



National Oceanic and Atmospheric Administration

Strategic Information Technology Plan

2007-2014

NOAA Office of the Chief Information Officer

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NOAA Strategic Information Technology Plan

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Purpose

The purpose of the NOAA IT Strategic Plan (SITP) is to: describe the future direction of NOAA's investment in Information Technology, define specific goals, objectives, key activities, and provide a basis for assessing progress in NOAA's IT program. The SITP aligns IT strategy with NOAA business goals and strategy, see [NOAA Strategic Plan, 2006-2011](#), with the Department of Commerce IT strategic planning, see [Department of Commerce Strategic IT Plan, 2007-11](#), and with the pending 2010-2014 Program Operating Plans (POPs) from NOAA's Planning Programming Budgeting and Execution System (PPBES). This document is forward-looking in that it focuses its attention on currently funded developmental initiatives or planned initiatives identified for funding, rather than ongoing operations and maintenance. Specific details on each of these initiatives may be found in Office of Management and Budget (OMB) Exhibit 300 documents or NOAA Program Operating Plans.

The Importance of Information Technology in NOAA

NOAA's mission is to understand and predict changes in the Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs. The fulfillment of this mission requires NOAA to observe, collect, process, evaluate, disseminate, and archive vast quantities of environmental information and information products. The effective use of information technology (IT) is critical to NOAA's ability to accomplish its mission. Because of this, IT is integrated into virtually all aspects of NOAA's mission goals and cross cut priorities, and NOAA's Strategic Plan recognizes the critical role of information services.

Information technology allows NOAA to increase the amount and quality of environmental data collected. IT is an integral part of environmental observing and data collection systems, including radar, sensors, and satellite systems. Once collected, the data are evaluated and processed with Information Technology to create useful products for the Nation.

IT allows NOAA to disseminate products to the public in a timely manner. According to www.HitWise.com, a leading online web intelligence service, the term "weather" was the most popular search term, for the one week ending, July 14, 2007 – with 0.64% of all searches. Several other weather-related terms, including "noaa", are among the top-20 searches. NOAA- and weather-related searches comprise a total of 1.56% of all internet searches. NOAA IT services support getting this information to the public. In the case of a weather warning, "timely" means immediately, through systems such as the NOAA Weather Radio system or through links to emergency management offices. Other products are disseminated in "near real-time" to allow the preparation of forecasts. IT resources are essential tools in the production of information products such as nautical charts and management tools such as quotas for fish species. NOAA also serves the research community's need for reliable and responsive access to NOAA data covering extended periods of time.

NOAA uses IT to create and preserve the Nation's long-term environmental record. The Nation's ability to make informed decisions affecting the environment and the economy hinge upon the integrity and completeness of environmental datasets. As NOAA collects and processes ever larger volumes of environmental data, the systems that archive and preserve the data for posterity must keep pace.

Managing information resources across the NOAA enterprise and ensuring the confidentiality, integrity, and availability of NOAA information management systems is vital to ensuring the success of NOAA's mission. The strategic application of information resources is also important in ensuring that NOAA resources are used in a cost-effective manner.

Overall Strategic Objective for Information Technology

The NOAA Information Technology Services program overall strategic objective is to develop a secure, reliable, technically-robust operating environment to support NOAA's mission goals and ensure the highest data quality for emergency management officials, decision-makers, researchers, and the general public. This program recognizes the importance of information technology in NOAA and must be poised to support the changing mission requirements in the decade ahead. The vision of "an informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions" as stated in NOAA's Strategic Plan for FY 2006-FY 2011 will bring challenges in information technology, information security, and network operations for the next five years. Investments will be required not only in hardware, software, and telecommunications, but also in information security, new processes, and human capital. Developing state-of-the-art, robust, fault-tolerant information systems and networks, ensuring the security of the enterprise, implementing an IT architecture management framework, and providing useful data management tools will be key to NOAA's future.

Strategic Goals

NOAA's mission hinges on its ability to use sophisticated Information Technology (IT) to gather, process, and disseminate environmental information. With both weather and climate sensitive industries accounting for approximately one-third of the United States' Gross Domestic Product, government agencies, businesses, and citizens continuously turn to NOAA for accurate environmental products and information. NOAA's IT and the people that manage and operate it are, therefore, critical to NOAA's mission and our Nation's economic strength, environmental vitality, and human health.

NOAA's Office of the Chief Information Officer (OCIO) is responsible for providing IT leadership, mission assurance, and high-performance computing capabilities. As NOAA responds to the exponential growth of environmental data; the threat from increasingly complicated and potentially damaging information attacks; the growing skill set requirement for NOAA IT talent; the complex fragmentation of IT services and systems; and the demand for continuous operation during times of crises, NOAA's IT must rapidly evolve through modernization, or risk tremendous loss of mission functionality.

These risks shall be addressed by a strategic plan that transforms NOAA's IT into a secure, agile, and innovative enterprise. The plan must drive towards improving processes that acquire, manage, and secure NOAA's IT; attract and retain a world-class technical workforce; and apply efficient ways to scale and grow IT infrastructure. The NOAA Strategic IT Plan incorporates strategic direction from many sources, including the NOAA OCIO 500-Day Plan. The strategies from the NOAA OCIO 500-Day Plan are shown below:

Strategy #1 – Protect and defend NOAA's IT systems and information

The OCIO is committed to securing NOAA's information enterprise. Information is central to NOAA's mission; any amount of data loss, network failures, or malicious intrusions can result in far reaching damage. Attacks on NOAA's systems are continuous and, given the sophistication of attack tools, the threat is constantly increasing. IT Security is not only a priority, but a necessity to defend and protect the NOAA mission. The OCIO will define and execute a comprehensive IT Security strategy to address this increasing risk. Leveraging our accomplishments in the area of IT security, while understanding the need to constantly raise the bar, the NOAA CIO Community will enhance its security capabilities to meet the demands of a vibrant and growing IT environment. The key focus areas are to streamline and automate security processes enterprise-wide, and to develop a robust IT Security Architecture. Achieving this goal will ensure NOAA's mission success through information confidentiality, integrity, and availability.

Strategy #2 – Maintain continuous IT services and information before, during, and after natural or man-made disasters

The OCIO will ensure that IT services and information delivery becomes more resilient in the face of catastrophic failures, or unforeseen natural or man-made disasters. NOAA predicts and responds to hurricanes, tornados, and floods on behalf of the nation. When one of these events disrupts a NOAA facility or requires NOAA disaster responders, IT must remain available. The single points of failure within NOAA's infrastructure increase the likelihood that an unforeseen event impacts NOAA operations. This requires a continuity of critical infrastructure strategy to ensure that NOAA IT mission-essential functions are failsafe, and NOAA IT can respond to crises requiring IT capabilities in Mobile Emergency Response System technology. The risks of surges or outages disrupting IT continuity will be assessed on a regular basis by pre-planning for disaster situations, conducting exercises, and mitigating failure points. The end result will be NOAA's reliable information delivery (e.g. watches, warnings); an ability to avoid IT discontinuity; and resilience when confronted with disasters.

Strategy #3 – Develop the IT knowledge and skills needed to support NOAA’s mission

The OCIO is dedicated to recruiting, developing and retaining a cadre of highly capable IT professionals with the critical competencies needed to enable NOAA’s mission. This is a formidable challenge given the world-wide demand for IT talent. The CIO Community must keep pace with evolving technological advances by defining a comprehensive IT workforce strategy. The OCIO will champion workforce investment and competency requirements, creative recruitment and incentive strategies, and training, education and certification programs. Achieving this goal will ensure NOAA’s future.

Strategy #4 – Scale NOAA’s IT infrastructure, computing, and dissemination capabilities to keep pace with observing capabilities

NOAA’s IT infrastructure must be scalable with sufficient computing and dissemination capacity to keep pace with the growing volume of environmental data products. In its current state, NOAA’s IT infrastructure has gradually evolved to handle current requirements for gathering, processing, and distributing information. However, the volumes of data collected from new observing systems, and the exponential growth of model data, are increasing at a pace that dwarfs the growth of our IT infrastructure. If NOAA’s investment in IT does not evolve to meet these new requirements, NOAA risks its ability to transport and use relevant environmental data from operational observing platforms. The OCIO will develop and execute necessary plans to manage this expected growth in information volume and complexity. This effort requires that NOAA extend its architecture to encompass both data networking and dissemination; to increase its High Performance Computing capacity; and to ensure programmatic integration by facilitating more coordinated IT planning in the NOAA budgeting process. Through these efforts, NOAA will be able to strategically grow and adapt to fully utilize new and evolving data resources by ensuring IT infrastructure scalability and capacity.

Strategy #5 – Maximize enterprise-wide solutions and services

The OCIO will improve effectiveness and identify efficiencies to better support operational requirements. NOAA IT consists of multiple fragmented IT systems that create independent services. The CIO Community will find “common solutions” to “common problems” that are encountered across this IT enterprise. Improvements across the IT enterprise involve the creation of an enterprise-wide strategy that identifies and implements common NOAA-wide solutions; development and enforcement of standards which IT managers can use to successfully integrate into NOAA infrastructure; and development and implementation of common solutions with existing infrastructure to find efficiencies and reduce unnecessary duplications. As NOAA’s services evolve, it must leverage opportunities for procurement consolidations, share common infrastructure across Line Offices, and coordinate management of cross-agency infrastructure to maximize use of limited resources. This effort will lead to more effective IT infrastructure to support NOAA’s mission.

NOAA IT Management Functions

In addition to Strategic IT Planning, NOAA performs a number of other IT Management functions including Capital Planning and Enterprise Architecture, which form the Business Model for managing IT. Explanations of these functions may be found under the Policy and Programs section of the NOAA CIO Website (www.cio.noaa.gov).

Structure of NOAA's Strategic IT Plan

The main body of this plan is organized by NOAA's Mission Goals, as identified in NOAA's Strategic Plan. Using the [NOAA Strategic Plan 2006-2011](#) and the [OMB Exhibit 53](#) provides the framework to:

- Review and evaluate NOAA's IT spending; see Appendix 1 for the [NOAA BY08 Exhibit 53](#).
- Determine the net program performance benefits resulting from major capital investments in information systems and how those benefits relate to the accomplishment of the Goals.

The alignment of this document with the [NOAA Strategic Plan](#) will promote traceability and accountability for NOAA's IT program, from strategic planning through performance management. Each Mission Goal is further organized by: mission goal description; mission goal objectives; IT objectives; IT architecture gap and target statement; and initiatives. Only forward-looking strategies – new development, enhancements, and modernization initiatives (DME) from current NOAA IT Exhibit 300s – are included. Ongoing “steady state” (SS) or maintenance activities are not included in this Strategic IT Plan.

NOAA IT by Mission Goal

This section presents the IT strategy for NOAA Mission Goals that are in the NOAA Exhibit 53 Part 1, in the order of Goals from the NOAA IT Strategic Plan 2006-2011. The Goals are: Ecosystems; Climate; Weather and Water; and Commerce and Transportation; and Mission Support.

1. Ecosystems Mission Goal

Mission Goal Description

To conserve, protect, manage, and restore living marine, coastal, and ocean resources.

Mission Goal Objectives

- Increase number of fish stocks managed at sustainable levels.
- Increase number of protected species that reach stable or increasing population levels.
- Increase number of invasive species populations eradicated, contained, or mitigated.
- Increase number of habitat acres conserved or restored.
- Increase environmentally sound aquaculture production.

IT Strategic Objectives

- Gain efficiencies by applying economies of scale and national consolidation to regional operations.
- Ensure interoperability and seamless transmission of Ecosystem Observation Program (EOP) data through adoption of DMAC standards and protocols.
- Harmonize fisheries data and permitting systems to facilitate reporting and ease the burden for permit applicants.

IT Architecture Gap and Target Statement

See the Mission Support Goal, Modernize IT Infrastructure, IT Architecture Gap and Target Statement.

Major Initiatives

The following activities are NOAA's IT investments or planned investments that will meet the objectives identified above.

FIS – Integrate state and federal information collection systems to enhance ecosystems-based marine fisheries through improved data quality and management.

Permits – Implement a single consolidated records system for fishing permits.

Northeast Fisheries information Management System (NE-FIMS) – Develop an integrated fisheries dependent management system for the NMFS Northeast Region.

2. Climate Mission Goal

Mission Goal Description

To deliver reliable climate information and predictions in time scales of up to decades and longer to help minimize risks and maximize opportunities for decisions in agriculture, natural resources, water and energy usage, public policy, and public health.

Mission Goal Objectives

- Describe and understand the state of the climate system through integrated observations, analysis, and data stewardship.
- Improve climate predictive capability from weeks to decades, with an increase range of applicability for management and policy decisions.
- Improve the quality and quantity of climate observations, analyses, interpretation, and archiving by maintaining a consistent climate record and by improving our ability to determine why changes are taking place.

IT Strategic Objectives

- Support the scientific life cycle to help bring research and development initiatives to operational applications.
- Modernize central processing capabilities.
- Develop new modeling products for forecast and climate predictions.
- Increase capability to ingest, control, and access of high volumes (petabytes) of environmental data.

IT Architecture Gap and Target Statement

NOAA has a significant and critical role in the stewardship of environmental data. However, NOAA currently lacks the ability to integrate data from various observing systems and provide climate-related data with adequate information about the how the data was transformed from a specific measurement to data records delivered to the user. A wide variety of data such as open ocean data, atmospheric data, socio-economic data, coastal geology, ocean bathymetry, sea level, land glacier melt, river runoff, etc. is required by multiple disciplines within NOAA. Although NOAA's capacity to provide the linked information required by our users is currently limited, efforts such as GEO-IDE, EDSM, and CDMP are making progress toward closing the gap. CLASS is also being positioned as scaleable archive for the expected logarithmic increase in the quantity of observation data from new observing platforms over the coming decade. These efforts will better prepare the Nation to mitigate the effects of climate and weather extremes that are amplified by changes in population and societal trends in a changing climate.

Major Initiatives

The following activities are NOAA's IT investments or planned investments that will meet all of the IT objectives identified above.

Comprehensive Large Array-data Stewardship System (CLASS) – Develop a web-based data storage and distribution system for high volumes (petabytes) of archived environmental data derived from the following satellites and observing systems: GOES, POES DMSP, MetOp, EOS/MODIS, NPP, NPOESS, NEXRAD, USCRN, COOP/NERON, oceanographic sensors and buoys, and solar environmental data.

Global Earth Observation Integrated Data Environment (GEO IDE) – Establish a Services Oriented Architecture (SAO) for NOAA data management systems, providing common services, and leveraging the benefits of existing data management systems.

Historical Climatology Network (HCN) modernization is a major climate initiative – Develop a modern network of 1,000 stations nationwide, collecting accurate, near real-time surface weather data obtained with state-of-the-art measurement, monitoring and communication equipment to replace existing HCN sites.

National Integrated Drought Information System (NIDIS) – Provide drought information through web-based portal that organizes and delivers historical and real-time climate and weather information for researchers and emergency responders.

3. Weather and Water Mission Goal

Mission Goal Description

To produce timely and accurate environmental observations, analyses, predictions and warnings for a range of atmospheric and hydrologic conditions including hurricanes, tornadoes, flood, droughts, tsunamis, wildfires, air quality, and space weather.

Mission Goal Objectives

- Increase lead time and accuracy for warnings and forecasts.
- Improve predictability of the onset, duration and impact of hazardous and severe events.
- Increase development, application, and transition of advanced science and technology to operations.

IT Strategic Objectives

- Increase capability and performance of key observing systems.
- Modernize central processing capabilities.
- Modernize information dissemination capabilities.
- Develop new modeling/forecast products.

IT Architecture Gap and Target Statement

New observing system capabilities (e.g., NEXRAD dual-polarization capability, NPOESS Preparatory Project (NPP) and National Polar-Orbiting Environmental Satellite System (NPOESS)) will produce an exponential increase in the volume and velocity of data needed to make increasingly accurate and timely warnings, forecasts and environmental predictions. The new modeling/forecast products that will be derived from these data require significant new processing capabilities, and especially greater High Performance Computing (HPC) capacity. Likewise, the massive increases in data throughput will directly impact NOAA's telecommunications infrastructure and information dissemination capacity, both within NOAA and to external customers. Current IT capabilities and supporting infrastructure were designed for earlier generations of observing and product production requirements, and do not scale to meet the new requirements. Modernization of NOAA's computational capacity and significant enhancement to the supporting infrastructure are needed to enable the production and efficient dissemination of the new modeling and forecast products needed to satisfy current mission goals. Specific examples of IT gaps and targets include:

- The need for new HPC capacity to produce operational air quality forecasts nationwide (e.g., current capacity for ozone forecasting is limited and only partially deployed, and there is no capability to produce particulate matter forecasts).
- Environmental modeling requirements are driving the need for new IT subsystems to leverage new sensors being implemented at domestic aviation facilities as a replacement for manual observation techniques.
- Integrated observations require a level of interoperability in NOAA's climate, weather, ocean, water and ecosystems models, and a concomitant integration of the IT architecture that supports these models. The current IT architecture is not adequately integrated, and there is no common design architecture or integration roadmap to accomplish this. Integrated observations also require improved data management to enable sharing of observational data across disciplines.
- The current infrastructure to transmit the tsunami warning is inadequate.

- The current telecommunications infrastructure is inadequate to handle the significant increase in the volume of data from NEXRAD and the new generations of satellite observing systems, and will require re-architecting of the infrastructure and significant investments in new capacity.
- The information security posture of existing programs (e.g., National Centers for Environmental Prediction) requires enhancement and continued investments, consistent with existing and emerging threats.

Increased processing capabilities, infrastructure capacity and network bandwidth will allow for not only improved products, but also for their more efficient distribution. Additionally, development of a common architecture and integration roadmap will result in a more interoperable, robust and agile computing environment for warning, forecasts and predictions.

Major Initiatives

The following initiatives are NOAA's IT investments or planned investments that will meet the IT objectives identified above.

- Increase capability and performance of key observing systems.

Next Generation Weather Radar (NEXRAD) – Acquire modern hardware advancements in radar meteorology and information technology to improve the performance of the nation's Doppler weather radar network. NEXRAD acquires observation information about tornadoes and severe thunderstorms. The Dual Polarization modification will improve the ability to estimate precipitation amounts, detect size and location of hail and snow, and discriminate between weather and non-weather phenomena.

Office of Hydrologic Development (OHD) – Acquire advanced hardware and software to increase capabilities for nationwide water resource forecasting, enhanced short-term predictions of river levels and longer-term forecasts.

NOAA Environmental Real-time Observations Network (NERON) – Develop a modern network of 8,000 stations nationwide collecting accurate, near real-time surface weather data obtained with state-of-the-art measurement, monitoring, and communication equipment.

Tsunami – Upgrade telecommunications bandwidth, operational hardware, and related software for the development of improved Tsunami forecasting and modeling capabilities.

NPOESS Data Exploitation (NDE) – Provide the essential data processing and distribution systems including high speed computers, telecommunications, and automated procedures to deliver enhanced environmental observations to operational weather forecasters, government and international scientists, private enterprises, and university researchers from the NPP and NPOESS Satellites.

Automated Surface Observing System (ASOS) – Replace vintage 1980 architecture with state of the art data collection, processor, software, and network communications components for the nation's primary surface weather observing platform, which observes and collects basic weather elements (visibility, precipitation, temperature, wind etc.) at over 1000 locations including nearly 600 airports.

- Modernize central processing capabilities.

Advanced Weather Interactive Processing System (AWIPS) – Develop a modern technology platform and a continuous technology refresh cycle for NOAA's distributed data processing system used at NWS field offices, regional offices, and headquarters that integrates all meteorological, hydrologic, satellite, and weather radar data received from all other observational and analytical elements that enables the forecaster to prepare and issue more accurate and timely forecasts and warnings.

Weather and Climate Operational Supercomputer Systems (NCEP) – Upgrade the computational capabilities necessary to execute the numerical models that form the basis of all routine weather and climate forecasts produced in the US.

- Modernize information dissemination capabilities.

Telecommunications Gateway (NWSTG) System – Modernize the hardware, software, and telecommunications infrastructure, and provide a critical infrastructure protection backup for the NOAA central switching system that provides continuous acquisition and dissemination of domestic and foreign meteorological and hydrological data and products between providers and users.

NOAA Weather Radio Improvement Program (WRIP) – Replace the Console Replacement System, consolidate the NWR and NOAA Weather Wire Service (NWWS) in a single satellite network, and provide access to NNWR transmitters for dissemination of live localized and national emergency voice alerts.

- Develop new modeling/forecast products.

Air Quality Forecast Capability (AQF) – Develop the computational capability to provide 12km Ozone and Particulate Matter forecasts.

Fire Weather Services and Modeling – Develop the hardware, software, and telecommunications resources to provide live data to meteorologists during fire events. Develop the computation capability to produce a coupled fire spread mode to 1km spatial resolution.

4. [Commerce and Transportation Mission Goal](#)

Mission Description

To provide information, services, and products for transportation safety and for increased commerce on roads, rails, airways and waterways; provide marine, aviation, and surface weather forecasts, navigational charts, positioning information that is critical for air, sea, and surface transportation; response to hazardous material spills; provide search and rescue to save lives; and provide information for port and coastal operations.

Mission Goal Objectives

- Enhance navigational safety and efficiency by improving information products and services.
- Realize national economic, safety, and environmental benefits of improved, accurate positioning capabilities.
- Reduce weather-related transportation crashes and delays.
- Reduce human risk, environmental, and economic consequences resulting from natural or human-induced emergencies.

IT Strategic Objectives

- Transition aviation weather program products and services from a primarily text based model to a digital environment with machine-to-machine interface capabilities.
- Enhance capacity of the IT infrastructure to accommodate anticipated increases in the volume of data from observations, particularly in real-time.
- Transition nautical chart production from “dumb” raster data representation into more usable vector data.
- Merge the two separate production components of the Nautical Charting System into a single production system from which multiple products can be derived.

- Eliminate the single point of failure regarding the real-time provision of oceanographic and meteorological observations for safe maritime navigation and Homeland Security applications.

IT Architecture Gap and Target Statement

The Commerce and Transportation goal presents a number of IT challenges and opportunities. For example, the PORTS and NWLON programs have become tightly coupled, and integration of the IT systems is needed to support environmental stewardship and environmental assessment and prediction. The objectives of this integration initiative include: modernization and consolidation of the metadata within the two programs; institutionalization of a 24x7 data quality control system; continuation of partnerships with private industry and the national port and harbor infrastructure to deploy and operate additional PORTS; and improved real-time capabilities. These efforts will result in benefits to community preparedness and response during severe weather events, protect lives and property, and minimize impacts on sensitive habitats. Another example is NOAA's current limited ability to conduct the aviation weather program in a digital environment. Legacy NOAA products and services in this arena are primarily text-based, but our stakeholders are using decision making tools that leverage automated graphical capabilities, which is driving a requirement to perform machine-to-machine communication with dynamic displays. A final example is NOAA's ability to provide adequate data stewardship for the growing volumes of hydrographic survey and other environmental data archived and managed by the National Geophysical Data Center. Closing this gap through the CLASS investment will enable NOAA to fulfill its responsibilities to the U.S. marine transportation system with adequate and accurate products and services to aid safe movement on our waterways.

Major Initiatives

Hydrographic Data Management and Communications Upgrade (Hydro DMAC) – Use Commercial Off the Shelf (COTS) hardware and software to provide the infrastructure to transfer and store hydrographic survey data.

5. Mission Support Goal

In this section Strategic goals for IT infrastructure are discussed. IT infrastructure is defined as all common and enterprise level functions and systems that support mission activities and are not directly used for most mission programs named in Part 1. It includes: IT Security, networks, end-user workstations, office automation hardware and software, help desks, financial and administrative systems. In accordance the NOAA Strategic Plan: NOAA will ensure state-of-the-art IT infrastructure and secure information technology and systems with the objective of increasing internal and external availability, reliability, security, and the use of information technology and services

This section presents the IT strategy for NOAA Mission Support that is funded in the NOAA Exhibit 53 Part 1, including the Satellite Systems Mission Support Sub-Goal, and, as specified per OMB Circular A-11, the programs for Financial Management and e-Gov.

5.1. Satellite Services Sub-Goal

Mission Sub-Goal Description

To deliver accurate, timely, and reliable satellite environmental observations and integrated products.

Mission Sub-Goal Objectives

- Increase lead time and accuracy for warnings and forecasts.
- Improve predictability of the onset, duration and impact of hazardous and severe events.

IT Strategic Objectives

- Increase capability and performance of key observing systems.
- Modernize central processing capabilities.
- Develop ground systems for new/interim satellites.

IT Architecture Gap and Target Statement

New satellites and satellite series (NPP, NPOESS, GOES-R) require new advanced ground systems. The development of completely new ground systems for command and control, data ingest and processing, product generation is necessary for the new capabilities that will be provided by the new geostationary and polar orbiting satellites that will launch in the next five to ten years. The instruments that will be enabled on these new satellites will demand that their ground systems handle not only the increased downstream bandwidth but also increased granularity of the data being provided. The new NOAA Satellite Operations Facility (NSOF) in Suitland, Maryland will allow for the physical consolidation of the ground system command and control facilities for most of the investments in Satellite Services.

Major Initiatives

The following activities are NOAA's IT investments or planned investments that will meet all of the IT objectives identified above.

NPOESS Ground System – Develop the ground segments to operate, monitor, control, and produce the environmental observation products for the Nation's civil and military polar-orbiting operational meteorological satellite system into a single national entity capable of satisfying both civil and national security requirements for space-based remotely sensed environmental data.

GOES-R Ground System – Develop the ground segments to operate, monitor, control, and produce the environmental products for NOAA's next generation of civilian geostationary satellites.

5.2. Operate the Financial Management and Administrative Systems

IT Goal Description

To provide central computer operations and management for NOAA's administrative and financial systems.

IT Goal Objectives

Improve the efficiency and performance of financial, administrative, workforce management, and acquisition transactions and services.

IT Strategic Objectives

- Invest in IT to improve processing of financial, administrative, workforce, management and acquisition services.
- Consolidate the Commerce Business System (CBS) to Census.
- Provide the system components for the Management and Reporting Systems (MARS).
- Support the development of the End-to-End (E2E) system.

IT Architecture Gap and Target Statement

Improve the server topology to allow for server consolidation, allowing for better integration and improved performance. CBS and MARS support the CFO Act to produce accurate and timely financial reports.

Major Initiatives

Commerce Business System (CBS) – Consolidate CBS at the Census Bureau Bowie Data Center.

Management and Reporting Systems (MARS) – Provide the front end to CBS for better reporting.

5.3. Align IT with the OMB Lines of Business and E-Gov initiatives

IT Goal Description

Expand E-Government by utilizing technology to improve how the Federal Government serves citizens, businesses and agencies.

IT Goal Objectives

NOAA will participate with other federal agencies to construct, transition to, and implement the Geospatial Line of Business. NOAA will be a provider of e-Government services for weather events, earth observing, environments and geospatial data. Within NOAA, support program collaboration for geospatial initiatives, regional ecosystem responses, and incident responses.

IT Strategic Objectives

- Leverage the existing Geographic Information Systems (GIS) Committee, under the CIO Council, to support the NOAA implementation of the federal framework for the GeoSpatial Line of Business (LOB).
- Work with government-wide geospatial standards and architecture through participation in the Geospatial LOB and the national geospatial data infrastructure.
- Create composite geospatial data products that span NOAA Line and Program office missions.
- Remove the physical barriers to geospatial data access within NOAA.
- Promote interoperability and collaboration within NOAA via eGov.

IT Architecture Gap and Target Statement

The Federal Government continues to improve services and deliver results through the adoption and implementation of the President's E-Government (E-Gov) initiatives and government wide solutions. The United States Government is one of the largest users and acquirers of data, information and supporting technology systems in the world, by investing approximately \$65 billion annually on Information Technology (IT). The Federal Government has made improvements but continues to strive to be the world's leader in managing technology and information to achieve the greatest gains of productivity, service and results. For the past five years, the President's Management Agenda (PMA) initiative to Expand E-Government has delivered significant results to the taxpayer and federal employees alike. The departments and agencies are determined to build upon past success and continue to apply the principles and complete implementation of government wide solutions to achieve greater savings, better results and improved customer service levels.

Major Initiatives

The following activities are NOAA's IT investments or planned investments that will meet all of the IT objectives identified above.

E-Rulemaking – Deploy the Federal Docket Management System throughout NOAA Fisheries in direct support of the President's Management Agenda E-Rulemaking initiative.

E-Gov – NOAA will fully align with the 24 national E-Gov initiatives. Specifically, NOAA has a role in the following initiatives: 1) Recreation One-Stop, 2) E-Rulemaking, 3) Geo-Spatial One-Stop, 4) Disaster Management, 5) Grants.gov.

Geospatial Line of Business – NOAA staff will be active participants in the Geospatial Line of Business by actively attending Geo LOB Task Force meetings, supporting the development of the Quantitative and Qualitative Geospatial Investments Data Call templates, responding to Quantitative Geospatial Data Calls, supporting development of A-16 report templates, reviewing the Geospatial Coordination FACA Charter, reviewing and commenting on outputs from Joint Business Case and Performance Management Working Group, reviewing plans for the formulation of the Geo LoB Program Management Office.

5.4. Ensure IT Security

IT Goal Description

Implements policies, standards, and procedures for NOAA IT systems which are consistent with government-wide laws and regulations and information assurance standards to adequately protect NOAA's information systems, whether maintained in-house or commercially, and prevent any unplanned disruptions of processing which would seriously impact NOAA's mission.

IT Goal Objectives

To protect NOAA from information system intrusions, and prevent compromises that put NOAA at risk for any disruption of operations or unauthorized access to information resources.

IT Strategic Objectives

- Achieve and maintain Certification and Accreditation (C&A) for all NOAA IT systems.
- Full compliance with the Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology (NIST) Guidance Special Publication 800-53A.
- Employ an affordable and repeatable certification and accreditation process.
- Employ a centralized and standardized certification and accreditation process.
- Integrate the use of standard security controls, verification techniques and procedures.
- Develop evidence to support informed, risk-based accreditation decisions by senior agency officials.
- Develop or enhance appropriate technical, personnel, administrative, physical, environmental, and telecommunications safeguards in IT systems.
- Develop or enhance an enterprise-level robust Patch Management process and system.
- Established and maintain an incident response and intrusion capability.
- Deploy regional Intrusion Detection Systems (IDS).
- Encrypt Laptops and other portable devices.
- Secure Personally Identifiable Information (PII).
- Fund IT Security at 10% of systems life cycle costs.
- Implement Homeland Security Presidential Directive (HSPD) -12.

IT Architecture Gap and Target Statement

A number of critical issues remain in the execution of a sound IT security program within NOAA. These issues include: 1) Certification and Accreditation of all systems, 2) the development of a standardized and uniform process for conducting C&As, 3) producing quality C&As that achieves DOC IG verification of the C&A process, 4) inadequate funding for IT security in all systems and projects, 5) Implementation of the new National Institute of Standards and Technology (NIST) Guidance Special Publication 800-53A. The targets for this goal are to provide full capability of securing and documenting the security of NOAA systems, formulate and enforce IT security policy, timely responding to security incidents, and develop

processes which ensure consistent application of security controls. Achieving the target architecture will result in a more consistent, reliable, and secure IT environment for NOAA systems.

Major Initiatives

Laptop encryption/PII – Implement DOC policy on laptop security, and encrypt all laptops and PDAs to be compliant with FIPS-140-2 level of encryption, completed June 1, 2007 and maintained ongoing.

C&A Schedule – Re-certify and update C&As on all NOAA systems within required time constraints.

Certification & Accreditation (C&A) Process – Develop a standardized and automated C&A model, and business process.

Standard Configurations - Create standard configurations for desktops, laptops, servers, firewalls, and routers.

N-CIRT – Establish Computer Incident Response Teams at Boulder and Seattle.

Patch management – Deploy an enterprise patch management tool.

Spam and virus protection – Implement comprehensive spam and virus prevention at the Messaging Operations Center.

5.5. Modernize IT Infrastructure

IT Goal Description

To manage NOAA’s IT infrastructure including wide and local area networks, messaging systems, collaboration tools, telephony, workstations, help desks, enterprise COTS software, and administrative applications.

IT Goal Objectives

- To develop a new enterprise infrastructure under a “One-NOAA” approach that provides for common solutions across all Line Offices.
- To consolidate, integrate, and reduce the total cost of operations for NOAA’s existing IT infrastructure.

IT Strategic Objectives

- Eliminate “Single Points of Failure”.
- Establish a One-NOAA Web Presence.
- Consolidate Web servers.
- Establish a single NOAA Wide Area Network (NOAAnet).
- Consolidate messaging.
- Implement a NOAA pilot & test proof-of-concept for IPv6, working in collaboration with DOC.
- Expand enterprise software licensing.
- Consolidate DC Metro Area Help Desks.
- Deploy a single SSMC Telephone System to upgrade from legacy systems..
- Establish a single IT Services Contract.
- Modernize the staff directory.
- Identify a single collaboration software suite.

IT Architecture Gap and Target Statement

Historically IT infrastructure has evolved independently among the LOs. For example, each LO has independently developed and manages wide area networks, phone systems, local area networks, and help desks at major NOAA locations. There are, however, some enterprise level successes. These include a Washington DC area Metropolitan Area Network, enterprise email based upon the Sun One and Mozilla, and Oracle calendaring. These successes notwithstanding, NOAA has a long way to go before it can be declared to have an enterprise level IT infrastructure. Committed management and technical action must be taken on a number of fronts including, Wide Area Networks, Web management, and collaboration software.

For example, NMFS mission success is dependent on the improving IT infrastructure. NMFS currently maintains its own wide area network (WAN), based on 1990's Frame Relay Technology, with remote users being provided access through expensive Virtual Private Network (VPN) technology. Since fielding this network, collaborative data relationships have evolved and demands for bandwidth have exceeded the capacity of this technology to keep pace in a cost effective manner. Newer and more scaleable technologies such as Multi-Protocol Layered Switching (MPLS) have emerged in recent years, offering a cost effective alternative that satisfies the bandwidth and security requirements of NMFS systems. NMFS is currently piloting an MPLS network, and pending the results of this pilot, the vision is complete replacement of the existing Frame Relay Network with an MPLS based solution that is fully integrated with NOAAnet. This would immediately improve bandwidth and fulfill the security requirements, while eliminating single points of failure and enable future multi-media capabilities (e.g., voice and video).

Major Initiatives

Consolidate Web Servers – Physically consolidate web servers at the SSMC Web Operations Center (WOC).

Directory Integration – Integrate the e-mail director, NOAA Locator, organization table, and network directories.

Enterprise licensing – Support the federal government-wide approach for enterprise licenses on common software, known as Smart Buy in the areas of Office Automation; Network Management; Antivirus; Database; Business Modeling Tools; and Open Source software support. Develop enterprise license agreements for widely used software.

Help Desk Consolidation – Consolidate Help Desks in the Washington DC area.

Intranet – Establish an intranet for the NOAA locations that is secure and seamless to the NOAA community.

Local Area Networks (LANs) – Rationalize LANs at all NOAA campuses at the enterprise level across all LOs.

Messaging – Migrate to the DOC Microsoft based messaging standard.

NOAAnet – Develop a single integrated Wide Area Network that will move NOAA from a collection of twelve legacy networks, to a consolidated network architecture that connects major NOAA locations and functions at single logical points.

One NOAA Web Presence – Project a One-NOAA branding on all public accessible web pages to convey the message that all mission goals, programs, organizations, functions, and capabilities are produced and delivered as One-NOAA.

Standard Desktop Configuration – Implement standard a desktop configuration for Windows XP and VISTA in order to provide a baseline level of security, reduce risk from security threats and

vulnerabilities, to improve system performance, decrease operating costs, and ensure public confidence in the confidentiality, integrity, and availability of government information.

Strategic Sourcing Support Services – Implement a strategic sourcing contract for IT support services in the areas of network management, messaging, collaborative tools, web services, IT security, infrastructure support, desktop and server management, and applications development and management.

Telephony – Rationalize telephone systems at all NOAA campuses and major locations at the enterprise level.

5.6. Establish Enterprise Architecture and Planning

The NOAA Enterprise Architecture (EA) serves as a strategic roadmap for transitioning legacy IT investments to the future, based on the evolving mission needs and priorities. The EA provides a holistic and integrated view of NOAA, including business processes (e.g., the NOAA Functional Model), performance expectations, the IT services and applications required to support the processes and enable better performance, the data/information required, and the technical standards and specifications needed to achieve enterprise IT goals. The EA includes a description of the current (legacy) environment, the target environment needed to support NOAA's strategic business direction and priorities, and the transition/sequencing plan for moving to the target IT environment. In keeping with PPBES, the EA is organized by NOAA's mission goals.

IT Goal Description

The Enterprise Architecture is a management practice to maximize the contribution of NOAA's resources to achieve its mission. The EA establishes a clear line-of-sight from business requirements to IT investments to measurable performance improvements for the entire NOAA enterprise.

IT Goal Objectives

- Ensure that IT security requirements are fully integrated with the NOAA EA and governance process.
- Simplify and unify NOAA's IT architecture across all Line Offices, mission areas and programs.
- Inform and guide PPBES decisions with IT implications through architecturally based analysis of alternatives to close program gaps.
- Provide vetted IT target architecture to guide and inform NITRB investment decisions, and serve as a vehicle for CIO monitoring and enforcement of agreed-to transition plans.
- Provide specific and actionable guidance to program managers for IT components (e.g., standards for interoperability).

IT Strategic Objectives

- Develop framework and process for incorporating IT security requirements into the NOAA EA
- Establish EA life-cycle, governance model and repeatable maintenance process.
- Integrate the EA with PPBES and CPIC.
- Identify and vet business principles to drive the EA.
- Identify and promote opportunities to consolidate IT architecture components (e.g., applications, services, etc.) for shared business requirements across NOAA.
- Assess the alignment of NOAA's IT resources with agency mission goals and objectives, and develop transition strategies to close gaps where needed.
- Identify and foster enterprise-wide adoption of open standards to enable system interoperability and data sharing across applications and functional disciplines (TRM and Data Architecture).

IT Architecture Gap and Target Statement

The NOAA EA satisfies external stakeholder (OMB and DOC) technical expectations, but is generally recognized as a somewhat academic exercise with marginal return on value within NOAA. The intent is to transform it into a practical, relevant and value added tool to guide CIO and corporate decisions regarding NOAA's IT future. This transformation will begin with an initiative to integrate the NOAA security architecture into the EA, leveraging the resources and urgency of need associated with IT security. Subsequent efforts will focus on usage of the EA to consolidate resources (e.g. infrastructure) wherever possible, and on integrating applications and data across programs and Line Offices. Currently, the NOAA EA is not approved by NOAA goal team leads, although this level of vetting is essential to achieve the buy-in needed to implement the target architecture. Education, outreach and a concerted and focused campaign to sell the NOAA EA to goal team leads and other strategically placed stakeholders is needed to close this gap. Apart from the NOSA segment architecture (a subset and extension of the NOAA EA), the EA is not structured in a manner that enables meaningful or efficient analysis of the significant amounts of empirical information contained within the NOAA EA document. This is a significant gap which limits the potential and is showstopper barrier to achieving the long-term goals of EA. In concert with DoC, NOAA is currently considering alternatives for closing this gap, with a roll-out and expansion of the CasaNOSA repository and NOSA architecture methodology as a viable option.

Major Initiatives

Security Integration – Integrate IT security into the NOAA EA, including Homeland Security Presidential Directive (HSPD) -12.

EA Processes – Document the EA lifecycle, maintenance process and governance model. Integrate the EA with PPBES and CPIC. Specify EA tool requirements (repository and analytical capabilities) and acquire, implement and maintain a solution. Develop and execute an EA communications, education and outreach strategy and plan.

Data Management – Evolve and mature the NOAA data architecture through partnerships with the DMIT and DMC.

Technical Reference Model (TRM) – Establish and publish a NOAA TRM.

Segment Architecture – Define, develop and maintain the Segment Architectures beyond the NOAA Observing Systems Architecture (NOSA).

5.7. Meet NOAA and federal-wide objectives of Grants Management

The Grants Management Division (GMD) supports NOAA's mission by reviewing solicitations for applications, processing applications, negotiating awards, managing administrative and financial aspects of awards, monitoring progress against expenditures, resolving audit problems, and closing out awards when the projects are completed.

IT Goal Description

To provide a fast coherent, flexible and robust application in support of the evaluation, award, and long-term management and operations of the NOAA grant making function.

IT Goal Objectives

- Develop grants management data standards based on DOC's Interim Grants Manual.
- Generate corporate standard business processes which contribute to a more efficient and effective use of government-wide grants management resources.
- Provide improved customer access and communications by establishing direct lines of accountability with program managers, grant administrative staff and external customers.

IT Strategic Objectives

Provide a single unified grant processing and administration system, using an electronic solution that will reduce processing time and increase efficiency.

IT Architecture Gap and Target Statement

The NOAA Grants Online (GOL) system provides a scalable and robust system for handling all aspects of the grant process, from researching and applying for grants, to reporting on progress, to their closure. GOL receives and parses direct downloads hourly from the www.grants.gov citizen interface.

Major Initiatives

None.

Appendix 1. NOAA FY08 Exhibit 53, version December 28, 2006

**Agency IT Investment Portfolio
Department of Commerce
Dec. 28, 2006 : \$M
FY 2008 Budget Exhibit 53 - NOAA**

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-00-00-00-00-0000-00	Agency Total IT Investment Portfolio		570.187	604.94	600.201	147.96	128.606	112.424	422.227	476.334	487.777		
006-00-01-00-00-0000-00	Part 1. IT Systems by Mission Area		457.969	488.144	480.96	147.96	128.606	112.374	310.008	359.538	368.586		
006-00-01-01-00-0000-00	Financial Management		6.653	6.555	8.167	0.456	0.45	2	6.197	6.105	6.167		
006-48-01-01-01-3801-00	NOAA/OCIO/ Financial Management IT Operations	This system provides the central computing services for NOAA financial and administrative activities.	5.725	5.68	7.23	0.456	0.45	2	5.269	5.23	5.23	55	1
006-48-01-01-01-3801-04	006-48-1450-0	NOAA: ORF	5.725	5.68	7.23	0.456	0.45	2	5.269	5.23	5.23		
006-48-01-01-01-3801-09	Funding Source Subtotal		5.725	5.68	7.23	0.456	0.45	2	5.269	5.23	5.23		
006-48-01-01-01-3803-00	NOAA/OCIO/ NOAA Non-Core CBS Financial Management System (PCS)	In addition to DOC CBS, NOAA uses its non-core CBS financial system module, Permanent Change Station (PCS) in accordance with departmental guidelines.	0.928	0.875	0.937	0	0	0	0.928	0.875	0.937	55	1
006-48-01-01-01-3803-04	006-48-1450-0	NOAA: ORF	0.928	0.875	0.937	0	0	0	0.928	0.875	0.937		
006-48-01-01-01-3803-09	Funding Source Subtotal		0.928	0.875	0.937	0	0	0	0.928	0.875	0.937		
006-00-01-12-00-0000-00	NOAA - Weather and Water		203.471	252.198	250.733	41.67	49.304	43.111	161.801	202.894	207.622		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-12-01-3101-00	NOAA/NWS/ Advanced Weather Interactive Processing System (AWIPS)	AWIPS is a nationwide interactive computer and communications system that integrates all meteorological, hydrologic, satellite, and weather radar data to enable the forecaster to prepare and issue more accurate and timely forecasts and warnings.	46.89	50.368	50.531	13.28	12.765	12.765	33.61	37.603	37.766	55	1
006-48-01-12-01-3101-04	006-48-1460-0	NOAA: PAC	13.28	12.764	12.764	13.28	4.457	3.571	0	8.307	9.193		
006-48-01-12-01-3101-04	006-48-1450-0	NOAA: ORF	33.61	37.603	37.766	0	0	0	33.61	37.603	37.766		
006-48-01-12-01-3101-09	Funding Source Subtotal		46.89	50.367	50.53	13.28	4.457	3.571	33.61	45.91	46.959		
006-48-01-12-01-3102-00	NOAA/NWS/ Next Generation Weather Radar (NEXRAD) System Product Improvement	The objectives of the NEXRAD Product Improvement (NPI) Program are to apply advancements in radar meteorology and information technology to improve the performance of the nation's weather radar network.	8.344	8.376	8.376	8.344	8.376	8.376	0	0	0	55	1
006-48-01-12-01-3102-04	006-48-1460-0	NOAA: PAC	8.344	8.376	8.376	8.344	8.376	8.376	0	0	0		
006-48-01-12-01-3102-09	Funding Source Subtotal		8.344	8.376	8.376	8.344	8.376	8.376	0	0	0		
006-48-01-12-01-3103-00	NOAA/NWS/ Next Generation Weather Radar (NEXRAD) Operations and Maintenance	NEXRAD is NWS prime observation system for acquiring information about tornados & severe thunderstorms. The Doppler weather radar system is a tri-agency program of DOC, DOT, & DOD.	8.662	8.662	8.662	0	0	0	8.662	8.662	8.662	55	1
006-48-01-12-01-3103-04	006-48-1450-0	NOAA: ORF	8.662	8.662	8.662	0	0	0	8.662	8.662	8.662		
006-48-01-12-	Funding Source		8.662	8.662	8.662	0	0	0	8.662	8.662	8.662		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
01-3103-09	Subtotal												
006-48-01-12-01-3104-00	NOAA/NWS/ NCEP Weather and Climate Operational Supercomputer Systems (WCOSS Primary and Backup)	The NOAA NCEP Weather & Climate Supercomputer Systems (Primary and Backup) produces environmental forecasts and assimilate data used to execute the numerical models that form the basis for all routine weather and climate forecasts produced in the US.	30.07	30.329	30.479	0	0	0	30.07	30.329	30.479	55	1
006-48-01-12-01-3104-04	006-48-1460-0	NOAA: PAC	26.07	26.169	26.169	0	0	0	26.07	26.169	26.169		
006-48-01-12-01-3104-04	006-48-1460-0	NOAA: PAC B	4	4.16	4.31	0	0	0	4	4.16	4.31		
006-48-01-12-01-3104-09	Funding Source Subtotal		30.07	30.329	30.479	0	0	0	30.07	30.329	30.479		
006-48-01-12-01-3106-00	NOAA/NWS/ National Weather Service Telecommunication Gateway (NWSTG) System (Legacy, Replacement, and CIP)	The NWS Telecommunication Gateway disseminates (message-switching services) weather observations and guidance data to a national and international community of customers. The Gateway services this customer base in a near-real-time operational environment.	13.001	15.629	16.454	1.79	0	0	11.211	15.629	16.454	22	1
006-48-01-12-01-3106-04	006-48-1450-0	NOAA: ORF	12.508	15.134	15.259	1.297	0	0	11.211	15.134	15.259		
006-48-01-12-01-3106-04	006-48-1460-0	NOAA: PAC	0.493	0.495	1.195	0.493	0	0	0	0.495	1.195		
006-48-01-12-01-3106-09	Funding Source Subtotal		13.001	15.629	16.454	1.79	0	0	11.211	15.629	16.454		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-12-01-3111-00	NOAA/NWS/ NOAA Weather Radio (NWR) All Hazards Weather Network (NAHWN) aka All Hazards Emergency Message Collection System (HazCollect)	This project is to automate the collection and dissemination of non-weather civil-emergency messages over NOAA Weather Radio (NWR) and to quickly and securely authenticate messages received by emergency managers.	0	0.75	0.75	0	0	0	0	0.75	0.75	00	1
006-48-01-12-01-3111-04	006-48-1460-0	NOAA: PAC	0	0	0	0	0	0	0	0	0		
006-48-01-12-01-3111-04	006-48-1450-0	NOAA: ORF	0	0.75	0.75	0	0	0	0	0.75	0.75		
006-48-01-12-01-3111-09	Funding Source Subtotal		0	0.75	0.75	0	0	0	0	0.75	0.75		
006-48-01-12-01-3112-00	NOAA/NWS/ National Air Quality Forecast Capability	This proposal is to implement NOAA Air Quality forecasting operationally.	2.959	6.75	7.755	2.959	6.75	7.755	0	0	0	55	1
006-48-01-12-01-3112-04	006-48-1450-0	NOAA: ORF	2.959	6.75	7.755	2.959	6.75	7.755	0	0	0		
006-48-01-12-01-3112-09	Funding Source Subtotal		2.959	6.75	7.755	2.959	6.75	7.755	0	0	0		
006-48-01-12-01-3113-00	NOAA/NWS/ NCEP Weather and Climate Computing Infrastructure Services (WCCIS)	The NOAA NWS NCEP Weather and Climate Computing Infrastructure Services (WCCIS) provide support resources for (a) weather and climate forecasting capabilities and (b) operational model development for forecasts and warnings.	23.997	29.009	29.976	0	0	0	23.997	29.009	29.976	55	1
006-48-01-12-01-3113-04	006-48-1450-0	NOAA: ORF	23.997	29.009	29.976	0	0	0	23.997	29.009	29.976		
006-48-01-12-01-3113-09	Funding Source Subtotal		23.997	29.009	29.976	0	0	0	23.997	29.009	29.976		
006-48-01-12-01-3115-00	NOAA/NWS/ NWS Office of Hydrologic Development (OHD)	Nationwide water resource forecasting capability, enhanced short-term predictions of river levels and	3.646	4.351	4.451	0.99	2.025	2.075	2.656	2.326	2.376	55	1

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
		longer-term probabilistic forecasts.											
006-48-01-12-01-3115-04	006-48-1450-0	NOAA: ORF	3.646	4.351	4.451	0.99	2.025	2.075	2.656	2.326	2.376		
006-48-01-12-01-3115-09	Funding Source Subtotal		3.646	4.351	4.451	0.99	2.025	2.075	2.656	2.326	2.376		
006-48-01-12-01-3117-00	NOAA/NWS/ NERON-NOAA Environmental Real-time Observations Network (NERON)	IT resources for NERON are used to ingest, quality control and assure data, produce metadata and maintenance metrics and acquire and ensure continuous communications of NERON sites for near real-time temperature and precipitation data.	4.218	4.234	4.234	4.218	4.234	3.848	0	0	0.386	00	1
006-48-01-12-01-3117-04	006-48-1450-0	NOAA: ORF	0	0	0	0	0	0	0	0	0		
006-48-01-12-01-3117-04	006-48-1460-0	NOAA: PAC	4.218	4.234	4.234	4.218	4.234	3.848	0	0	0.386		
006-48-01-12-01-3117-09	Funding Source Subtotal		4.218	4.234	4.234	4.218	4.234	3.848	0	0	0.386		
006-48-01-12-01-3118-00	NOAA/NWS/ NWS Regions & Field	IT resources for weather and water information and warning services are used by the NWS Regions & Fields, the single points of access, to federal, state and local governments and emergency manager coordinators in every state.	21.9	21.9	21.9	0	0	0	21.9	21.9	21.9	55	1
006-48-01-12-01-3118-04	006-48-1450-0	NOAA: ORF	21.9	21.9	21.9	0	0	0	21.9	21.9	21.9		
006-48-01-12-01-3118-09	Funding Source Subtotal		21.9	21.9	21.9	0	0	0	21.9	21.9	21.9		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-12-01-3119-00	NOAA/NWS/NDBC Ocean Observing System of Systems (NOOSS)	Investments are for the operations and maintenance of the NWS/NDBC Ocean Observing System of Systems (NOOSS). NOOSS includes the Data Assembly Center, C-MAN, meteorological, oceanographic, Tsunami, and climate (el nino) buoys.	5.4	5.425	5.425	0	0	0	5.4	5.425	5.425	55	1
006-48-01-12-01-3119-04	006-48-1450-0	NOAA: ORF	5.4	5.425	5.425	0	0	0	5.4	5.425	5.425		
006-48-01-12-01-3119-09	Funding Source Subtotal		5.4	5.425	5.425	0	0	0	5.4	5.425	5.425		
006-48-01-12-01-3120-00	NOAA/NWS/ NWS Dissemination Systems (NDS)	Investments for three NWS information dissemination systems used to provide the US public and emergency managers warnings of severe weather events and weather information in support of aviation and civil activities in the Atlantic and Pacific basins.	3.818	3.828	4.438	0	0	0	3.818	3.828	4.438	55	1
006-48-01-12-01-3120-04	006-48-1450-0	NOAA: ORF	3.818	3.828	4.438	0	0	0	3.818	3.828	4.438		
006-48-01-12-01-3120-09	Funding Source Subtotal		3.818	3.828	4.438	0	0	0	3.818	3.828	4.438		
006-48-01-12-01-3204-00	NOAA/NESDIS/ Office of Satellite Data Processing and Distribution (OSDPD) Systems Critical Infrastructure Protection (CIP)	The NESDIS OSDPD-CIP project will provide a backup facility to the Environmental Satellite Processing Center (ESPC) primary facility that is the central processing system for environmental satellite data.	2.798	2.772	2.772	2.798	1.956	1.212	0	0.816	1.56	55	1
006-48-01-12-	006-48-1460-0	NOAA: PAC	2.798	2.772	2.772	2.798	1.956	1.212	0	0.816	1.56		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
01-3204-04													
006-48-01-12-01-3204-09	Funding Source Subtotal		2.798	2.772	2.772	2.798	1.956	1.212	0	0.816	1.56		
006-48-01-12-01-3211-00	NOAA/NESDIS/ NPOESS Data Exploitation (NDE)	The NPOESS Data Exploitation Project will develop, implement and test key data processing and distribution systems within NOAA/NESDIS and deliver enhanced environmental observations to NOAA Operational Centers and other civilian customers.	4.248	4.455	2.455	4.248	4.455	2.455	0	0	0	00	1
006-48-01-12-01-3211-04	006-48-1460-0	NOAA: PAC	4.248	4.455	2.455	4.248	4.455	2.455	0	0	0		
006-48-01-12-01-3211-09	Funding Source Subtotal		4.248	4.455	2.455	4.248	4.455	2.455	0	0	0		
006-48-01-12-01-3213-00	NOAA/NESDIS/ Environmental Satellite Processing Center (ESPC)	This investment is for the consolidation of two environmental processing systems for Polar (CEMSCS) and GOES (SATEPS) satellite data, into one central processing system for environmental satellite data, Environmental Satellite Processing Center (ESPC).	18.659	19.311	22.673	1.543	2.043	4.625	17.116	17.268	18.048	25	1
006-48-01-12-01-3213-04	006-48-1450-0	NOAA: ORF	16.401	16.944	20.529	0.627	0.716	3.352	15.774	16.228	17.177		
006-48-01-12-01-3213-04	006-48-1460-0	NOAA: PAC	2.258	2.367	2.144	0.916	1.327	1.273	1.342	1.04	0.871		
006-48-01-12-01-3213-09	Funding Source Subtotal		18.659	19.311	22.673	1.543	2.043	4.625	17.116	17.268	18.048		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-12-01-3804-00	NOAA/OCIO/ NOAA R&D High Performance Computing System	High performance computing resources are used for weather and climate research in the development and use of sophisticated numerical models to predict and understand atmospheric and oceanic phenomena.	0.5	26.408	26.461	0	0	0	0.5	26.408	26.461	25	1
006-48-01-12-01-3804-04	006-48-1460-0	NOAA: PAC	0	16.179	16.179	0	0	0	0	16.179	16.179		
006-48-01-12-01-3804-04	006-48-1450-0	NOAA: ORF	0.5	10.229	10.282	0	0	0	0.5	10.229	10.282		
006-48-01-12-01-3804-09	Funding Source Subtotal		0.5	26.408	26.461	0	0	0	0.5	26.408	26.461		
006-48-01-12-02-3109-00	NOAA/NWS/ Automated Surface Observing System (ASOS)	ASOS, the nation's primary surface weather observing network, supports aviation operations & weather forecasting. Replacing manual surface observation techniques, it provides improved efficiency to acquire & record surface atmospheric phenomena.	0.4	0.3	0.3	0.1	0	0	0.3	0.3	0.3	55	2
006-48-01-12-02-3110-00	NOAA/NWS/Data Assimilation and Modeling	IT resources used to develop new methods for coupling atmosphere, ocean, land surface and cryosphere models which will enable the next generation of numerical forecast systems to be developed.	2.181	2.181	2.181	0	0	0	2.181	2.181	2.181	55	1

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-12-02-3122-00	NOAA/NWS/ NOAA Profiler Network	NOAA NWS Profiler is a vertical looking, radar-based observation system for acquiring information about tornados, flash floods, and winter storms. There are 35 operational Profiler radars deployed in the US, 32 in the central US and 3 in Alaska.	0.38	0.46	0.46	0	0	0	0.38	0.46	0.46	55	1
006-48-01-12-03-3998-00	NOAA/CAO/ NOAA Center Weather and Climate Prediction (NCWCP) - Ex 53 (IT equipment)	This is for the IT component of the investment for the new construction of the NCWCP. The IT resources are to provide the critical IT and communications infrastructure in the NCWCP and will support parallel operations during the move.	1.4	6.7	0	1.4	6.7	0	0	0	0	00	
006-00-01-13-00-0000-00	NOAA - Climate		82.035	73.466	78.046	11.478	7.789	10.251	70.557	65.677	67.795		
006-48-01-13-01-3205-00	NOAA/NESDIS/ Comprehensive Large Array-data Stewardship System (CLASS)	The CLASS project will implement efficient management of high volumes (petabytes) of data and automate the means of data ingest, quality control and access.	14.391	8.966	8.966	11.328	6.439	5.831	3.063	2.527	3.135	55	1
006-48-01-13-01-3205-04	006-48-1460-0	NOAA: PAC	8.376	6.476	6.476	6.861	5.449	4.841	1.515	1.027	1.635		
006-48-01-13-01-3205-04	006-48-1460-0	NOAA: PAC B	4.467	0.99	0.99	4.467	0.99	0.99	0	0	0		
006-48-01-13-01-3205-04	006-48-1450-0	NOAA: ORF	1.548	1.5	1.5	0	0	0	1.548	1.5	1.5		
006-48-01-13-01-3205-09	Funding Source Subtotal		14.391	8.966	8.966	11.328	6.439	5.831	3.063	2.527	3.135		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-13-01-3207-00	NOAA/NESDIS Global Earth Observation Integrated Data Environment (GEO IDE)	Development of a NOAA Global Earth Observation Integrated Data Environment--establishing a services oriented architecture for NOAA data management systems, providing common services, and leveraging the benefits of existing data management systems.	0.15	0.6	2.62	0.15	0.6	2.62	0	0	0	00	2
006-48-01-13-01-3207-04	006-48-1460-0	NOAA: PAC	0.15	0.6	2.62	0.15	0.6	2.62	0	0	0		
006-48-01-13-01-3207-04	006-48-1450-0	NOAA: ORF	0	0	0	0	0	0	0	0	0		
006-48-01-13-01-3207-09	Funding Source Subtotal		0.15	0.6	2.62	0.15	0.6	2.62	0	0	0		
006-48-01-13-01-3209-00	NOAA/NESDIS/ NOAA National Data Centers (NNDC)	The NOAA NESDIS National Data Centers have the ultimate responsibility for the long term-management and stewardship of the bulk of NOAA's data, in addition to environmental data collected by other Federal agencies, countries and research programs.	34.046	44.8	44.9	0	0	0	34.046	44.8	44.9	55	1
006-48-01-13-01-3209-04	006-48-1450-0	NOAA: ORF	34.046	44.8	44.9	0	0	0	34.046	44.8	44.9		
006-48-01-13-01-3209-04	006-48-1460-0	NOAA: PAC	0	0	0	0	0	0	0	0	0		
006-48-01-13-01-3209-09	Funding Source Subtotal		34.046	44.8	44.9	0	0	0	34.046	44.8	44.9		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-13-01-3214-00	NOAA/NESDIS/ NIDIS Implementation	NIDIS will provide drought information through a web-based drought portal that offers user-friendly access to historical and real-time climate and weather data. Coupled with soil moisture sensors, NIDIS supports US GEO Near-Term Opportunities.	0	0	1.8	0	0	1.8	0	0	0	00	1
006-48-01-13-01-3214-04	006-48-1460-0	NOAA: PAC	0	0	0	0	0	0	0	0	0		
006-48-01-13-01-3214-04	006-48-1450-0	NOAA: ORF	0	0	1.8	0	0	1.8	0	0	0		
006-48-01-13-01-3214-09	Funding Source Subtotal		0	0	1.8	0	0	1.8	0	0	0		
006-48-01-13-01-3501-00	NOAA/OAR/ GFDL High Performance Computing System	GFDL's High Performance Computing resources are used for climate and weather research through development and application of sophisticated numerical models to predict and understand atmospheric and oceanic phenomena.	19.51	0	0	0	0	0	19.51	0	0	55	1
006-48-01-13-01-3501-04	006-48-1450-0	NOAA: ORF	10.01	0	0	0	0	0	10.01	0	0		
006-48-01-13-01-3501-04	006-48-1460-0	NOAA: PAC	9.5	0	0	0	0	0	9.5	0	0		
006-48-01-13-01-3501-09	Funding Source Subtotal		19.51	0	0	0	0	0	19.51	0	0		
006-48-01-13-01-3504-00	NOAA/OAR/ NOAA Research Scientific Computing Support	Periodic technical refreshment of IT computing resources and associated IT maintenance and support services used to conduct short, mid and long term climate and weather research.	13.938	19.1	19.76	0	0.75	0	13.938	18.35	19.76	55	1
006-48-01-13-	006-48-1450-0	NOAA: ORF	13.938	19.1	19.76	0	0.75	0	13.938	18.35	19.76		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
01-3504-04													
006-48-01-13-01-3504-04	006-48-1460-0	NOAA: PAC	0	0	0	0	0	0	0	0	0		
006-48-01-13-01-3504-09	Funding Source Subtotal		13.938	19.1	19.76	0	0.75	0	13.938	18.35	19.76		
006-00-01-14-00-0000-00	NOAA - Ecosystems		8.799	10.895	12.78	2.279	1.675	2.585	6.52	9.22	10.195		
006-48-01-14-02-3168-00	NOAA/NMFS/ Vessel Monitoring System	The Vessel Monitoring System (VMS) is a satellite based tool for monitoring control and surveillance of the 3.4 million mile jurisdiction of the NOAA Office for Law Enforcement.	6.37	8.96	9.8	0	0	0	6.37	8.96	9.8	25	1
006-48-01-14-02-3304-00	NOAA/NMFS/ Fisheries Information System	Harmonization and integration of disparate state and federal information collection systems to enhance the ecosystems-based management of marine fisheries through improved data quality and management.	0.62	0.62	0.62	0.47	0.36	0.25	0.15	0.26	0.37	55	2
006-48-01-14-02-3305-00	NOAA/NMFS/ Permits	The investment will enable NMFS to better serve customers with an improved national fisheries permit system. The agency wide online system will be utilized by NMFS and the public to process permit applications and renewals.	0.78	0.78	0.77	0.78	0.78	0.77	0	0	0	00	2
006-48-01-14-02-3306-00	NOAA/NMFS/ Northeast Fisheries Information Management System (NE-FIMS)	The intent of the Northeast Fisheries Information Management System is to design, develop and implement an integrated fisheries-dependent information	1.029	0.535	1.59	1.029	0.535	1.565	0	0	0.025	25	2

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
		management system for the Northeast Region.											
006-00-01-15-00-0000-00	NOAA Commerce and Transportation		12.816	13.173	13.414	2.274	0	0.554	10.542	13.173	12.86		
006-48-01-15-01-3208-00	NOAA/NESDIS/ Search and Rescue Satellite-Aided Tracking (SARSAT)	SARSAT system locates those in distress almost anywhere in the world at anytime. Its Mission Control Center processes the distress signal and alerts the appropriate search and rescue authorities to who is in distress and where they are located.	2.253	2.741	2.898	0	0	0.554	2.253	2.741	2.344	55	1
006-48-01-15-01-3208-04	006-48-1460-0	NOAA: PAC	0.025	0.456	0.554	0	0	0.554	0.025	0.456	0		
006-48-01-15-01-3208-04	006-48-1450-0	NOAA: ORF	2.228	2.285	2.344	0	0	0	2.228	2.285	2.344		
006-48-01-15-01-3208-09	Funding Source Subtotal		2.253	2.741	2.898	0	0	0.554	2.253	2.741	2.344		
006-48-01-15-01-3401-00	NOAA/NOS/ Nautical Charting System	The Nautical Charting System (NCS) supports the production of essential navigation products that currently comprise a suite of 1000 paper and raster products and ultimately 1000 Electronic Navigational Charts (ENC).	3.035	2.674	1.831	1.533	0	0	1.502	2.674	1.831	55	1
006-48-01-15-01-3401-04	006-48-1450-0	NOAA: ORF	3.035	2.674	1.831	1.953	0	0	1.082	2.674	1.831		
006-48-01-15-01-3401-09	Funding Source Subtotal		3.035	2.674	1.831	1.953	0	0	1.082	2.674	1.831		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-01-15-01-3402-00	NOAA/NOS/ PORTS & NWLON	The PORTS and NWLON IT System generates an integrated set of environmental information that is used as a decision support tool by its customers for improving the safety and efficiency of maritime commerce and coastal resource management.	3.255	3.675	4.507	0	0	0	3.255	3.675	4.507	55	1
006-48-01-15-01-3402-04	006-48-1450-0	NOAA: ORF	3.255	3.675	4.507	0	0	0	3.255	3.675	4.507		
006-48-01-15-01-3402-09	Funding Source Subtotal		3.255	3.675	4.507	0	0	0	3.255	3.675	4.507		
006-48-01-15-01-3403-00	NOAA/NOS/ Geodetic Support System	The Geodetic Support System processes data for the National Spatial Reference System and geoid models. Plans are to expand to 1,500 Continuously Operating Reference Stations (CORS).	1.53	1.625	1.72	0	0	0	1.53	1.625	1.72	55	1
006-48-01-15-01-3403-04	006-48-1450-0	NOAA: ORF	1.53	1.625	1.72	0	0	0	1.53	1.625	1.72		
006-48-01-15-01-3403-09	Funding Source Subtotal		1.53	1.625	1.72	0	0	0	1.53	1.625	1.72		
006-48-01-15-02-3601-00	NOAA/nmao/ NOAA Marine and Aviation Operations	NOAA ships use IT resources to support data acquisition capabilities, which enable scientists and environmental managers to make decisions based on real-time data access and visualization.	2.743	2.458	2.458	0.741	0	0	2.002	2.458	2.458	55	1
006-00-01-16-00-0000-00	NOAA - Satellite Services		144.194	131.857	117.821	89.803	69.388	53.873	54.391	62.469	63.948		
006-48-01-16-01-3201-00	NOAA/NESDIS/ GOES Ground System	GOES ground system monitors and controls NOAA's Geostationary	18.701	17.162	14.697	6.504	0.82	0.46	12.197	16.342	14.237	25	1

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
		environmental satellites.											
006-48-01-16-01-3201-04	006-48-1460-0	NOAA: PAC	18.701	17.162	14.697	6.504	0.82	0.46	12.197	16.342	14.237		
006-48-01-16-01-3201-09	Funding Source Subtotal		18.701	17.162	14.697	6.504	0.82	0.46	12.197	16.342	14.237		
006-48-01-16-01-3202-00	NOAA/NESDIS/POES Ground System	An FY06 Initiative, POES ground system monitors and controls NOAA's polar-orbiting operational environmental satellites. IT hardware/software upgrades are underway for future satellites.	14.622	17.2	18.111	4.696	4.309	2.7	9.926	12.891	15.411	25	1
006-48-01-16-01-3202-04	006-48-1460-0	NOAA: PAC	14.622	17.2	18.111	4.696	4.309	2.7	9.926	12.891	15.411		
006-48-01-16-01-3202-09	Funding Source Subtotal		14.622	17.2	18.111	4.696	4.309	2.7	9.926	12.891	15.411		
006-48-01-16-01-3206-00	NOAA/NESDIS/Satellite Operations Control Center Command and Data Acquisition (SOCC/CDA)	This investment is used by the Office of Satellite Operations (OSO) to command and control the POES and GOES satellites, to track the satellites, and to acquire their data.	32.268	33.236	34.3	0	0	0	32.268	33.236	34.3	55	4
006-48-01-16-01-3206-04	006-48-1450-0	NOAA: ORF	32.268	33.236	34.3	0	0	0	32.268	33.236	34.3		
006-48-01-16-01-3206-09	Funding Source Subtotal		32.268	33.236	34.3	0	0	0	32.268	33.236	34.3		
006-48-01-16-01-3212-00	NOAA/NESDIS/NPOESS Ground System	IT support for the Nation's civil and military polar-orbiting operational meteorological satellite system into a single national entity capable of satisfying both civil and national security requirements for space-based remotely sensed	78.603	64.259	50.713	78.603	64.259	50.713	0	0	0	00	1

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
		environmental data.											
006-48-01-16-01-3212-04	006-48-1460-0	NOAA: PAC	78.603	64.259	50.713	78.603	64.259	50.713	0	0	0		
006-48-01-16-01-3212-09	Funding Source Subtotal		78.603	64.259	50.713	78.603	64.259	50.713	0	0	0		
006-00-02-00-00-0000-00	Part 2. IT Infrastructure and Office		105.979	111.177	113.498	0	0	0	105.979	111.177	113.498		
006-03-02-00-01-0511-00	NOAA/NOAA/ IT Infrastructure	For NOAA consolidated infrastructure.	105.979	111.177	113.498	0	0	0	105.979	111.177	113.498	55	4
006-03-02-00-01-0511-04	006-48-1450-0	NOAA: ORF	102.463	105.575	107.293	0	0	0	102.463	105.575	107.293		
006-03-02-00-01-0511-04	006-48-1460-0	NOAA: PAC	3.516	5.602	6.205	0	0	0	3.516	5.602	6.205		
006-03-02-00-01-0511-09	Funding Source Subtotal		105.979	111.177	113.498	0	0	0	105.979	111.177	113.498		
006-00-03-00-00-0000-00	Part 3. Enterprise Architecture & Planning		4.04	4.119	4.193	0	0	0	4.04	4.119	4.193		
006-48-03-00-02-3702-00	NOAA/NOAA Systems/ NOAA-Wide Enterprise IT Architecture	IT resources are used to support NOAA-wide IT Architecture activities for strategic, operational and capital planning and investment management.	1.4	1.4	1.393	0	0	0	1.4	1.4	1.393		
006-48-03-00-02-3703-00	NOAA/NOAA Systems/ NOAA-Wide Enterprise IT Planning	IT resources are used to support NOAA-wide IT Planning activities for strategic, operational and capital planning and investment management.	2.64	2.719	2.8	0	0	0	2.64	2.719	2.8		
006-00-04-00-00-0000-00	Part 4. Grants Management		2.2	1.5	1.55	0	0	0.05	2.2	1.5	1.5		

2008 UPI (17-digits required for all)	Investment Title	Investment Description (limited to 255 characters)	PY 2006	CY 2007	BY 2008	DME (\$M)			Steady State (\$M)			Investment C&A	Project Management
						PY	CY	BY	PY	CY	BY	Status (00,02,22,25,55)	Qualification Status (1,2,3,4,5,6)
006-48-04-00-01-3802-00	NOAA/OCIO/ NOAA Grants On-line	The NOAA-wide Grants back-end processing system consists of a web-based application that will interface with grants.gov for the "Find and Apply" functions.	2.2	1.5	1.55	0	0	0.05	2.2	1.5	1.5	55	1
006-48-04-00-01-3802-04	006-48-1450-0	NOAA: ORF	2.2	1.5	1.55	0	0	0	2.2	1.5	1.55		
006-48-04-00-01-3802-09	Funding Source Subtotal		2.2	1.5	1.55	0	0	0	2.2	1.5	1.55		
006-00-05-00-00-0000-00	Part 5. IT Grants to State and Locals (optional)		0	0	0	0	0	0	0	0	0		