

National Aeronautics and  
Space Administration



# EXPLORE SOLAR SYSTEM & BEYOND

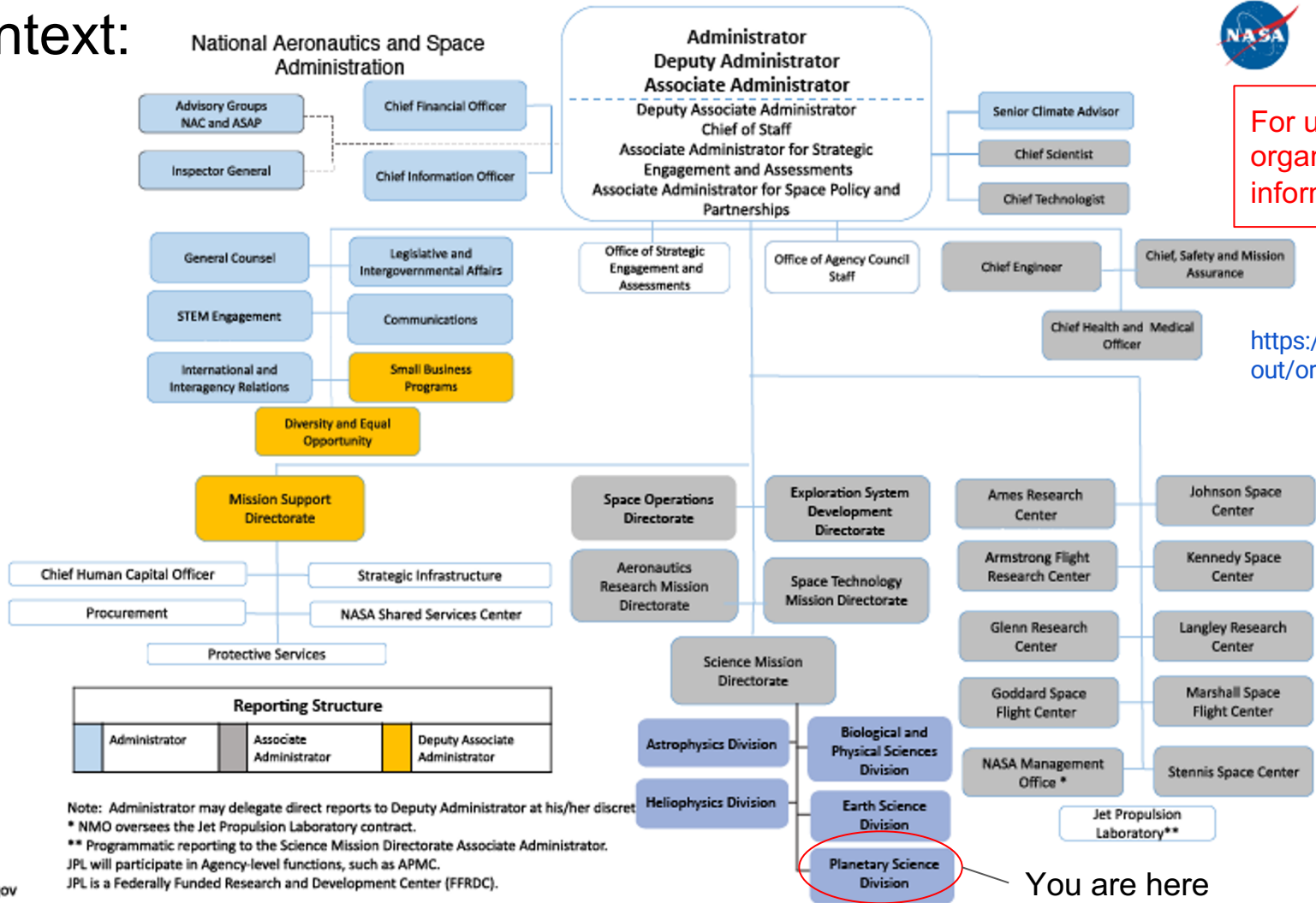
PAC 101:  
Welcome to the PAC

# Context:



For up-to-date organizational information, go [here](https://www.nasa.gov/ab/out/org_index.html)

[https://www.nasa.gov/ab/out/org\\_index.html](https://www.nasa.gov/ab/out/org_index.html)



You are here

Note: Administrator may delegate direct reports to Deputy Administrator at his/her discretion.  
 \* NMO oversees the Jet Propulsion Laboratory contract.  
 \*\* Programmatic reporting to the Science Mission Directorate Associate Administrator. JPL will participate in Agency-level functions, such as APMC. JPL is a Federally Funded Research and Development Center (FFRDC).



# What is the PAC?

The Planetary Science Advisory Committee (PAC) is an Advisory committee chartered under the Federal Advisory Committee Act (FACA).

FACA committees are established to provide information and advice on a broad range of issues affecting federal policies and programs.

FACA committees should (per the GSA):

- Provide advice that is relevant, objective, and open to the public
- Act promptly to complete their work
- Comply with reasonable cost controls and record keeping requirements (this one is mostly on the Executive Secretary)



# The PAC Charter

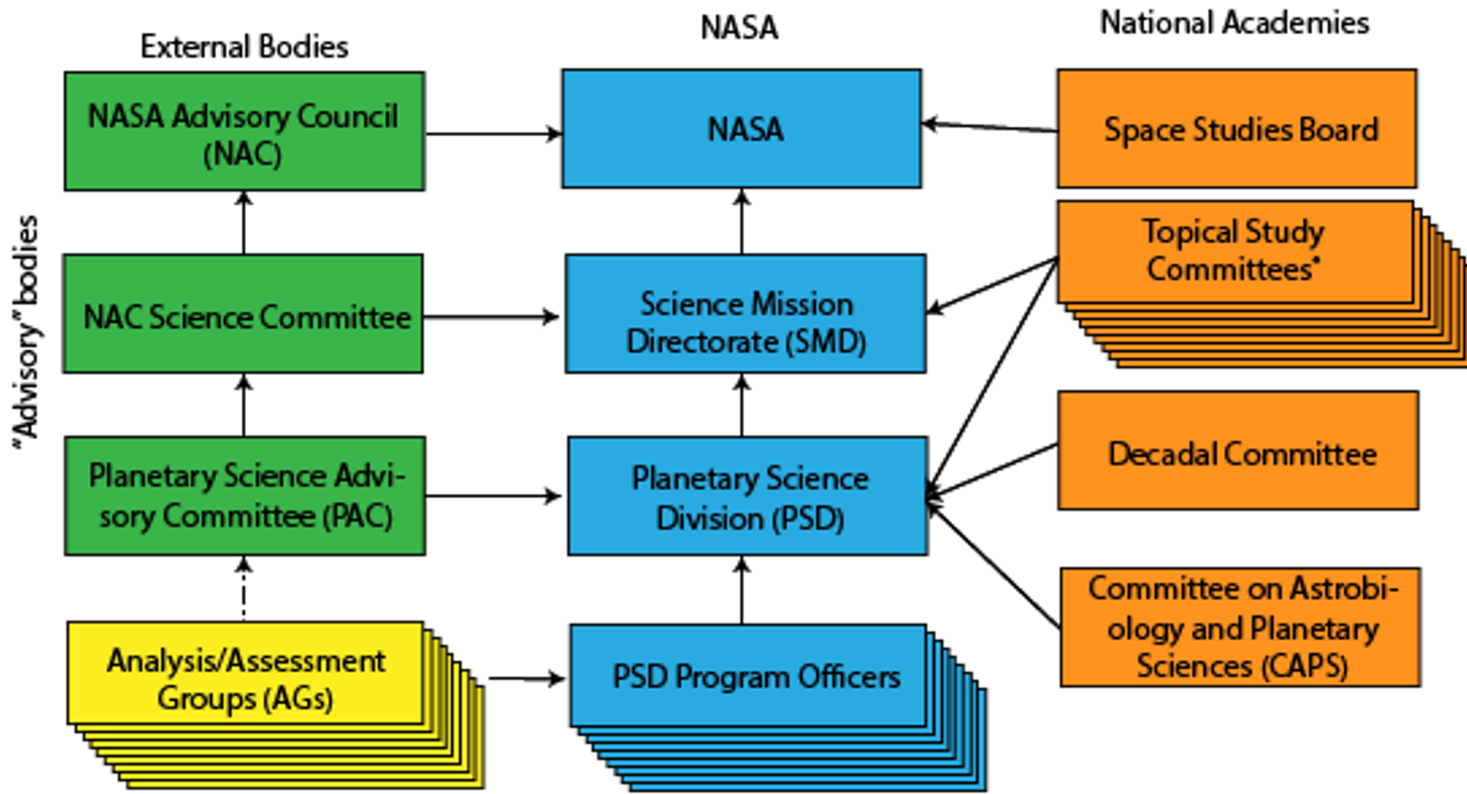
The full PAC Charter can be found here: [https://science.nasa.gov/science-red/s3fs-public/atoms/files/PAC\\_Charter\\_2021\\_TAGGED.pdf](https://science.nasa.gov/science-red/s3fs-public/atoms/files/PAC_Charter_2021_TAGGED.pdf)

The most important part of the charter:

**3. Objectives and Scope of Activities:** The PAC shall draw on the expertise of its members to provide advice and make recommendations to the Director, Planetary Science Division, Science Mission Directorate, NASA Headquarters (hereinafter, "Director, Planetary Science Division") on planetary science programs, policies, plans, and priorities. The PAC's recommendations and analysis can be used to inform decisions on the programmatic scope and priorities, as well as the implementation of planetary science programs. In addition, the PAC will provide a regular forum for broad discussion of planetary science and the role of planetary science within and outside of NASA.



# The PAC: Context



\*Topical Study Committees: These can be either standing committees, such as the Committee on Planetary Protection, or narrow-focus committees established for a single topical report (e.g., "Strategic Investments in Instrumentation and Facilities for Extraterrestrial Sample Curation and Analysis:").



# The Role of the PAC: Practicalities

- PSD does not restrict in any way what the PAC wants to discuss. However, PSD does try to actually highlight where we want/need advice.
- It is important to remember that the PAC makes **recommendations** and provides **advice**. While the wisdom of the PAC is highly valued, PSD is not obligated to follow or respond to the recommendations and advice provided.
  - Requests for information: There are times when the PAC requests presentations and/or information, and traditionally PSD has tried to provide these in a timely manner. However, we want to emphasize that such requests should be made with a goal in mind -- will the information lead to a recommendation? What might that be? Is it a useful/actionable recommendation?
  - NASA may not be able to share some information due to Federal law or regulations.
- The PAC is not an oversight body!
  - FACA committees cannot direct Agency activity, including that of individual Agency employees



# How the PAC Operates -- A Timeline

The PAC meets ~3 times a year.

A rough timeline:

Meeting - 6 months: Schedule the PAC meeting

Meeting - 2 months: Set a preliminary agenda; requests sent to the PAC for additional topics

Meeting - 6 weeks: Final agenda; notice posted in Federal Register; Logistics

~Meeting - 1 week: Some presentation slides (e.g., from the AGs) to the PAC for review prior to the meeting.

Meeting: Publicly-accessible meeting held


Meeting +90 days: Minutes, findings, etc. must be made public. Ideally, we do this faster so that there's time before the next PAC meeting to respond.



# PAC Meeting Requirements

- All meetings must be available to the public; generally this is accomplished through video conferencing.
- The Committee **must** stick to the agenda. It's ok to get a little behind, but you **cannot** be early (e.g. a presentation may start no earlier than the time listed on the agenda).
- Questions/comments during the regular meeting are from PAC members only; questions from the general public are only allowed in the public comment period.
- There should be a public comment period as part of each meeting; however, this has sometimes not happened due to time constraints.
- Any potential finding **must** be substantively discussed during the public meeting.
- NASA/PSD wants to hear from **all** of the PAC members.
- The Executive Secretary (a Civil Servant representative of PSD) or a Civil Servant delegate must be present at all times.





## Following the PAC Meeting (and one other detail)

- A professional notetaker (from outside PSD) attends each meeting and provides notes to the Executive Secretary (Stephen) who distributes the notes to all speakers for verification of their accuracy. Revisions are sent back to the notetaker and the final version is read and approved by the Executive Secretary and the PAC Chair
- Details of findings (wording, etc.) get sorted out by the PAC. As a FACA committee, all findings require consensus of the group. The final findings are signed by the Executive Secretary and the Chair.
- PAC members should cc the Executive Secretary on any correspondence regarding official PAC business.
  - Why: If there is a FOIA request, the Executive Secretary will have all records and be able to respond quickly.
  - Caveat: If there is an issue on which you feel that having the Executive Secretary included would preclude frank and open discussion, please try to include a civil servant on the correspondence. Make sure that they know that those records need to be preserved.



# Findings versus Recommendations

Findings: Observations made by the PAC that do not require a response. E.g, “The PAC commends NASA on the successful landing of Perseverance.”

Recommendations: Advise a course of action for PSD and should receive an official NASA response.

Recommendations should be: Concise, Clear, and Actionable.

The best recommendations have have clear and specific advice on a well-defined topic. Overly broad recommendations are open to interpretation and can be difficult to implement.

Having too many recommendations can also be problematic: NASA staff has limited bandwidth to respond to findings, so it’s important to really prioritize.

Findings and recommendations can serve to provide direction to PSD or to provide support for new directions PSD wants to take.



## Legal Restrictions (on NASA)

No Civil Servant can lobby Congress for their own Agency or ask others to do so: you will **never** hear one of us say “If you want more money for X, you need to go talk to your Congressperson.” We **cannot** say that.

PSD cannot redistribute funding allocated by Congress without explicit approval from the Office of Management and Budget (OMB) and Congress. Moving money between budget wedges is extremely challenging and may not be allowed!

We cannot take advice from any non-FACA group.



# Legal Restrictions (on the PAC)

Disclosures and conflicts: To be on the PAC, you have to file financial disclosures and obtain a ruling from NASA lawyers on any potential conflicts of interest. You also have to take ethics training. These must be done annually for one to continue on the PAC.

The Hatch Act: While serving as a member of the PAC, you have to follow the same laws as regular civil servants. This includes the Hatch Act, which forbids the use of government position for the support of a specific candidate/proposition (e.g., you cannot say “As a member of the PAC, I think you should all vote for Senator Bullworth and for Proposition D”). This does not extend to issue advocacy (e.g., you can say “The PAC thinks climate change is a problem and we should do something about it”). This restriction only applies while you are carrying out the duties of the PAC; it does not apply outside of that.



## Recusal (more on conflicts)

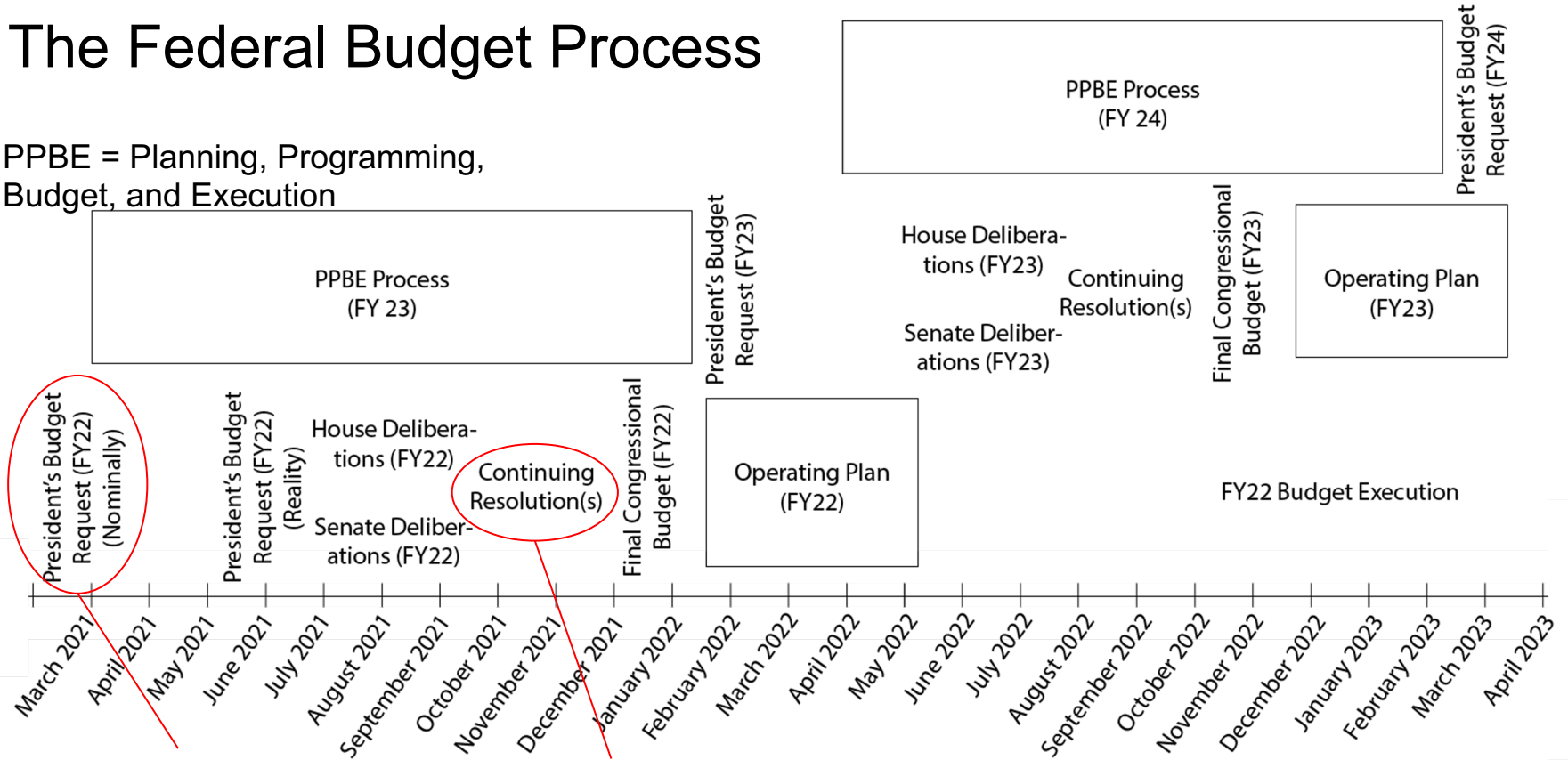
PAC members cannot provide advice on issues for which they have (or might be perceived as having) a conflict. Examples:

- PAC Member A is the PI for the Hypothetical Explorer (HEX) mission. A should recuse themselves from any specific discussion of issues surrounding HEX and should not contribute to any findings on it.
- R&A: The PAC starts talking about the funding balance between specific R&A programs. The Exec. Sec. puts an immediate stop to it because (nearly) all of the PAC members apply to one or more of those programs. As they are now effectively in a position to advocate for a source of funding for themselves, the PAC members need to recuse themselves.
- Summary: if **you** might benefit personally/professionally from a given topic, you should probably recuse yourself. If in doubt, ask the Exec. Sec.



# The Federal Budget Process

PPBE = Planning, Programming, Budget, and Execution

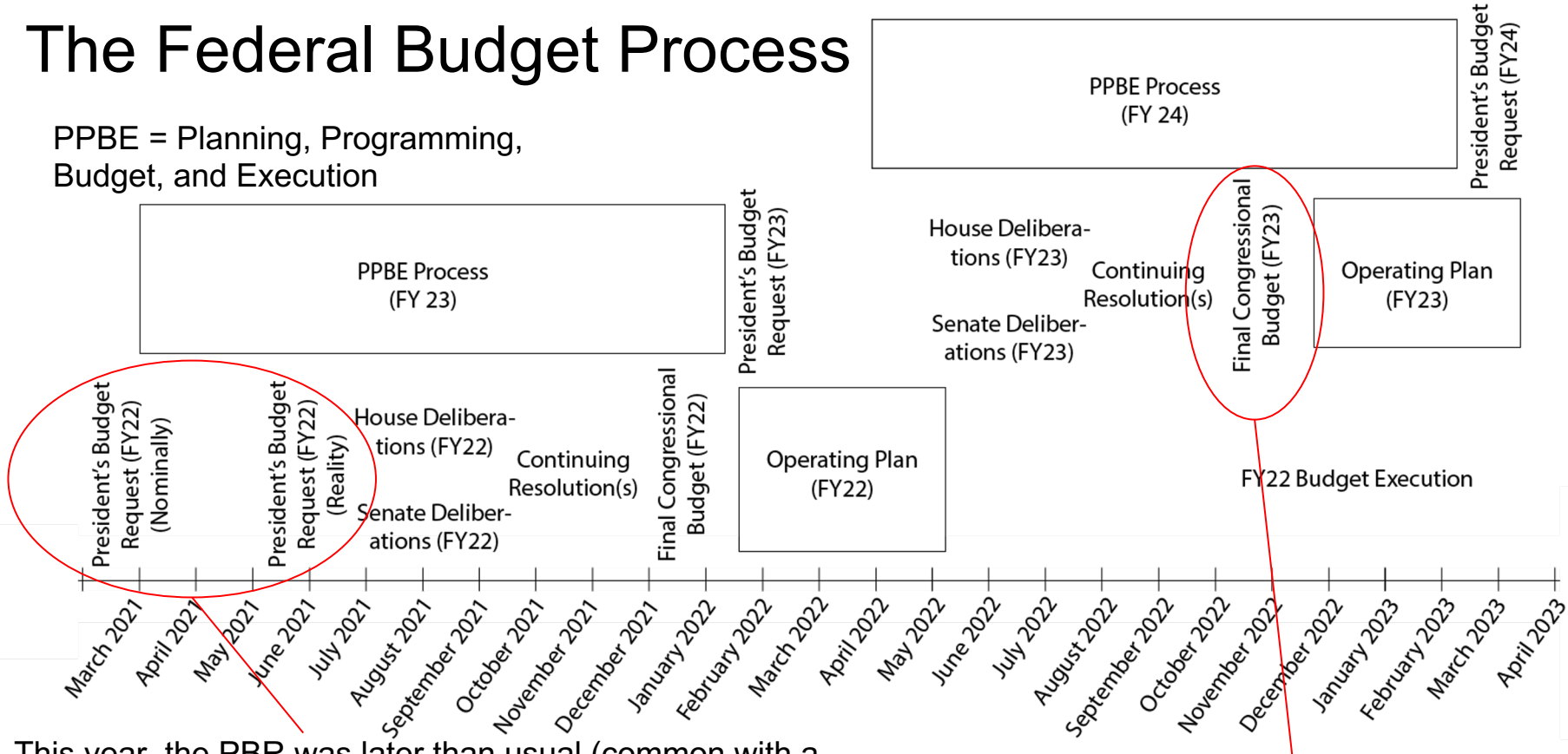


The President makes a budget request for the year; the Agency has to plan to that budget

If Congress does not pass a budget, we typically operate on a Continuing Resolution, following the previous year's appropriation. In the absence of a budget or a CR, the government shuts down.

# The Federal Budget Process

PPBE = Planning, Programming, Budget, and Execution

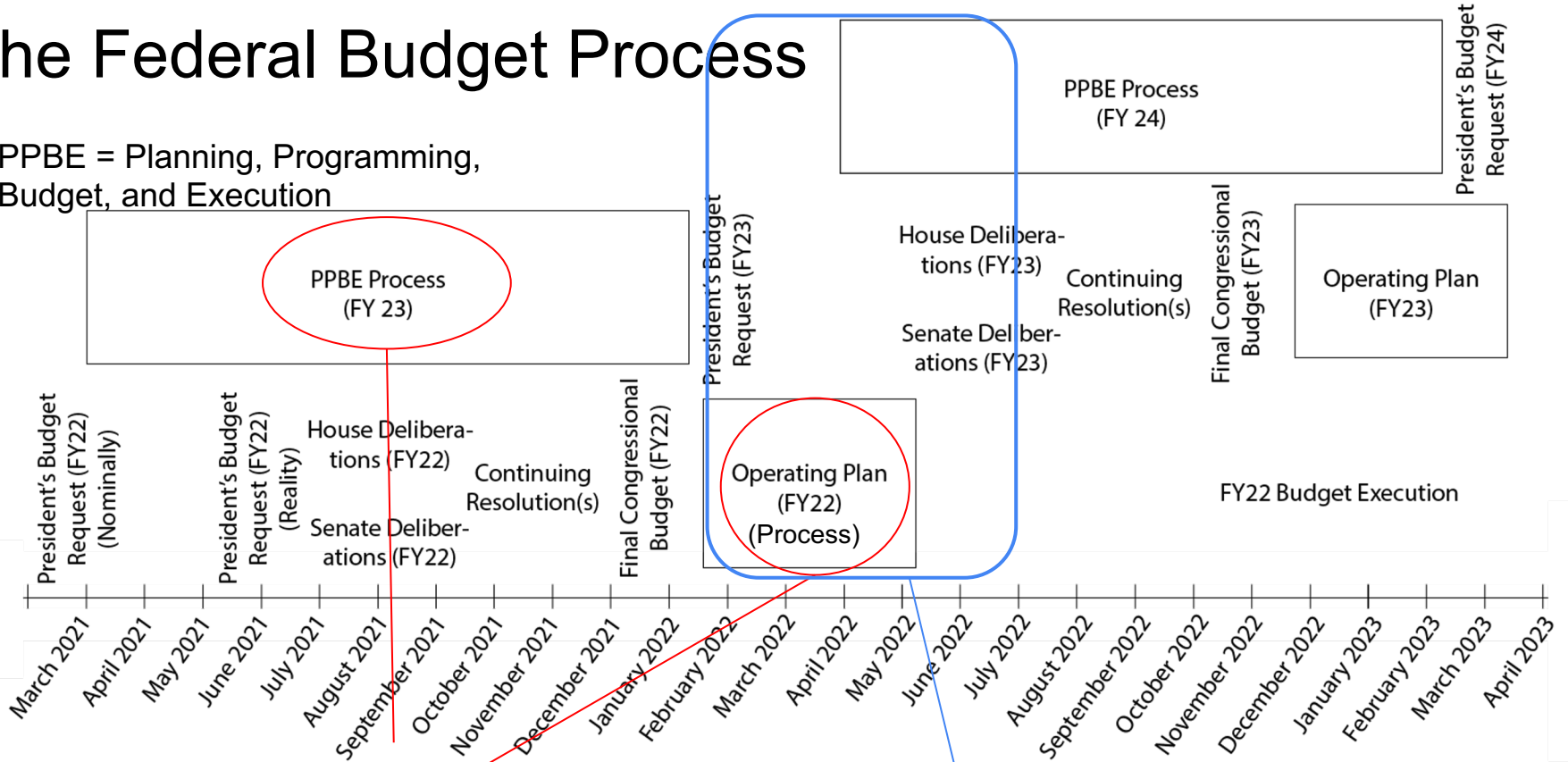


This year, the PBR was later than usual (common with a new administration). It highlights a key point – **the process is not always smooth and anomalies happen.**

Congress can pass a budget at any time in the year; when this will happen can be unpredictable

# The Federal Budget Process

PPBE = Planning, Programming, Budget, and Execution



These are the two parts of the process where NASA actually has work to do.

Observe that NASA can be actively working on three different year's budgets at the same time

# The PPBE Process

The Office of Management and Budget (OMB) sends budget guidelines for the next fiscal year (starting ~1.5 years later) to all Agencies/Departments

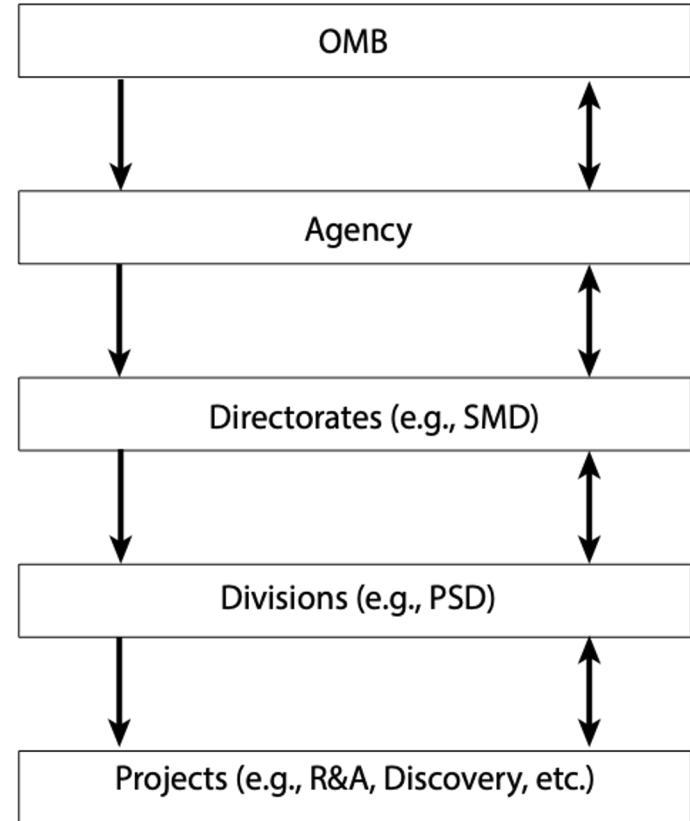
The Agencies (at all levels) prepare a budget request that is in-guide with the guidance.

They also prepare overguide requests -- requests for additional funds with an associated justification.

Overguide requests from projects have to be approved all the way up the chain.

PPBE Starts with OMB sending budget guidance to the Agency: This then flows down

Budget plans are made conforming to Guidance; over-guides requesting additional funds can also be made

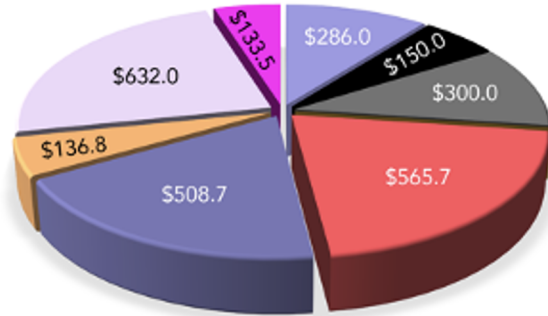


# Actual Budgets: Presidential Budget Request

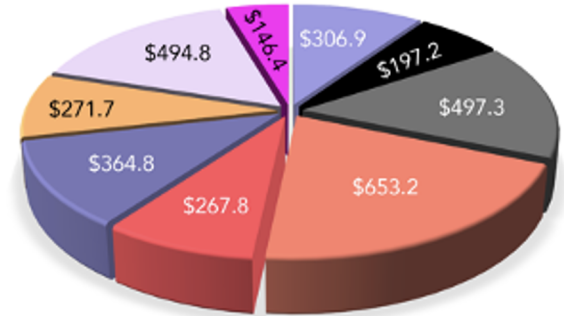
The President presents a budget request to Congress. Congress deliberates and passes new authorizations and appropriations.

In lieu of passing a budget, Congress can put the government on a Continuing Resolution (in absence of either a CR or a budget, the government shuts down).

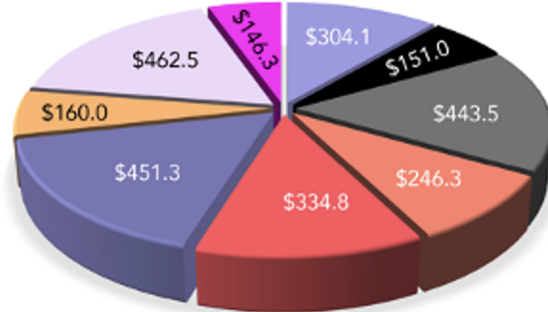
FY20 Actual (Total: \$2,712.6M)



FY22 Request (Total: \$3,200.0M)



FY21 Operating Plan (Total: \$2,699.8M)



- Planetary Science Research/Other
- Planetary Defense
- Lunar Discovery and Exploration
- Mars Sample Return
- Mars Exploration
- Discovery
- New Frontiers
- Outer Planets & Ocean Worlds
- Radioisotope Power

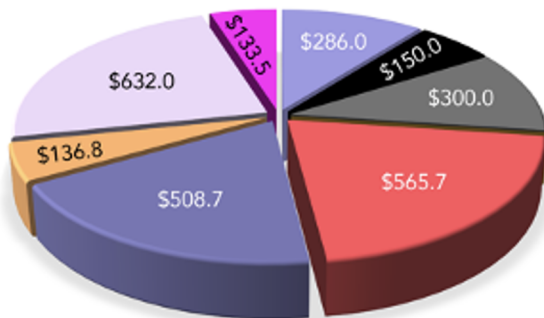


# Actual Budgets: The Budget

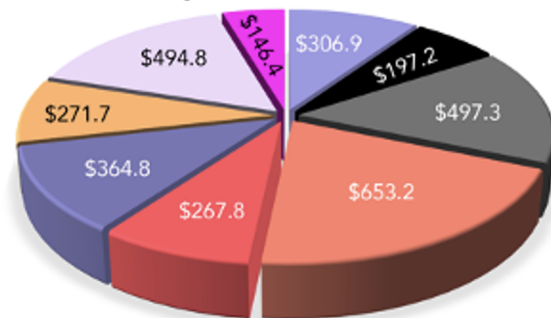
When Congress passes a budget bill and the President signs it, the Agency has a budget.

Note that the language in the bill matters. Usually, the bill will say things like “NASA shall spend no less than \$451.3M on Discovery”. That language precludes moving **any** money out of that wedge of the pie.

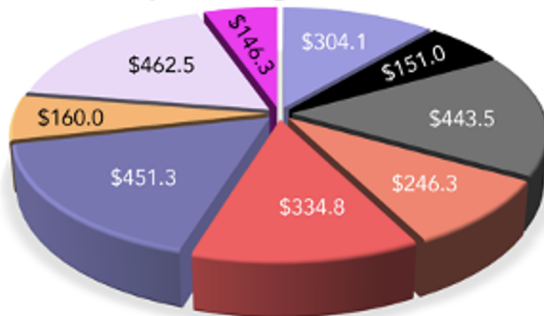
FY20 Actual (Total: \$2,712.6M)



FY22 Request (Total: \$3,200.0M)



FY21 Operating Plan (Total: \$2,699.8M)

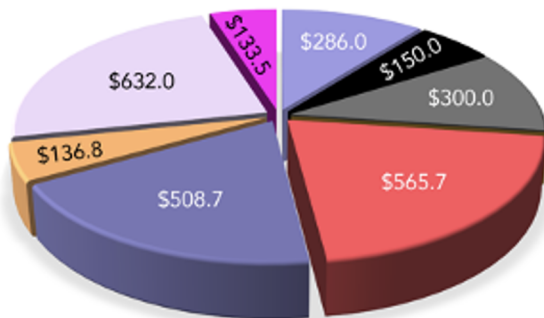


# Actual Budgets: Operating Plans

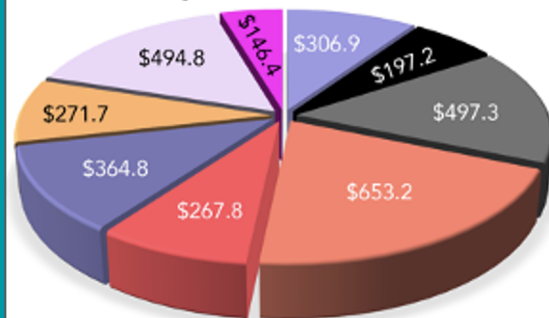
In recent years, nearly every “wedge” of the pie has been specified.

Much like the PPBE process, NASA now develops an operating plan, explaining how it will use the appropriated funds to meet congressional direction. A case may be made for moving funds from one wedge to another -- but to do so requires a **strong** justification.

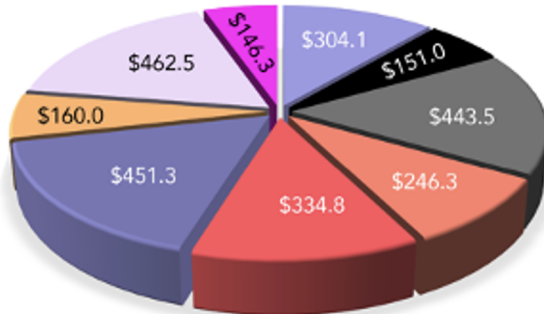
FY20 Actual (Total: \$2,712.6M)



FY22 Request (Total: \$3,200.0M)



FY21 Operating Plan (Total: \$2,699.8M)



Moving money between wedges is **very** difficult

# Continuing Resolutions

A Continuing Resolution basically says that the government should continue what it is currently doing. This means that:

- The appropriation is the same as was in the previous year's budget.
- No new programs<sup>1</sup> can start.
- No existing programs can stop (or spend more/less money)
- Anomalies can be addressed through an existing process

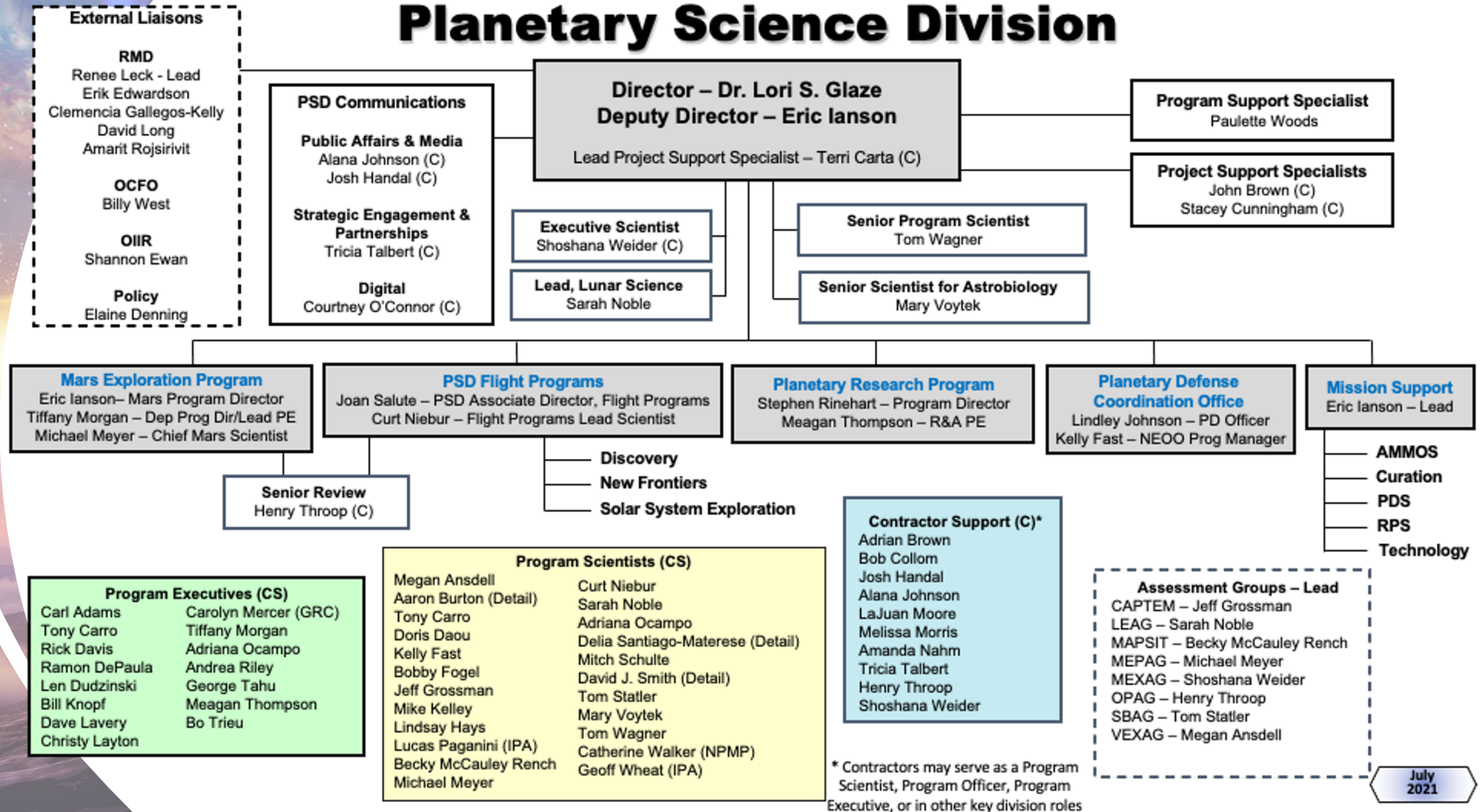
When a budget passes, it can be a bit of a shock, as the new budget may be significantly different from the previous year, but **the** government has been spending according to the previous budget. Example: the new budget says “NASA should stop running Program X”. But, under the CR, NASA has already spent funding on Program X, which cannot be unspent. This becomes a factor in developing an operating plan for the year.

1: “Programs” refers to things called out in the last budget, e.g., the Discovery Program.

Backup Slides

# PSD: Org. Chart and Personnel

## Planetary Science Division





# Abbreviations and Acronyms

AG	Analysis or Assessment Groups	NPM P	NASA Postdoctoral Management Program
CAPS	Committee on Astrobiology and Planetary Sciences	PAC	Planetary Science Advisory Committee
CR	Continuing Resolution	OMB	Office of Management and Budget
FACA	Federal Advisory Committee Act	PAC	Planetary Science Advisory Committee
FOIA	Freedom of Information Action	PBR	President's Budget Request
GSA	General Services Administration	PPBE	Planning, Programming, Budget, and Execution
IPA	Intergovernmental Personnel Act	SMD	Science Mission Directorate



# Useful Links

<https://science.nasa.gov/researchers/nac/science-advisory-committees/pac>

Reporting requirements are changing soon; details are still coming, but for context:

<https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf>