

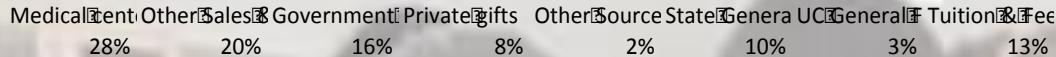


Federal Regulations on Research

- Regulations that are necessary (albeit with modification):
 - Governance of ethics: e.g. Institutional Review Boards (IRBs)
 - Sensitivity to cultural issues: e.g. NAGPRA
 - Sensitivity to national defense: e.g. ITAR
- Regulations that impede research without addressing real problems:
 - Controls around the use of research dollars: money is scarce and only a means to another end: it's not the goal of research
 - Effort reporting: progress is not a linear function of effort
 - Unreimbursed costs (esp. administrative): these are contributing to the increasing costs of education (through tuition)

The Research Budget at UC

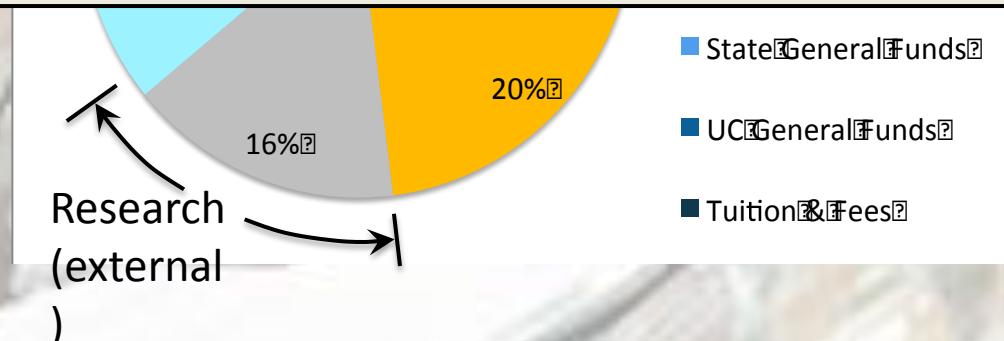
<http://accountability.universityofcalifornia.edu/report.html>



UC Operating Revenues FY12-13: \$24B

- Research is $\sim\frac{1}{4}$ of UC's expenditures but less than $\frac{1}{4}$ of its revenue

- **\$5.6B in research expenditures, 23% of UC's \$24B budget**
 - **\$4.0B direct of which UC contributes $\sim\$1B$**
 - **\$1.0B reimbursed indirect costs**
 - **\$0.6B unrecovered indirect costs**
 - » $\$241M$ lost to low rates (e.g. administrative costs)
 - » $\$371M$ ICR waived (usually required by government program officers)

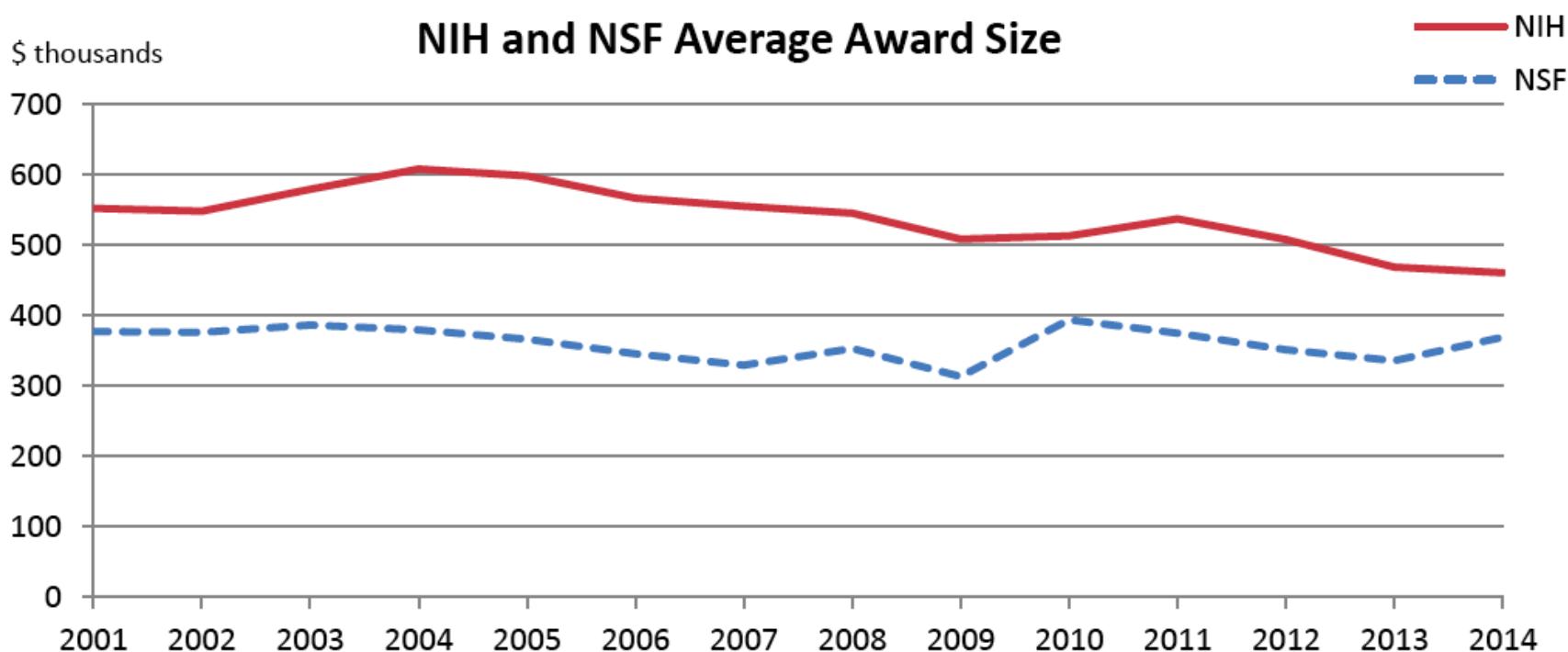


- Decreasing State support means the institutional support must come increasingly from tuition



Federal Funding at UC

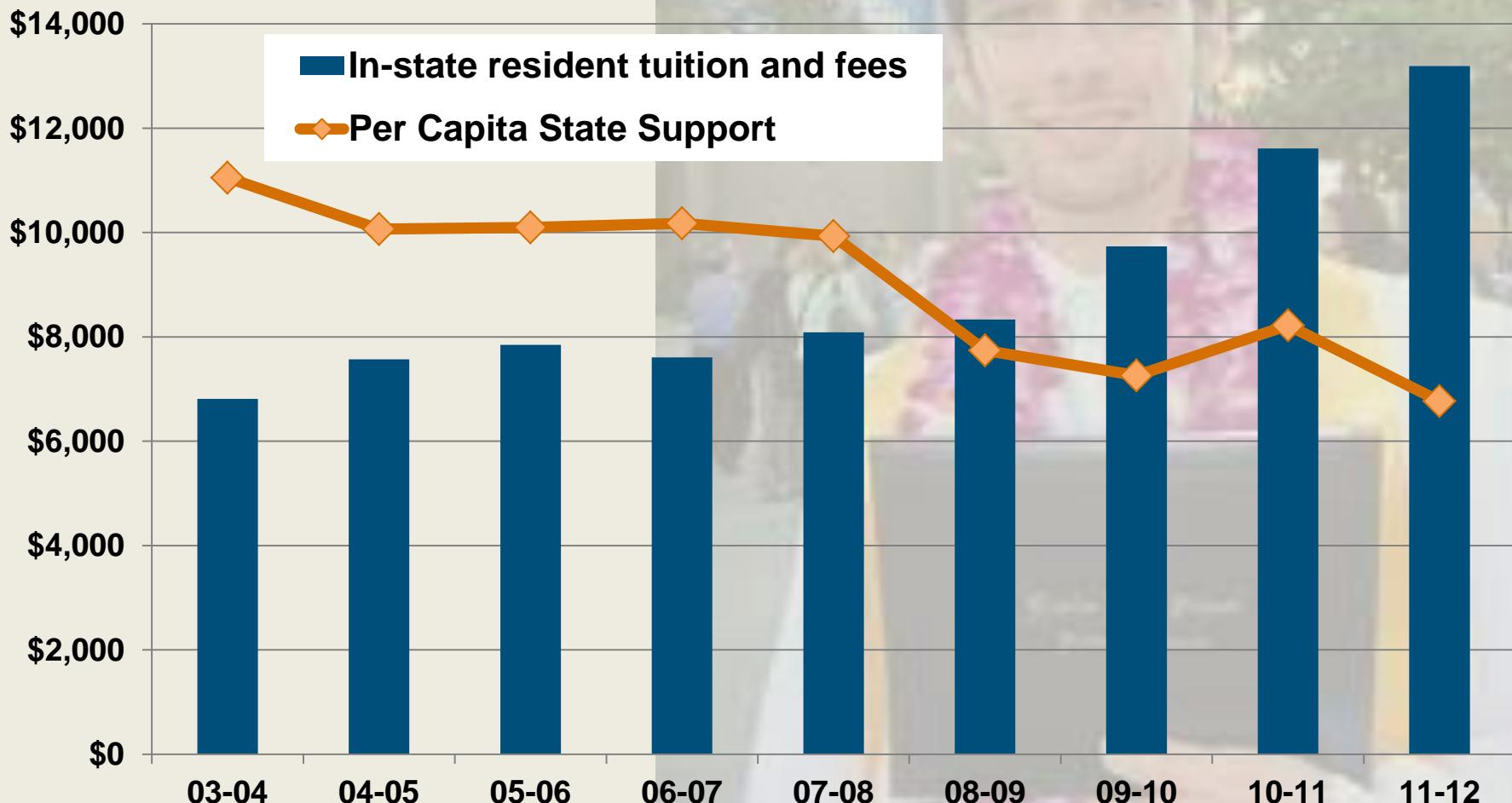
- Federal agencies provide 60% of all UC research (+8% flowthrough)
 - ~3/4 of the federal support from NIH and NSF: NIH/NSF~4
- UC provides ~\$1B for research from its own funds
- Research supports 30% of UC FTE, \$1.9B in salaries including:
 - \$342M for faculty, \$428M for researchers, \$702M for staff, \$227M for post-docs, and \$226M for students





State Funding at UC

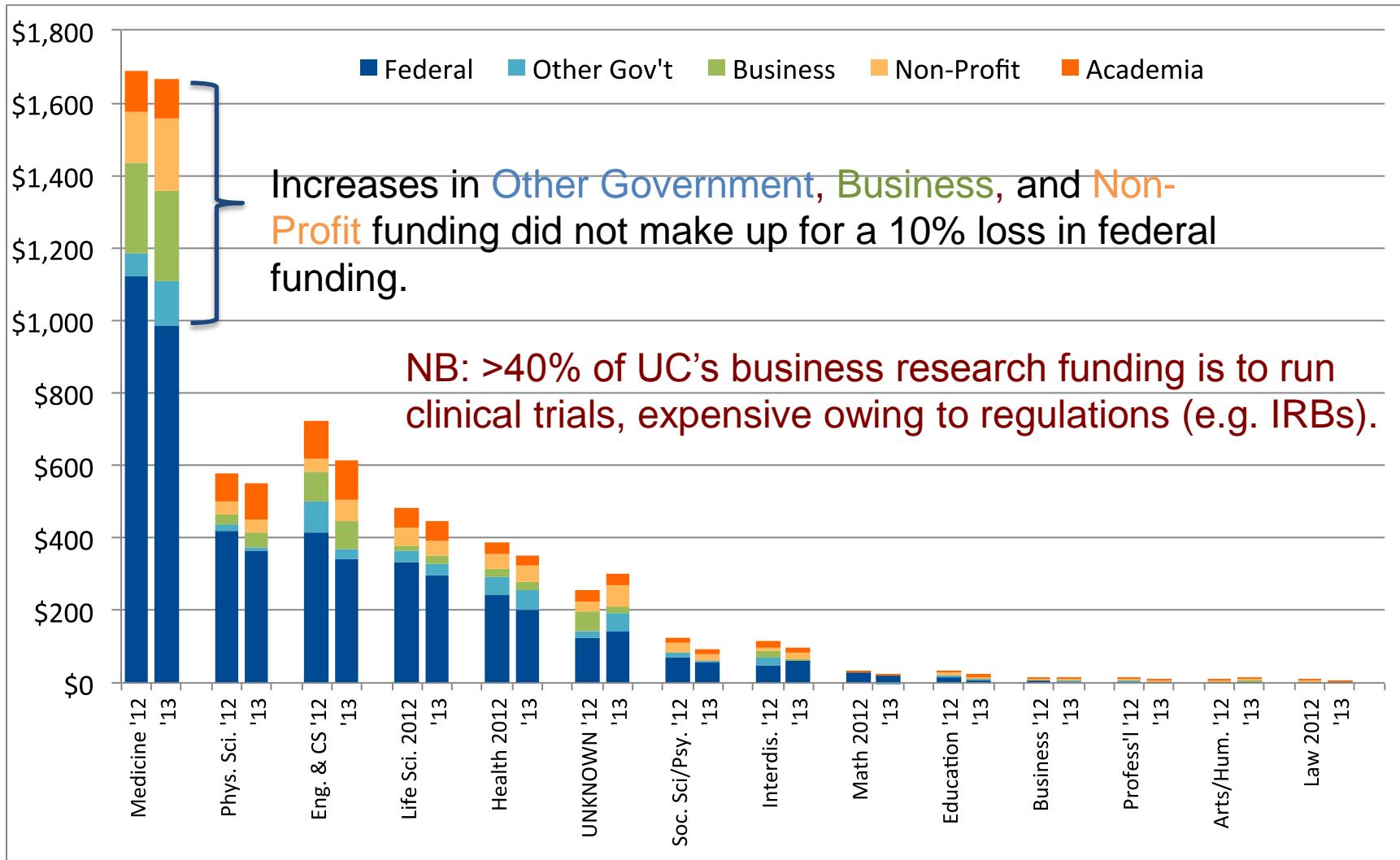
State support has declined, UC Tuition and Fees have increased





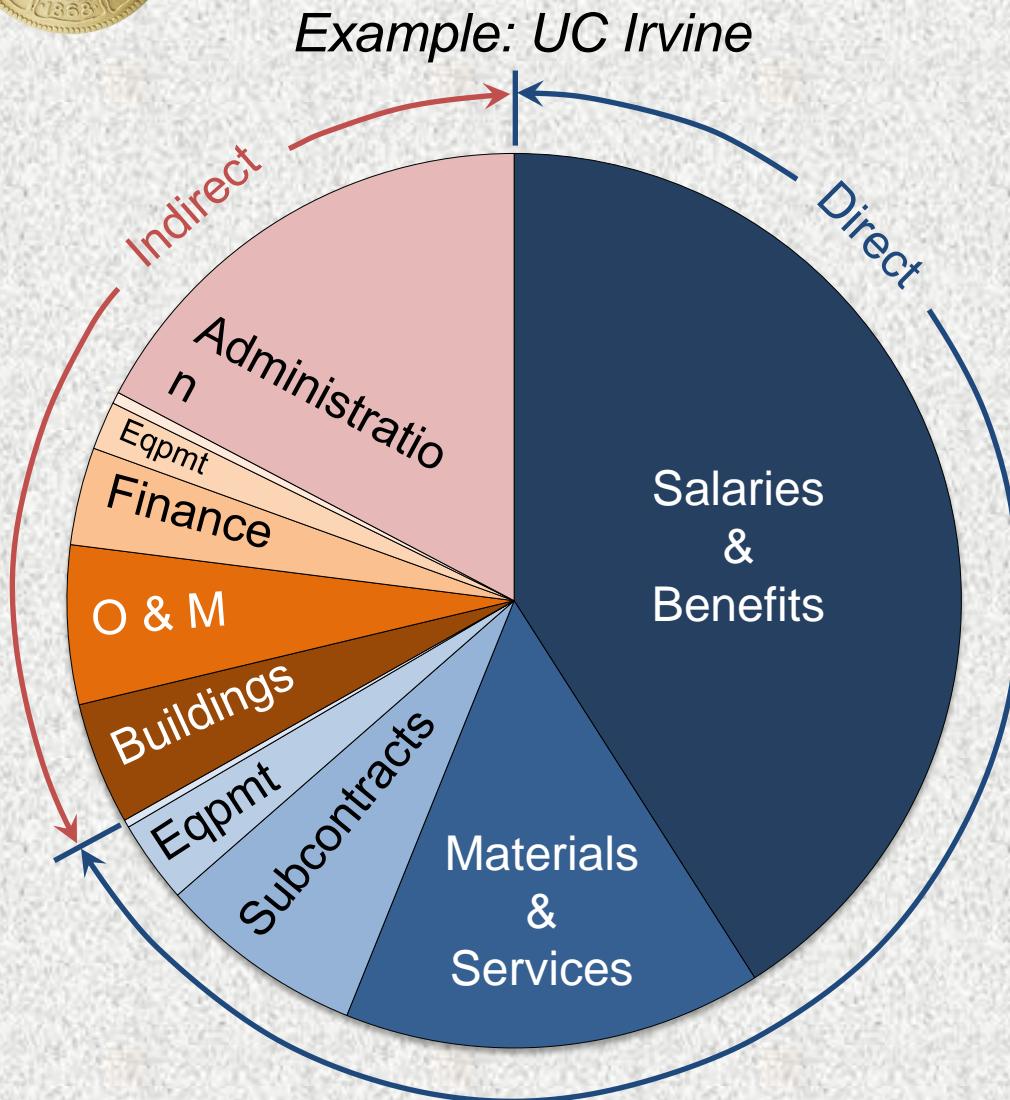
UC Research by Field: 2012 & 2013

(\$M) 2011





Costs of Research



◆ Direct costs (~67%)

- Salaries & Benefits
- Materials & Services
- Subcontracts
- Equipment
- Stipends

◆ Facilities & Administration (~33%)

- Buildings
- Operations & Maintenance.
- Finance (interest)
- Equipment
- Library
- Administration



Burdens on Research Universities

- Our research system is showing signs of erosion: decreasing per capita funding, increasing burdens of compliance, increasing costs of facilities and people, and increasing expectations for short-term returns.
- Research costs for public research universities puts an undue burden on support from undergraduate education.
- Pressures to produce short-term benefits and solutions to immediate problems do not address the underlying weaknesses and do not capitalize on the greatest strengths of the current system: basic research.
- Unproductive regulations increase the costs and decrease the benefits of all research, especially by forcing researchers into unproductive activities.