EXPLANATION OF FY 2022 CARRYOVER INTO FY 2023 BY ACCOUNT

The National Science Foundation's total unobligated balance of \$493.78 million (\$418.52 million from Discretionary accounts, and \$75.26 million from Mandatory accounts) is described below.

Discretionary and Mandatory Accounts: Distribution of NSF FY 2022 Carryover into FY 2023

(Dollars in Millions)

Discretionary Accounts	Amount
Research and Related Activities	\$72.02
STEM Education	10.97
Major Research Equipment and Facilities Construction	330.73
Agency Operations and Award Management	4.40
Office of Inspector General	0.40
Total, Appropriated Accounts	\$418.52
Mandatory Accounts	
H-1B Non-Immigrant Petitioner	51.15
Donations	24.10
Total, Mandatory	\$75.26
TOTAL, NSF	\$493.78

Appropriated Accounts

Research and Related Activities (R&RA)

Within the R&RA account, \$72.02 million was carryover into FY 2023.

Directorate for Geosciences Polar Programs (no-year funding)

- Amount: \$7.28 million
- Purpose: Recoveries from prior year obligations that were received too late in the fiscal year to obligate.
- Obligation: Anticipated FY 2023 Quarter 4

Integrative Activities for Evaluation and Assessment Capabilities program

- Amount: \$1.06 million
- Purpose: Funds will be used for the Evaluation and Assessment Program Services contract in support of NSF's Learning Agenda and Annual Evaluation Plan and will be used to conduct evaluative studies such as the Merit Review bias analysis, Convergence Accelerator and EPSCoR.
- Obligation: Anticipated FY 2023 Quarter 1 and Quarter 2

Integrative Activities for Growing Convergence Research

- Amount: \$453,000
- Purpose: Funds will support awards that were not ready for obligation in FY 2022.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Growing Research Access for Nationally Transformative Equity and Diversity

- Amount: \$1.85 million
- Purpose: Funds will support conferences and workshops addressing the research administration and post-award management capabilities and capacity at under-resourced and emerging research institutions.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Historically Black Colleges & Universities – Excellence in Research (HBCU-EiR)

- Amount: \$4.42 million
- Purpose: Funds will support awards associated with the HBCU-EiR proposal cycle that began in July 2022 including new opportunities announced in fall 2022.
- Obligation: Anticipated FY 2023 Quarter 3

Integrative Activities for Major Research Instrumentation

- Amount: \$114,000
- Purpose: Funds will be used for awards that were not ready for obligation in FY 2022.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Mid-scale Research Infrastructure – Track 1

- Amount: \$6,400
- Purpose: Funds will provide continuing support to projects that began in FY 2021 upon receipt of progress reports that are due late in FY 2022.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Science and Technology Centers Administration

- Amount: \$7,700
- Purpose: Funds will provide support to a contractor for a summative study of the Science and Technology Centers program.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Modeling and Forecasting program

- Amount: \$1.47 million
- Purpose: Funds will be used to develop an enterprise analytics governance/management operating model, conduct an organizational assessment, and develop an implementation plan.
- Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Program Planning and Policy Development

- Amount: \$643,000
- Purpose: Funds will support activities to enhance and expand opportunities for minority-serving and emerging research institutions, as well as support capacity-building activities for national priorities.
- Obligation: Anticipated by FY 2023 Quarter 3

Integrative Activities for Research Investment Communications

- Amount: \$783,000
- Purpose: Funds will be used for NSF multimedia contract awards that were not ready for obligation in FY 2022. These funds will support critical communications contracts that enable NSF

to engage with stakeholders including Congress, elected officials, national and international institutions, and the general public.

• Obligation: Anticipated FY 2023 Quarter 2

Integrative Activities for Research Security Strategy and Policy

- Amount: \$586,000
- Purpose: This funding will support NSF's analytic capabilities to proactively identify conflicts of
 commitment, vulnerabilities of pre-publication research, risks to the merit review system, and
 development and implementation of training to recipients of federal research funding for
 best practices to optimize research security.
- Obligation: Anticipated FY 2023 Quarter 1 and Quarter 2

Office of International Science & Engineering

- Amount: \$5.24 million
- Purpose: Funds will be used for awards that were not ready for obligation in FY 2022 associated with cross-directorate collaborations that include international components and supporting the launch of OISE's Global Center program.
- Obligation: Anticipated FY 2023 Quarter 3

TIP Innovation & Technology Ecosystems

- Amount: \$37.78 million
- Purpose: Given the timing of the establishment of the TIP directorate, the initiation of several activities was delayed, leaving insufficient time to complete the review process and make awards. Activities included aspects of the NSF Convergence Accelerator program, NSF Regional Innovation Engines (NSF Engines) program, the Democracy-Affirming Technologies Prize Challenges, and the Proto-Open Knowledge Networks (Proto-OKN) program
- Obligation: Anticipated FY 2023 Quarter 1, 2 and 3

TIP Translational Impacts:

- Amount: \$3.0 million
- Purpose: Given the timing of the establishment of the TIP directorate, the initiation of the NSF Entrepreneurial Fellowships was delayed to Summer 2022, with initial funding split across FY 2022 and FY 2023.
- Obligation: Anticipated FY 2023 Quarters 1 and 2

TIP Translational Impacts (SBIR and STTR):

- Amount: \$3.05 million
- Purpose: Funds will be used on STTR Phase I or Phase II awards in FY 2023.
- Obligation: Anticipated FY 2023 Quarters 1 and 2

National Coordination Office for Networking and Information Technology Research and Development

- Amount: \$934,000
- Purpose: Funds will continue government procurements and operational expenses (i.e. credit card purchases, government travel, mailroom operations, etc.).
- Obligation: Anticipated FY 2023 Quarter 2

National Nanotechnology Coordination Office

- Amount: \$537,000
- Purpose: Funds will be used to fund the required Quadrennial Review of the National Nanotechnology Initiative. In addition, funds carried over will be used to cover rent in NNCO's new location and other operational costs.
- Obligation: Anticipated FY 2023 Quarter 2 and 3

The remaining \$2.81 million within R&RA consists of funds from throughout the Foundation for projects not funded in FY 2022.

STEM Education (EDU)

Within the STEM account, \$10.97 million was carried over into FY 2023.

EDU Core Research

- Amount: \$13,496
- Purpose: To support actions that could not be processed in time.
- Obligation: Anticipated FY 2023 Quarter 1

Presidential Award for Excellence and Teaching

- Amount: \$4.72 million
- Purpose: Applicant selection was delayed; therefore, the carryover amount will be used to recognize recipients of the Presidential Awards for Excellence in Mathematics, Science Teaching and recipients of the Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring.
- Obligation: Anticipated FY 2023 Quarter 2

Robert Noyce Teacher Scholarship Program (Noyce)

- Amount: \$4.30 million
- Purpose: This no year account will use carryover to invest in teacher preparation and/or support Noyce fellows during completion of a teaching obligation.
- Obligation: Anticipated FY 2023 Quarter 1

The remaining \$1.94 million consists of funds from EDU for projects not funded in FY 2022.

Major Research Equipment and Facilities Construction (MREFC)

Within the MREFC account, \$330.73 million was carried over into FY 2023.

Mid-scale Research Infrastructure Track 2 (Mid-scale RI-2)

- Amount: \$98.34 million
- Purpose: Obligations proceeding as anticipated. This portfolio has both out-year mortgages on current awards and future obligations planned on pending awards given the two-year proposal/review cycle. Availability of an additional \$6.50 million in targeted appropriations through ARP also reduced need for previously appropriated funds. Obligations for the next round of proposals (some of which are approaching \$100.0 million) will be made following NSB authorization of the portfolio in February 2023.
- Obligation: Anticipated \$60.0 million FY 2023 Quarter 2; \$38.0 million FY 2023 Quarter 4

Antarctic Infrastructure Modernization for Science (AIMS)

(as described in the Antarctic Infrastructure Recapitalization narrative of the MREFC chapter)

- Amount: \$150.65 million
- Purpose: Continued construction of the Antarctic Infrastructure Modernization for Science (AIMS) project. Any residual funds not needed for AIMS will be carried over into the Antarctic Infrastructure Recapitalization (AIR) program to potentially support unfunded components of AIMS or other recapitalization priorities.
- Obligation: Anticipated \$100.0 million in FY 2023; \$50.65 million in FY 2024

Regional Class Research Vessel (RCRV), Including \$1.50 million in Hurricane Ida funding

- Amount: \$6.50 million
- Purpose: Continued construction of the Regional Class Research Vessels. Management reserve funding not obligated in FY 2022.
- Obligation: Anticipated \$5.0 million in FY 2023 based on project needs

Daniel K. Inouye Solar Telescope (DKIST)

- Amount: \$20,467
- Purpose: Continued construction of the Daniel K. Inouye Solar Telescope (DKIST) Management reserve funding not obligated in FY 2021.
- Obligation: Construction completed. No additional obligations anticipated.

High Luminosity Large Hadron Collider (HL-LHC)

- Amount: \$29.68 million
- Purpose: Continued construction of the Large Hadron Collider, High-Luminosity Upgrade (HL-LHC) program. Funding not obligated in FY 2022, including budget contingency.
- Obligation: Anticipated FY 2023 Quarter 2

Vera C. Rubin Observatory

- Amount: \$40.0 million
- Purpose: Continued construction of the Vera C. Rubin Observatory following re-baseline
- Obligation: \$29.0 million in FY 2024; \$20.0 million in NSF-held management reserve to be obligated based on need.

Large Facilities Office

- Amount: \$1.18 million
- Purpose: Enhanced Research Infrastructure oversight related to construction, acquisition, and implementation based on statutory and NSF policy requirements
- Obligation: Anticipated FY 2023 Quarter 1 and Quarter 2

The remaining \$4.36 million consists of funds from recoveries from old projects not funded in FY 2022.

Agency Operations and Award Management (AOAM)

Within the AOAM account, \$4.40 million was carried over into FY 2023.

- Amount: \$4.40 million
- Purpose: To ensure sufficient funding would be available early in FY 2023 to bridge increased costs while operating under a Continuing Resolution for increased staffing as NSF is adding

additional FTE to manage increased responsibilities and requirements from CHIPS and Science Act, including staffing up a new directorate and several new offices, as well as ensuring funds are available to cover emerging needs in activities funded under the Office of Equity and Compliance in Research (OECR).

• Obligation: FY 2023 Quarter 1

Office of Inspector General (OIG)

Within the OIG two-year account, \$398,292 was carryover over into FY 2023.

- Amount: \$398,292
- Purpose: Funds are expected to be used to procure financial and performance audit services.
 The selection of awards and institutions to be audited will require careful preparation and is subject to changing circumstances and new information that may require additional time to process.
- Obligation: Anticipated FY 2023 Quarter 3

Mandatory

Within the H-1B account, \$51.15 million was carryover into FY 2023.

Innovation Technology Experiences for Students and Teachers

- Amount: \$30.91 million
- Purpose: Since NSF received the largest payments of H-1B visa fees in August and September, there was insufficient time to obligate the receipts on awards before the end of the fiscal year.
- Obligation: Anticipated FY 2023 Quarters 1-2

Scholarships in Science, Technology, Engineering, and Mathematics

- Amount: \$6.76 million
- Purpose: Since NSF received the largest payments of H-1B visa fees in August and September, there was insufficient time to obligate the receipts on awards before the end of the fiscal year.
- Obligation: Anticipated FY 2023 Quarters 1-2

The remaining \$13.48 million consists of funds from H-1B for projects not funded in FY 2022.

Within the Donations account, \$24.10 million was for carryover into FY 2023. Donations are received from organizations and individuals to fund various cooperative efforts in science, research, and education.

Technical Information