

# RESEARCH AND GRADUATE EDUCATION



BUILDING EXCELLENCE THROUGH COMMITMENT

PRESENTED TO STRATEGIC PLANNING STEERING COMMITTEE  
BY JOHN A. KOROPCHAK  
JANUARY 24, 2011

## **Outline of Presentation**

### **Research and Graduate Education Strategic Realignment Retreat January 24, 2011**

*Circulate Criterion 4 in advance.*

#### **1) LEAD in RESEARCH, SCHOLARLY, and CREATIVE ACTIVITIES**

##### **Handouts:**

- a. Summary of S@150 Response to research commitment
- b. Charts on Total R&D Expenditures, and Grant Awards
- c. Undergrad Research Awards
- d. Space Report
- e. SWOT on Research

#### **2) OFFER PROGRESSIVE GRADUATE EDUCATION**

##### **Handouts:**

- a. Summary of S@150 Response to grad ed. commitment
- b. Chart of Grad Enrollment History
- c. SWOT on Graduate Education

#### **3) SEEK and CELEBRATE FACULTY EXCELLENCE**

##### **Handouts:**

- a. Summary of S@150 Response to faculty commitment
- b. Report of Strategic Faculty Hiring Initiative

#### **4) RANKINGS of RESEARCH UNIVERSITIES**

##### **Handouts:**

- a. The Center Definitions, Measures
- b. Chart with Ranking and Total R&D Expenditures
- c. Peer Comparison Table
- d. Ranking of Illinois 'Big 5'

# I. Lead in Research, Scholarly, and Creative Activities

## Progress

**NOTE:** Figures include both the Carbondale and School of Medicine campuses.

**Target: Increase SIUC's R&D expenditures 11%/year; federal by 13%/year.**

- At SIUC, *total research and development expenditures* increased from \$53M in 2003 to \$69.9M in 2010; an increase of 32% [see graph]; ~4%/yr.
- *Federal research and development expenditures* increased from \$12M in 2003 to \$22.2M in 2010, an 85% increase (~10%/yr).
- The % of our total research expenditures from federal sources rose from 23% in 2003 to 32% in 2010.
- Growth rates comparable to national growth rates
- External awards increased by 20% between 2003 (\$64.9M) and 2010 (\$78.4M) [see graph].
- State awards increased by only 9% from 2003 (\$24.8M) to 2010 (\$27M).
- Federal awards increased by 44% from 2003 (\$22.1M) to 2010 (\$31.8M), including:
  - 129% increase in NIH awards (\$6M to \$13.7M)
  - 30% increase in NSF awards (\$5.3M to \$6.8M)
  - 370% increase in Department of Energy awards (\$0.7M to \$2.6M), and
  - 580% increase in Department of Defense awards (\$.16M to \$0.96M).

**Target: Obtain new sources of external funding.**

- National Science Foundation: e.g., GK-12, IGERT, Major Research Instrumentation (~10), Center for Embedded Systems
- Earmark: PSM in Advanced Energy and Fuels Management
- ARRA (stimulus bill) grants (FY10 and FY11)
- McNair Program (U.S. Dept of Education)
- Agreements with Boeing, Buffet Foundation
- Also increased federally negotiated F&A rate every 3 years

**Target: Develop new research centers.**

- Center for Health, Law, and Policy (2003)
- Center for Autism Spectrum Disorders (2003)
- Middle Mississippi Wetland Research Field Station (2003)
- Global Media Research Center (2004)
- Center for Ecology (2005)
- Center for Innovation (2005)
- Center for Integrated Research in Cognitive and Neural Sciences (2005)
- Center for Rural Schools and Communities (2005)
- Center for Delta Studies (2008)
- NSF Center for Embedded Systems (2009)

**Target: Increase intellectual property licensing.** Since 2003:

- Royalties increased 361%.
- Invention disclosures increased 70% (from 17 to 29).
- Patents filed increased 250% (from 6 to 15).
- Licenses and options executions were typically 3-6 per year, with 10 in 2009.
- To date, 11 new companies have been formed using Carbondale IP.
- In 2006, SIUC (including SOMS) ranked in the top ten in “Innovation Pipeline” rankings, that is, the number of patents issued per \$1 million of research expenditures (Association of University Technology Managers, “Mind to Market...” September 2006).

**Target: Incorporate research into undergraduate academics.** REACH has existed since 2002 (initiated as Chancellor’s Undergraduate Research Award in 2000), as have Undergraduate Assistantships (2001), but four others have been added:

- Ronald L. McNair Postbaccalaureate Scholars Program (2003)
- ILSAMP (Illinois Louis Stokes Alliance on Minority Participation) (2004)
- Saluki Research Rookies (2008)
- Undergraduate Research Scholarship Program (2010)
- Goldwater, USA Today, etc. scholarship winners (Picture)

## **Challenges**

**Internal:**

- Insufficient infrastructure (personnel):
  - Departments, Colleges, Centers: dedicated accountants for grants mgt
  - Colleges: Associate Deans for Research and Graduate Education (HLC)
  - Legal Counsel: unfamiliar with needs of research university; need at least part-time counsel to review contracts, IP licensing, agreements, advise on policy, etc.
- Insufficient infrastructure (physical):
  - Too little space [see attached report], and poor quality of space, e.g., labs, vivarium (HLC)
  - Inadequate campus bandwidth
- No grants management software
- Poor, rural location: difficult to partner with industry, lack of venture capital
- Declining tuition income makes it difficult to hire new faculty; e.g., suspension of Strategic Faculty Hiring Initiative
- Loss of accomplished research-active faculty
- Inconsistent support for research at highest levels:
  - Continuing debates on research vs. teaching; limited vision by some faculty
  - Foundation lacks incentive for research-related fund-raising and endowments
  - Inability to develop incentive programs and reward structures (e.g., salary supplement, release time, IDC returns, differential teaching load)
  - Need to better educate BoT on benefits of university’s research agenda



- Increased compliance burden (esp. human subjects and animal care)
- Lack of faculty merit reward structures and even disincentives (e.g., equity)

### **Statewide**

- Negative climate for higher education
  - ALL Illinois Big-5 state universities are declining in national rankings [see chart in rankings section]
- Shrinking budget for SIUC (combined with tuition loss)
- Shrinking budget for state-supported research [e.g., Ag, loss of CFAR]

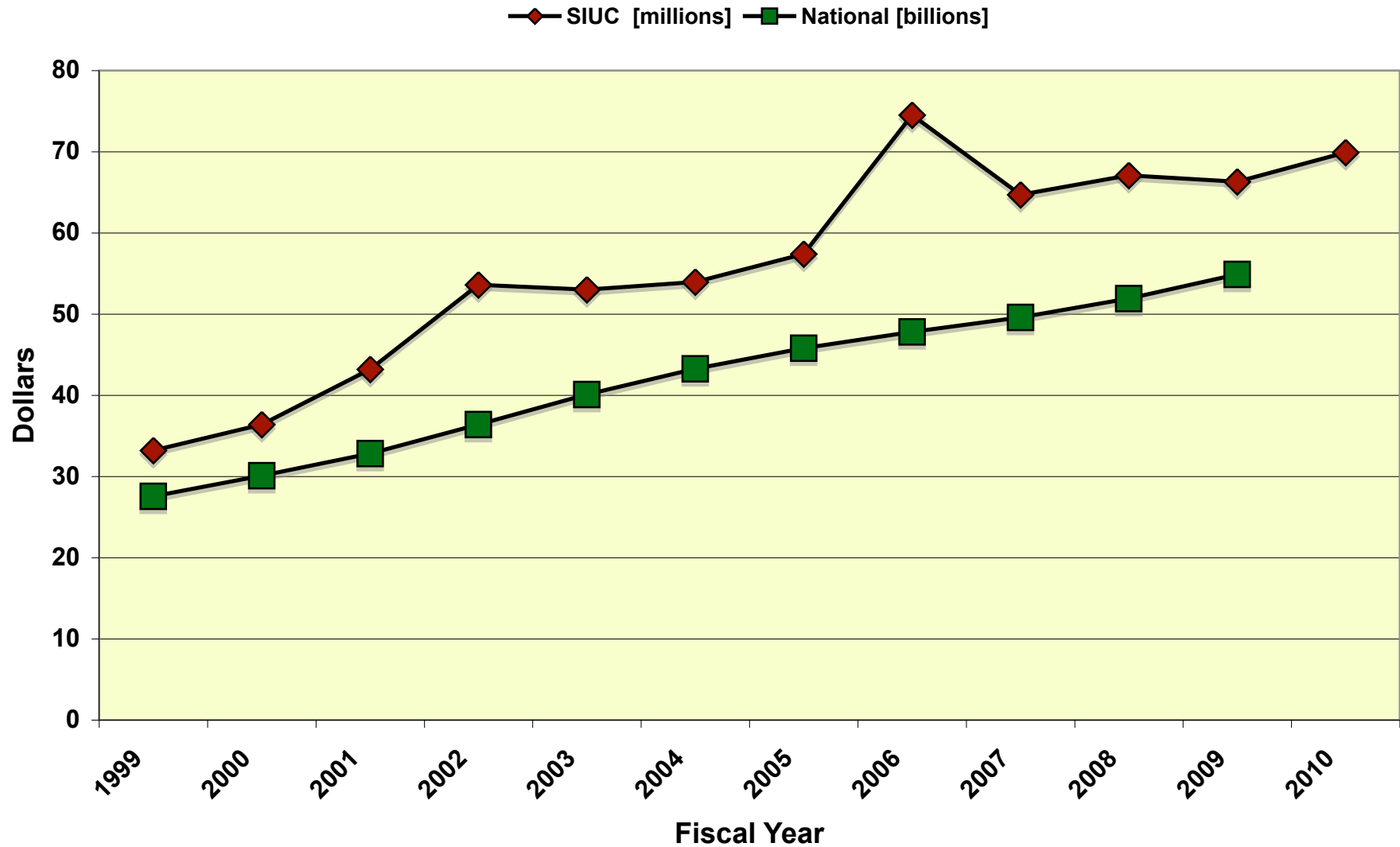
### **National**

- Lack of effective lobbying in Washington for federal funds and earmarks
- End of federal stimulus money
- Possible end of earmarks?
- Uncertain future for funding of federal agencies and areas of research (arts, humanities, social sciences)

### **The Future**

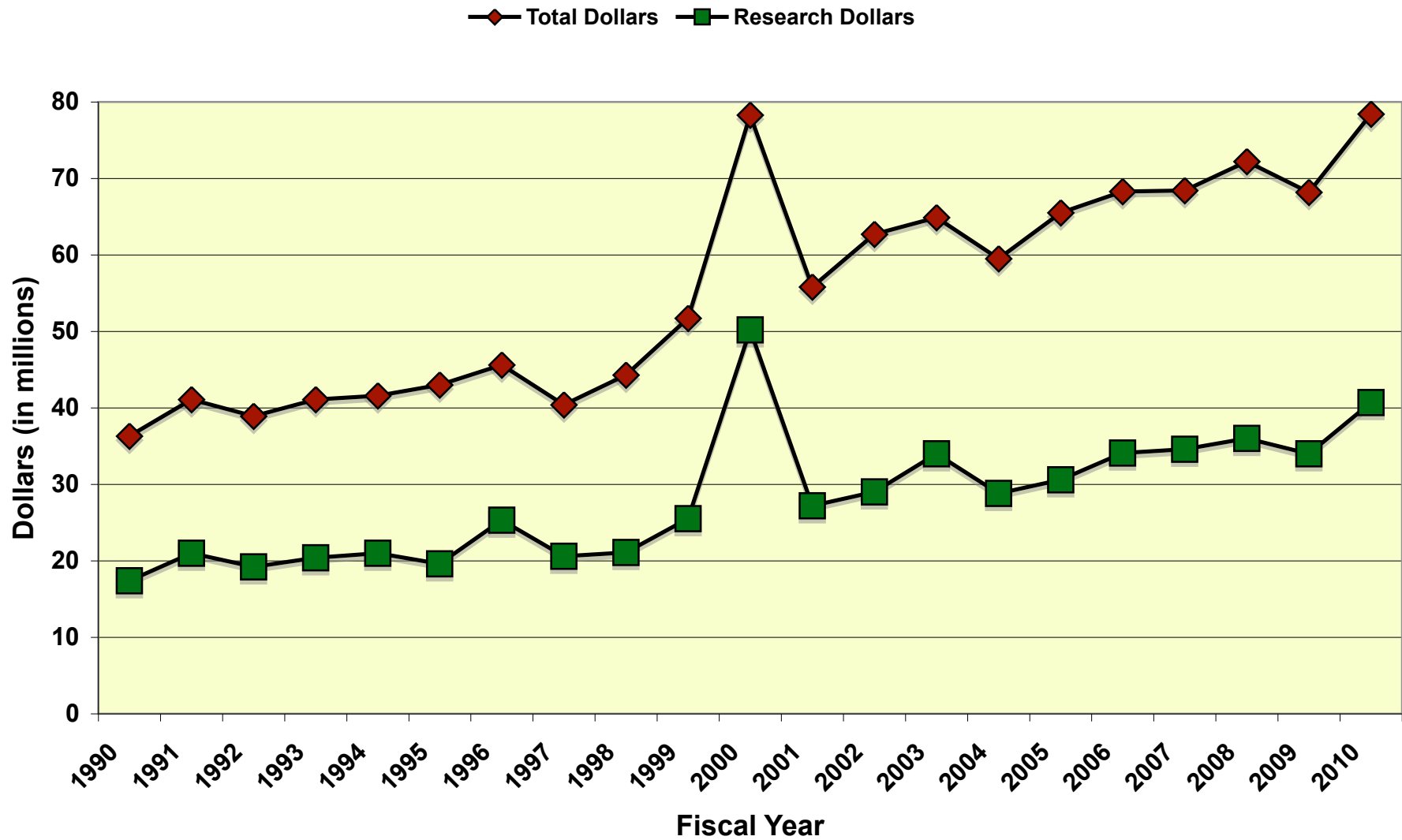
- Stimulate further growth through successful interdisciplinary collaborations, e.g.:
  - CWRL and FIAC with College of Agricultural Sciences
  - Tech transfer and commercialization with OERD and its units; undergrad research
  - New Centers in key areas (Ecology, Neuroscience, Cancer, Embedded Systems, Advanced Energy Institute, etc.)
- Plans for Advanced Energy & Interdisciplinary Research Lab
- Preliminary plans for a systematic laboratory renovation program
- Continue successes for securing major instrumentation through NSF & NIH grants.
- Develop/participate in development of faculty reward structures based on merit and productivity, e.g.:
  - Sponsored Academic Incentive Policy that encourages and rewards success in gaining grant dollars to release state salary support, and
  - Campus-wide policy for effort assignment based on performance.
- Continue to support reinitiating the Strategic Faculty Hiring Initiative, even if in abbreviated form.
- Fundraising for graduate education and research

## Total Research and Development Expenditures: FY 1999 - 2010



SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2008, Tables 1 and 32. FY09: General Accounting

## Total External Grants & Contracts Awarded (Excluding Financial Aid) FY 1990-2010



# Southern Illinois University Carbondale



## Goldwater Scholars



**National  
Champion  
Debate  
Team**

**alt.news  
Emmy  
Awards**

## Morris K. Udall Scholars



**Wind  
Ensemble in  
Carnegie  
Hall**

**USA Today All-USA College Academic Team  
Posters on the Hill**

**150**  
SOUTHERN

# SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

## Faculty Positions History\*

T/T FACULTY FTE BY COLLEGE, CY2003-2010									Net Change	% Change
	2003	2004	2005	2006	2007	2008	2009	2010		
<b>AgSciences</b>	46.65	47.5	44	46	47	40.5	41.75	41.00	-5.7	<b>-12.1%</b>
<b>CASA</b>	66.85	73.85	73.35	78.85	79.51	85.81	86.51	83.51	16.7	<b>24.9%</b>
<b>CoBusiness</b>	36	34	34	33.67	34.5	32	35	34	-2.0	<b>-5.6%</b>
<b>CoEdHS</b>	89.75	94	99.75	92.75	85.9	92	95.5	91.9	2.2	<b>2.4%</b>
<b>CoEngineering</b>	55.5	53.5	54	49.5	50.5	51.5	52.5	49.5	-6.0	<b>-10.8%</b>
<b>CoLA</b>	208	205.8	216.3	232.3	218.8	218.3	210.5	202.3	-5.7	<b>-2.7%</b>
<b>Library</b>	17.75	20.75	22.75	23.5	22.5	26.75	25	25	7.3	<b>40.8%</b>
<b>MCMA</b>	32	32.5	31.5	30.5	32	34	38	39	7.0	<b>21.9%</b>
<b>CoScience</b>	96	93.25	98.79	104.3	104.8	100	103.3	101.3	5.3	<b>5.5%</b>
<b>School of Law</b>	22	22	25	23	25	22	24	26	4.0	<b>18.2%</b>

\*for colleges that participated in FHI



**SOUTHERN ILLINOIS UNIVERSITY CARBONDALE**

**Academic Space Issues for SIUC:  
A Preliminary Assessment**

by

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Cathy Hagler  
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July 17, 2006

## EXECUTIVE SUMMARY

A core goal for the campus *Southern at 150* plan is to significantly increase the research ranking of SIUC. Studies of the research enterprise at SIUC indicate that the “availability of quality research space and necessary research infrastructure is a serious problem” in some areas. In response to Chancellor Wendler’s call for a more in-depth evaluation of research space issues on campus, we collected and evaluated data from the National Science Foundation, the Illinois Board of Higher Education, and the Association of Physical Plant Administrators on space use at SIUC and its peer/comparable institutions. Some of the primary observations of this evaluation are that:

- ✓ SIUC has a significantly lower level of net assignable square feet (nasf) of space than comparable institutions,
- ✓ SIUC has less classroom space than comparable institutions,
- ✓ SIUC has less research space than comparable institutions,
- ✓ SIUC has less office space than comparable institutions, and
- ✓ the overall space use profile at SIUC resembles that of a master’s-level institution, rather than that of a doctoral/research institution.

The campus also has long-range plans for expansion related to *Southern at 150* goals: the ten year Faculty Hiring Initiative (FHI) plan, intended to add dozens of research-active tenure-track faculty, and a plan for a substantial increase in the number of graduate students by 2010.

To address these space needs, **we recommend that SIUC immediately begin planning to create the additional laboratory and office space required to accommodate these additional faculty and graduate students.** This might be accomplished through:

- ✓ a space audit, leading to reallocation of existing space that might provide some minor relief. However based on the analysis above, this approach will not provide a complete solution,
- ✓ the use of external consultants to perform a space needs analysis focused on the areas of concern,
- ✓ construction of an interdisciplinary research facility.

Based on recent trends, the capital RAMP process, the traditional means for addressing space needs at universities in Illinois, is not likely to have a significant impact on these issues during the course of the FHI and the plan for growth in graduate enrollment.

## INTRODUCTION

*Southern at 150* articulates a clear vision for the Southern Illinois University Carbondale (SIUC) campus targeting “commitments and actions that will place us among the top 75 public research universities in the United States by the year 2019, our 150th anniversary, while we continue to provide the foundation for academic, economic, and social progress in Southern Illinois.”

The Vice Chancellor for Research (VCR) has discussed (Attachment 1) the recommendations of the Washington Advisory Group’s (WAG) 2003 report on research at SIUC, that:

in some areas, availability of quality research space and necessary research infrastructure is a serious problem. This situation detracts from the research productivity of existing faculty, and will make recruiting outstanding faculty more difficult. The University should conduct an audit of its current space availability, quality, and use, and of its research support facilities and instrumentation, and then develop a plan for addressing deficiencies as the Institution builds toward the goal of *Southern at 150*.<sup>1</sup>

The VCR described symptoms supporting the WAG concerns, including the fact that many strong departments are unable to compete for Faculty Hiring Initiative (FHI) positions because of lack of identified space to house additional faculty. The VCR report provided recommendations for addressing these issues, including: 1) a formal assessment of space on campus, 2) construction of an interdisciplinary research facility, with at least partial funding through F&A (indirect cost) returns, and 3) a long-term solution of space construction/renovation via the RAMP process. In response, Chancellor Walter Wendler charged the VCR and the Executive Director of Administration to begin the process of assessment of space on the campus.

The present document is intended to provide a preliminary evaluation of space issues on campus through consideration of data available from various state and national databases.

## DATA SOURCES

The goal of our preliminary evaluation was to collect and evaluate data in order to compare the “space profile” and “space-use profile” of the SIUC campus to those profiles at comparable institutions (e.g., doctoral/research-extensive universities), and especially our *Southern at 150* peer and aspirational peer institutions. Data are available from several sources:

- The Association of Physical Plant Administrators (APPA) publishes a Facilities Core Data Survey<sup>2</sup> that includes measures of the gross square footage (gsf) on campuses, as well as specific measures of classroom, laboratory, office, etc. space. Data for some specific institutions are also available.
- The Illinois Board of Higher Education (IBHE) compiles data for Illinois universities<sup>3</sup> that provide space comparisons among these institutions.
- The National Science Foundation (NSF) conducts a semi-annual Survey of Scientific and Engineering Research Facilities<sup>4</sup>. Prior to 2003, this survey included data for instructional and research space. However, NSF data are only available as compilations among institutions of various categories (i.e., information from individual institutions is



confidential but, for example, data for “public doctorate-granting” institutions are available). In 2003 and later surveys, data for instructional space are not included, although the databases *can* be queried to provide information for the individual institutions.

## DATA EVALUATION

### I. APPA and NSF Data

A. Attachment 2 shows data for SIUC peer and aspirational peers compared to SIUC in terms of gsf and net assignable square feet (nasf) of research space, as well as space usage.

With respect to gsf for the other institutions for which data are available:

- 1) SIUC has the lowest gsf, and this value is 22% lower than that of the second lowest institution, Ohio University, while SIUC’s student population is 7% greater, and
- 2) SIUC’s gsf is only 35% of that of the highest institution, University of Missouri, Columbia (UM-C), while SIUC’s enrollment is 95% of UM-C’s.

► **These data indicate that SIUC has less total space (gsf) than comparable institutions despite closely comparable enrollment levels.**

B. Attachment 2 also includes data from the NSF survey for research space. Comparison of these data to the gsf data shows that:

- 1) after Ohio University, SIUC has the second lowest percentage of nasf research space (5.85%),
- 2) after Ohio University, SIUC has the second lowest level of nasf research space, and
- 3) UM-C has the third lowest percent of research space (5.89%), comparable to SIUC, however the actual nasf of research space at UM-C is nearly 300% of that at SIUC.

► **These data show that SIUC has less research space than most comparable institutions and that, based on usage, the percent of total available space assigned to research is also lower than most comparable institutions.**

C. Attachment 3 shows data for the APPA survey reported by space usage, with comparison to institutions of various type, including SIUC’s Carnegie ranking of research/doctoral-extensive. These data show that:

- 1) SIUC’s percentage of classroom space (2.8%) is 37% lower than the average percentage of classroom space for research/doctoral-extensive universities (4.4%),
- 2) the percentage of classroom space increases as the classification of institution moves farther from those of research institutions,
- 3) SIUC’s percentage of laboratory space (9.9%) is 25% lower than that of either research category, and comparable to that of a master’s-level institution (9.8%),
- 4) SIUC’s percentage of office space (12.8%) is 18% lower than that for research/doctoral-extensive universities, and
- 5) nearly 1/3 of all SIUC space is in the “other” category, which is comparable to the level (31.7%) reported for research/doctoral-extensive universities.

► **These data show that SIUC has lower percentages of available space assigned to classroom, office and laboratory use than other research/doctoral extensive universities.**

## **II. NSF Data**

As indicated above, prior to 2003 the NSF survey included data for both research and instructional space, including cumulative data for various institutional categories.

A. Attachment 4 presents data from the 2001 survey that indicate the average nasf for research in science and engineering (S&E) fields:

- 1) for top 100 research institutions, the figure is 1.1M nasf. Note that as the top 100 include both public and private institutions, this group might approximately include the top 75 public research institutions (i.e., our ***Southern at 150*** target group), and
- 2) for the 188 public doctorate-granting institutions the figure is 580,000 nasf. Note that this group includes many more institutions than the top 75 public research institutions.

B. For comparison, Attachment 2 shows that SIUC reported a value of 342,000 nasf for research in science and engineering fields. Comparison with other institutions indicates that:

- 1) SIUC has 69% less nasf for research in science and engineering fields than the average of the top 100 research institutions, and
- 2) SIUC has 41% less nasf for research in science and engineering fields than the average of doctorate granting institutions.

C. It is also useful to compare instructional space (I) to research space (R) in science and engineering fields, by calculating a ratio providing values for I/R. This comparison shows that:

- 1) the I/R for the top 100 research institutions is 0.69,
- 2) the I/R for the doctorate granting institutions is 0.79,
- 3) the I/R for the non-doctorate granting institutions is 2.5.

► **Based on data reported by SIUC for the 2001 survey, the I/R for SIUC is 2.58, placing the space-use profile of SIUC more in line with that of non-doctorate granting institutions, rather than that of the top 100 research and doctorate granting institutions.**

## **III. Capital RAMP Data for Illinois Research Universities**

Attachment 5 shows data for Illinois public universities. Comparisons among these institutions is somewhat less revealing than the national comparisons, because there is less similarity among these institutions and only four of them are research universities: SIUC, NIU, UIC and UIUC. Nonetheless, the following nasf comparisons can be made:

- 1) Total space: SIUC has 63% less nasf than UIUC, 43% less nasf than UIC, and 11% more nasf than NIU.
- 2) Classroom space: SIUC has the smallest amount among the four universities, with 49% of that for UIUC, 76% of that for UIC, and 55% of the level for NIU.

- 3) Instructional laboratory space: SIUC has 29% more than NIU, 38% more than UIC, and 43% less than UIUC.
- 4) Research laboratory space: SIUC has 80% less than UIUC, 60% less than UIC, and 82% more than NIU.
- 5) Office space: SIUC has 65% less than UIUC, 51% less than UIC, and 15% more than NIU.

### OVERALL ASSESSMENT

Collectively, these data provide the following profile for SIUC regarding space:

- 1) SIUC has a significantly lower level of space than comparable institutions,
- 2) SIUC has less classroom space than comparable institutions,
- 3) SIUC has less research space than comparable institutions,
- 4) SIUC has less office space than comparable institutions,
- 5) the overall profile for space usage for SIUC is more like that of a Master's-level institution, than it is like that of a doctoral-research institution.

### RECOMMENDATIONS

SIUC is at a pivotal time in its efforts to achieve the goals of *Southern at 150*. A significant part of those efforts are projected to derive from the additional faculty to be hired via the Faculty Hiring Initiative. SIUC is in the third year of a ten-year plan for the FHI, the balance of which would be projected to hire more than 100 additional faculty. The University currently does not have the laboratory or office space required to house these additional faculty. Moreover, there will be more demand on research facilities because of the goal of increasing graduate enrollment by 1300 students, a 30% increase, by 2010.

Some relief might be achieved by reallocating the functions of some space to transform the campus space-use profile into one more like that of a research institution. A space audit may provide a mechanism by which to implement such reallocation. However, the total space available on the campus, significantly less than peer and comparable institutions, does not suggest this to be anything more than a short-term solution.

In addition, many of the existing facilities are deteriorating (Attachment 1). Quality facilities are required to attract the best faculty who will be best able to assist in achieving the goals of *Southern at 150*.

**As a result, we recommend that SIUC immediately begin planning to create the additional laboratory and office space required to accommodate the additional faculty of the FHI and increasing numbers of graduate students.**

One option for advancing this planning is to employ external consultants to perform a space needs analysis focused on the areas of concern. On the basis of preliminary discussions with candidate consultants, we estimate that the cost of such an analysis would be \$100-200K.

## CITATIONS

1. *A Review of the Research Enterprise at Southern Illinois University Carbondale, including the School of Medicine in Springfield*, Washington Advisory Group, LLC, July 9, 2003.
2. *Facilities Performance Indicators, Facilities Core Data Survey 2003-04*, Association of Physical Plant Administrators.
3. *Capital RAMP FY2007*, Illinois Board of Higher Education.
4. *FY2001 Survey of Scientific and Engineering Research Facilities*, National Science Foundation.

## SIUC VCR/GD's FY11 RESEARCH SWOT

	STRENGTHS	WEAKNESSES
RESEARCH	<ul style="list-style-type: none"> <li>• High-quality young faculty (e.g., high success rate for Strategic Faculty Hiring Initiative hires) complementing a core of productive senior faculty</li> <li>• Higher research culture (vs. 10 yrs ago)</li> <li>• Growing research productivity</li> <li>• Growing undergraduate research agenda/program</li> <li>• Success of undergraduate researchers in national competitions</li> <li>• Improved research infrastructure (instrumentation)</li> <li>• Plans for Advanced Energy &amp; Interdisciplinary Research Lab</li> <li>• Indirect cost rate increasingly competitive</li> <li>• Graduate population that has an increasing % of doctoral students (30% in 2011)</li> <li>• New Chancellor is a great supporter of the research agenda</li> <li>• Research is now a central priority for campus image, marketing, and recruitment efforts</li> <li>• Shifting emphasis and success with federal support for research, versus state sources (e.g., federal research expenditures in FY09 ~3X those in FY99)</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of growth in faculty numbers</li> <li>• Suspension of Strategic Faculty Hiring Initiative</li> <li>• Infrastructure (physical) - insufficient space in sq ft + quality, campus bandwidth (HLC)</li> <li>• Infrastructure (personnel, etc.), e.g., Assoc Dean for Research, grants mgmt software (HLC)</li> <li>• Lack of endowments supporting research</li> <li>• Risk-adverse administrative culture and aversion/inability to set reward structures</li> <li>• Some faculty have limited vision &amp; aversion to high goals</li> <li>• Poor, rural location; difficult to partner with industry, lack of venture capital</li> <li>• Lack of hospital-based medical school</li> <li>• Weak federal research lobby presence</li> <li>• Inadequate research staffing in legal counsel</li> <li>• Undergraduate enrollment declines cause campus-wide budget challenges &amp; limit faculty growth</li> <li>• Campus conversation dominated by issues of enrollment and budget reductions</li> <li>• Oscillating leadership priorities, esp. last ~5 yrs.</li> </ul>
	OPPORTUNITIES	THREATS
RESEARCH	<ul style="list-style-type: none"> <li>• <i>America Competes Act</i> overlaps campus strengths, i.e., energy, materials, etc.</li> <li>• Collaborations between CWRL and FIAC with College of Agricultural Sciences; across campus re tech commercialization, undergraduate research, etc.</li> <li>• New strategies for incentivizing research productivity</li> <li>• New strategies for optimizing use of research resources</li> <li>• Council of Associate Deans for Research and Grad Ed.</li> <li>• New state budget model may include federal research support as one measure</li> <li>• New Centers and changes in key areas (Ecology, Materials, Neuroscience, Cancer, Embedded Systems, etc.)</li> <li>• Newly established Advanced Energy Institute</li> <li>• Plans for Advanced Energy &amp; Interdisciplinary Research Lab</li> <li>• Fundraising for graduate education and research</li> <li>• Preliminary plans for a systematic laboratory renovation program</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of accomplished researchers</li> <li>• Blurring of campus vision</li> <li>• Undercurrent pitting research vs. teaching</li> <li>• Leadership instability</li> <li>• State budget shrinking, including for research</li> <li>• Tenuous state-wide climate for higher education</li> <li>• Federal deficit, loss of stimulus funds, and uncertain future for federal support for research</li> <li>• Increased compliance burden, and slow response</li> <li>• Lack of reward structures and even disincentives (e.g., equity)</li> <li>• Undergraduate enrollment declines cause campus-wide budget challenges</li> </ul>

## II. Offer Progressive Graduate Education

### Progress

The Carnegie Foundation for Education classifies SIUC as a Research University (high research activity; RU/H), a ranking that takes into account not only its direct research activity but also the production of doctoral degrees. The SIUC Graduate School plays an essential role in developing instructional and research programs and overseeing assistantships and fellowships for 70 master's degree and 30 doctoral programs, as well as eight certificate programs.

#### **Target: Provide additional resources for master's programs to double enrollments.**

- Professional Science Master's degree in Advanced Energy and Fuels Management funded through Department of Energy
- 5% increase in graduate enrollment (+199) since 2004, to 4162 in Fall 2010
- 902 master's degrees were awarded in 2003; 961 in 2009 (+6%).
- 13 new master's programs (plus 2 pending)
  - MA in Geology (Fall 2002)
  - MPH in Community Health Education (Fall 2004)
  - MLS in Legal Studies (Fall 2005)
  - MS in Professional & Media Management (Summer 2006)
  - MAT-Masters of Arts in Teaching in Curriculum & Instruction (Summer 2004)
  - M.ARCH-Masters in Architecture (Summer 2007)
  - MSPA-Masters of Science in Physician Assistant Studies (Summer 2007)
  - MS in Biomedical Engineering (Summer 2008)
  - MS in Medical Dosimetry (Spring 2009)
  - MS in Medical Dosimetry –Track 2 (Fall 2009)
  - MS in Math & Science Education (Spring 2009)
  - ME in Civil & Environmental Engineering (Spring 2010)
  - PSM-Professional Science Masters in Advanced Energy & Fuels Management (AEFM) (Spring 2010)
  - MS in Fire Science and Homeland Security Management (PENDING)
  - MS in Art History (PENDING)

#### **Target: Maintain an “appropriate” balance of Ph.D. programs.**

- 125 Ph.D. degrees in 2003; 150 in 2009 (+16.7%)
- 6 new doctoral programs (plus 2 pending)
  - Environmental Resources & Policy (2000)
  - Applied Physics (2005)
  - Electrical & Computer Engineering (2007)
  - Computer Science (2007)
  - Agricultural Sciences (2008)
  - Geology (reactivated 2010)
  - Criminology & Criminal Justice (PENDING)
  - Interdisciplinary Ph.D. in Geosciences (PENDING)

**Target: Increase applications by 100%.**

- Ph.D. applications increased from 517 (Fall 2003) to 1,100 (Fall 2010), an increase of 112%. Master's applications increased from 2,387 (Fall 2003) to 2,829 (Fall 2010), an increase of 18%.
- Graduate Enrollment Working Group meets regularly to develop practices for enhanced enrollment and diversity of graduate students:
  - Directors of Graduate Studies submitted Strategic Plans for respective departments/colleges Spring 2008.
  - Strategic Plans reviewed for best practices.
  - Enhanced recruiting efforts, including local and neighboring states
  - International agreements in China, India, Iraq, Taiwan, etc.
  - SIUC Centers established at three Chinese universities
- Online program through Apply Yourself™

**Target: Assess the strength and reputation of programs.**

- Capacity Analysis
- National Research Council rankings
- Academic Analytics Faculty Scholarly Productivity rankings
- Survey of Earned Doctorates (December 2010): SIUC doctoral students complete degrees almost 2 yrs. earlier: 8.7 yrs. from baccalaureate; all other high research universities, 10.8.

**Target: Communicate the value of graduate education and our students' successes to the region, state, and nation.**

- *Graduate Highlights* publication
- Tactical videos produced for Chemistry, Zoology, and Food & Nutrition graduate programs, and other programs identified for graduate video production
- Newspaper advertisements:
  - In southern Illinois area newspapers
  - In college newspapers of bordering state universities receiving Alternate Tuition Rate
  - In college newspapers of Illinois public institutions
- Workshops presented annually for undergraduate SIUC students

**Target: Fund 75% of graduate and professional students.**

- Graduate students supported by assistantships and fellowships increased (5%) from 1,518 in Fall 2003 to 1,602 in Fall 2004. From Fall 2004 to present the support has had an increase of around 1% each year.

**Target: Double the number and dollar amount of stipends.**

- The stipend support has increased by 26% since Fall 2003.
- Proactive Recruitment of Multicultural Professionals for Tomorrow (PROMPT) Endowment Program (2006)
- Willis Swartz Scholarship established via \$50k endowment (2010)

**Target: Allocate a portion of tuition increases to scholarships.**

- Enhanced travel support for graduate students making presentations at professional meetings

### **Challenges**

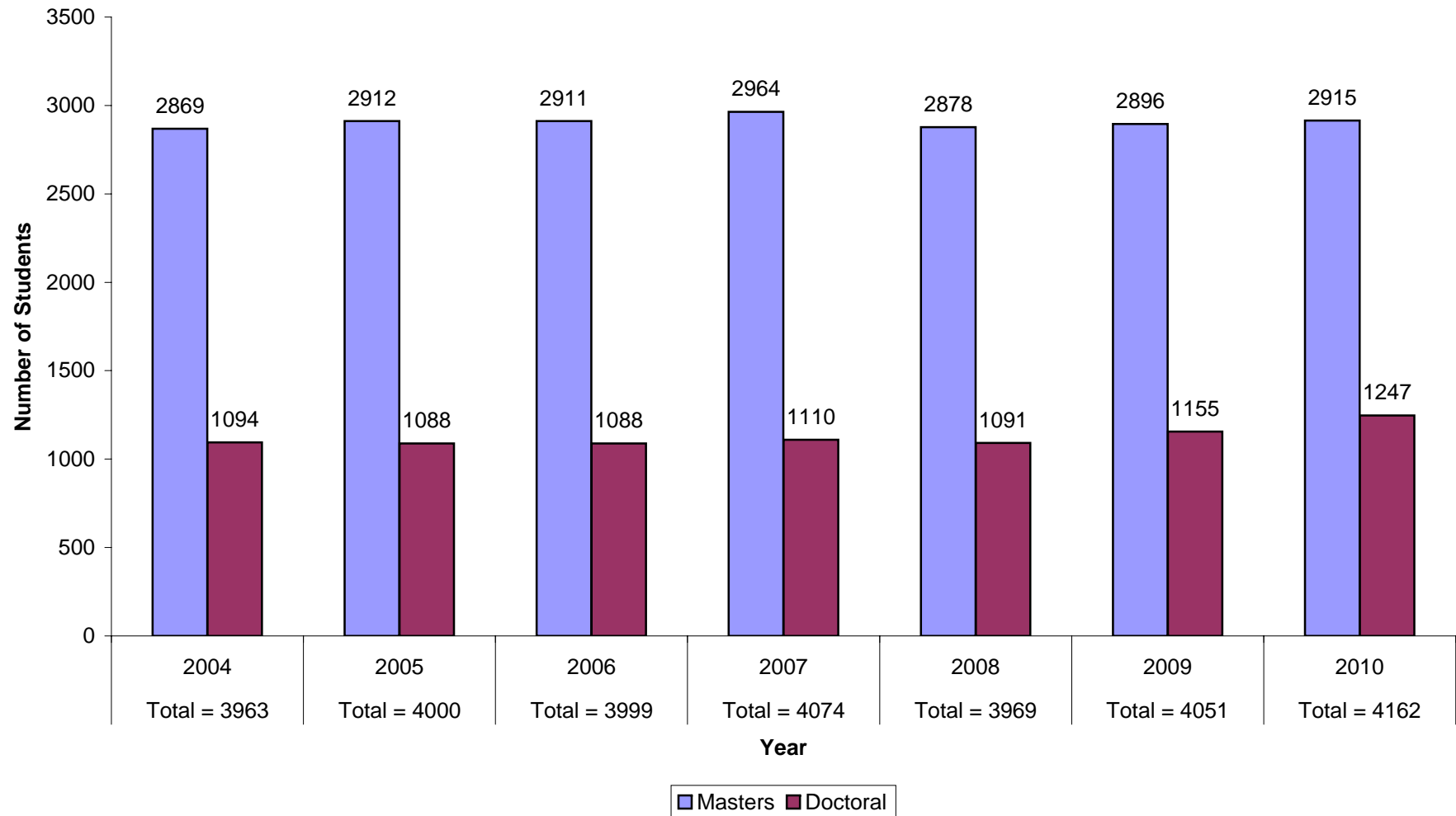
- High fee levels
- Higher grad tuition (1.4x undergraduate rates)
- High out-of-state tuition multiplier (2.5x)
- $1.4x + 2.5x \text{ compounded} = 3.5x!$
- Apparent lack of state priority for graduate education
- Undergraduate enrollment declines cause campus-wide budget challenges

### **The Future**

- Expand system of SIUC Centers at Chinese universities to increase geographical coverage.
- Develop and implement a marketing plan for quality prospective graduate students from India.
- Encourage and facilitate creation of additional on-line programs.
- Initiate a fundraising campaign for graduate education and research.



## Total Graduate Enrollment 2004-2010



SIUC VCR/GD's FY11 GRADUATE EDUCATION SWOT		
	STRENGTHS	WEAKNESSES
GRADUATE EDUCATION	<ul style="list-style-type: none"> <li>Continued growth in graduate enrollment</li> <li>Expanding portfolio of cutting-edge programs</li> <li>Success of graduates in competitions, e.g., MAGS thesis</li> <li>Several nationally-ranked programs</li> <li>NRC ranking of doctoral programs indicating some top quartile programs, and generally high ranking in student support/outcomes, and faculty diversity</li> <li>Graduate Enrollment Working Group with representatives from all colleges: planning, best practices, laying ground work for enhanced success</li> <li>According to NSF Survey of Earned Doctorates, SIUC's avg. time-to-degree is about 1 year shorter than that for comparable institutions</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Modest growth in graduate enrollment</li> <li>Quality of some printed recruitment documents/some websites</li> <li>Mixed acceptance for grad issues in colleges</li> <li>Lack of competitive support packages, e.g., fellowships</li> <li>Challenges in gaining approval of on-line programs</li> <li>Risk-averse administrative culture</li> <li>Need for additional staff, especially for graduate recruiting</li> <li>Bureaucratic friction across administrative lines that has sometimes impeded goals</li> </ul>
	OPPORTUNITIES	THREATS
GRADUATE EDUCATION	<ul style="list-style-type: none"> <li>Strong international agreements, e.g., in China and India</li> <li>ApplyYourself™ graduate application implemented</li> <li>Alternate Tuition Rate agreements for neighboring states and selected international partners</li> <li>Improving collaboration across bureaucratic lines</li> <li>On-line programs, e.g. Rehab Admin (RA-Online), MBA</li> <li>Tuition on grants?</li> <li>Fundraising for graduate education and research</li> </ul>	<ul style="list-style-type: none"> <li>High fee levels</li> <li>Higher grad tuition (1.4x undergraduate rates)</li> <li>High out-of-state tuition multiplier (2.5x)</li> <li>1.4x + 2.5x compounded = 3.5x!</li> <li>Apparent lack of state priority for graduate education</li> <li>Undergraduate enrollment declines cause campus-wide budget challenges</li> <li>Budget challenges may affect assistantships</li> </ul>

### III. Seek and Celebrate Faculty Excellence

#### Progress

The University undertook a Strategic Faculty Hiring Initiative, a ten-year, \$10M plan for new faculty positions that were competitively awarded to departments/colleges. The program was conducted in FY02, and 2004-2006, but was put on hiatus in 2007. A 2008 assessment (attached) demonstrated the success of the program. Key findings as of May 2008 were:

- The Strategic Faculty Hiring Initiative resulted in the addition of 64 tenured/tenure track faculty to the campus.
- SFHI faculty significantly increased the scholarly productivity of the campus in grant dollars, publications, and presentations.
- 23% of these faculty won national or campus awards, despite the fact that 2/3 of these faculty had only been on campus for two years.
- 9 (14%) won national awards, enhancing the reputation of the university.
- 7 (11%) won national or campus teaching awards, enhancing the teaching mission of the university.
- 11 (17%) won national or campus research awards, enhancing the scholarly reputation of the campus.
- 2 were recognized for their service activities.

**Target: Faculty should increase and enhance collaborative and cooperative initiatives across disciplines.**

- ORDA established and maintains a number of listservs to encourage collaborative and cooperative initiatives across disciplines:
  - AQECOGROUP-L: Aquatic Ecology discussion list
  - BIOTECH-L: Biotechnology discussion list
  - CIR-CNS-L: Cognitive and Neural Science discussion list
  - COGSCI-L: Cognitive Sciences discussion list
  - CRC-L: Coal and Energy discussion list
  - DELTA-L: Delta Region Studies discussion list
  - ECOGROUP-L: Ecology Research discussion list
  - EVO-L: Evolutionary Biology discussion list
  - HHCN-L: Human Health, Cancer, and Nutrition discussion list
  - NANOTECH-L: Nanotechnology discussion list
  - SIUAFS-L: Fisheries discussion list
  - Entrepreneurship discussion list (to be added)
  - High Performance Computing discussion list (to be added)
- Interdisciplinary Research Seed Grant program through ORDA ([http://www.orda.siuc.edu/internal/interdisc\\_seed.html](http://www.orda.siuc.edu/internal/interdisc_seed.html))
- NSF-funded IGERT in Watershed Science and Policy (<http://www.igert.siuc.edu/>)
- Federal earmark funding for PSM in Advanced Energy & Fuels Management (<http://psmenergy.siuc.edu/>)

- ORDA – grants in multiple colleges (see attached - Multiple College Awards FY03-10.pdf)
- New centers include:
  - Center for Health, Law and Policy, 2003
  - Center for Autism Spectrum Disorders, 2003
  - Middle Mississippi Wetland Research Field Station, 2003
  - Global Media Research Center, 2004
  - Center for Ecology, 2005
  - Center for Innovation, 2005
  - Center for Integrated Research in Cognitive and Neural Sciences, 2005
  - Center for Rural Schools and Communities, 2005
  - Center for Delta Studies, 2008
  - NSF IUCRC for Embedded Systems, 2009
  - Advanced Energy Institute, 2011

**Target: Pursue federal, state, and private support** for the Center for Teaching Excellence.

- The Graduate School received \$200,000 via RAMP to establish the Center for Graduate Teaching Excellence (CGTE) in 2001. The Center:
  - Conducts the pre-fall TA workshop and workshops throughout the year, etc. to improve GA instruction.
  - Supports CESL to conduct special courses for ITAs to improve their language and teaching skills, and
  - Supports pilot programs in Math and Chemistry to enhance retention (success rates) in gatekeeper courses, with substantial results. Based on these efforts, the Math Department is in the process of changing all sections of 107 and 108.

### **Challenges**

- Suspension of the Strategic Faculty Hiring Initiative in 2007
- Loss of high-quality faculty to other universities

### **The Future**

- Develop/participate in development of faculty reward structures based on merit and productivity, e.g.:
  - Sponsored Academic Incentive Policy that encourages and rewards success in gaining grant dollars to release state salary support, and
  - Campus-wide policy for effort assignment based on performance.
- Continue to support reinitiating the Strategic Faculty Hiring Initiative, even if in abbreviated form
- Continue to assist recruitment of high-quality faculty via support of strong hiring packages
- Continue to assist retention efforts for high-performing faculty members

# Long Range Planning for Faculty Hiring at SIUC in the 2000s: A Synopsis and Preliminary Assessment 5/21/08

## I. Introduction

Faculty excellence is key to SIUC achieving the overall excellence to which the University aspires as articulated in ***Southern at 150: Building Excellence Through Commitment*** and other related instruments. Enhanced faculty excellence will help to advance the reputation of the University, improve the quality of the educational experience provided to undergraduate and graduate students, attract new resources to the campus and the surrounding communities, and overall help the University to better serve the citizens of Illinois.

In FY02, the campus initiated the first of several steps intended to increase the number of high-quality, tenure/tenure-track faculty. The *Strategic Faculty Hiring Initiative* (SFHI) invested \$2M in new tuition funds to create twenty-eight new positions to be filled beginning in FY04. The goals and priorities of this program were to: make good programs better, leverage existing strengths, posture success in disciplinary/interdisciplinary areas showing great potential for growth, enhance core doctoral programs lacking critical mass, and address concerns about core programs raised in the program review process.

Subsequent studies by external advisors (the Washington Advisory Group; the ad hoc Arts, Humanities, and Social Sciences group) lauded the SFHI but indicated that significant additional growth in faculty positions was required to achieve the University's goals. In response, a ten-year, \$1M/year *Faculty Hiring Initiative* (FHI) plan was developed and implemented for FY05-07, but was put on hiatus in FY08 due to budget challenges. The priorities of the FHI were aligned with those of ***Southern at 150***.

As the campus plans to resume the FHI, the following data summarize the accomplishments of the faculty hired through the SFHI and FHI.

## II. Overall Indicators for SFHI and FHI Faculty

- 74 positions approved; 64 hires currently at SIUC
- 34.5% of the hires arrived in FY04; 65.5% arrived in FY06, or later.
- These hires attracted an additional \$8.1M in external grant funding.
- These hires generated an additional 250 peer-reviewed journal articles, 8 books, 45 book chapters, 67 productions and 35 exhibitions.
- These hires made an additional 570 international/national and 80 regional/state presentations.
- These hires generated 10+ patents and 6 patent applications.

### III. Quality Indicators for SFHI and FHI Faculty

- **Faculty Awards – National**
  - National Science Foundation CAREER Teacher-Scholar Awards
    - Ling Zang (2007), Chemistry
    - Gary Kinsel (1999), Chemistry
    - Kay Nelson (2000), Management
    - Mark Byrd (2006), Physics
  - Other
    - American Agricultural Economic Association Award for Professional Excellence: Lyubov Kurkalova (2006), Agribusiness Economics
    - Pushcart Prize (1997, 2004, 2008): Pinckney Benedict, English
    - Fellow, Charles S. Peirce Society (2005): Douglas Anderson, Philosophy
    - Jack D. Pressman-Burroughs Wellcome Fund Career Development Award, American Association for the History of Medicine (2007): Mariola Espinosa, History
    - Counselor Educator of the Year, (National – IAAOC): Shane Koch (2005), Rehabilitation Institute
- **Teaching Awards - Campus**
  - Undergraduate Teacher of the Year (Dept.)
    - Xiaoxin Wang (2007), Finance
    - James Nelson (2006, 2007), Management
    - Ania Rose (2007), Accountancy
  - Graduate Teacher of the Year (Dept.)
    - Ania Rose (2007), Accountancy
  - Outstanding Teacher Award (Dept.)
    - Ning Weng (2006), Electrical & Computer Engineering
    - Gary Kinsel (2007), Chemistry
  - Dean Thomas Jefferson Outstanding Teacher Award (College)
    - Tomasz Wiltowski (2006), Mechanical Engineering
- **Scholar Awards - Campus**
  - Dean Kent Tempelmeyer Outstanding Researcher Award (College)
    - Tomasz Wiltowski (2005), Mechanical Engineering
  - Excellence Through Commitment Outstanding Scholar Award (College)
    - Tomasz Wiltowski (2006), Mechanical Engineering
    - John Downing (2008), Radio TV
- **Service Recognition**
  - New Orleans Rebuilding After Hurricane Katrina: Michael Brazley (2006): Students and professors planning efforts for New Orleans' Ninth Ward; helped build an academic partnership between SIUC and Tulane University.

- American Society of Mechanical Engineers Pressure Vessel and Piping Division Outstanding Service Award: Yong Kwon, Mechanical Engineering

#### **IV. Analysis**

- The Strategic Faculty Hiring and Faculty Hiring Initiatives have resulted in the addition of 64 additional tenured/tenure track faculty on the campus.
- These faculty have significantly increased the scholarly productivity of the campus in grant dollars, publications and presentations.
- 23% of these faculty have already won national or campus awards, despite the fact that 2/3 of these faculty have only been on campus for two years.
- 9 of these faculty (14%) have won national awards, enhancing the reputation of the university.
- 7 of these faculty (11%) have won national or campus teaching awards, enhancing the teaching mission of the University.
- 11 of these faculty (17%) have won national or campus research awards, enhancing the scholarly reputation of the campus.
- 2 faculty have been recognized for their service activities.

**V. Conclusions.** The SFHI and FHI have already successfully enhanced the research, teaching and service missions of the University. Completion of the planned ten-year FHI plan is sure to lead to continuation of this enhancement.


**Faculty Hiring Initiative  
Research and Scholarly Activities  
FHI Start Date - February 2008**

PUBLICATIONS															
	Hires	Resign	Net FHI	Total Months	Per AY	Journal Articles		Books/ Monographs		Chapters		Productions		Exhibitions	
						Total	Per FHI	Total	Per FHI	Total	Per FHI	Total	Per FHI	Total	Per FHI
AGRICULTURAL SCI	8	3	5	128.5	14.3	15	1.1	0	0.0	2	0.1	0	0.0	0	0.0
APPLIED SCI & ARTS	5	0	5	76.5	8.5	6	0.7	0	0.0	1	0.1	0	0.0	1	0.1
BUSINESS & ADMIN	5	1	4	119	13.2	9	0.7	0	0.0	0	0.0	0	0.0	0	0.0
EDUC & HUMAN SERV	4	2	2	80	8.9	13	1.5	1	0.1	5	0.6	1	0.1	0	0.0
ENGINEERING	7	2	5	145	16.1	30	1.9	0	0.0	2	0.1	0	0.0	0	0.0
LIBERAL ARTS	21	1	20	445.5	49.5	50	1.0	4	0.1	18	0.4	65	1.3	34	0.7
LIBRARY AFFAIRS	2	0	2	34.5	3.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MASS COMM & MEDIA	3	0	3	40.5	4.5	7	1.6	2	0.4	6	1.3	1	0.2	0	0.0
SCIENCE	19	1	18	477.5	53.1	121	2.3	1	0.0	11	0.2	0	0.0	0	0.0
<b>TOTAL</b>	<b>74</b>	<b>10</b>	<b>64</b>	<b>1547</b>	<b>171.9</b>	<b>251</b>	<b>1.5</b>	<b>8</b>	<b>0.0</b>	<b>45</b>	<b>0.3</b>	<b>67</b>	<b>0.4</b>	<b>35</b>	<b>0.2</b>
PRESENTATIONS												GRANTS & CONTRACTS			
	Hires	Resign	Net FHI	Total Months	Per AY	International/ National		Regional/State		SIUC		Awards (PI)	Total Level of ALL Grant \$	Per # FHI	
						Total	Per FHI	Total	Per FHI	Total	Per FHI				
AGRICULTURAL SCI	8	3	5	128.5	14.3	31	2.2	11	0.8	8	0.6	10	\$247,890	\$30,986	
APPLIED SCI & ARTS	5	0	5	76.5	8.5	31	3.6	1	0.1	2	0.2	0	\$0	\$0	
BUSINESS & ADMIN	5	1	4	119	13.2	14	1.1	1	0.1	0	0.0	0	\$0	\$0	
EDUC & HUMAN SERV	4	2	2	80	8.9	47	5.3	21	2.4	13	1.5	9	\$516,779	\$129,195	
ENGINEERING	7	2	5	145	16.1	52	3.2	6	0.4	3	0.2	14	\$3,637,704	\$519,672	
LIBERAL ARTS	21	1	20	445.5	49.5	126	2.5	13	0.3	9	0.2	3	\$237,824	\$11,325	
LIBRARY AFFAIRS	2	0	2	34.5	3.8	2	0.5	0	0.0	0	0.0	0	\$0	\$0	
MASS COMM & MEDIA	3	0	3	40.5	4.5	22	4.9	0	0.0	0	0.0	1	\$72,663	\$24,221	
SCIENCE	19	1	18	477.5	53.1	245	4.6	27	0.5	10	0.2	49	\$3,432,553	\$180,661	
<b>TOTAL</b>	<b>74</b>	<b>10</b>	<b>64</b>	<b>1547</b>	<b>171.9</b>	<b>570</b>	<b>3.3</b>	<b>80</b>	<b>0.5</b>	<b>45</b>	<b>0.3</b>	<b>86</b>	<b>\$8,145,413</b>	<b>\$110,073</b>	



## What does SIUC use to assess the University's research performance?

SIUC uses primarily two organizations as sources for indications of the University's research performance: the National Science Foundation (NSF), and The Center for Measuring University Performance.

 <p><b>Academic R&amp;D Expenditures: FY 2008</b> Statistical Tables NSF 10-311, 1 April 2010</p> <p>Randa Bittl Project Officer Research and Development Statistics Program (703) 292-7766</p> <p><b>General Notes</b></p> <p>The data presented in this report were compiled from the National Science Foundation (NSF) FY 2008 Survey of Research and Development Expenditures at Universities and Colleges (SR). More recently conducted the survey under contract to NSF.</p> <p>The survey is conducted annually, and its reference period is the fiscal year of the survey institution. It includes separately budgeted R&amp;D expenditures in science and engineering (S&amp;E) fields reported by universities and colleges. Other non-S&amp;E expenditures included in this report are for S&amp;E-related activities only. The S&amp;E expenditures are reported separately and are not included in overall expenditures totals.</p> <p>Times used in institutional accounting procedures, not reported in the report, are defined below:</p> <ul style="list-style-type: none"> <li><b>Separately budgeted R&amp;D expenditures:</b> All funds expended for activities specifically organized to produce research outcomes. These activities are either commissioned by an agency external to the institution or are separately budgeted by an organizational unit within the institution.</li> <li><b>Expenditures:</b> Funds actually spent by an institution during its fiscal year.</li> <li><b>Separately budgeted R&amp;D expenditures purchased from external funds:</b> All research expenditures purchased under an external contract or grant.</li> <li><b>Indirectly funded research and development centers (FFRDCs):</b> R&amp;D performing organizations that report no organizational structure but are funded and controlled by one or more federal, state, or government-owned contractors or contractors in which degree of ownership/management control and ownership vary. FFRDCs are formed to achieve particular federal R&amp;D objectives that cannot be met as effectively by existing organizations.</li> <li><b>Imputation and imputed data:</b> The imputation process by which NSF develops estimates of data when institutions do not provide information upon request. Estimates are based primarily on the data from the previous year. When data for the current year are not available, estimates are derived from data of independent institutions that have similar characteristics, including those from the previous year. If a substantial control (public or private) is in this publication, the letter "I" is used to identify imputed data. The letter "C" is used when institutional imputation is indicated that their data were estimated.</li> </ul> <p>Data presented in this report were compiled from the most recently completed survey cycle. Diverse data have been reviewed for consistency with current year responses and, where necessary, revised the information with institutional input. Institutions receive data from previous years when important changes occur in reporting practice and programs.</p>	 <p><i>The Top American Research Universities</i></p> <p>2009 Annual Report</p> <p>The Center for Measuring University Performance</p> <p>Elizabeth D. Caplan John V. Lombardi Craig W. Bailey David D. Craig</p>
NSF	THE CENTER FOR MEASURING UNIVERSITY PERFORMANCE
<p>Latest version: National Science Foundation, Division of Science Resources Statistics. 2010. <b>Academic Research and Development Expenditures: Fiscal Year 2008.</b> Detailed Statistical Tables NSF 10-311. Arlington, VA. Available at <a href="http://www.nsf.gov/statistics/nsf10311/">http://www.nsf.gov/statistics/nsf10311/</a>.</p>	<p>Latest version: <b>The Top American Research Universities: 2009 Annual Report*</b> The Center for Measuring University Performance at Arizona State University</p>
Total R&D Expenditures	Total R&D Expenditures (2007)
Federal R&D Expenditures	Federal R&D Expenditures (2007)
	Endowment Assets (2008)
	Annual Giving (2008)
	National Academy Members (2008)
	Faculty Awards (2008)
	Doctorates Awarded (2008)
	Postdoctoral Appointees (2007)
	National Merit Scholars (2008)

\*The Center's data reflect the work of about two years past.

## Who reports SIUC's R&D data?

When describing R&D levels, there are two (2) methods of reporting, and the data are **not interchangeable, nor** are the terms **synonymous**.

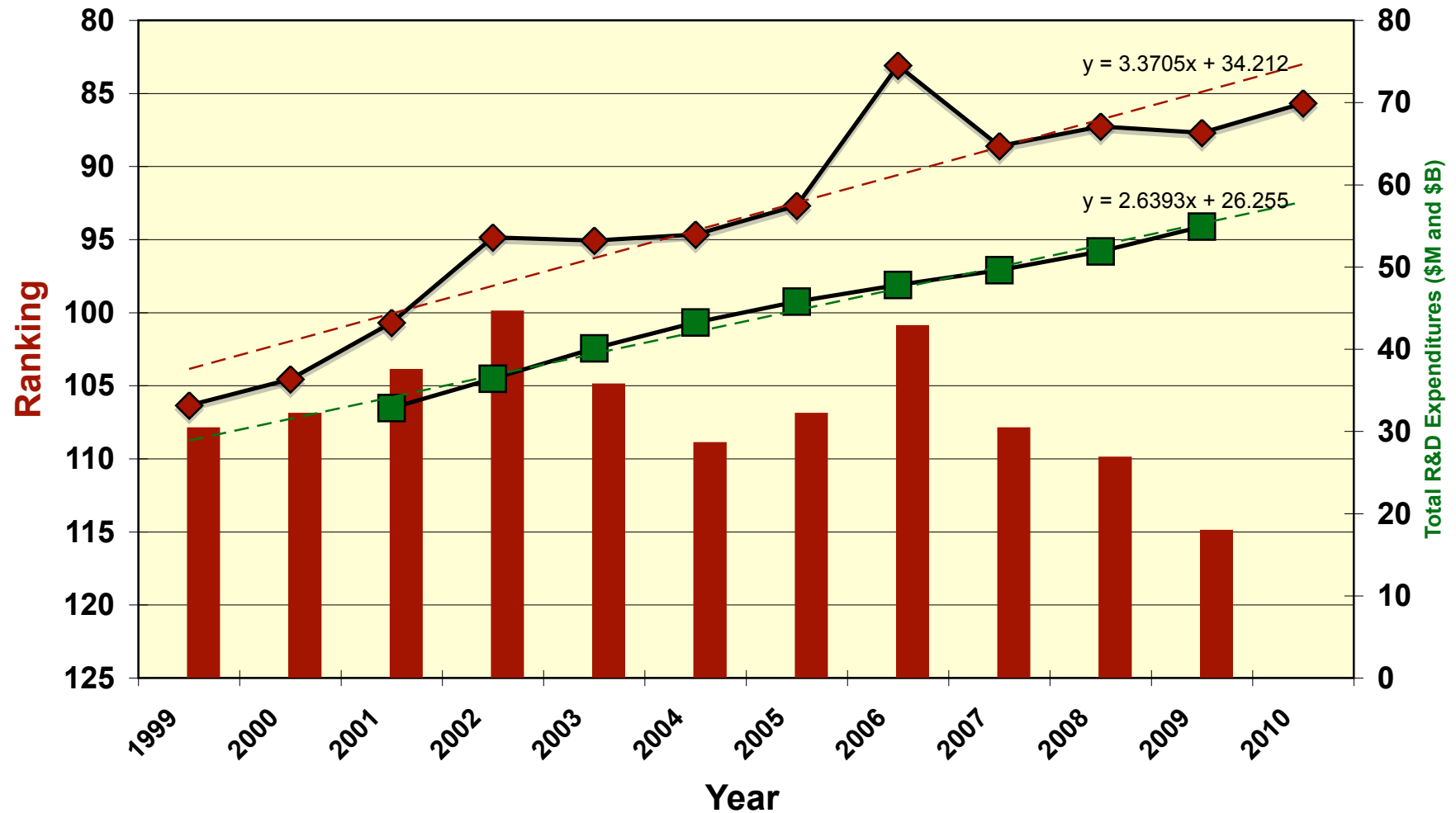
RESEARCH FUNDING (AWARDS)	RESEARCH EXPENDITURES
<b>ORDA</b> collects and reports the data for our research awards, including SOM.	<b>General Accounting</b> reports the research expenditures to agencies such as NSF.
<b>Research awards</b> can be defined as the grants and contract dollars that are awarded to the University, or to someone at the University. There are lags between time when money comes in and when it is spent or expended. <b>"Awards often reflect multi-year commitments."</b> (The Center)	<b>Expenditures.</b> "Funds actually spent by an institution during its fiscal year." (NSF) "Expenditures capture the actual work done on projects <b>during a given year.</b> " (The Center)
"Awards also include contracts, cooperative agreements, and dollars that subsequently flow to other universities under subcontracts." (The Center)	"Universities, both private and public, in addition to the federal expenditures, report expenditures from non-federal sources, including corporations, state governments, and foundation or for-profit research enterprises." (The Center)
"Awards may help to demonstrate growing success in competing for greater amounts of research funding." (The Center)	"As a comparative measure of current university performance, the expenditure data are more reliable." (The Center)
All federal figures include flowthrough funding (federal funds awarded via nonfederal subcontracting agencies, such as state or local agencies, industry, or nonprofit organizations). Federal flowthrough dollars are examples of where the original source is federal funds, but our portion has been subcontracted to us via another source.	"Universities, both public and private, in addition to the federal expenditures, report expenditures from non-federal sources, including corporations, state governments, and foundation or for-profit research enterprises. These expenditures, more broadly defined than the federal number, include a variety of specially designated state funds that are allocated to institutions within the state for agriculture or other research purposes. Such funding may not be nationally competitive. Nonetheless, these expenditures, combined with the federal expenditures, reflect total research activity

	and provide a useful indicator of research performance, even if the national peer review process does not referee all of the projects included in this number.” (The Center)
	“Most of the non-federal portion of this total research, especially when funded by foundations, requires institutional subsidies as well. Thus, many observers recognize total research expenditures as another useful indicator of research competitiveness.” (The Center)
	“The federal and total research expenditures capture most of this activity, and together these two serve as useful indicators of competitive research success.” (The Center)

Sources: The Center for Measuring University Performance, 2001, pp. 22-23; National Science Foundation, Division of Science Resources Statistics. 2010. Academic Research and Development Expenditures: Fiscal Year 2008. Detailed Statistical Tables NSF 10-311. Arlington, VA. Available at <http://www.nsf.gov/statistics/nsf10311/>

## SIUC Ranking Among Publics: Total R&D

Source: National Science Foundation, Academic Research and Development Expenditures



**PEER COMPARISON DATA**  
**Top 200 Institutions**

**TABLE 1a**

**Total R&D Expenditures in \$M (and Rank among Public Research Universities by NSF)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn*	80.5 (74)	92.6 (72)	106.3 (71)	108.8 (75)	124.1 (72)	125.7 (73)	132.2 (72)	126.5 (78)	140.6 (75)	147.0 (74)	143.7 (78)
Iowa St.	161.3 (36)	175.6 (39)	179.2 (41)	188.7 (43)	199.6 (48)	212.0 (51)	209.5 (54)	222.0 (51)	217.2 (55)	224.4 (56)	224.3 (56)
Kansas St.	85.6 (71)	91.8 (73)	94.0 (76)	106.8 (76)	112.7 (76)	119.3 (76)	123.4 (77)	123.7 (80)	123.9 (81)	137.5 (78)	146.3 (76)
Ohio U. *	21.4 (134)	23.8 (131)	27.1 (127)	36.6 (117)	37.5 (121)	38.7 (125)	43.2 (121)	38.0 (131)	38.7 (136)	38.1 (139)	41.3 (139)
Okla St.*	83.1 (72)	88.3 (74)	90.3 (77)	95.0 (78)	103.1 (81)	103.9 (83)	99.4 (88)	100.3 (90)	101.1 (91)	121.2 (82)	120.4 (85)
TX Tech	58.5 (85)	66.2 (82)	69.9 (87)	82.8 (84)	92.5 (84)	57.6 (107)	56.6 (108)	58.6 (111)	57.9 (115)	57.9 (121)	80.0 (104)
Wash. St.	96.9 (65)	104.8 (64)	107.9 (70)	112.5 (71)	175.2 (54)	171.7 (57)	182.7 (56)	196.4 (56)	210.0 (57)	276.8 (44)	285.6 (47)
W. VA U.	63.4 (82)	66.1 (83)	71.3 (85)	85.0 (82)	104.7 (80)	108.0 (81)	115.4 (81)	122.1 (81)	133.6 (78)	139.8 (76)	139.6 (80)
SIUC	33.2 (108)	36.4 (107)	43.2 (104)	53.6 (100)	53.0 (105)	54.0 (109)	57.4 (107)	74.5 (101)	64.7 (108)	67.1 (110)	66.3 (115)
LSU*	225.8 (26)	251.2 (24)	268.9 (23)	287.4 (26)	314.7 (25)	341.6 (24)	356.8 (23)	343.8 (28)	372.4 (24)	391.2 (26)	401.3 (27)
U. Colorado*	318.6 (14)	353.5 (14)	365.5 (15)	399.8 (15)	436.8 (15)	483.0 (13)	517.1 (14)	512.8 (15)	527.6 (16)	535.6 (17)	648.4 (12)
U. Ky.*	174.0 (32)	202.4 (32)	211.7 (36)	236.3 (36)	272.1 (36)	297.6 (34)	306.7 (34)	324.0 (34)	331.6 (36)	336.7 (36)	373.4 (30)
UM-Columbia	149.0 (44)	158.9 (46)	174.8 (43)	177.0 (49)	205.2 (46)	217.6 (48)	220.7 (51)	215.2 (53)	228.7 (52)	244.6 (53)	245.1 (53)

Based on National Science Foundation (NSF) listing.

\*All campuses

**TABLE 1b**

**Total R&D Expenditures in \$M (and Rank among Public Research Universities by The Center)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn*	80.5 (72)	92.6 (71)	106.3 (68)	108.8 (76)	124.1 (72)	125.7 (73)	132.2 (70)	126.5 (78)	140.6 (73)		
Iowa St.	161.3 (34)	175.6 (37)	179.2 (40)	188.7 (45)	199.6 (49)	212.0 (52)	209.5 (52)	222.0 (50)	217.2 (53)		
Kansas St.	85.6 (69)	91.8 (72)	94.0 (75)	106.8 (77)	112.7 (76)	119.3 (76)	123.4 (75)	123.7 (80)	123.9 (80)		
Ohio U. *	21.4 (142)	23.8 (139)	27.1 (135)	36.6 (126)	37.5 (130)	38.7 (134)	43.2 (129)	38.0 (140)	38.7 (145)		
Okla St.*	83.1 (70)	88.3 (75)	90.3 (79)	95.0 (82)	103.1 (83)	103.9 (85)	99.4 (92)	100.3 (94)	101.1 (93)		
TX Tech	46.2 (100)	53.9 (99)	55.0 (103)	63.2 (103)	69.7 (100)	57.6 (115)	56.6 (115)	58.6 (118)	57.9 (123)		
Wash. St.	96.9 (63)	104.8 (62)	107.9 (71)	138.7 (59)	165.2 (57)	161.9 (63)	182.7 (55)	196.4 (56)	210.0 (56)		
W. VA U.	63.4 (83)	66.1 (85)	71.3 (88)	85.0 (86)	104.7 (82)	108.0 (83)	115.4 (83)	122.1 (81)	133.6 (77)		
SIUC	33.2 (116)	36.4 (114)	43.2 (113)	53.6 (108)	53.0 (113)	54.0 (117)	57.4 (114)	74.5 (107)	64.7 (115)		
LSU*	158.7 (35)	173.4 (38)	185.5 (38)	198.0 (43)	206.7 (44)	224.5 (48)	236.7 (46)	246.1 (45)	260.9 (44)		
U. Colorado*	184.2 (28)	208.0 (28)	201.0 (34)	219.9 (37)	214.0 (41)	236.7 (42)	261.4 (38)	250.3 (42)	259.6 (45)		
U. Ky.*	174.0 (30)	202.4 (29)	211.7 (32)	236.3 (33)	272.1 (32)	297.6 (31)	306.7 (29)	324.0 (30)	331.6 (33)		
UM-Columbia	149.0 (41)	158.9 (42)	174.8 (42)	177.0 (52)	205.2 (46)	217.6 (49)	220.7 (50)	215.2 (53)	228.7 (51)		

Based on "The Center" data that are corrected vs. NSF data to add more institutions.

\*All campuses

<b>TABLE 2</b> <b>Federal R&amp;D Expenditures in \$M (and Rank among Public Research Universities)</b>											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	27.1 (88)	31.5 (83)	40.1 (83)	42.4 (85)	45.4 (90)	49.6 (92)	51.3 (92)	45.5 (100)	54.9 (89)		
Iowa St.	54.2 (58)	60.0 (57)	62.0 (59)	71.4 (62)	82.3 (62)	92.2 (61)	98.0 (59)	104.6 (56)	97.1 (64)		
Kansas St.	28.1 (84)	31.2 (85)	34.0 (88)	44.0 (84)	53.3 (82)	56.1 (85)	58.8 (86)	52.6 (90)	47.7 (101)		
Ohio U.	10.5 (142)	11.7 (143)	12.9 (140)	17.7 (133)	20.4 (132)	20.8 (136)	20.7 (138)	19.6 (145)	18.6 (146)		
Okla St.	23.2 (101)	24.8 (98)	25.6 (101)	31.1 (103)	37.7 (102)	43.3 (100)	36.6 (109)	37.9 (113)	37.0 (118)		
Texas Tech	15.2 (122)	16.1 (122)	17.2 (126)	20.4 (127)	23.2 (128)	23.2 (133)	22.1 (135)	22.3 (138)	22.9 (136)		
Wash. St.	44.6 (65)	48.4 (66)	44.0 (75)	55.6 (69)	63.8 (71)	67.7 (73)	80.2 (68)	81.3 (70)	78.5 (74)		
West Va. U.	26.3 (90)	28.0 (93)	29.4 (95)	49.4 (78)	60.6 (76)	60.8 (82)	62.5 (81)	63.8 (83)	65.7 (81)		
SIUC	7.7 (161)	10.1 (151)	10.9 (153)	10.8 (158)	12.1 (163)	15.6 (154)	17.0 (148)	20.1 (142)	17.7 (155)		
LSU	37.3 (70)	44.5 (69)	65.3 (57)	52.8 (73)	48.7 (87)	55.0 (86)	60.3 (84)	64.3 (82)	79.8 (73)		
UC-Boulder	141.0 (18)	178.8 (15)	172.8 (16)	190.7 (17)	192.8 (22)	211.6 (21)	233.3 (19)	223.7 (20)	223.0 (23)		
U. Ky.	66.2 (47)	73.9 (46)	86.2 (43)	100.4 (42)	120.0 (39)	129.9 (40)	142.8 (39)	151.2 (40)	154.7 (39)		
UM-Columbia	53.9 (60)	65.4 (49)	68.4 (54)	77.7 (59)	84.2 (61)	90.3 (62)	96.0 (61)	101.7 (60)	108.3 (56)		

Based on "The Center" data that are corrected vs. NSF data to add more institutions.

<b>TABLE 3</b> <b>Endowment Assets in \$M (and Rank among Public Research Universities)</b>											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	432 (63)	238 (62)	259 (54)	233 (61)	224 (60)	269 (59)	294 (57)	335 (64)	384 (67)	388 (65)	
Iowa St.	266 (45)	411 (30)	339 (41)	336 (41)	339 (38)	401 (39)	457 (35)	496 (41)	592 (38)	569 (44)	
Kansas St.		188 (76)	185 (72)	172 (73)	168 (74)	206 (71)	251 (67)	295 (70)	346 (70)	346 (69)	
Ohio U.	206 (60)	221 (69)	196 (69)	162 (77)	159 (77)	176 (79)	196 (81)	208 (80)	243 (84)	312 (76)	
Okla St.		167 (81)	168 (74)	153 (79)	149 (82)	169 (82)	320 (48)	382 (53)	469 (51)	617 (36)	
Texas Tech	198 (66)	293 (49)	316 (44)	332 (42)	199 (67)	247 (67)	291 (59)	340 (63)	410 (60)	589 (39)	
Wash. St.	421 (26)	437 (28)	469 (26)	473 (29)	496 (26)	516 (29)	553 (29)	580 (34)	651 (33)	679 (33)	
West Va. U.	255 (49)	284 (54)	274 (51)	272 (53)	275 (48)	304 (51)	328 (46)	381 (54)	437 (57)	430 (58)	
SIUC		47 (148)	46 (146)	43 (150)	45 (150)	58 (148)	43 (177)	72 (145)	85 (150)	79 (157)	
LSU	177 (71)	190 (75)	184 (73)	202 (68)	227 (59)	258 (63)	283 (61)	332 (65)	350 (69)	333 (73)	
UC-Boulder	196 (67)	239 (61)	205 (67)	197 (70)	193 (68)	250 (65)	256 (66)	295 (69)	405 (63)	492 (53)	
U. Ky.	328 (38)	369 (40)	419 (29)	398 (34)	412 (32)	489 (31)	577 (25)	785 (25)	958 (25)	909 (26)	
UM-Columbia	350 (32)	379 (38)	354 (37)	381 (37)	434 (30)	571 (25)	574 (27)	638 (31)	643 (35)	527 (49)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions

**TABLE 4****Annual Giving in \$M (and Rank among Public Research Universities)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	38 (58)	37 (67)	61 (42)	38 (67)	44 (56)	51 (52)	52 (54)	55 (58)	72 (47)	69 (57)	
Iowa St.	49 (44)	130 (14)	52 (47)	61 (47)	47 (50)	54 (48)	49 (56)	55 (57)	70 (48)	77 (54)	
Kansas St.	35 (62)	40 (59)	45 (61)	37 (69)	45 (55)	54 (47)	40 (70)	53 (59)	47 (70)	56 (69)	
Ohio U.		17 (109)	16 (125)	12 (135)	16 (124)	18 (110)	17 (113)	14 (137)	19 (118)	24 (107)	
Okla St.	35 (61)	38 (65)	41 (66)	31 (79)	40 (68)	41 (66)	48 (59)	82 (34)	59 (55)		
Texas Tech	60 (33)	59 (41)	116 (19)	44 (58)	27 (92)	42 (63)	42 (65)	53 (60)	123 (23)	98 (38)	
Wash. St.	41 (51)	46 (54)	40 (71)	40 (65)	45 (54)	41 (67)	46 (61)	51 (62)	60 (52)	74 (55)	
West Va. U.	28 (73)	53 (47)	39 (72)	57 (51)	42 (64)	49 (55)	41 (67)	61 (53)	86 (40)	62 (62)	
SIUC			10 (160)	8 (162)	13 (143)	15 (120)	12 (145)	11 (160)	13 (150)	14 (149)	
LSU	39 (56)	33 (72)	51 (49)	61 (43)	39 (71)		52 (52)	66 (49)	77 (45)	79 (49)	
UC-Boulder	52 (40)	57 (42)	49 (54)	61 (45)	40 (70)	35 (78)	38 (75)	35 (82)	46 (73)	100 (35)	
U. Ky.	53 (39)	48 (52)	55 (45)	61 (46)	55 (43)	59 (43)	67 (39)	66 (48)	55 (59)	59 (65)	
UM-Columbia	40 (54)	39 (63)	44 (62)	90 (26)	65 (34)	71 (36)	88 (30)	90 (31)	89 (37)	103 (34)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions

**TABLE 5****National Academy Members (and Rank among Public Research Universities)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn										2 (77)	
Iowa St.	7 (38)	7 (41)	7 (42)	9 (35)	10 (36)	11 (34)	9 (37)	10 (36)	9 (37)	9 (37)	
Kansas St.											
Ohio U.											
Okla St.	3 (61)	3 (61)	3 (63)	3 (64)	3 (62)	3 (62)	3 (66)	3 (66)	3 (66)	3 (64)	
Texas Tech					1 (83)	1 (88)	1 (87)	1 (91)	1 (92)		
Wash. St.	7 (38)	7 (41)	6 (47)	6 (47)	8 (41)	8 (42)	8 (42)	9 (38)	8 (39)	8 (41)	
West Va. U.								1 (91)	1 (92)		
SIUC											
LSU	1 (76)	1 (83)	1 (82)	2 (70)	1 (83)	1 (88)	1 (87)	1 (91)	1 (92)		
UC-Boulder	25 (13)	24 (16)	24 (17)	26 (16)	24 (20)	28 (19)	30 (17)	28 (19)	26 (20)	28 (17)	
U. Ky.	4 (56)	4 (58)	4 (57)	3 (64)	3 (62)	3 (62)	2 (72)	2 (72)	2 (74)	3 (64)	
UM-Columbia	5 (48)	5 (50)	5 (52)	5 (53)	5 (51)	5 (53)	5 (56)	5 (56)	6 (49)	6 (52)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions

**TABLE 6**  
**Faculty Awards (and Rank among Public Research Universities)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn		3 (104)	3 (107)	1 (175)		3 (107)	5 (70)	4 (87)	2 (127)	3 (105)	
Iowa St.	4 (82)	6 (60)	11 (40)	13 (26)	8 (47)	7 (56)	8 (44)	12 (30)	5 (72)	6 (66)	
Kansas St.		1 (183)	4 (85)	5 (66)	5 (68)	4 (93)	4 (86)	3 (103)	2 (127)	1 (180)	
Ohio U.	4 (82)	3 (104)	4 (85)	6 (56)	1 (175)	2 (132)	1 (171)	6 (65)	0 (294)	7 (55)	
Okla St.		6 (60)	5 (70)	4 (79)	5 (68)	7 (56)	3 (100)	2 (127)	3 (104)	3 (105)	
Texas Tech	5 (65)	4 (87)	3 (107)	5 (66)	3 (95)	4 (93)	2 (125)	2-(127)	4 (86)	6 (66)	
Wash. St.	5 (65)	9 (45)	7 (55)	6 (56)	11 (35)	10 (41)	11 (37)	8 (50)	6 (63)	8 (49)	
West Va. U.	5 (65)	2 (128)	4 (85)			1 (176)	2 (125)	3 (103)	1 (177)	7 (55)	
SIUC	4 (82)	5 (74)	4 (85)		1 (175)	3 (107)	4 (86)	3 (103)	4 (86)	2 (132)	
LSU	9 (45)	10 (43)	10 (43)	7 (50)	7 (53)	11 (35)	8 (44)	6 (65)	6 (63)	4 (89)	
UC-Boulder	28 (9)	15 (25)	17 (24)	26 (5)	19 (14)	18 (22)	19 (18)	15 (24)	17 (21)	12 (31)	
U. Ky.	13 (30)	14 (29)	12 (37)	10 (36)	11(35)	5 (80)	10 (39)	3 (103)	12 (34)	7 (55)	
UM-Columbia	13 (30)	9 (45)	10 (43)	13 (26)	14 (24)	8 (51)	9 (42)	7 (60)	8 (46)	9 (43)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions.

**TABLE 7**  
**Doctorates Awarded (and Rank among Public Research Universities)**

	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	192 (55)	186 (53)	153 (64)	143 (65)	159 (60)	161 (63)	174 (59)	164 (67)	204 (57)	205 (61)	
Iowa St.	300 (31)	238 (44)	232 (45)	239 (38)	238 (38)	239 (43)	246 (44)	281 (40)	296 (42)	308 (43)	
Kansas St.	162 (63)	132 (67)	145 (67)	152 (62)	145 (66)	146 (70)	138 (79)	160 (70)	152 (75)	153 (76)	
Ohio U.	133 (74)	120 (73)	106 (78)	112 (79)	111 (81)	111 (80)	147 (74)	124 (87)	162 (73)	147 (81)	
Okla St.	177 (57)	185 (54)	236 (41)	188 (51)	182 (52)	204 (50)	173 (60)	177 (60)	195 (59)	142 (85)	
Texas Tech	163 (62)	141 (65)	139 (68)	140 (67)	163 (57)	174 (58)	175 (58)	199 (53)	192 (60)	230 (54)	
Wash. St.	170 (58)	118 (75)	149 (65)	161 (56)	126 (72)	167 (61)	180 (57)	170 (63)	175 (67)	189 (68)	
West Va. U.	154 (68)	132 (67)	130 (71)	142 (66)	150 (65)	160 (64)	159 (66)	168 (64)	148 (77)	204 (63)	
SIUC	142 (70)	119 (74)	120 (75)	126 (73)	126 (72)	124 (76)	145 (77)	139 (80)	145 (78)	141 (87)	
LSU	258 (43)	275 (33)	264 (32)	222 (41)	211 (47)	240 (42)	222 (49)	252 (48)	274 (46)	231 (53)	
UC-Boulder	309 (28)	266 (35)	292 (27)	258 (33)	303 (25)	286 (33)	272 (40)	310 (38)	319 (37)	323 (41)	
U. Ky.	232 (47)	249 (40)	219 (49)	216 (44)	208 (48)	233 (46)	276 (37)	256 (46)	292 (45)	308 (43)	
UM-Columbia	277 (38)	256 (38)	278 (29)	252 (36)	274 (30)	251 (40)	274 (39)	277 (41)	293 (43)	326 (39)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions.



**TABLE 8****Postdoctoral Appointees (and Rank among Public Research Universities)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	33 (108)	36 (108)	34 (109)	38 (104)	48 (103)	47 (99)	27 (125)	32 (119)	45 (107)		
Iowa St.	179 (43)	180 (42)	180 (45)	203 (41)	225 (40)	228 (38)	235 (39)	216 (40)	220 (39)		
Kansas St.	88 (69)	100 (68)	122 (61)	133 (56)	138 (59)	119 (67)	83 (81)	116 (67)	87 (83)		
Ohio U.	34 (107)	31 (114)	14 (142)	19 (141)	28 (125)	26 (123)	26 (127)	21 (137)	32 (120)		
Okla. St.	35 (106)	42 (100)	43 (98)	55 (93)	55 (99)	50 (97)	60 (93)	35 (112)	58 (95)		
Texas Tech	88 (69)	80 (78)	67 (79)	60 (90)	53 (97)	55 (93)	56 (95)	63 (91)	104 (77)		
Wash. St.	163 (47)	157 (50)	161 (49)	161 (49)	147 (54)	164 (51)	171 (51)	159 (55)	151 (58)		
West Va. U.	7 (155)	45 (97)	32 (110)	31 (112)	27 (127)	29 (120)	40 (104)	47 (99)	43 (109)		
SIUC	8 (150)	8 (155)	26 (123)	14 (148)	11 (159)	7 (159)	34 (113)	27 (127)	33 (119)		
LSU	72 (79)	88 (74)	84 (71)	86 (79)	132 (61)	186 (45)	195 (46)	174 (50)	148 (59)		
UC-Boulder	274 (21)	744 (5)	678 (5)	680 (7)	703 (7)	711 (7)	651 (9)	650 (11)	485 (18)		
U. Ky.	186 (41)	224 (34)	250 (31)	230 (35)	170 (49)	310 (27)	251 (35)	338 (22)	249 (33)		
UM-Columbia	152 (49)	179 (43)	142 (53)	157 (51)	156 (54)	154 (57)	144 (59)	161 (53)	160 (56)		

Based on "The Center" data that are corrected vs. NSF data to add more institutions.

**TABLE 9****National Merit Scholars (and Rank among Public Research Universities)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Auburn	20 (49)	38 (30)	26 (40)	29 (37)	28 (37)	26 (38)	31 (34)	31 (32)	28 (37)	35 (32)	
Iowa St.	125 (7)	125 (7)	125 (6)	99 (10)	75 (12)	70 (11)	57 (18)	50 (21)	45 (21)	55 (20)	
Kansas St.	22 (46)	14 (58)	13 (59)	9 (66)	22 (46)	14 (54)	9 (63)	9 (69)	8 (64)	11 (57)	
Ohio U.	6 (77)	18 (54)	9 (69)	17 (51)	7 (73)	8 (66)	9 (63)	9 (69)	5 (78)	8 (65)	
Okla. St.	23 (43)	18 (54)	19 (50)	13 (58)	20 (49)	8 (66)	17 (51)	21 (43)	26 (39)	20 (46)	
Texas Tech	13 (64)	19 (50)	22 (46)	16 (54)	17 (53)	11 (61)	12 (59)	16 (52)	11 (57)	14 (53)	
Wash. St.		2 (106)	1 (110)	2 (104)	6 (75)	3 (89)	2 (100)	4 (86)	7 (67)	7 (71)	
West Va. U.	9 (69)	11 (65)	11 (62)	14 (57)	16 (55)	20 (46)	9 (63)	12 (62)	29 (35)	21 (44)	
SIUC			1 (110)			1 (118)					
LSU	39 (28)	34 (33)	41 (26)	44 (23)	39 (29)	40 (24)	43 (24)	45 (25)	43 (23)	37 (29)	
UC-Boulder		11 (65)	6 (78)	3 (93)	3 (92)	4 (80)	5 (81)	10 (67)	7 (67)	4 (82)	
U. Ky.	65 (15)	60 (16)	49 (22)	54 (18)	45 (22)	36 (29)	43 (24)	32 (31)	30 (33)	36 (30)	
UM-Columbia	23 (43)	30 (38)	20 (48)	21 (43)	18 (52)	32 (33)	21 (43)	26 (37)	20 (46)	34 (34)	

Based on "The Center" data that are corrected vs. NSF data to add more institutions.

Sources: Table 1a, National Science Foundation; Table 1b - Table 9, The Center for Measuring University Performance

**Illinois Public Institutions Ranked by Total R&D Expenditures; FY 1999-2008**

Institutional Control: Public Institutions

Academic Institution (survey-specific): All values

Dollar amounts in thousands

Year	Rank	Academic Institution (survey-specific)	Total R&D Expenditures	Rank Inc/Dec	Total R&D Expenditures Inc/Dec	% Inc/Dec
1999	11	U. of Illinois at Urbana-Champaign	\$358,247			
2000	11	U. of Illinois at Urbana-Champaign	\$373,024			
2001	12	U. of Illinois at Urbana-Champaign	\$390,863			
2002	13	U. of Illinois at Urbana-Champaign	\$427,174			
2003	11	U. of Illinois at Urbana-Champaign	\$493,581			
2004	12	U. of Illinois at Urbana-Champaign	\$506,041			
2005	16	U. of Illinois at Urbana-Champaign	\$499,711			
2006	17	U. of Illinois at Urbana-Champaign	\$476,198			
2007	19	U. of Illinois at Urbana-Champaign	\$473,890			
2008	20	U. of Illinois at Urbana-Champaign	\$501,279	-9	\$143,032	41%
1999	32	U. of Illinois at Chicago	\$175,093			
2000	33	U. of Illinois at Chicago	\$195,839			
2001	31	U. of Illinois at Chicago	\$233,098			
2002	32	U. of Illinois at Chicago	\$259,852			
2003	30	U. of Illinois at Chicago	\$291,507			
2004	31	U. of Illinois at Chicago	\$312,768			
2005	30	U. of Illinois at Chicago	\$318,279			
2006	31	U. of Illinois at Chicago	\$332,176			
2007	31	U. of Illinois at Chicago	\$342,421			
2008	37	U. of Illinois at Chicago	\$335,138	-5	\$160,045	91%
1999	107	Southern Illinois U. Carbondale	\$33,169			
2000	106	Southern Illinois U. Carbondale	\$36,354			
2001	105	Southern Illinois U. Carbondale	\$43,207			
2002	100	Southern Illinois U. Carbondale	\$53,604			
2003	105	Southern Illinois U. Carbondale	\$53,018			
2004	109	Southern Illinois U. Carbondale	\$53,953			
2005	107	Southern Illinois U. Carbondale	\$57,434			
2006	101	Southern Illinois U. Carbondale	\$74,520			
2007	108	Southern Illinois U. Carbondale	\$64,703			
2008	110	Southern Illinois U. Carbondale	\$67,094	-3	\$33,925	102%
1999	169	Western Illinois U.	\$10,049			
2000	177	Western Illinois U.	\$8,489			
2001	186	Western Illinois U.	\$7,759			
2002	203	Western Illinois U.	\$7,042			

Year	Rank	Academic Institution (survey-specific)	Total R&D Expenditures	Rank Inc/Dec	Total R&D Expenditures Inc/Dec	% Inc/Dec
2003	292	Western Illinois U.	\$1,350			
2004	302	Western Illinois U.	\$1,404			
2005	313	Western Illinois U.	\$1,190			
2006	313	Western Illinois U.	\$1,154			
2007	305	Western Illinois U.	\$1,485			
2008	311	Western Illinois U.	\$1,597	-142	(\$8,452)	-84%
1999	183	Northern Illinois U.	\$6,455			
2000	186	Northern Illinois U.	\$7,431			
2001	178	Northern Illinois U.	\$9,028			
2002	183	Northern Illinois U.	\$10,366			
2003	186	Northern Illinois U.	\$12,368			
2004	189	Northern Illinois U.	\$11,687			
2005	190	Northern Illinois U.	\$11,239			
2006	176	Northern Illinois U.	\$16,627			
2007	176	Northern Illinois U.	\$16,710			
2008	184	Northern Illinois U.	\$14,948	-1	\$8,493	130%