

### TSIP - Is It Time to Evolve?

#### Successes

- Provided <u>new</u> funds for <u>needed</u> 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 (jacoby@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-)</li>
  - Fast readout (1-3 Mpix/s/amp)