Human Capital (Dollars in Millions)							
				Change over			
	FY 2021	FY2022	FY 2023	FY 2021 Actual		Funding	
	Actual	(TBD)	Request	Amount	Percent	Source	
Personnel Compensation & Benefits <sup>1</sup>	\$262.68	-	\$333.55	\$70.87	27.0%	AOAM	
Management of Human Capital	13.49	-	16.32	2.83	21.0%	AOAM	
IPA Compensation and Per Diem <sup>2</sup>	49.57	-	75.35	25.78	52.0%	R&RA/EHR	
Total, Human Capital	\$325.74	-	\$425.22	\$99.48	30.5%		
Total AOAM	270.76	-	349.87	79.12	29.2%		
Total R&RA	43.65	-	67.17	23.52	53.9%		
Total EDU	5.92	-	8.18	2.26	38.2%		

<sup>1</sup> FY 2021 Actual funding for PC&B includes \$5.42 million in Adminsitrative Cost Recoveries (ACRs). For FY 2022, NSF is moving away from the practice of including ACRs as a source of funds to meet its Organizational Excellence requirement and ACRs are not factored into NSF's budget plans for the FY 2023 Request.

<sup>2</sup> Costs for IPA travel are found within the Travel section of this chapter.

Support for NSF's human capital activities is the largest component of Organizational Excellence, accounting for almost 60 percent of the total portfolio. The Human Capital component includes personnel compensation and benefits (PC&B) of NSF's federal employees as well as support for NSF's temporary employees-both those that are hired through authority provided by the Intergovernmental Personnel Act, known as IPAs, and those employed through NSF's own Visiting Scientist, Engineer, and Educator (VSEE) program. NSF's federal employee full-time equivalents (FTE) and VSEEs are funded through the AOAM account while IPAs are funded through two programmatic accounts-R&RA and EDU.

The use of IPAs and VSEEs, together commonly referred to as rotators, has been a defining characteristic of NSF since its inception in 1950, as it gives NSF a direct connection to the researchers and educators working at the frontiers of science and engineering. VSEEs count as regular federal FTE and are included in the regular AOAM FTE totals. IPAs are not included in the regular AOAM FTE totals.

The Human Capital component also includes support for the Management of Human Capital, which includes:

- Human resources systems accessed through shared service providers, including the Federal Personnel Payroll System, the time and attendance system (WebTA), and eRecruit capabilities using USAJobs.
- Operational activities including recruiting, hiring, and on-boarding of permanent and rotating staff, as well as processing support for pay and benefits and awards.
- Workplace and career-life balance support for employees including the Health Unit, the Employee Assistance Program, and childcare subsidy.
- Contracts that support training and development programs, on-line training capabilities, networking activities including the NSF mentoring program, executive and supervisory training, and program management training.

## Personnel Compensation and Benefits (PC&B)

reisonner compensation & benefits						
(Dollars in Millions)						
				Change	e over	
	FY 2021	FY 2022	FY 2023	FY 2021	Actual	
	Actual	(TBD)	Request	Amount	Percent	
Regular FTE Usage (projected)	1,345	-	1,445	100	7.4%	
Pathways Intern FTE Usage (projected	21	-	52	31	148.7%	
Regular FTE Base Salary <sup>1</sup>	\$189.56	-	\$233.20	\$43.65	23.0%	
Pathways Intern Salary	1.00	-	2.91	1.91	190.6%	
Other Compensation <sup>2</sup>	2.30	-	2.78	0.48	20.9%	
Awards	6.51	-	8.64	2.13	32.6%	
Subtotal, FTE Compensation	\$199.37	-	\$247.54	\$48.16	24.2%	
Benefits	62.48	-	84.67	22.19	35.5%	
Other Benefits <sup>3</sup>	0.84	-	1.35	0.51	61.3%	
Subtotal, Benefits	\$63.31	-	\$86.02	\$22.70	35.9%	
Total, PC&B	\$262.68	-	\$333.55	\$70.87	27.0%	
Source of Funds						
AOAM Appropriation	\$257.27	-	\$333.55	\$76.28	29.7%	
Administrative Cost Recoveries <sup>4</sup>	5.42	-	-	-5.42	-100.0%	
Total	\$262.68	-	\$333.55	\$70.87	27.0%	

#### Personnel Compensation & Benefits

<sup>1</sup> Includes full support for a 4.6 percent COLA in FY 2023 (\$10.88 million).

<sup>2</sup> Includes reimbursable details to NSF and terminal leave.

<sup>3</sup> Includes Federal Employee's Compensation Act (FECA) funding and transit subsidies.

<sup>4</sup> ACRs estimates are not factored into NSF's PC&B budget for the FY 2023 Request.

The FY 2023 Request for PC&B is \$333.55 million. As implemented in the FY 2022 Request, FY 2023 funding includes AOAM appropriated funds only; no Administrative Cost Recoveries (ACRs) are factored into NSF's AOAM budget plans for the FY 2023 budget submission. The FY 2023 PC&B cost estimate will support the projected year-end usage of 1,445 regular FTE employees, a total of 52 Pathways intern FTE, associated cost of benefits, general workforce performance awards (GWFPA), and Senior Executive Service (SES) bonuses. It includes funding to cover a Cost of Living Adjustment in FY 2023 of 4.6 percent and also contains approximately \$1.0 million for the Federal Transit Benefits Program. In total, NSF believes this PC&B estimate presents a realistic estimate of these costs in FY 2023 and, if provided at the requested level, should minimize the amount of any transfer should NSF need to exercise its transfer authority.

#### NSF AOAM Workforce

	INIUICE				
Equivalent (FTE	) and Othe	r Staff)			
			Change over		
FY 2021	FY 2022	FY 2023	FY 2021 Actual		
Actual	(TBD)	Request	Amount	Percent	
1,330	-	1,445	115	8.6%	
42	-	52	10	23.8%	
1,372	-	1,497	125	9.1%	
1,345	-	1,445	100	7.4%	
21	-	52	31	148.7%	
1,366	-	1,497	131	9.6%	
3		3	-	-	
1,369	-	1,500	131	9.5%	
	FY 2021 Actual 1,330 42 <b>1,372</b> 1,345 21 <b>1,366</b> 3	FY 2021 FY 2022   Actual (TBD)   1,330 -   42 -   1,372 -   1,345 -   21 -   1,366 -   3 -	Equivalent (FTE) and Other Staff)     FY 2021 Actual   FY 2022 (TBD)   FY 2023 Request     1,330   -   1,445     42   -   52     1,372   -   1,497     1,345   -   1,445     21   -   52     1,366   -   1,497     3   3   3	Equivalent (FTE) and Other Staff)     Change     Change     FY 2021   FY 2022   FY 2023   FY 2021   FY 2021     Actual   (TBD)   Request   Amount     1,330   -   1,445   115     42   -   52   10     1,372   -   1,445   100     1,345   -   1,445   100     21   -   52   31     1,366   -   1,497   131     3   3   3   -	

# NSF AOAM Workforce

NSF's FY 2023 FTE allocation is 1,497. The FY 2023 FTE estimated usage is 1,445 regular and 52 Pathways FTE.

NSF's regular FTE level are increased by 115 FTE in FY 2023. Six of these FTE will support NCSES' role as Program Management Office for the Standard Application Process and for work related to building a National Secure Data Service. The remaining FTE are for the TIP Directorate and for NSF to achieve the program objectives set forth by the Director in the FY 2023 Request.

Currently, planning is underway to expand NSF's internship program in FY 2023 to grow the program by an additional 10 Pathways Intern FTE. Within NSF, the Pathways Program is working as designed and NSF is converting interns to permanent positions at a highly successful rate. These additional FTE will support NSF efforts to uphold Section 6 of Executive Order 14035, Advancing Diversity, Equity, Inclusion and Accessibility (DEIA) in the Federal Workforce, as these entry level positions often create a real opportunity for candidates in underserved communities to gain access to the Federal workforce.

#### Management of Human Capital

#### Management of Human Capital (Dollars in Millions) Change over FY 2021 FY 2022 FY 2023 FY 2021 Actual Actual (TBD) Request Amount Percent \$13.49 \$16.32 \$2.83 21.0% -

The FY 2023 Request level for Management of Human Capital is \$16.32 million. This funding level will enable NSF to maintain operational support activities, learning and development programs essential for NSF's permanent and rotator staff, and contractual support for human capital initiatives. Specifically, NSF's FY 2023 Management of Human Capital investments support the following activities:

#### Learning and Development Programs (4.76 million)

Investments in this category fund contracts in support of learning and development programs, such as the Learning Management System, LearnNSF, and related on-line learning capabilities, as well as support for learning and capacity-building activities including the NSF mentoring program, executive and supervisory training, and program management training. These learning and development activities are designed to help ensure that the workforce, including permanent and rotating staff, as well as new supervisors and executives, are equipped with the tools needed to succeed as NSF employees whether working onsite or offsite.

#### Operations Support (\$4.53 million)

This category includes contract support for recruiting, hiring, and on-boarding of permanent and rotating staff, outreach, and employee surveys as well as processing support for pay, benefits, and incentive and other awards. These investments ensure that initiatives related to the NSF work environment focus on keeping NSF competitive in the labor market, able to attract, recruit, retain, and empower top talent, and advance diversity, equity, inclusion, and accessibility. The FY 2023 funding level is guided by costs associated with these employee-driven human capital activities. Included within the FY 2023 funding level is increased support for Pathways Program management in support of the program's FTE growth. The increased funding will allow NSF to ramp up recruitment and outreach efforts, to include campus outreach, internship-focused training/networking, and DEIA program enhancements.

#### Strategic Human Capital Support (\$3.98 million)

NSF relies on strategic human capital support contracts for assistance in developing new approaches to critical human resource needs. FY 2023 funding reflects NSF's planned investment in business intelligence and other tools anticipated to bring agility and process efficiency to the agency and enable workload analysis and workforce planning in support of strategic management of human capital resources. Within this investment category, FY 2023 funds will continue support for talent teams established in the FY 2022 Request, to identify assessments which are appropriate for NSF, and to improve internships and Pathways Programs. Additional support is also provided to advance position management, competency assessment, and career path navigation activities associated with NSF' s Operational Reforms initiative (formerly Renewing NSF).

## Workplace and Work-Life Support (\$2.09 million)

The Workplace and Work-Life Support investment is focused on helping NSF's employees by providing health and family-friendly programs and activities, including an onsite health unit, onsite fitness center, the employee assistance program, childcare subsidy, backup dependent care program, and student loan repayment program. These activities address the future of employee support and help the agency remain competitive in the labor market and support Federal employees in a hybrid work environment.

## Human Resource Systems and Shared Services (\$960,000)

This category represents NSF's HR systems accessed through shared service providers, such as the Federal Personnel Payroll System, the time and attendance system (WebTA), and eRecruit capabilities using USAJobs. FY 2023 funding reflects the rising costs of the Interior Business Center's (IBC) shared services support for various critical personnel management systems. The required funding level is a result of agency identified resources needed (or savings identified) to operate effectively and support the federal workforce.

#### Intergovernmental Personnel Act Costs

A portion of NSF's workforce consists of temporary staff hired through the Intergovernmental Personnel Act (IPA) authority. IPAs remain employees of their home institution while serving at NSF during their temporary assignments. They are not paid directly by NSF and are not subject to federal pay, benefits, or other limitations. NSF reimburses their home institution without overhead. IPAs are eligible to receive relocation expenses or a per diem allowance in lieu of relocation. Since January 31, 2020, NSF has required that institutions provide a minimum of 10 percent cost share of an IPA's base salary and fringe benefits for every full-time IPA agreement.<sup>1</sup>

The agency uses IPA science and engineering staff to help ensure that the Foundation's funding decisions are based on the best input from the field and reflect fresh ideas and creativity. The expertise provided by these IPAs is essential to help shape the NSF research portfolio and support transformational advances across the frontiers of all fields of science, engineering, and education.

	(Dollars in Mill	ions)				
				Change over		
	FY 2021 FY 2022 F		FY 2023	FY 2021 Actual		
	Actual	(TBD)	Request	Amount	Percent	
IPA FTE Allocation <sup>1</sup>	205	-	275	70	34.1%	
IPA FTE Usage (Actual/Projected) <sup>1</sup>	193	-	275	82	42.4%	
Research and Related Activities (R&RA)						
IPA Compensation	\$41.67	-	\$62.64	\$20.97	50.3%	
IPA Per Diem	1.98	-	4.53	2.55	128.3%	
Subtotal, R&RA Costs	\$43.65	-	\$67.17	\$23.52	53.9%	
STEM Education (EDU)						
IPA Compensation	\$5.60	-	\$7.40	\$1.80	32.2%	
IPA Per Diem	0.32	-	0.78	0.46	142.1%	
Subtotal, EDU Costs	\$5.92	-	\$8.18	\$2.26	38.2%	
Total <sup>1</sup>	\$49.57	-	\$75.35	\$25.78	52.0%	

#### IPA Costs Compensation and Per Diem by Appropriation

<sup>1</sup> IPA FTE of approximately one in FY 2021 and four in FY 2023 are included in the IPA FTE Allocation and Usage lines of the table above but the costs are budgeted within Other Program Administration and included in Operating Expenses section of this chapter.

The FY 2023 IPA FTE allocation increases 70 IPA FTE over the FY 2021 Actual, reflecting the creation of the TIP directorate and a growth in the number of IPA FTE commensurate with the growth in the total NSF Request. The FY 2023 funding for IPA compensation and per diem costs are associated with full use of NSF's IPA FTE allocation for FY 2023.

For both R&RA and EDU, IPA costs in FY 2021 were below normal due to restrictions imposed by COVID-19, especially as it related to travel and per diem costs. For FY 2023, NSF expects normal activities to resume and IPA costs are increased consistent the increase in IPA FTE and no assumed

<sup>&</sup>lt;sup>1</sup> If a home institution is unable to provide the full 10 percent cost share, the institution may submit requests for NSF to waive the cost-sharing requirement. Such requests must include the rationale for not being able to provide the required amount.

#### Management of Human Capital

restrictions. Per IPA compensation costs for the FY 2023 Request are estimated based on projected IPA FTE utilization, current IPA funding, and the need to provide competitive salaries to recruit the best researchers in the STEM fields. The per Diem costs are increased to levels consistent with historical averages and also reflects new NSF policy, beginning October 1, 2021, raising the maximum annual per Diem level to \$24,984.

Information on costs associated with travel for NSF's IPAs is found within the Travel section of this chapter.