

Facilities

Activity	FY 2000 Estimate	Uncontrol. & Related Changes	Program Changes	FY 2001 Budget Request	Change from FY 2000
Facilities	85,618	+2,418	0	88,036	+2,418
Total Requirements \$000	85,618	+2,418	0	88,036	+2,418

Activity Summary

Funds for this activity are used to provide safe and functional workspace and facilities for accomplishing the bureau's mission. It includes rental payment to the General Services Administration (GSA) and to private lessors for space holdings nationwide; operations and maintenance of USGS real property holdings; and deferred maintenance and capital improvement needs.

Approximately 60 percent of the requested funds are directed toward the rental payments to the General Services Administration (GSA) and to private lessors for space holdings nationwide. Under the President's Family Friendly Workplace Initiative, the rental payment are also provided for two day care facilities: one located near the USGS National Center in Reston, Virginia, and the other at the USGS Menlo Park, California, regional center.

Facilities	
	FY 2001 Request
Rental Payments	55,714
Operations & Maintenance	29,332
Deferred Maintenance and Capital Improvement	<u>2,990</u>
Total	88,036

The operations and maintenance of USGS real property holdings includes major science centers, research stations, and geomagnetic and seismological observatories. Facilities support services are provided for the National Center and major field centers. The activity provides funding for the USGS library system that consists of three large regional libraries with multidisciplinary collections (geology, hydrology, cartography, and biology), as well as several smaller libraries with more specialized collections in earth and biological sciences.

Deferred maintenance and capital improvement addresses the USGS highest priority needs to bring facilities and equipment to meet safety and environmental standards within available resources. The funding will help USGS to maintain and invest capital for its facilities and other mission infrastructure, including the science centers, river cableway structures, and extensive seismic warning networks.

Rental Payments

Facilities	FY 2000 Estimate	Uncontrol. & Related Changes	Program Changes	FY 2001 Budget Request	Change from FY 2000
Rental Payments	54,355	1,359	0	55,714	1,359

Current Program Highlights

Rental Payments funds payments to GSA and to private lessors space occupied by the USGS nationwide. The FY 2001 request funds the appropriated portion of these facilities costs. Rental costs related to reimbursable activities are recovered from reimbursable customers. Although the USGS has unique facility requirements necessary to support its science, it relies heavily on GSA to meet these needs. GSA has been an active partner in providing modern laboratory and other support space, which are key to the efficient and effective performance of USGS research and analysis on a host of critical environmental, natural resources, and hazards concerns.

Recent Accomplishments

The USGS has closely monitored GSA's implementation of new billing policies for Government-owned buildings. Based on occupancy agreements typically covering 10 years, the USGS and GSA have entered into a leveled-rent arrangement for USGS space at Menlo Park, California. At the John Wesley Powell Federal Building in Reston, Virginia, the proposed agreement would change dramatically the traditional funding approach for the USGS share of the costs for the GSA renovation of laboratories. As the latter agreement sets precedents that may apply to future renovations of other USGS-occupied space in GSA-owned buildings, coordination continues to bridge from the old to new pricing policies.

Operations and Maintenance

Facilities	FY 2000 Estimate	Uncontrol. & Related Changes	Program Changes	FY 2001 Budget Request	Change from FY 2000
Operations & Maintenance	29,273	59	0	29,332	59

Current Program Highlights

Facilities Operations and Maintenance funding provides for the routine, daily work necessary for the basic upkeep of facilities, to ensure that facilities are in compliance with Federal, State, and local standards and to ensure that facilities remain safe. Operations and Maintenance includes three program components: Facilities Operation and Maintenance, Facilities Support Services, and Library. The FY 2001 request funds the operations and maintenance costs associated with appropriated work; operations and maintenance costs associated with reimbursable activities are recovered from reimbursable customers.

	FY 2001 Estimate
Operation & Maintenance	16,332
Support Services	6,100
Library	<u>6,900</u>
Total	29,332

USGS owns 37 real property installations that include major Science Centers with complex facilities such as laboratories and chemical storage buildings, and smaller facilities such as research stations, geomagnetic and seismological observatories, and warehouses.

Facilities Operation and Maintenance. Operations and maintenance functions include ongoing facility and equipment support that sustain day-to-day USGS scientific activities at its owned installations. Associated costs are for utilities, fuel, janitorial services, grounds upkeep, waste management, security and safety, hazardous materials pre-disposal storage and removal, preventive and other maintenance to realize the originally anticipated useful life of an asset, salaries, contracts, repairs, rehabilitation, parts replacement, inspections, and similar services and items.

Facilities Support Services. Support Services at each of the three regional centers for USGS program operations include mail and transportation operations; conference/training facility service; moving services; property management; work space layout, assignment, and control; systems furniture design, ordering, and installation; parking; duplicating and printing services; facility safety, industrial hygiene and hazardous materials management; and central receiving, delivery, and warehousing operations.

Recent Accomplishments

Working closely with scientists, GSA, and designers, the construction contract to modernize laboratory space at the National Center was awarded. This \$31 million renovation project with shared cost made up of \$28.1 million from GSA and \$2.9 million from USGS began in August 1999. Construction is anticipated to continue until FY 2004.

Facilities Activity

The USGS and GSA have worked together to initiate a design project to replace four 1,500-ton chillers at the National Center during FY 2000 and FY 2001. This capital improvement is anticipated to cost \$2.5 million and GSA will provide the funding.

A Building Security Committee was established at each USGS-owned facility to facilitate implementation of the Department of Justice minimum-security standards, with a goal of minimizing danger to life and protecting USGS owned facilities. The EROS Data Center and many of the Biological Science Centers have included security upgrades in the Maintenance and Construction Plan FY 2001-2005. GSA and DOI requirements for meeting the Department of Justice minimum-security standards remain to be met and continue to require monitoring to assure eventual compliance.

To assist the programs with establishing classified programs and projects, USGS security managers and staff certified and accredited several special-use facilities and systems. This included the certification of a classified Automated Information System (AIS) for Eastern Region, Geologic Division at the National Center; certification of the Mid-Continent Mapping Center classified AIS Rapid Exploitation System; accreditation of a closed-storage Secret collateral facility for the Northern Prairie Wildlife Research Center; and the review of the architectural drawings and security requirements for a Secret collateral facility to be built in Menlo Park, California.

Deferred Maintenance and Capital Improvement

Facilities	FY 2000 Estimate	Uncontrol. & Related Changes	Program Changes	FY 2001 Budget Request	Change from FY 2000
Deferred Maintenance & Capital Improvement	1,990	1,000	0	2,990	1,000

Current Program Highlights

The USGS participates in the Department of the Interior's Safe Visits to Public Lands initiative and is committed to improving the maintenance of existing facilities and equipment to ensure the health and safety of the public and employees, cultural and natural resource protection, and building codes and standards compliance.

The USGS conducted a detailed inventory of its facilities and equipment needs based on the Department of the Interior's standards and definitions, and developed a plan to address the most critical maintenance and capital improvement projects. The FY 2001 Budget reflects year two of a proposed Five-Year Plan for deferred maintenance and capital improvement. This Plan is subject to adjustments in outyears based on funding levels.

The focus of the Five-Year Plan is addressing critical health and safety needs of USGS installations, streamgaging, and hazards monitoring networks. The identified facility projects include such activities as replacing unsafe laboratories fume hoods to ensure safe ventilation of toxic fumes; repairing buildings; and repairing or replacing building systems such as fire suppression and alarm systems. The plan also includes, as a high priority to the USGS, the repair/replacement of unsafe river cableways used by employees to measure rivers, including flooding rivers. Maintenance and, where required, replacement of the USGS hazards monitoring infrastructure components are high priorities as they are critical to safeguarding the health and safety of people throughout the Nation. Components of some earthquake monitoring networks, for example, were installed over 20-30 years ago so the need exists to replace these infrastructure components before they become unreliable.

The USGS will continue to refine the scope of its project backlog and prioritize our critical projects. In concert with this effort, the USGS is working with the Department and with other bureaus in formulating a strategy for maintenance system automation and developing a condition assessment program. Through the implementation of a condition assessment program, the USGS will establish a cyclic/recurring process for on-site inspections to document deferred maintenance and to measure asset condition.

Recent Accomplishments

Of the total \$1,990,000 funded in FY 2000, the first year of the 5-Year Deferred Maintenance Plan, about \$700,000 is for much-needed repairs at USGS facilities nationwide. The largest project will be the replacement of the fire curtains at the EROS Data Center in Sioux Falls, South Dakota. An example of the significant opportunity that funding provided to address overdue repairs, the project will help overcome a longstanding design deficiency that essentially failed to provide fire protection in the plenum above the ceiling.

The USGS targeted \$341,000 of the deferred maintenance funds to the repair, renovation, or replacement of unsafe river cableways as an initial step in the much larger initiative applying new design and load-testing criteria that will make the structures safer for field technicians. Cableways have been erected across rivers since the early 1900s to allow USGS technicians to directly measure river depths and velocities. Deteriorating cableways crossing rivers pose a significant hazard to employees who use them. Recently, USGS updated the design and load-testing criteria for all cableways. In addition, new technologies are being investigated to develop alternative methods of direct measurement of streamflow to reduce or eliminate the need for field technicians to work directly over rivers suspended from cableways. The cableways at these sites are not able to meet the new design and load-testing criteria. In FY 2000, to ensure employee safety and the collection of required scientific data, \$341,000 will be used to begin to bring these cableways up to the new safety standards, or (where possible) to initiate the redesign of the installation to allow use of a bank-operated system or a modified acoustic doppler current profiler streamflow measurement instrument.

As the USGS has just established a program to eliminate the backlog of deferred maintenance at its facilities and other mission infrastructure, the balance of the funds was tapped to initiate the first standardized assessments of the condition of its assets and establishing priorities, and to develop a maintenance management system. The USGS will work in collaboration with the National Park Service to identify and implement a maintenance system and also to explore system alternatives that would be responsive to the needs of smaller installations.

FY 2001 Maintenance and Construction Plan

FY 2001 Facility Projects	
1	Restoration of research vessel, R/V Sturgeon. Facility -- Great lakes Science Center; State MI; Congressional District - 13. The vessel is an empty hull, therefore the retrofit will include: installation of electrical and plumbing systems; building interior walls/infrastructure, the pilot house; installing a navigation system, hydraulic and steering mechanisms, hydraulics for the science system components, and other components. Project Cost \$504,000.
2	Replace unsafe HVAC and roof. Facility -- Leetown Science Center; State WV; Congressional District - 2; Project number B19980061D. The HVAC is operating in an unsafe and inefficient manner. The operating controls for the boiler have failed and a dangerous condition exists because only the built-in boiler safety systems keep the boiler going. The cooling system is no longer functional. The system air handlers and cooling tower are seriously corroding. The roof is leaking extensively. The water damage will cause masonry unit wall damage. Project Cost \$550,000.
3	Replace Exhaust Fans with Velocity Stacked Exhaust Fans: Facility --EROS Data Center; State SD; Congressional District - 1; Project number M1998EDC003. The existing chemical exhaust fans do not meet code and do not adequately exhaust potentially hazardous fumes from the building intakes. Project Cost \$75,000
4	Replace Hazardous HVAC Distribution System and motor control center: Facility --Upper Midwest Environmental Science Center; State WI; Congressional District - 3; Project number B19990002&12B. The existing air distribution system is constructed of fiberglass ductboard that is deteriorating and is a health hazard. The air distribution system is not capable of meeting OSHA requirements to provide acceptable air quality in work areas (insufficient fresh air and insufficient air volume to dissipate heat). The existing control system is 20 years old and has pneumatic type controls, resulting in unacceptable air quality from airborne fiberglass, excessive temperature and excessive humidity. Replace unsafe motor control center violating OSHA requirement for lockout/tagout provisions and poses electrical shock risk to staff. Project Cost \$235,000
5	Repair unsafe vessel (Kaho) steering mechanism: Facility --Great Lakes Science Center; State MI; Congressional District - 13; Project number B19990001G. Repair critical steering mechanisms & hydraulic systems for vessels. Critical to ensure safe passage by vessel crew. Project Cost, \$50,000.
6	Chemical - Formalin: Facility --Great lakes Science Center; State MI; Congressional District - 13; Project number B19980006G. The present Formalin storage facility is dangerously insufficient. There is no air ventilation or circulation to dissipate toxic and corrosive fumes, and no spill containment for accidents. Shelving does not meet OSHA requirements for chemical storage. Project Cost \$50,000,
7	Replace Unsafe Tractor: Facility -Leetown Science Center; State WV; Congressional District - 2; Project number B19980061. During a safety inspection, the mower was considered unsafe due to no manufactured roll bar. Project Cost \$30,000
8	Remove unsafe buildings: Facility -- Leetown Science Center FM; State WV; Congressional District - 2; Project number B19980028D. Two buildings identified as fire and/or safety hazards by local Fire and Security personnel need to be removed. Project includes removing asbestos and then the local Fire Department will perform a controlled burn for destruction of the buildings. Project Cost \$40,000.
9	Replace boiler exhaust stack: Facility Natural Wildlife Health Center; State WI; Congressional District - 2; Project number B19960010C. The stack is corroding and condensation is leaking into the incinerator room in the Diagnostic Building. The stack transmits combustion gas from the boiler to the outside and if it is not replaced, deterioration will allow combustion gas, carbon monoxide, to eventually leak into the building. The project requires replacing approximately 100 feet of 18" insulated boiler flue which is in our biological containment section of the building. Project Cost \$44,000

Facilities Activity

10	<p>Repairs to 50ft research vessel (Tamnick): Facility -- Alaska Biological Science Center; State AK; Congressional District - 0; Project number B199800980. The research vessel is to be used as a research platform for conducting specialized sampling inherent to the numerous marine-related research projects conducted by staff. Replacement of the global positioning system and life raft with a new Emergency Position Identification Beacon (EPIRB), as well as other structural modifications (safe ladder/dive platform) and a cascade system for storing compressed air will resolve critical safety deficiencies and make the vessel a safer environment for research scientists working at sea. Project Cost \$77,000.</p>
11	<p>Seal Shock Hazard electrical vaults: Facility -- West Fisheries Research Center; State WA; Congressional District - 7; Project number B19970013N. Twelve electrical vaults that house telephone/electrical equipment are unsealed and fill w/rain water. Pumping is required to drain, creating a hazard of shock to employees. Project Cost \$80,000</p>
12	<p>Relocate & Replace existing generator & transfer switch: Facility -- Upper Midwest Environmental Science Center; State WI; Congressional District - 3; Project number B19940001B. The existing generator violates OSHA/NEC regulations & poses a significant health risk to Center staff. Current location of generator results in damage to research specimens due to the transmission of noise and vibration. The existing generator capacity is insufficient to continue electric service in support of critical research needs during an electric utility outage and electrical power for ventilation needs resulting in exposure of laboratory personnel to chemical fumes. This project will permit generator operation and cooperation with utility company yielding significant utility savings. Project Costs \$315,000.</p>

FY 2001 Equipment Projects

1	<p>Microwave Replacement - Facility -- Northern California Seismic Network; State CA; Project number G987160001. Replace earthquake network stations which provide seismic monitoring/warning for large metropolitan areas. The requested funds would be used to replace existing equipment that has exceeded its expected life and that cannot be expected to operate continuously without increased failure rates. The current equipment that supports the network may fail during an emergency, which would limit or possibly prevent adequate response to other Federal agencies, local governments, the private sector, and public needs. Project Cost for FY 2001 \$242,000. (Total need = \$2.0M.)</p>
2	<p>Renovate/Replace active cableways - Facility --139 Sites Nationwide; Project number W1998A10000. Cableways have been erected across rivers since the early 1900s to allow USGS technicians to directly measure river depths and velocities. Deteriorating cableways pose a significant hazard to employees who use them. Recently, WRD updated the design and load-testing criteria for all cableways. In addition, new technologies are being investigated to develop alternative methods of direct measurement of streamflow to reduce or eliminate the need for employees to work directly over rivers suspended from cableways. The cableways at these sites are not able to meet the new design and load-testing criteria. To ensure employee safety and the collection of required scientific data, it is critical to bring these cableways up to the new safety standards, or to redesign the installation to allow use of a bank-operated system or a modified acoustic doppler current profiler streamflow measurement instrument. Total need = \$3,436; remaining costs will be funded in the outyears. Project Cost for FY 2001 \$243,000.</p>