

# Decadal Survey Planning

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Complete presentation available at: [http://sites.nationalacademies.org/cs/groups/bpasite/documents/webpage/bpa\\_184274.pdf](http://sites.nationalacademies.org/cs/groups/bpasite/documents/webpage/bpa_184274.pdf)

# Current Timeline Overview

- 2018 January AAS Town Hall
- 2018 March Astro 2020 proposal submitted to Agencies
- Summer/Fall: Science White Paper call issued
- 2018 ≤December Chair selected
- 2019 January AAS Town Hall and other Community outreach activities

Time for complete Survey process through report release: 2 years

# Decadal Survey Preparatory Activities

- The CAA continues to explore which parts of the task could be done before the formal start of the survey in Dec 2018
  - Balance getting work done early versus constraining the Survey chair and process
- Activities underway:
  - Engagement with community via AAS Town Halls and other activities, including “Demystifying the Process” discussions.
  - Consultation Group
- Additional pre-survey activities:
  - Plan to issue a call for Science White Papers, timed so they will be available to the Survey Committee at the start of the process.
    - **DRAFT to be posted in April/May timeframe on the CAA website. Watch for announcements.**
  - Meeting of Experts on the Cost and Technical Evaluation (CATE) process, spring 2018, providing some specifics about CATE prior to the start of the Survey.
  - Early-career colleague engagement events and other outreach
- Connections between exoplanets and astrobiology will be scoped out by ongoing Academies studies
  - Exoplanet Science Strategy (Charbonneau and Gaudi Co-Chairs) now underway.  
[http://sites.nationalacademies.org/SSB/CurrentProjects/SSB\\_180659](http://sites.nationalacademies.org/SSB/CurrentProjects/SSB_180659)

# Some Ongoing Topics

- How to handle desire for State-of-the-Profession activities before and/or during the survey
  - Good discussion with AAS/AIP Demographics survey expert.
  - A CAA subcommittee is developing a plan.
- Scope of the survey
  - Ground-based GW astronomy: recent neutron star merger highlights that astronomers are deeply engaged with gravitational wave discoveries.
  - Scientific connections outside the formal scope of the Survey.
  - Continued/increasing importance of the international context.
- Engagement with non-federal organizations
- Survey structure and timing of the chair selection
- Engaging early-career colleagues, and other community organizations beyond American Astronomical Society (AAS), especially Divisions of the American Physical Society.

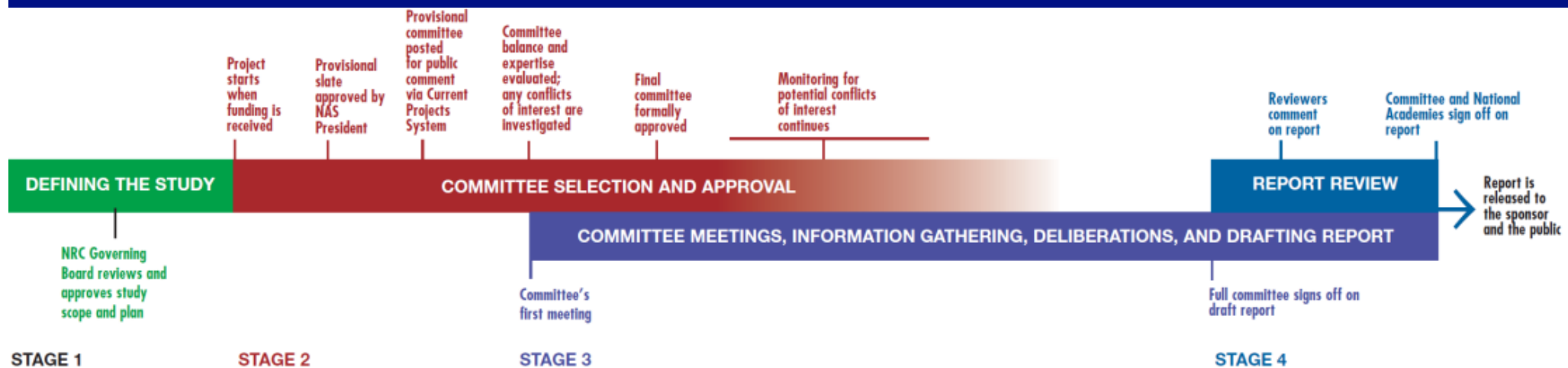
# Demystifying the Process

# Who Chartered and Uses the Survey?

- Congress and three federal agencies that fund astronomy (eg., NASA Astrophysics, NSF Division of Astronomical Sciences, DOE High Energy Physics) are the groups that rely on Decadal Surveys for science and activity guidance
- Congress can (and has) passed laws that define some Survey work such as the requirement for independent cost and technical evaluation
- The three agencies fund the Survey and negotiate the Statement of Task and report due date with the National Academies

# A Decadal Survey is a National Academies Report

A survey follows a process designed to ensure independence and objectivity. The review process checks that conclusions and recommendations are supported by the committee's information gathering and deliberations.



from <http://www.nationalacademies.org/studyprocess>

***Reports have been successful because astronomers have made choices and prioritized so federal agencies and Congress have clear guidance.***

The National Academies of

SCIENCES  
ENGINEERING  
MEDICINE

Decadal Survey Planning – January 2018

# Survey Committee Selection

- First step is selection of the chair who will work with the Academies staff to select an executive committee
- The chair and executive committee define the panel structure followed by selection of survey committee and panel members
- Follow academy procedures to reduce and balance biases
- Ensure the needed expertise across disciplines and diversity, including types and sizes of institutions, geographic distribution, gender, traditionally under-represented groups, career stage, funding sources,....
- Conflicts of interest (not in the financial sense which rarely affect astronomy decisions but in the “promoting a project” sense) considered very carefully



# Example from NWNH: Task and Charge

## Negotiated by NRC\* with Agencies

- The Committee on Astro2010 will survey the field of space- and ground-based astronomy and astrophysics, recommending priorities for the most important scientific and technical activities of the decade 2010-2020. The principal goals of the study will be to carry out an assessment of activities in astronomy and astrophysics, including both new and previously identified concepts, and to prepare a concise report that will be addressed to the agencies supporting the field, the Congressional committees with jurisdiction over those agencies, the scientific community, and the public.

## Scope

- NASA, NSF, DOE
- Remote observing of cosmos, theory, physics, computation and simulation, laboratory astrophysics, solar astronomy (excluding space missions), and technology development
- Activities and infrastructure (broadly defined)
- Balance
- Partnerships: international, private, state .....

\*Now called the National Academies

# NWNNH: Survey Overview

## Some features of Astro2010

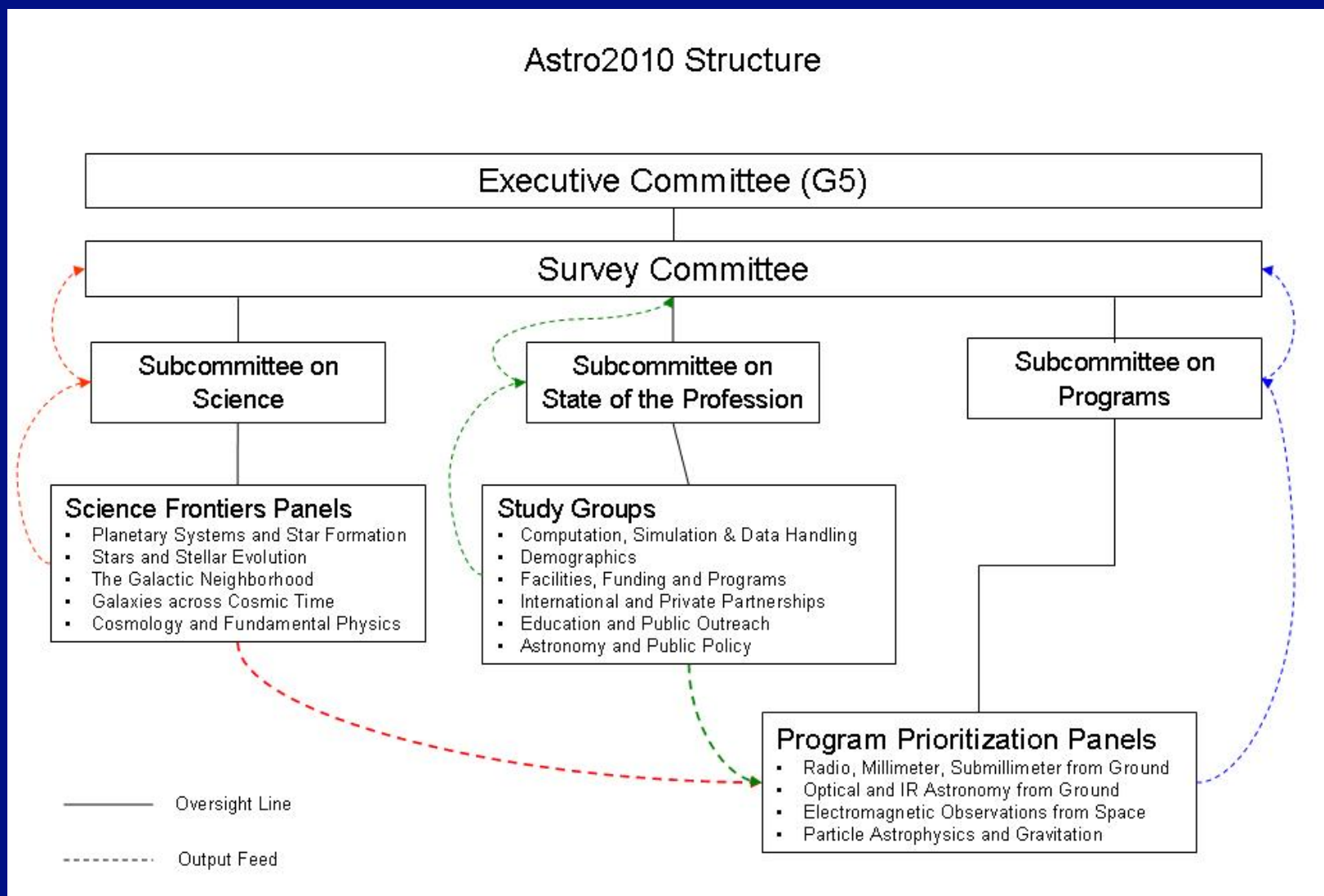
Significant community input to process via white papers and presentations to panels

Include unstarted projects from 2001's AANM

Improved assessment of technical readiness and risk, and cost drivers

Changing economic political background and increased international and private collaboration

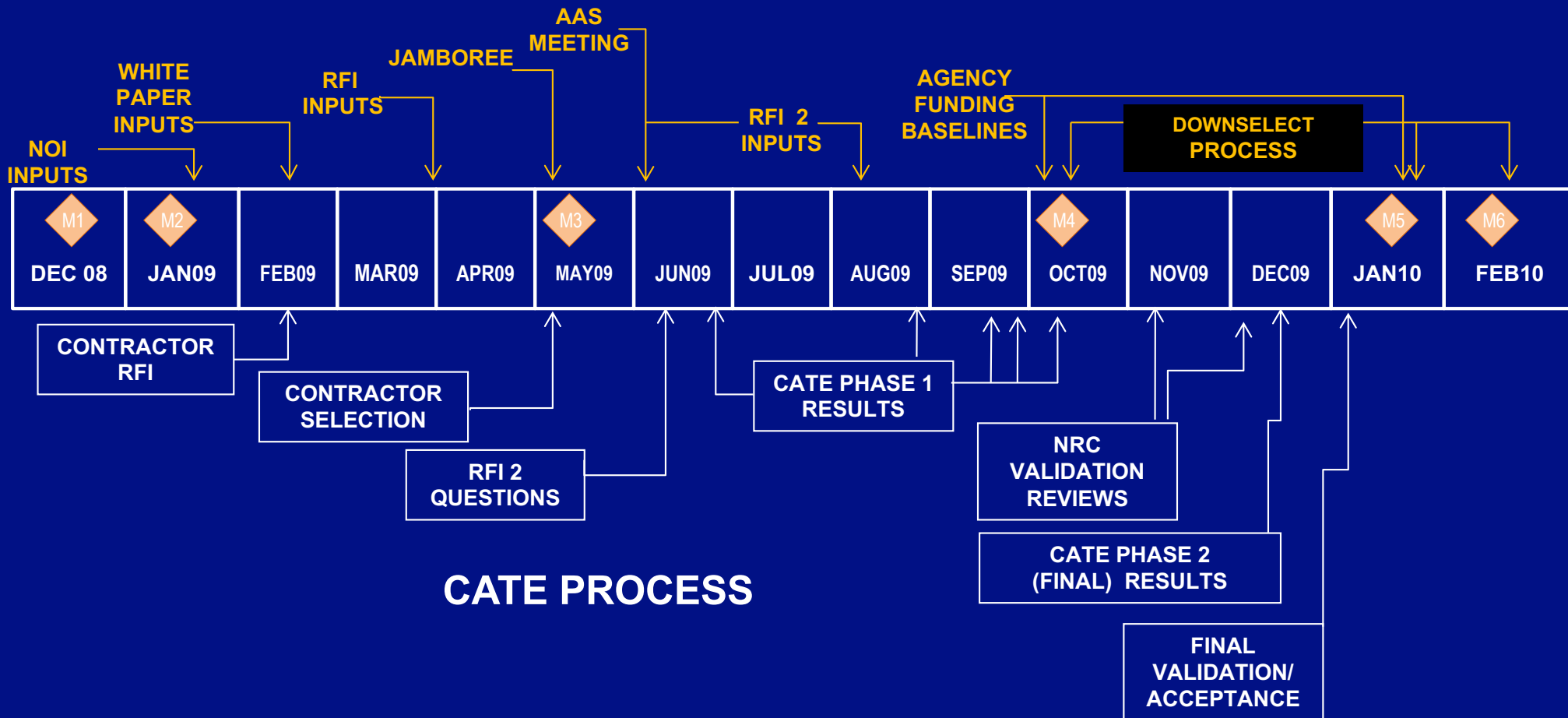
# Astro2010 Structure



Astro2020 structure TBD now.

# Astro 2010 Committee Process

Astro2020 process not yet defined.



*DATA GATHERING AND EVALUATION PROCESS FLOW*

# Astro2020 Givens

- Adhere to National Academies policies and procedures as well as the negotiated Statement of Task
- A science-driven process that defines priorities for federal funding of astronomy
- Independent, with minimization of biases
- Strive to be inclusive and involve as diverse a population of astronomers as possible consistent with the needs for scientific and technical expertise