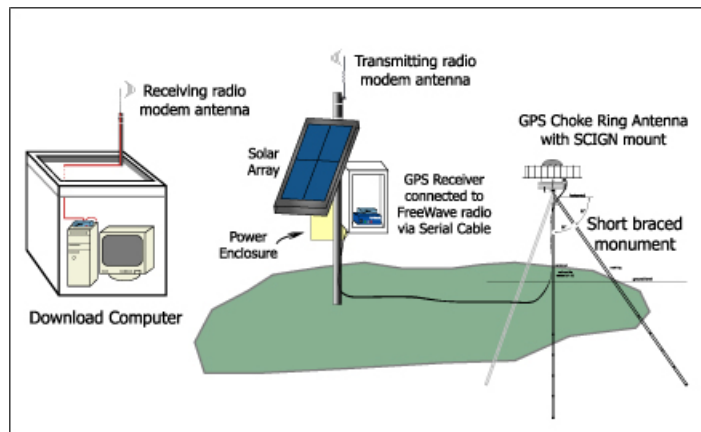


Permanent GNSS/GPS Stations - Budgets

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Please note that this is an example of various costs related to a general NSF project. Note that the funding of the sections listed here are typically split between science programs at NSF, and the instruments and facilities. Please [Request Support](#) for a more detailed budget analysis, or for any questions you might have.



You can download the excel version of the [Sample Budget \(.xls\)](#).

Sample Project Budget - Standard GPS Station with Dial-Up Relay and Radio Telemetry			
Statement of Work: This budget includes the estimated costs associated with the installation of a standard DC-powered GPS station installed in the western United States. The assumed data telemetry consists of both phone and radio modems.			
	Unit Cost	Number of Units	Total Cost
GPS Receiver with Choke Ring Antenna			
GPS Receiver System	10,000 - 15,000	1	10,000 - 15,000
GPS Receiver			
Choke Ring Antenna			
30m Antenna Cable			
Download/Power Cable			
North American AC Power Cord			
Power Supply			
Manual/CD/Release Notes			
128 Mb Flash memory for GPS receiver (if needed)	325.00	1	325.00
Huber-Shuner Lightning Protection	150.00	1	150.00
Pig tail (N-type to RSMA) or (N-type to N-type)	20.00	1	250.00
Total Receiver and Antenna			10,475.00
Radio and Ancillary Hardware			

900 MHz Spread Spectrum Transceiver (Slave)	1,200.00	1	1,200.00
30 meter radio antenna cable (low loss)	200.00	1	200.00
Yagi Antenna	125.00	1	125.00
Mast, Antenna Mounting Hardware	200.00	1	200.00
Huber-Shuner Lightning Protection	150.00	1	150.00
Pigtail (N-type to RSMA) or (N-type to N-type)	20.00	1	250.00
Total Radio			1,875.00
Monumentation- Drilled Braced Monument			
10 ft stainless steel legs	100.00	4	400.00
2 inch threaded adapter	25.00	1	25.00
Hilti epoxy	20.00	25	500.00
SCIGN Mount	550.00	1	550.00
SCIGN Dome	125.00	1	125.00
Miscellaneous	150.00	1	150.00
Total Monumentation			1,750.00
Relay Hardware			
Small Enclosure	300.00	1	300.00
900 MHz Spread Spectrum Transceiver (Master)	1,200.00	1	1,200.00
30 meter radio antenna cable (low loss)	200.00	1	200.00
Huber-Shuner Lightning Protection	150.00	1	150.00
Tripplite Surge/Line Protector	100.00	1	100.00
RS-232 Cable with null adapter	25.00	1	25.00
USRobotics V.Everything Modem	250.00	1	250.00
Pigtail (N-type to RSMA) or (N-type to N-type)	20.00	1	250.00
Miscellaneous (connectors, wiring, conduit, tools, etc)	100.00	1	100.00
Total Relay Hardware			2,225.00
Solar Systems / Enclosures			
MAPPS power system - 12 v, 4 batteries, 3 75-W panels, char	3,500.00	1	3,500.00
MAPPS receiver enclosure	400.00	1	400.00
Liquitite conduit (30 m @ \$3/m)	3.00	30	90.00
Miscellaneous (connectors, wiring, conduit, tools, etc)	200.00	10	2,000.00
Grounding rod, cable,	25.00	1	25.00

clamp			
Total Solar Systems/Enclosures			6,015.00
Computer System			
1 desk-top PC running RedHat Linux	1,500.00	1	1,500.00
APC UPS 280	200.00	1	200.00
Extra Serial Card	200.00	1	200.00
APC serial port protectors - 9pin	40.00	2	80.00
Enclosure	250.00	1	250.00
Miscellaneous (RS232 cables, connectors, etc)	100.00	1	100.00
Total Computer System			2,330.00
Total Equipment			24,670.00
Purchased Services			
Shipping (from vendor/to UNAVCO/to Site)	200.00	1	200.00
Shipping (UNAVCO/to site - batteries, enclosures, etc)	500.00	1	500.00
phone, fax, copier	200.00	1	200.00
Total Purchased Services			900.00
Travel			
Airfare (Round Trip - 3 trips: recon, installation, maintenance)	550.00	3	1,650.00
Lodging (approximate costs 21 nights: hotels and camping)	1,200.00	1	1,200.00
Per Diem: (govt. rate: \$50/day For 3 trips: 22 days)	50.00	22	1,100.00
Rental Car: (recon & maintenance only, car provided by PI for i	1,000.00	1	1,000.00
Total Travel			4,950.00
Total Costs			30,520.00

Send questions or comments to Support (support @ unavco.org)

Posted by: **Beth Bartel** - Thu, Feb 11, 2010 at 5:40 PM. This article has been viewed 8768 times.

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