

**Office of Research Administration**

**Annual Report – Fiscal Year 2013**

This is a report on sponsored research award and proposal activity at Caltech for Fiscal Year 2013, October 1, 2012 through September 30, 2013. In FY 2013 funding for research grants, contracts, and cooperative agreements totaled \$309 Million. The report includes award and proposal transactions processed through the Office of Sponsored Research.<sup>1</sup>

California Institute of Technology  
**Contract and Grant Funding, by Sponsor Type - FY2013**

\$309,298,873

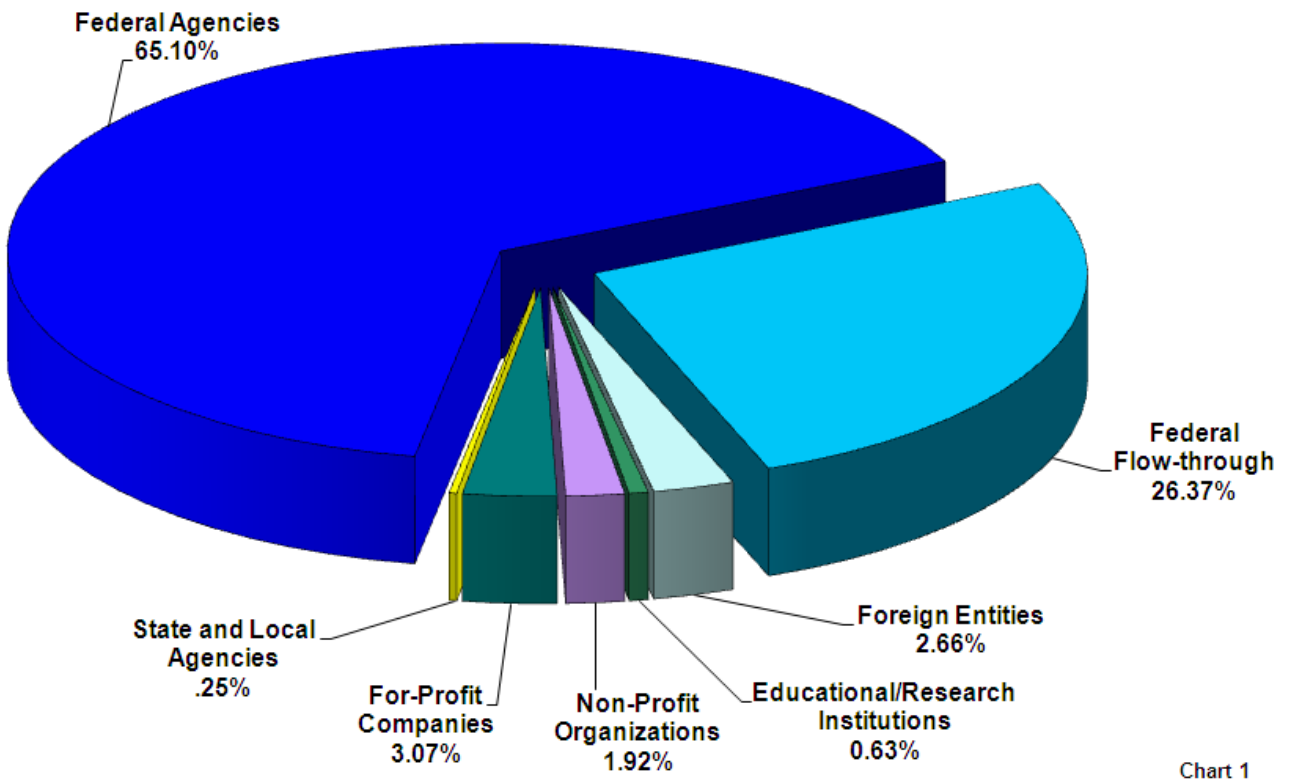


Chart 1

<sup>1</sup> The report does not include information on research awards administered by Foundation Relations or Corporate Relations, research funding provided by the Howard Hughes Medical Institute, or funding from NASA for the operation of the Jet Propulsion Laboratory.

Chart 2 compares research funding received with research expenditures over the past 10 years. Information for most years shows a lag between funds awarded and funds expended. In some cases funds are awarded for multi-year periods but expenditures occur on an annual basis. This is exemplified by the fact that expenditures exceeded funds awarded in FY 2012 and FY 2013.

California Institute of Technology  
Contract and Grant Funding and Expenditures: FY2004-FY2013

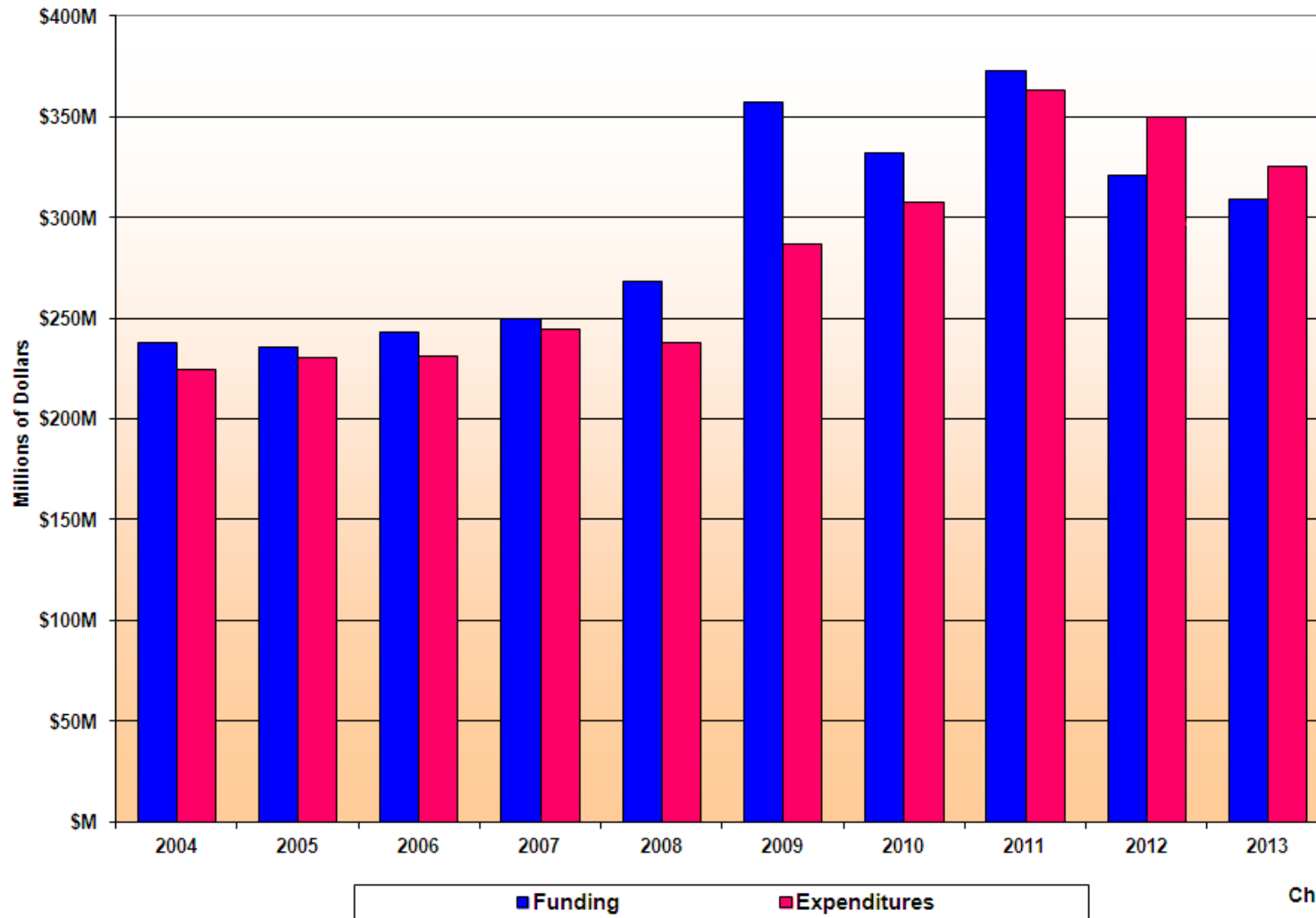


Chart 2

| Chart 3                                 | Agency Type                                             | # of Transactions | Funds Awarded               | % Change in Dollars from Previous Year |
|-----------------------------------------|---------------------------------------------------------|-------------------|-----------------------------|----------------------------------------|
| Federal Funding                         |                                                         |                   |                             |                                        |
| Executive and Independent Agencies      |                                                         |                   |                             |                                        |
| Department of Defense                   |                                                         |                   |                             |                                        |
|                                         | Air Force                                               | 15                | 5,318,093                   | -36.6%                                 |
|                                         | Army                                                    | 20                | 3,564,387                   | 28.3%                                  |
|                                         | Defense Advanced Research Projects Agency               | 5                 | 4,670,258                   | 146.0%                                 |
|                                         | Navy                                                    | 44                | 4,443,246                   | -36.7%                                 |
|                                         | Other DOD                                               | 2                 | 499,985                     | 0.0%                                   |
|                                         | <b>Subtotal DOD</b>                                     | <b>86</b>         | <b>18,495,969</b>           | <b>-10.2%</b>                          |
|                                         | Department of Energy                                    | 30                | 25,788,343                  | -15.1%                                 |
|                                         | National Aeronautics & Space Administration             | 72                | 14,780,238                  | 25.7%                                  |
|                                         | National Institutes of Health                           | 179               | 59,465,738                  | 5.4%                                   |
|                                         | National Science Foundation                             | 142               | 79,656,748                  | -16.6%                                 |
|                                         | Department of Interior (USGS)                           | 9                 | 2,512,101                   | 14.0%                                  |
|                                         | Other Federal Agencies                                  | 4                 | 669,014                     | 15.5%                                  |
|                                         | <b>Subtotal Executive &amp; Independent Agencies</b>    | <b>522</b>        | <b>201,368,151</b>          | <b>-7.4%</b>                           |
| Federal Funds From Non-Federal Sponsors |                                                         |                   |                             |                                        |
|                                         | Educational/Research Institutions                       | 180               | 23,111,479                  | 8.0%                                   |
|                                         | Non-Profit Organizations                                | 116               | 13,168,954                  | 67.2%                                  |
|                                         | For-Profit Companies                                    | 32                | 2,659,430                   | -57.3%                                 |
|                                         | Jet Propulsion Laboratory                               | 241               | 38,711,472                  | -12.2%                                 |
|                                         | State and Local Government                              | 1                 | 3,921,180                   | 0.0%                                   |
|                                         | <b>Subtotal Federal Funds from Non-Federal Sponsors</b> | <b>570</b>        | <b>81,572,515</b>           | <b>2.5%</b>                            |
|                                         | <b>TOTAL FEDERAL FUNDING</b>                            | <b>1,092</b>      | <b>282,940,666</b>          | <b>-4.7%</b>                           |
| Non-Federal Funding                     |                                                         |                   |                             |                                        |
|                                         | Educational/Research Institutions                       | 18                | 1,939,707                   | 71.1%                                  |
|                                         | Non-Profit Organizations                                | 43                | 5,929,865                   | -21.8%                                 |
|                                         | For-Profit Companies                                    | 40                | 9,483,834                   | 31.2%                                  |
|                                         | State and Local Government Agencies                     | 2                 | 778,239                     | 132.5%                                 |
|                                         | Foreign Entities                                        | 49                | 8,226,561                   | 14.7%                                  |
|                                         | <b>Subtotal Non-Federal Funding</b>                     | <b>152</b>        | <b>26,358,206</b>           | <b>10.0%</b>                           |
|                                         | <b>GRAND TOTAL</b>                                      | <b>1,244</b>      | <b><u>\$309,298,872</u></b> | <b>-3.6%</b>                           |

Chart 4 shows federal funding by agency. NSF and NIH continue to rank as Caltech's leading research sponsors.

California Institute of Technology  
Federal Contract and Grant Funding - FY2013

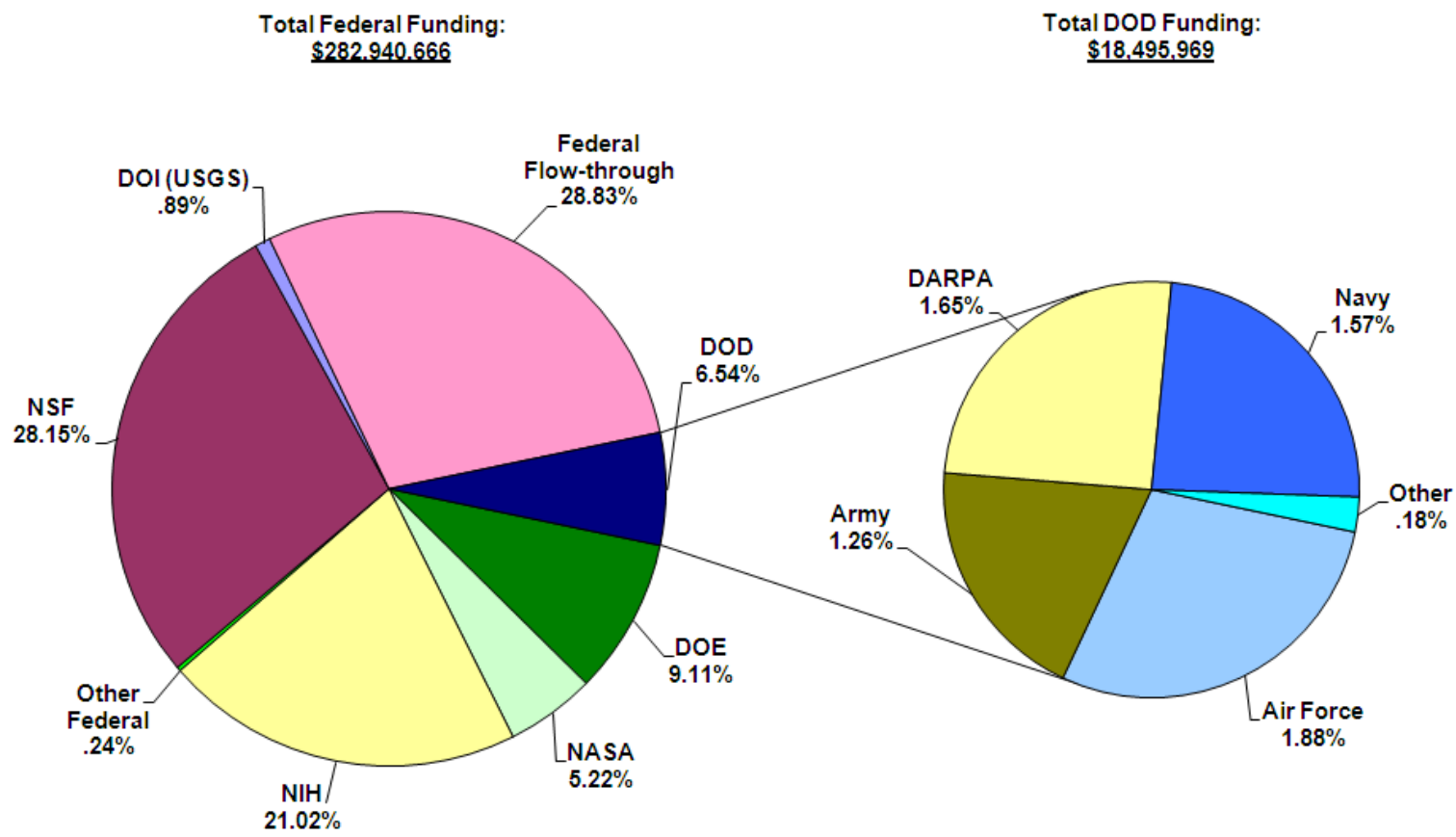


Chart 4

| Chart 5                          | No. of Transactions | % Change in No. of Transactions | Funds Awarded        | % Change in Dollars from Previous Year |
|----------------------------------|---------------------|---------------------------------|----------------------|----------------------------------------|
| Biology                          | 210                 | 12.9%                           | 53,359,219           | 0.9%                                   |
| Chemistry & Chemical Engineering | 184                 | 0.0%                            | 51,026,141           | -0.6%                                  |
| Engineering & Applied Science    | 280                 | -4.4%                           | 46,338,330           | -5.6%                                  |
| Geological & Planetary Sciences  | 173                 | -4.9%                           | 22,070,978           | 29.4%                                  |
| Humanities & Social Sciences     | 15                  | -57.1%                          | 4,329,609            | -20.8%                                 |
| Physics, Math & Astronomy        | 377                 | 14.9%                           | 127,595,970          | -7.0%                                  |
| Other                            | 5                   | -44.4%                          | 4,578,626            | -42.7%                                 |
| <b>Totals</b>                    | <b>1,244</b>        | <b>2.2%</b>                     | <b>\$309,298,873</b> | <b>-3.6%</b>                           |

California Institute of Technology  
 Contract and Grant Funding, by Division - FY2013

\$309,298,873

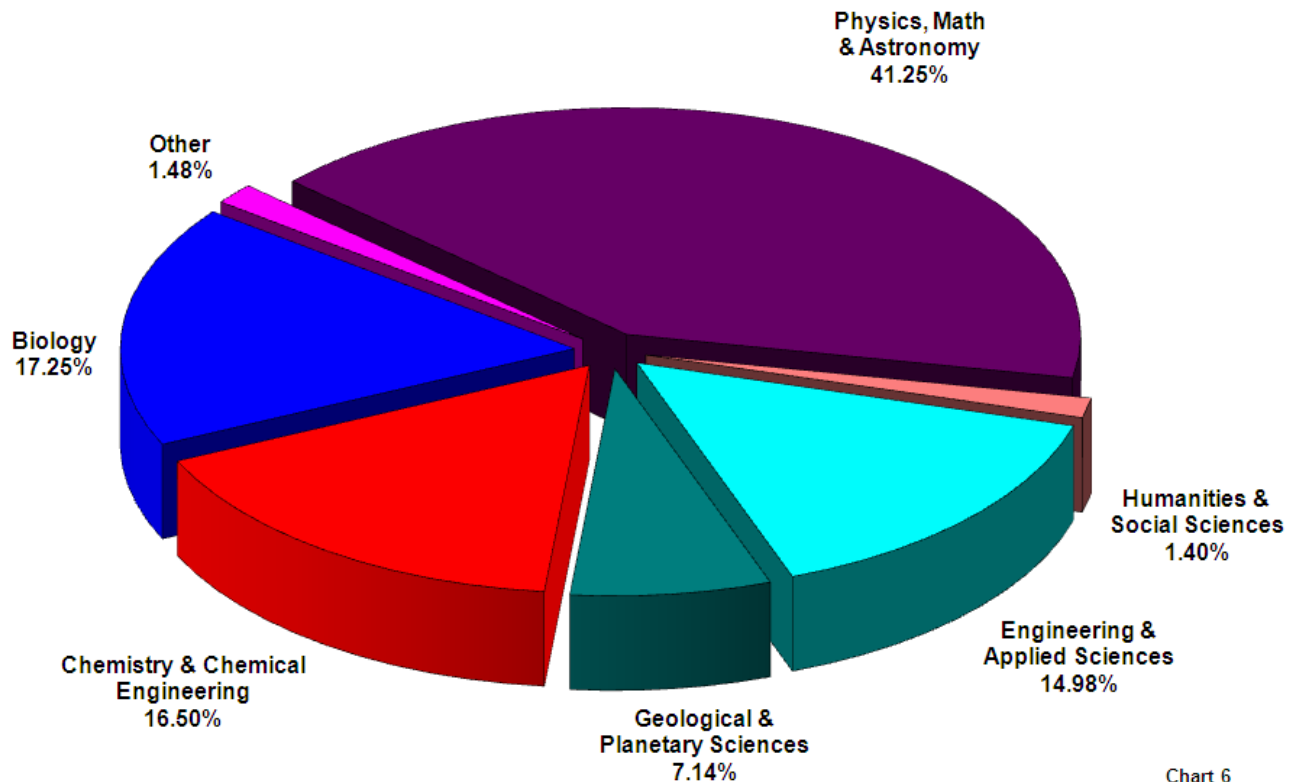


Chart 6

Chart 7 shows the relative funding levels of federal sponsors over the past ten years. The category “Federal Flow-through Funds” includes funding received from other universities for collaborative research as well as funds received from JPL for campus collaborations.

**California Institute of Technology  
Federal Contract & Grant Funding - FY2004-FY2013**

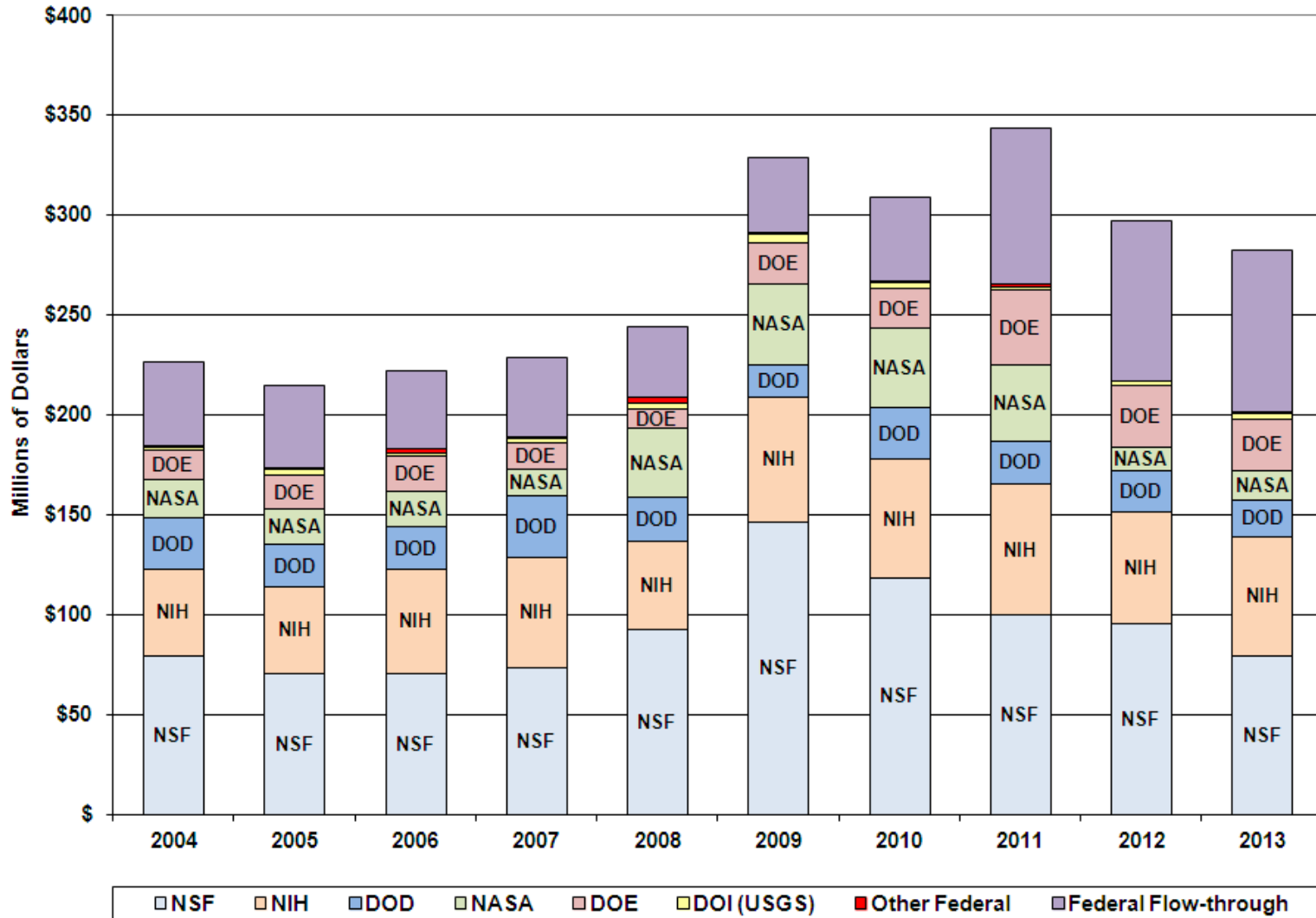


Chart 7

Chart 8 shows the past ten years of funding and also shows growth by inflation using FY 2004 dollars adjusted for inflation.

### 10-Year Contract and Grant Funding: FY2004-FY2013 Compared to FY2004 Dollars Adjusted for Inflation (Inflation Rate Based Upon Average Annual Consumer Price Index)

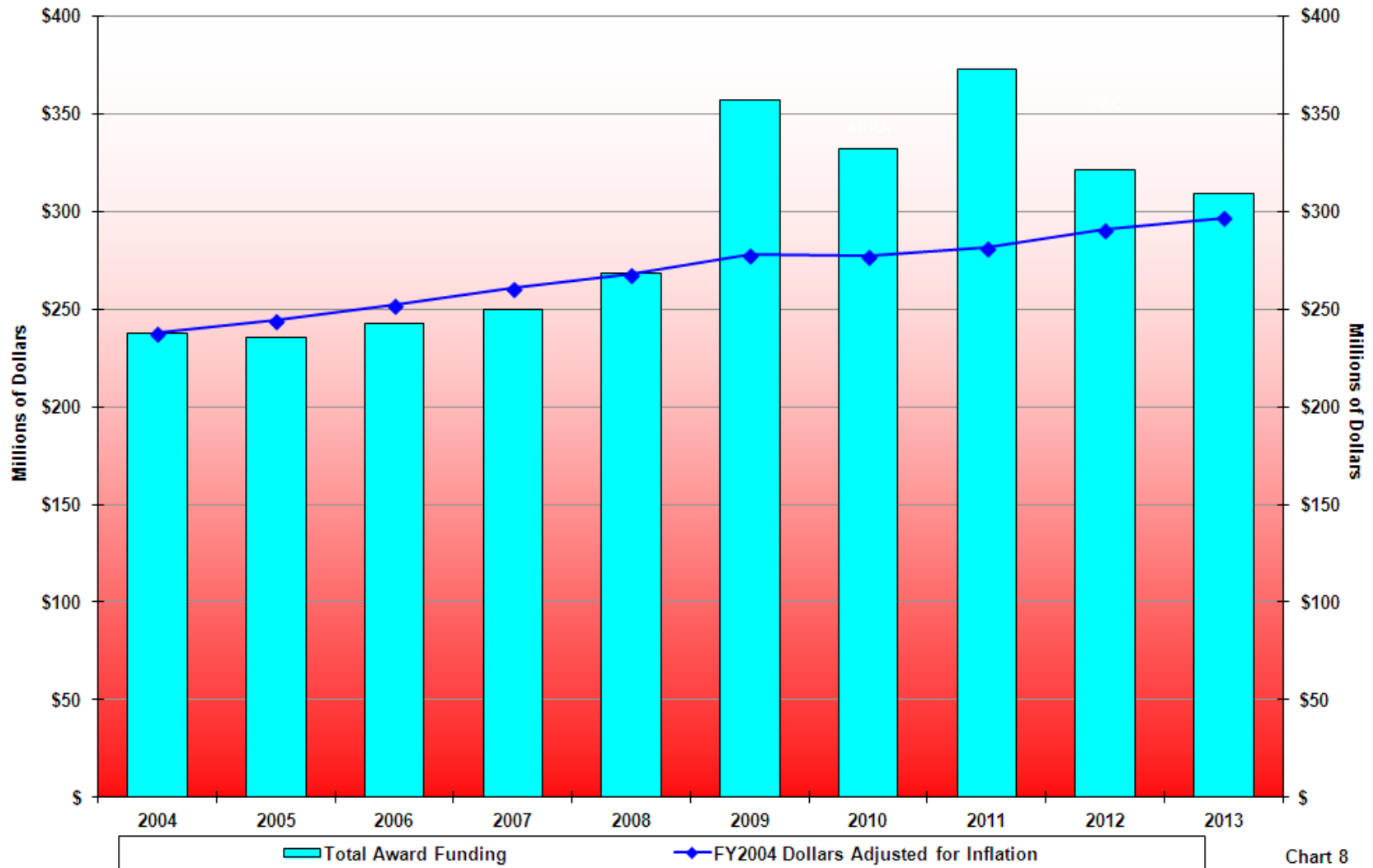


Chart 8

Chart 9 shows ten years of funding by Caltech's six academic divisions. Information for the Division of Physics, Math, and Astronomy (PMA) also shows the funding level without the inclusion of NuSTAR, Advanced LIGO, or IPAC funding. The impact of JCAP funding is noted for the Division of Chemistry and Chemical Engineering (CCE).

California Institute of Technology  
**Contract and Grant Funding, by Division - FY2004-FY2013**

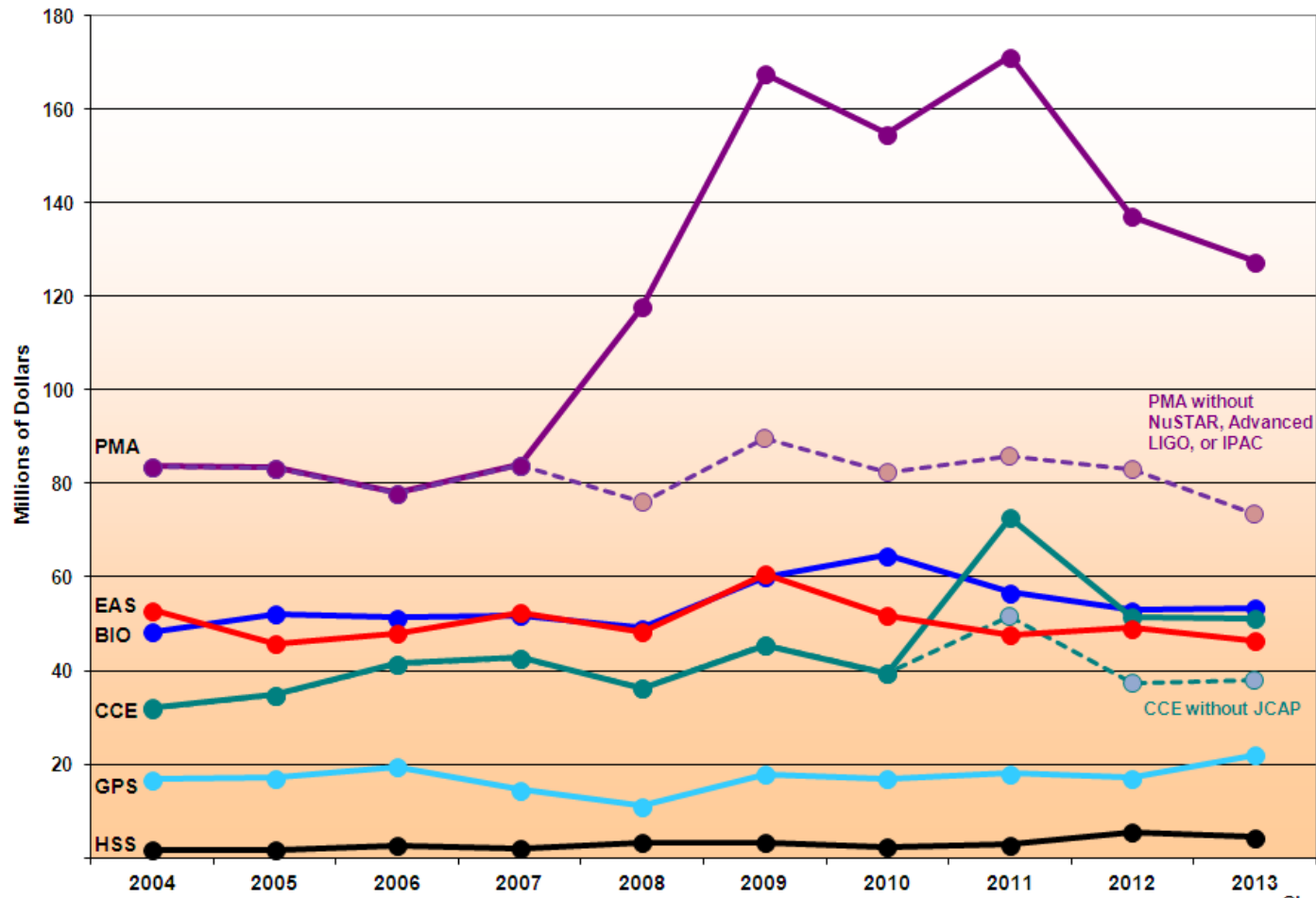


Chart 9



Chart 10 shows proposal submissions—both the number of proposals submitted and the funding requested—for the past ten years. For FY 2009 the impact of proposals in response to ARRA solicitations is noted.

California Institute of Technology  
**Contract and Grant Proposal Submissions: FY2004-FY2013**

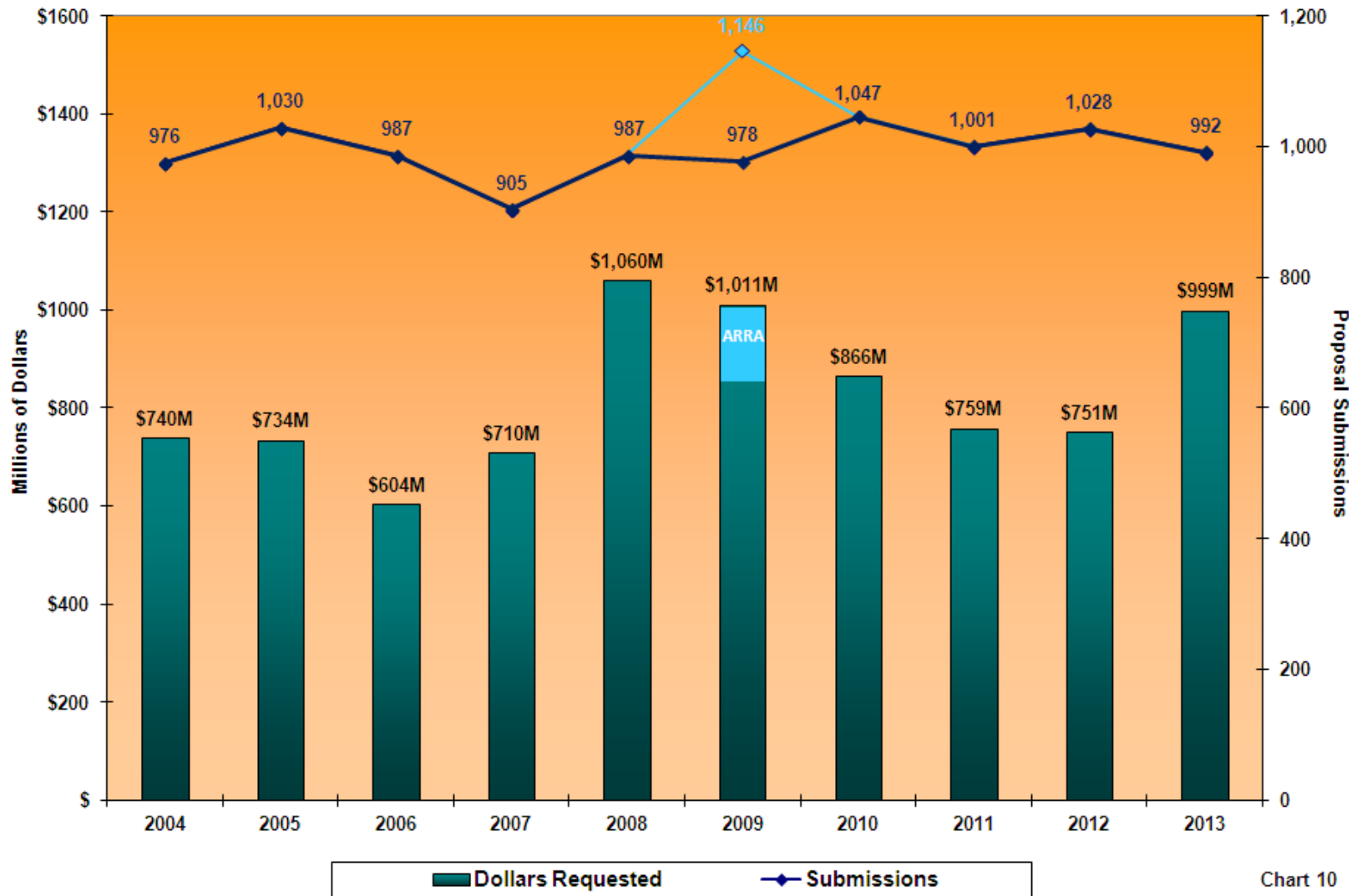


Chart 10

Chart 11 shows proposal submissions by major federal sponsor. For multi-year proposals, the chart also shows the average dollars requested per year and the total dollars requested.

| <b>Chart 11</b>                             | <b>No. of Proposals</b> | <b>Average Dollars Requested/Year</b> | <b>Total Dollars Requested</b> |
|---------------------------------------------|-------------------------|---------------------------------------|--------------------------------|
| <b>Biology</b>                              | 292                     | 108,194,349                           | 317,134,439                    |
| <b>Chemistry &amp; Chemical Engineering</b> | 221                     | 58,719,957                            | 153,074,692                    |
| <b>Engineering &amp; Applied Science</b>    | 275                     | 83,749,162                            | 267,522,885                    |
| <b>Geological &amp; Planetary Sciences</b>  | 131                     | 14,150,844                            | 34,596,637                     |
| <b>Humanities &amp; Social Sciences</b>     | 21                      | 13,715,862                            | 60,988,185                     |
| <b>Physics, Math &amp; Astronomy</b>        | 204                     | 48,644,872                            | 142,654,809                    |
| <b>Other</b>                                | 2                       | 10,333,333                            | 35,000,000                     |
| <b>Totals</b>                               | <b>1,146</b>            | <b>\$337,508,379</b>                  | <b>\$1,010,971,647</b>         |

Chart 12 shows the success rate of all Caltech proposals over the past nine years. The average success rate over the past nine years is 42.4%.

### Success Rate of All Caltech Proposals

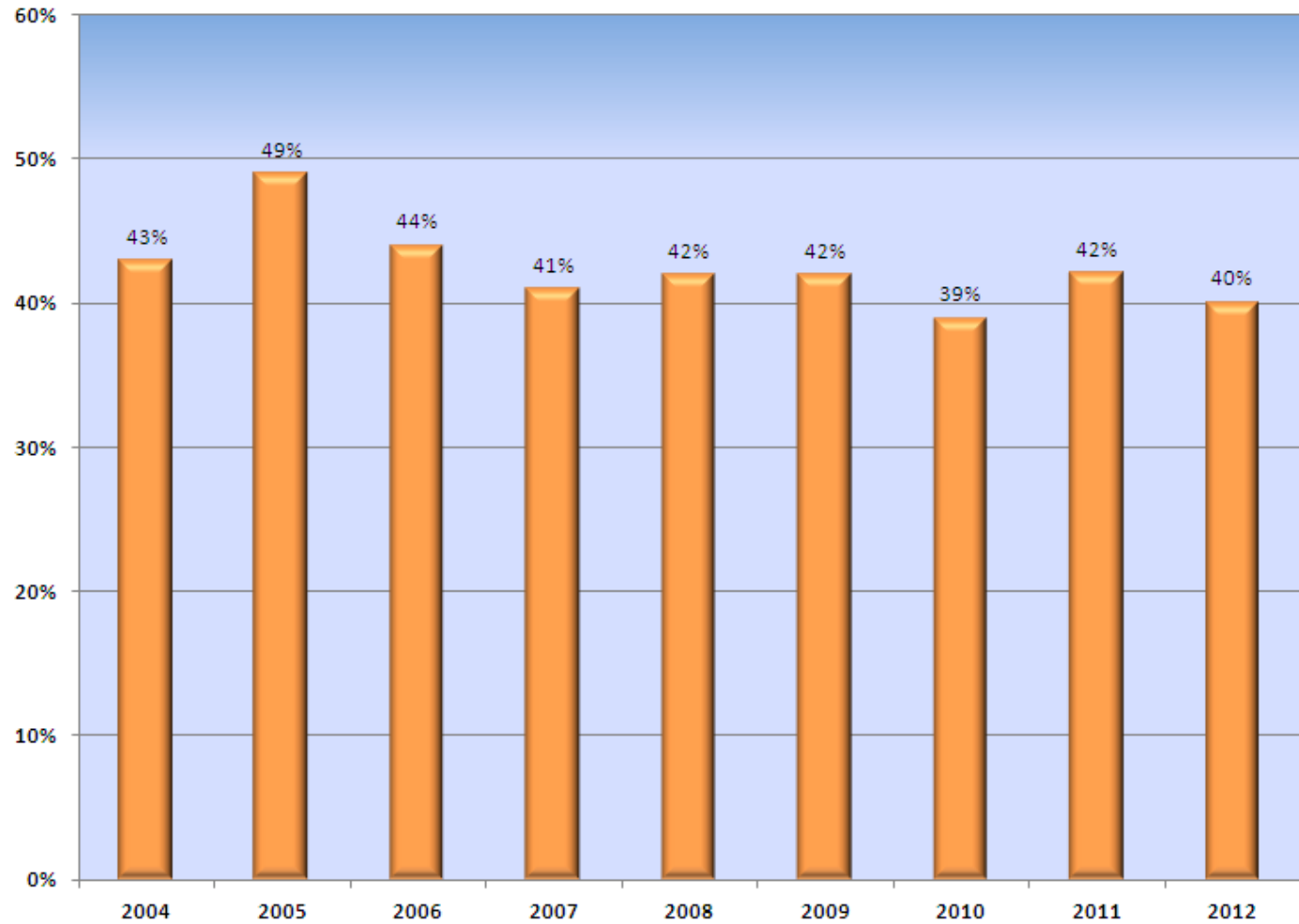


Chart 12

Charts 13 and 14 shows the continuing rates of success for Caltech proposals submitted to NIH and NSF compared to the national success rates reported by those agencies.

