

**Table 17.26-- ASTRONOMY AND RELATED FACILITIES AT  
THE SUMMITS OF MAUNA KEA AND HALEAKALA: 2009**

Facility (mirror diameter in meters)	Capital cost 1/ (\$ mil)	Annual operating cost (\$ mil)	County based staff	Opera- tional
Mauna Kea observatories:				
Total	611	72.4	527	
UH 2.2-m (Optical/Infrared)	5	1.2	7	1970
Canada-France-Hawaii 3.6-m (Optical/Infrared)	30	7.5	49	1979
NASA IRTF 3.0-m (Infrared)	10	4.0	16	1979
United Kingdom 3.8-m (Infrared)	5	3.3	27	1979
James Clerk Maxwell 15-m Submillimeter	32	3.8	27	1986
Caltech 10.4-m Submillimeter	10	2.6	11	1986
VLBA Antenna 25-m (Radio)	7	0.3	2	1992
W.M. Keck Observatory (Keck I & II) 10-m x 2 (Optical/Infrared)	170	13.0	130	1992/1996
Subaru (Japan National Large Telescope) 8-m (Optical/Infrared)	170	18.4	96	1999
Fredrick C. Gillett Gemini 8m (Optical/Infrared)	92	13.3	105	1999
Submillimeter Array 8x6-m	80	5.0	27	2003
Mauna Kea Observatories Support Services	(X)	2/ 3.9	30	1980
Haleakala observatories:				
Total	261.1	35.70	208	
Mees Solar Observatory	0.5	0.10	2	1968
Haleakala Observatories Projects	(NA)	0.42	5	1979
Maui Space Surveillance Site (MSSS) 3/ Advanced Electro-Optical System	200.0	16.00	120	1979
3.7-m Telescope (AEOS)	50.0	15.00	55	1997
Faulkes 2-m Telescope	5.0	0.40	2	2003
Transportable Laser Ranging System (TLRS4)	0.6	0.40	4	2005
Panoramic Survey Telescope And Rapid Response System (Pan-STARRS) PS1 @ LURE Observatory	15.0	3.00	9	2009
Haleakala Support Facilities	(NA)	0.38	9	(NA)

NA Not available.

X Not applicable.

1/ Historical cost, not adjusted for inflation, and not including subsequent capital improvements for Mauna Kea Observation.

2/ Not included in the total since derived from facility operating costs.

3/ Formerly Air Force Maui Optical Station (AMOS).

Source: University of Hawaii at Manoa, Institute for Astronomy, records.