY 2018 – FY 2019 MAP formula uses max of \$4,968 and reduces all awards by 2%.

PELL

■ MAP

Even as we have frozen in-state undergraduate tuition for the last four years, the gap between MAP and PELL support on the one hand and cost per student on the other has persisted. We urge the state to consistently fund MAP awards in a timely fashion and to consider augmenting this support.

INVESTING IN ILLINOISANS

Research shows that most college graduates stay in the state where they earn their degrees. Along with driving economic growth, college-educated citizens bring a host of other benefits to the state. Compared to non-graduates, studies show that college graduates are healthier and live longer, and are more likely to vote and volunteer in their communities.

Unfortunately, the proportion of Illinois high school graduates who are enrolling in universities outside the state has grown significantly over time, as shown in Figure 18. This increased outmigration should be of urgent concern to all.

29%
Enrolled
Out of
State

2016

46%
Enrolled
Out of
State

Figure 18
Four-year College-going Illinois High School Graduates

Enhancing investment in Illinois undergraduates is critical to halting this outmigration. In fact, according to a recent study by the IBHE, the State of Illinois is second only to New Jersey in the net number of students lost to colleges in other states.

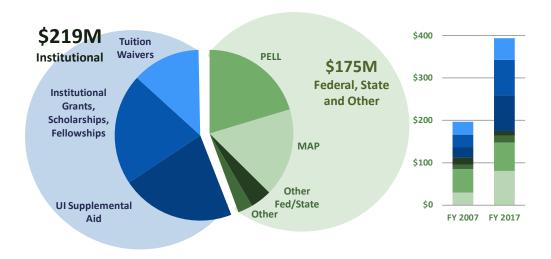
Urbana-Champaign has created a bold new financial aid program to encourage the best and brightest students in the state to enroll, regardless of their family income. This new program, called **Illinois Commitment**, utilizes a combination of institutional, federal, and state aid. Effective fall 2019, the Illinois Commitment will cover tuition and fees for up to four years for all qualified in-state freshman and transfer students whose family income is \$61,000 or less (the state median) and whose family assets are less than \$50,000. There is no cap or limit in the number of students the program will help. Illinois Commitment provides a new pathway to an Illinois degree for first-generation college students and low- to moderate-income students, keeping our talented young people in the state. A number of other need and merit-based scholarship programs will continue to be available for students who do not qualify for Illinois Commitment.

Also committed to stemming outmigration, UIC recently created the **Chancellor's Fellows Program** for high achieving Illinois high school students. Beginning in the 2019-2010 school year, UIC will cover tuition and fees for first-time college students with a minimum unweighted high school GPA of 3.8 and a minimum SAT score of 1360 or minimum ACT score of 30. High school valedictorians are also eligible, without reference to GPA and standardized test scores. Eligible students

also will receive priority consideration for admission in the UIC Honors College. UIC will fund this program by providing matching funds to the new merit-based grant program called AIM HIGH (Aspirational Institutional Match Helping Illinois Grow Higher), introduced by Illinois legislators in the summer of 2018. Together with state AIM funds, the Chancellor's Fellows Program will allow UIC to recruit and retain highly qualified students from Illinois and give these students the opportunity and resources to succeed.

In addition to these new programs, the University of Illinois System and its three universities will continue to increase ongoing efforts to retain and support student talent. As shown in Figure 19, we have devoted more and more resources to financial aid over time and we now provide more aid than the State and Federal programs combined. Total institutional aid, which now stands at \$219 million, was \$156 million just five years ago and only \$83 million a decade ago.

Figure 19
University of Illinois System
Undergraduate Financial Aid FY 2017



To ensure access, our universities have set aside an increasing amount of supplemental funding to help the neediest students. As we continue to balance quality with affordability, institutional aid has become a much larger part of our financial portfolio.

We applaud the state for taking a significant step in augmenting student support with the AIM HIGH scholarship program. However, it simply is not enough. Even with state and institutional investments, the average unmet need continues to increase across the University of Illinois System. For FY 2020, we are requesting \$10 million to support additional scholarships for Illinois residents. This funding will increase access and help ensure that our brightest students do not leave the state to go to college.

RECRUITING AND REBUILDING FACULTY

PROGRAM (\$10,000,000)

Overview

The University of Illinois System plays a central role in education, research and discovery, and economic development in the State of Illinois and beyond. As laid out in our Strategic Framework launched in 2016, we see ourselves as the *Public's University* and we have set forth four overarching pillars to which our three member universities are committed:

- An institution of and for our students
- Research and scholarship with global impact
- A healthy future for Illinois and the Midwest
- Tomorrow's university today

All four of these pillars rely on the recruitment and retention of **faculty of the highest caliber**. One of the casualties of the state budget crisis is that the U of I

System has lost a number of award-winning faculty. For example, in 2017 Professor

Thomas Overbye, a world renowned engineer, was lured away from the College of

Engineering in Urbana-Champaign to Texas A&M University. Overbye is an expert
in power system computational algorithms, operations, control, and visualization.

He is the original developer of PowerWorld Simulator, an innovative computer
program for power system analysis and visualization, and a co-founder of

PowerWorld Corporation. Overbye is also a member of the National Academy of
Engineering and an IEEE Fellow, and he maintains a robust research portfolio in
high-profile areas such as smart grid cyber security and renewable energy. When he
left the University of Illinois at Urbana-Champaign, he took much of his grant
money and graduate students with him. And there are other examples.

The fact is that our peer institutions, public and private, recognize our state budget challenges over the last few years and have unabashedly raided our universities because of it. In fact, the state of Texas has set up special funds to go after distinguished faculty and we have been told that Illinois is a prime target. As a case in point, the state of Texas spent \$9 million dollars to bring Professor Overbye to Texas A&M. During the budget impasse, a total of 321 tenure-system faculty across our three universities received firm outside offers from other institutions (156 in FY 2016, 165 in FY 2017), representing a 40% increase in offers from

FY2013 to FY 2017. Almost 70% of those retention cases involved faculty at Urbana-Champaign. Thankfully, after the resolution of the budget impasse, retention cases at Urbana-Champaign dropped substantially. Exceptional universities are always going to be the target of faculty poaching, but the extent of these activities had reached an all-time high because of the budget impasse and dramatic cuts in state funding over the past few years.

RECRUITING DISTINGUISHED FACULTY

It is imperative that we counter the perception that the state is in a dire fiscal situation and that our faculty are vulnerable to outside offers. To assist in this effort, we launched the President's Distinguished Faculty Recruitment Program in FY 2019 to help attract high-level talent to our universities. Incremental funding for this initiative was not provided by the state in our last budget request—we have had to use internal resources that were reallocated out of necessity for this critical program.

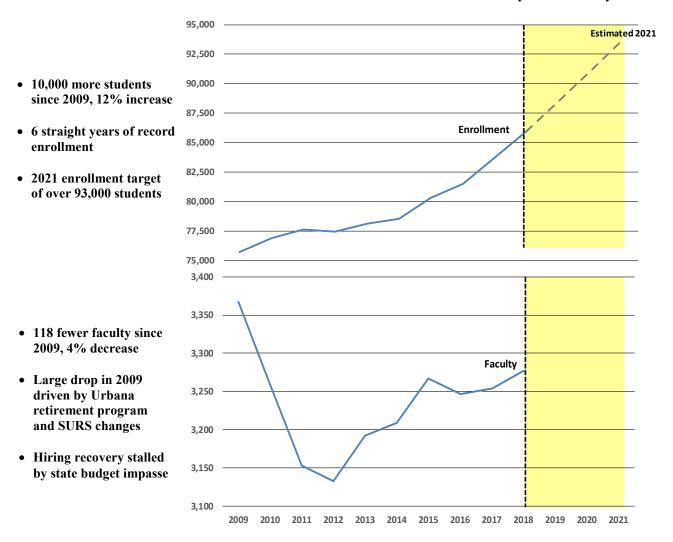
The Distinguished Faculty Recruitment Program is a three-year initiative that provides \$10 million per year in U of I System matching funds to attract highly distinguished, superstar faculty across the our three universities. The funds are to be used for start-up costs such as: the purchase of new equipment, renovation of space, graduate student support, and/or other needs associated with supporting the research and teaching needs of prominent faculty.

Already, 12 acclaimed experts have been hired under the new program. For example, Dr. John H. Stewart IV, MD, joined UIC as the Associate Director for Clinical Research at the UIC Cancer Center, and was recruited away from Duke University. Robotics expert Professor Nancy Amato, was recruited away from Texas A&M, and is now the first female head of the highly ranked Department of Computer Science at Urbana-Champaign. And Professor Ardith Zwyghuizen Doorenbos, now Director of Palliative Care and a member of the highly ranked College of Nursing at UIC, was recruited away from the University of Washington. All three of these faculty and the other transformational hires we have made will ensure that the quality of our academic programs remains strong in the future. However, we need additional funding to ensure these types of hiring initiatives can continue.

REBUILDING FACULTY AT ALL RANKS

The top portion of Figure 20 illustrates our growing student enrollments over the last 10 years, a commitment we have made to be more accessible and provide more transformational opportunities for an increasing number of individuals. Our target is to reach over 93,000 system-wide by 2021.

Figure 20
University of Illinois System
Trends in Student Enrollment and Tenure System Faculty

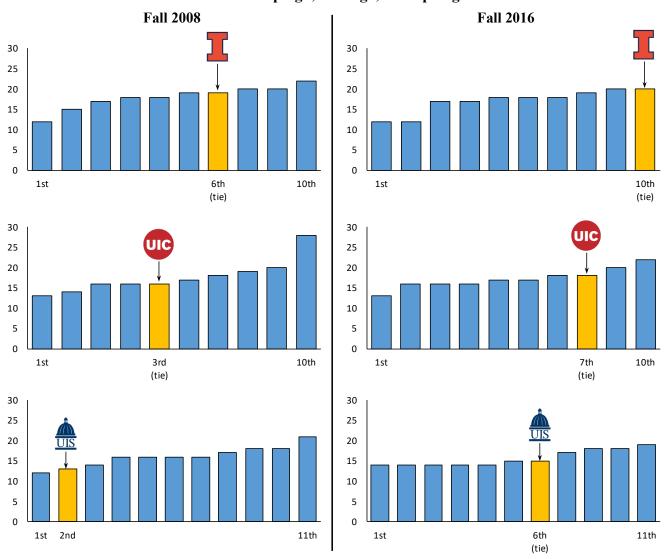


At the same time as we have grown the student body, we have not kept pace with faculty numbers (see lower portion of Figure 20). The budget impasse caused our universities to curtail faculty hiring and certain SURS changes accelerated faculty losses during particular years. Maintaining a balance between student and faculty

numbers is vital to academic quality. Otherwise, class sizes grow too large, courses may not be offered as often because of few faculty and staff, and students have fewer opportunities to work one-on-one with faculty who are overwhelmed with requests. All of this affects the student experience. In addition, student-to-faculty ratios are among several key factors used in university rankings; they can also influence decisions of prospective students as well as faculty.

As Figure 21 shows, we have lost ground over time with our student-to-faculty ratios when compared to our peers.

Figure 21
Changes in Student-to-Faculty Ratio in Relation to BOT Performance Dashboard Peers
Urbana-Champaign, Chicago, and Springfield



In fall 2008, Urbana-Champaign had the 6th best student-to-faculty ratio out of its 10 peers; by fall 2016 it had **fallen to last place**. To provide some comparison, undergraduate enrollment at the University of Michigan increased by 11% over the same timeframe. However, faculty hiring kept pace, allowing Michigan to maintain their enviable 12:1 student-to-faculty ratio.

Similar to Urbana, our other two universities also lost ground in student-to-faculty ratios during this period. Chicago dropped from 3rd to 7th out of 10 in the same time frame, and Springfield fell from 2nd to 6th.

To ensure competitiveness and reverse these trends, we need to rebuild our faculty numbers across all three universities. We are developing aggressive five-year hiring plans at each university so as to keep pace with our record and growing enrollments. This hiring will be done gradually over a five-year period, and will support our excellence and reputation across the U of I System. The full details of the plan are currently being developed and are expected to be complete by the end of 2018.

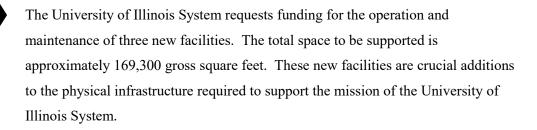
We are requesting a total of \$10 million from the State of Illinois to supplement our five-year hiring initiative to rebuild our faculty and to assist in our continuing efforts to recruit and retain distinguished faculty. These critical initiatives will help us maintain our excellence in teaching and reaching, meet current student demands, and allow us to strategically invest for planned enrollment growth.

Infrastructure Maintenance

OPERATION AND MAINTENANCE NEW AREAS

(\$3,214,785)

Overview



When facilities are constructed or remodeled, a request is made for the operations and maintenance of that new space. The last time the U of I System received requested funds for the operations and maintenance of new areas was FY 2002. Over the last five years where funds were requested, \$5.6 million dollars had to be reallocated from other sources to cover the lack of state support. Such internal reallocations, if continued, will seriously impact ongoing educational activities. Thus, it is critical that the state provide funding for operating and maintaining facilities that are approved for construction.

For FY 2020, the U of I System requests support of \$3,214,785 to operate and maintain three new facilities described below.

URBANA-CHAMPAIGN PROJECT

Siebel Center for Design

The new Siebel Center for Design will be a facility used by students from every discipline and background. It will serve both as a physical and intellectual hub, layering across the undergraduate experience a range of informal and formal opportunities to engage students in multi- and trans-disciplinary collaborations. This project will meet Illinois' vision for multi-disciplinary design and thinking and planning, while fostering a culture of student-led problem solving. The building will be an incubator of talent where students master skills by tackling real and pressing problems that lend themselves to design-based solutions. The highly visible center will connect a breadth of perspectives, spaces, and resources. The \$48 million construction project will provide approximately 68,300 new gross square feet of flexible collaborative learning and idea generating, meeting, prototyping, digital imaging, and flexible display/gallery spaces. This new facility, supported by a gift

from the Thomas and Stacey Siebel Foundation, is to be located on the west terminus of the Military Axis on Fourth Street in Champaign. A full year of operations and maintenance support is requested at \$1,021,000.

CHICAGO PROJECTS

Engineering Innovation Building

Enrollment in the College of Engineering at UIC has nearly doubled over the last decade. To accommodate that recent growth, a new 50,000 gross square foot building is being constructed to house chemical engineering, mechanical and industrial engineering, and civil and materials engineering. This new facility will have space for labs, classrooms and offices for faculty and staff. The building will also house the first high bay structural lab on campus where a wide range of research can be completed for structures. A year of operations and maintenance support is requested totaling \$1,193,785.

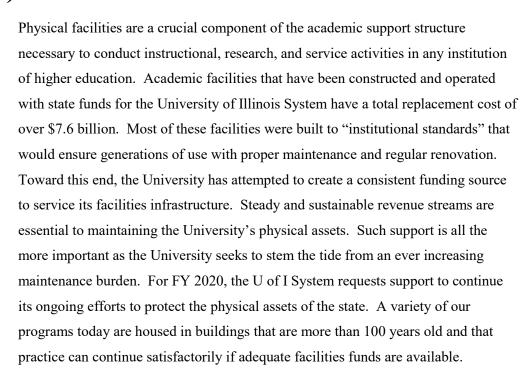
The Academic and Residential Complex

As planned, the Academic and Residential Complex project will provide a true living-learning community, located at the corner of Harrison Street and Morgan Street. The residential component of the project will be housed in a ten-story tower comprising approximately 83,000 square feet, providing approximately 550 beds in a mix of traditional residence hall style units and semi-suite style units. The facility will contain study lounges, social lounges, residence life offices, a fitness center, and laundry facilities. The facility will also include 51,000 square feet of academic space, which is to be located within a two-story wing of the building and will provide three large lecture halls, four classrooms, several small group study rooms, a tutoring center, computer stations, and other soft seating areas for social and study purposes. Slated for completion in July of 2019, the proposed state funding is only for the 51,000 gross square feet of academic space in the facility. The request is for \$1,000,000 for a full year of operations and maintenance support.

FACILITY MAINTENANCE SUPPORT

(\$10,400,000)

Overview



THE NEED



Sixty percent of state constructed space was built prior to 1970.

Three types of requirements contribute to the urgency of attending annually to the configuration and quality of the physical facilities that support academic programs:

• Replacement Needs

Normal use inevitably causes wear and tear on building systems and components to the point at which their useful lives are exceeded and they must be replaced. This process is frequently described as depreciation and is universally recognized. If proper annual maintenance is not available for building systems, their useful lives are shortened. If replacement of worn-out building systems is not completed on a timely basis, significant backlogs of deferred maintenance needs arise, eventually resulting in larger and more costly major remodeling requirements.

• Realignment Needs

The needs of academic programs vary over time. As enrollments shift among fields of study, space needs change with them. As state-of-the-art activities within fields of study change, so too do the facilities needed to support these efforts. In some cases, the entire functional use of space must shift to accommodate changes within or among academic programs.

Renewal Needs

Technological advances can render both facilities and equipment obsolete, sometimes at rates far exceeding their physically useful lives. The most obvious example of this is the application of computing to every discipline within a university and the dizzying pace at which computing power, speed, and applications continue to evolve.

Several types of funding are required to meet the range of facilities needs that universities confront annually. In the state of Illinois, day-to-day operations and maintenance costs are funded through the annual operating budgets of colleges and universities. In contrast, major remodeling and new construction funds come from capital budget appropriations with annual sales of bonds, which customarily carry 20-year debt retirement obligations. At this time, funds to address minor remodeling needs most often come from capital budget sources. Unfortunately, state funding in the capital budget has been largely nonexistent over the last decade.

Why is a recurring source of support for facility renovation so urgently required today? There are at least three important reasons:

- 1. Public colleges and universities in Illinois have accumulated backlogs of deferred maintenance projects reaching hundreds of millions of dollars per campus. The state's investment in college and university facilities is at risk.
- 2. Once fully implemented, a first-ever *operating budget-based facilities* renovation program would permit institutions to plan, schedule and complete minor remodeling projects more rapidly, more efficiently, and less expensively than the present capital budget-based program permits. Funding such projects from annual operating budgets would enable the state to devote its bond-funded activities to major remodeling and new construction needs.
- 3. The capital budget offers an uncertain and uneven level of support for renovation projects, which must compete with other capital needs for major remodeling and new construction.

We strongly support a shift in the state's approach that would provide annual funding for minor and modest projects through universities' operating budgets.

SPACE REALIGNMENT, RENEWAL AND REPLACEMENT (SR3)

November 2018

Approximately thirty years ago, the University of Illinois argued for the need for an operating budget-based source of funds to address annual space renovation requirements. Using historical reviews of the useful lives of all building

Without an annually sustainable source of funds to support facilities renovation, the State's investment in college and university facilities is at risk.

requirements. Using instance reviews of the aseral rives of an ounding

Page 41

components, the University developed a formula based approach to provide an estimate of the annual expenditures that an institution would need for regular replacement of components that had exceeded their useful lives (such as roofs, heating, ventilating and cooling systems and so forth) and that could also address the annual need for reconfiguration of space to address new functional requirements brought on by changes in academic programs. This approach was termed *Space Realignment, Renewal and Replacement* or SR³.



The University has devised a formula based approach to determine the annual investment necessary to keep facilities in adequate condition.

The SR³ formula is based on the assumption that certain building components (foundation, superstructure, and exterior skin) have an infinite life, while other components need replacement on a predictable life cycle of normal use. Providing an annual allocation of one-half of one percent of the replacement cost of the facility is sufficient to address these needs. In addition, some provision must be made in the case of academic facilities to address the costs of functional changes in space as well as realignments in programmatic space needs. Adding these academic strategic needs to the basic building component replacement requirements raises the annual amount necessary to meet SR³ requirements to two-thirds of one percent of the building's replacement cost.

The SR³ approach requires an institution to keep an accurate inventory of the space it has and that it computes the replacement costs of all of its facilities by type of space. Fortunately in Illinois, the Capital Development Board and IBHE have worked together to provide institutions with construction cost estimates for the various types of space that colleges and universities require and with inflation estimates needed to escalate those costs for future construction timetables. Summing the SR³ requirements for all the facilities on a campus establishes the amount that an institution should spend each year to make certain that its academic facilities are functionally appropriate for the programs it offers. For the three universities in the University of Illinois System, the SR³ requirement is \$75 million for Fiscal Year 2020.

SR³ Proven Effective

In 1979, the University of Illinois undertook a major restructuring of the debt for its auxiliary facilities and created an entity known as the Auxiliary Facilities System. An integral part of the debt restructuring was the initiation of an annual space renewal and replacement component in the operating budgets of all auxiliary



For three decades, the University has demonstrated the effectiveness of SR³ in keeping its auxiliary facilities in good working order. facilities. Because auxiliary facilities do not face the same pressure for reconfiguration of space to meet changing strategic and functional needs that academic facilities must address, the annual Auxiliary Facilities System space renewal and replacement requirement equals one-half of one percent of the facilities' replacement costs. This requirement represents a first dollar operating budget commitment for all University of Illinois System auxiliary facilities. It has been in place over 30 years and it provides the best documentation possible for the effectiveness of the SR³ philosophy and approach to effective facilities maintenance. As a group across the University of Illinois System, auxiliary facilities today are significantly better maintained than the academic buildings are.

The IBHE has endorsed many of the principles embodied in the *Space Realignment, Renewal and Replacement* approach. For more than a decade IBHE has recommended and the General Assembly and Governor have supported a capital budget-based Repair and Renovation (R & R) program that uses the SR³ formula approach to allocate funds among institutions for minor remodeling projects. Unfortunately, the capital R & R initiative, when funded, has been funded at approximately one-third of the annual need that the SR³ formula prescribes for each institution. There has only been one fiscal year in the last decade where the R & R funds have been released for university use. A backlog of critically important R & R projects is growing to near crisis proportions, emphasizing dramatically the need for regular, recurring attention to facilities renewal, realignment, and replacement requirements.

FY 2020 OPERATING BUDGET REQUEST FOR FACILITY RENOVATION



SR³ is simple, straightforward, equitable, comprehensive and cost effective. The need for an operating budget-based program that can address a variety of facilities needs facing the University of Illinois System has grown to the point that its priority matches the need for new or expanded academic program funds. For FY 2020, the University of Illinois will continue the program and seek to add incremental funds necessary to fund the SR³ formula. For FY 2020, the University seeks \$10.4 million for this multi-year facilities improvement initiative.

Funds provided under this program would be used to meet facilities needs arising in three distinct areas:

- 1. To accelerate the attack on a burgeoning backlog of deferred maintenance projects centered on building system components well beyond their useful lives.
- 2. To address functional changes in space configuration caused by program changes or state-of-the-art changes in instruction and research. Upgrading classrooms and teaching laboratories would be a significant element in this category.
- 3. To address continually changing infrastructure needs to accommodate changes in technology.

The University strongly believes that the SR³ formula approach is the most effective mechanism to implement an operating budget-based facilities renovation program. The SR³ approach offers numerous advantages, which include the following:

- SR³ is simply defined and easily understood. Its components (amount of space maintained with state funds, space inventory by type, replacement costs) can be easily computed by all colleges and universities in the state and are elements that institutions, the IBHE, and legislative and executive agency staff are very comfortable with and have dealt with for a number of years.
- SR³ is easy to implement. All of its components are already in place at all public colleges and universities participating in the capital budget R & R program.
- SR³ is equitable to all institutions regardless of size or complexity.
- SR³ effectiveness and impact is demonstrable, since it has been in place nearly 40 years in the University of Illinois Auxiliary Facilities System.
- SR³ is less costly than the current capital budget-based system, because it improves efficiencies in project planning, scheduling, completion and it requires no debt service.
- SR³ is easily audited through a review of individual projects planned and completed.

A period of several years will be required to adapt to annual spending on facilities improvement projects on the order of magnitude provided by the SR³ approach. In addition, some reappropriation mechanism will eventually be needed to ensure that funds made available for facilities improvements in the early years of the program

could be fully expended on projects that might require several months of planning and up to one year after that to complete. As the program becomes fully operational, it is expected that a portion of each year's appropriation would be devoted to planning and design for future projects, which would allow construction to start as soon as the new fiscal year began.

Finally, it is worth noting that in the short-run, we believe that an operating budget-based facilities improvement program should complement but not replace the existing capital budget-based R & R program, until the existing backlog of deferred maintenance projects is reduced. Once the SR³ program is fully implemented in the annual operating budget at an appropriate level of support, it could be expected that it would replace the capital R & R program. The capital budget could then be devoted to major remodeling projects and new construction initiatives.

MEET INFLATIONARY AND OTHER COST INCREASES

PAYROLL COST INCREASES

(\$800,000)

Overview

The University of Illinois System has faced increasing requirements for specialized payroll-related expenditures without receiving commensurate funding to cover them. As one example, payouts for federally-mandated Medicare contributions have placed stress on the University's budget in recent years. Although years of major reallocation for federal Medicare have brought the budgets more in line with expenditures, we must continue to fund the annual growth in these mandates. The U of I System is required by federal law to match new employees' contributions to Medicare and for certain employees, to Social Security. Increases in funding are essential to provide for these unavoidable expenditures.

MEDICARE AND SOCIAL SECURITY CONTRIBUTIONS - \$800,000

Effective April 1, 1986, the federal government mandated participation in the Medicare system by all newly hired state and local government employees not covered under the Social Security system. These employees and their employers are responsible for equal portions of the FICA Medicare Tax of 1.45% of gross pay. Additional legislation, effective July 1, 1991, requires employees not covered by the State University Retirement System to participate in the Social Security system.

Medicare cost increases present mandatory, unavoidable budget requirements. Up until the mid-1990s, the Medicare Tax of 1.45% was capped at \$135,000 of gross pay. In FY 1995, federal legislation removed the cap and now allows the 1.45% tax on the entire gross payment. This action, with an effective date of January 1, 1994, significantly increased Medicare expenditures for the second half of FY 1994 and subsequent years.

Expenditures have grown at a rapid rate as a result of the changes in Social Security requirements as well. Although state appropriations for these costs also have increased, until recently they had been insufficient in meeting actual needs. Table 2 details annual appropriations and expenditures along with each year's percentage growth rate.

Table 2
State Appropriations and Tuition Expenditures
for Medicare and Social Security Costs
(Dollars in Thousands)

	State		
Fiscal	Appropriation		% Change in
Year	<u>& Tuition Budget</u>	Expenditures	Expenditures
2008	\$ 12,037.1	\$ 13,440.7	=
2009	14,241.6	14,574.6	8.4%
2010	15,285.6	13,858.6	-4.9%
2011	15,385.6	14,366.6	3.7%
2012	15,340.6	14,765.2	2.8%
2013	15,725.6	15,721.1	6.5%
2014	16,122.6	16,740.4	6.5%
2015	16,972.6	18,022.9	7.7%
2016	16,303.8	18,044.3	0.1%
2017	18,292.6	17,992.9	-0.3%
2018	18,697.6	18,592.4	3.3%
2019	18,947.6	19,231.8	(est.) 3.4%

In FY 2019, expenditures are expected to rise in conjunction with the associated salary program. An increment of \$800,000 is requested for the FY 2020 appropriation. Because it is a federal mandate, this is a nonnegotiable and unavoidable increase for the University of Illinois System.

INFORMATION TECHNOLOGY AND SECURITY UPGRADES

(\$4,000,000)

Overview

An increment of \$4 million is requested for information technology and security upgrades. Technology is embedded in every core mission of the University of Illinois System. Our classrooms are infused with computers, projectors, and clickers; our students bring an average of five to six portable devices to campus each year, which they use non-stop as they travel from resident halls and apartments to classrooms and labs; and our world-class researchers need cutting-edge hardware and software to solve intractable societal problems. The University of Illinois System is known across the state and the world as a technology-rich, innovation hub, mandating that we stay up-to-date in information technology. And this effort is expensive. We work hard to find efficient ways to operate through shared services and technological innovations that save time and money. Yet there are still many unavoidable costs. Some of these are:

- Security risks to information technology are significant and increasing. As a result, vendors publish frequent security patches, and we must remain on current, supported hardware and software platforms in order to accept and implement these patches.
- As more **processes become automated**, a greater number of individuals require access to and increased usage of systems. This increasing reliance upon electronic systems and related data stores means we need to spend money on employee access, training, security and equipment that will ensure that work can be accomplished.
- The U of I System's increasing dependence upon **electronic records** and increasing use of document management is resulting in increases in the amount of disk storage required.
- Having up-to-date hardware and software has become a necessity due to the
 increasing number and complexity of business rules that must be supported.
 Some of these rules change frequently, such as in the area of financial aid with
 multiple regulatory upgrades required throughout the year. Our systems must stay
 current, because of the complex interdependencies among hardware platforms,
 software infrastructure, such as operating systems and database management
 systems, and the application systems that support those business rules.

This requested increment is intended to address growth in the following four areas of hardware and software:

- Growth in hardware needed to continue existing services
- Increases in software maintenance expenses
- Increased hardware and software expenses due to new projects
- Hardware refresh

In the past, we have tried to manage technology costs in incremental ways or by waiting until we had a major technology initiative, such as the UI-Integrate project. It is clear that this approach is not sustainable. In many ways, the information technology issue is similar to the deferred maintenance being accrued because of our aging infrastructure. We need a special, dedicated pool of funds to ensure that our universities stay competitive in this arena.

The requested increment of \$4 million is not large enough to cover all of our anticipated incremental expenses, especially big ticket overhauls or replacements. However, it would help with a growing list of more moderate upgrades that are crucial to our students, faculty, and staff. Without allocating additional recurring funds, the U of I System would face a number of problematic approaches to IT management such as:

- Dropping maintenance on some components. This puts the U of I System at risk of: a) security breaches due to unavailability of critical software patches in unsupported environments, b) possible system failures resulting in loss of service, and c) diversion of limited, existing technology staff to resolving failures thereby increasing the time to correct problems and raising the cost of new projects.
- Use of out-of-date, unsupported hardware. This puts the U of I System at risk of being unable to run current software versions and being susceptible to hardware failures resulting in loss of services.
- Reducing capacity of services as components fail and potentially rationing services.

By establishing funding that will cover a significant portion of the anticipated needs, we can maintain up-to-date, well-functioning technology systems and hardware at the U of I System. This approach is vital to ensuring our missions of providing exceptional education, scholarship, public service, and economic development for the State of Illinois.

SUMMARY OF THE FY 2020 OPERATING BUDGETING REQUEST

SUMMARY OF THE FY 2020 OPERATING BUDGET REQUEST

(\$97,902,300)

Overview



The University of Illinois System's FY 2020 operating budget request seeks to accomplish two important goals. The first is to restore core state support to original FY 2017 appropriation levels (\$55.7 million) in order to protect our in-state students, guarantee our overall academic competitiveness, and contribute to the State's economic development. The second is to provide the University of Illinois System with additional capacity (\$42.2 million) to implement our Strategic Framework.

Our 2016 Strategic Framework calls on us to:

- Serve more students
- Conduct cutting-edge research that addresses pressing state and national problems
- Ensure that the Midwest is a vibrant and healthy region of the country.

The State of Illinois needs its flagship system now, more than ever. We can help the state to keep and attract talent and to grow the state's infrastructure and economy. To do all this, we urgently need a modest and healthy FY 2020 budget.

The requested increase in funds will be spent on three broad categories. First, we will ensure competitiveness by providing a competitive salary program, and recruiting talented students and faculty to the state.

We propose to devote \$10 million in additional scholarships for Illinois students in order to stem the flow of high school graduates to out-of-state universities. Special emphasis will be given to attracting underrepresented students, including those from low-sending counties in Illinois. Funds also will be devoted to a program to recruit more distinguished, world-class faculty as well as to provide competitive salary compensation to retain current faculty and staff.

Second, we will use the requested funding to address our infrastructure maintenance needs. The University of Illinois System has over \$2 billion in deferred maintenance projects, many of which require urgent attention. Too many of our

classrooms, labs and faculty offices suffer from leaks, structural damage, poor heating and air flow, and disability access challenges. Over the years, the three universities have invested a portion of their operating fund as well as philanthropic gifts to address this need as best as possible but it is not enough. The proposed request will provide crucial resources to bolster and enhance academic spaces.

The final category requested is to address unavoidable inflationary cost increases related to payroll as well as crucial information technology upgrades.

Requested Operating Budget details are shown in Table 3.

Table 3 University of Illinois System FY 2020 Operating Budget Request (Dollars in Thousands)

\$23,795.0 3.0% 35,692.5	\$	59,487.5 10,000.0 10,000.0		
	\$	3,214.8 10,400.0	\$	13,614.8
\$ 800.0	\$	800.0 4,000.0	\$	4,800.0
			\$	97,902.3 5.2% 16.5%
	3.0% 35,692.5	\$23,795.0 3.0% 35,692.5 \$	\$23,795.0 3.0% 35,692.5 10,000.0 10,000.0 \$ 3,214.8 10,400.0 \$ 800.0 \$ 800.0	\$23,795.0 3.0% 35,692.5 10,000.0 10,000.0 \$ 3,214.8 10,400.0 \$ 800.0 \$ 4,000.0

Base = EAF/GRF + Tuition

CAPITAL BUDGET REQUEST FOR FY 2020

CAPITAL EXECUTIVE SUMMARY

CAPITAL EXECUTIVE SUMMARY

An institution of the size, scope and complexity of the University of Illinois System faces a recurring array of facility needs every year. Indeed, the capital facilities make up the University's largest asset and provide one of the foundations to attract and retain top quality, faculty, staff and students. The fiscal year 2020 request focuses on several themes in the capital budget that directly support the academic mission of the University of Illinois System as shown in Figure 1.

Figure 1 University of Illinois System FY 2020 Capital Budget Themes



REPAIR & RENOVATION \$272.3 Million



INNOVATION & WORKFORCE DEVELOPMENT

\$306.1 Million



ACADEMIC LIBRARIES \$144.0 Million

The first theme related to capital continues our longstanding request for crucial funds for **Repair and Renovation** projects at the three universities. To date, we have a backlog of roughly \$2B in deferred maintenance, system wide. As buildings age through their normal life cycles, it is crucial to address minor repair and renovation needs as they occur. Failure to do so accelerates deterioration and leads to costly major remodeling requirements more quickly than would be necessary if prudent attention to annual repair and renovation were possible. Changing programmatic emphases in academic units also create the need for relatively small remodeling projects, which can be addressed quickly to make existing space more useful for emerging academic priorities. This year's request totals \$272 million to combat the remodeling and rehabilitation projects at each campus. Much of this money will be used to update classrooms, labs, studios, and faculty-student collaborative spaces.

The second theme—Innovation and Workforce Development—represents funds for major renovation projects as well as new facilities to keep the U of I System on the forefront of invention as well as developing the workforce of the future to support a vibrant economy in the State of Illinois. Included here are several exciting initiatives, such as the Math/Statistics/Data Science Collaborative Facility (Altgeld/Illini Hall renovation) at

Urbana-Champaign and the Computer Design Research and Learning Center at Chicago. Both of these efforts would greatly enhance STEM education, research and training at our two largest universities.

The third focus of the capital budget seeks to upgrade the libraries at the three universities in order to meet the changing educational and research needs of diverse users. The libraries play a vital role at our three universities, supporting students, faculty and staff. They also provide resources and information services to the citizens of the state. In fact, our libraries collectively are the largest contributor to the statewide library network, containing over 40% of the unique titles available and providing over 20% of the statewide library loans through the network.

The allocation by university is shown in Figure 2.

Figure 2
University of Illinois System
FY 2020 Capital Budget Request by University

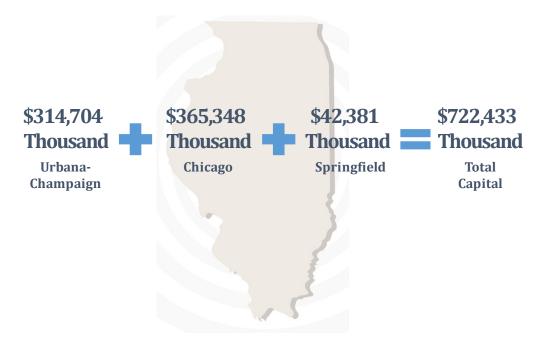
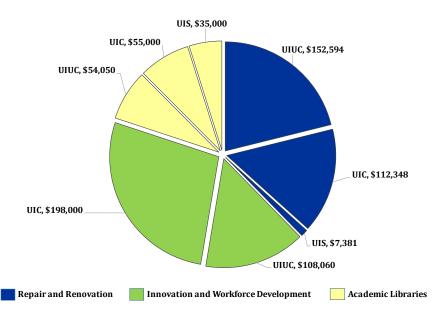


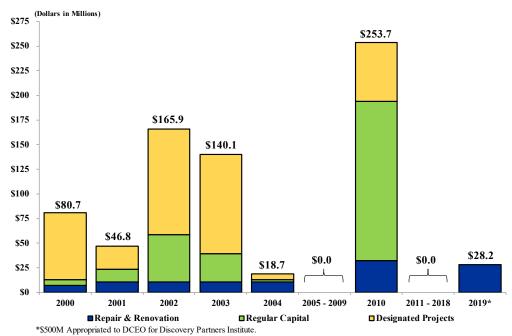
Figure 3 provides the campus breakout by theme.

Figure 3
University of Illinois System
FY 2020 Capital Budget Request by University Detail
(Dollars in Thousands)



As shown below in Figure 4, the University of Illinois System has received capital appropriations just seven times in the last 19 years, and only two capital appropriations since 2010.

Figure 4
University of Illinois System
Capital Appropriations FY 2000 – FY 2019



Fortunately, in FY 2019, the university received new appropriations for repair and renovation projects along with several projects that had been on hold from the FY 2010 budget. Additionally, \$500 million in capital funds were appropriated for the Discovery Partners Institute which will aid the University in its research and innovation agenda.

Consistent and steady state funding is critically important to maintain the physical plant. There is no doubt that costs rise and safety is at risk when we do not attend to maintenance of our facilities on an annual basis. When that is not possible, a backlog of unfunded projects grows quickly and accelerates the cycle of deterioration in facilities. The result is that the University of Illinois System suffers from a decline in the physical environment that is so desperately needed to attract talented faculty and students. With the recent new appropriations in FY 2019 and reappropriation of those projects funded in FY 2010, we hope this will begin a new pattern of steady funding for the valuable plant infrastructure at our universities. Perhaps it is obvious yet worth stating-academic facilities exist for one purpose, to support academic and research programs. The capital facilities make up the University's largest asset and provide a crucial foundation for attracting and retaining exceptional faculty, staff and students.

For FY 2020, the University of Illinois System requests a Capital Budget of \$722,433,000. A detailed project list is provided in Table 1.

Table 1 University of Illinois System FY 2020 Capital Budget Request (Dollars in Thousands)

		Urbana	Chicago	Springfield	Total
I.	Repair and Renovation				
	A. Repair and Renovation	\$152,594	\$112,348	\$7,381	\$272,323
II.	Innovation and Workforce Development				
	A. Math/Statistics/Data Science Collaborative Facility	43,200			43,200
	(Altgeld/Illini Hall renovation)				
	B. School of Art & Design Thinking and Learning Addition	64,860			64,860
	C. Computer Design Research and Learning Center		98,000		98,000
	D. Drug Discovery and Innovation Pavilion		100,000		100,000
III.	Academic Libraries				
	A. Library Upgrades	54,050	55,000		109,050
	B. Library Learning Student Success Center			35,000	35,000
	Total Request	\$314,704	\$365,348	\$42,381	\$722,433

CAPITAL REQUESTS

PRIORITIES

(\$722,433,000)

Overview

The University's FY 2020 Capital Budget Request consists of seven projects within three themes at a total cost of \$722,433,000 as detailed below.

REPAIR AND RENOVATION - \$272,323,000

Repair and Renovation \$272,323,000 - All Campuses

Urbana-Champaign \$152,594,000

Chicago \$112,348,000

Springfield \$7,381,000

The first priority is a \$272,323,000 Repair and Renovation request, which is comprised of projects at Urbana-Champaign, Chicago and Springfield. These projects, while not large enough to compete with major remodeling requests, represent a significant, real funding need. A high priority on renovation and renewal must be maintained by institutions with facilities with the size, scope and age of the University of Illinois System. Years of insufficient funding coupled with an ageing physical plant serve to create rising levels of deferred maintenance that have reached the critical stage. The Repair and Renovation request is vital for the continued renewal of existing University facilities, provision of up-to-date support for academic programs and protection of the state's investment in capital facilities.

INNOVATION AND WORKFORCE DEVELOPMENT – \$306,060,000

Math/Statistics/Data Science Collaborative Facility (Altgeld/Illini Hall Renovation) \$43,200,000 – Urbana-Champaign

Urbana-Champaign \$108,060,000

Chicago \$198,000,000 A comprehensive renovation is desired for historic Altgeld Hall and the 2nd and 3rd floors of Illini Hall. These spaces serve the Departments of Mathematics and Statistics, the Mathematics Library, and the campus classrooms in Altgeld Hall. The department serves students from across the campus as 83% of the student population has taken a class realizing the integral part mathematics and statistics play in a global economy. This has served to drive enrollment up over 100% and degrees up over 126% in the last decade.

The project will restore Altgeld and Illini Halls to a level consistent with a world class academic enterprise. The classrooms must be improved, the library

refurbished, and departmental offices, computer labs and common areas require comprehensive modernizations. Many ancillary, but essential, infrastructural elements such as heating, cooling, data technology, roofing, masonry, flooring and windows must be brought up to modern standards for occupant comfort, safety and progressive instructional practices. Landscaping will be addressed, as will many deferred maintenance elements that have been identified in the campus-wide facilities condition audit. Total project budget is \$100,000,000 with \$43,200,000 being requested from the state. This project is also eligible for funding from the Discovery Partners Institute.

School of Art and Design Thinking and Learning Addition \$64,860,000 – Urbana-Champaign

Built in the late 1950s, the Art and Design Building has undergone only minor repairs and upgrades. The current condition of the building reflects the wear and tear of 60 plus years of continuous use as an administrative, teaching and research facility. It suffers from general fatigue and deterioration of comfort and visual quality. Also during this time, requirements of the School's disciplines have undergone dramatic change, creating entirely new functional demands which were unimagined when the building was conceived. New program and equipment needs have rendered the original space configuration outmoded, inefficient and ill-suited to their intended purposes. This project will renovate and upgrade the existing facility and provide an addition to consolidate all functions, activities and programs into one facility.

This renovation will allow for a symbiotic relationship with the new Siebel Design Center which will be a facility used by students from every discipline and background. These facilities will serve both as a physical and intellectual hub, layering across the undergraduate experience a range of informal and formal opportunities and offerings to engage students in multi-and trans-disciplinary collaborations. This project will meet Illinois' vision for multi-disciplinary design and doing, while fostering a culture of student-led problem solving. The building will be an incubator of talent where students master skills by tackling real and pressing problems that lend themselves to design-based solutions. Total project budget is \$84,000,000 with \$64,860,000 being requested from the state.

Computer Design Research and Learning Center \$98,000,000 - Chicago

The College of Engineering plans to construct a new 145,000 gross square foot building on the footprint of Lot 10, located north of Taylor Street adjacent to the Science and Engineering Laboratory West and the Engineering Research Facility. The College of Engineering has experienced recent enrollment growth and is expected to grow by an additional 628 engineering students by 2021. This facility will accommodate this growth and the subsequent need for research space.

This building will help the college attract future students and faculty and will provide modern research and educational facilities to students and researchers. This five-story building will include a basement, two large auditoriums, twenty classrooms/seminar rooms, thirty-one dry research laboratories and eighty faculty offices. It is envisioned that this building will serve as an experiential learning and design hub, providing space for holistic and interactive learning and interdisciplinary collaboration space.

An open plan for the first floor will allow for informal, collaborative space and will also feature a café, exhibition space and a digital video wall. It's anticipated that the building façade will be constructed with a mixture of concrete and transparent, energy efficient glazing systems. The interior will feature exposed structure and mechanical systems, wood shutters and copper cladding design. The building will also build upon the Chancellor's Climate Commitments by featuring geothermal heating/cooling systems, daylighting and energy efficiency features, HVAC sensor controls, and a green roof. \$98,000,000 is requested from the state. This project is also eligible for funding from the Discovery Partners Institute.

Drug Discovery and Innovation Pavilion \$100,000,000 - Chicago

This proposal is to build a \$100,000,000 building on the west campus. The Drug Discovery and Innovation Pavilion will provide the physical infrastructure necessary to take the next step in the further progression of UIC and the Discovery Partners Institute (DPI) as leaders in the discovery, development, and commercialization of drugs and pharmaceutical technologies.

The five-story building will be located on UIC's west campus, adjacent to the hospital and directly connected to the existing Pharmacy Building. It will feature

team-based teaching classrooms, office and conference space, research laboratories, instrumentation rooms, clinical research laboratory space, clinical patient rooms and other support spaces.

The vision for this facility will be to create an interactive environment employing interdisciplinary and multidisciplinary teams to address fundamental biological and biomedical questions. This Institute will facilitate a new model for commercializing basic-findings and innovative therapies with international leaders in the pharmaceutical and healthcare industry. The facility will provide new opportunities for innovation in drug discovery, pharmaceutical product development, and personalized medicine; provide state-of-the-art space for contemporary biomedical research, which requires intense collaborations across different campus disciplines with investigators having unique and specialized skills; develop a transfer informative center of research excellence housed in cutting-edge core facilities that will benefit the entire Institution; and drive growth as a major economic engine for the State of Illinois.

The outcomes will be to leverage the expertise in drug discovery to develop new innovative healthcare practices which will lead to cost savings and improved outcomes; drive commercialization, business development, start-ups, and healthcare innovation by bringing pharmaceutical discovery to the forefront; bring together international industry leaders with our own nationally-recognized researchers to focus on new technologies, new discoveries, and new treatments; create synergies through public-private partnerships to address disparities in drug delivery and access to healthcare.

Currently missing in UIC's drive for innovative therapeutics is the physical infrastructure to bring together university researchers, students, and industry. The proposed Drug Discovery and Innovation Pavilion will provide the infrastructure needed to further the progression of UIC and DPI as a leader in the discovery, development, and commercialization of drugs and pharmaceutical technologies. \$100,000,000 is requested from the state. This project is also eligible for funding from the Discovery Partners Institute.

ACADEMIC LIBRARIES – \$144,050,000

Main/Undergraduate Library Redevelopment \$54,050,000 - Urbana-Champaign

Urbana-Champaign \$54,050,000

Chicago \$55,000,000

Springfield \$35,000,000

The High Density Storage (HDS) Addition will be the first step in a multi-phased project to reconstruct the Main and Undergraduate Libraries. This addition to be located on the west end of the existing 6th stack will be primarily a large climate controlled vault capable of storing 1.5M volumes in an 11,000 square foot footprint. The total area of the HDS Addition with the associated mechanical room is approximately 23,000 square foot. As part of this project, a new utility tunnel will be constructed to connect the existing Main Library Power Plant to the West Sixth Street steam tunnel and the new HDS Addition. Also part of this project will be the construction of a new Lecture Hall 66, a building addition to the southwest side of the Main Library.

The HDS shelving will be protected with an in-rack fire protection system and the HVAC system for the addition will be designed to maintain 65 degrees and 50% RH year round. A new mechanical room will be constructed to house the mechanical and electrical systems to serve the HDS. The mechanical room roof will be designed to support new cooling towers that will replace the current cooling towers on the roof of the stacks. This project will construct the new cooling towers and demolish those currently existing on the roof of the stack area. Interior renovation work in the existing Main Library Building as part of this project will consist of a 3,600 square foot renovation of the main north/south corridor on the first floor, a 3,300 square foot renovation of the Grand Stair located between the north/south corridor and the Marshall Gallery and a renovation of the mechanical systems serving the existing 11,600 square foot Delivery Room on the 2nd floor. \$54,050,000 is requested from the state.

Daley Library Addition \$55,000,000 - Chicago

An addition to the Richard J. Daley Library will supplement student academic life through the inclusion of a new information commons, an auditorium, a large café, a winter garden and a temporary exhibit space. A central atrium will allow natural light deep into the building and provide a visual connection to the upper floors. A new 200-seat auditorium will provide a public meeting venue to offer programs,

lectures, performances, readings and other events related to library and campus interests. To promote 24/7 campus life, a larger café with food prep areas and seating will be central to the ground floor. To create spaces that promote research, learning, and collaboration, the third floor will include a double height reading room, large group meeting spaces, and small group meeting rooms. \$55,000,000 is requested from the state.

Library Learning Student Success Center \$35,000,000 – Springfield

Academic buildings on Universities can no longer be the single use boxes of yesteryear. Today's buildings must accommodate a myriad of uses and purposes, and optimize capacity and capability. The Library lends itself to being a shared space where reflective thinking and quiet study can co-exist with collaborative spaces and group study areas. Dedicated to student success and the continuous improvement in teaching and learning, this new academic building will be constructed to cater to the academic resources and teaching support that engages students on a successful path to graduation and prepares them for the life that follows. Faculty and staff will discover a building with resources that will inspire new and innovative teaching techniques, support the skill sets required for excellent teaching methods, and encourage collaboration in research and instruction. This new 50,000 square foot building will house the library and collections, classrooms, lecture hall/auditorium, faculty staff offices space, and space for the units dedicated to the academic and teaching support units on campus.

The Center for Online Learning Research and Service (COLRS), Center for Academic Success (CAS), Information Technology Services (ITS) and the Library support similar services but all are involved in engaging students, faculty and staff in using resources and technology provided by the university. At a time of shrinking state support, and a university commitment to freezing tuition, shared services, shared spaces and a shared mission can equate with overall cost savings in a building with shared purpose of academic success. The Center for Academic Success and the Library can partner on providing peer tutors during evening and weekend hours, when many staff are not available or in the building. Classroom space, conference rooms and the auditorium can be shared by all units in the space and a shared calendar can optimize scheduling. Locating Information Technology Services Client Services in the space is appropriate as service to students and staff

could be offered through strategically designed spaces that accommodate the varied services ITS offers. \$35,000,000 is requested from the state.

APPENDIX I REPAIR AND RENOVATION

REPAIR AND RENOVATION

System-wide - \$272,323,000



Requested Funds: State \$272.3M Multiple projects at each university 74% of space is 40+ years old

Stated most simply, physical facilities are a critically important component of the academic support structure necessary to conduct instructional, research and service activities in any institution of higher education. Academic facilities constructed and operated with state funds for the University of Illinois System have a replacement cost over \$7.6 billion. Most of these facilities were built to "institutional standards" in construction materials and techniques, meaning that with proper maintenance and regular renovation of components which have exceeded their useful lives, the facility can have a nearly infinite life. A variety of programs are today housed satisfactorily in buildings more than 100 years old and that experience can continue if adequate facilities funds are available. The University of Illinois System faces an array of facility related needs each year but a major component in that capital portfolio is repair and renovation to existing facilities. Buildings and the infrastructure systems that support them have finite useful lives; masonry decays, roofs deteriorate, heating and cooling systems wear out. As buildings age through their normal life-cycle it is crucial to address repair and renovation needs that normally arise. Failure to do so accelerates deterioration and leads to more costly repairs more quickly than would be necessary if prudent annual attention to annual repair and renovation were possible.

Three factors contribute to the need for annual attention to the configuration and quality of the

physical facilities supporting any academic program:

Replacement Needs – Normal use inevitably causes wear and tear on building systems and components to the point at which their useful lives are exceeded and they must be replaced. This process is frequently described as depreciation and is universally recognized. If proper annual maintenance is not available for building systems, their useful lives are shortened. If replacement of worn-out building systems is not completed on a timely basis, significant backlogs of deferred maintenance needs arise, eventually resulting in larger and more costly major remodeling requirements.

Realignment Needs – The needs of academic programs vary over time. As enrollments shift among fields of study, space needs change with them. As the state-of-the-art within fields of study changes, so too do the facilities needed to support new activities. In some cases, the entire functional use of space must shift to accommodate changes within or among academic programs.

Renewal Needs – Technological advances can render both facilities and equipment obsolete, sometimes at rates far exceeding their physically useful lives. The application of computing to every discipline within a university and the dizzying pace at which computing power, speed and applications continue to evolve is the most obvious example of such a change.

APPENDIX II INNOVATION AND WORKFORCE DEVELOPMENT

- ➤ Math/Statistics/Data Science Collaborative Facility (Altgeld/Illini Hall Renovation)
- > School of Art & Design Thinking and Learning Addition
- > Computer Design Research and Learning Center
- > Drug Discovery and Innovation Pavilion

MATH/STATISTICS/DATA SCIENCE COLLABORATIVE FACILITY (ALTGELD/ILLINI HALL RENOVATION) — \$43,200,000 — URBANA-CHAMPAIGN



Requested Funds: State \$43M, Other \$47M Potential for DPI Funding Altgeld Hall 79,720 G.S.F. Illini Hall 49,450 G.S.F.

- Complete Renovation of buildings
- Electrical/ HVAC upgrades
- Masonry /Roof /Window Repairs

Academic Impact of Math/Statistics:

- Majors: 1,890 Undergrad; 389 Grad
- 58% increase in instructional units over last decade
- 83% of graduates have taken a class
- Delivers 8.0% of all credit hours
- Generates over \$4.2M in research

The Department of Mathematics and Statistics touches nearly every student and most researchers across campus. The faculty and students in these departments are making leading edge advances in the fields of mathematics, actuarial science, statistics and biostatistics, data science, risk analysis, engineering, computational science, and the biological, medical, and social sciences. The department is housed in two older facilities that were constructed well over 100 years ago.

Altgeld Hall built in 1897 is the second oldest building on campus and is one of the architectural jewels on campus, listed on the National Register of Historic Places. Originally known as Library Hall, the building has seen several additions over the years. Illini Hall built in 1907, was originally built as the University YMCA, and recommissioned as the Student Union in 1919.

The goal of this project is to restore Altgeld and Illini Halls to a level consistent with a world class academic enterprise for the Departments of Mathematics and Statistics. These buildings have become outdated and can no longer support the surge in student demands nor the requirements of 21st century teaching and learning. Restoration of these two halls will provide students and faculty with dynamic, collaborative spaces that encourage exploration and innovation in teaching, learning and research. Modernized, forward thinking environments will enable interdisciplinary interactions between students and faculty, providing shared space where new ideas can take root and grow into transformative solutions and applications. The renovation will restore and preserve historic spaces in Altgeld Hall and make both Illini and Altgeld fully accessible. Some 6,800 square feet of classroom space will be added along with the modernization of 14,600 existing square feet of classroom space. 5,300 square feet of collaboration space will be added for instruction and research. The project will reduce an estimated \$18M of deferred maintenance in these buildings while at the same time reducing utility costs for each facility.

SCHOOL OF ART & DESIGN THINKING AND LEARNING ADDITION — \$64,860,000 — URBANA-CHAMPAIGN



Requested Funds: State \$64.8M, Other \$20.3M Consolidation of multiple facilities Academic Impact of Art and Design:

- Majors: 549 Undergrad; 79 Grad
- 17,400 instructional units per year
- College of Fine and Applied Arts generates over \$1.3M in research

Built in the late 1950s, the Art and Design Building has undergone only minor repairs and upgrades since it was constructed. The current condition of the building reflects the wear and tear of 60 plus years of continuous use as an administrative, teaching, and research facility. It suffers from general fatigue and deterioration of comfort and visual quality. It is worth stressing, however, that the basic building structure appears to be sound, and its functional qualities, while needing upgrading, serve its purposes well. This project will update worn and outdated facilities and improve accessibility.

The School of Art + Design occupies 141,000 square feet of space across 13 buildings. Of this space, 57,000 square feet are contained in the current Art and Design Building. Seven prefabricated industrial type metal buildings known as the South Studio contain 30,000 square feet in an area adjacent to the Research Park. Flagg and Noble Halls combined have 42,000 square feet of space assigned to Art +

Design. The School is the sole occupant/user of the seven studio buildings and of Flagg Hall. Currently, students, faculty, and staff are in 13 separate and scattered locations. Many of the occupied spaces were considered temporary and therefore are not adequate for the needs or of the size to best support the programs. Many of the spaces do not allow for growth, meet accessibility codes, or have adequate transportation services for student needs. For the first time in the history of the School, 12 discreet programs will be brought together in one building creating a strong identity for the visual arts on campus. This action will serve to promote the arts as a viable academic partner for collaborative research and intellectual interaction.

Undergraduate and Graduate students will be able to interact easily, build community, exchange ideas among programs, and more easily connect with the faculty and the rest of campus. The alterations and additions to the existing building will provide a unified location that will encourage interaction, improve efficiency of operation, and support more cross-discipline cooperation and collaborative courses. Consolidation of space within the existing Art and Design Building plus an addition to the building would allow the School to totally vacate space in nine buildings, including Flagg Hall, which would help clear the way for the Inkenberry Commons expansion.

COMPUTER DESIGN RESEARCH AND LEARNING CENTER — \$98,000,000 — CHICAGO



Requested Funds: State \$98M Potential for DPI Funding

New Construction 145,000 G.S.F. Academic Impact of Engineering:

- Majors: 3,861 Undergrad; 1,474 grad
- 81% increase in enrollment over last decade
- Over 96% increase in degrees over last decade
- 50% increase of instructional units over last decade
- College generates \$19.2M in research

The College of Engineering plans to construct a new 145,000 gross square foot building on the footprint of Lot 10, located north of Taylor Street adjacent to the Science and Engineering Laboratory West (SELW) and the Engineering Research Facility (ERF). The College of Engineering has experienced recent enrollment growth and is expected to grow by an additional 628 engineering students by 2021. This facility will accommodate this growth and the subsequent need for research space.

This building will help the college attract future students and faculty and will provide modern

research and educational facilities to students and researchers. This six-story building will include a basement, three large auditoriums, twenty-six classrooms/seminar rooms, twenty dry research laboratories and forty-two faculty offices. It is envisioned that this building will serve as an experiential learning and design hub, providing space for holistic and interactive learning and interdisciplinary collaboration space.

An open plan for the first floor will allow for informal, collaborative space and will also feature a café, exhibition space and a digital video wall. It's anticipated that the building façade will be constructed with a mixture of concrete and transparent, energy efficient glazing systems. The interior will feature exposed structure and mechanical systems, wood shutters and copper cladding design. The building will also build upon the Chancellor's Climate Commitments by featuring geothermal heating/cooling systems, daylighting and energy efficiency features, HVAC sensor controls, and a green roof.

DRUG DISCOVERY AND INNOVATION PAVILION — \$100,000,000 — CHICAGO



Requested Funds: State \$100M Potential for DPI Funding

New Construction of 110,000 GSF Academic Impact of Pharmacy:

- 879 Grad/Professional Students
- Over the last decade:
 - 22% increase in instructional units
 - 11% increase in enrollment
 - 6% increase in degrees
- Generates \$10.9M in research

The University of Illinois at Chicago is requesting \$100M in FY 2020 to construct a new 110,000 square foot building adjacent and connected to the 1954 College of Pharmacy building. It will feature team-based teaching classrooms, office and conference space, research laboratories, instrumentation rooms, clinical research laboratory space, clinical patient rooms and other support spaces.

The College of Pharmacy (COP) has a proven track record of discovery, it is currently ranked fifth among pharmacy colleges. More than 50 tenure track faculty and over 250 research and clinical faculty conduct research in areas of drug and target discovery through synthetic chemistry and from natural sources and therapeutic outcomes in cancer, infectious diseases, women's health and central nervous system disorders. In the last five years researchers in

the college have submitted 167 US patent applications, had 32 US patents issued, had 108 disclosures, and entered into 44 licenses and options. During that same time the college has generated over \$15M in royalties.

Nearly all faculty in the COP are involved in drug discovery, development, and commercialization. This stems from the fact that the primary focus of the College is pharmacotherapeutics; from new discovery to development to clinical trials, and eventually to medication use on the population level which includes examining drug prescribing, access, and affordability. This new building will facilitate a new model for commercializing basic findings and innovative therapies with international leaders in the pharmaceutical and healthcare industry. The facility will provide new opportunities for innovation in drug discovery, pharmaceutical product development, and personalized medicine; provide state-of-the-art space for contemporary biomedical research, which requires intense collaborations across different campus disciplines with investigators having unique and specialized skills; develop a transformative center of research excellence housed in cutting-edge core; drive growth as a major economic engine for the State of Illinois.

APPENDIX III ACADEMIC LIBRARIES

- > Library Upgrades
- > Library Learning Student Success Center

ACADEMIC LIBRARIES

LIBRARY UPGRADES - \$109,050,000



Requested Funds: State \$109.05M Urbana-Champaign Main Library \$54.05M Chicago Daley Library \$55M Statewide Participation from U of I

- Account for over 21% of loans
- Provide over 50% of unique titles
- Over 30% of library record counts

Urbana-Champaign:

The High Density Storage Addition will be the first step in a multi-phased project to reconstruct the Main and Undergraduate Libraries. This addition to be located on the west end of the existing 6th stack will be primarily a large climate controlled vault capable of storing 1.5M volumes in an 11,000 square foot footprint. The total area of the High Density Storage Addition with the associated mechanical room is approximately 23,000 square foot. As part of this project, a new utility tunnel will be constructed to connect the existing Main Library Power Plant to the West Sixth Street steam tunnel and the new High Density Storage Addition. Also part of this project will be the construction of a new Lecture Hall 66, a building addition to the southwest side of the Main Library.

Chicago:

An addition to the Richard J. Daley Library will supplement student academic life through the inclusion of a new information commons, an auditorium, a large cafe, a winter garden and a temporary exhibit space. A central atrium will allow natural light deep into the building and provide a visual connection to the upper floors. A new 200-seat auditorium will provide a public meeting venue to offer programs, lectures, performances, readings, and other events related to library and campus interests. To promote 24/7 campus life, a larger café with food prep areas and seating will be central to the ground floor. To create spaces that promote research, learning, and collaboration, the third floor will include a double height reading room, large and small group meeting spaces.

ACADEMIC LIBRARIES

LIBRARY LEARNING STUDENT SUCCESS CENTER — \$35,000,000 — SPRINGFIELD



Requested Funds: State \$35M

Replaces existing library and provides various spaces for students along with student and teaching support units

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