

Table 1. FY14 Expenditures by Project

Project name	PI or manager	Related telescope	FY14 total cost	FY14 external funds	Net cost to UCO	Cumulative		External fund source	Comments
						net cost to UCO	net cost to UCO		
Planned projects at UCSC:									
TMT MOBIE	Bernstein	TMT	\$ 499,584	\$ 368,529	\$ 131,055	\$ 131,055	TMT project	Revenue-neutral	
TMT motor-control software	Deich	TMT	\$ 170,002	\$ -	\$ 170,002	\$ 301,057	TMT project	Partial cost recovery sought	
Advanced coatings research	Bolte, Phillips	TMT, Keck	\$ 414,259	\$ -	\$ 414,259	\$ 715,317	Moore	Contract sought from Advanced Solar Telescope	
Shane AO	Gavel, Max	Keck, TMT	\$ 1,035,594	\$ 129,760	\$ 905,834	\$ 1,621,150	Foundation	AO optics, laser, IRCAL camera, wind-predictive AO	
Next-Generation AO proposal	Max, Gavel	Keck	\$ 132,980	\$ -	\$ 132,980	\$ 1,754,130		For NSF Mid-scale program	
KCWI spectrograph	Martin (Caltech)	Keck	\$ 358,883	\$ 158,321	\$ 200,562	\$ 1,954,692	KCWI project	Camera, detector software; revenue-neutral	
Keck support projects	Rockosi	Keck	\$ 93,507	\$ -	\$ 93,507	\$ 2,048,199	Keck	Azimuth encoder, laser launch telescope; contracts sought	
Remote observing support	Deich	Keck, Lick	\$ 63,418	\$ -	\$ 63,418	\$ 2,111,617	Observatory		
Gemini Planet Imager	Macintosh (LLNL)	Gemini-South	\$ 29,252	\$ 16,500	\$ 12,752	\$ 2,124,369	GPI project	Revenue-neutral	
Automated Planet-Finder telescope	Vogt (UCSC), Marcy (UCB)	APF	\$ 90,545	\$ 52,503	\$ 38,042	\$ 2,162,411	Pls Vogt and Marcy		
Shane KAST upgrade			\$ 56,967	\$ 35,713	\$ 21,254	\$ 2,183,665	Private donor	Revenue-neutral	
New proposal development, contingency, unallocated effort			\$ 819,197	\$ 15,046	\$ 804,151	\$ 2,987,816	Small software contract		
Planned project totals			\$ 3,764,188	\$ 776,372	\$ 2,987,816				External funds may increase if new contracts come through
Fixed expenses:									
UCSC faculty			\$ 2,006,569	\$ -	\$ 2,006,569	\$ 4,994,385			
Faculty stipends			\$ 20,000	\$ -	\$ 20,000	\$ 5,014,385			
Director's office administration			\$ 411,217	\$ -	\$ 411,217	\$ 5,425,602			
FY14 salary & benefits increases			\$ 147,000	\$ -	\$ 147,000	\$ 5,572,602			For faculty and staff
UCLA operations			\$ 340,000	\$ -	\$ 340,000	\$ 5,912,602			TMT IRIS is the major funded UCO project at UCLA
Lick Observatory operations	Shane		\$ 1,312,083	\$ -	\$ 1,312,083	\$ 7,224,685			Spartan model
Grand totals, planned budget			\$ 8,001,057	\$ 776,372	\$ 7,224,685				

Uncommitted funds: \$7.548 M - \$7.225 M	\$ 323,315	Assumes that FY14 budget is \$7.548 M, same as FY13
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Candidate additional projects, currently unfunded:			Cost		
Keck I tertiary mirror	Prochaska (UCSC)	Keck	\$ 195,202	NSF	Likely will be rejected
Keck OSIRIS IR detector upgrade	Larkin (UCLA)	Keck	\$ 187,000	NSF	Likely will be rejected
Keck NIRSPEC detector upgrade	McClean (UCLA)	Keck	\$ 281,000	NASA	Rejected
TMT system engineers	Larkin (UCLA), Bernstein (UCSC)	TMT	\$ 240,000		Systems engineers for MOBIE and IRIS
KCWI spectrograph	Martin (Caltech)	Keck	TBD		Additional UCO-supported work of an as-yet-unspecified nature

Other budget needs for FY14 and beyond:				
	Permanent augmentation	One-time funds		
Service buyouts for systemwide astronomy faculty	\$ 126,000	\$ -		Three full-effort UCO faculty @ \$42 k per faculty; will increase in FY15 and future years
Project mgt/cost-accounting software at UCSC	\$ -	\$ 250,000		For MOBIE and to streamline UCO business office
Managing director	\$ 160,000	\$ -		Hire spring 2014; \$40 k needed in FY14
Director salary and startup	\$ 300,000	\$ 300,000		Needed in FY15
Capital improvements fund	\$ 300,000	\$ -		Replace aging equipment
Total other budget needs	\$ 886,000	\$ 550,000		

Notes:

- 1) Administrative costs are divided into three pieces, the director's office administration, technical administration, and Lick Observatory. The director's administration is a separate line item, the Lick administration is included in the Lick costs, and technical administration is pro-rated across the technical projects.
- 2) Project costs include technical staff, research scientists, and pro-rated technical administration; purchases not included.
- 3) "Revenue-neutral" means external funds cover technical salaries but not pro-rated technical administrative costs. This is why the net cost to UCO is always positive.
- 4) External funds are still being sought for some projects. See comments.