Decadal Surveys

The National Academy of Sciences’ decadal surveys are scientific community-based and recommend **ranked, consensus scientific priorities** for the coming decade.

The decadal surveys’ overriding priority has been a **balanced program**…
- across discipline and mission size
- between competed and strategic programs
- between facilities and grants
  …to **optimize return on taxpayer investment**.

Missions and Facilities

Small and Mid-Scale

- Competed | Investigator-led | Focused Science

Flagship

- Directed | Broad Science | Community Instruments

Competed Grants

- Awards are based on the **scientific merit** and **breadth of impact** of proposed research.
- NASA, NSF, and DOE fund **students and researchers in all fifty states** across the academic, industry, government, and nonprofit sectors.
- Current selection rates for Planetary Science Division (PSD) R&A Programs are ~20%. **In order to increase grant selection rates to a sustainable 33% requires an additional $200 million to NASA’s PSD budget for Planetary R&A.**

Awards are based on the **scientific merit** and **breadth of impact** of proposed research.

NASA, NSF, and DOE fund **students and researchers in all fifty states** across the academic, industry, government, and nonprofit sectors.

Current selection rates for Planetary Science Division (PSD) R&A Programs are ~20%. **In order to increase grant selection rates to a sustainable 33% requires an additional $200 million to NASA’s PSD budget for Planetary R&A.**
Robust Investments Needed for Scientific Research

Curiosity-driven research is vital to innovation and economic growth in the U.S. Other countries are accelerating their investments in Research and Development (R&D) activities; China is surpassing the U.S. investment this year. The U.S. has maintained a generally flat R&D expenditure relative to our GDP (3%) over the last three decades.

To ensure that the U.S. remains a global leader in innovation, we ask that Congress fund sustained, robust growth for the science agencies, including the NASA Science Mission Directorate (SMD), NSF, and the DOE Office of Science (SC).

2021 Appropriations Request

The FY21 funding AAS requests will allow NASA, NSF, and DOE to support a balanced, coordinated, and world-leading planetary sciences program that advances top community priorities.

<table>
<thead>
<tr>
<th>Account</th>
<th>FY19 Enacted</th>
<th>FY20 Enacted</th>
<th>PBR</th>
<th>AAS Ask</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA</td>
<td>$21.5</td>
<td>$22.6</td>
<td>$25.2</td>
<td>$26.5</td>
</tr>
<tr>
<td>SMD</td>
<td>$6.9</td>
<td>$7.1</td>
<td>$6.3</td>
<td>$7.5</td>
</tr>
<tr>
<td>- PSD</td>
<td>$2.8</td>
<td>$2.7</td>
<td>$2.7</td>
<td>$2.9</td>
</tr>
<tr>
<td>NSF</td>
<td>$8.1</td>
<td>$8.3</td>
<td>$7.7</td>
<td>$9.0</td>
</tr>
<tr>
<td>DOE (SC)</td>
<td>$6.6</td>
<td>$7.0</td>
<td>$5.8</td>
<td>$7.4</td>
</tr>
</tbody>
</table>

All values are given in billions of USD.

In FY21, the AAS
• Supports an appropriation that enables an FY24 Europa Clipper launch without delay, completion of James Webb Space Telescope, and continues to support Planetary Defense Coordination Office activities, including Arecibo Observatory
• Seeks an historic increase for NSF to jumpstart the U.S. scientific enterprise and long-term economic security, enabling investments like mid-scale instrumentation
• Advocates for strong Research & Analysis grant funding (>350 million) and following the balanced cadence of Small and Mid-scale missions called for in the Planetary Sciences Decadal Survey

T 202-328-2010  public.policy@aas.org  http://www.aas.org