Environmental Scan

University of Illinois
Office for Planning and Budgeting
7th Edition, September 2015
The purpose of an environmental scan is to support and inform the strategic planning process. A good environmental scan will help an organization understand and respond effectively to changes in their environments.\(^1\)

- This environmental scan provides information on demographics, higher education, economic and budgetary matters, research, technology, and economic development, the political landscape, and the related implications, opportunities, and challenges for the University of Illinois.

- The University of Illinois’ initial environmental scan was developed in March 2005 to set a context for the University’s strategic planning framework. Subsequent editions of the environmental scan have updated source data for many of the charts and graphs and added elements of increasing importance (e.g., information has also been added on the topics of global competitiveness in higher education participation, completion, and attainment, energy, online education, and the impacts of the aging population).

- Because the external environment in which the University of Illinois operates is continually changing, the environmental scan will be updated and refined periodically to reflect the most recent available information on key opportunities and challenges facing the University.

- Feedback on the usefulness of the environmental scan and suggestions for improvement are welcome and encouraged. Please direct any comments or questions to the University Office for Planning and Budgeting (UOPB) via e-mail to envscan@uillinois.edu.

\(^1\) Bryson, John M. Strategic Planning for Public and Nonprofit Organizations. 2004.
Key Highlights: Opportunities

• Creatively addressing the educational, health care, and other needs of an increasingly diverse Illinois population
• Developing a niche within the rapidly developing market for online education both nationally and globally
• Responding to the growing global demand for individuals with training in the sciences and engineering
• Enhancing capacity in energy research and development (both traditional and renewable sources)
• Developing new and enhanced University revenue sources from the growing demand for higher education and R&D activities
• Effectively responding to the increased interest of state and federal policymakers in the public accountability of colleges and universities
Key Highlights: Challenges

- Maintaining and enhancing access to the University for minority, low income, and first-generation students
- Recruiting and retaining high quality faculty and staff given increasing competition and looming retirements
- Ensuring the highest level of academic quality in the face of state and federal funding constraints
- Maintaining the University’s physical environment absent new infusions of state capital funding
- Expanding the University’s R&D capacity given federal funding constraints
- Balancing interest in enhancing higher education’s public accountability with legitimate privacy concerns within the University community (students, faculty, and staff)
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  - Implications for the University of Illinois

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Demographics
University of Illinois Statewide Presence

Additional Facilities

- Regional Medical Colleges
  - Rockford
  - Peoria
  - Urbana-Champaign

- Illinois has 102 Counties
  - U of I Extension serves all 102 Counties
  - Police Training Institute FY 2014 students from 66 Illinois Counties
  - FY 2014 State-wide Programming Course Locations in 31 Illinois Counties
  - Online Instruction accessible from all 102 Illinois Counties
  - Regional Agricultural Stations
  - 4-H Camps

On-Campus Headcount Enrollment by County, Fall 2014
Undergraduate Enrollments by Race/Ethnicity Fall 2014

UIUC, Undergraduate
- White: 50.18%
- Hispanic: 8.61%
- Asian/Pacific Islander*: 16.14%
- Non-Resident Alien: 16.26%
- Other: 3.50%
- Black: 5.32%

UIC, Undergraduate
- White: 35.83%
- Hispanic: 26.38%
- Asian/Pacific Islander*: 22.73%
- Non-Resident Alien: 2.48%
- Other: 4.70%
- Black: 7.88%

UIS, Undergraduate
- White: 65.67%
- Hispanic: 6.16%
- Asian/Pacific Islander*: 3.52%
- Non-Resident Alien: 4.05%
- Other: 6.06%
- Black: 14.55%

Graduate/Professional Enrollments by Race/Ethnicity Fall 2014

UIUC, Grad/Prof
- White: 43.01%
- Hispanic: 3.56%
- Asian/Pacific Islander*: 6.58%
- Non-Resident Alien: 37.78%
- Other: 4.59%

UIC, Grad/Prof
- White: 46.40%
- Hispanic: 9.10%
- Asian/Pacific Islander*: 12.70%
- Non-Resident Alien: 19.39%
- Other: 4.60%

UIS, Grad/Prof
- White: 51.19%
- Hispanic: 3.13%
- Asian/Pacific Islander*: 3.80%
- Non-Resident Alien: 29.42%
- Other: 4.43%
Minority Enrollment Data
Fall 1995 through Fall 2014

UIUC, Undergraduate

UIC, Undergraduate

UIS, Undergraduate
University of Illinois Full-Time Faculty by Race/Ethnicity
Fall 2014 – All Fund Sources

UIUC

White, 70%
Asian, 13%
Hispanic, 5%
Nonresident Alien, 5%
Black, 5%
Other, 2%
N = 2,317

UIC

White, 61%
Asian, 19%
Hispanic, 6%
Nonresident Alien, 6%
Black, 5%
Other, 3%
N = 2,123

UIS

White, 75%
Asian, 10%
Hispanic, 2%
Nonresident Alien, 7%
Black, 4%
Other, 2%
N = 204
University of Illinois Full-Time Faculty by Gender
Fall 2014 – All Fund Sources

UIUC
Female, 36%
Male, 64%
N = 2,317

UIC
Female, 46%
Male, 54%
N = 2,123

UIS
Female, 45%
Male, 55%
N = 204
University of Illinois Full-Time Staff by Gender
Fall 2014 – All Fund Sources

UIUC
Female, 52%
Male, 48%
N = 8,079

UIC
Female, 66%
Male, 34%
N = 7,993

UIS
Female, 57%
Male, 43%
N = 504

UA
Female, 64%
Male, 36%
N = 1,137
University of Illinois SURS Participants, Tenure-System Faculty Age Distribution
Fall 2014

UIUC

UIC

UIS
Health Care Expenditures, % of GDP
2013

Health Care Spending, % of GDP in the U.S.
1975 - 2013

Number of Americans Over 60 by Decade

Health Care Expenditures per Capita, Current PPP
2013

Projected

Source: OECD Health Data Statistics.
Demographics
Implications for the University of Illinois

• As with the rest of the U.S., Illinois’ population will become more diverse and the Hispanic population will grow faster than any other segment.

• The proportion of African-American students at UIC and UIUC grew slightly after a period of decline, while the proportion of Hispanic students has generally grown at all three campuses in recent years. Pressure from University stakeholders to enhance diversity among students, staff, and faculty will continue.

• The over 50 population will grow rapidly. This aging population will put increasing pressure on social services and health care and may view higher education as less of a priority in the future.

• A significant proportion of the University’s tenure/tenure-track faculty are age 55 or over creating the potential for large numbers of retirements in the near future.
Higher Education
Value of Higher Education

Median Income by Educational Attainment, 1964 - 2013
(Males)

- High School
- Bachelor's Premium
International Comparison: Higher Education Attainment
2012

Ages 25-34

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
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<td>Korea</td>
<td>59%</td>
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<td>Japan</td>
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<td>Canada</td>
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Ages 25-64

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Source: Organisation of Economic Co-operation and Development (OECD). Data represent the percentage of adults with an associate’s degree or higher in 2012.
University of Illinois On-Campus Headcount
Enrollment by State Fall 2014

Illinois – 56,675 (79%)
Other U.S. – 6,243 (9%)
District of Columbia - 28
U.S. Territories - 66
U.S. Residents with Foreign or Unknown Addresses – 383
Non-Resident Aliens – 8,541 (12%)
UIUC Bachelor's Degrees Conferred by Race/Ethnicity
FY 2014

- White, 58.1%
- Other, 16.4%
- Asian/Pacific Islander*, 13.8%
- Hispanic, 7.1%
- Black, 4.5%
- American Indian/Alaska Native, 0.1%

UIS Bachelor's Degrees Conferred by Race/Ethnicity
FY 2014

- White, 73.0%
- Other, 8.6%
- Asian/Pacific Islander*, 3.6%
- Hispanic, 4.9%
- Black, 9.4%
- American Indian/Alaska Native, 0.4%
Percentage of FY 2014 Bachelor’s Degrees Awarded by Gender

UIUC

- Male, 54.0%
- Female, 46.0%

UIS

- Male, 45.8%
- Female, 54.2%

National Average

- Male, 42.8%
- Female, 57.2%
Mean Income by Quintile in Illinois
1982 to 2013

% of Undergraduates Who Receive MAP Awards by Race
Fall 2014
Faculty Salary Comparisons, IBHE Peers

Full-time Instructional Faculty Salary Rank, Fall 2015

UIUC

UIC

Research I Universities
Full-Time Instructional Faculty Average Salaries
FY 1982 to FY 2015

$8,900
Gap in 1982

$39,500
Gap in 2015

* Constant (FY 2015) dollars calculated using CPI-U (not seasonally adjusted).
Enrollment in Online Courses

Illinois College and Universities
Fall 2000 to Fall 2014

University of Illinois
Fall 2000 to Fall 2014

University of Illinois, Fall 2014

Illinois, Fall 2014

University of Illinois, Fall 2014

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University of Illinois, Fall 2014
Online Learning Trends

• Online enrollments have continued to grow at rates far in excess of the total higher education student population, albeit at slower rates than for previous years.
  – Over 7 million students were taking at least one online course during the fall 2012 term
  – The 6.1 percent growth rate for online enrollments far exceeds the 1.2 percent growth of the overall higher education student population.
  – More than one-third of all U.S. higher education students were taking at least one online course in the fall of 2012.

<table>
<thead>
<tr>
<th></th>
<th>Total Enrollment</th>
<th>Annual Growth Rate Total Enrollment</th>
<th>Students Taking at Least One Online Course</th>
<th>Online Enrollment Increase over Previous Year</th>
<th>Annual Growth Rate Online Enrollment</th>
<th>Online Enrollment as a Percent of Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002</td>
<td>16,611,710</td>
<td>NA</td>
<td>1,602,970</td>
<td>NA</td>
<td>NA</td>
<td>9.6%</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>16,911,481</td>
<td>1.8%</td>
<td>1,971,397</td>
<td>368,427</td>
<td>23.0%</td>
<td>11.7%</td>
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<tr>
<td>Fall 2004</td>
<td>17,272,043</td>
<td>2.1%</td>
<td>2,329,783</td>
<td>358,386</td>
<td>18.2%</td>
<td>13.5%</td>
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<tr>
<td>Fall 2005</td>
<td>17,487,481</td>
<td>1.2%</td>
<td>3,180,050</td>
<td>850,267</td>
<td>36.5%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>17,758,872</td>
<td>1.6%</td>
<td>3,488,381</td>
<td>308,331</td>
<td>9.7%</td>
<td>19.6%</td>
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<tr>
<td>Fall 2007</td>
<td>18,248,133</td>
<td>2.8%</td>
<td>3,938,111</td>
<td>449,730</td>
<td>12.9%</td>
<td>21.6%</td>
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<tr>
<td>Fall 2008</td>
<td>19,102,811</td>
<td>4.7%</td>
<td>4,606,353</td>
<td>668,242</td>
<td>16.9%</td>
<td>24.1%</td>
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<tr>
<td>Fall 2009</td>
<td>20,427,711</td>
<td>6.9%</td>
<td>5,579,022</td>
<td>972,669</td>
<td>21.1%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>21,016,126</td>
<td>2.9%</td>
<td>6,142,280</td>
<td>563,258</td>
<td>10.1%</td>
<td>29.2%</td>
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<tr>
<td>Fall 2011</td>
<td>20,994,113</td>
<td>-0.1%</td>
<td>6,714,792</td>
<td>572,512</td>
<td>9.3%</td>
<td>32.0%</td>
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<tr>
<td>Fall 2012</td>
<td>21,253,086</td>
<td>1.2%</td>
<td>7,126,549</td>
<td>411,757</td>
<td>6.1%</td>
<td>31.5%</td>
</tr>
</tbody>
</table>

• Two-thirds of institutions report that online learning is critical to their long-term strategy.
• Five percent of institutions have Massive Open Online Courses (MOOCs).

Higher Education
Implications for the University of Illinois

• The economic value of higher education to the individual – especially those with post-baccalaureate degrees – continues to grow.
• U.S. competitiveness in higher education participation, completion, and attainment, while still strong, is slipping relative to other developed and developing nations.
• A larger percentage of women are attending higher education than men and the gap is increasing.
• Competition from proprietary institutions and other non-traditional educational providers in the marketplace for students (both nationally and internationally) has greatly increased in recent years.
• Growth in faculty compensation at private institutions has surpassed public universities, and the intense competition for faculty will continue.
• Relatively flat incomes at the lower income brackets in recent years will have implications for tuition and financial aid policies particularly with regard to promoting access for low income and first-generation students.
• Rapid technological innovation has led to a need for lifelong learning that will allow individuals to continuously adapt and update skills. On-line instruction has grown rapidly in the last 15 years as it has gained mainstream acceptance due to increasing internet access and innovations in instructional technologies.
Economy and Budget
**Labor Costs Among Major Auto-Producing Nations, 2012**

(in US dollars per hour)

<table>
<thead>
<tr>
<th>Country</th>
<th>Labor Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>$45.79</td>
</tr>
<tr>
<td>Canada</td>
<td>$36.59</td>
</tr>
<tr>
<td>United States</td>
<td>$35.67</td>
</tr>
<tr>
<td>Japan</td>
<td>$35.34</td>
</tr>
<tr>
<td>South Korea</td>
<td>$20.72</td>
</tr>
<tr>
<td>Brazil</td>
<td>$11.20</td>
</tr>
<tr>
<td>Mexico</td>
<td>$6.36</td>
</tr>
<tr>
<td>China*</td>
<td>$1.74</td>
</tr>
<tr>
<td>India**</td>
<td>$1.46</td>
</tr>
</tbody>
</table>

*2009 estimate.
**2010 estimate.


---

**Growth in Public and Private Health Spending**

1990 - 2024

- Private Health Insurance
- Medicare
- Medicaid
Cumulative Growth in Real GDP by State
FY 1997 - FY 2014

Top Five States*

United States

Illinois

University of Illinois
Flash Index

Growth
No Growth
State of Illinois Economic & Fiscal Indicators

State Appropriations by Sector

- Human Services, 39%
- Elementary/Secondary, 32%
- Higher Education, 11%
- Other, 18%

State Tax Appropriations Changes by Sector

- All Other, 41.4%
- Elem/Sec, 31.2%
- State Avg, 6.9%
- Higher Ed, 1.3%
- Human Services, 14.6%

General Funds Revenues by Source

- Individual Income Tax, 43.0%
- Corporate Income Tax, 7.5%
- Sales Tax, 22.4%
- Federal Sources, 9.3%
- Public Utility, 2.8%
- Lottery & Gaming, 2.7%
- Other, 12.3%

State Tax Appropriations

- Higher Education vs Elementary/Secondary Education
  in constant 2015 dollars (CPI)

- Elem/Sec, 31.2%
- Higher Ed, 1.3%

Page 36
University of Illinois
Share of State Tax Appropriations
FY 1980 to FY 2016

University of Illinois
Payments on Behalf
State of Illinois by Outcomes
FY 2015 General Fund Appropriations
(does not include bond payments or statutory transfers)

State Payments on Behalf of the University
(Dollars in Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Retirement</th>
<th>Fringe Benefits</th>
<th>Health Insurance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>$87,425.1</td>
<td>$112,200.3</td>
<td></td>
<td>$199,625.4</td>
</tr>
<tr>
<td>2000</td>
<td>$90,606.5</td>
<td>127,261.8</td>
<td></td>
<td>$217,868.3</td>
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<tr>
<td>2001</td>
<td>$94,267.3</td>
<td>154,420.1</td>
<td></td>
<td>$248,687.4</td>
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<tr>
<td>2002</td>
<td>$99,014.4</td>
<td>157,024.2</td>
<td>$24,893.2</td>
<td>$280,931.8</td>
</tr>
<tr>
<td>2003</td>
<td>$112,980.6</td>
<td>169,170.4</td>
<td>$24,893.2</td>
<td>$307,044.2</td>
</tr>
<tr>
<td>2004</td>
<td>$727,269.3</td>
<td>210,084.4</td>
<td>$24,893.2</td>
<td>$962,246.9</td>
</tr>
<tr>
<td>2005</td>
<td>$114,279.8</td>
<td>232,952.6</td>
<td>$24,893.2</td>
<td>$372,125.6</td>
</tr>
<tr>
<td>2006</td>
<td>$70,462.8</td>
<td>257,464.0</td>
<td>$24,893.2</td>
<td>$352,820.0</td>
</tr>
<tr>
<td>2007</td>
<td>$107,981.7</td>
<td>268,675.0</td>
<td>$24,893.2</td>
<td>$401,549.9</td>
</tr>
<tr>
<td>2008</td>
<td>$144,642.4</td>
<td>296,838.0</td>
<td>$24,893.2</td>
<td>$466,373.6</td>
</tr>
<tr>
<td>2009</td>
<td>$191,959.8</td>
<td>294,061.8</td>
<td>$24,893.2</td>
<td>$510,914.8</td>
</tr>
<tr>
<td>2010</td>
<td>$291,255.1</td>
<td>343,490.0</td>
<td>$24,893.2</td>
<td>$659,638.3</td>
</tr>
<tr>
<td>2011</td>
<td>$321,272.4</td>
<td>361,929.0</td>
<td>$24,893.2</td>
<td>$708,094.6</td>
</tr>
<tr>
<td>2012</td>
<td>$403,628.5</td>
<td>414,456.0</td>
<td>$24,893.2</td>
<td>$842,977.7</td>
</tr>
<tr>
<td>2013</td>
<td>$588,267.0</td>
<td>495,399.0</td>
<td>$24,893.2</td>
<td>$1,108,559.2</td>
</tr>
<tr>
<td>2014</td>
<td>$644,332.0</td>
<td>430,581.0</td>
<td>$24,893.2</td>
<td>$1,099,806.2</td>
</tr>
<tr>
<td>2015</td>
<td>$681,677.0</td>
<td>491,054.0</td>
<td>$24,893.2</td>
<td>$1,197,624.2</td>
</tr>
</tbody>
</table>

INCREASE $ 997,998.8

*Retirement estimate based on the University's actual percentage of total SURS from prior year and fringe benefits based on 5-year average increase.
FY2004 reflects sale of pension obligation funds. Portion from bonds $397,245 thousand.
FY2015 SURS increased by $34 million, U of I share is approximately 42.4%.
University of Illinois
Budget by Source of Funds
FY 1990, FY 2015 and Projected FY 2030

**FY 1990**

- **Auxiliaries**: 14.6%
- **Hospital/Medical**: 8.5%
- **Grants/Contracts**: 26.7%
- **Income Fund**: 8.4%
- **Payments on Behalf**: 2.8%

Total: **$2,639.9 Million**

**FY 2015**

- **Auxiliaries**: 12.6%
- **Hospital/Medical**: 13.5%
- **Grants/Contracts**: 22.0%
- **AFMFA**: 0.7%
- **Income Fund**: 19.5%
- **Payments on Behalf**: 19.9%

Total: **$5,640.5 Million**

**Projected FY 2030**

- **Auxiliaries**: 10.9%
- **Hospital/Medical**: 15.8%
- **Grants/Contracts**: 24.9%
- **AFMFA**: 0.7%
- **State Taxes**: 11.0%
- **Payments on Behalf**: 15.3%
- **Tuition**: 21.4%

Total: **$7,099.2 Million**
### State of Illinois Unfunded Public Pension Obligations

<table>
<thead>
<tr>
<th>(SERS, SURS, JRS, GARS, TRS)</th>
<th>(Dollars in Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>$104.6 Billion</td>
</tr>
<tr>
<td>FY01</td>
<td>$153.2 Billion</td>
</tr>
<tr>
<td>FY02</td>
<td>$158.9 Billion</td>
</tr>
<tr>
<td>FY03</td>
<td>$163.5 Billion</td>
</tr>
<tr>
<td>FY04</td>
<td>$168.3 Billion</td>
</tr>
<tr>
<td>FY05</td>
<td>$174.6 Billion</td>
</tr>
<tr>
<td>FY06</td>
<td>$181.1 Billion</td>
</tr>
<tr>
<td>FY07</td>
<td>$188.2 Billion</td>
</tr>
<tr>
<td>FY08</td>
<td>$195.8 Billion</td>
</tr>
<tr>
<td>FY09</td>
<td>$203.3 Billion</td>
</tr>
</tbody>
</table>


### Total Retirees, Public Pension Systems

TRS, SERS, SURS, JRS, GARS

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Retirees (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>108,709</td>
</tr>
<tr>
<td>FY01</td>
<td>114,109</td>
</tr>
<tr>
<td>FY02</td>
<td>119,730</td>
</tr>
<tr>
<td>FY03</td>
<td>136,920</td>
</tr>
<tr>
<td>FY04</td>
<td>141,846</td>
</tr>
<tr>
<td>FY05</td>
<td>148,940</td>
</tr>
<tr>
<td>FY06</td>
<td>152,845</td>
</tr>
<tr>
<td>FY07</td>
<td>158,799</td>
</tr>
<tr>
<td>FY08</td>
<td>163,502</td>
</tr>
<tr>
<td>FY09</td>
<td>168,398</td>
</tr>
<tr>
<td>FY10</td>
<td>174,620</td>
</tr>
<tr>
<td>FY11</td>
<td>181,662</td>
</tr>
<tr>
<td>FY12</td>
<td>191,435</td>
</tr>
<tr>
<td>FY13</td>
<td>203,332</td>
</tr>
<tr>
<td>FY14</td>
<td>212,500</td>
</tr>
</tbody>
</table>


### State of Illinois

Unfunded Pension Liability

Estimated as of June 30, 2014

(Dollars in Billions)

- **SERS**: $20.04
- **SERS**: $24.95
- **SURS**: $20.04
- **JRS**: $1.45
- **GARS**: $0.27

Asset/Liability Ratio 42.9%

Using Actuarial Accrued Liability at Market Value.

### # Active Members to # Retirees

State of Illinois Unfunded Public Pension Obligations

(SERS, SURS, JRS, GARS, TRS)

(Dollars in Billions)

<table>
<thead>
<tr>
<th>Year</th>
<th># Active Members to # Retirees</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>15</td>
</tr>
<tr>
<td>FY01</td>
<td>25</td>
</tr>
<tr>
<td>FY02</td>
<td>35</td>
</tr>
<tr>
<td>FY03</td>
<td>45</td>
</tr>
<tr>
<td>FY04</td>
<td>55</td>
</tr>
</tbody>
</table>

(At end of Fiscal Year, FY 2003-04 sale of Pension Bonds)

Using Actuarial Accrued Liability at Market Value without asset smoothing.

The Center: The Top American Research Universities (August 2002)

- An Annual Report from the Lombardi Program on Measuring University Performance.
- Intended to assess the relative economic strength of research universities.
- Evaluated universities based on the market value of their endowments and an endowment equivalent calculation for other revenue streams
  - Endowment equivalent is the amount of endowment that would be required to generate the revenue stream (assuming a 4.5% growth).
- Revenue streams included annual giving, tuition and fees, and state appropriations.
- Adjusted for size based on student enrollment.
- Public universities can compete with private institutions because of the significant state support received.
- Updated with 2012 data.

2012 Adjusted Total Endowment-Equivalent Based on The Center’s Methodology
UIUC – Peer Institutions (in billions)

2012 Adjusted Total Endowment-Equivalent Based on The Center’s Methodology
UIC – IBHE Peer Institutions (in billions)

Total Endowment-Equivalent Adjusted for Student FTE Enrollment
Universities with More Than $20 Million in Federal Research in Rank Order

- Michigan
- Stanford
- Minnesota
- Berkeley
- Ohio State
- Northwestern
- Chicago
- UIUC
- Texas
- Iowa
- Arizona State
- Oregon State
- Colorado
- Private (N=39)
- Public (N=80)
Source: NACUBO-Commonfund Study of Endowments FY 2014.
*Represents endowment balance for the University of Maryland College Park Foundation.

Note: The University of Maryland College Park Foundation was not included in the NACUBO report until 2008.

Source: NACUBO-Commonfund Study of Endowments FY 2013.
*Represents endowment balance for the University of Maryland College Park Foundation. Does not include
Public Higher Education Capital Appropriation History
FY 1999 to FY 2015
(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>70,622.6</td>
<td>28,852.3</td>
<td>29,938.5</td>
<td>80,685.6</td>
<td>96,189.3</td>
<td>11,000.0</td>
<td>317,288.3</td>
</tr>
<tr>
<td>2001</td>
<td>44,099.7</td>
<td>8,131.8</td>
<td>42,573.8</td>
<td>46,821.9</td>
<td>63,532.5</td>
<td>415.0</td>
<td>205,574.7</td>
</tr>
<tr>
<td>2002</td>
<td>84,186.5</td>
<td>20,770.5</td>
<td>22,730.0</td>
<td>165,949.4</td>
<td>75,736.4</td>
<td>2,000.0</td>
<td>371,372.9</td>
</tr>
<tr>
<td>2003</td>
<td>38,096.8</td>
<td>7,214.5</td>
<td>30,072.1</td>
<td>140,096.9</td>
<td>80,679.2</td>
<td>13,943.8</td>
<td>310,103.3</td>
</tr>
<tr>
<td>2004</td>
<td>8,721.9</td>
<td>25,415.5</td>
<td>5,752.5</td>
<td>12,735.0</td>
<td>59,107.6</td>
<td>0.0</td>
<td>111,732.5</td>
</tr>
</tbody>
</table>

NO CAPITAL APPROPRIATIONS
2005
5,703.8 | 3,270.5 | 10,391.4 | 19,725.0 | 59,107.6 | 2,465.1 | 100,663.4

NO CAPITAL APPROPRIATIONS
2006
2007
2008
2009
2010
294,068.1 | 97,824.6 | 172,273.9 | 256,478.0 | 434,201.0 | 60,135.0 | 1,314,980.6

NO CAPITAL APPROPRIATIONS
2011
2012
2013
2014
2015

Total Debt by Type
Dollars in Millions

Total Debt by Campus
Dollars in Millions

IL Fastest Growing Occupations, 2012 - 2022
(Percentage increase)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Aides</td>
<td>41.6%</td>
</tr>
<tr>
<td>Industrial-Organizational Psychologists</td>
<td>39.4%</td>
</tr>
<tr>
<td>Skin Care Specialists</td>
<td>38.2%</td>
</tr>
<tr>
<td>Biomedical Engineers</td>
<td>38.0%</td>
</tr>
<tr>
<td>Interpreters &amp; Translators</td>
<td>37.6%</td>
</tr>
<tr>
<td>Occupational Therapist Assistants</td>
<td>34.5%</td>
</tr>
<tr>
<td>Insulation Workers, Mechanical</td>
<td>33.5%</td>
</tr>
<tr>
<td>Physical Therapist Aides</td>
<td>32.8%</td>
</tr>
<tr>
<td>Health Specialties Teachers, College</td>
<td>32.5%</td>
</tr>
<tr>
<td>Physical Therapist Assistants</td>
<td>32.5%</td>
</tr>
</tbody>
</table>

Source: Illinois Department of Employment Security

U.S. Projected Employment Growth, 2012-2022

US Fastest Growing Occupations, 2012 - 2022
(Percentage increase)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial-organizational psychologists</td>
<td>53.4%</td>
</tr>
<tr>
<td>Personal care aides</td>
<td>48.8%</td>
</tr>
<tr>
<td>Home health aides</td>
<td>48.5%</td>
</tr>
<tr>
<td>Insulation workers</td>
<td>46.7%</td>
</tr>
<tr>
<td>Interpreters and translators</td>
<td>46.1%</td>
</tr>
<tr>
<td>Diagnostic medical sonographers</td>
<td>46.0%</td>
</tr>
<tr>
<td>Brickmason/blockmason/etc. helpers</td>
<td>43.0%</td>
</tr>
<tr>
<td>Occupational therapy assistants</td>
<td>42.6%</td>
</tr>
<tr>
<td>Genetic counselors</td>
<td>41.2%</td>
</tr>
<tr>
<td>Physical therapist assistants</td>
<td>41.0%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics
Economy and Budget
Implications for the University of Illinois

• The U.S. economy will continue to grow, but at a slower rate. Health care costs continue to grow at a more rapid rate than general inflation and earnings which has an impact on both the national economy and governmental spending at all levels.

• The state’s fiscal situation, faces continued challenges in the coming years. Health care and pension obligation costs are expected to continue rising rapidly and will likely outpace any state revenue growth realized resulting in continued constraints on “discretionary spending” in the state budget (e.g., higher education).

• The University has increasingly needed to rely on internal sources for funding capital projects, which in turn has contributed to increased debt service levels.

• The University has become more reliant on multiple revenue streams and state policymakers may interpret this trend as meaning the University can more easily absorb reductions or at least flat funding in the general appropriation.
Research, Technology, and Economic Development
Federal Outlays for R&D
All Agencies

Federal Outlays for R&D
National Institute of Health

Federal Outlays for R&D
National Science Foundation

Federal R&D Budget Proposal
(Dollars in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense</td>
<td>$70,576</td>
<td>$72,618</td>
<td>$76,946</td>
<td>2.9%</td>
</tr>
<tr>
<td>NIH</td>
<td>$28,429</td>
<td>$28,636</td>
<td>$29,008</td>
<td>0.7%</td>
</tr>
<tr>
<td>NASA</td>
<td>$11,257</td>
<td>$11,172</td>
<td>$11,172</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Energy</td>
<td>$2,363</td>
<td>$2,341</td>
<td>$2,771</td>
<td>-0.9%</td>
</tr>
<tr>
<td>NSF</td>
<td>$5,198</td>
<td>$5,271</td>
<td>$5,558</td>
<td>1.4%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$1,823</td>
<td>$2,404</td>
<td>$2,200</td>
<td>31.9%</td>
</tr>
<tr>
<td>Other</td>
<td>$11,660</td>
<td>$11,795</td>
<td>$12,433</td>
<td>1.2%</td>
</tr>
<tr>
<td>Total</td>
<td>$131,306</td>
<td>$134,237</td>
<td>$140,088</td>
<td>2.2%</td>
</tr>
</tbody>
</table>
## Higher Education R&D Expenditures, FY 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>All R&amp;D expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Johns Hopkins U.</td>
<td>$2,168,568</td>
</tr>
<tr>
<td>2</td>
<td>U. Michigan, Ann Arbor</td>
<td>1,375,117</td>
</tr>
<tr>
<td>3</td>
<td>U. Washington, Seattle</td>
<td>1,192,513</td>
</tr>
<tr>
<td>4</td>
<td>U. Wisconsin-Madison</td>
<td>1,123,501</td>
</tr>
<tr>
<td>5</td>
<td>U. California, San Diego</td>
<td>1,075,554</td>
</tr>
<tr>
<td>6</td>
<td>U. California, San Francisco</td>
<td>1,042,841</td>
</tr>
<tr>
<td>7</td>
<td>Harvard U.</td>
<td>1,012,766</td>
</tr>
<tr>
<td>8</td>
<td>Duke U.</td>
<td>992,821</td>
</tr>
<tr>
<td>9</td>
<td>U. North Carolina, Chapel Hill</td>
<td>973,007</td>
</tr>
<tr>
<td>10</td>
<td>U. California, Los Angeles</td>
<td>966,659</td>
</tr>
<tr>
<td>11</td>
<td>Stanford U.</td>
<td>945,450</td>
</tr>
<tr>
<td>12</td>
<td>Massachusetts Institute of Technology</td>
<td>900,524</td>
</tr>
<tr>
<td>13</td>
<td>Columbia U. in the City of New York</td>
<td>889,188</td>
</tr>
<tr>
<td>14</td>
<td>U. Pittsburgh, Pittsburgh</td>
<td>872,736</td>
</tr>
<tr>
<td>15</td>
<td>U. Minnesota, Twin Cities</td>
<td>858,378</td>
</tr>
<tr>
<td>16</td>
<td>Cornell U.</td>
<td>845,184</td>
</tr>
<tr>
<td>17</td>
<td>Penn State U., U. Park and Hershey Medical Center</td>
<td>837,880</td>
</tr>
<tr>
<td>18</td>
<td>U. Pennsylvania</td>
<td>828,422</td>
</tr>
<tr>
<td>19</td>
<td>Texas A&amp;M U., College Station</td>
<td>820,015</td>
</tr>
<tr>
<td>20</td>
<td>Ohio State U.</td>
<td>793,373</td>
</tr>
<tr>
<td>21</td>
<td>Yale U.</td>
<td>788,784</td>
</tr>
<tr>
<td>22</td>
<td>U. Illinois, Urbana-Champaign</td>
<td><strong>743,487</strong></td>
</tr>
<tr>
<td>23</td>
<td>Georgia Institute of Technology</td>
<td>730,488</td>
</tr>
<tr>
<td>24</td>
<td>U. California, Berkeley</td>
<td>727,002</td>
</tr>
<tr>
<td>25</td>
<td>U. California, Davis</td>
<td>725,734</td>
</tr>
<tr>
<td>26</td>
<td>U. Texas M. D. Anderson Cancer Center</td>
<td>718,096</td>
</tr>
<tr>
<td>27</td>
<td>U. Florida</td>
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<td>U. Utah</td>
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<td>Rutgers, State U. New Jersey, New Brunswick</td>
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Note: Totals reported in thousands.
Source: National Science Foundation
International Comparison: Science and Engineering Degrees

Science & Engineering Doctoral Degrees, 2010

University of Illinois Technology Transfer

Startups

UIC  UIUC  Total

Energy Costs and Source Usage

Cumulative Energy Price Increases, 2000 - 2015

Figure 2. World energy consumption by fuel type, 1990-2040 (quadrillion Btu)
Illinois’s Renewable Energy Presence

- Illinois currently has 14 ethanol plants in operation.
- UI’s Renewable Energy Efforts:
  - UI has shown a commitment to energy efficiency in its new facilities.
  - UI has entered into ESCO partnerships to renovate existing facilities while achieving energy savings.


Illinois’s Nuclear Presence

- Illinois has 6 nuclear power plants, the largest family of nuclear facilities in the Nation.
- Over half of Illinois’s power is derived from nuclear.
- Illinois’ nuclear generation capacity is greater than any other state. Illinois is also home to the Department of Energy’s Argonne National Laboratory and Fermi National Accelerator Laboratory (Fermilab).
  - Argonne has a long history of research and development in nuclear reactor technology.
  - Fermilab conducts research on the frontier of high energy physics and related disciplines.
  - University of Illinois faculty have a history of collaboration with researchers at both facilities.

Research, Technology, & Economic Development Implications for the University of Illinois

- Federal R&D spending has slowed significantly in recent years and this pattern is likely to continue in the near term due to the slowing economy and other significant pressures on the federal budget.

- The bedrock of economic development through research and technology commercialization are top quality science and engineering faculty and students. Intense competition for science and faculty and students nationally and internationally coupled with stagnant state and federal funding will create serious challenges for major research institutions as they attempt to maintain and enhance the quality and competitiveness of their research programs and technology commercialization endeavors.

- Land grant and other major research universities are increasingly expected to have technology transfer as a key part of their overall economic development mission. The University’s efforts in this area have grown considerably in recent years although many technical and competitive opportunities (and challenges) remain.

- Global interest in renewable energy sources will continue to grow in the future due to the overall increase in demand and continued concerns about the cost and supply of fossil fuels and other traditional energy sources. The University has an opportunity to take a leadership role in energy research and development given its proximity to traditional (e.g., coal, nuclear) and renewable (e.g., biomass, wind) energy sources and its fundamental strengths in science and engineering disciplines.
Political Landscape
Legislature Composition

Illinois House of Representatives Membership

- Republican: 47
- Democrat: 71


Illinois Senate Membership

- Republican: 22
- Democrat: 37


U.S. House of Representatives Membership*

- Independent: 1
- Republican: 246
- Democrat: 188

* 1 Vacancy

http://clerk.house.gov/member_info/cong.aspx

U.S. Senate Membership

- Independent: 2
- Republican: 54
- Democrat: 44

http://clerk.house.gov/member_info/cong.aspx
Higher education issues have traditionally been state concerns, but Congress also has become much more interested in issues related to higher education’s affordability and public accountability.

Growing public concern over affordability will make major increases in tuition challenging to achieve.

While the University enjoys a broad base of support within the General Assembly, the dominance of other issues facing the state legislature (e.g., health care, pensions, K-12 education) make it difficult to advance the University’s (or higher education’s) interests.

There is growing interest at both the state and national levels in creating complex data systems that would provide policy makers and the general public with detailed information on student progress through the P-20 educational pipeline and beyond to the work place.
Sources

External Sources
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• Post Secondary Education Opportunity Newsletter
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• National Center for Public Policy and Higher Education
• Organisation for Economic Co-operation and Development (OECD)
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• TIAA-CREF Institute Quarterly
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• Northern Illinois University 2007 Illinois Policy Survey

U of I Reports
• Profile of Students, Faculty and Staff by Race/Ethnic Group, Gender and Disability
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• Budget Summary for Operations
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