

THE FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

FISCAL YEAR 2002 EXECUTIVE SUMMARY

For Fiscal Year (FY) 2002, the President's budget requests \$2.7 billion for meteorological services and supporting research. Of the total requested, \$2.31 billion is designated for operations and \$389 million for supporting research. Table ES-1 lists a breakout of the FY 2002 budget proposal.

As in previous years, 92.8 percent of the total requested funds will go to the Departments of Commerce (DOC), Defense (DOD), and Transportation (DOT). The distribution among these three departments is DOC 59.1 percent, DOD 16.6 percent, and DOT 17.1 percent. The other federal agencies will share the remaining 7.2 percent.

In comparison to the \$2.64 billion appropriated in FY 2001, the FY 2002 request represents an increase of 2.1 percent. Within the three major departments, DOC requests an increase of 10.1 percent while DOD and DOT requests decreases of 11.7 percent and 4.4 percent, respectively. The DOC increase is attributable to requests for increase by NWS, NESDIS, NOS, and OAR. The DOD decreases are attributable to DMSP (32 percent in DMSP operations and 51.2 percent in supporting research) and Army (TRADOC and AMC systems and acquisition funding). DOT's decrease is associated with FAA operations.

The budget requests for the other departments are as follows:

Department of Agriculture (USDA) an increase of 0.4 percent, Department of the Interior (DOI) no change, Environmental Protection Agency (EPA) an increase of 17.2 percent; National Aeronautics and Space Administration (NASA) a decrease of 6.5 percent; and Nuclear Regulatory Commission (NRC) a decrease of 57.3 percent.

Figure ES-1 depicts each agency's proportion of the requested FY 2002 federal budget for meteorological operations and supporting research. Each agency's portion of the requested funding for meteorological operations is shown in Figure ES-2. Of the \$2.31 billion requested for meteorological operations, DOC, DOD, and DOT account for slightly over 99 per-

Table ES-1. Federal Budget for Meteorological Operations and Supporting Research, FY 2002 (in thousands of dollars)

<u>Agency</u>	<u>Operations</u>	<u>% of TOTAL</u>	<u>Supporting Research</u>	<u>% of TOTAL</u>	<u>TOTAL</u>	<u>% of TOTAL</u>
Agriculture	\$12,700	0.6	\$15,500	4.0	\$28,200	1.0
Commerce	1,485,104	64.4	107,832	27.7	1,592,936	59.1
Defense	376,109	16.3	71,479	18.4	447,588	16.6
Interior	1,100	0.0	0	0.0	1,100	0.0
Transportation	429,244	18.6	31,583	8.1	460,826	17.1
EPA	0	0.0	7,500	1.9	7,500	0.3
NASA	2,845	0.1	155,400	39.9	158,245	5.9
NRC	50	0.0	0	0.0	50	0.0
TOTAL	2,307,152	100.0	389,294	100.0	2,696,445	100.0

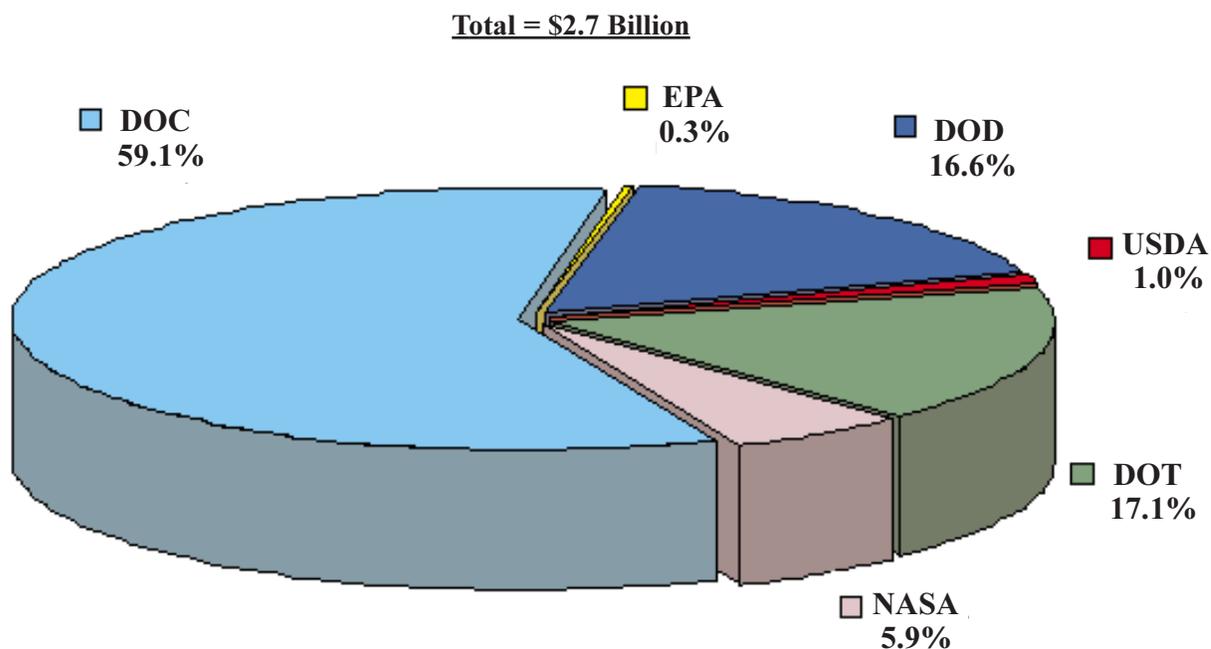


Figure ES-1. Agency Percent of Total Federal Budget for Meteorological Operations and Supporting Research, FY 2002.

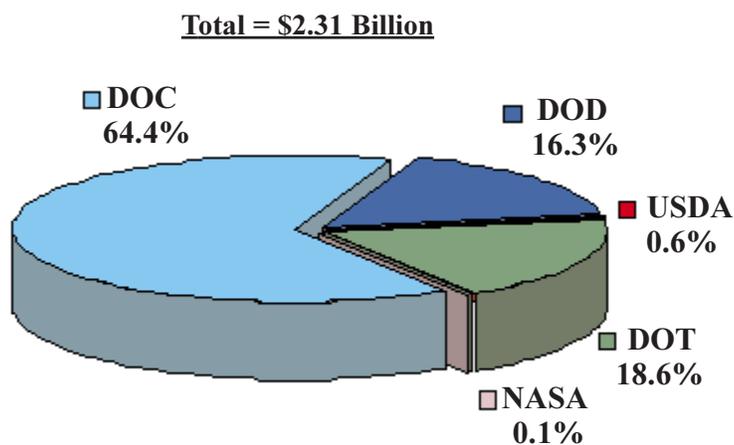


Figure ES-2. Agency Percent of Federal Budget for Meteorological Operations, FY 2002.

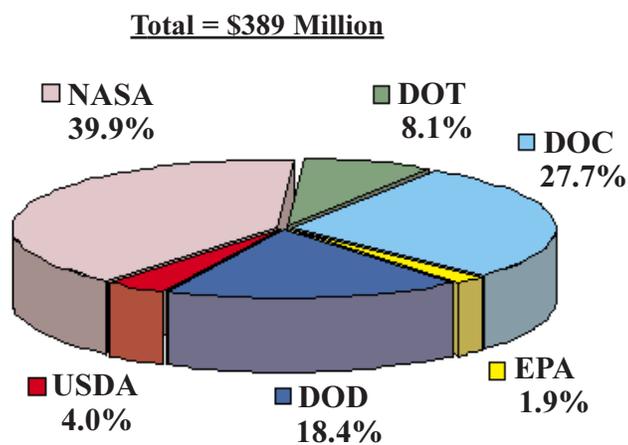


Figure ES-3. Agency Percent of Federal Budget for Supporting Research, FY 2002.

cent of the funds. Overall, operational costs increased by 3.7 percent. Figure ES-3 depicts each agency's portion of the proposed federal supporting research budget. Unlike operations, DOC, DOD, and NASA account for the major share (86 percent) of the supporting research budget. Requests for increases in supporting research funds are: DOC 5.0 percent, DOT 13.4 percent, and EPA 17.2 percent. The DOD and NASA requests for supporting research funds decrease by 26.9 and 6.2 percent, respectively.

All agencies project a personnel total of 14,410 full-time equivalent (FTE) to be employed in federal meteorological operations in FY 2002. This figure represents an increase of 0.6 percent from the 14,320 FTE employed in FY 2001.

MAJOR PROGRAMS--DOC, DOD, and DOT

Next Generation Weather Radar (NEXRAD). The NEXRAD Program which began in FY 1981 was responsible for procurement, installation, and operation of the Weather Surveillance Radar-1988 Doppler (WSR-88D). The first limited production WSR-88D system was installed at Oklahoma City, Oklahoma in May 1990 and commissioned 4 years later in February 1994. The original program plan called for a total of 161 radars. In response to a National Research Council report, three additional radars were added and raised the total to 164 radar sites. The last system in the basic procurement schedule was installed in June 1996.

By agency, as of June 2001, the DOC/National Weather Service had commissioned 123 sites, the DOD (USAF and Army) had commissioned 32 sites (within the states and overseas), and the DOT/FAA had commissioned 12 sites. DOD has three systems at Keesler AFB, Mississippi, for training; DOC/NWS has one each at the National Reconditioning Center, and NWS Training Center in Kansas City,

Missouri and at the Operational Support Facility, Oklahoma City, Oklahoma.

Automated Surface Observing System (ASOS). The ASOS program, began in 1983, as a joint development effort between the DOC, DOD, and DOT/FAA. Installation of ASOS units started in 1991. As of June 2001, a total of 994 units have been purchased. The NWS has purchased, accepted, and commissioned 314 sites. The FAA has purchased 569 units, accepted 567 units, and commissioned 564 sites. The Navy has purchased, accepted, and commissioned 77 sites. The Air Force has purchased, accepted, and commissioned 34 sites. Collectively, a total of 989 ASOS sites have been commissioned. The remaining 5 FAA sites are scheduled to be commissioned by October 2001.

Automated Weather Information Systems (AWIS). The DOC, DOD, and DOT require AWISs to facilitate the collection, processing, and interpretation of meteorological data. AWISs are being procured to provide an automated, high-speed, user-friendly man/machine interface to access and process large volumes of sophisticated meteorological data. AWIS supports the timely production of accurate and geographically precise warnings, forecasts, and special tailored products. They also provide the communications capability for expeditious product dissemination.

Major agency systems classified as AWISs are: NOAA's Advanced Weather Interactive Processing System (AWIPS), FAA's Weather and Radar Processor (WARP); Air Force's New-Tactical Forecasts System (N-TFS) and Operational Weather Squadron Production System, Phase 2 (OPS-II); and Navy's Naval Integrated Tactical Environmental Subsystem (NITES).

In February 1997, the Secretary of Commerce approved the limited deployment of AWIPS. This decision authorized NOAA to procure and deploy 21 systems. The group of

21 limited deployment systems were installed in November 1997 through March 1998. A second group of 19 limited deployment systems were installed in June through August 1998. On April 9, 1998, the Secretary authorized full scale production and deployment of AWIPS, through Build 4.2, for the remaining 95 systems. Installation of these 95 systems began in September 1998 and was completed in June 1999. An Operational Test and Evaluation of the commissioning software (Build 4.2) was successfully conducted from mid-May through June 1999. AWIPS commissioning began in January 2000 and, as of June 2001, NWS had commissioned 141 AWIPS systems located at 121 Weather Forecast Offices (WFOs), 13 River Forecast Centers (RFCs), and 7 national centers.

The FAA's Weather and Radar Processor (WARP) will greatly enhance the dissemination of aviation weather information throughout the National Airspace System (NAS). WARP will automatically create unique regional, WSR-88D-based, mosaic products and send these products, along with other time-critical weather information, to controllers through the Advanced Automation System (AAS) as well as to pilots via the aeronautical data link.

The Air Force is modernizing and improving strategic, operational, and combat level systems. Modernization programs include the Observing System 21st Century (OS-21), N-TFS, OPS-II, Tactical Weather Radar, and Small Tactical Terminal which provides a single system for both garrison and deployed operations. These systems will replace the Automated Weather Distribution System (AWDS) and serve as an in-garrison system as well as a deployable "first-in" combat weather forecast capability. OS-21 will provide a much needed state-of-the-art life-cycle replacement for Air Force observing equipment. OS-21

includes five different configurations: fixed, deployable, remote, manual, and upper air. The manual section is intended for tactical operations and will continue upgrades begun under the Manual Observing System and Tactical Meteorological Observing System modification programs. The Air Force purchased commercial off-the-shelf remote miniature weather sensors to provide accurate real-time weather information from forward unmanned locations to support Kosovo operations. OS-21 will continue to expand this capability.

The Navy is presently undergoing migration towards a modular, interoperable suite of systems to ingest, process, fuse, display, and disseminate METOC data. The program consists of five seamless versions known as the Naval Integrated Tactical Environmental Subsystem (NITES) versions I-V. NITES systems will be fielded in FY 2000 through FY 2004.

OTHER AGENCY PROGRAMS

For FY 2002, the Department of Agriculture (USDA) requested \$28.2 million for meteorological operations (\$12.7 million) and supporting research (\$15.5 million). Operationally, the USDA supports specialized weather observation networks and also conducts an active supporting research program to ensure an abundance of high-quality agricultural commodities while minimizing the adverse effects of agriculture on the environment. Under supporting research, USDA focuses on the interactions of weather and climate with plant and animal production and water resources management.

The Department of the Interior's (DOI) FY 2002 request is \$1.1 million primarily to support the Bureau of Land Management's remote automatic weather station (RAWS) program.

The budget request for the Environmental Protection Agency (EPA) remains level at \$7.5 million to

provide user-appropriate and scientifically credible air-quality meteorological programs to support regulatory applications.

Nearly all of NASA's funding in meteorology is for supporting research. The requested funding for supporting research in FY 2002 is \$155 million, which is 6.2 percent lower than the FY 2001 funding level. These funding levels are composed of the estimated meteorology share of the supporting research and analysis programs as well as Earth Observing System (EOS) and Earth Probe instruments, EOS science, and the EOS Data Information System elements of the NASA Office of Earth Science budget. Included in NASA's request is \$35.25 million for special programs under the category of aviation weather supporting research.

The Nuclear Regulatory Commission's (NRC) request for \$50,000 is mainly for operations. The NRC will dedicate these funds to obtain and analyze meteorological data and information related to the safe operation of nuclear facilities, and the protection of the environment, public health, and safety.

FEDERAL COORDINATION

55th Interdepartmental Hurricane Conference (IHC) (March 5-9, 2001). OFCM annually hosts the Interdepartmental Hurricane Conference to provide a forum for the responsible federal agencies, together with representatives of the user communities such as emergency management, to review the nation's hurricane forecast and warning program and to make recommendations on how to improve the program in the future. The 55th IHC was held in Orlando, Florida. The theme for the conference was *Landfalling Hurricanes-A Major Challenge for Operations and Research in the 21st Century*. The conference was attended by over 210 people -- a new record, represent-

ing twelve federal agencies, the academic community, local emergency management, and the weather media. Special sessions were conducted on transitioning research to operations and the Hurricane Landfall component of the United States Weather Research Program (USWRP). The major outcome of the IHC was identification of the need for a sustainable, formalized approach to transition successful research results into the operational environment, which the OFCM will pursue through its Committee for Cooperative Research. In May, OFCM published the 39th edition of the *National Hurricane Operations Plan*, which details responsibilities of federal agencies; operations and procedures; products; aircraft, satellite, radar, and buoy data collection; and marine weather broadcasts.

National Hurricane Conference (April 9-13, 2001). OFCM sponsored a three-hour session attended by more than 200 individuals at the 2001 National Hurricane Conference with the theme *Toward a Safer America: Making the Nation More Resilient to Hurricanes*. The session included two distinguished panels which addressed managing the public's vulnerabilities and consequences through risk assessment and management, and improving hurricane preparedness and response through new communications technology and enhancing public outreach and education.

Post-Storm Data Acquisition. The OFCM-sponsored Working Group for Natural Disaster Reduction/Post-Storm Data Acquisition coordinated efforts to examine the devastation that resulted from the tornado outbreak in the Tallahassee Florida area (northern Florida and southern Georgia) in mid-March 2001, and to examine flooding, ice jams, and levies in the area of the Red River near Grand Forks, North Dakota, in early April 2001. Aerial photographic support was provided by the Air Force's Civil Air Patrol (CAP). The

CAP support, negotiated by the working group and documented in a memorandum of understanding, has proven to be both timely and very cost effective.

Severe Local Storms Operations. In May 2001, the OFCM-sponsored Joint Action Group for Severe Local Storms Operations published the *National Severe Local Storms Operations Plan*. The plan outlines the responsibilities of the various United States federal agencies that provide meteorological services in observing, forecasting, and warning of severe local storms. It also defines meteorological terms used by the agencies preparing severe local storms forecasts and warnings; identifies differing operational warning criteria and procedures; and discusses communications, observations, and some public release aspects of severe storms warnings.

Transition Issues. The Federal Committee for Meteorological Services and Supporting Research (FCMSSR) met on November 14, 2000, in the Herbert C. Hoover Building, Washington, District of Columbia, to focus on issues that were relevant to the transition team for the next administration. The meeting was very successful and was attended by thirteen of the FCMSSR agencies. A white paper identifying and describing transition issues was prepared subsequent to the meeting and provided to the agencies for use in interactions with the transition team. Areas and issues identified were: (1) The Next Step Beyond Modernization (fully implement observational program; continue evolution of National Weather Service (NWS) systems); (2) Climate Services (implement global climate ocean observing systems; upgrade national computational capabilities); (3) Comprehensive Strategy for Emergency Management (support FEMA's *Project Impact*; support the Global Disaster Information Network; communicate rainfall and flooding information better); (4) Landfalling Hurricanes (improve

hurricane track and intensity forecasts; follow and report on hurricanes after landfall); (5) Transportation (enhance weather information dissemination for aviation; improve accuracy of convective forecasts for aviation; improve road weather information); and (6) Strategy for Atmospheric Information (develop a strategy for atmospheric information; improve communication of weather and climate information).

Annual Federal Plan. OFCM prepared *The Federal Plan for Meteorological Services and Supporting Research -- Fiscal Year 2002*. The Federal Plan is Congressionally mandated and is a one-of-a-kind document which articulates the meteorological services provided and supporting research conducted by agencies of the federal government. The Federal Plan helps to reduce duplication among the agencies. It is a comprehensive publication that documents proposed programs for Fiscal Year 2002 and reviews agency programs in Fiscal Year 2001. The Plan demonstrates to the Congress and to the Executive Branch how the agencies work together to accomplish their missions in an effective and efficient manner.

Weather Information for Surface Transportation. OFCM has continued its extensive involvement in the area of Weather Information for Surface Transportation (WIST). The OFCM and United States Department of Transportation - Federal Highway Administration (USDOT-FHWA) co-sponsored Symposium on Weather Information for Surface Transportation, *Preparing for the Future: Improved Weather Information for Decision-Makers* was held December 4-6, 2000, in Rockville, Maryland. The symposium was attended by more than 100 individuals who were a cross-section of the transportation and weather communities (federal, state, and city governments,

urban and rural transportation agencies, professional and trade organizations, and government and commercial weather service providers). Eight overarching areas of concern were identified and five specific action items were highlighted as needing priority for continued progress. The bottom line is that improvements in surface transportation weather support will result in safer and more efficient operations by all users.

OF CM also made substantial progress in preparation of a document addressing meteorological requirements for the six core modes of surface transportation: roadway, railway, transit, waterway, pipeline, and airport ground operations. This activity has included formation of a joint action group to address meteorological requirements for surface transportation; questionnaires; surveys; WIST symposia conducted jointly with the Federal Highway Administration; meetings with railroad, pipeline, and emergency managers; and participation on panels concerning public-private partnerships in transportation and Intelligent Transportation Systems. The requirements document will be a culmination of intensive OFCM efforts in this area and is expected to be published in November 2001.

Aviation Weather. OFCM completed its analysis of agency and industry programs/projects identified as meeting the needs and concerns contained in the January 1999 *National Aviation Weather Initiatives* document. A significant enabler in the process was the OFCM-sponsored July 2000 Aviation Weather User Forum. The forum provided an opportunity for open dialog between program managers as well as the users and providers of aviation weather information. The forum also played a significant role in completing the *National Aviation Weather Initiatives Tier 3 (Service Design)/Tier 4 (Budgets and Schedules) Baseline Report* which was issued in April

2001, a first-ever achievement for all government. The report was a major contribution toward establishing a baseline for ongoing and planned research and development for each initiative (requirements and products). The report will serve as a vehicle for transitioning research results into operations. Of the 86 initiatives, only ten have no agency identified as satisfying a particular need or concern. The next step will focus on key issues and actions identified during the Aviation Weather User Forum. One such issue is the need for improved aviation weather training and, in that regard, OFCM will take a leadership role in coordinating the establishment of a National Training Program. Another issue deals with establishing, validating, and prioritizing requirements. Now that we have established a baseline, the Joint Action Group for Aviation Weather will revisit the initiatives to determine if they continue to represent the priorities for aviation safety and efficiency. Consideration will also be given as to how best to meet the requirements for the ten initiatives identified that are not now being addressed by agencies or industry. OFCM is also continuing efforts concerning volcanic ash and expects to publish *A National Framework for Volcanic Ash Hazards to Aviation during FY 2002*.

Wind Chill Temperature Index.

Under the leadership of OFCM's federal coordinating infrastructure, United States federal agencies, Canadian participants, and the academic research community have taken an important step towards improving the Wind Chill Temperature (WCT) Index. The new WCT Index will provide the citizens of the United States and Canada better protection of life and property. The current wind chill index attempts to measure the rate of heat loss by the human body as wind blows across it at different temperatures and speeds. The index was developed in the 1940s dur-

ing an Antarctic expedition, and is now known to overestimate the effect of wind by at least ten degrees. This overestimate gives a false sense of security and people are sometimes not aware or prepared for the danger of severe winter weather. OFCM led the improvement effort by creating a Joint Action Group for Temperature Indices within its federal coordinating infrastructure, and this Joint Action Group pulled together the various United States, Canadian, and academic entities to develop the new WCT Index based on 21st Century science. Funding for the development of the new WCT Index was provided by OFCM, the United States Army's Cold Region Research and Engineering Laboratory, and the Defence Research and Development Canada. NOAA's NWS, the United States Air Force, and the Meteorological Service of Canada will implement the new WCT Index during the winter season of 2001-2002. This new WCT Index will be a substantial improvement over the current practice and will be based on a human face model, use wind speed calculated at the average height of an adult's face, incorporate modern heat transfer theory, lower the walking speed threshold used in calm wind situations, and use a consistent standard for skin tissue resistance. Later refinements will include adjustments for solar radiation for a variety of conditions.

Space Weather. Space weather refers to conditions on the Sun and in the solar wind, magnetosphere, ionosphere, and thermosphere that can influence the performance and reliability of space-borne and ground-based technological systems, and can endanger human life or health. Space weather storms can cause disruption of satellites, communications, navigation, and electric power distribution grids. The overarching goal of the National Space Weather Program (NSWP), which is managed by an OFCM program council, is to achieve an active, synergistic,

interagency system to provide timely, accurate, and reliable space weather warnings, observations, specifications, and forecasts within the next ten years. The *NSWP Strategic Plan* and *Implementation Plans* provide, respectively, broad guidance and a detailed roadmap for the Program. The Committee for Space Weather (CSW) recently established the Community Coordinated Modeling Center (CCMC), with a mission to prepare the next generation of space weather models for transition to operations through the operational centers' rapid prototyping centers. During FY 2001, the fledgling CCMC transferred its first model to the Department of Commerce's Space Environment Center (SEC). The magnetohydrodynamic version of the Magnetospheric Specification Model will significantly improve the SEC's ability to predict the future state of the magnetosphere based on solar wind inputs. Nearing completion is work on coupling this model with a radiation belt model. During 2002, the CCMC will focus on ionospheric and heliospheric models and coupling ionospheric and magnetospheric models. In addition, the highly successful competition for space weather research grants, sponsored and administered by the National Science Foundation (NSF), will continue in 2002 with a modest increase in funding.

Strategy for Providing Atmospheric Information. OFCM is planning a forum to respond to the agency priorities and to address Leadership and Management Recommendation 1 of the National Research Council/National Academy of Sciences Board on Atmospheric Sciences and Climate (BASC) report *The Atmospheric Sciences Entering the Twenty-First Century*, which states: "The Federal Coordinator for Meteorological Services and Supporting Research should lead a thorough examination of the issues

that arise as the national system for providing atmospheric information becomes more distributed. Key federal organizations, the private sector, academe, and professional organizations should all be represented in such a study and should help develop a strategic plan." The Federal Coordinator began this effort by drafting a concept development paper which was provided to thirty agencies and individuals for feedback. The objective was defined to "Plan and promote the effective and efficient availability and distribution of atmospheric information that meets the requirements of all agencies (operational and research)." Major issues were identified to include: roles and responsibilities of the public and private sectors; availability of data (data receipt and distribution) and archival capabilities; health of the meteorological infrastructure; international commitments for free and open data exchange; and role of academic research, both basic and applied. The methodology would examine major issues in climate, natural hazards, technological hazards, urban meteorology and air quality, ecosystem management and agriculture, and aviation and surface transportation. The forum will be conducted in early December 2001.

United States Weather Research Program. The USWRP mission is to accelerate forecast improvements of high-impact weather and facilitate full use of advanced weather information. The USWRP's vision is to mitigate the effects of weather-induced disasters; reduce the costs associated with routinely disruptive weather; create opportunities for increased productivity through better weather information; and assist the military in the accomplishment of its mission. The current USWRP team includes NOAA as the lead agency, NSF, National Aeronautics and Space Administration, and the United States Navy. The Federal Coordinator has taken steps to

contact additional agencies to broaden federal participation in the USWRP in accordance with an action from the Interdepartmental Committee for Meteorological Services and Supporting Research, direction from the Chairman of the Federal Committee for Meteorological Services and Supporting Research, and also recommendation from the National Academy of Sciences/National Research Council Board on Atmospheric Sciences and Climate (BASC). OFCM hosted meetings on expanded agency participation in the USWRP on May 11 and August 24, 2001. The additional agencies included Federal Aviation Administration, FHWA, USAF, DOE, USDA, and FEMA. These meetings have led to more interaction directly between the leadership of the USWRP and interested agencies to discuss, in more detail, agency specific needs which may be benefited by the program. It is expected that several additional federal participants will join the USWRP and that the USWRP priorities will be expanded to address their needs.

Committee on Environment and Natural Resources. OFCM and the Committee on Environment and Natural Resources (CENR) Subcommittee on Natural Disaster Reduction (SNDR) cosponsored the Forum on Risk Management and Assessments of Natural Hazards February 5-6, 2001. The forum theme was *Toward a Safer America: Building Natural Hazard Resistant Communities through Risk Management and Assessments*. It was attended by an unprecedented cross-section of more than 120 weather, natural disaster and risk management professionals, and academia. Consensus was reached to proceed with a national natural hazard assessment and to develop an action plan which would deal with the assessment in manageable pieces. It was also agreed to inte-

grate efforts with the Congressional Natural Hazards Caucus; develop improved partnerships between users and developers; standardize terminology, methodology, and approach within risk assessment and management; compile available risk assessment tools and models; and improve public outreach, education, and training.

American Meteorological Society. During FY 2001, OFCM joined nine leading environmental science and service corporations in supporting undergraduate scholarships in the atmospheric and related oceanic and hydrologic sciences. The scholarships, awarded for the junior and senior years, are designed to encourage outstanding undergraduates to pursue careers in the fields covered by the awards. OFCM plans to continue this support in FY 2002. OFCM also supports American Meteorological Society endeavors by participating in AMS conferences and workshops and other environmental science education and outreach programs.

Publications and OFCM's Website. The following plans and publications were prepared in hardcopy form and also placed on OFCM's website (www.ofcm.gov):

- *The Federal Plan for Meteorological Services and Supporting Research -- Fiscal Year 2001*
- *National Hurricane Operations Plan*
- *55th Interdepartmental Hurricane Conference (Minutes)*
- *Proceedings for the Symposium Weather Information for Surface Transportation, Preparing for the Future: Improved Weather Information for Decision-Makers*
- *Proceedings of the Forum on Risk Management and Assessments of Natural Hazards*
- *National Severe Local Storms Operations Plan*

• *National Aviation Weather Initiatives Tier 3 (Service Design)/Tier 4 (Budgets and Schedules) Baseline Report*

The following documents are planned for publication during FY 2002:

- *The Federal Plan for Meteorological Services and Supporting Research -- Fiscal Year 2002*
- *National Hurricane Operations Plan*

• *56th Interdepartmental Hurricane Conference (Minutes)*

• *Weather Information for Surface Transportation (WIST) Requirements*

• *Proceedings for Workshop on BASC 21st Century Report Recommendation -- A Strategy for Atmospheric Information*

• *National Plan for Post-Storm Data Acquisition*

• *A National Framework for Volcanic Ash Hazards to Aviation*

During FY 2001, OFCM continued to make substantial progress on its use of the Internet. In addition to information about the office, OFCM has placed its current publications on its website, and keeps the website current with information regarding workshops and symposia being conducted by the office. OFCM will continue to make information available on the Internet during FY 2002.