TMT
Presentation for Chicago GSMT Meeting
16 June 2008
TMT: Public Participation

- TMT genesis was response to 2000 Decadal Survey call for *private-public partnership* to build a GSMT
- Merging of 3 projects: CELT (UC/Caltech), VLOT (ACURA), GSMT (AURA). From the very beginning, the US astronomical community was a partner in TMT via AURA
- AURA withdrew at the end of 2006 after three productive years to take on the role of managing the overall GSMT effort
- US community through AURA played an important role in defining the TMT Observatory during the critical phase when the Science-driven Requirements Document (SRD) was drafted
- SRD: 18-month effort of the TMT Science Advisory Committee with equal membership from UC, CIT, ACURA and US community via AURA
TMT Status

- Although AURA withdrew, TMT has continued to make excellent progress in the Design Development Phase (DDP). Received additional $15M from the Moore Foundation in Sept 2007, bringing the total funding for DDP activities to $80M
  - Design and costs vigorously pursued and reviewed
  - Industrial partnerships established
  - Very capable team established
  - Completed extensive site survey, selected Armazones and Mauna Kea for further consideration
  - $300M in pledges from the Moore Foundation, Caltech and UC
  - NAOJ interest in TMT led to participation as observers on Board and SSC
  - Cooperation agreement with ESO on development of common technologies
Current TMT Effort

- Pasadena Project Office – 33 FTE
- AURA/ACURA/HIA/JPL/Caltech/UC ~100 FTE
- Individual technical consultants – 26
- Significant industry or laboratory contracts – 29
The Way Forward

- Complete the Design Development Phase (Mar 2009)
- Initiate early construction phase (Apr 2010)
- Establish the final partnership capable of realizing the capital and operating funds, building on $300M from Moore Foundation, UC, and CIT
- Integrate new partners into construction and operations
- Secure outstanding site
- Complete Construction (2009 - 2018)
We welcome NSF involvement and a renewal of our partnership with AURA.

TMT planned as public/private partnership from beginning. Have ~33% role for NSF (capital+ops over 20 years) in current business plan.

A high ranking for a GSMT in the next Decadal Survey is a critical step toward realizing this opportunity for US astronomy and maintaining future health of the overall US astronomy program.

Observatory design already reflects US community input:
- Early partnership with AURA
- Continued community membership on SAC
TMT Foundation Documents

www.tmt.org/foundation-docs/index.html

- Detailed Science Case 2007
- Observatory Requirements Document
- Observatory Architecture Document
- Operations Concept Document
- TMT Construction Proposal
  - Currently in use for funding proposals