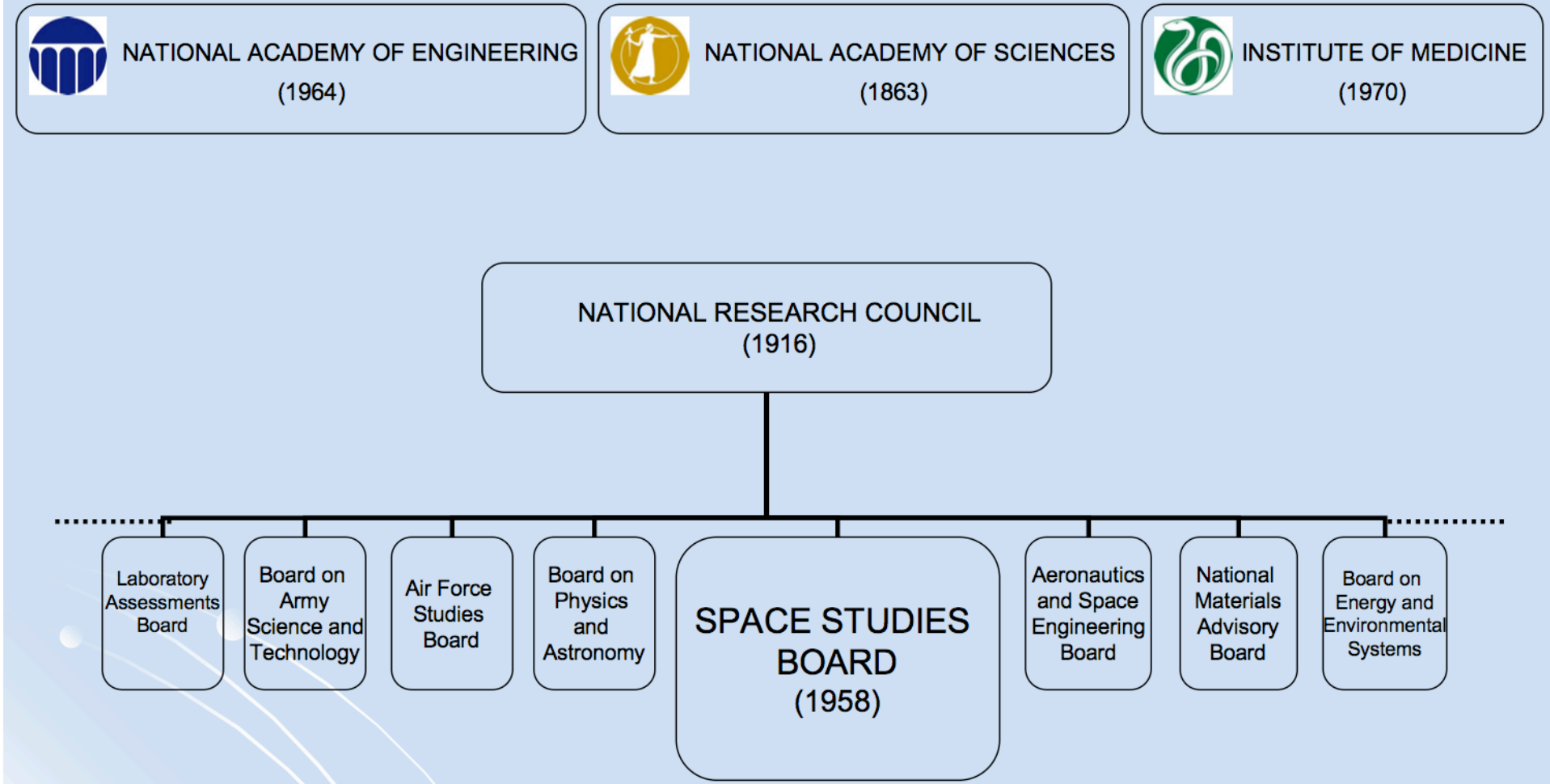

NATIONAL ACADEMY OF ENGINEERING
(1964)
NATIONAL ACADEMY OF SCIENCES
(1863)
INSTITUTE OF MEDICINE
(1970)
NATIONAL RESEARCH COUNCIL
(1916)
Laboratory Assessments Board
Board on Army Science and Technology
Air Force Studies Board
Board on Physics and Astronomy
SPACE STUDIES BOARD
(1958)
Aeronautics and Space Engineering Board
National Materials Advisory Board
Board on Energy and Environmental Systems

THE DECADAL SURVEYS

Microgravity
Life and
Physical
Sciences

(FORTHCOMING)

Key Features of a Decadal Survey

- Community-based priority setting exercises
- Done approximately once a decade looking forward to the next decade in a specific area such as solar system exploration
- Broad community involvement and consensus are keys to success

New Requirements

- Congress has directed (H.R. 6063) that future decadal surveys include --
  - Independent estimates of the life cycle costs and technical readiness of missions assessed in the survey
  - Identification of any conditions or events, such as significant cost growth or scientific or technological advances, that would warrant NASA asking for a reexamination of the priorities (“trip-wires”)

A New Astrophysics Decadal Survey is Just Beginning, and

It's Time for a New Solar System Decadal Survey, Too

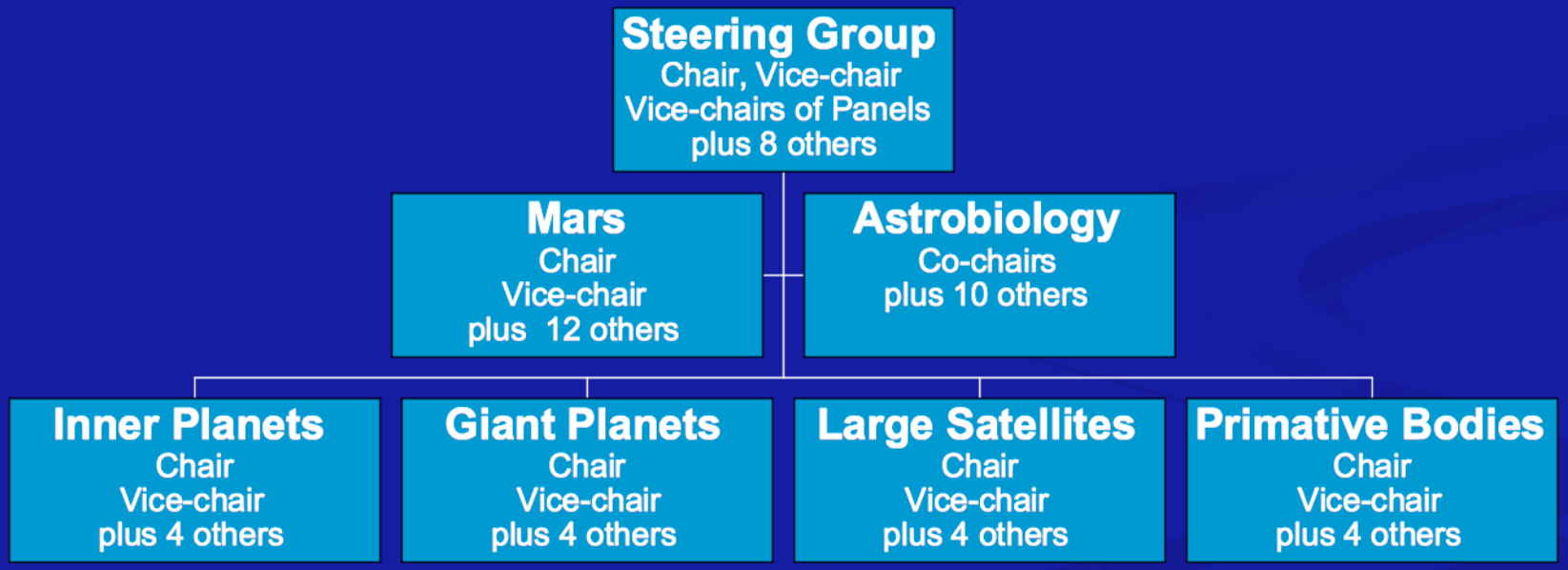
What will the Report Address?

The likely topics include the following:

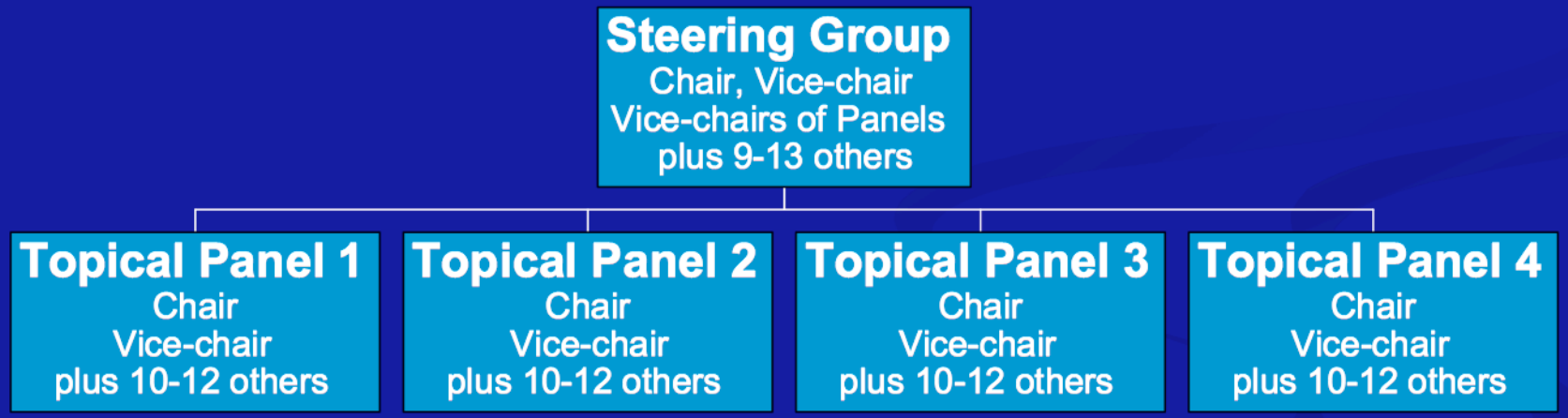
1. Overview of planetary science—what it is, its relationship to other scientific endeavors, and why it is a compelling undertaking;
2. Broad survey of the current state of knowledge of the solar system;
3. Inventory of the key scientific questions that should guide flight programs and supporting research programs;
4. Recommendations on the optimum balance among small, medium, and large missions and supporting activities;
5. Technology development needs and opportunities;
6. Prioritized recommendations for major flight investigations in the New Frontiers, and flagship classes for initiation in the period 2011-2020; and
7. Recommendations for supporting research required to maximize the science return from the flight investigations.

Other major topics?

Organization
Decadal Survey Committee
2001-2003



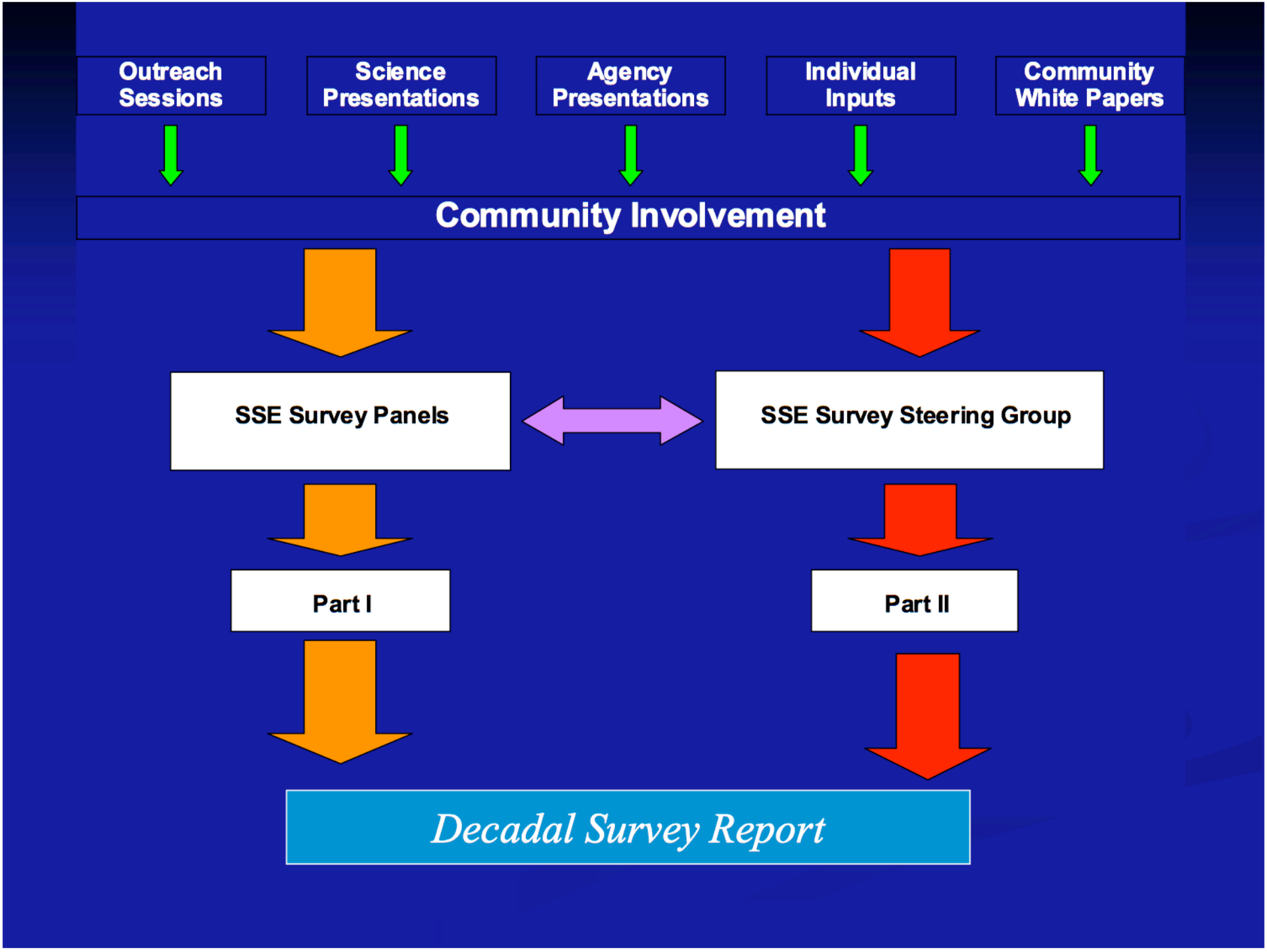
Notional Organization
Decadal Survey Committee
2009-2011



How should the topical panels be organized?

Optimum Schedule 2008-2011?

2008		
	4th Quarter	Informal request received, NRC approves initiation, Proposal to NASA (and others?)
2009		
	1st Quarter	Funding received, Membership appointed
	2nd Quarter	Steering group and panel meetings begin
	3-4th Quarter	Panels' period of peak active
2010		
	1st Quarter	Panel reports finalized
	2-3rd Quarter	Prioritization and drafting of survey report
	4th Quarter	Draft survey report to reviewers, Report revised
2011		
	1st Quarter	Report approved, NASA briefed and prepub. released
	3rd Quarter	Printed report released


Outreach Sessions
Science Presentations
Agency Presentations
Individual Inputs
Community White Papers
Community Involvement
SSE Survey Panels
SSE Survey Steering Group
Part I
Part II
Decadal Survey Report

Community Interactions 2000-2003

- **Through town hall meetings at multiple venues:** such as scientific conferences, specially arranged meetings, in conjunction with panel and steering-group meetings, and professional meetings.

- **Stimulation of written input from ad hoc community panels**
  - Web page sponsored by the DPS/AAS in conjunction with PGD/GSA, PSS/AGU and Meteoritical Soc.
  - 24 panels formed (3 to 61 members each) involving >308 individuals
  - 23 finished reports published **as *The Future of Solar System Exploration, 2003-2013: Community Contributions to the NRC Solar System Exploration Decadal Survey* (Marc V. Sykes, Ed., Astronomical Society of the Pacific Conf. Series, Volume 272).**
  - Community ad hoc reports used by panels and steering group

- **Independent DPS and Planetary Society polls** on some key issues

- **NRC Report review process** solicited comments from 13 reviewers who supplied more that 450 specific comments, response to which immeasurably improved the quality of the report.

Topics of Community Panels

Mercury
Venus
Mars
Asteroids
Io
Europa
Titan
Neptune System
Kuiper Belt Objects
NEOs: Sample Return
NEOs: Human Exploration and Utilization
NEOs: Discovery, Tracking and Characterization
Lunar Exploration: Robotic and Human
Interplanetary Dust
Planetary Rings
Sub-orbital Program
Education and Outreach
Terrestrial Analogs to Mars
Radio Science and the DSN
Extraterrestrial Mineralogy
Instrument Technology
Solar System Astrometry

But, what about the Big Picture! Was nobody other than the decadal survey committee interested in an integrated strategy for solar system exploration?

Optimizing Community Interactions

How to stimulate broad community input?

- Town hall and open meetings as early as possible (e.g., DPS, AGU and LPSC). The schedule last time was suboptimal for engaging in outreach at major community meetings.
- Coordinate with other groups that have overlapping interests.
- Early stimulation of ad hoc community reports. (The DPS committee was very proactive and successful in generating inputs to the 2000-2003 decadal survey). Last time, the community reports could have had a greater impact on the formulation of panel positions if they had arrived earlier.

Other actions?

Summary

Issues to consider:

1. What specific major topics should the decadal survey address?

2. How should the decadal survey's topical panels be organized?
   Who should chair the survey?
   Who should chair the panels?
   Who should serve on the steering group and panels?

3. How can community interactions and input be optimized given the decadal survey's likely schedule.

4. What can the survey committee do to facilitate input from the community and vice versa?

Written input is encouraged and preferred. A decadal survey website will go on-line soon. Watch out at www.nas.edu/ssb .