TSIP – Is It Time to Evolve?

• Successes
  ▪ Provided new funds for needed instruments on 6.5+m telescopes
  ▪ Efficient process, fast turnaround from proposal to award

• Future Considerations
  ▪ Is more competition needed (7 proposals in 3 yrs)?
  ▪ Should System reinvest in existing suite of 3-5m telescopes?
  ▪ Overly focused on a few capabilities? Coordination needed to avoid duplication and to encourage diverse capabilities.
  ▪ How many instruments does an 8-10m need? Should TSIP fund an instrument used only 10% of the time?
  ▪ Should more TSIP funds directly purchase time for community (e.g., on Keck, Magellan, LBT)? At what rate?
  ▪ Should System coordinate and broker time trades across system?

• Do we need a coordinating body for all federally-funded programs (e.g., NSF: ATI, MRI, TSIP, AODP)?
A Proposal for CCD Detectors

• Issues
  - Optical and IR detectors are difficult (or expensive) to obtain
  - Many instruments rely on legacy detectors (e.g., SITe 2Kx4K)
  - Few groups can design and develop their CCD of choice

• Univ of Arizona (ITL) & UC Berkeley (LBNL) offer unique CCD capabilities (i.e., not commercially available)

• Proposed process by ITL and LBNL
  - Poll community for popular formats (jacyjob@wiyn.org)
  - Submit joint proposal to NSF to build and verify CCDs
  - Publish characteristics of working devices
  - Solicit requests from community for tested CCDs
  - Independent broker (NSF panel?) reviews proposals for CCDs
LBNL Offerings
(Steve Holland, Richard Stover)

- Thick, high resistivity (very red sensitive)
- Tested (rows x columns)
  - 800x1100 (15µ)
  - 800x1980 (15µ)
  - 2048x2048 (15µ)
  - 4096x2048 (15µ)
  - 1636x1560 (9µ)
  - 690x400 (24µ) (for use as a guider)
- In progress, mostly for SNAP
  - 2520x2520 (12µ)
  - 2880x2880 (10.5µ)
  - 3512x3512 (10.5µ)
  - 1200x600 (15µ) (high speed readout)
ITL Offerings
(Mike Lesser)

• Thinned, low-medium resistivity (blue/pan sensitive)
• Tested (rows x columns)
  ▪ 1024x512
  ▪ 1200x800
  ▪ 2560x512
  ▪ 2048x1024
  ▪ 4096x4096 (15µ)
• Common Requests
  ▪ 8192x4096 (9-15µ)
  ▪ Low readnoise (<2 e-)
  ▪ Fast readout (1-3 Mpix/s/amp)