



Experimental Program to Stimulate Competitive Research (EPSCoR)

**Project Directors / Project Administrators
Annual Meeting**

NSF EPSCoR Updates

**Arlington, VA
19 May 2009**



EPSCoR Mission

To assist the National Science Foundation in its statutory function

“ to strengthen research and education in science and engineering throughout the United States and to avoid undue concentration of such research and education.”



EPSCoR Objectives

- **To catalyze key research themes**
- **To activate effective collaborations**
- **To broaden participation in S&E**
- **To use EPSCoR as a programmatic test bed**



Bolsters capacity to

- **Enhance discovery and learning through utilization of CI and other evolving technologies,**
- **Develop the diverse, well-prepared, internationally competent and globally engaged STEM workforce necessary to sustain the nation's competitive edge,**



Bolsters capacity to (+)

- **Facilitate knowledge generation leading to economic development, and**
- **Expand the scientific literacy of all citizens, and disseminate to them the importance of STEM research and education.**



NSF EPSCoR Updates

- **Eligibility** **NB: The next 3 slides refer to FY08 only!**
- **Staffing**
- **Portfolio Activity**
 - **Research Infrastructure Improvement**
 - ✓ **RII Track-1**
 - ✓ **RII Track-2**
 - ✓ **RII C2**
 - **Co-Funding**
 - **Outreach and Workshops**
- **Budget Outlook and Planning**

NSF EPSCoR Jurisdictions



1980

Arkansas
Maine
Montana
South Carolina
West Virginia

2001

Hawaii
New Mexico

2002

U.S. Virgin Islands

1985

Alabama
Kentucky
Nevada
North Dakota
Oklahoma
Puerto Rico
Vermont
Wyoming

2003

Delaware

2004

New Hampshire
Rhode Island
Tennessee

1987

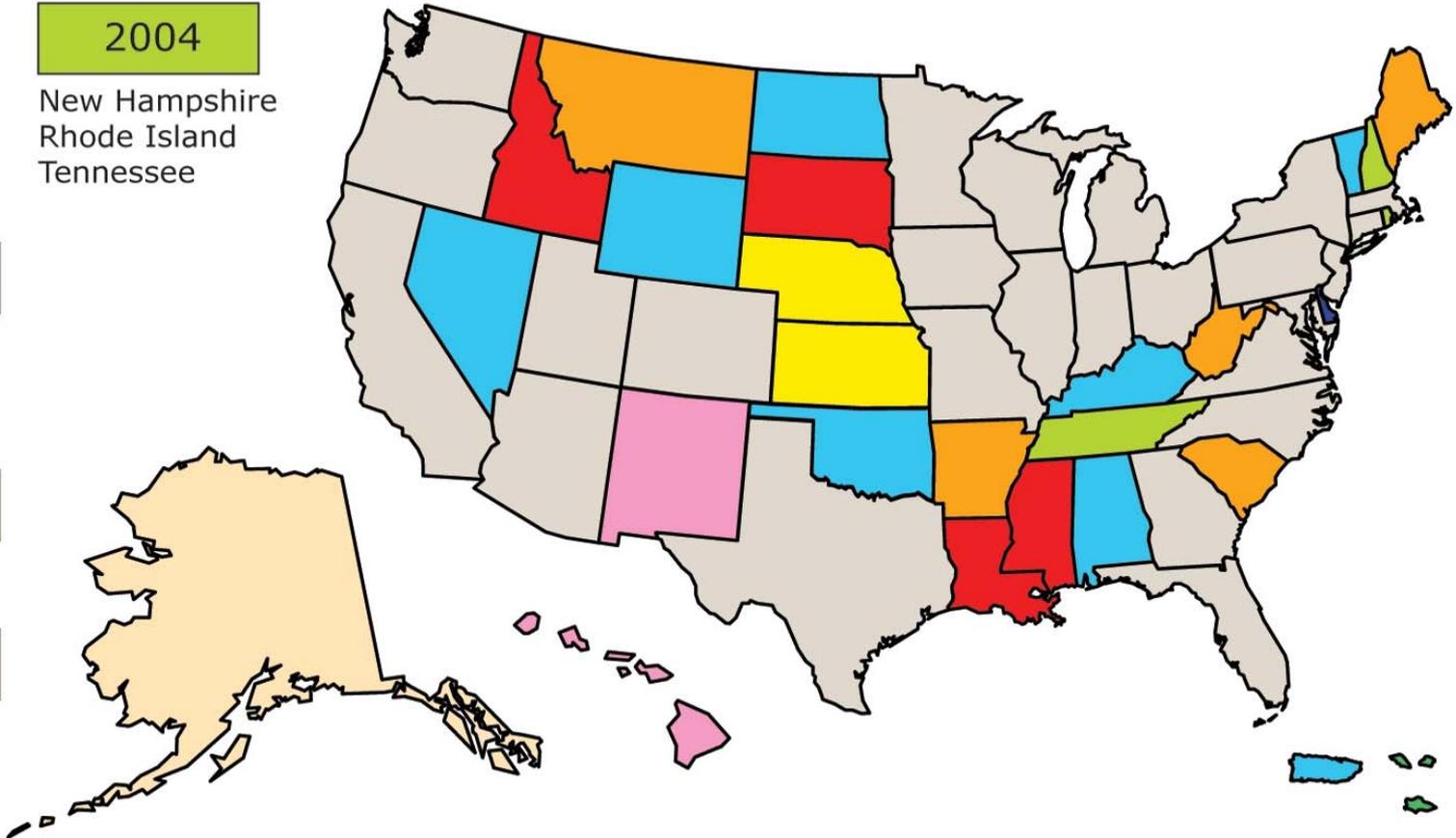
Idaho
Louisiana
Mississippi
South Dakota

1992

Kansas
Nebraska

2000

Alaska





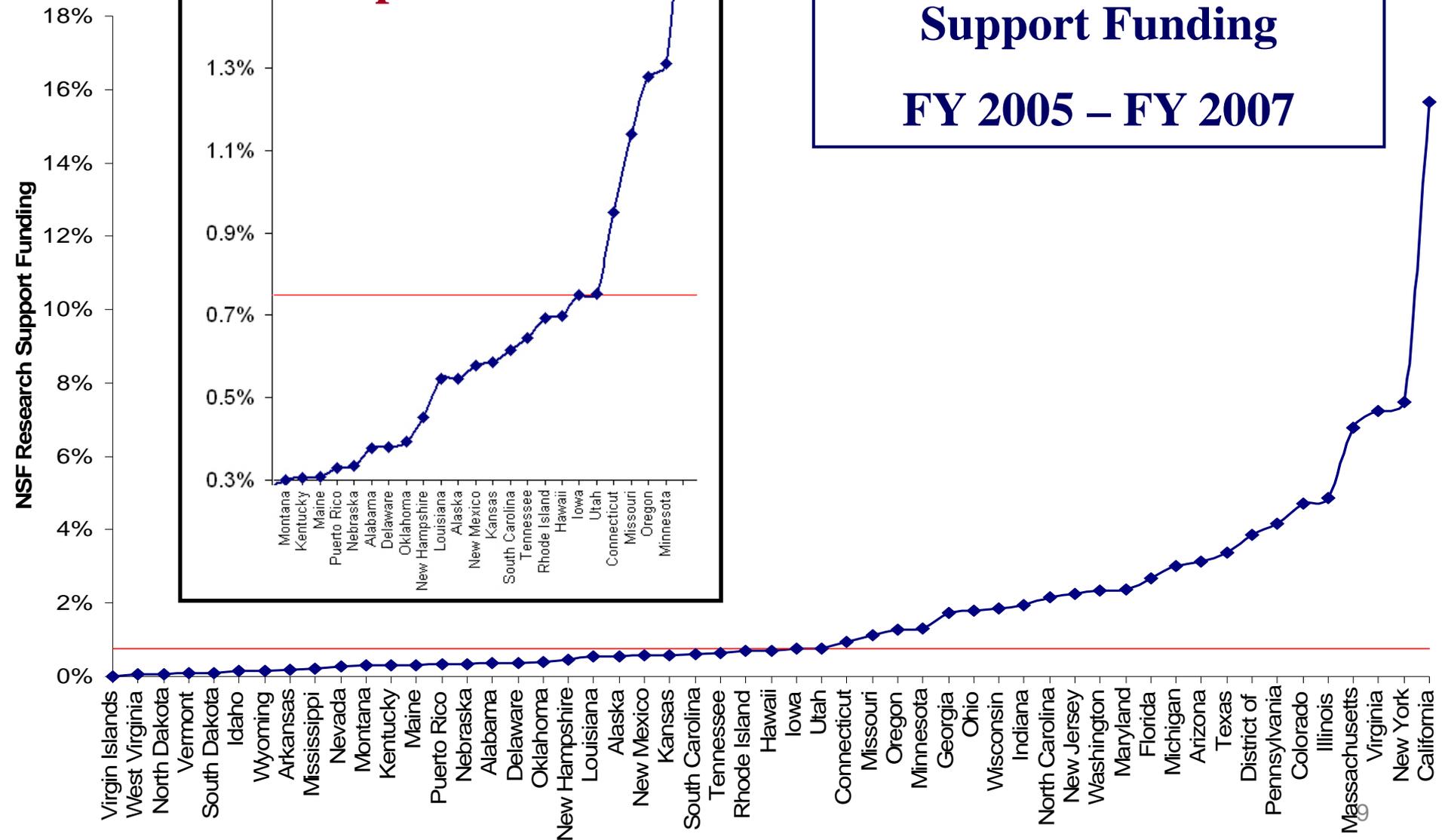
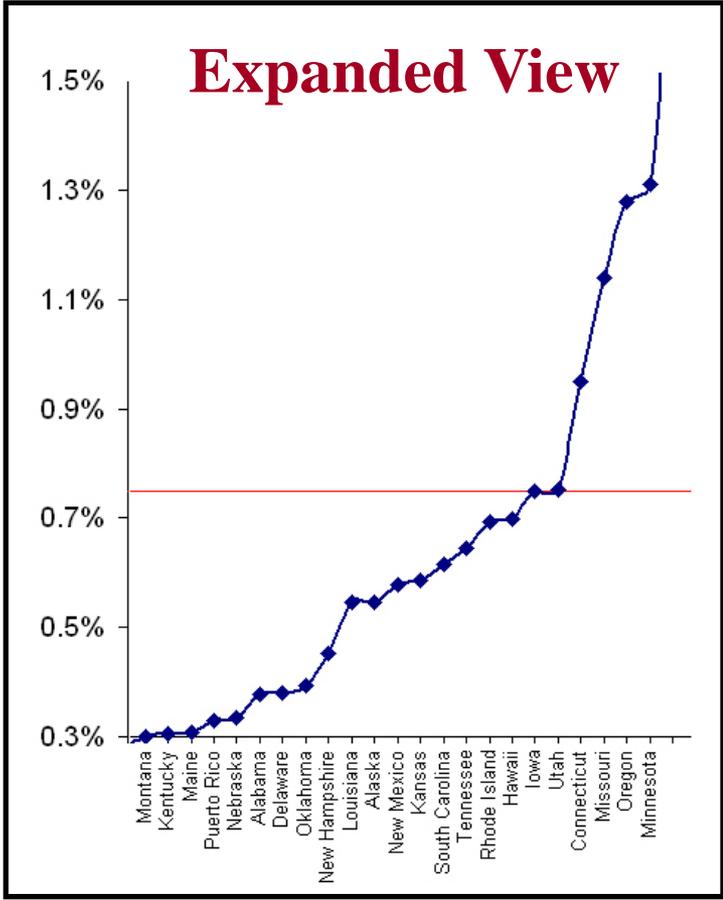
NSF Research Support Funding FY 2005 - 2007

STATE	FY 2005		FY 2006		FY 2007		FY 2005-07		% of Total \$
	Amt \$k	Cnt	Amt \$k	Cnt	Amt \$k	Cnt	Amt \$k	Cnt	
Grand Total	\$4,197,364	18,681	\$4,310,421	18,803	\$4,612,577	19,896	\$13,120,362	57,380	100.00%
Other	\$22,496	46	\$26,135	41	\$31,177	34	\$79,808	121	0.61%
US Total	\$4,174,868	18,632	\$4,284,286	18,762	\$4,581,400	19,862	\$13,040,554	57,256	99.39%
Virgin Islands	\$91	1	\$2	1	\$24	1	\$117	3	0.00%
West Virginia	\$2,682	26	\$3,812	35	\$2,972	31	\$9,466	92	0.07%
North Dakota	\$5,060	31	\$2,083	24	\$2,708	22	\$9,851	77	0.08%
Vermont	\$4,514	35	\$3,800	30	\$4,639	35	\$12,953	100	0.10%
South Dakota	\$4,322	31	\$4,050	22	\$4,809	32	\$13,181	85	0.10%
Idaho	\$6,659	46	\$5,951	40	\$6,729	53	\$19,339	139	0.15%
Wyoming	\$7,971	48	\$6,151	41	\$6,520	42	\$20,642	131	0.16%
Arkansas	\$5,392	57	\$7,915	69	\$9,207	84	\$22,514	210	0.17%
Mississippi	\$7,817	47	\$8,526	56	\$10,308	55	\$26,651	158	0.20%
Puerto Rico*	\$6,384	27	\$18,182	29	\$8,210	37	\$32,776	93	0.25%
Nevada	\$13,946	76	\$8,734	65	\$13,028	80	\$35,708	221	0.27%
Montana	\$13,467	85	\$12,047	86	\$13,694	93	\$39,208	264	0.30%
Kentucky	\$15,046	109	\$14,241	94	\$10,726	92	\$40,013	295	0.30%
Maine	\$10,785	81	\$13,353	77	\$16,440	87	\$40,578	245	0.31%
Nebraska	\$12,131	77	\$15,749	96	\$15,891	85	\$43,771	258	0.33%
Alabama	\$15,090	123	\$17,182	125	\$17,392	135	\$49,664	383	0.38%
Delaware	\$13,434	96	\$18,328	108	\$18,032	118	\$49,794	322	0.38%
Oklahoma	\$15,198	107	\$17,764	132	\$18,697	116	\$51,659	355	0.39%
New Hampshire	\$22,149	134	\$18,371	124	\$18,809	128	\$59,329	386	0.45%
Louisiana	\$22,103	179	\$22,770	189	\$26,630	164	\$71,503	532	0.54%
Alaska*	\$19,009	89	\$21,400	99	\$31,329	115	\$71,738	303	0.55%
New Mexico	\$27,238	137	\$24,539	145	\$24,050	158	\$75,827	440	0.58%
Kansas	\$27,319	145	\$25,415	139	\$24,238	139	\$76,972	423	0.59%
South Carolina*	\$22,265	155	\$20,423	152	\$37,956	178	\$80,644	485	0.61%
Tennessee*	\$30,760	185	\$27,270	167	\$26,507	205	\$84,537	557	0.64%
Rhode Island	\$29,019	196	\$29,453	212	\$32,318	211	\$90,790	619	0.69%
Hawaii	\$23,461	132	\$35,072	138	\$32,981	135	\$91,514	405	0.70%
Iowa	\$36,508	221	\$33,360	210	\$28,399	184	\$98,267	615	0.75%
Utah	\$32,265	197	\$36,031	195	\$30,315	189	\$98,611	581	0.75%
Connecticut	\$40,148	258	\$44,203	263	\$40,206	276	\$124,557	797	0.95%
Missouri	\$39,790	264	\$56,591	273	\$53,025	276	\$149,406	813	1.14%
Oregon	\$49,047	286	\$56,115	308	\$62,603	327	\$167,765	921	1.28%
Minnesota	\$53,497	288	\$56,958	297	\$61,284	309	\$171,739	894	1.31%



NSF EPSCoR Eligibility Threshold

**0.75 % of NSF Research Support Funding
FY 2005 – FY 2007**



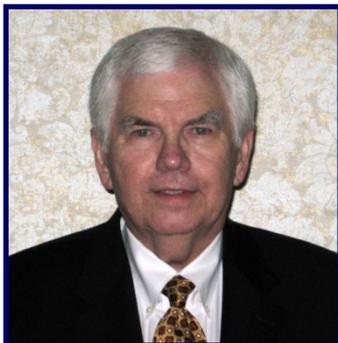


NSF EPSCoR Updates

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- **Staffing**
- **Portfolio Activity**
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NSF EPSCoR Staff





Staff Jurisdiction Responsibilities

PROGRAM DIRECTOR	JURISDICTIONS	PROGRAM DIRECTOR	JURISDICTIONS
Denise Barnes	Alabama Arkansas Hawaii Iowa Maine Montana North Dakota South Dakota Utah Wyoming	Maija Kukla	Delaware Kentucky Louisiana Nebraska Oklahoma South Carolina West Virginia
Arlene Garrison	Idaho Mississippi Nevada New Mexico Virgin Islands	Uma Venkateswaran	Alaska Kansas New Hampshire Puerto Rico Rhode Island Tennessee Vermont



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NSF Funding to EPSCoR Jurisdictions (\$M)

FY	EPS	Non EPS	NSF Total
1999	48.7	406.4	455.1
2000	51.7	433.6	485.3
2001	75.0	515.8	590.8
2002	79.7	508.5	588.2
2003	89.2	559.4	648.6
2004	94.2	573.9	668.1
2005	93.4	543.5	636.9
2006	98.2	540.4	638.6
2007	102.1	616.9	719.0
2008	120.0	572.2	692.2
FY 99-08	852.2	5,270.6	6,122.8

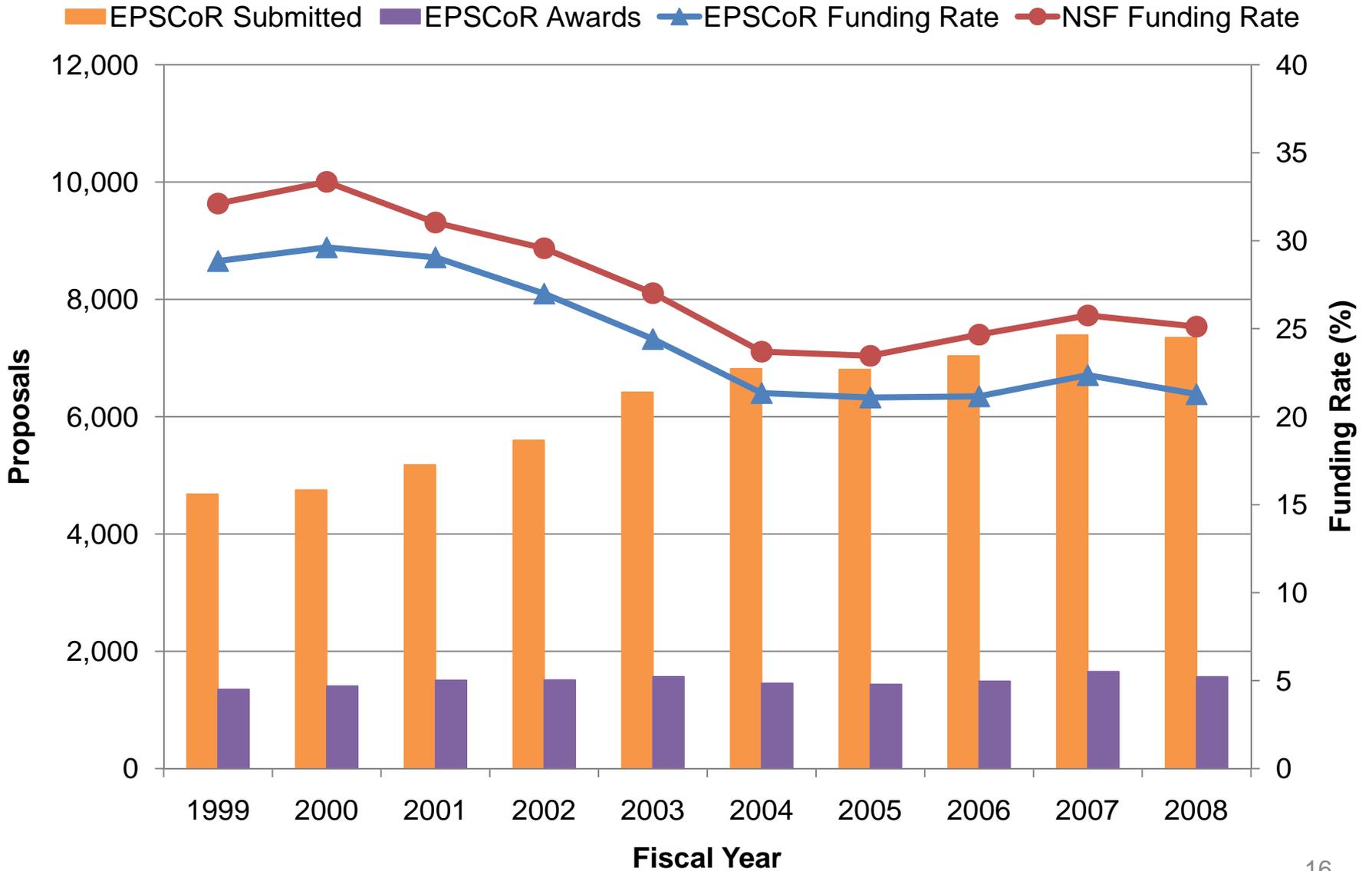


EPSCoR Investments by Type (\$M)

FY	RII	CF	O/W	Total
1999	26.3	21.5	0.9	48.7
2000	30.7	19.6	1.4	51.7
2001	39.9	33.7	1.3	75.0
2002	40.5	37.7	1.5	79.7
2003	47.5	39.7	2.0	89.2
2004	56.7	36.2	1.3	94.2
2005	59.2	33.7	0.5	93.4
2006	61.7	36.4	0.1	98.2
2007	65.8	36.2	0.1	102.1
2008	72.8	46.7	0.5	120.0
FY 99-08	501.1	341.4	9.6	852.2

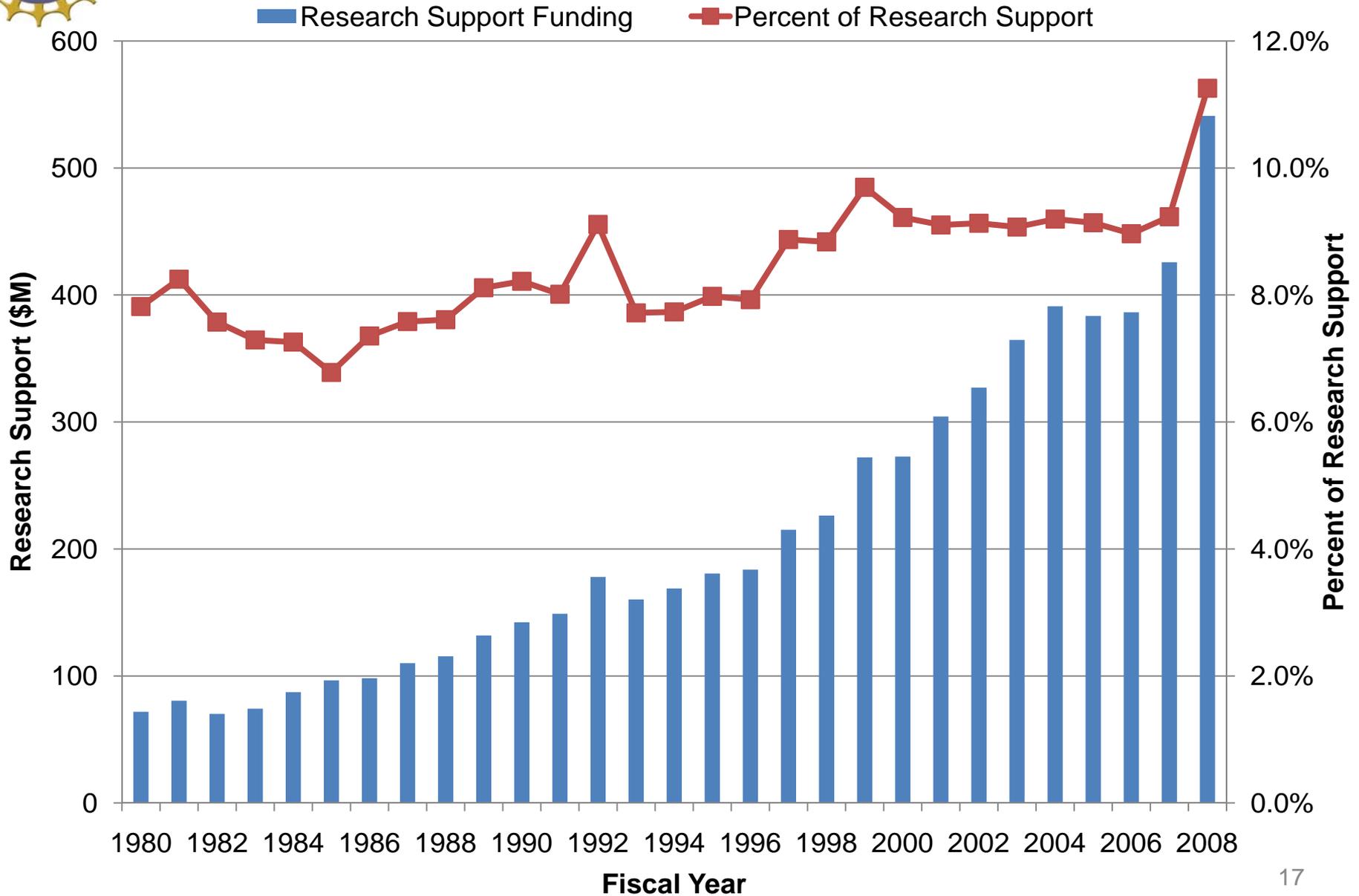


NSF EPSCoR Funding Rate





EPSCoR Research Support Funding (\$M)





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EPSCoR Investment Tools for Capacity Building

- **Research Infrastructure Improvement Awards (RII)**
 - **Track-1**: Up to 5 years and \$20M to jurisdictions to improve physical and human infrastructure critical to R&D competitiveness in priority research areas.



RII Activities Update: Track-1

Event	Target Date
• Awards Announced (NSF 08-587)	05/29/09
➤ Note on Cost Sharing	
• New Solicitation Released (NSF 09-xxx)	06/01/09
• Proposals Due	10/15/09
• Review Panel	Dec 2009
• DRB Review	Mar 2010
• NSB Review	May 2010
• Awards Announced	Jun 2010
• Start Dates	Jul 2010



EPSCoR Investment Tools for Capacity Building

- **Research Infrastructure Improvement Awards (RII)**
 - **Track-2**: Up to 3 years and \$6M to consortia of jurisdictions to support innovation-enabling cyberinfrastructure of regional, thematic, or technological importance.



RII Activities Update: Track-2

Event	Target Date
• Awards Announced (NSF 08-595)	06/01/09
➤ Note on Cost Sharing	
➤ Note on ARRA Funding	
• New Solicitation Released (NSF 09-yyy)	07/01/09
• Proposals Due	11/15/09
• Review Panel	Feb 2010
• Awards Announced	Apr 2010
• Start Dates	May 2010



EPSCoR Investment Tools for Capacity Building

- **Research Infrastructure Improvement Awards (RII)**
 - **Cyber Connectivity (C2)**: Up to 2 years and \$1M to support the enhancement of inter-campus and intra-campus cyber connectivity and broadband access within an EPSCoR jurisdiction.



RII Activities Update: C2

Event	Target Date
• Solicitation Released (NSF 09-zzz)	06/15/09
➤ Note on Cost Sharing	
➤ Note on Award Instrument	
➤ Note on ARRA Funding	
• Proposals Due	09/15/09
• Review Panel	Nov 2009
• Awards Announced	Dec 2009
• Start Dates	Feb 2010



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EPSCoR Investment Tools for Capacity Building

Co-Funding:

Joint support of research proposals submitted by EPSCoR researchers to non-EPSCoR NSF programs that have been merit reviewed and recommended for award, but could not be funded without the combined, leveraged support of EPSCoR and the Research and Education Directorates and Offices.

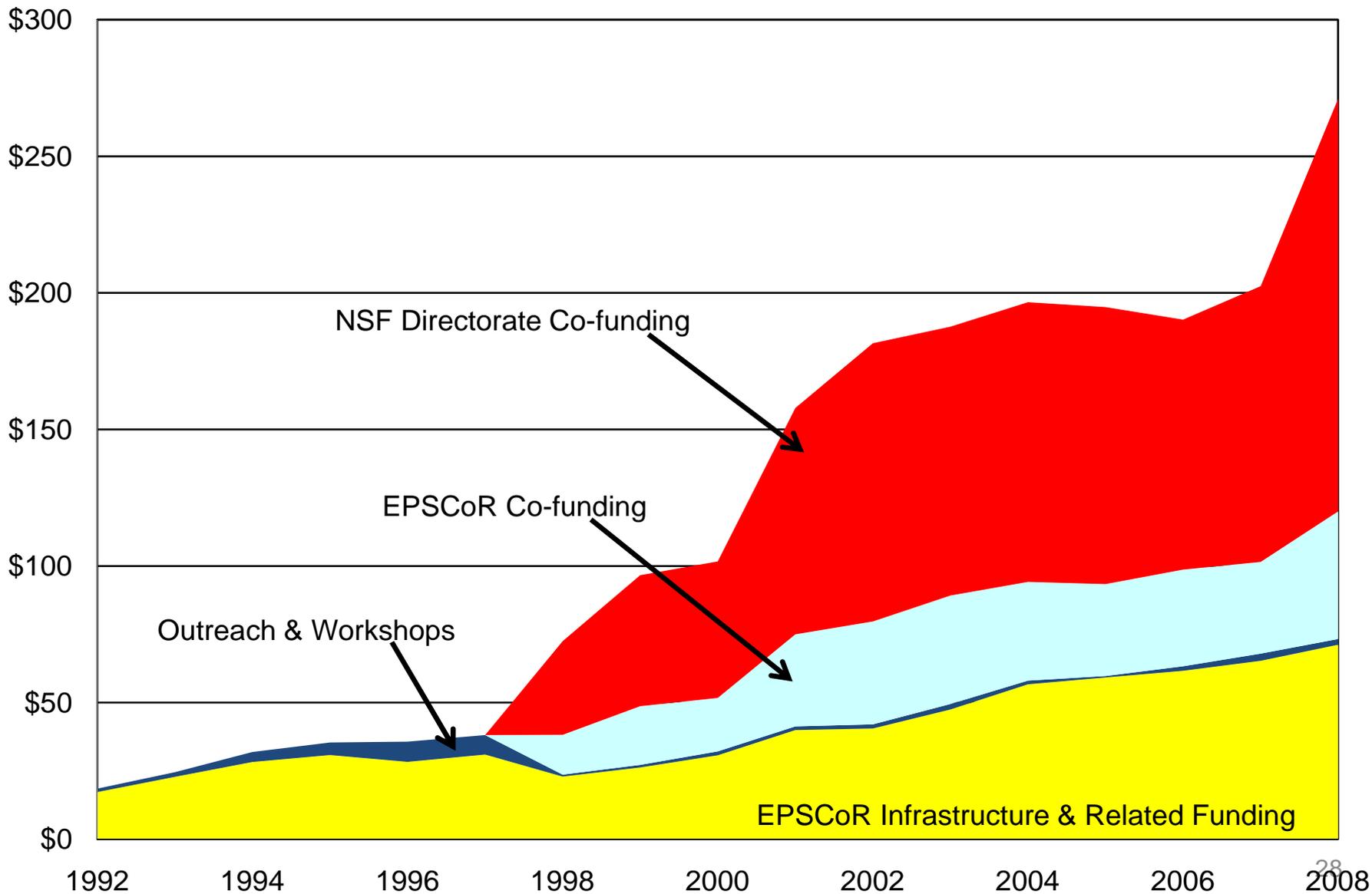


Co-Funding Essentials

- Reviewed and Recommended for Funding within NSF Directorates and Offices
- Combined leveraged support necessary for funding
- Characteristics favoring Co-funding:
 - New PIs
 - Collaborative
 - Multidisciplinary
 - Synergistic
 - Broaden participation
 - Instrumentation
 - R/T Ops for St/Tchrs
 - Integration of R&E
- **Tipping Point is Financial!**



EPSCoR Investments Leveraged with Funds from NSF Disciplinary Directorates (\$M)





EPSCoR Co-Funding (\$M)

FY	EPS	Dir/Off	NSF Total	Leverage
1999	21.5	26.4	47.9	2.2
2000	19.6	30.4	50.0	2.6
2001	33.7	49.1	82.8	2.5
2002	37.7	64.2	101.9	2.7
2003	39.7	58.7	98.4	2.5
2004	36.2	66.2	102.4	2.8
2005	33.7	67.7	101.4	3.0
2006	36.4	56.1	91.5	2.6
2007	36.2	67.4	101.0	3.0
2008	46.7	104.4	151.1	3.2
FY 99-08	341.4	590.6	932.0	2.7



Funding by Dir/Off FY04 – FY08 (\$M)

Co-Funding

Dir/Off	EPS	Dir/Off	Total	Dir/Off Only	NSF Total
BIO	27.4	42.6	70.0	432.7	460.0
CISE	17.2	22.8	39.9	139.8	157.0
EHR	17.3	49.0	66.3	983.3	1,000.6
ENG	43.2	63.8	107.1	299.3	342.6
GEO	17.1	30.7	47.8	351.8	368.9
MPS	43.1	58.1	101.2	414.7	457.9
SBE	7.9	8.8	16.7	82.1	90.0
OCI	2.4	3.6	6.0	115.8	118.2
OISE	2.3	11.6	13.9	13.1	15.3
OPP	3.0	5.4	8.4	245.6	248.6
Totals	180.9	296.5	477.4	3,078.2	3,259.1



FY08 Co-Funding by Award Type (\$M)

Type	EPSCoR	NSF Tot		Type	EPSCoR	NSF Tot
IIA	14.77	32.48		Math	1.56	9.83
CAREER	5.44	11.28		RUI	0.79	1.79
HR Dev	5.44	41.14		ATE	0.68	2.63
Collabs	5.19	12.49		GOALI	0.54	1.25
Centers	4.61	19.00		INT	0.36	0.73
Cyber	2.96	8.40		CCLI	0.20	0.40
MRI	2.02	5.32		RET	0.19	0.50
REU	1.99	3.88		Totals:	46.74	151.11

HR Dev: GK-12; HBCU-UP; TCUP; URM; etc

Cyber: OCI; CDI



FY08 Co-Funding by Jurisdiction (\$M)

JD	Num	EPSCoR	NSF Tot		JD	Num	EPSCoR	NSF Tot
AK	6	1.28	6.46		LA	21	3.56	13.81
AL	30	3.50	7.93		ME	16	2.19	7.68
AR	6	0.70	3.26		MS	13	3.03	18.65
DE	11	1.74	3.72		MT	14	1.78	4.68
HI	12	1.39	7.07		ND	8	1.77	7.16
ID	10	1.25	2.66		NE	8	3.45	9.59
KS	17	2.74	7.57		NH	10	0.91	2.10
KY	9	1.20	2.41		NM	15	2.10	5.71



FY08 Co-Funding by Jurisdiction (\$M)

- continued -

JD	Num	EPSCoR	NSF Tot		JD	Num	EPSCoR	NSF Tot
NV	8	0.98	2.26		TN	31	4.10	11.27
OK	11	1.87	6.53		VI	0	0	0
PR	5	1.12	3.52		VT	4	0.61	1.22
RI	5	0.95	2.17		WV	7	0.81	1.87
SC	15	1.90	6.64		WY	2	0.32	1.07
SD	5	1.54	4.10		Tot	299	46.74	151.11



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EPSCoR Investment Tools for Capacity Building

Outreach & Workshops

**Support of outreach activities by NSF disciplinary and professional staff;
Support of strategic planning and capacity-building workshops.**



Workshops: Community Catalysis

The logo for the 'Living on Earth' workshop in Anchorage, 2009. It features a black silhouette of a moose standing on a yellow diamond-shaped sign, set against a white background with a blue border.

LIVING ON EARTH
Anchorage • 2009

The logo for the Science Research West Virginia Higher Education Policy Commission (WVEPSCOR). It includes the text 'Science Research' in a stylized font, 'West Virginia Higher Education Policy Commission' in smaller text, and 'WVEPSCOR' in large blue letters. Below this is the slogan 'Building Diversity in Higher Education' and the dates 'October 21-22, 2008, Charleston, West Virginia'. The logo also features a graphic of a white mouse head with blue eyes and a blue DNA double helix.

Science Research
West Virginia Higher Education Policy Commission
WVEPSCOR
Building Diversity
in Higher Education
October 21-22, 2008, Charleston, West Virginia

A poster for the 'NSF EPSCoR Water Workshop: Water Dynamics'. The poster features three images: a river scene, a group of three people, and a marina with sailboats. The text on the poster includes the workshop title, 'Hosted by Vermont EPSCoR', the dates 'November 9-12, 2008', and the location 'Sheraton Hotel and Conference Center Burlington, Vermont'. A small NSF logo is visible in the bottom right corner.

NSF EPSCoR WATER WORKSHOP:
WATER DYNAMICS
Hosted by Vermont EPSCoR
November 9-12, 2008
Sheraton Hotel and Conference Center
Burlington, Vermont



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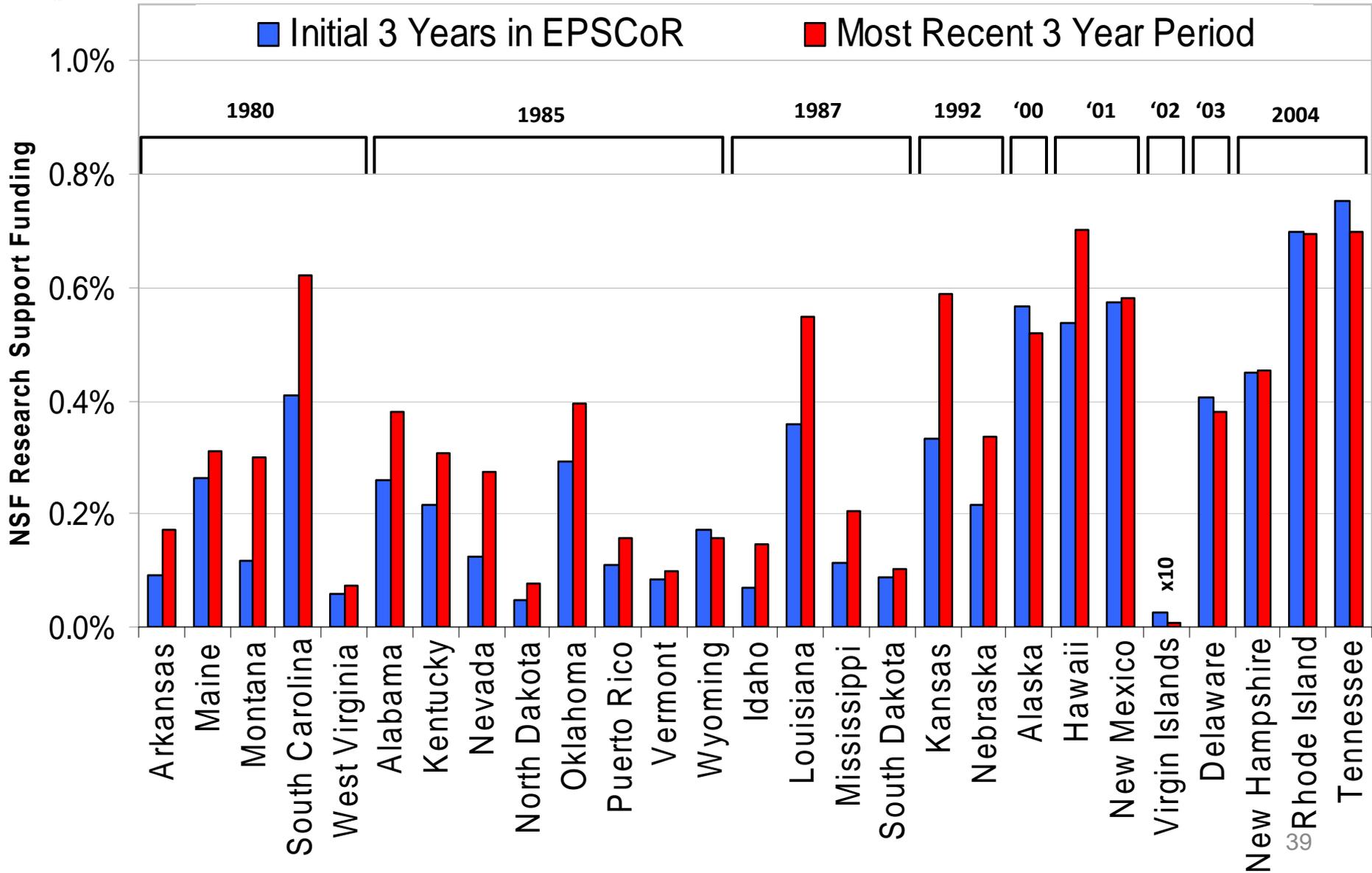


NSF EPSCoR Funding (\$M)

Activity	FY06 Actual	FY07 Actual	FY08 Actual	FY09 C Plan	FY10 Req
RII	61.7	65.8	72.8	91.5	114.4
Co-Fund	36.4	36.2	46.7	40.0	31.2
Outreach Workshp	0.1	0.1	0.5	1.5	1.5
Total	98.2	102.1	120.0	133.0	147.1



We Are Heading in the Right Direction





EPSCoR -

Good Progress

Significant Challenges

Outstanding Opportunities



Employing Diversity Effectively

Diversity is not the objective.

It is a means to facilitate our achieving
the critical objective: innovation.

J. DeSimone



Thank You