

AURA Steering Committee for The 2010 Decadal Survey

Background

For each past Decadal Survey, AURA has conducted preliminary, community based activities intended to (1) provide a view of the future landscape for astronomy and emerging scientific trends, (2) identify specific initiatives that might emerge as priority investments, and (3) define the role of the national observatories and public astronomy in general.

Increasingly, major projects in astronomy in space or on the ground require long lead times and a strong and enduring community consensus. Leading up to the last Decadal Survey, AURA conducted major community based workshops on the “MAXAT” concept that eventually led to the Giant Segmented Mirror Telescope. AURA also provided major recommendations for a Large Survey Telescope and a large aperture solar telescope. All of these materialized as high priorities.

For prior decadal surveys, AURA conducted major workshops that led to the present James Webb Space Telescope and before that the Gemini Observatory. AURA’s pre-survey activities have been a key organizing element for the community that has substantially enhanced the value of decadal surveys. Leading up to the next Decadal Survey, AURA intends to play a similarly active role.

AURA has conducted round table discussions with Member Representatives. In its 2006 Annual Meeting major structural features were discussed, such as the need to include a broader range of expertise, mixing science drivers and mission/wavelength themes, and producing a more unified prioritization of initiatives.

As a result of the 2007 Annual Meeting round table, the following discussion points emerged:

- The next survey needs a better means of mission/project cost assessment, including risk, technology readiness. Although our expertise and contributions are primarily in science evaluation, AURA institutions and centers may be able to help in some cost assessment.
- AURA members support broader community involvement in the next survey, as was done during the 1990 (Bahcall Committee) review. AURA can help by sponsoring workshops on future UVOIR projects.
- Re-prioritization of uncompleted missions/projects is probably inevitable. However, AURA will push to have ATST considered outside this process, as it is already under consideration in the MREFC queue.
- The Decadal Process needs to find a way to make the public-private partnerships work, especially for major capital funding but also for operations support.

In addition, there was substantial recognition that AURA should conduct further community based activities to define scientific aspects of the President's Vision for Space Exploration. Specifically, possible astronomical uses of the Ares launch vehicle are seen as a potentially enabling capability.

Role of the AURA Steering Committee

Our intent is to establish, first, a Steering Committee possessing a suitable cross-section of expertise that can identify community needs, demographic and structural changes, scientific trends, a balance of possible investments that include major and moderate initiatives and infrastructure improvements, and roles that AURA might play. The intent is to define a science based approach towards the next decadal survey.

Specific activities of the Committee include the following:

- The Committee should meet at least once in between AURA Board meetings and provide a verbal or written report at each Board meeting between now and the initiation of Decadal Survey activities.
- The AURA Board may request additional, specific activities during the course of the Survey.
- In addition to direct advice to the Board, the Steering Committee will be encouraged to recommend additional community based activities such as dedicated workshops in aspects of UV/OIR astronomy.
- The Committee will be encouraged to seek input from other segments of the community, including AURA member institutions and AURA managed observatories, and the general community through open Town Hall type meetings, web sites, community surveys, etc.
- AURA envisions submitting relevant white papers to the next decadal survey. These will be developed, or based upon, the work of the Steering Committee.

It is envisioned that the Committee will focus primarily on the most uncertain and complex areas in UV/OIR astronomy, both ground and space. Solar astronomy has, at this time, a more predictable landscape which matches closely the NSO Strategic Plan. The combination of the AURA Board, the Solar Observatory Council and NSO itself will represent a major input to the Decadal Survey. Other areas of astronomy such as radio and microwave are being addressed by other organizations.

Straw Man Schedule

(To be determined by the Committee)

Meeting	Time frame	Activity
1 (possibly preceded by an initial telecon)	Prior to Oct 07 AURA Board Meeting	Committee (plus special invitees if needed) develops plan, identifies issues.
2	Prior to February 08 AURA Board Meeting, probably in association with January AAS meeting in Austin	Town Hall type meeting to solicit wider community input on science themes, future science trends
3, 4	Prior to April 08 AURA Annual Meeting, and possibly around the time of the summer AAS meeting	Additional Town Hall type meeting (s). Focus on science and possible facilities
5	Early 09, possibly in association with winter AAS meeting	Community workshop for UV/OIR to provide more extensive input on science and facilities
6	Prior to spring 09 AURA annual meeting	Committee meets to write report plus associated white papers
7	Late 09 or early 10	Presentation to Decadal Survey panel (s)