

Contracts & Grants Q113 Award Report

Federal Funding Uncertainties and the Research Enterprise

Summary

Whatever the other results of the current federal budget controversy, it is already clear that the academic research enterprise, at UC and nationwide, is in for a period of increasing uncertainty and possible retrenchment. Federal base funding to UC during the first quarter of FY2013 fell by \$320 million compared to last year, from \$1.42 billion to \$1.1 billion, a drop of 22%. The first quarter of UC's fiscal year corresponds to the final quarter of the federal fiscal year, and it appears that agencies are altering their funding practices in anticipation of reduced appropriations for research in future budgets. They are systematically conserving cash, approving fewer and shorter awards, and reducing some awards that have already been issued—at least temporarily.

The decline in federal funding this quarter was partly offset by several very substantial awards from non-profit organizations and from the State of California. The total award amount received during Q113 was about \$1.76 billion, which is still 13%, or \$266 million, below the award total for the first quarter of FY2012.

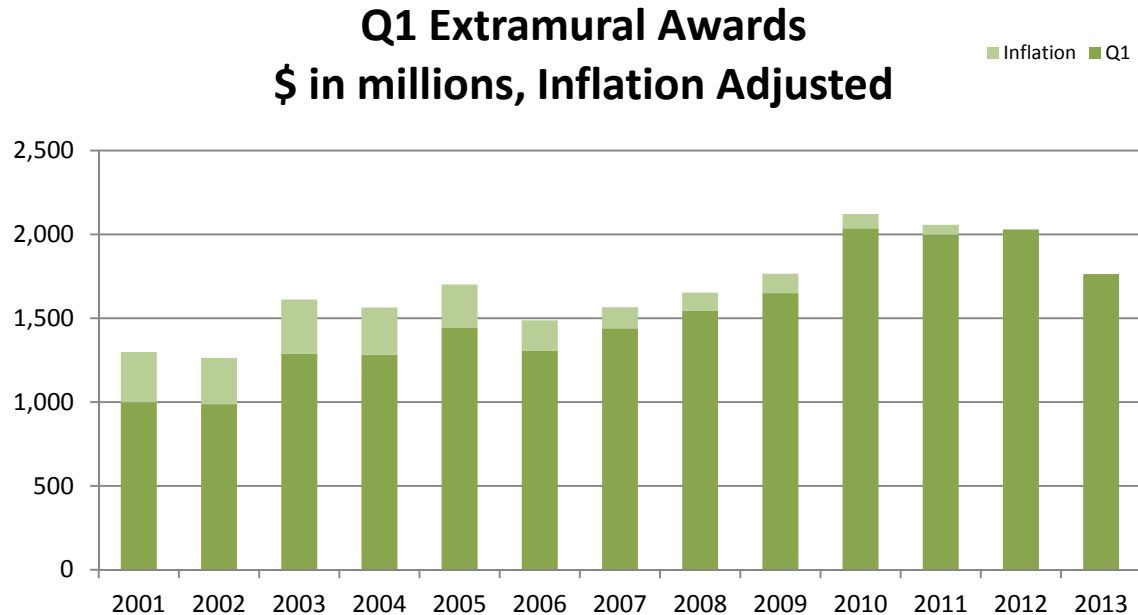
But with federal funding providing two-thirds or more of the award total, any decrease in agency funding will have a significant effect on the academic research enterprise. If budget uncertainties are prolonged and award funding remains constrained for one or two more quarters, it is likely that the impact of these declines will begin to be felt at about the same time that Recovery Act funds are fully spent out. The combination of these two factors could have detrimental and lasting consequences for the research enterprise at UC and nationwide.

Key findings for Q113 are as follows:

- The decline in federal funding is not attributable to NIH alone, but is broadly based across many agencies. NIH generally provides about 60% of UC's federal funding and was proportionately responsible for about 60% of the \$320 million decrease during Q113. Funding from the Departments of Commerce, Defense and Energy showed similar reductions.
- The campuses with the largest dollar declines in federal funding compared to Q112 were Berkeley (\$95M), Los Angeles (\$76M), Davis (\$56M) and San Diego (\$52M)
- Of the \$1.76 billion UC received in extramural awards during Q113, research awards amounted to \$1.3 billion, or 74%, compared to 84% for Q112.
- Award funding for UC's first fiscal quarter is generally between 33 and 38% of the annual total. FY 2013 is likely to be an anomalous year because of federal budget uncertainties, and it is to be hoped that the volume of federal awards increases significantly once an actual budget is in place.

I. Quarterly Performance Metrics

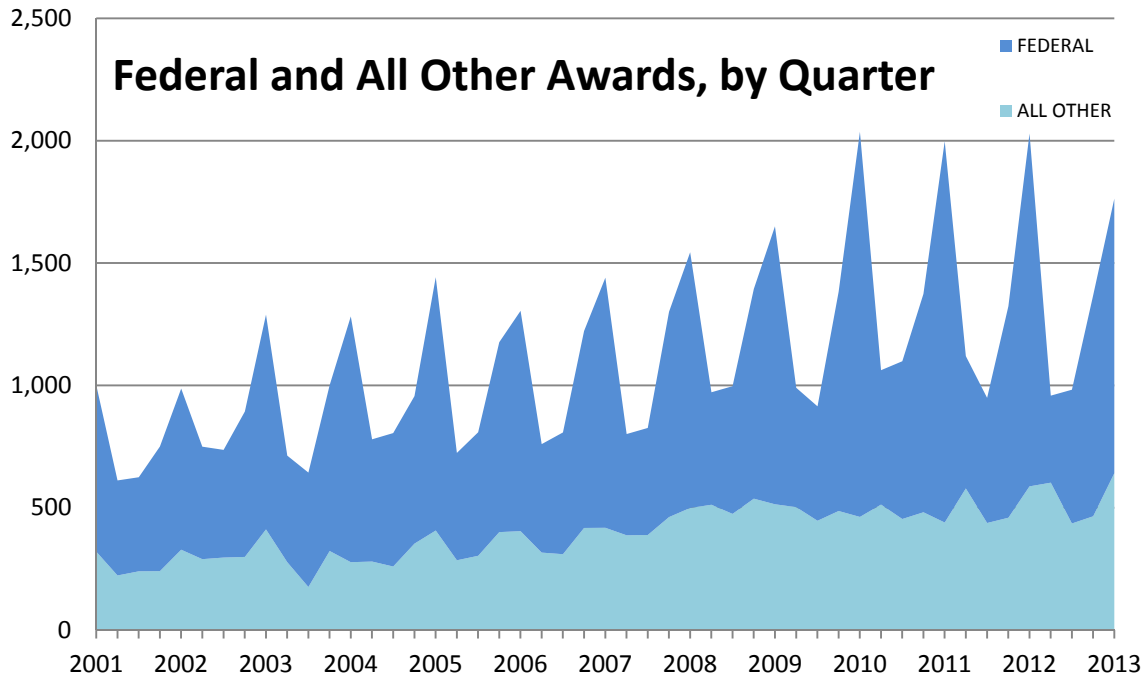
Extramural awards for Q113 totaled about \$1.76 billion, \$266 million (13%) below the amount reported during Q112.



Quarterly Extramural Awards, FY 2001 – 2013 (\$ millions)

PERIOD	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Q1	999	987	1,290	1,282	1,442	1,305	1,440	1,545	1,650	2,037	1,998	2,030	1,763
Q2	612	750	713	780	724	760	802	972	991	1,063	1,120	958	-
Q3	625	737	644	805	809	808	826	997	915	1,099	949	982	-
Q4	750	894	1,002	956	1,177	1,223	1,301	1,395	1,383	1,374	1,324	1,369	-
FYTD	2,986	3,367	3,649	3,823	4,151	4,096	4,370	4,909	4,938	5,574	5,391	5,340	1,763

Award totals for UC's first fiscal quarter are always the highest for the year, followed by Q4. This is a function of the federal funding cycle, which awards the largest amounts in the final quarter of the federal fiscal year (corresponding to UC's Q1). With direct federal sponsorship providing about two-thirds of all UC's awards, this produces sharp quarterly spikes in funding.



II. Award Trends by Sponsor Category

The decline in overall funding for Q113 is due to federal cutbacks. Direct federal award funding this quarter amounted to over \$1.1 billion, or about 64% of the award total, compared to about 71% a year ago.

Q1 Awards by Sponsor Category, FY 2006-2013 (\\$ Millions)

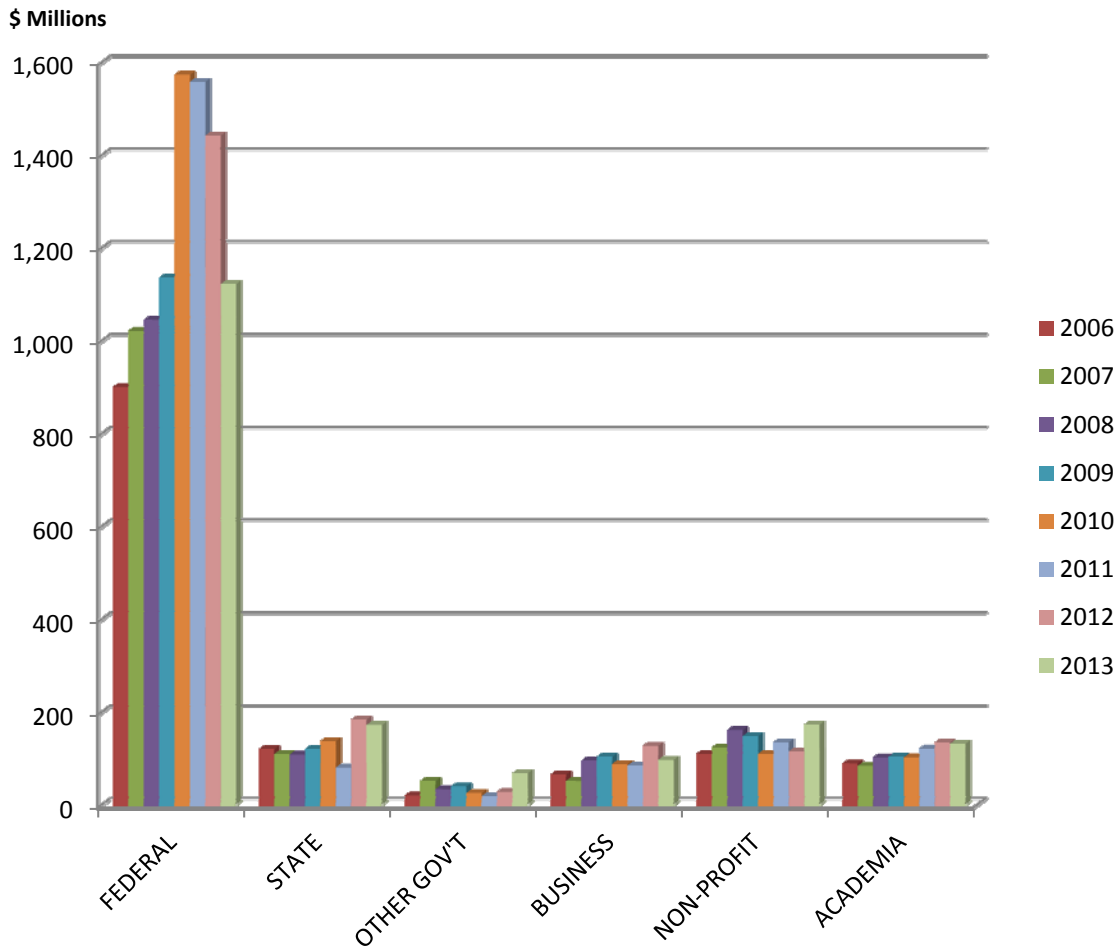
SPONSOR	Q106	Q107	Q108	Q109	Q110	Q111	Q112	Q113
Federal Base	901	1,022	1,045	1,136	1,220	1,376	1,431	1,122
Federal ARRA*	-	-	-	-	353	182	11	-
State	120	109	108	120	137	80	184	172
Other Gov't**	20	51	34	40	25	19	28	68
Business	65	49	86	101	82	81	127	97
Non-Profit	110	124	161	147	110	135	115	173
Academia***	89	86	112	107	108	124	134	131
TOTAL	1,305	1,440	1,545	1,650	2,037	1,998	2,030	1,763

* ARRA sub-awards from non-federal sources are attributed to the category of the prime contractor.

** Other Gov't includes Agricultural Market Order Boards.

***Academia includes the categories of Higher Education, DOE Labs, Campuses and UCOP.

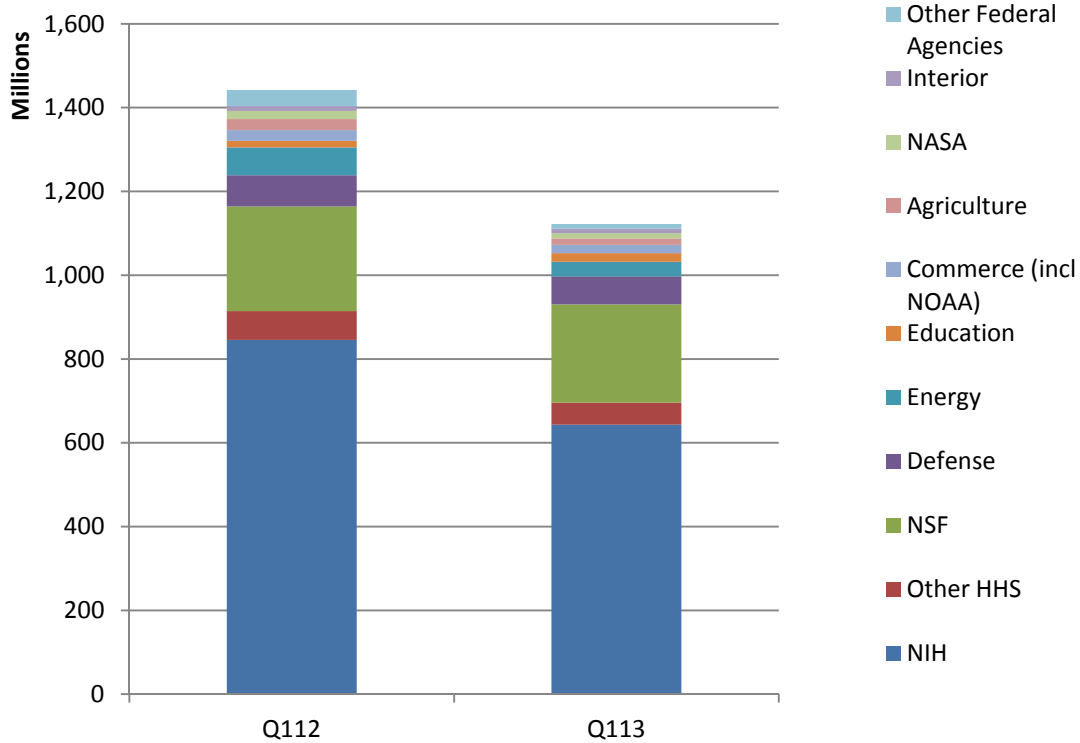
Q1 Awards by Sponsor Category, FY 2006 - 2013



III. Federal Agency Award Trends

Most of the decrease in federal awards reported for Q113 was attributable to UC's largest single source of federal funds, the National Institutes of Health. NIH generally provides nearly 60% of UC's federal funding, and was responsible for just a little over 60% of the dollar decline. However, all the other major federal agencies also decreased their award totals, with two significant exceptions. UC's second-largest source of funding, the National Science Foundation, showed a decline of only about 5%, or \$15 million, compared to last year. The Department of Education was the only large agency whose awards to UC increased over last year, from \$15.6 to \$20.6 million.

Federal Agency Funding Q112 - Q113 Comparison



Q1 Federal Agency Funding, FY 2012 and 2013

AGENCY	Q112	Q113	\$\$ DIFFERENCE	% CHANGE
NIH	845,533,352	643,312,214	-202,221,138	-23.9%
Other HHS	68,819,174	52,530,459	-16,288,715	-23.7%
NSF	249,681,778	234,403,954	-15,277,824	-6.1%
Defense	74,501,918	67,135,662	-7,366,256	-9.9%
Energy	66,421,678	34,736,822	-31,684,856	-47.7%
Education	15,607,896	20,631,019	5,023,123	32.2%
Commerce (incl. NOAA)	25,534,284	19,549,688	-5,984,596	-23.4%
Agriculture	26,694,816	15,501,458	-11,193,358	-41.9%
NASA	19,484,773	12,554,711	-6,930,062	-35.6%
Interior	11,498,577	10,561,564	-937,013	-8.1%
Other Federal Agencies	38,513,462	11,330,765	-27,182,697	-70.6%
TOTAL	1,442,291,708	1,122,248,316	-320,043,392	-22.2%

IV. Award Trends by Project Type

Research awards during Q113 amounted to \$1.3 billion, including \$51 million in clinical trial sponsorship. Training, service and other awards came to about \$460 million. The increase in non-research funding compared to last year is due to a number of significant training and service awards from non-profit and the State of California in addition to federal sources.

Q1 Award Amounts by Project Type, FY 2006-2013 (\$ millions)

PROJECT TYPE	Q106	Q107	Q108	Q109	Q110	Q111	Q112	Q113
<i>Research</i>	1,019	1,011	1,186	1,261	1,596	1,608	1,665	1,252
<i>Clinical Trials</i>	35	31	49	39	50	43	48	51
<i>Training</i>	113	125	139	134	146	140	128	128
<i>Service</i>	75	153	80	112	90	87	94	171
<i>Other</i>	63	121	91	104	155	120	95	161
TOTAL	1,305	1,440	1,545	1,650	2,037	1,998	2,030	1,763

V. Major Awards Over \$5M

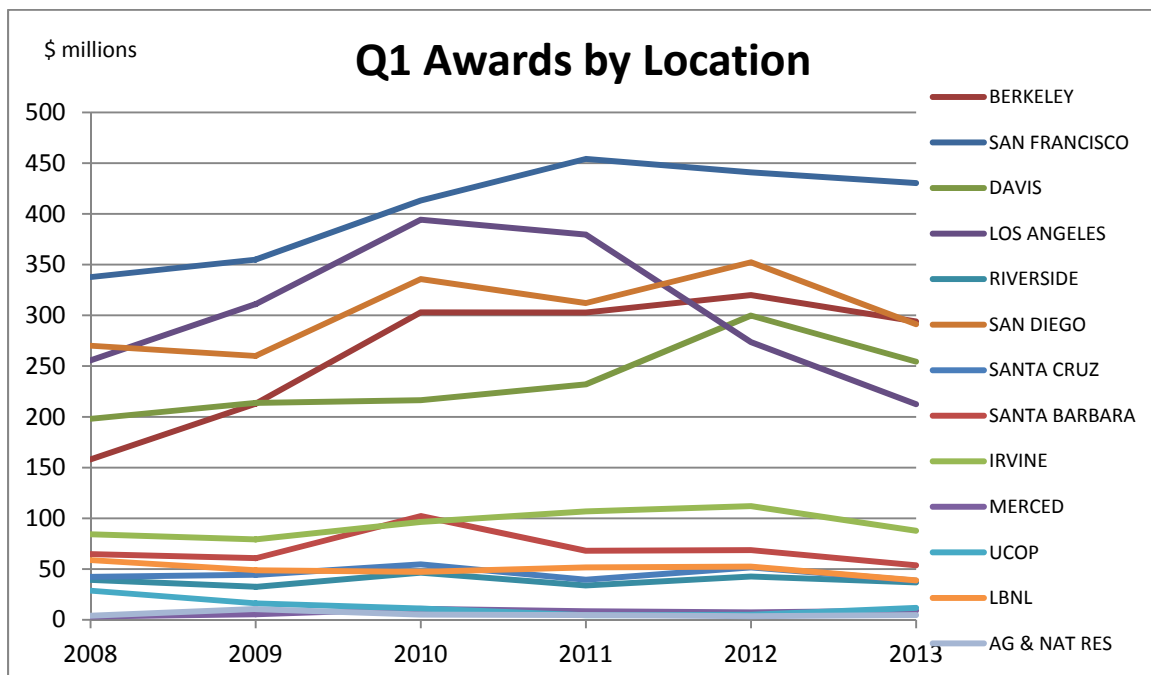
During Q113, UC received 20 awards for amounts of \$5M or more. Most awards of this magnitude are intended to support ongoing programs, centers, or affiliation agreements rather than specific research projects, and may involve funding that extends over several fiscal years.

LOCATION	SPONSOR CATEGORY	SPONSOR	PROJECT TITLE	AMOUNT
San Francisco	Federal	NIH National Inst of Allergy and Infectious Diseases	Collaborative network for clinical research on immune tolerance	35,767,739
Berkeley	State	California Department of Social Services	Title IV-E social work training program	32,587,458
Berkeley	Foundation	Simons Foundation	Simons Institute for the Theory of Computing	31,140,000
Berkeley	Foundation	MasterCard Foundation	MasterCard Foundation Global Scholars Program at UC Berkeley	30,077,837
Davis	State	California Department of Public Health	Statewide California cancer registry	28,999,948
Los Angeles	Other Gov't	County of Los Angeles	Affiliation Agreement-Medical School operating agreement	27,074,000
San Francisco	State	California Department of Public Health	Tuberculosis Risk Reduction project	20,732,692
San Francisco	Federal	NIH National Center for Advancing Translational Sciences	Clinical and Translational Science Institute	19,487,157
Davis	State	California Department of Social Services	Health Information Exchange	17,504,791

San Diego	Federal	National Oceanic and Atmospheric Administration (NOAA)	CIMEC: Cooperative Institute for Marine Ecosystems and Climate	15,836,434
Berkeley	Higher Education	Johns Hopkins University	Fields investigation for Solar Probe Plus - Phase B	10,620,980
Berkeley	Federal	National Institute of General Medical Science	Center for RNA Systems Biology	9,992,931
Berkeley	Federal	National Institute of General Medical Science	The molecular basis of cell function	9,017,734
Berkeley	Other Gov't	Singapore National Research Foundation	Sinberbest: Singapore Berkeley: Building efficiency and sustainability in the topics	8,914,044
San Francisco	Federal	Advanced Research Projects Agency	Linking virus population genetic structure to infectivity and adaptation	7,385,049
San Francisco	Federal	NIH National Inst of Allergy and Infectious Diseases	Dare: Delaney Aids Research Enterprise to find a cure	6,511,956
Davis	State	California Department of Public Health	Tobacco control activities	6,014,277
San Diego	Federal	National Science Foundation	PRAGMA - Enabling scientific expeditions and infrastructure experimentation for Pacific Rim institutions and researchers	5,693,064
Riverside	Foundation	John Templeton Foundation	The science, philosophy, and theology of immortality	5,061,808
Berkeley	Federal	National Science Foundation	SYNBERC: Synthetic Biology Engineering Research Center	5,026,101

VI. Award Trends by Recipient Location

Q113 awards were about 13% under Q112, but this drop was unevenly divided.

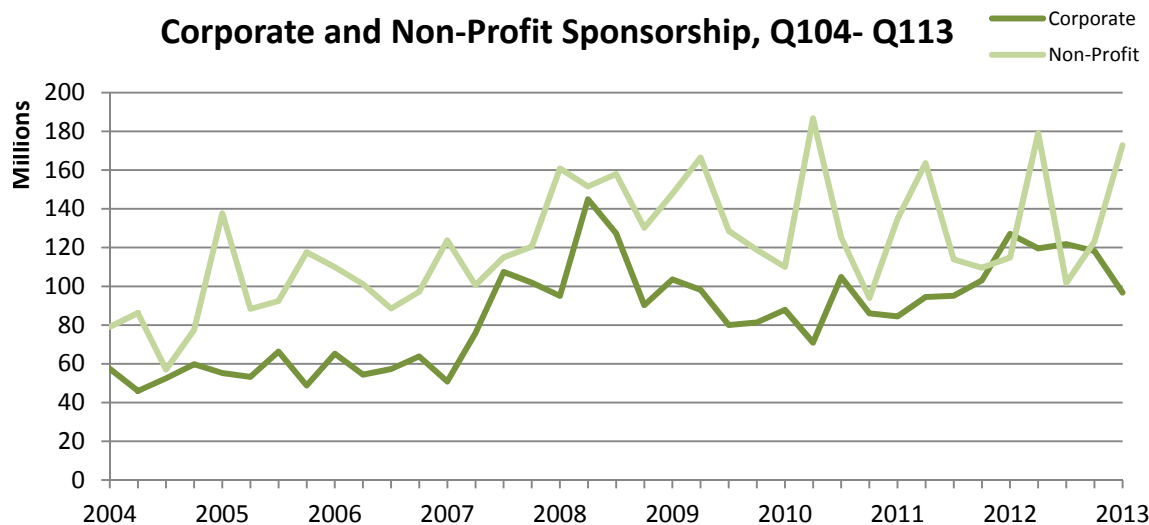


Q1 Awards by Location (\$M)

UC LOCATION	2008	2009	2010	2011	2012	2013	Change
BERKELEY	158	213	303	303	320	294	-8.86%
SAN FRANCISCO	338	355	413	454	441	430	-2.43%
DAVIS	198	214	216	232	300	254	-17.89%
LOS ANGELES	256	311	394	380	274	213	-28.75%
RIVERSIDE	39	32	46	34	43	37	-15.97%
SAN DIEGO	270	260	336	312	352	291	-20.93%
SANTA CRUZ	42	44	55	39	52	39	-33.84%
SANTA BARBARA	65	61	102	68	69	54	-27.89%
IRVINE	84	79	96	107	112	88	-27.74%
MERCED	3	5	11	9	7	9	19.34%
UCOP	29	16	11	4	5	12	58.21%
DOE LABS	59	49	47	52	52	39	-35.37%
AG & NAT RES	4	11	5	5	3	5	24.31%
TOTAL	1,545	1,650	2,037	1,998	2,030	1,763	-15.11%

VII. Shifts in Funding Sources

The federal funding decline during Q113 was partly mitigated by a number of substantial awards from non-federal sources. Among them were two large foundation grants to UC Berkeley totaling just over \$60 million, noted in the listing above, and accounting for about one-fifth of all Berkeley awards for the quarter.



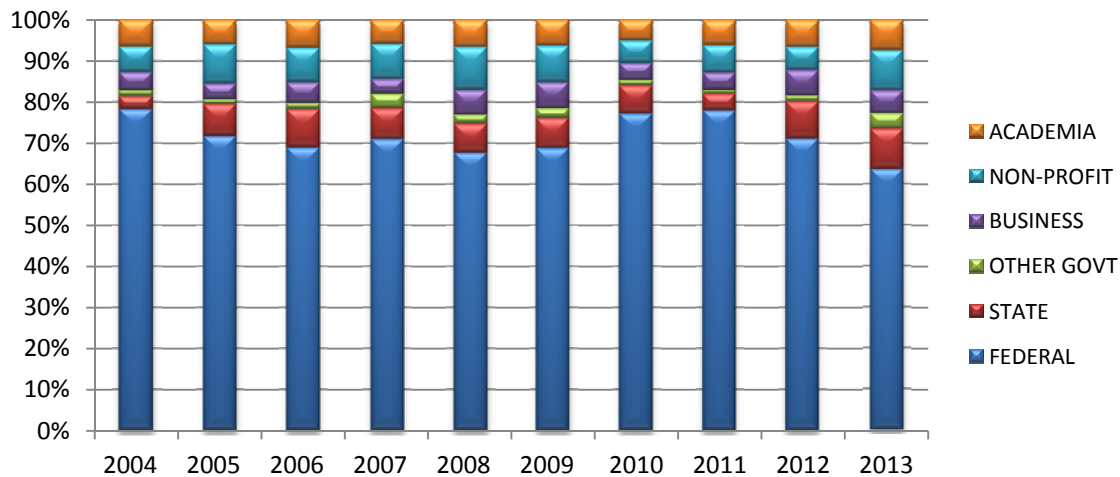
Direct federal awards generally supply about two-thirds of all UC's extramural funds on a yearly basis. During UC's first fiscal quarter this percentage is somewhat higher due to quarterly variations in the federal funding cycle. The Recovery Act, combined with recessionary effects, resulted in a peak in federal funding percentages during

2010 and 2011, which returned to more typical levels in 2012. With the sharp decline in agency funding for Q113, the federal contribution has fallen to a record low for a first fiscal quarter of 63.6%.

Extramural Funding Sources, % of Total

	Q104	Q105	Q106	Q107	Q108	Q109	Q110	Q111	Q112	Q113
FEDERAL	78.3%	71.8%	69.0%	70.9%	67.6%	68.8%	77.3%	78.0%	71.1%	63.6%
STATE	3.1%	7.7%	9.2%	7.6%	7.0%	7.3%	6.7%	4.0%	9.0%	9.7%
OTHER GOVT	1.4%	1.2%	1.5%	3.6%	2.2%	2.4%	1.2%	0.9%	1.4%	3.9%
BUSINESS	4.5%	3.8%	5.0%	3.5%	6.2%	6.3%	4.3%	4.2%	6.3%	5.5%
NON-PROFIT	6.2%	9.5%	8.4%	8.6%	10.4%	9.0%	5.4%	6.7%	5.7%	9.8%
ACADEMIA	6.5%	6.0%	6.8%	5.8%	6.6%	6.3%	5.0%	6.1%	6.6%	7.5%

Q1 Extramural Award Sources, % of Total



It's uncertain at this point how long federal agencies, most notably NIH, will continue to conserve their R&D appropriations and issue fewer and smaller awards. Much depends on how and when current federal budget controversies are resolved.

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January, 2013