

NSF and Decadal Surveys



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Why Early Career People should care and why the NSF cares about your perspective

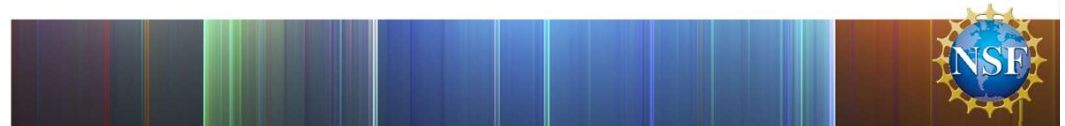
- This is community advice to the agencies and Congress.
- You will be the ones carrying out the recommendations of the decadal surveys
- It takes many decades sometimes to see a priority through to fruition.
- You have ideas that are fresh and we want to hear them. It's important for a diversity of ideas and perspectives to be heard in the decadal (and all community based) processes. That means early career.



The NSF Organic Act (1950)



- Mandate: May 10, 1968
Foundation's organic legislation authorizes us to engage in the following activities:
- **A.** Initiate and support, through grants and contracts, scientific and engineering research and programs to strengthen scientific and engineering research potential, and education programs at all levels, and appraise the impact of research upon industrial development and the general welfare.
- **D.** Foster and support the development and **use of computers** and other scientific methods and technologies, primarily for research and education in the sciences.



A Little Bit More About NSF

- Unlike the mission driven agencies, NSF has a goal of supporting science from the grassroots. This philosophy compliments our sister agencies.
- Feeds into the Merit Review Criteria
 - Intellectual Merit – How good is the science and the plan?
 - Broader Impacts – How does the project further the goals of society?
 - Includes but are not limited to:
 - STEM Education and Workforce
 - Broadening Participation
 - Enhanced Infrastructure and Partnerships
 - Knowledge Dissemination and Scientific Literacy
 - Societal Impact and Economic Competitiveness



NSF Priorities

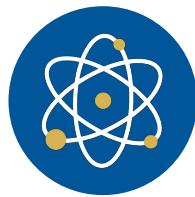
- NSF's Mission

“To promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense; and for other purposes.”

- At the highest level, set by the Administration and Legislation (organic, authorization, and appropriations)
- National Science Board provides ongoing guidance (e.g. Vision 2030)
- NSF Director establishes agency high-level priorities



NSF Priorities Cont.



NSB Vision 2030

Research benefits

STEM talent

Geography of innovation

Global S&E community



NSF Vision

Advancing research

Accessibility and inclusivity

Global leadership

Translation, Innovation,
Partnerships (TIP)



Administration Pillars

Pandemic response

Economic recovery

Racial equity

Climate change

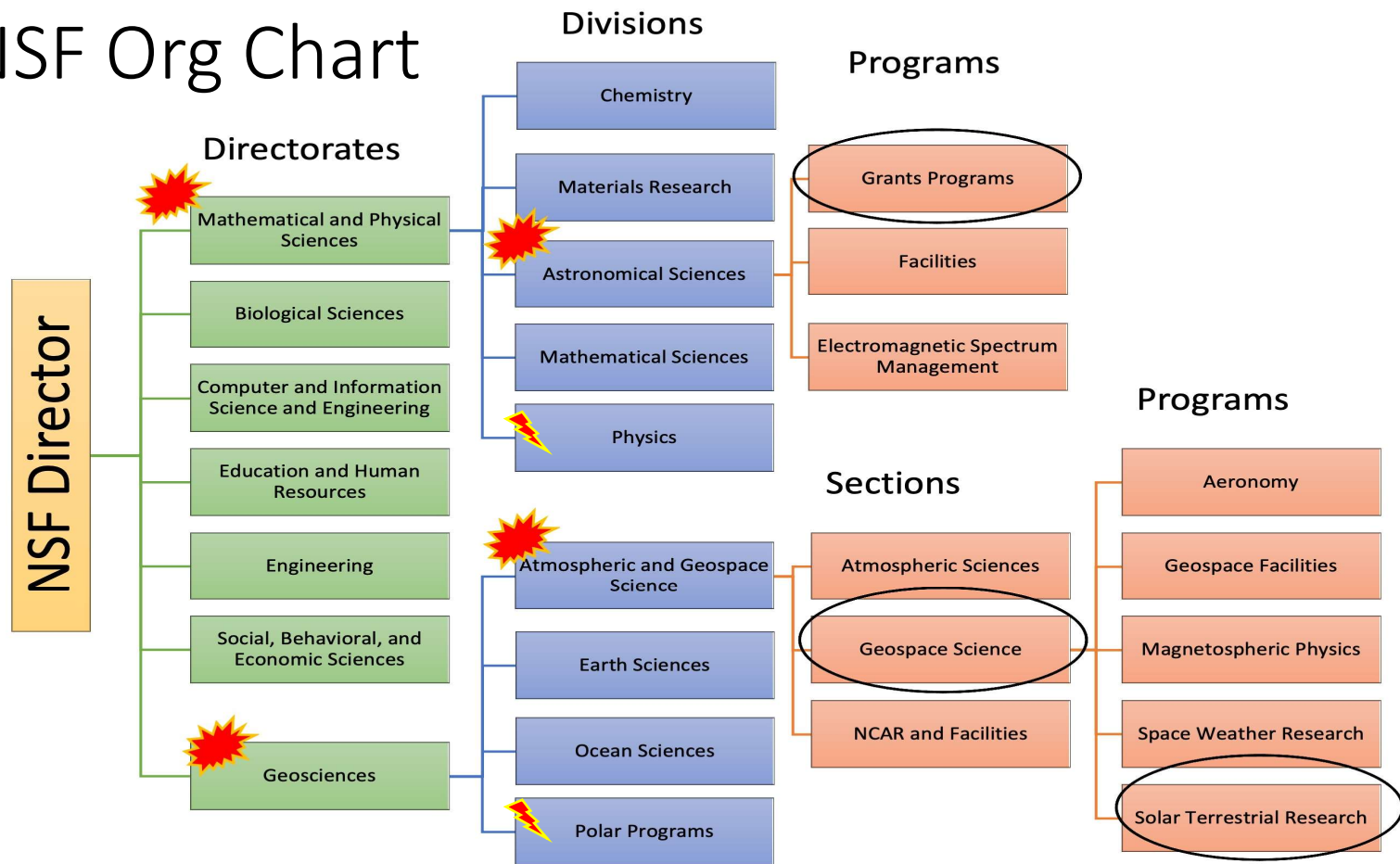


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NSF Org Chart



Some Budget Numbers

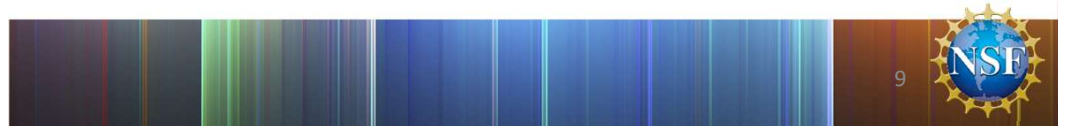
	FY21 Enacted	FY22 Request
NSF Total	\$8.35B	\$10.3B
Division Budgets	FY21 Estimate	FY22 Request
AST Total	\$277M	\$294M
<i>AST Facilities</i>	<i>\$219M</i>	<i>\$216M</i>
<i>AST Research</i>	<i>\$53M</i>	<i>\$73M</i>
AGS Total	\$283M	\$342M
<i>AGS Research</i>	<i>\$135M</i>	<i>\$185M</i>

	FY22 Request
NASA Total	\$24.8B
<i>NASA SMD</i>	<i>\$7.9B</i>



NSF and Decadal Surveys

- Decadal Surveys are *independent* community advice, developed by the National Academies at the request of an agency or agencies. The agencies work together to draft a Statement of Task for NASEM.
- They are used, by you - the community, to develop broad community priorities.
- Unlike NASA, NSF is not mandated by law to use the decadal surveys
- HOWEVER, the decadal surveys are **extremely** important to NSF
- Because these priorities are from the whole community, they have a big impact.
 - NSF programs use them as one source of guidance on which science topics, instruments, etc should be developed
 - Facility development, construction, and continued support lean heavily on decadal surveys and other community priority documents – for example, MREFC and Midscale Research Infrastructure.
- NSF uses the recommendations on state of the profession to inform improvements to programs and new initiatives



NSF AST Division Use of Decadal Surveys

- Cover Astronomy, Planetary Science, and Solar and Space Physics
- Decadals from all three communities and Plasma Physics are input to AST priorities
- It is particularly important that these have consistent messages on priorities.
- AST can make use of common messages to advance priorities
- Coordination between SSP and ASTRO decadals was key to getting DKIST constructed.

