NATIONAL SCIENCE FOUNDATION PROGRAMS TO BROADEN PARTICIPATION FY 2019 BUDGET REQUEST TO CONGRESS

(Dolla	rs in Millions)					
				FY 2019 F	Request	
				change over		
	FY 2017	FY 2018	FY 2019	FY 2017 Actua		
	Actual	(TBD)	Request	Amount	Percent	
Total, NSF Broadening Participation Programs	\$926.52	-	\$887.22	-\$39.30	-4.2%	

Broadening participation infuses science and engineering excellence into varied individual, institutional, and geographic networks and provides for the discovery and nurturing of talent wherever it may be found. Additionally, NSF defines broadening participation in terms of individuals from underrepresented groups (i.e., women, underrepresented minorities, and persons with disabilities) as well as institutions (i.e., women's colleges, minority-serving institutions, and institutions primarily serving persons with disabilities) and geographic areas (i.e., rural, urban and EPSCoR jurisdictions) that do not participate in NSF research programs at rates comparable to others.¹

NSF has taken a variety of approaches to broaden participation across its many programs. While broadening participation is included in the NSF review criteria, some program announcements and solicitations go beyond the standard criteria to include program-relevant suggestions and/or specific requirements for promoting diversity and inclusion. Investments range from capacity building, research centers, partnerships, and alliances to the use of co-funding or supplements to existing awards in the core research programs.

NSF's broadening participation portfolio can be divided into three categories: (1) Focused, (2) Emphases, and (3) Geographic Diversity. The following sections define each of these categories and provide a list of the programs and activities with their respective funding levels that comprise each.

¹Broadening Participation at the National Science Foundation: A Framework for Action, www.nsf.gov/od/broadeningparticipation

Focused Programs

Focused Programs have broadening participation as an explicit goal of the program and are included at 100 percent of their funding.

(Dollars in Milli	ons)					
	Amount				FY 2019 F	₹equest
	of				change over	
	Funding	FY 2017	FY 2018	FY 2019	FY 2017	Actual
	Captured	Actual	(TBD)	Request	Amount	Percent
ADVANCE	100%	\$18.00	-	\$18.00	-	-
Alliances for Graduate Education & the Professoriate (AGEP)	100%	8.01	-	8.00	-0.01	-0.1%
AGEP Graduate Research Supplements (AGEP-GRS)	100%	2.42	-	2.51	0.09	3.6%
Broadening Participation in Biology Fellowships	100%	2.50	-	2.50	-	-
Broadening Participation in Engineering (BPE)	100%	9.40	-	7.85	-1.55	-16.5%
Career-Life Balance (CLB)	100%	0.65	-	0.32	-0.33	-50.5%
Centers of Research Excellence in Science & Technology (CREST)	100%	24.02	-	24.00	-0.02	-0.1%
Excellence Awards in Science & Engineering (EASE) ¹	100%	4.31	-	4.31	-	-
Historically Black Colleges & Universities Undergraduate Program (HBCU-UP)	100%	35.01	-	35.00	-0.01	-0.0%
HBCU Excellence in Research (HBCU-EiR)	100%	-	-	10.00	10.00	N/A
Improving Undergraduate STEM Education (IUSE): Hispanic Serving Institutions (HSI) program	100%	-	-	15.00	15.00	N/A
Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)	100%	14.13	-	20.00	5.87	41.6%
Louis Stokes Alliances for Minority Participation (LSAMP)	100%	46.15	-	46.00	-0.15	-0.3%
Partnerships for Research & Education in Materials (PREM)	100%	6.13	-	6.30	0.13	2.8%
Partnerships in Astronomy & Astrophysics Research Education (PAARE)	100%	-	_	1.00	1.00	2.070 N/A
SBE Postdoctoral Research Fellowships-Broadening Participation	100%	1.54	_	1.50	-0.04	-2.5%
SBE Science of Broadening Participation	100%	1.50	-	1.50	-	2.070
Tribal Colleges & Universities Program (TCUP)	100%	14.01	-	14.00	-0.01	-0.1%
Subtotal, Focused Programs	10070	\$187.77	-	\$217.79	\$30.02	16.0%

¹The Excellence Awards in Science and Engineering (EASE) program is comprised of both Presidential Awards for Excellence in Science, Math and Engineering Mentoring (PAESMEM) and Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST).

Emphasis Programs

Emphasis Programs have broadening participation as one of several emphases but broadening participation is not an explicit goal of the program. These programs are included at a percentage of their funding level. The percentage used equals the 3-year average percentage of the programs' award portfolio that meets one the following criteria where an award:

- Was to a Minority Serving Institution (MSI);
- Had at least 50 percent of its principal investigators from an underrepresented group; or
- Had at least 50 percent of the students or postdocs supported by the grant reporting themselves as members of an underrepresented group on project reports.

(Dollars in Mil	lions)					
	Amount				FY 2019 F	Request
	of				change	over
	Funding	FY 2017	FY 2018	FY 2019	FY 2017 Actual	
	Captured	Actual	(TBD)	Request	Amount	Percent
Advancing Informal STEM Learning (AISL)	53%	\$33.34	-	\$33.13	-\$0.21	-0.6%
Disability and Rehabilitation Engineering (DARE)	55%	2.56	-	2.48	-0.08	-3.2%
Discovery Research PreK-12 (DRK-12)	62%	50.97	-	50.97	-	-
Engineering Research Centers (ERC)	63%	36.22	-	35.28	-0.94	-2.6%
Graduate Research Fellowship Program (GRFP)	63%	201.27	-	170.55	-30.72	-15.3%
Improving Undergraduate STEM Education (IUSE)	56%	57.18	-	57.40	0.22	0.4%
Innovative Technology Experiences for Students and Teachers (ITEST) ²	51%	17.90	-	12.75	-5.15	-28.8%
International Research Experiences for Students (IRES)	53%	3.70	-	6.36	2.66	71.9%
NSF Scholarships in STEM (S-STEM) ²	59%	49.78	-	44.25	-5.53	-11.1%
Research Experiences for Undergraduates (REU) - Sites and Supplements	55%	51.84	-	44.02	-7.82	-15.1%
Robert Noyce Teacher Scholarship Program (NOYCE)	61%	37.57	-	28.67	-8.90	-23.7%
STEM + Computing Partnerships (STEM+C Partnerships)	52%	33.62	-	23.57	-10.05	-29.9%
Subtotal, Emphasis Programs		\$575.95	-	\$509.43	-\$66.52	-11.5%

²Innovative Technology Experiences for Students and Teachers (ITEST) and NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) are H1B Visa funded programs.

Geographic Diversity Programs

Geographic Diversity Programs, EPSCoR, has geographic diversity as an explicit goal of the program and is included at 100 percent of its funding.

(Dol	lars in Millions)					
	Amount				FY 2019 Request	
	of			change over		
	Funding	FY 2017	FY 2018	FY 2019	FY 2017	Actual
	Captured	Actual	(TBD)	Request	Amount	Percent
EPSCoR	100%	\$162.80	-	\$160.00	-\$2.80	-1.7%
Subtotal, Geographic Diversity Programs		\$162.80	-	\$160.00	-\$2.80	-1.7%