



Financing the Future: Framework/trends, Sponsored Funding

Presentation to the Board of Regents

October 11, 2007



We must align our financial and strategic investment strategies to support the goal of becoming

one of the top three public research universities in the world,

with similar high aspirations for our coordinate campuses and state-wide centers according each one's unique signature and aspirations

Strategic positioning framework

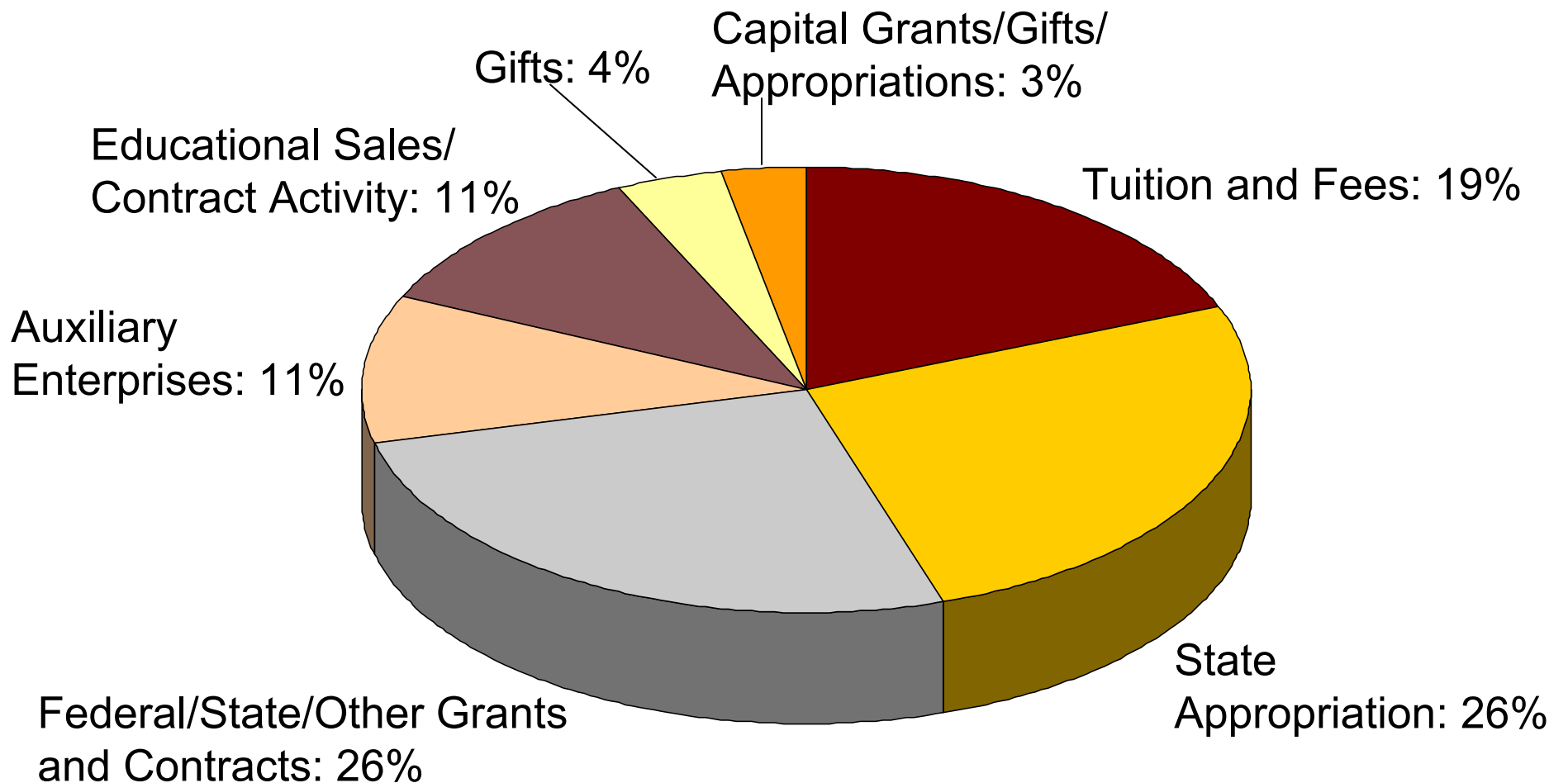


Key financial strategies

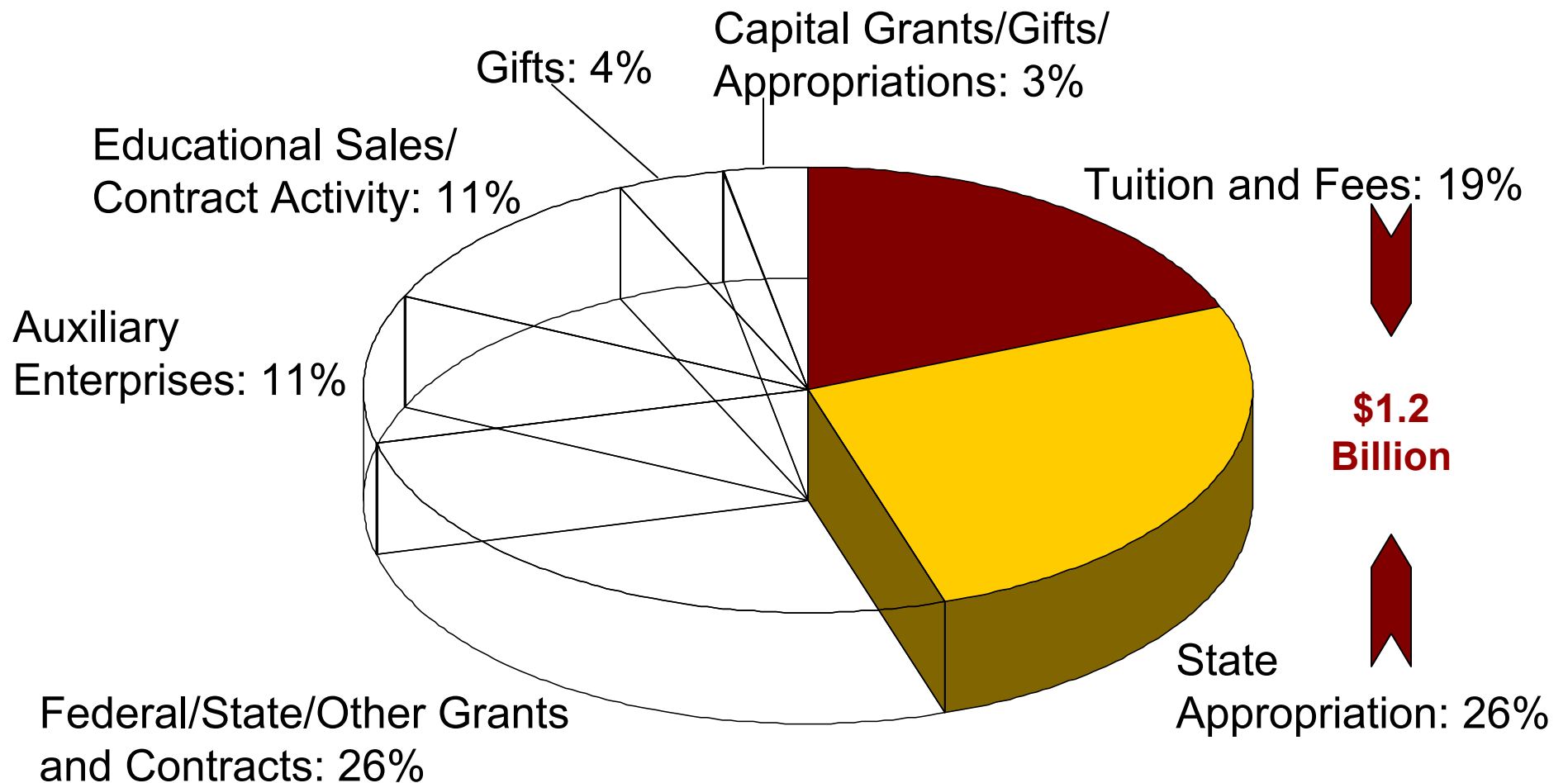


- Build enduring and mutually beneficial partnerships with the state
- Work to stabilize tuition and control the total cost of education
- Strengthen levels of sponsored funding in areas of distinction and opportunity
- Cultivate private support for University priorities
- Maximize the growth and impact of existing University assets
- Enhance service and productivity while reducing costs
- Redeploy resources to meet our strategic priorities

University of Minnesota Revenue Sources All Funds FY 2007



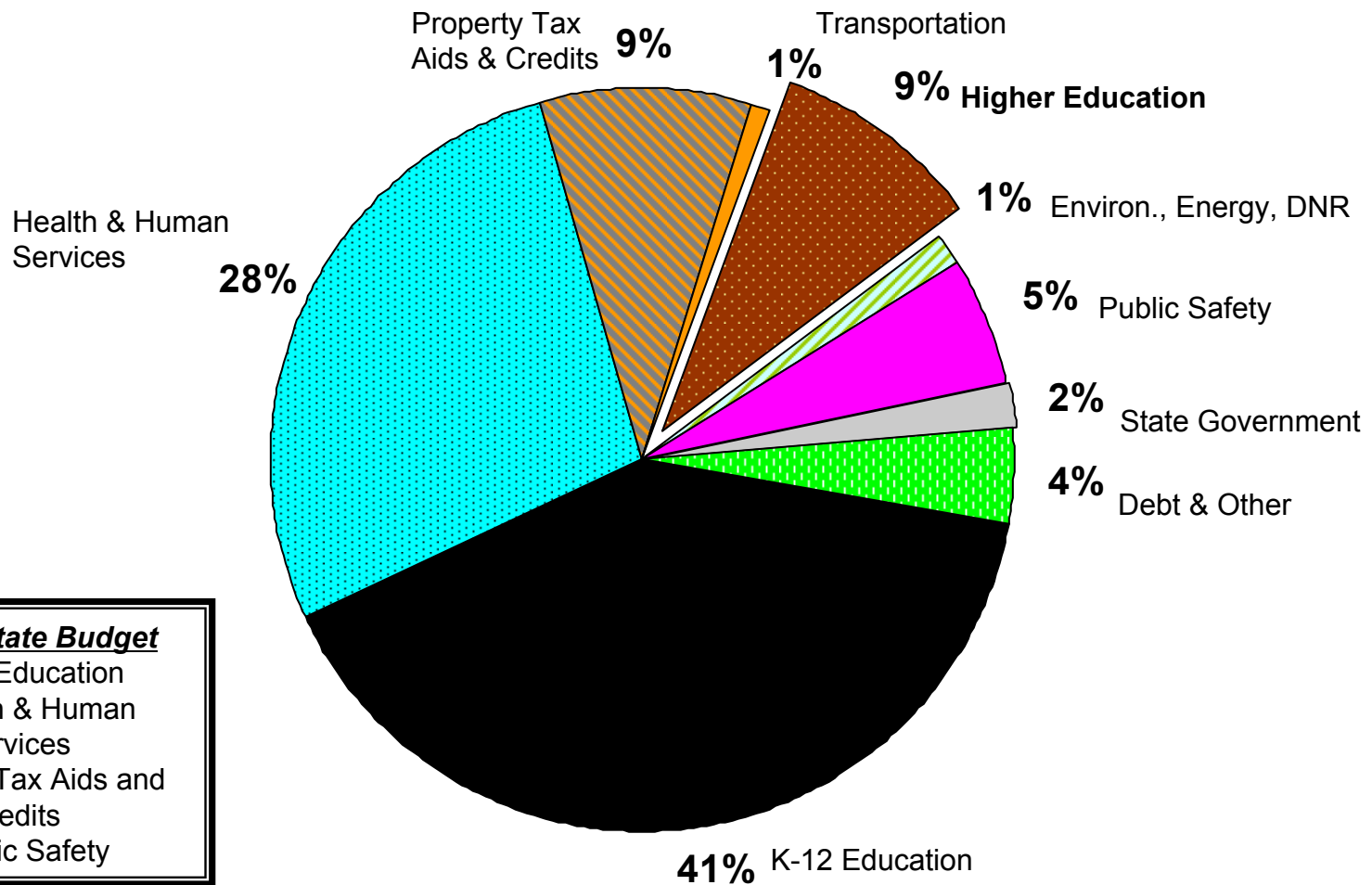
University of Minnesota Revenue Sources All Funds FY 2007



Where the Money Goes

State of Minnesota General Fund Budget / \$15.8 Billion

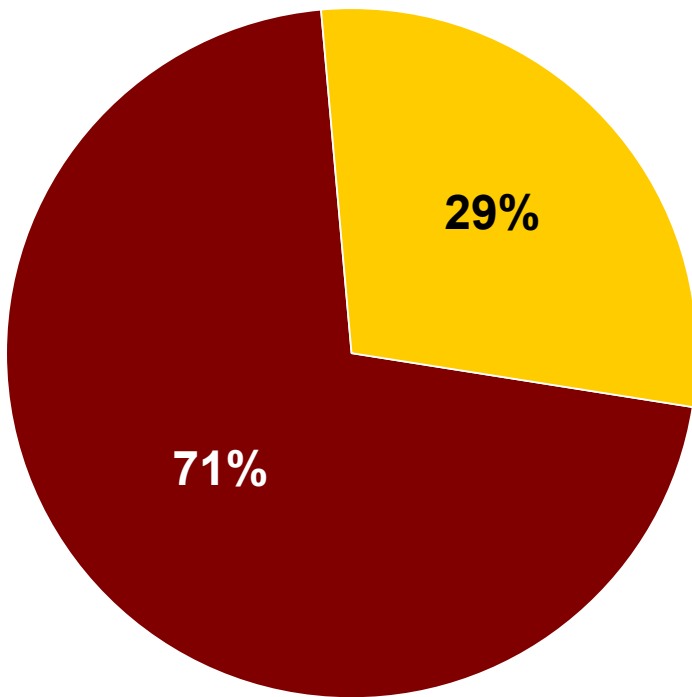
Fiscal Year 2007-08



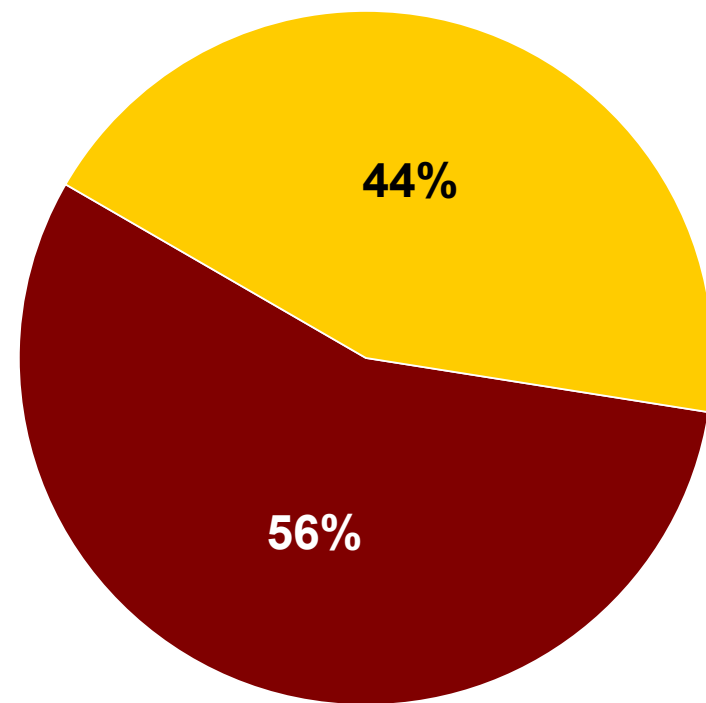
State appropriation and tuition revenue mix: Changes in the last decade



1997-98



2007-08



 **State Allocation**

 **Tuition and Fees**

Conceptual Framework: Board of Regents Strategic Positioning & Financing the Mission



Exceptional
Students

Exceptional
Faculty and
Staff

Exceptional
Organization

Exceptional
Innovation

State Biennial Request

State Capital Request

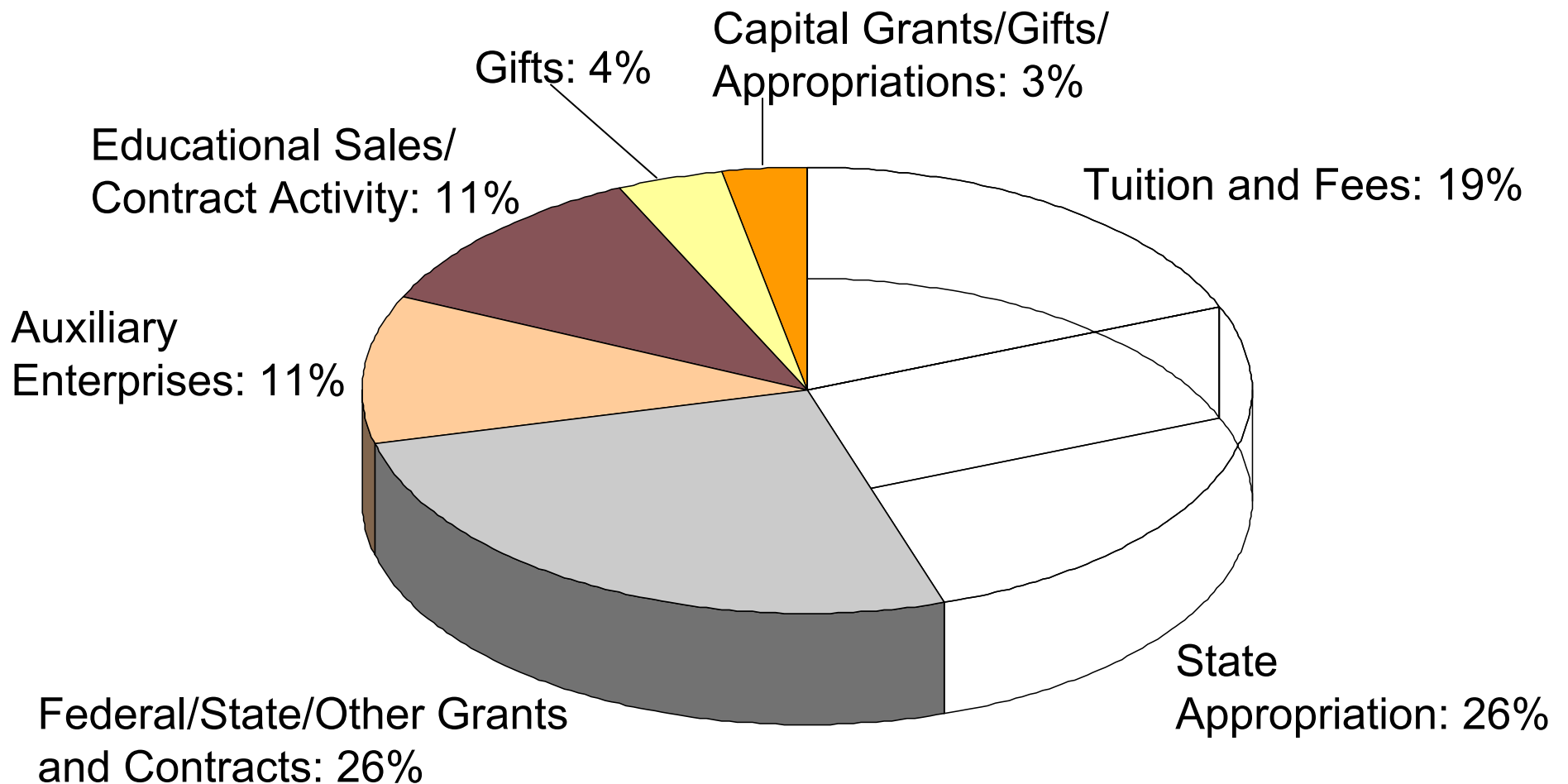
Annual Operating Budget

Annual Capital Budget

Six Year Capital Plan

**ALL REQUIRE BOARD OF REGENTS
DISCUSSION, REVIEW, AND ACTION**

University of Minnesota Revenue Sources All Funds FY 2007



Board of Regents Work Session on Funding the Mission: Research

Tim Mulcahy
Vice President for Research
October 11, 2007

UNIVERSITY OF MINNESOTA
Driven to Discover™

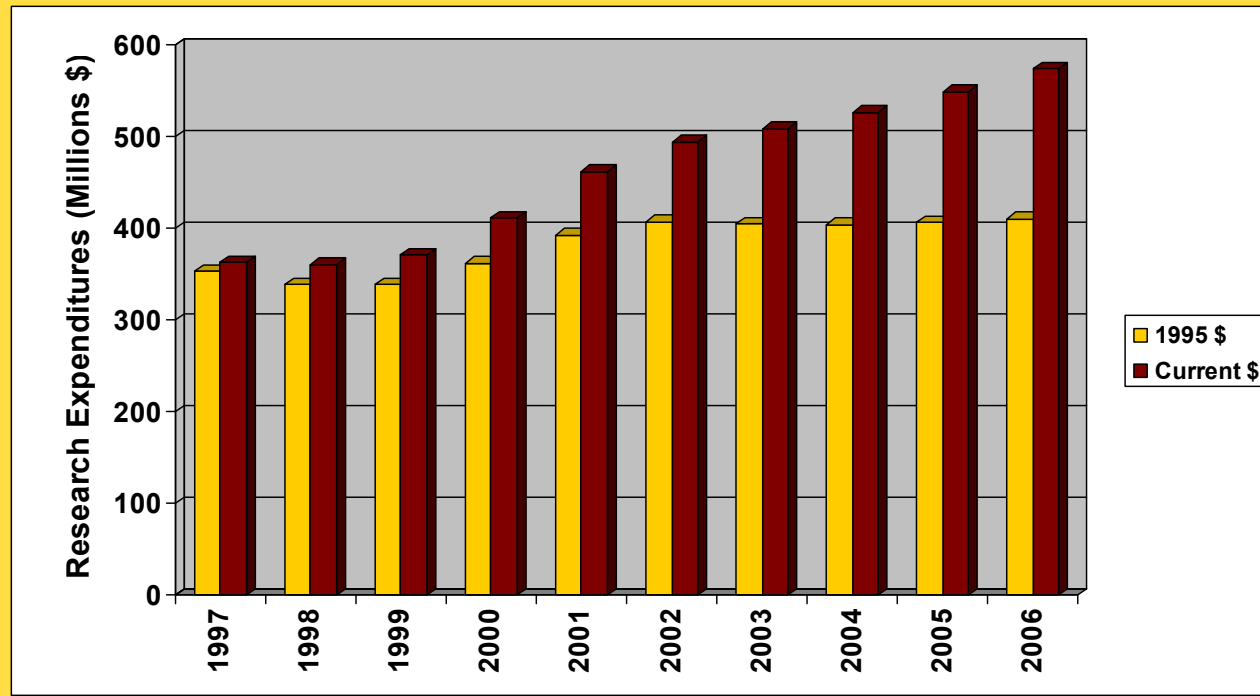
Intent

- Identify major funding streams that support research
- Discuss trends: opportunities & challenges
- Identify related policy issues
- Provide an introduction to upcoming detailed presentations/discussions

Sources of Research Support

- Three general categories of support:
 - Sponsored research
 - Federally sponsored
 - State & local government sponsored
 - Institutional research support
 - Business & industry sponsored
 - Other sponsors (i.e. research foundations)
 - Income from commercialization of UM intellectual property
 - Gifts and endowments

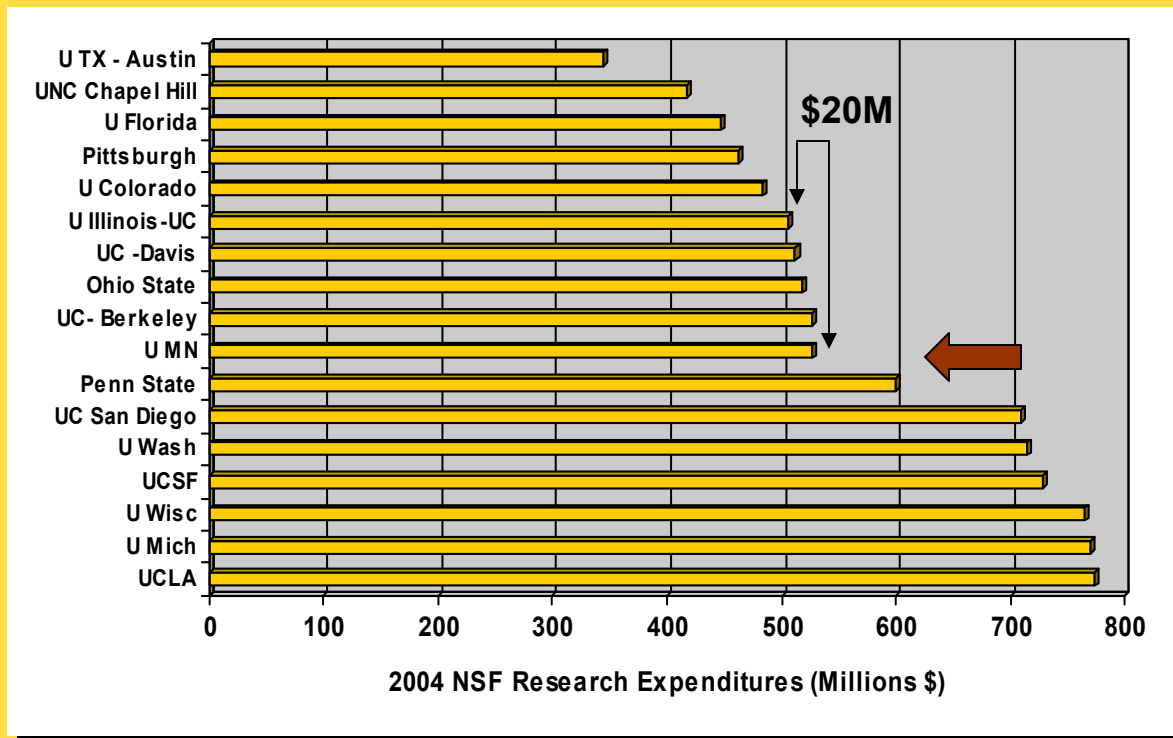
NSF Research Expenditures 1997-2006



Report Figure 3.1

- Progressive growth
- Average growth rate = ~6.8%/yr since 1999
- In constant 1995 \$ average growth rate = 2.0%

2004 NSF Ranking: Public Universities



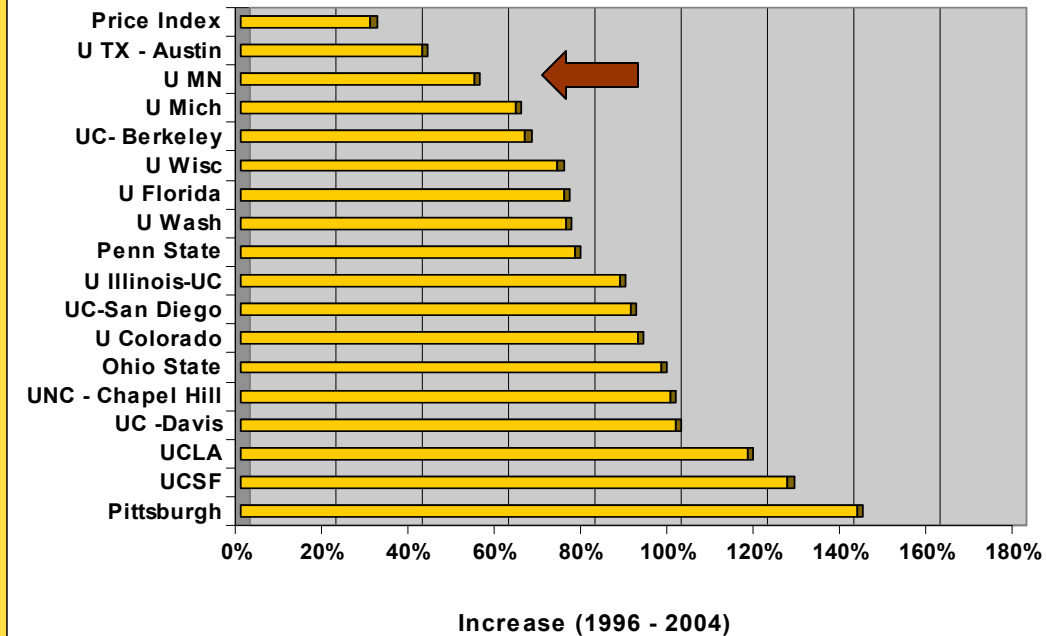
Report Figure 4.1

- In 2004 Minnesota ranked 8th*; tied with UC-Berkeley
- Difference between 8th and 11th is just \$20M
- Small differences in future performance can have a significant + or – effect on ranking

* Includes amended total for UMN not published in 2004 NSF report, but accepted by NSF

Growth Rates: 1997 - 2004

The University of Minnesota's research portfolio has grown at a lower rate than key public peers



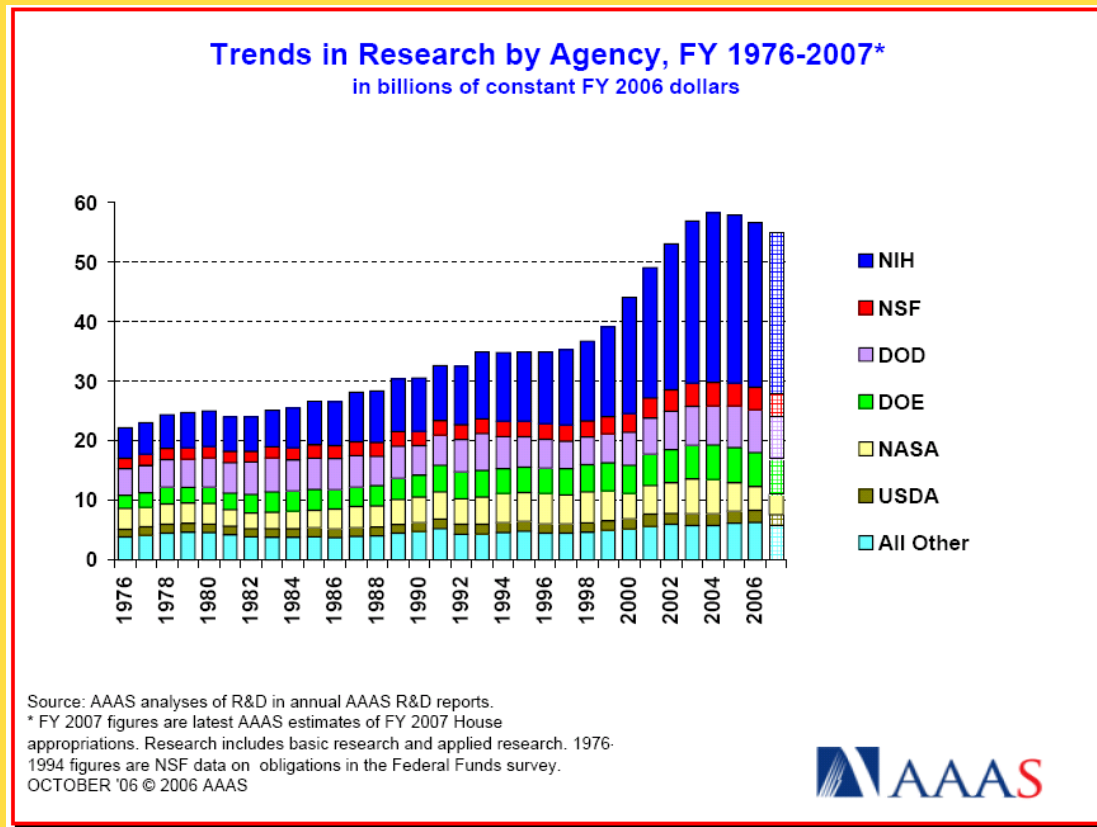
Report Figure 4.2

- Based on NSF Survey Expenditures
- UMN increased 53%; overall average 88%
- UMN 16th of 17
- Average annual growth rates differed widely (5% - 18%)
- UMN average annual growth rate = 6.7%; average annual = 11%
- Price Index = 30%

NSF Survey Data: What categories account for differences?

NSF Research Support Category	UMN Research Expenditures	UMN Rank among 17 "peers"	#1 Research Expenditures
Federally Sponsored Research	\$308 Million	10 th	\$625 Million (U Washington)
State & Local Government Sponsored Research	\$50 Million	4 th	\$80 Million (U Florida)
Institutional Research Support	\$70 Million	13 th	\$210 Million (U Wisconsin)
Industry Sponsored Research	\$22 Million	12 th	\$86 Million (Penn State U)
All Other Sources	\$76 Million	3 rd	\$123 Million (UCLA)

Declining Federal R&D Budget: A Big Problem



- Federal sources provide ~75% of UMN research funding
- 2007 NIH budget expected to increase just 0.7%
- For third year in a row will fail to keep pace with inflation

Report Figure 5.1

Federal Funding: Opportunities

- Interdisciplinary research
- Large-scale science
- Translational research
- Clinical research

Turning the corner?

- 2006 research data just released by NSF provide evidence that the U is “closing the gap”:
 - UMN research expenditures increased by \$46M (+8.4%) over 2005 levels
 - This growth rate was second only to the U of Washington among top publics
 - UMN ranked 10th among publics in 2005 but 9th among publics in 2006
 - The “Gap” between the U and the number 3 public university in 2005 was \$237M, but is now \$205M in 2006

- Cautionary note: one year a trend does

Industry funding

Support from business and industry represents an increasing proportion of sponsored research dollars nationally

- Industry funding rose for the second year in a row, reaching \$2.4 billion in FY2006 (5.8% increase)

What the ACRC Offers



- *“Three Legged Stool”*
 - Concierge Services
 - Relationship Managers
 - Business Web Interface
- *Support Mechanisms*
 - Activities and Events
 - Resource Databases

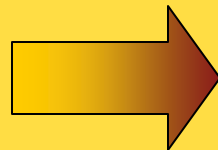
The University of Minnesota is a Member of the University:Industry Demonstration Partnership



UIDP Mission: Form a coalition of willing participants to engage in a series of *collaborative experiments* on new approaches to sponsored research and the broader strategic elements of a healthy, long-term university:industry relationship based on advancing competitiveness and innovation in the U.S. economy, in maintaining research infrastructure, and in educating highly skilled scientists, engineers, teachers, and workforce

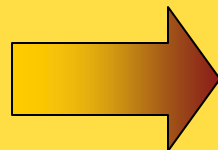
Commercialization: 4 Major Innovations

Technology Liaisons



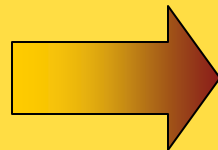
- 3 new positions; “seek” opportunities; in the labs
- inform faculty; guides through the process

IP Commitment Committee



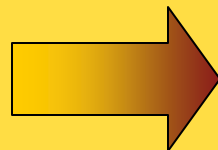
- assess business & market potential; UM and external advisors; award Innovation grants; invest Ignition grants

Innovation & Ignition Funds



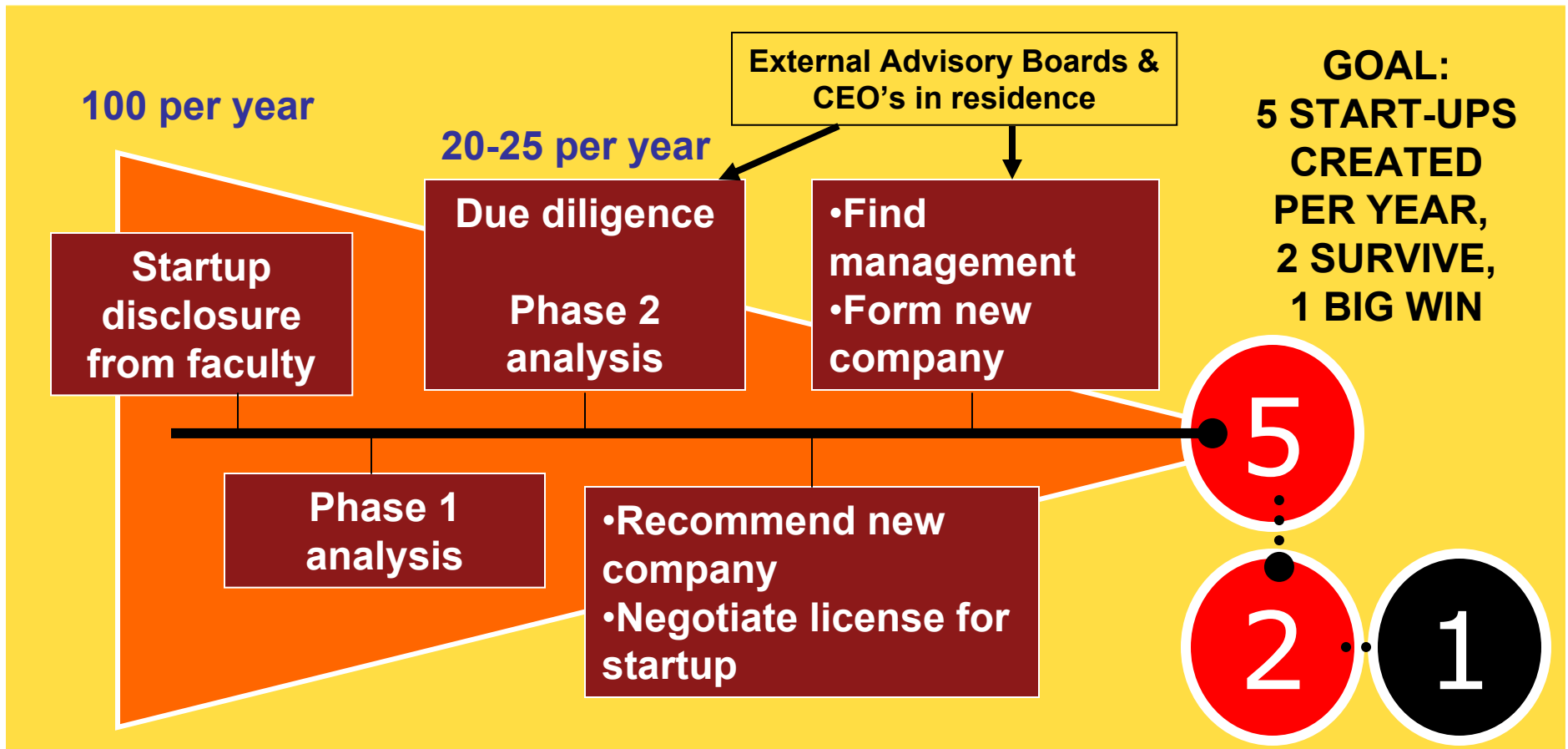
- \$5 million founding investment
- development grants to bridge “gap”

Venture Center



- advise, develop & approve business plans
- oversight for progress and milestones
- more active management of start-ups

The Venture Center: Disciplined Guidance for Start-ups



IP Commercialization: Caveats

- High risk venture; low success rate
 - Only 0.6% (167/27,332) of all license/options generated >\$1M in 2004 (AUTM, 2004)
- Unpredictable revenue source
- Involves significant operational costs
- Long cycle time (>10 yrs) for returns
- A long-term commitment is required
- Will involve academic culture changes

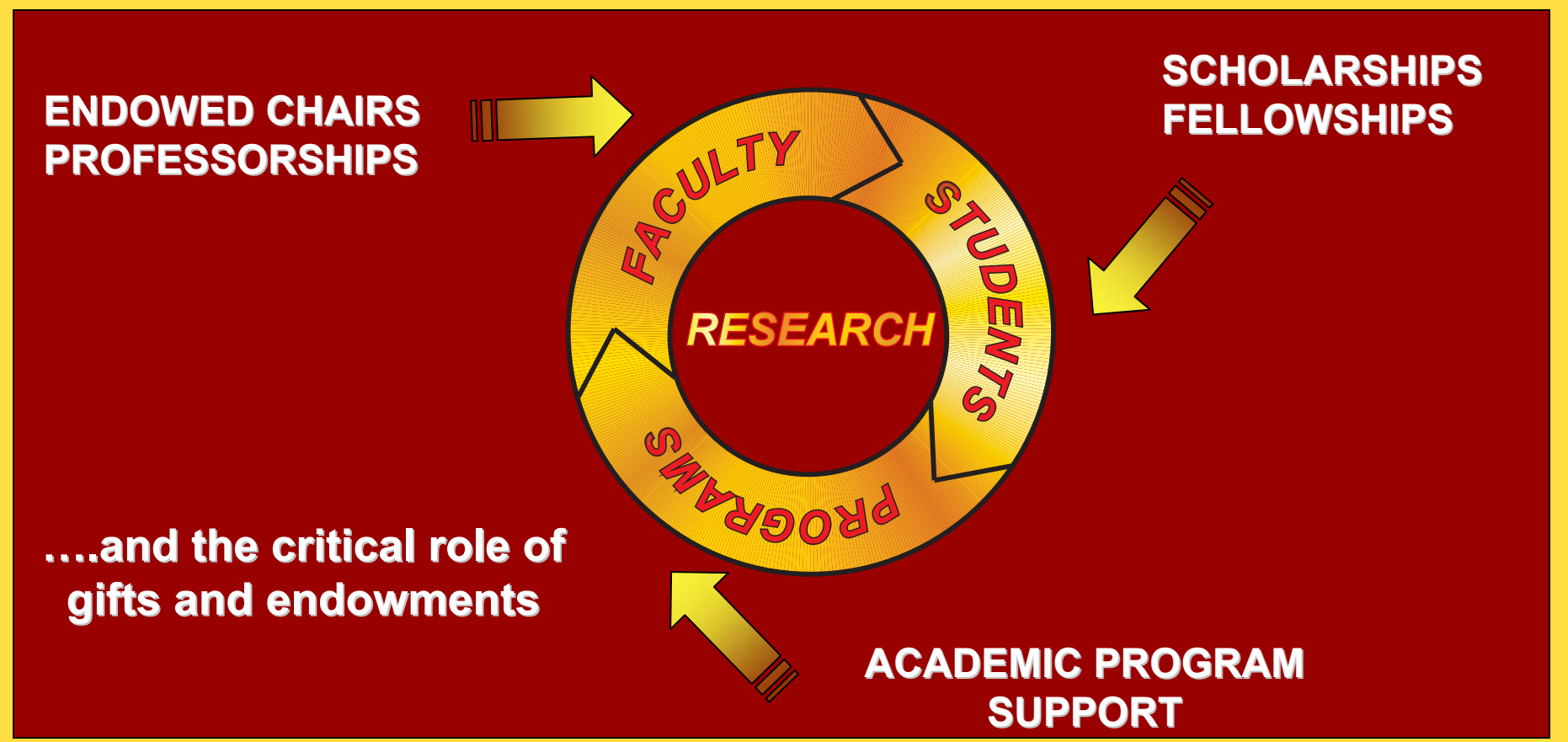
Nevertheless.....

- High impact activity that will in the long run significantly benefit the academic mission
- Can be managed appropriately to avoid conflicts with academic values
- An essential function of leading research universities & significance is increasing
- Despite uncertainty, need to establish an environment to optimize performance

Filling Critical Needs: Gifts

- The margin of excellence
- Enhance critical flexibility
- Address unmet needs
- Provide discretionary support
- Enable new initiatives
- Recognized as an indicator of quality used in some national rankings

The Research “Circle of Life”



Policy Issues

- Institutional conflicts of interest
- Individual conflicts of interest
- Protection of research participants
- Academic freedom
- Intellectual property

Strategic Positioning: Strategies to Close “The Gap”

- Increase share of federal research support:
 - *Increase research capacity: faculty & facilities*
 - Biomedical Facilities Bonding Authority
 - State capital request: HEAPR, Laboratories, ROCs
 - Biennial budget request
 - New internal revenues
 - *Provide for critical research infrastructure*
 - *Emphasis on interdisciplinary research*
 - Institute for Advanced Studies, Institute on the Environment, Institute for the Advancement of Science and Technology
 - Allocations for new strategic interdisciplinary initiatives
 - For example: nanobiotechnology, translational neuroscience

Strategic Positioning: Strategies to Close “The Gap”

- Increase share of federal research support (cont.):
 - *Work with colleges to develop strategic plans to enhance research productivity*
 - *Take advantage of major opportunities aligned with UMN strengths*
 - For example: biofuels and renewable energy
 - *Enable increased faculty productivity*
 - Office of Collaborative Research Services
 - Improve administrative support services
 - Reduce administrative hurdles
 - Increase awareness of and responsiveness to funding opportunities

Strategic Positioning: Strategies to Close “The Gap”

- Increase sponsored research collaborations with business and industry
 - *Emphasize long-term relationships*
 - *Revision of negotiating practices*
 - *University-Industry Demonstration Partnership*
 - *Academic and Corporate Relations Center*
- Identify and prioritize increased unrestricted funds in support of research
 - *Increased State support*
 - *Improved technology commercialization*
 - *Increase private support through UMF & MMF*

Conclusions

- Federal research support will be increasingly competitive and less reliable as a basis for substantial growth
- The University of Minnesota will need to optimize alternative sources to support its research mission
- Success in the current research environment will involve organizational, operational, policy and cultural changes
- Policies and procedures need to preserve

Questions & Discussion

EXTRA SLIDES

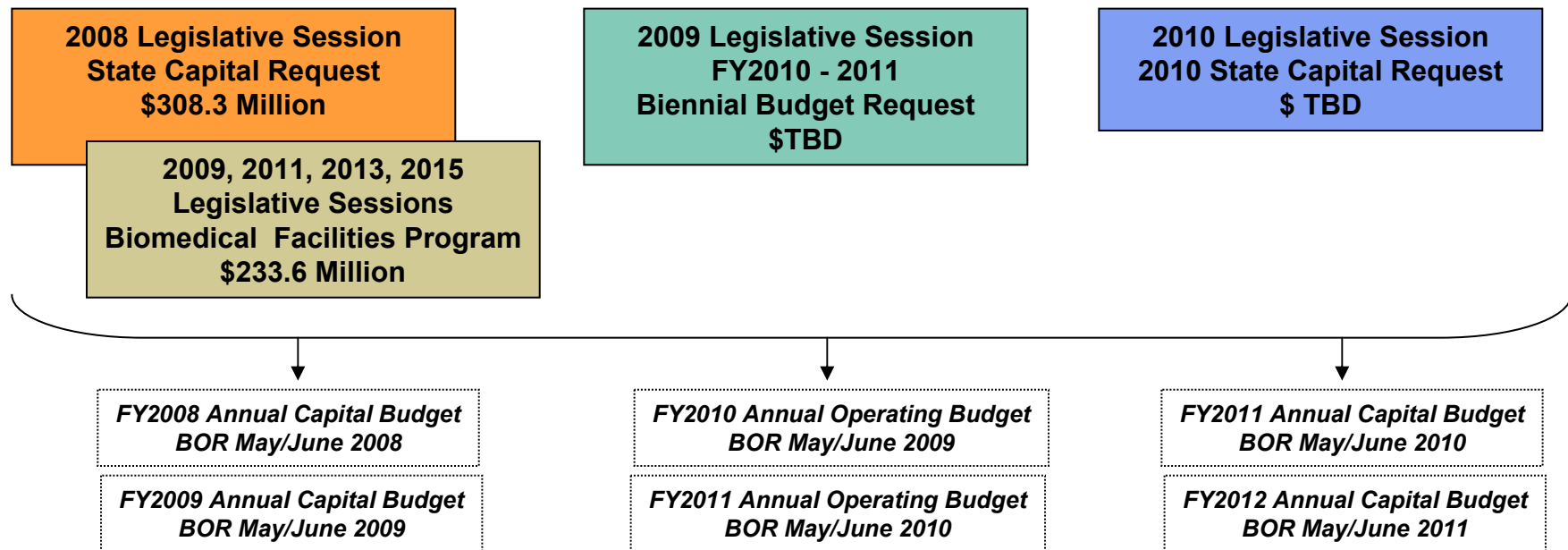


Critical Path: 2008 - 2012

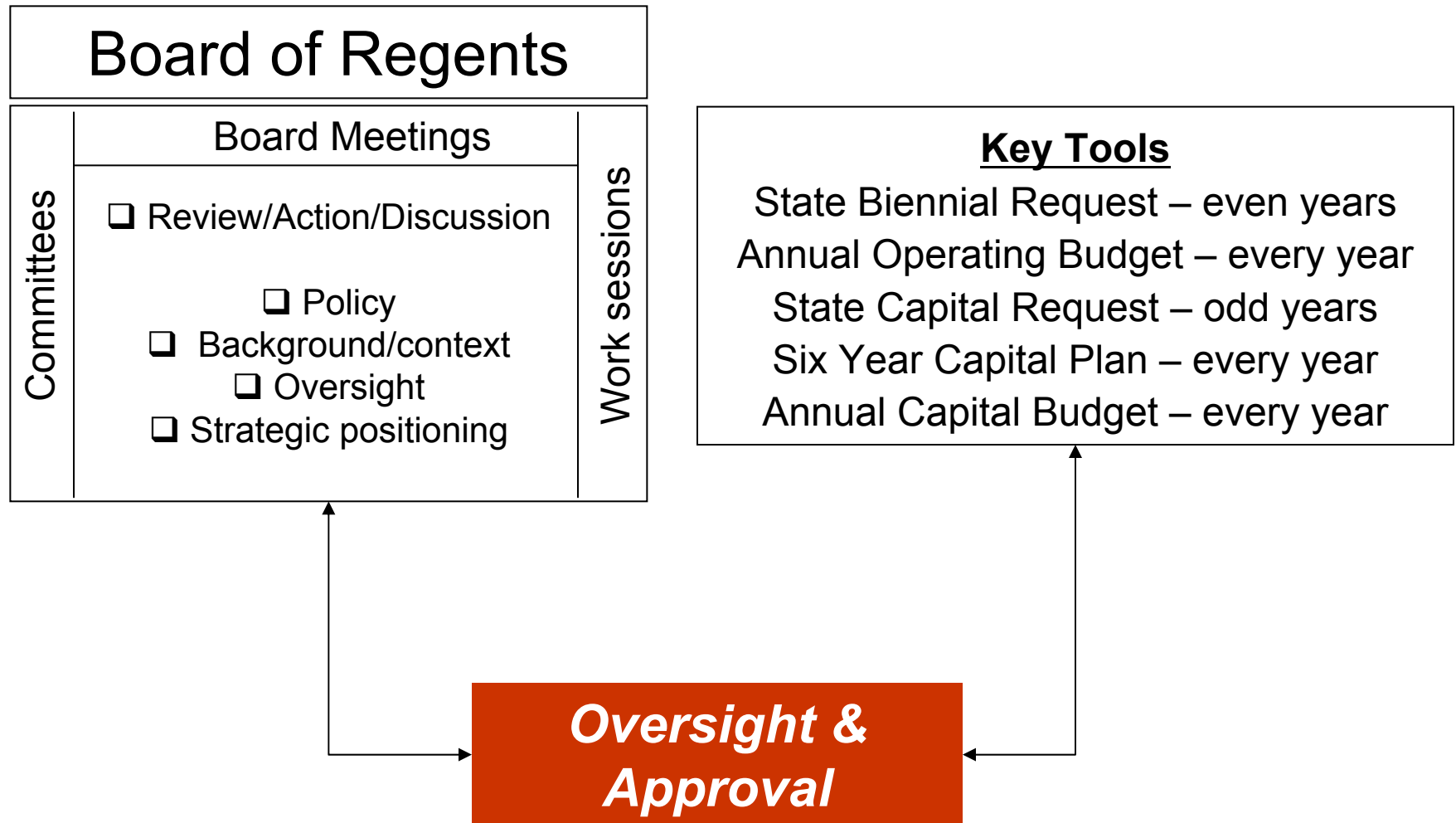
Strategic Positioning & Financing the Mission



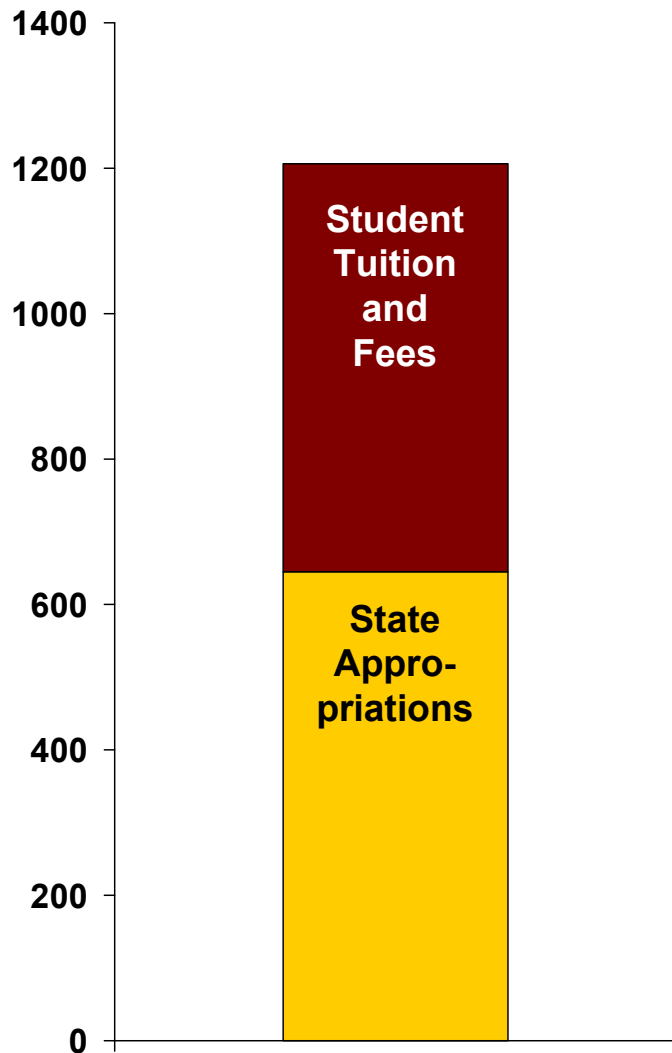
The University will continue to require an enduring partnership with the state to be successful



Conceptual Framework: Board of Regents Strategic Positioning & Financing the Mission



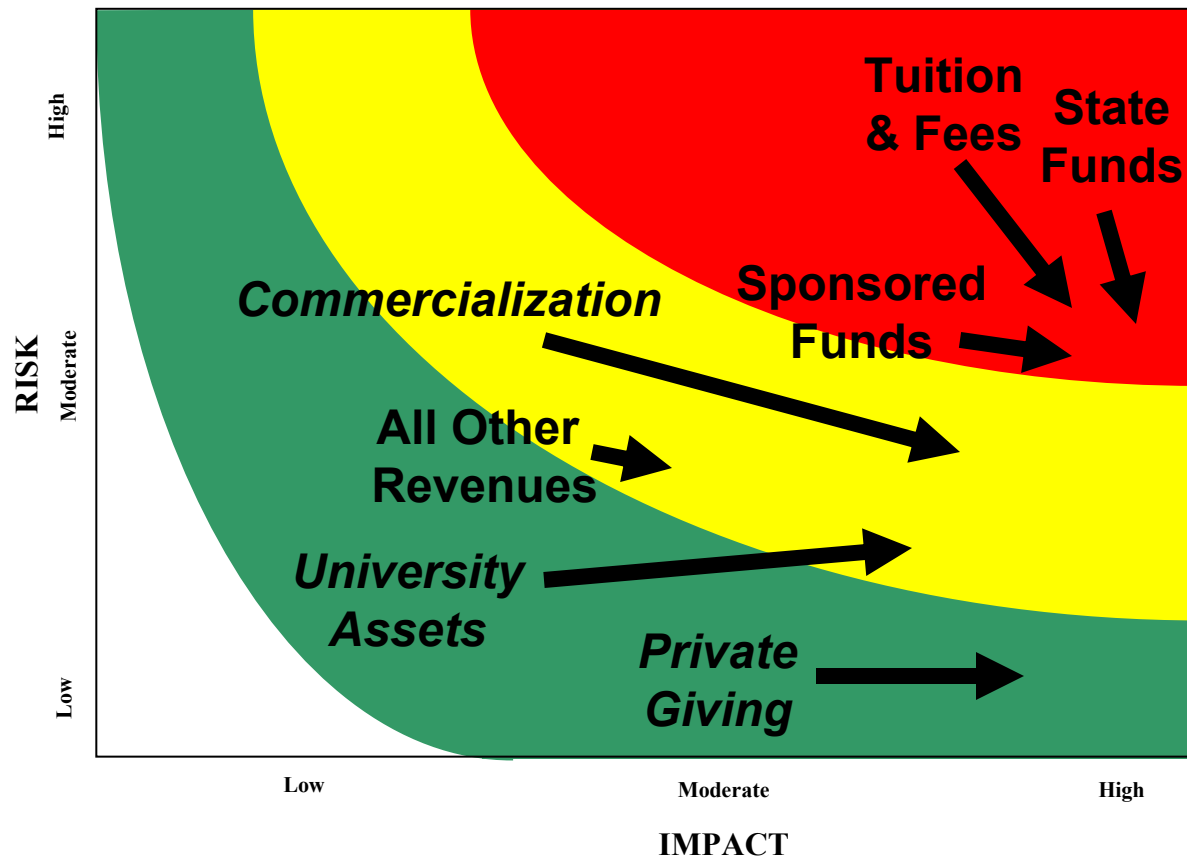
FY 2007–08 O&M and Tuition Revenues: \$1.2 billion



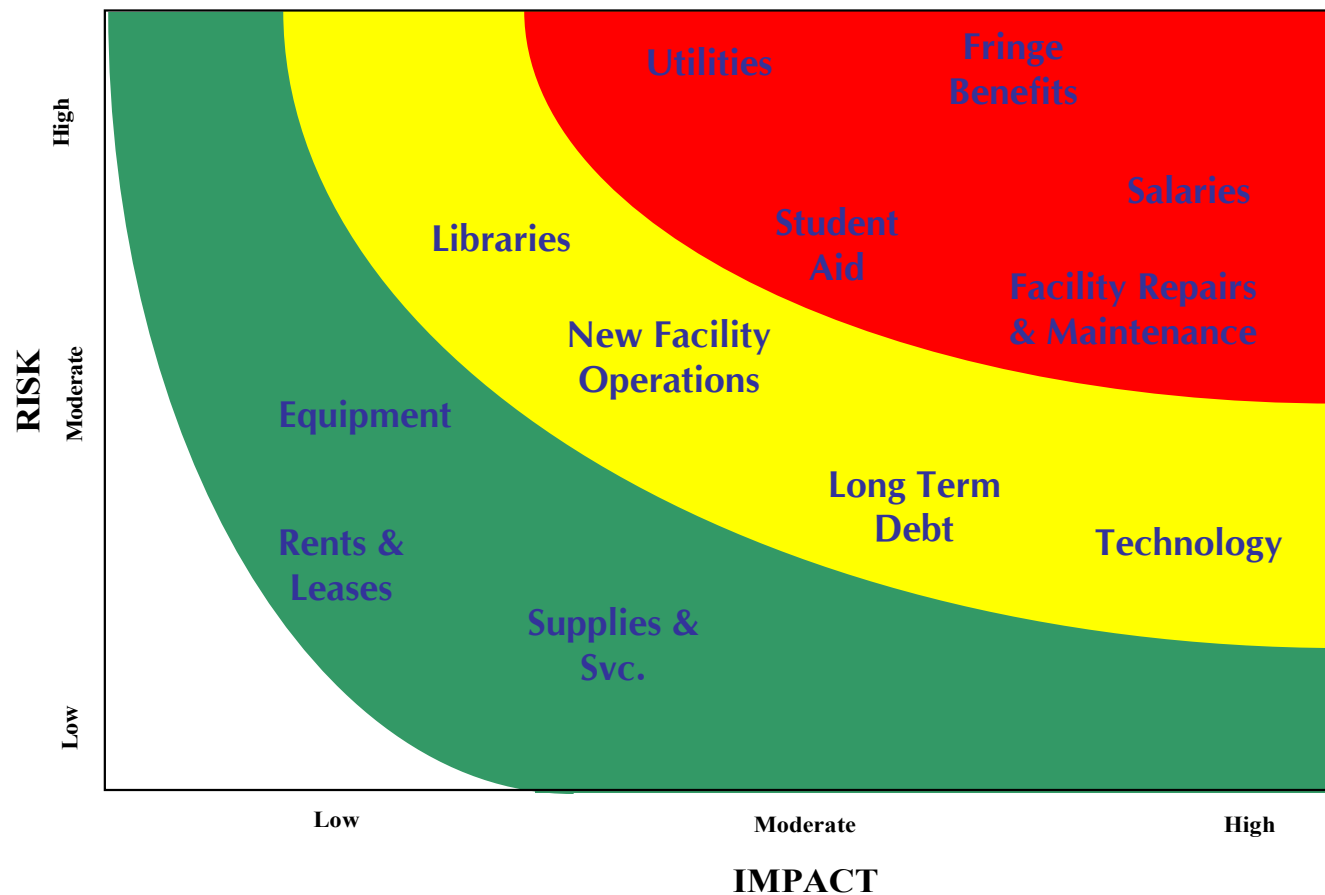
Why Are These Revenues So Important?

- 70% of total spending on instruction
- 77% of total spending on student services
- 72% of total spending on faculty compensation
- 93% of the total budget of CLA
- 78% of the total budget of IT
- 75% of the total budget of CFANS

Future directions - revenues

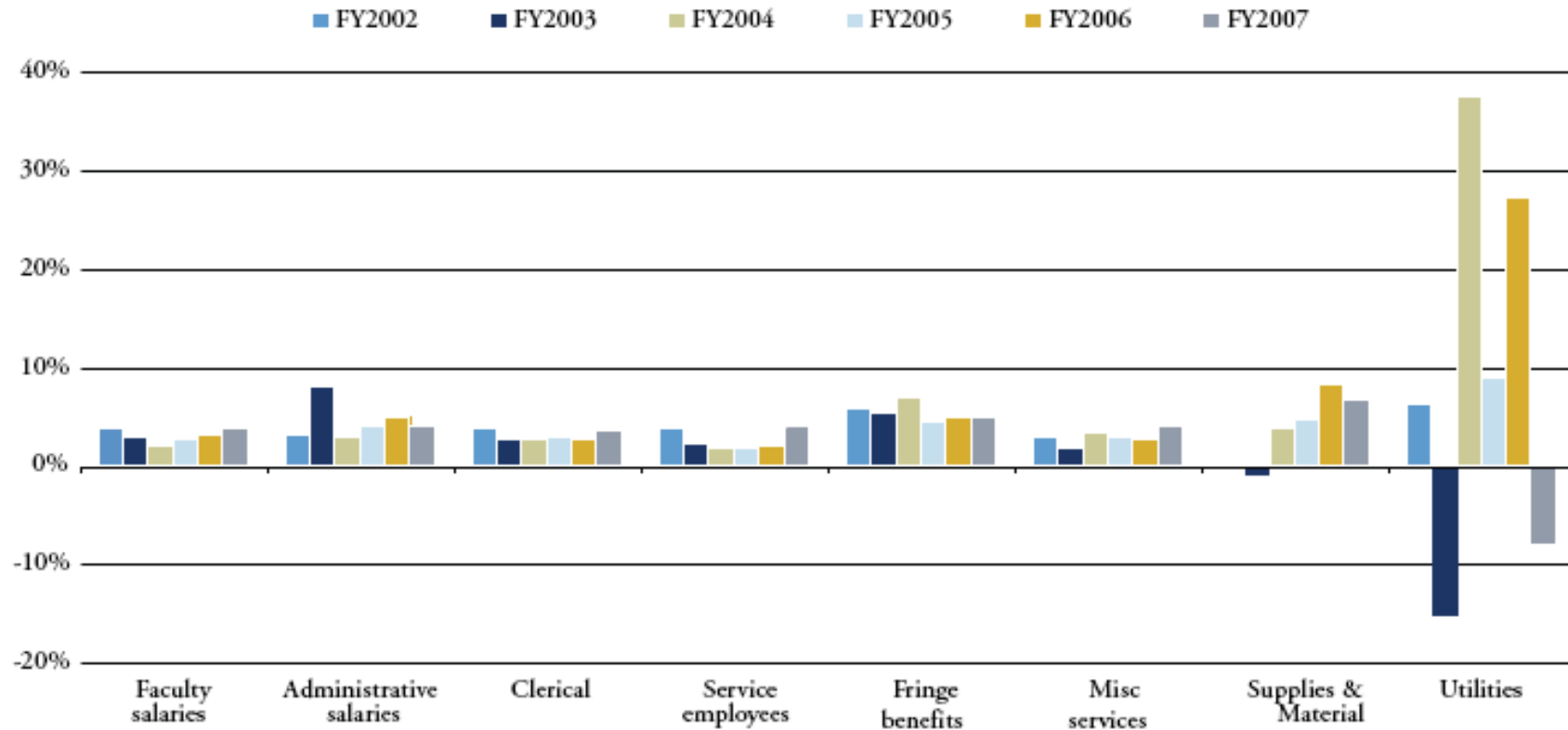


Expenditure risk and impact



Changes in core higher education costs

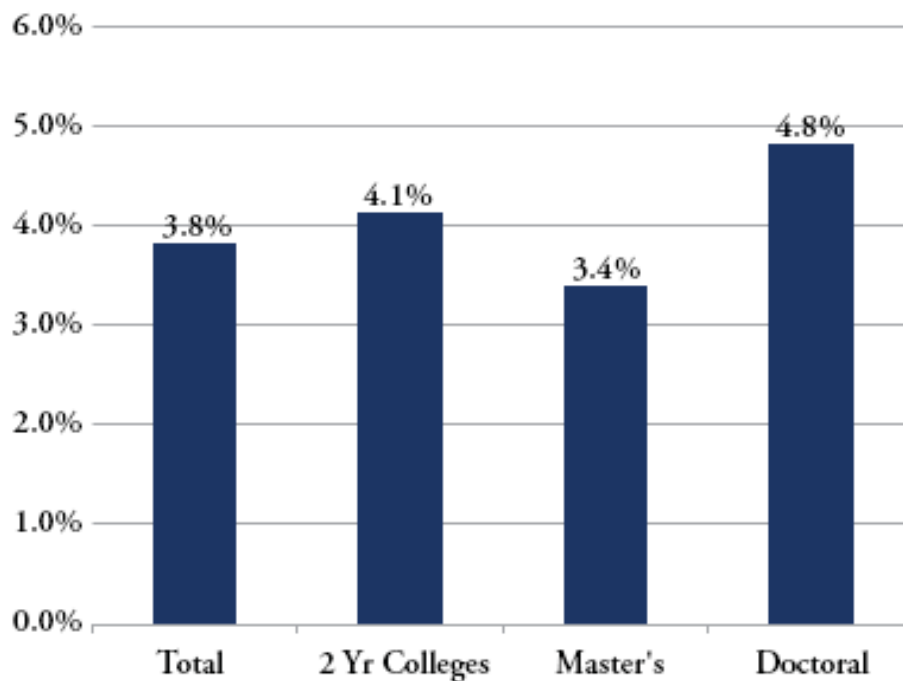
Annual Percentage Changes in the Eight HEPI Cost Factors, FY2002 - 2007



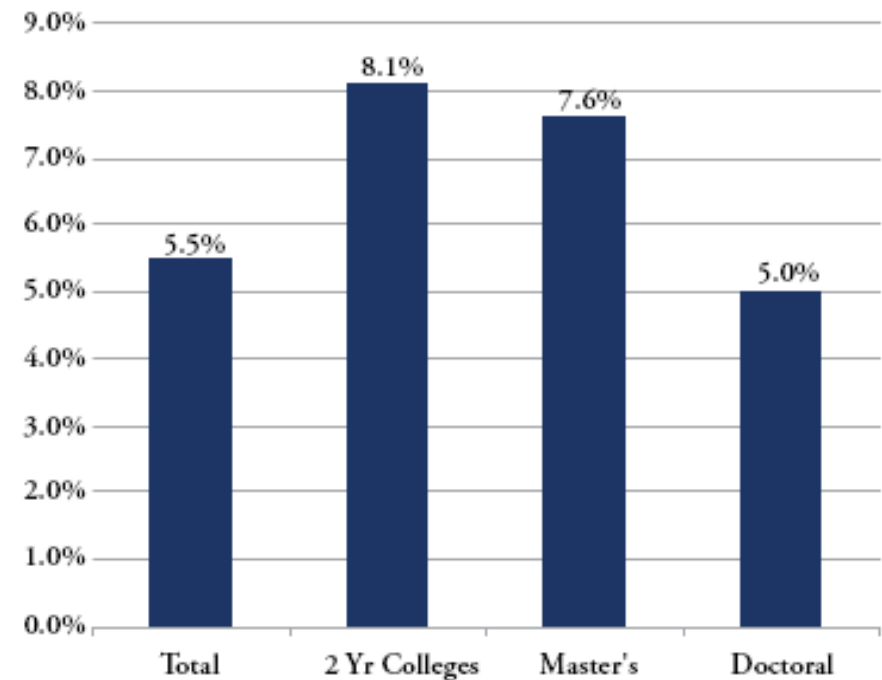
Source: Higher Education Price Index, 2007 update, Commonfund Institute

Changes in core higher education costs

FY2007 Faculty Salaries - Public Institutions



FY2007 Fringe Benefits - Public Institutions



Source: Higher Education Price Index, 2007 update, Commonfund Institute

Expenditures: Effect of Inflation Consumer Price Index [CPI] & Higher Education Price Index [HEPI] Comparison 1961 – 2004 (1983 base = 100)

