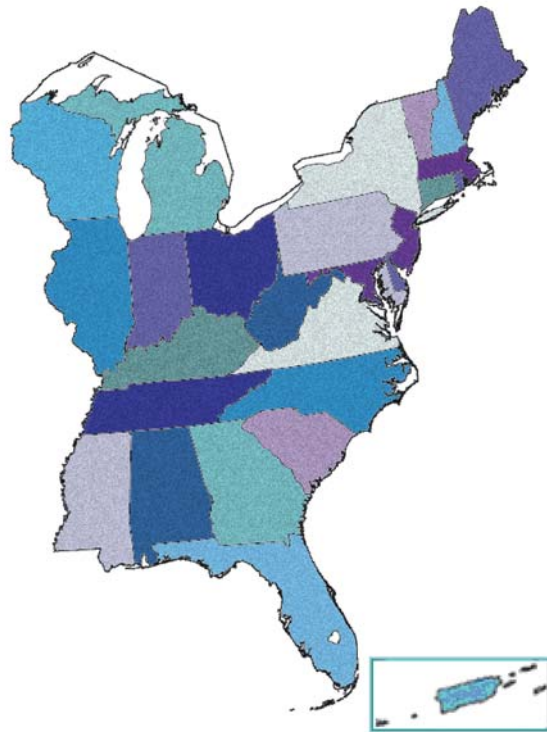




Eastern Region Geography Strategic Plan 2005 to 2009



Eastern Region Geography Strategic Plan
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VISION

Eastern Region Geography is a leader in building *The National Map* by integrating earth and biological sciences through geography.

MISSION

Eastern Region Geography builds *The National Map* by integrating and applying earth and biological science data and information to describe, monitor, understand, and predict changes in the land surface in response to society's needs.

EXECUTIVE SUMMARY

Eastern Region Geography (ERG) is an organization in transition. Once known as a producer of USGS printed topographic maps and later as a data collector of Digital Line Graphs and Digital Elevation Models, today's ERG is becoming a builder of *The National Map* (figure 1).

To accomplish its mission in building *The National Map*, ERG will develop and sustain partnerships within the USGS, other Federal, State, and local governments, non-governmental organizations, academic institutions, and the private sector to grow its capabilities in data discovery, assessment, integration, and management. ERG will transfer to partners and collaborators its expertise in spatial data and geographic research necessary for partners and collaborators to become full partners in building and maintaining *The National Map*.

In support of the USGS's hazards, environment and resources, human health, and homeland security responsibilities, and society's needs in the Eastern Region, ERG will describe for *The National Map* the state, condition, and change of the region's land surface, and build its capabilities to study terrain elevation data, hazard potential, and environmental and human health.

To do this ERG must attract, develop, support, and retain a quality workforce, which delivers a robust body of work and serves with integrity while continuously improving efficiency and effectiveness to support ERG's partners, programs, and people.

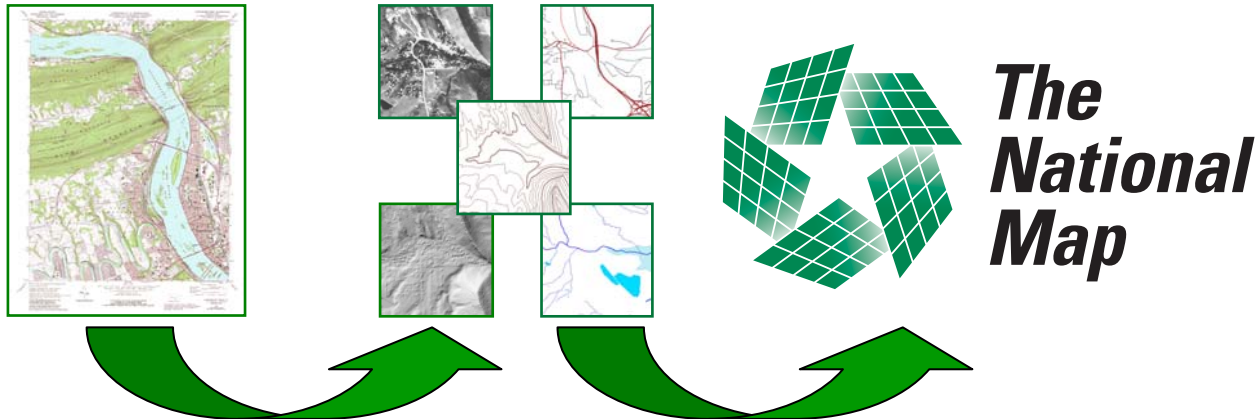


Figure 1. Eastern Region Geography is transitioning from producing printed topographic maps and digital cartographic products to becoming a builder of *The National Map*.

INTRODUCTION

This Strategic Plan lays out the direction for Eastern Region Geography (ERG) for the years 2005 through 2009. The plan describes the geographic context and societal issues within which ERG works, and presents ERG's contributions and plans for building *The National Map*. The strategic goals are organized around partners, program, people, and operations; annual objectives for each goal are included. Within this framework, the plan describes specific scientific contributions that ERG will make to meet its commitment to serve the American public.

GEOGRAPHY OF THE EASTERN REGION¹

From Maine to Florida, Mississippi to Wisconsin, the Gulf of Mexico to the Great Lakes, and the Mississippi River to the Atlantic Ocean, the 26 states, District of Columbia, Puerto Rico, and the Virgin Islands, which comprise the U. S. Geological Survey's (USGS) Eastern Region, covers 850,000 square miles or 24 percent of the conterminous United States. With more than 42,000 miles of coastline, the Eastern Region accounts for 45 percent of the Nation's more than 95,000 miles of coastline, of which more than 35,000 miles are in Alaska, Hawaii, and the Pacific trust islands.

The Eastern Region's physiography includes mountain systems with peaks reaching over 6,000 feet; the Piedmont, Blue Ridge, Ridge and Valley, and Plateau regions of the Appalachian Mountain system; the Catskill and Adirondack Mountains of New York; the Green and White Mountains of New England, the lowlands of the Mississippi and other river valleys, the Great Lakes, and the coastal plain.

The region is home to more than 167,000,000 people or about 60 percent of the Nation's total population. The nighttime lights associated with the infrastructure that supports this population is clearly visible from space (figure 2). This area and its population yields a population density more than 8 times the average for the conterminous United States with the Eastern Region claiming 9 out of 10 and 22 of the top 25 densest counties in the United States. Even with these high population densities, there are many pristine areas for people to enjoy. Based on

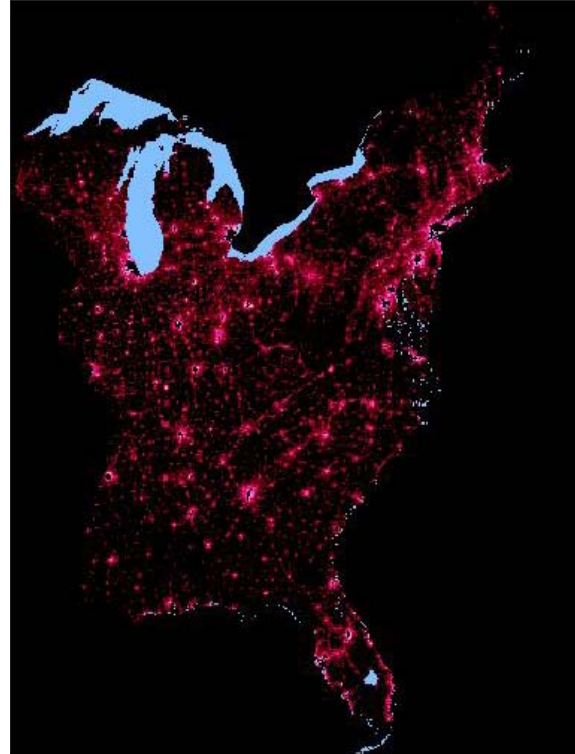


Figure 2. Night-time map of the Eastern Region.

recent figures on the fastest growing counties in the United States, by percent increase (not absolute), 8 out of 10 are in the east. The Eastern Region included 4 of the top 10 and 11 of the top 25 counties with the largest populations, and 76 of the 134 most populated metropolitan regions of the United States (figure 3).



(San Juan, Anchorage, Juneau, and Honolulu not shown)

Figure 3. 134 most populated metropolitan areas of the United States.

Although the Eastern Region includes some of the fastest growing counties, it also includes 9 of

the top 10 and 21 of the top 25 counties with the largest declines in population. These figures represent a region with significant movement of people, resulting in a major impact on the landscape. Population pressures in the coastal zone are having a significant impact on the aquifers that provide water resources for human consumption and ecological needs. The same population pressures impact animal and plant habitats.

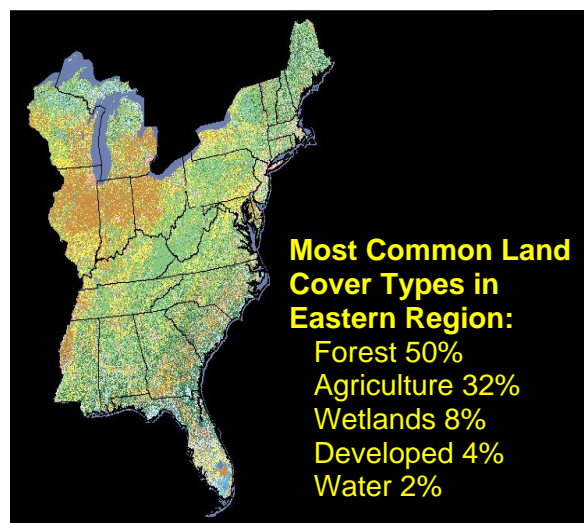


Figure 4. Eastern Region land cover.

The Eastern Region supports a variety of land covers (figure 4). When contrasted to the nation as a whole, the region stands out in several

ways. Forest cover accounts for 29 percent of the conterminous United States, whereas in the Eastern Region it accounts for 50 percent. While this region has twice the developed land (4 percent) of the country as a whole, agricultural land cover (32 percent) is similar to the conterminous United States as a whole, which is 26 percent agricultural. While grasslands account for more than 34 percent of the lower 48 states, they barely account for 1 percent in the Eastern Region and are included in the land cover not listed here (~4 percent). Finally, the Eastern Region has twice the amount of wetlands as the conterminous United States. Land cover and the use it portrays are far from static in the Eastern Region. Hosting the earliest European settlements in the nation, the Eastern Region has been undergoing cyclic change for more than 100 years, as is evident in the change from agriculture back to forest, which has occurred in the Baltimore/Washington area since 1850 (figure 5).

Natural hazards are another significant characteristic of the region. Figure 6 shows the tracks of category 3 and higher hurricanes from 1960 to 1999. A category 3 hurricane has winds 111 to 130 mph and storm surges of 9-12 feet above normal. An increase in the frequency of major hurricanes that hit the United States, given the increases in human population and the

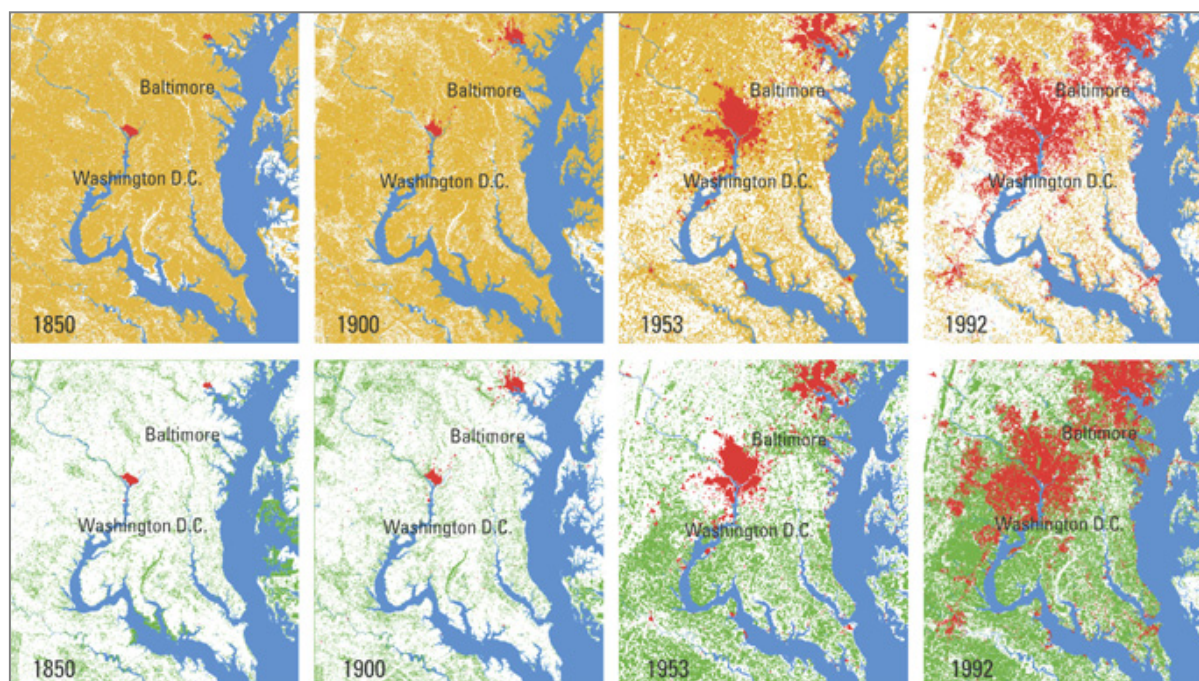


Figure 5. Land use change: top series shows the increase of urban (red) and the decline of agriculture (gold); bottom series shows the increase of forested land (green).

associated infrastructure, along with large portions of the East and Gulf coasts within 1 meter of sea level, has increased the potential for deaths and property destruction.

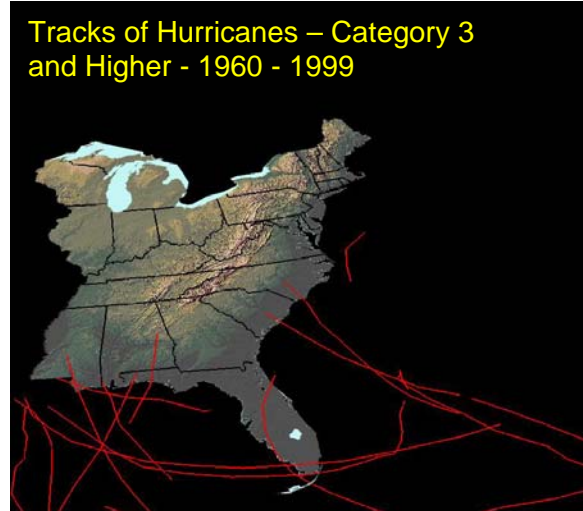


Figure 6. Category 3 and higher hurricanes.

Finally, the Eastern Region is home to a variety of Federal lands, including those of the Department of the Interior, Department of Defense, Tennessee Valley Authority, U.S. Forest Service, and others. While these lands only account for 5 percent of the roughly 1,400,000 square miles of Federal lands, they represent a majority of individual National Park and Wildlife Refuge units, military bases, and other Federally managed lands.

EASTERN REGION CHARACTERISTICS²

As described in the previous section, the Eastern Region is characterized by numerous, high-density, urban population centers (figure 7), many of which are located along or in proximity to coastal areas. The geographic configuration of the coastlines and populated cities, bounded by the hardwood forests and Appalachian Mountains to the west, has led to the development of social, cultural, and even physical features that make the Eastern Region unique. These characteristics include:

- Continued rapid population growth, especially along the coasts
- Numerous environmental threats to human health

- Great biodiversity of both plants and animals
- Numerous invasive species with major economic impact
- Significant human and natural threats to biodiversity
- Development of local water supplies versus basin-wide extraction
- Human water consumption greater than agricultural consumption
- Water demand greater than water availability
- Nutrient/chemical intensive agriculture
- Susceptibility to drought
- Expansive coastal wetlands, estuaries, and barrier islands
- Few public lands yet heavily used parks and refuges
- Old and degrading man-made infrastructure
- Storm and resultant flooding susceptibility
- Coal mining spoils
- Oil and gas infrastructure (pipelines)
- Numerous State and Territorial political entities
- Centuries of industrial use with legacy of environmental degradation



Figure 7. The Eastern Region is characterized by continued population growth.

Continued expansion of our coastal and riverine urban centers into rural areas will impact the citizens' ability to use and enjoy the energy and living resources while challenging the government's ability to protect the welfare of citizens from natural disasters and other health risks. A delicate balance must exist between resource extraction and use to support continued expansion, and ecosystem protection strategies for preserving many of our nation's valued natural living resources, as well as promoting human health and the overall quality of life.

As a result of the attacks of September 11, 2001, governmental decision-makers at the local, State, and Federal level have placed more emphasis on homeland security. Because the Eastern Region is home to many of the nation's major urban, political, and commercial centers and large military facilities, homeland security is of primary concern to Eastern Region decisionmakers and the public.

FROM TOPOGRAPHIC MAPPING TO *THE NATIONAL MAP*

The USGS has been the primary civilian mapping agency of the U.S. Federal government since the establishment of the USGS in 1879. The best known USGS maps are the 1:24,000-scale topographic maps, also known as 7.5-minute quadrangles (figure 8). More than 55,000 7.5-minute maps were made to cover the 48 conterminous states, about 30 percent of these maps cover the Eastern Region. This is the only uniform map series that is comprehensive, trans-jurisdictional, and covers the entire area of the United States from border to border and coast to coast.³

The National Map is a consistent framework for geographic knowledge needed by the Nation. It provides public access to high-quality, geospatial data and information from multiple partners to help support decisionmaking by resource managers, governmental officials, and the public.

The USGS completed once-over coverage of the 7.5-minute map series in 1992. The program has recently been replaced by *The National Map*, which is a consistent framework for geographic knowledge needed by the Nation. It provides public access to high-quality, geospatial data

and information from multiple partners to help support decisionmaking by resource managers, governmental officials, and the public. *The National Map* is the product of a consortium of Federal, State, and local partners, who provide geospatial data to enhance America's ability to access, integrate, and apply geospatial data at global, national, and local scales. The USGS is committed to meeting the Nation's needs for current base geographic data and maps. By working with partners, the USGS will ensure that the Nation has access to current, accurate, and nationally consistent digital data and topographic maps derived from those data.⁴ Emergency management and homeland security applications rely on this information. *The National Map* brings the full spectrum of geographic science -- map, monitor, understand, model, and predict -- to bear on key national issues and needs (figure 9). As described in this plan, ERG is committed to building *The National Map*.

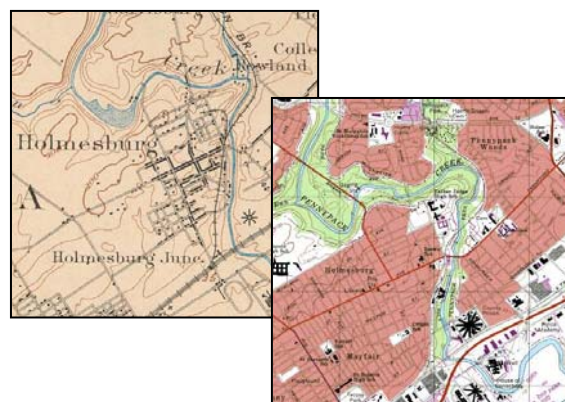


Figure 8. Topographic map of Germantown, PA - 1899 (left) and 1997 (right).

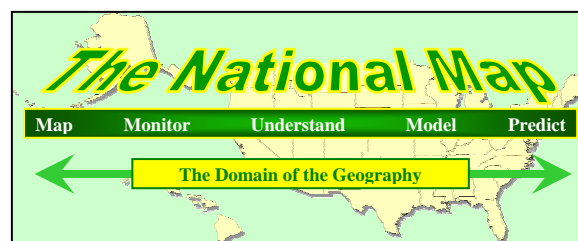


Figure 9. *The National Map* and the domain of the geography discipline.

TODAY'S EASTERN REGION GEOGRAPHY

ERG and its predecessor organizations built topographic maps using field survey crews (figure 10), aerial photography, photogrammetry, map scribing, and lithographic printing. The transition from making paper topographic maps to producing geospatial data in computer-readable form began in the 1980s, and consisted of ERG-produced products such as the Digital Line Graph (DLG) and Digital Elevation Model (DEM). At this same time, earth science applications were developed using geospatial data, geographic information systems (GIS), and image processing software.



Figure 10. In the past, compiling topographic maps required field surveys.

ERG represents the Geography Discipline within the USGS Eastern Region. ERG has approximately 180 employees and is currently organized around 4 teams: Mapping Operations, Real-Time Land Change, Regional Investigations, and Information Services. An analysis of this structure is being conducted in 2004 and changes may be introduced at the start of fiscal year 2005. A Workforce Plan and Staffing Plan are included in the Appendix A.

The majority of ERG employees are located on the USGS National Center Campus in the John Wesley Powell and Advanced Systems Center (ASC) buildings located in Reston, Virginia. Ten employees are located in field offices throughout the Eastern Region (figure 11). This

plan later addresses the goal of increasing the number of ERG employees throughout the region to meet the needs of partners in building *The National Map*.



Figure 11. Current location of ERG employees.

In fiscal year 2004, ERG implemented several significant changes as it transitions to an organization able to fully implement *The National Map*. ERG and the Federal Aviation Administration (FAA) entered into an Interagency Support Services agreement for lithographic printing. The agreement provides the USGS a cost-effective alternative for maintaining access to printing capability for civilian Federal map and charting functions. As part of the agreement, 9 ERG employees transferred to FAA's printing function. In addition, the Office of Personnel Management authorized a Voluntary Separation Incentive Payment (buyout) and Voluntary Early Retirement Program (earlyout) in fiscal year 2004. The buyout and earlyout was based on the need to change the skill base of our workforce, and was offered to employees involved in mapping production and production support. Fifty ERG employees took advantage these offers.

The primary mission of ERG is to build *The National Map* and work towards meeting the goals primarily of the Geography Discipline's

Cooperative Topographic Mapping, Geographic Analysis and Monitoring, and Land Remote Sensing Programs, as well as other relevant USGS programs through contributions to integrated science efforts.

AREAS OF SCIENTIFIC EMPHASIS

The Eastern Region Science Plan² (internal.er.usgs.gov/docs/er_science_plan-ver8-01-20-04.doc) identifies the major societal issues that are relevant to USGS science programs and that USGS science should address:

- Urban Dynamics
- Ecosystems and Natural Resources
- Environment and Human Health
- Natural Hazards

These issues have significant impact on the quality of human life and require sound science to be effectively understood, managed, and mitigated. Geographic science has a great deal to contribute towards answering these societal issues. Geographers are engaged in understanding the world's physical and human features by studying where things are and how they got there - bringing the notion of "place" and "location" to the forefront of USGS science.

ERG scientists are well placed to help address these societal needs within the context of *The National Map*. To meet these societal needs, 4 areas have been identified to serve as future growth areas for ERG science in the next 5 years:

- Land Surface Change
- Terrain Elevation Data Research and Applications
- Hazard Potential and Analysis
- Environmental and Human Health

These growth areas directly support the mission of *The National Map*, and the goals of USGS Programs, especially the Cooperative Topographic Mapping, Geographic Analysis and Monitoring, and Land Remote Sensing Programs.

Land Surface Change

ERG scientists conduct geographic assessments to improve the understanding of the rates,

causes, and consequences of natural and human-induced processes that shape and change the landscape over time (figure 12). *The National Map*, socioeconomic, land remote sensing, and other natural science data are used to quantify rates, identify key driving forces, and forecast future regional trends of landscape change. Regional land surface change studies are conducted within a geographic context, and at a range of spatial and temporal scales so that investigations provide comprehensive information needed to understand the environmental, resource, and economic consequences of landscape change.



Figure 12. These two photographs of Miami, taken in 1912 and 1997, exemplify how dramatically urban expansion over time can alter the landscape, ecosystems, and human environment. Source: mapping.usgs.gov/gam.html.

The Earth's landscape is being changed by human-induced and natural processes, some of which have significant impact on local and regional ecosystem health and sustainability. The need for better information about causes and implications is especially evident for changes induced by fire, agricultural production, urbanization, forest logging, climate change, and other factors operating at broad regional scales. Improved understanding and information about the consequences of landscape change are needed to help regional decisionmakers with land-use planning, land management, and natural resource conservation.

Over the next 5 years, ERG will place more emphasis on scientific studies about land surface change, environmental and human health, fire and urban ecology, and natural hazards. In addition, ERG scientists will increase their use of National Technical Means data through the Global Fiducials Library for Eastern Region study sites related to land surface change issues. The Global Fiducials Library provides a long-term data record of environmentally sensitive sites, and can be used by scientists to study environmental processes and changes.

Terrain Elevation Data Research and Applications

Terrain and elevation information have been depicted on USGS map products since the early days of topographic mapping (figure 8). Digital elevation models (DEM) portray elevation information typically found on a topographic map. Elevation data are an essential part of many earth science applications. They are used for such diverse purposes as providing shaded-relief backgrounds, establishing stratification in land cover classification, doing geometric and radiometric correction of remotely sensed data, indicating landform characteristics such as slope and aspect, analyzing synthetic drainage networks and watershed delineations through the use of GIS, and generating floodplain maps (figure 13). Elevation data is an important layer within *The National Map*.

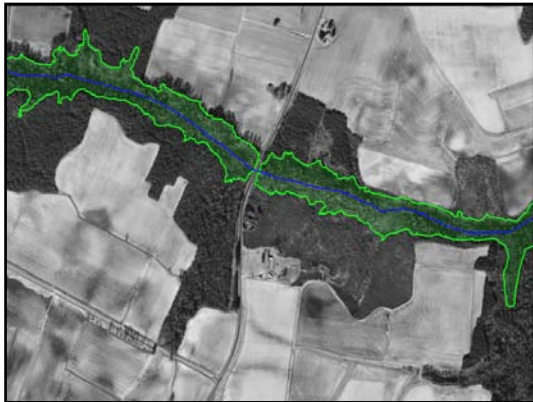


Figure 13. Our North Carolina partners use LIDAR to create elevation data for floodplain mapping.

Research related to improvements of DEMs and other three-dimensional (3-D) surface models, and their accuracies and applications are

important contributions that ERG can make in the next 5 years. Studies and evaluations of DEM-producing technologies, such as topographic Light Detection and Ranging (LIDAR) instruments, Interferometric Synthetic Aperture Radar (IFSAR), digital photogrammetry, the enabling technologies related to precise Global Positioning Systems (GPS), inertial navigation systems, and differential GPS should be conducted. Other research areas include resampling techniques to derive 30-meter DEMs from 3-meter data, creating 30-meter DEMs from the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) satellite data, comparing photogrammetrically derived DEMs with LIDAR-derived products, integrating hyperspectral remote sensing data with LIDAR, and evaluating Shuttle Radar Topography Mission (SRTM) data for use in other applications and data production techniques.

To support elevation and terrain research, ongoing ERG elevation research, which will continue and grow in the next 5 years, includes LIDAR studies, relative sea-level rise and predicting coastal landscape changes, fluvial dynamics, airborne GPS and inertial navigation systems, GPS measurements for tectonic motion detection, and enhancements to the USGS Airborne Height Finder (AHF) for collecting high-accuracy elevation data for hydrodynamic and ecological modeling applications.

Other ERG research to pursue includes detection of geomorphic and human-induced change using historical and contemporary data; identification of changes due to mountain top removal and subsidence; identification of natural hazards, such as floods, storm surge, landslides, and volcanic activity; and analysis of urban areas and hydrologic changes in stream valleys and coastal areas. Applications research and development areas for ERG to explore include processing for derivative information and integration with geologic, habitat, soils, and other datasets; automated geologic and landform interpolation from DEM; feature extraction from LIDAR; and landslide susceptibility. Visualization, including 3-D interactive viewing of terrain on web viewers, viewsheds, and virtual databases are also important and will be

undertaken. ERG will also utilize its capabilities at the ASC for conducting elevation and terrain-related research.

ERG will engage other partners to pursue and further elevation data research and applications.

Hazard Potential and Analysis

ERG staff, who work in the Hazard Potential and Analysis arena, support USGS scientists in their mandate to provide high-quality scientific information to the public and decisionmakers through timely collection and analysis of data on natural hazards, natural disasters, and environmental processes. This support is provided via classified assets in the ASC, fact sheet and web publications, and integration of various data in *The National Map*. In the past, ERG has provided support for response to earthquakes, landslides, flooding, volcanic activity, tropical storms (figure 14), wildfires, and homeland security. Future work will integrate the classified assets in the ASC with data and information available through *The National Map*.

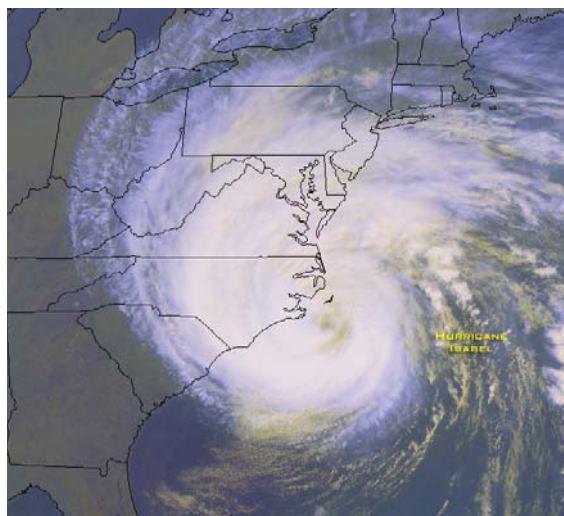


Figure 14. Hurricane Isabel strikes the east coast on September 18, 2003 (source: NOAA).

The future course in Hazard Potential and Analysis is aligned with the mission of the USGS, and focuses mainly on supporting hazards science. ERG will continue to integrate predictive hazard models with geospatial data and analysis, and integrate applications of hazards science with land surface characteristics

and elevation (figure 15). ERG will also promote the use of National Technical Means data, particularly the Global Fiducials Library, by USGS scientists and other Department of the Interior bureaus for Eastern Region study sites.



Figure 15. USGS surface geology merged with 1-meter orthophotograph of Charleston, South Carolina within *The National Map* can be used to study earthquake risk.

To provide the support outlined above, within the next 5 years, ERG will develop protocols to ensure efficient response to hazard, disaster, and homeland security situations and to maximize the use of collected data. Components of these protocols include improving existing linkages with USGS Geology and Water disciplines, and establishing a linkage with the USGS Biology discipline. This includes identifying appropriately cleared personnel within the disciplines who can exploit classified data at the ASC, and assessing what customer needs could be filled by *The National Map*. Where feasible, meeting with customers to establish pre-defined sites for natural hazards/disaster study (e.g., earthquakes, landslides, flooding) and a communications process will be pursued, such as meeting with the Eastern Region Storm Response Team before each hurricane season to review roles and establish a communications process for timely storm response.

Environment and Human Health

Many chronic health issues may relate directly to Earth processes and the environment. As the Nation's natural resource science agency, the USGS plays a significant role in understanding environmental contributions to diseases and human health. Remote sensing and GIS can characterize habitats and model processes that link hosts, vectors, and pathogens in the

environment. Geographic methods can illuminate the complexities of environmental disease risk.

Currently ERG provides the Centers for Disease Control and Prevention (CDC), as well as public health agencies, with real-time geographic information on land use and land cover, roads, and hydrographic data in areas where the West Nile Virus is active (figure 16). These data are being used by scientists in the field to identify bird and mosquito habitat, and to determine the best locations for placement of mosquito traps to study the geographic spread of the disease.

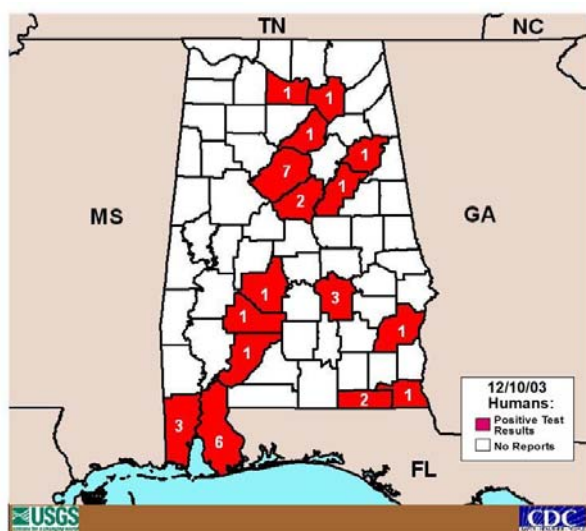


Figure 16. West Nile Virus - Alabama Cumulative Human Map.

In the next 5 years, ERG will expand disease mapping to include arboviruses, extend the geographic scope of West Nile Virus studies to other locales, conduct "place-based" integrated science studies of disease outbreaks/occurrences in collaboration with other USGS disciplines, consider the "geographic structure of epidemics" and applications to homeland security and public health, investigate the environmental impacts of contaminants, and align activities with issues and opportunities that will be identified by the President's Office of Science and Technology Policy's Health and Environment Subcommittee.

STRATEGIC GOALS

The goals presented in this Strategic Plan are organized around 4 areas: Partners, Program, People, and Operations.

PARTNERS

To support the achievement of *The National Map*, ERG will develop and sustain complementary partnerships within the U.S. Geological Survey and with Federal, State, and local entities, appropriate non-governmental organizations, academic institutions, and the private sector.

Thrusts:

- Key partners are identified.
- ERG staff are in proximity to partners (figure 17).
- Products and services are responsive to partner needs and further programmatic goals.
- Relationships are established and sustained through effective policy and communication strategies.

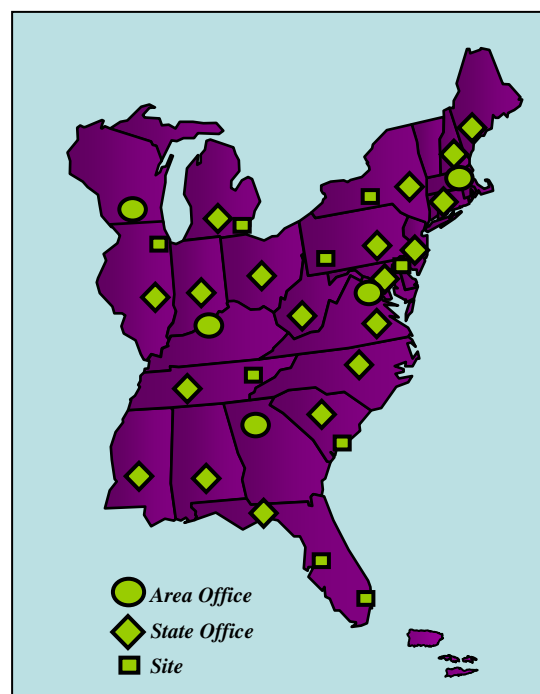


Figure 17. Projected FY 2008 Deployment of ERG.

PROGRAM

1. Describe for *The National Map* the state and condition of the region's land surface to support

the bureau's hazards, environment and resources, human health, and homeland security responsibilities (figure 18).

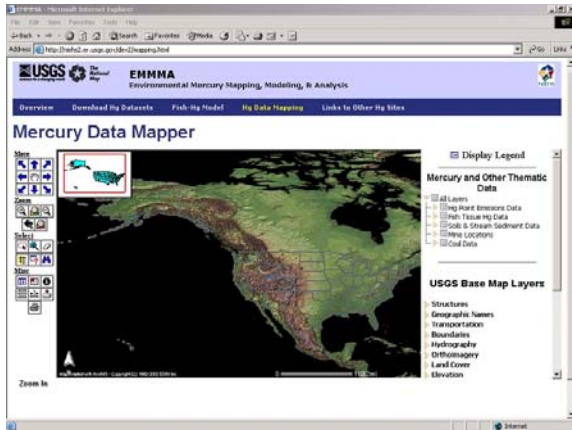


Figure 18. The Environmental Mercury, Mapping, Modeling, and Analysis project seeks to understand the causes and consequences of mercury contamination in the environment, integrates data from the USGS Geology, Water, and Biology disciplines, and is powered by *The National Map*.

Thrusts:

- Predictive models developed within ERG forecast impacts from land surface change.
- Expand the capabilities in the Advanced Systems Center to contribute to hazard science research.
- Use geographic methods and tools to illuminate the complexities of environmental disease risk.

2. Build *The National Map* by assessing and integrating partners' spatial data and the results from geographic research concerning the land surface.

Thrusts:

- Add partners' data to *The National Map* by building ERG's data assessment, integration, and management capabilities.
- ERG leads the research and development of new techniques and processes for creating and using elevation data for *The National Map* from partners' high-resolution data and

from LIDAR, IFSAR, and other new technologies.

- Elevation data are used to support land surface research.
- ERG leads the effort to build and maintain the National Atlas of the United States, which serves as the small-scale implementation of *The National Map* (figure 19).

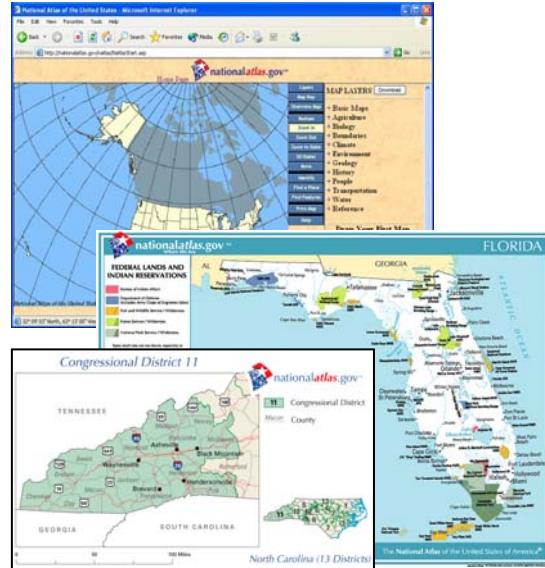


Figure 19. The National Atlas of the United States (nationalatlas.gov/) provides both on-line and printed maps as well as data that can be used in a geographic information system.

3. Transfer to partners and collaborators our expertise in spatial data and geographic research necessary for them to become full partners in building and maintaining *The National Map*.

Thrusts:

- Geographic science work is recognized as progressive, responsive to societal needs, and serves as the foundation for integrated science.
- *The National Map* objectives, including integrated science applications, are developed and maintained.
- ERG contributions to integrated Bureau science programs are integral to their success.

PEOPLE

Attract, develop, support and retain a quality workforce that delivers a robust body of work and serves with integrity.

Thrusts:

- ERG thrives on a leadership culture that promotes and recognizes an employee workforce that takes responsibility, is creative, supports each other, takes risks, and makes a difference.
- Employees work effectively in diverse teams that maximize their individual and team strengths.
- Provide opportunities for personal and professional development.
- ERG promotes a rewarding environment and supports quality of work life, where everyone adopts the USGS guiding principles:
 - Be Respectful
 - Be Accountable
 - Communicate
 - Value Differences
 - Encourage
 - Focus
 - Collaborate
- ERG's workforce is appropriately balanced between permanent and other-than-permanent appointments, and contractors.
- ERG's workforce is appropriately skilled and adaptive to changing program directions.

OPERATIONS

Continuously improve our efficiency and effectiveness to support our partners, programs, and people.

Thrusts:

- Internal and external communication strategies ensure that everyone has access to the information needed to support our program of work.
- Administrative processes and practices are streamlined and support our program of work.
- Management tools are effective, and promote creativity and program growth.

- Technical and information infrastructure supports our organizational needs, and addresses DOI and Bureau information technology security requirements.
- Responses to emergency events are preplanned and shared with ERG personnel to ensure appropriate continuity of operations.

ANNUAL OBJECTIVES

Annual objectives for fiscal years 2005 to 2009 for each these strategic goals have been developed as shown in following table. In addition, as a baseline, the table also shows ERG's annual objectives for 2004.

SUMMARY

ERG is committed to building *The National Map* along with its partners in the Eastern Region. In addition, ERG will build its capability to study land surface change, terrain elevation data research and applications, hazard potential and analysis, and environment and human health. ERG will distribute its workforce onto the landscape to better partner with other Federal agencies, and State and local governments.

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
<p>Partners:</p> <p>To support the achievement of <i>The National Map</i>, we will develop and sustain complementary partnerships within the U.S. Geological Survey, and with Federal, State, and local entities, appropriate non-governmental organizations, academic institutions, and the private sector.</p> <p>Thrusts:</p> <ul style="list-style-type: none"> • Key partners are identified. • ERG staff are in proximity to partners • Products and services are responsive to partner needs and further programmatic goals. • Relationships are established and sustained through effective policy and communication strategies. 	<p>Establish 2 new Area Offices.</p> <p>Establish 2 State Offices.</p> <p>Add 2 employees in State and Site Offices.</p>	<p>Establish 2 new Area Offices.</p> <p>Establish 4 State Offices.</p> <p>Add 10 employees in State and Site Offices.</p> <p>Add 2 new integrated science applications for <i>The National Map</i>.</p> <p>Help establish internal coordination mechanism in 3 states.</p> <p>Add new memorandums of understanding such that 50 percent of Eastern Region states support <i>The National Map</i>.</p> <p>Add new <i>The National Map Implementation Agreements (Maintenance Agreements)</i> such that 30 percent of the States in the Eastern Region are serving data to <i>The National Map</i>.</p> <p>Hold State Cooperators Forum to seek input from State partners; comments indicate issues from 2002 Forum have been addressed.</p> <p>Facilitate in 3 states a Federal Forum bringing together Federal, State, and Local government partners.</p> <p>Establish 1 new University partnership.</p>	<p>Establish 4 State Offices.</p> <p>Add 20 employees in State and Site Offices.</p> <p>Add 3 new integrated science applications for <i>The National Map</i>.</p> <p>Help establish internal coordination mechanism in 3 states.</p> <p>Add new memorandums of understanding such that 75 percent of Eastern Region states support <i>The National Map</i>.</p> <p>Add new <i>The National Map Implementation Agreements (Maintenance Agreements)</i> such that 60 percent of the States in the Eastern Region are serving data to <i>The National Map</i>.</p> <p>Solicit through e-mail any modifications or new requirements to outcomes from FY 2005 State Cooperator Forum.</p> <p>Facilitate in 10 states a Federal Forum bringing together Federal, State, and Local government partners.</p> <p>Establish 2 new University partnerships.</p>	<p>Establish 1 new Area Office.</p> <p>Establish 4 State Offices.</p> <p>Add 20 employees in State and Site Offices.</p> <p>Add 2 new integrated science applications for <i>The National Map</i>.</p> <p>Help establish internal coordination mechanism in 3 states.</p> <p>Add new memorandums of understanding such that 100 percent of Eastern Region states support <i>The National Map</i>.</p> <p>Add new <i>The National Map Implementation Agreements (Maintenance Agreements)</i> such that 90 percent of the States in the Eastern Region are serving data to <i>The National Map</i>.</p> <p>Solicit through e-mail any modifications or new requirements to outcomes from FY 2005 State Cooperator forum.</p> <p>Facilitate in 15 states a Federal Forum bringing together Federal, State, and Local government partners.</p> <p>Establish 3 new University partnerships.</p>	<p>Establish 2 State Offices.</p> <p>Add 15 employees in State and Site Offices.</p> <p>Add 2 new integrated science applications for <i>The National Map</i>.</p> <p>Help establish internal coordination mechanism in 3 states.</p> <p>Add new <i>The National Map Implementation Agreements (Maintenance Agreements)</i> such that 100 percent of the States in the Eastern Region are serving data to <i>The National Map</i>.</p> <p>Hold State Cooperators Forum to seek input from state partners; comments indicate issues from 2005 Forum have been addressed.</p> <p>Facilitate in all 26 states a Federal Forum bringing together Federal, State, and Local government partners.</p> <p>Establish 5 new University partnerships.</p>	<p>Hold Strategic Review and seek input from Federal, State, and local entities, and from appropriate non-governmental organizations and academic institutions.</p> <p>Reassess distribution of employees in Area State and Site Offices.</p> <p>Continually renew expiring agreements.</p> <p>Solicit through e-mail any modifications or new requirements to outcomes from FY 2005 State Cooperator forum.</p> <p>Facilitate in 26 states a Federal Forum bringing together Federal, State, and Local government partners together.</p> <p>Establish 5 new University partnerships.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
<p>Program:</p> <p>Describe for <i>The National Map</i> the state and condition of the region's land surface to support the Bureau's hazards, environment and resources, human health, and homeland security responsibilities.</p> <p>Thrusts:</p> <ul style="list-style-type: none"> Predictive models developed within ERG forecast impacts from land surface change. Expand the capabilities in the Advanced Systems Center to contribute to hazard science research. Use geographic methods and tools to illuminate the complexities of environmental disease risk. 	<p>Document impacts of LULCC on sedimentation.</p> <p>Understand and model the impacts of LU and population change, especially in the Chesapeake Bay, and on brownfields and tropospheric ozone.</p> <p>Understand vegetation influences on hydrology at multiple scales.</p> <p>Document rates, trends, and drivers of LULCC in the eastern United States.</p> <p>Improve processing of satellite data for LC classifications.</p> <p>Understand and model potential impacts of severe storms, floods, earthquakes, and habitat fragmentation in Charleston, SC and Washington DC as part of CUES.</p> <p>Understand, model, and predict the spread of West Nile Virus (WNV).</p>	<p>Insure that ERG LULCC-related activities contribute to the GAM's Status and Trends report.</p> <p>Increase collaboration with BRD by integrating LULC data with the BBS.</p> <p>Increase collaboration with WRD; understand the needs of the NAWQA urban gradients activities and identify areas to study the impact of floods and storm events along the coast.</p> <p>Increase collaboration with GD by identifying areas to study for impacts of landslides and earthquakes.</p> <p>Collaborate with GD to understand the impacts of LULCC on climate variability.</p> <p>Expand disease mapping with CDC to include all arboviruses.</p> <p>Extend geographic scope of WNV studies to other locales (e.g., Charleston, SC).</p> <p>Begin building the capability to model landscape change using existing models.</p> <p>Establish interdisciplinary group to assist in pursuing integrated analysis using NTM data.</p>	<p>Contribute to the first synthesis report for status and trends of the Nation's land surface.</p> <p>Design a strategy to monitor the Eastern Region landscape (using all sources) to include identification of candidate sites and critical variables.</p> <p>Start research related to LULCC (e.g., urban growth) and air quality, and water quantity and quality.</p> <p>Begin to investigate the impacts of LULCC on natural resource availability.</p> <p>Conduct integrated science studies of disease outbreaks/ occurrences in collaboration with other ERG disciplines (e.g., zoonotic diseases with biology; water-borne toxins with WRD; airborne dust with GD).</p> <p>Apply existing landscape models to high-priority metropolitan areas (e.g., CUES, PES).</p> <p>Begin to develop the capability to respond to partner requirements for LULCC data.</p>	<p>Continue to contribute to the status and trends report series.</p> <p>Begin investigations of the impacts of LULCC on habitat fragmentation, invasive species, and the interface of wild and developed lands.</p> <p>Monitor Eastern Region LULCC.</p> <p>Consider the "geographic structure of epidemics," and applications to Homeland Security and public health decisionmakers. Examples include identification of high-risk populations, and location of treatment facilities.</p> <p>Expand disease surveillance mapping with CDC to include additional infectious diseases such as influenza.</p> <p>Begin to enhance regional models of LULCC to address needs of land and water resource managers.</p>	<p>Continue to contribute to the status and trends report series.</p> <p>Continue to monitor Eastern Region LULCC.</p> <p>Align activities with issues and opportunities that will be identified (in 2005) by OSTP Health and Environment Subcommittee.</p> <p>Continue to enhance regional models of LULCC to address needs of land and water resource managers.</p>	<p>Continue to contribute to the status and trends report series.</p> <p>Continue to monitor Eastern Region LULCC.</p> <p>Continue to enhance regional models of LULCC to address needs of land and water resource managers.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
<p>Program:</p> <p>Build <i>The National Map</i> by assessing and integrating partners' spatial data and the results from geographic research concerning the land surface.</p> <p>Thrusts:</p> <ul style="list-style-type: none"> • Add partners' data to <i>The National Map</i> by building ERG's data integration and data management capabilities. • ERG leads the research and development of new techniques and processes for creating elevation data for <i>The National Map</i> from partners' high-resolution data and from LIDAR, IFSAR, and other new technologies. • Elevation data are used to support land surface research. • ERG leads the effort to build and maintain the National Atlas of the United States, which serves as the small-scale implementation of <i>The National Map</i>. 	<p>Implement CUES in Charleston, SC; Washington, DC; Memphis, TN; and Baltimore, MD.</p> <p>Build high- vertical-resolution elevation data sets using AHF in south Florida.</p> <p>Investigate the integration of GPS, INS, and LIDAR for improving ground control.</p> <p>Demonstrate the utility of LIDAR data to a variety of research and development projects.</p> <p>Investigate impacts of SLR in coastal areas of the Chesapeake Bay.</p> <p>Begin to develop a strategy for integrating NOAA's digital coast data with <i>The National Map</i>.</p> <p>Add new partner data to existing <i>The National Map</i> holdings.</p> <p>Maintain database of the National Atlas of the United States.</p>	<p>Start new CUES and identify candidates for FY06.</p> <p>Expand Washington, DC CUES to incorporate other studies within the Chesapeake Bay to include those of other disciplines.</p> <p>Understand partner needs for O&M of data sets contributed to <i>The National Map</i>.</p> <p>Identify the requirements of DOI bureaus and apply elevation and derivative data to support them.</p> <p>Assess and compare technologies for creating elevation data such as photogrammetry, LIDAR, INSAR, AHF, and SAR.</p> <p>Add new partner data to existing <i>The National Map</i> holdings.</p> <p>Integrate various high-resolution elevation data sets (e.g., south Florida) with <i>The National Map</i>.</p> <p>Begin researching and producing 3- and 10- meter post spacing DEMs from partners' high-resolution elevation data for the National Elevation Dataset.</p> <p>Begin integrating <i>The National Map</i> and digital coast data in the Eastern Region.</p> <p>Maintain database of the National Atlas of the United States.</p>	<p>Start new CUES and identify candidates for next FY07.</p> <p>Connect existing CUES with Eastern Region placed-based study areas (South Florida).</p> <p>Continue to understand and accommodate, as possible, partner needs for O&M of data sets contributed to <i>The National Map</i>.</p> <p>Continue to integrate various high-resolution elevation data sets with <i>The National Map</i>.</p> <p>Add new partner data to existing <i>The National Map</i> holdings.</p> <p>Continue integrating <i>The National Map</i> and digital coast data in the Eastern Region.</p> <p>Maintain database of the National Atlas of the United States.</p>	<p>Start new CUES and identify candidates for next FY08.</p> <p>Connect existing CUES with Eastern Region focus area(s).</p> <p>Continue to understand and accommodate, as possible, partner needs for O&M of data sets contributed to <i>The National Map</i>.</p> <p>Enhance the elevation and derivative aspects of landscape change models to address requirements identified through previous applications research.</p> <p>Continue to integrate various high-resolution elevation data sets with <i>The National Map</i>.</p> <p>Add new partner data to existing <i>The National Map</i> holdings.</p> <p>Continue integrating <i>The National Map</i> and digital coast data in the Eastern Region.</p> <p>Maintain database of the National Atlas of the United States.</p>	<p>Start new CUES and identify candidates for next FY09.</p> <p>Connect existing CUES with Eastern Region focus area(s).</p> <p>Continue to understand and accommodate, as possible, partner needs for O&M of data sets contributed to <i>The National Map</i>.</p> <p>Continue to integrate various high-resolution elevation data sets with <i>The National Map</i>.</p> <p>Continue integrating <i>The National Map</i> and digital coast data in the Eastern Region.</p> <p>Maintain database of the National Atlas of the United States.</p>	<p>Start new CUES and identify candidates for next FY10.</p> <p>Connect existing CUES with Eastern Region focus area(s).</p> <p>Continue to understand and accommodate, as possible, partner needs for O&M of data sets contributed to <i>The National Map</i>.</p> <p>Continue to integrate various high-resolution elevation data sets with <i>The National Map</i>.</p> <p>Continue integrating <i>The National Map</i> and digital coast data in the Eastern Region.</p> <p>Maintain database of the National Atlas of the United States.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
Program:						
<p>Transfer to partners and collaborators our expertise in spatial data and geographic research necessary for them to become full partners in building and maintaining <i>The National Map</i>.</p> <p><u>Thrust:</u></p> <ul style="list-style-type: none"> Geographic science work is recognized as progressive, responsive to societal needs, and serves as the foundation for integrated science. <i>The National Map</i> objectives, including integrated science applications, are developed and maintained. ERG contributions to integrated Bureau science programs are integral to their success. 	<p>Integrate USGS and other geospatial data regarding Hg in the environment for query, modeling, visualization, and reporting. Promote USGS/NIEHS collaboration.</p> <p>Support the science planning for FISC and New England to insure geographic science is positioned to contribute.</p> <p>CUES promote the utility of <i>The National Map</i>.</p>	<p>Support the objectives of NIEHS in integrating environmental contaminants and their human health impacts with the earth and biological science data of the USGS through <i>The National Map</i>.</p> <p>Identify targets of opportunity (e.g., NIEHS) for using <i>The National Map</i> to support programmatic goals and objectives of other Bureau, Department, Federal, State, and other government entities.</p> <p>Develop a strategy for building CUES around the Eastern Region that focuses on the contribution of the CUES to science and partner needs, especially other disciplines within the USGS.</p> <p>Begin building the capability to apply the land-use portfolio modeler in support of partner objectives for improving adaptive management.</p> <p>Investigate the feasibility of implementing INCLUDE activities in the Eastern Region (e.g., off-shore wind farms in New England).</p>	<p>Look for CRADA opportunities to enable <i>The National Map</i>.</p> <p>Document, evaluate, and understand the range of drivers that motivate partners in <i>The National Map</i>.</p> <p>Apply geographic theory and concepts in defining focus areas for the Eastern Region.</p> <p>Begin to embed <i>The National Map</i> in the activities of other Federal and State agencies.</p> <p>Conduct applications in support of targets of opportunity that utilize the CUES, portfolio, and INCLUDE approaches.</p> <p>Develop standards for acquiring, preprocessing, and analyzing remotely sensed and field-based data.</p> <p>Develop approaches to sampling, analyzing, and reporting important landscape variables.</p>	<p>Continue to embed <i>The National Map</i> in the activities of other Federal and State agencies.</p> <p>Conduct applications in support of targets of opportunity that utilize the CUES, portfolio, and INCLUDE approaches.</p> <p>Develop standards for acquiring, preprocessing, and analyzing remotely sensed and field-based data.</p> <p>Develop approaches to sampling, analyzing, and reporting important landscape variables.</p>	<p>Continue to embed <i>The National Map</i> in the activities of other Federal and State agencies.</p> <p>Conduct applications in support of targets of opportunity that utilize the CUES, portfolio, and INCLUDE approaches.</p> <p>Develop standards for acquiring, preprocessing, and analyzing remotely sensed and field-based data.</p> <p>Develop approaches to sampling, analyzing, and reporting important landscape variables.</p>	<p>Continue to embed <i>The National Map</i> in the activities of other Federal and State agencies.</p> <p>Conduct applications in support of targets of opportunity that utilize the CUES, portfolio, and INCLUDE approaches.</p> <p>Develop standards for acquiring, preprocessing, and analyzing remotely sensed and field-based data.</p> <p>Develop approaches to sampling, analyzing, and reporting important landscape variables.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
<p>People:</p> <p>Attract, develop, support, and retain a quality workforce that delivers a robust body of work and serves with integrity.</p> <p><u>Thrusters:</u></p> <ul style="list-style-type: none"> ERG thrives on a leadership culture that promotes and recognizes an employee workforce that takes responsibility, is creative, supports each other, takes risks, and makes a difference. Employees work effectively in diverse teams that maximize their individual and team strengths. Provide opportunities for personal and professional development. ERG promotes a rewarding environment and supports quality of work life, where everyone adopts the USGS guiding principles: <ul style="list-style-type: none"> Be Respectful Be Accountable Communicate Value Differences Encourage Focus Collaborate ERG's workforce is appropriately balanced between permanent and other-than-permanent appointments, and contractors. ERG's workforce is appropriately skilled and adaptive to changing program directions. 	<p>Complete ERG staffing and workforce plans in line with Geography Discipline and Eastern Region planning efforts; new hires to support data integration, data management, partnerships, and geographic science.</p> <p>Establish ERG Training Plan to include training in <i>The National Map</i>, and geographic information science. Conduct Project Chief's training. Nominate appropriate employees for Bureau Leadership training (i.e. Leadership Development, Supervisory Challenge).</p> <p>Establish Career Development Program for Physical Science Technicians and Geographer/Physical Scientists, and Upward Mobility for Security Specialists.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Implement employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p> <p>Implement Geography Discipline Buy-Out/Early Out.</p>	<p>Complete annual goals established in Workforce Plan.</p> <p>Continue training in <i>The National Map</i> and GIS science.</p> <p>Conduct Project Chief's training.</p> <p>Nominate appropriate employees for Bureau Leadership training.</p> <p>Maintain Career Development Program and Upward Mobility Program for employees selected in FY2004, and create new opportunities in line with program directions.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Maintain employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p>	<p>Complete annual goals established in Workforce Plan.</p> <p>Revise staffing plans.</p> <p>Reassess ERG Training Plan and training needs.</p> <p>Conduct Project Chief's training.</p> <p>Nominate appropriate employees for Bureau Leadership training.</p> <p>Select employees for Career Development Program and Upward Mobility Program; maintain existing programs.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Maintain employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p>	<p>Complete annual goals established in Workforce Plan.</p> <p>Conduct Project Chief's training.</p> <p>Nominate appropriate employees for Bureau Leadership training.</p> <p>Select employees for Career Development Program and Upward Mobility Program; maintain existing programs.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Maintain employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p>	<p>Reassess staffing and workforce plans, adjusting hiring goals as needed, and assess need for further career development program and upward mobility.</p> <p>Conduct Project Chief's training.</p> <p>Nominate appropriate employees for Bureau Leadership training.</p> <p>Select employees for Career Development Program and Upward Mobility Program; maintain existing programs.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Maintain employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p>	<p>Conduct Project Chief's training.</p> <p>Nominate appropriate employees for Bureau Leadership training.</p> <p>Select employees for Career Development Program and Upward Mobility Program; maintain existing programs.</p> <p>Recognize key accomplishments at least quarterly.</p> <p>Maintain employee-friendly programs such as "flexiplace" and alternative work schedule. Review plans annually.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
Operations:						
Continuously improve our efficiency and effectiveness to support our partners, programs, and people.						
Thrusts:						
<ul style="list-style-type: none"> Internal and external communication strategies ensure that everyone has access to the information needed to support our program of work. 	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain and use feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain and use feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain and use feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain and use feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain and use feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>	<p>Hold 3 “All Hands Meetings” to keep employees informed of program and personnel developments and issues.</p> <p>Obtain feedback from current and potential customers and partners annually.</p> <p>Brief ERG employees semi-annually on the direction and status of <i>The National Map</i> and supporting ERG activities.</p> <p>Institute procedures to recognize incentives for preparing highlights.</p> <p>Maximize use of ERG internal web site by setting internal homepage as default page for ERG employees, providing for employee feedback on web page, and incorporating appropriate link to web site on all ERG memos.</p>

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
Operations:						
<ul style="list-style-type: none"> Administrative processes and practices are streamlined and support our program of work. 	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Develop a 3-year staffing plan for ERG staff and on-site contract employees based on anticipated changes to required functions.</p> <p>Establish a review and approval process for external agreements.</p> <p>Initiate and distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Establish and use effective mechanisms to track controlled and accountable property (e.g., assign all accountable property to proper APO, CPO and CE; include as critical element in employee work plan, etc).</p>	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Update 3-year ERG staffing plans semi annually.</p> <p>Revise and use established procedures for review and approval of agreements.</p> <p>Continue to distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Conduct annual audit of controlled and accountable property as part of annual performance appraisal.</p>	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Update ERG staffing plans semi annually.</p> <p>Revise and use established procedures for review and approval of agreements.</p> <p>Continue to distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Conduct annual audit of controlled and accountable property as part of annual performance appraisal.</p>	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Update ERG staffing plans semi annually.</p> <p>Revise and use established procedures for review and approval of agreements.</p> <p>Continue to distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Conduct annual audit of controlled and accountable property as part of annual performance appraisal.</p>	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Update ERG staffing plans semi annually.</p> <p>Revise and use established procedures for review and approval of agreements.</p> <p>Continue to distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Conduct annual audit of controlled and accountable property as part of annual performance appraisal.</p>	<p>Conduct annual review of administrative functions and management tools; implement recommended changes, improvements over prior year's review is demonstrated.</p> <p>Update ERG staffing plans semi annually.</p> <p>Revise and use established procedures for review and approval of agreements.</p> <p>Continue to distribute series of policy and procedures directives customized to ERG administrative needs.</p> <p>Conduct annual audit of controlled and accountable property as part of annual performance appraisal.</p>
<ul style="list-style-type: none"> Management tools are effective and promote creativity and program growth. 	<p>Institutionalize monthly meetings between Program Analysts and Project Chiefs.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>	<p>Conduct monthly meetings between Program Analysts and Project Chiefs across Teams.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>	<p>Conduct monthly meetings between Program Analysts and Project Chiefs across Teams.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>	<p>Conduct monthly meetings between Program Analysts and Project Chiefs across Teams.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>	<p>Conduct monthly meetings between Program Analysts and Project Chiefs across Teams.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>	<p>Conduct monthly meetings between Program Analysts and Project Chiefs across Teams.</p> <p>Conduct monthly meetings on BASIS+ for ERG management and Project Chiefs.</p> <p>Status of projects and partnership activities is shared quarterly with ERG management and staff.</p>

April 5, 2004 DRAFT DOCUMENT (For Review and Comment)

5-year Goals	FY 2004 Objectives	FY 2005 Objectives	FY 2006 Objectives	FY 2007 Objectives	FY 2008 Objectives	FY 2009 Objectives
Operations:						
<ul style="list-style-type: none"> Technical and information infrastructure supports our organizational needs, and addresses DOI and Bureau information technology security requirements. 	<p>Develop long-term plan for ERG IT support, incorporating Bureau and regional enterprise solutions (e.g., consolidation of Help Desk, migration of web sites to NatWeb, etc.).</p> <p>All ERG major applications and systems supporting <i>The National Map</i> are certified and accredited per FISMA and DOI directives (includes identifying risk and contingency planning, and testing).</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>	<p>50 percent of ERG IT support provided by contractors or by the Bureau.</p> <p>ERG major applications and systems are reviewed for certification and accreditation.</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>	<p>90 percent of ERG IT support provided by contractors or by the Bureau.</p> <p>ERG major applications and systems are reviewed for certification and accreditation.</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>	<p>90 percent of ERG IT support provided by contractors or by the Bureau.</p> <p>ERG major applications and systems are reviewed for certification and accreditation.</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>	<p>90 percent of ERG IT support provided by contractors or by the Bureau.</p> <p>ERG major applications and systems are reviewed for certification and accreditation.</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>	<p>90 percent of ERG IT support provided by contractors or by the Bureau.</p> <p>ERG major applications and systems are reviewed for certification and accreditation.</p> <p>Document and follow policies and procedures for handling IT security incidents and questions.</p>
<ul style="list-style-type: none"> Responses to emergency events are preplanned and shared with ERG personnel to ensure appropriate continuity of operations. 	<p>Draft continuity of operations plan for ERG in coordination with Eastern Region and National Center planning efforts.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>	<p>Review and revise continuity of operations plan for ERG annually.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>	<p>Review and revise continuity of operations plan for ERG annually.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>	<p>Review and revise continuity of operations plan for ERG annually.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>	<p>Review and revise continuity of operations plan for ERG annually.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>	<p>Review and revise continuity of operations plan for ERG annually.</p> <p>Identify emergency personnel and maintain comprehensive contact information.</p> <p>Conduct 3 unannounced emergency call downs using varying scenarios.</p>

Appendix A: Workforce and Staffing Plans

CONTENT WILL BE ADDED LATER

Appendix B: List of Acronyms

AHF.....	Airborne Height Finder
APO.....	Accountable Property Officer
ASC.....	Advanced Systems Center
ASTER.....	Advanced Spaceborne Thermal Emission and Reflection Radiometer
BBS.....	Breeding Bird Survey
BRD.....	Biological Resources Discipline
CE.....	Cognizant Employee
CDC.....	Center for Disease Control and Prevention
CPO.....	Custodial Property Officer
CRADA.....	Cooperative Research and Development Agreement
CUES.....	Comprehensive Urban Ecosystem Study
DEM.....	Digital Elevation Model
DLG.....	Digital Line Graph
DOI.....	Department of the Interior
ERG.....	Eastern Region Geography
FAA.....	Federal Aviation Administration
FISC.....	Florida Integrated Science Center
FISMA.....	Federal Information Security Management Act
GAM.....	Geographic Analysis Monitoring
GD.....	Geologic Discipline
GIS.....	Geographic Information Systems
GPS.....	Global Positioning System
Hg.....	Mercury
IFSAR.....	Interferometric Synthetic Aperture Radar
INS.....	Inertial Navigation Systems
INSAR.....	Interferometric Synthetic Aperture Radar
IT.....	Information Technology
LIDAR.....	Light Detection and Ranging
LC.....	Land Cover
LU.....	Land Use
LULC.....	Land Use Land Cover
LULCC.....	Land Use Land Cover Characteristics
NAWQA.....	National Water Quality Assessment
NIEHS.....	National Institute of Environmental Health Sciences
NOAA.....	National Oceanic and Atmospheric Administration
NTM.....	National Technical Means
O&M.....	Operations and Maintenance
OSTP.....	Office of Science Technology Policy
PES.....	Priority Ecosystem Science
SAR.....	Synthetic Aperture Radar
SRTM.....	Shuttle Radar Topography Mission
USGS.....	U.S. Geological Survey
WNV.....	West Nile Virus
WRD.....	Water Resources Discipline

¹ Taken from “Geography of the Eastern Region” presentation by David Kirtland at the Eastern Region Geography Strategic Review, November 18, 2003.

² Extracted from Eastern Region Science Plan, dated January 20, 2004
(internal.er.usgs.gov/docs/er_science_plan-ver8-01-20-04.doc)

³ Source: <http://topomaps.usgs.gov/>

⁴ Source: <http://nationalmap.usgs.gov/>