Key assets represent a broad array of unique facilities, sites, and structures whose disruption or destruction could have significant consequences across multiple dimensions. One category of key assets comprises the diverse array of national monuments, symbols, and icons that represent our Nation's heritage, traditions and values, and political power. They include a wide variety of sites and structures, such as prominent historical attractions, monuments, cultural icons, and centers of government and commerce. The sites and structures that make up this key asset category typically draw large amounts of tourism and frequent media attention—factors that impose additional protection challenges.

Another category of key assets includes facilities and structures that represent our national economic power and technological advancement. Many of them house significant amounts of hazardous materials, fuels, and chemical catalysts that enable important production and processing functions. Disruption of these facilities could have significant impact on public health and safety, public confidence, and the economy.

A third category of key assets includes such structures as prominent commercial centers, office buildings, and sports stadiums, where large numbers of people regularly congregate to conduct business or personal transactions, shop, or enjoy a recreational pastime.

Given the national-level fame of these sites and facilities and the potential human consequences that could result from their attack, protecting them is important in terms of both preventing fatalities and preserving public confidence.
National Monument and Icon Challenges

Our national monuments and icons present specific challenges because their protection typically combines the authorities, responsibilities, and resources of federal, state, and local jurisdictions, and, in some cases, private foundations. A clear division of labor, resources, and accountability is often difficult to distinguish.

The need to protect our national icons and monuments from terrorist attack requires the development and coordination of comprehensive policies, practices, and protective measures. We are also faced with the task of balancing open visitor access to these structures with the protection of visitors and the structures themselves. Most often their protection entails restricting public access to certain areas and curtailing, or even prohibiting, the assembly of large numbers of visitors.

The Department of the Interior (DOI) is the lead federal department with primary jurisdiction over national icons and monuments. It has diverse responsibilities, including the protection of a number of potential targets. Such protection is particularly important in the case of icons and symbols that figure prominently in national celebrations and events.

Accordingly, DOI must coordinate with law enforcement agencies across jurisdictions and entities directly responsible for intelligence gathering and homeland security.

DOI and its state, local, and private sector counterparts also face unique challenges with respect to recruiting, training, and retaining a robust security force. Given the need for the physical protection of such a wide array of potential targets (e.g., national parks, monuments, and historic buildings), maintaining a highly trained security force is a priority.

National Monument and Icon Initiatives

To address the challenges associated with the protection of our national monuments and icons, we will take action in the following areas:

Define criticality criteria for national monuments, icons, and symbols

DOI will work in concert with DHS to develop specific guidance to define criteria and standards for determining the criticalities and protection priorities for our national monuments, icons, and symbols.
Conduct threat and vulnerability assessments

DOI will work in concert with DHS and other appropriate authorities to conduct threat and vulnerability assessments to identify gaps in visitor protection processes as well as asset protection.

Retain a quality security force

DOI will explore alternatives to foster efforts to recruit, train, and retain a skilled and motivated security force.

Conduct security-focused public outreach and awareness programs

DOI will enlist public support in the protection of our national icons and symbols through sustained public outreach and awareness programs.

Collaborate with state and local governments and private foundations to assure the protection of symbols and icons outside the federal domain

DOI will work with state and local governments and private institutions to explore alternatives to protect symbols and icons such as historical buildings and landmarks that are outside the purview of the federal government.

Evaluate innovative technologies

DOI, in concert with DHS and other key stakeholders, will explore ways to employ security technologies to ensure the protection of visitors to monuments and other like attractions.

Make provisions for extra security during high-profile events

DOI will work with law enforcement agencies to manage visitor periods at national monuments and provide extra security during high-profile events taking place in or around national icons.
Nuclear power represents about 20 percent of our Nation’s electrical generation capacity. The U.S. has 104 commercial nuclear reactors in 31 states. For 25 years, federal regulations have required that these facilities maintain rigorous security programs to withstand an attack of specified adversary strength and capability. Nuclear power plants are also among the most physically hardened structures in the country, designed to withstand extreme events such as hurricanes, tornadoes, and earthquakes. Their reinforced engineering design provides inherent protection through such features as robust containment buildings, redundant safety systems, and sheltered spent fuel storage facilities.

The security at nuclear power plants has been enhanced significantly in the aftermath of the September 11 attacks. All plants remain at heightened states of readiness, and specific measures have been implemented to enhance physical security and to prevent and mitigate the effects of a deliberate release of radioactive materials. Steps have been taken to enhance surveillance, provide for more restricted site access, and improve coordination with law enforcement and military authorities. In addition to these augmented security measures, all nuclear power plants have robust security and emergency response plans in place to further assure public health and safety in the unlikely event of a malicious act and/or radioactive release.

Nuclear Power Plant Challenges

Losing the capabilities of a single nuclear power plant may have only a minor impact on overall electricity delivery within the context of our robust national power grid. Nevertheless, a terrorist attack on any nuclear facility would be considered a significant security event. In an unlikely worst-case scenario, a successful terrorist strike against a nuclear facility could result in a release of radioactive material. Even if radioactive material were not released, widely held misconceptions of the potential consequences of an
attack on a nuclear facility could have significant negative impact.

NRC is currently performing a detailed design basis threat and vulnerability analysis for nuclear power plants to help identify additional security enhancements that may be warranted. Additional prudent measures should be examined to help strengthen the defensive posture of these facilities.

**Nuclear Power Plant Initiatives**

To overcome protection challenges, we will:

**Coordinate efforts to perform standardized vulnerability and risk assessments**

NRC and DHS will work with owners and operators of nuclear power plants to develop a standard methodology for conducting vulnerability and risk assessments.

**Establish common processes and identify resources needed to augment security at nuclear power plants**

The NRC and DHS will work in concert with plant owners and operators and appropriate local, state, and federal authorities to develop a standard process for requesting external security augmentation at nuclear power plants during heightened periods of alert and in the event of an imminent threat.

**Criminalize the carrying of unauthorized weapons or explosives into nuclear facilities**

NRC, in coordination with DHS, will pursue legislation to make the act of carrying an unauthorized weapon or explosive into a nuclear power plant a federal crime.

**Enhance the capabilities of nuclear power plant security forces**

NRC, in coordination with DHS, will pursue legislation authorizing security guards at licensed facilities to carry and use more powerful weapons. It will also assist the industry to develop standards and implement additional training in counter-terrorist techniques for private security forces.

**Seek legislation to apply sabotage laws to nuclear facilities**

NRC, in coordination with DHS, will pursue legislation to make federal prohibitions on sabotage applicable to nuclear facilities and their operations.

**Enhance public outreach and awareness**

NRC and DHS will work with plant owners and operators and appropriate local and state authorities to enhance public outreach and awareness programs and emergency preparedness programs.
Some of our larger and more symbolic dams are major components of other critical infrastructure systems that provide water and electricity to large populations, cities, and agricultural complexes. There are approximately 80,000 dam facilities identified in the National Inventory of Dams. Most are small, and their failure would not result in significant property damage or loss of life. The federal government is responsible for roughly 10 percent of the dams whose failure could cause significant property damage or have public health and safety consequences. The remaining critical dams belong to state or local governments, utilities, and corporate or private owners.

**Dam Challenges**
Under current policies and laws, dam owners are largely responsible for the safety and security of their own structures. Hence, the resources available to protect dam property vary greatly from one category to the next. Additionally, the distributed nature of dam ownership also complicates assessment of the potential consequences of dam failure for certain categories of dams. Given these realities, the need to develop more comprehensive mechanisms for assessing and managing risks to dams is clear.

**Dam Initiatives**
To overcome protective challenges for dam structures, we will take action to:

**Develop risk assessment methodologies for dams**
DHS, in cooperation with appropriate federal, state, and local government representatives and private-sector dam owners, will design risk assessment methodologies for dams and develop criteria to prioritize the dams in the National Inventory to identify structures requiring enhanced security evaluations and protection focus.

**Develop protective action plans**
DHS, together with other appropriate departments and agencies, will establish an intergovernmental working group to explore appropriate protective actions for the Nation’s critical dams.

**Establish a sector-ISAC**
DHS will work with other appropriate public and private sector entities to establish an information and warning structure for dams similar to the ISAC model in use within other critical infrastructure sectors.

**Institute a national dam security program**
DHS and other appropriate departments and agencies, such as the Association of State Dam Safety Officials and United States Society of Dams, will collaborate to establish a nationwide security program for dams.

**Develop emergency action plans**
DHS, together with other appropriate departments and agencies, will identify the areas downstream from critical dams that could be affected by dam failure and develop appropriate population and infrastructure protection and emergency action plans.

**Develop technology to provide protective solutions**
DHS, together with other appropriate departments and agencies, will explore new protective technology solutions for dams. Technology solutions hold significant promise for the identification and mitigation of waterborne threats. For example, technical options might include deploying sensors, barriers, and communications systems to reduce the possibility of an unauthorized craft or device entering a critical zone located near a navigational dam.
Before the September 11 attacks, the principal threat to government buildings was the use of explosives. After the 1995 bombing of the Alfred P. Murrah Building in Oklahoma City, the operators of many large government centers across the country implemented enhanced measures, such as concrete barriers, intensified surveillance, and parking restrictions, to safeguard key physical assets. While explosives remain an important concern, the innovative, highly coordinated Al-Qaeda attacks have added new dimensions to the threats now facing U.S. government facilities.

The General Services Administration (GSA) is a principal agency responsible for the management of federal government facilities. Additional departments and agencies are similarly involved in the management of federally owned or operated facilities, including DoD and the Department of Veterans Affairs. Within the overall federal inventory are buildings that the federal government owns and others that it leases from the private sector. GSA works with other federal agencies to conduct facility security assessments to ensure that each facility owned or leased by GSA identifies vulnerabilities to specific types of threats. The Federal Protective Service, which will transition into DHS, works with government tenants and private-sector owners to identify credible threats and implement appropriate countermeasures to provide cost-effective security.

Government Facilities Challenges
Most government organizations occupy buildings that are also used by a variety of nongovernmental tenants, such as shops and restaurants where the public is able to move about freely. In federally owned buildings, federal laws and regulations apply. In private facilities with federal tenants, federal laws and regulations only apply in areas that are federally occupied. For instance, federal laws and regulations prohibit the entry into federal buildings of prohibited weapons. In buildings where the federal government leases space, the weapons ban is applicable only to those spaces occupied by the federal tenants. Private owners of these properties may not want or have the ability to modify their procedures to accommodate the increased or special security countermeasures required by their federal tenants, such as installing surveillance cameras in lobbies, redesigning entry points to restrict the flow of traffic, or setting up x-ray machines and metal detectors at entrances. The need to consider the delicate balance between security and the public’s right to privacy presents additional challenges.

Government Facilities Initiatives
To overcome protection challenges associated with government facilities, we will:

- Develop a process to screen nonfederal tenants and visitors entering private-sector facilities that house federal organizations
  - DHS, together with GSA and other federal departments and agencies, will work with real-estate associations in the private sector to implement a noninvasive screening process at facilities that house federal organizations.

- Determine the criticality and vulnerability of government facilities
  - DHS, together with GSA and other federal departments and agencies, will work with owners of federally occupied facilities to establish a standard methodology to determine a government facility’s criticality and vulnerability to facilitate security-related planning.

- Develop long-term construction standards for facilities requiring specialized security measures
  - NIST, together with DHS and other federal government departments and agencies, will continue current efforts to develop long-term construction design standards for facilities requiring blast resistance or other specialized security measures.

- Implement new technological security measures at federally occupied facilities
  - DHS, together with GSA and other federal departments and agencies, will work with owners of federally occupied facilities to explore measures to enhance security measures in the common areas of federally occupied facilities (e.g., sensor systems in lieu of manual-access control).
COMMERCIAL KEY ASSETS

Protecting prominent commercial centers, office buildings, sports stadiums, theme parks, and other sites where large numbers of people congregate to pursue business activities, conduct personal commercial transactions, or enjoy recreational pastimes presents significant challenges. Day-to-day protection of such facilities is the responsibility of their commercial owners and operators, in close cooperation with local law enforcement.

The federal government’s responsibility for the protection of these assets is more or less indirect. Its activities include providing timely threat indications and warnings and working with commercial enterprises to harmonize individual facility security processes with the various Homeland Security Advisory System levels of alert. Additionally, providing support and input to organizations that develop standards and guidance for building construction and facility heating, ventilating, and air conditioning (HVAC) systems constitutes an important federal government activity.

The federal government typically coordinates or provides physical security at commercial facilities only in conjunction with dignitary visits or designated National Security Special Events. Given the national-level visibility and potential human and economic consequences of prominent commercial sites and facilities, it is important for the government and commercial sectors to work together to assure the protection of our nation’s prominent business centers and gathering places.

Commercial Key Asset Challenges

The likelihood of terrorists targeting and attacking any specific, prominent commercial facility or activity is difficult to determine. Potential terrorist attack methods range from conventional explosives to CBR weapons of mass destruction. Each facility’s vulnerability to the various means by which terrorists could strike is unique as determined by its engineering design, size, age, purpose, and number of inhabitants. Standards for building design, construction, and security also vary widely across enterprises, industrial sectors, and governmental jurisdictions. For the most part, commercial owners and operators must be responsible for assessing and mitigating their specific facility vulnerabilities and practicing prudent risk management and mitigating measures.
Commercial Key Asset Initiatives

There are no specific actions that will eliminate all of the potential risks associated with the threat of a determined terrorist attack on a prominent commercial facility or activity. However, there are certain steps that can be taken to reduce a facility's attractiveness as a target by complicating attack planning and execution, and helping to mitigate the effects of an explosive attack or CBR release.

For example, reducing a commercial facility's vulnerability to a high explosive or CBR attack requires a comprehensive approach. The first step is to integrate considerations for potential threats into the engineering design of the facility and its supporting systems (e.g., HVAC systems).

The second step is a thorough assessment of physical-security design features, systems, processes, and procedures that serve to deny or limit terrorist access to a facility and its key nodes. Preventing terrorist access to a targeted facility requires adequate physical security for all entrances, storage areas, maintenance areas, and rooftops, as well as securing access to the outdoor air intakes of facility HVAC systems.

The third step is an interior assessment of HVAC systems and their components. Specifically, this measure focuses on their vulnerability as conduits for the introduction and dispersal of CBR agents. Key areas considered during this assessment include HVAC system controls, airflow patterns, overpressure, purge capability, filtering efficiency, and leakage potential. If designed, installed, and maintained properly, air filtration and cleaning systems can mitigate the effects of CBR agents by removing contaminants from a facility's airborne environment.

A final step involves developing and rehearsing facility contingency plans based on scenarios involving the most likely and worst-case physical security breaches, aircraft impact, conventional explosive detonation, and CBR release scenarios. This final and important measure must include establishing processes and systems for coordinating and cooperating with local law enforcement and emergency response personnel.

To facilitate the protection of prominent commercial sites and facilities against terrorist attack, we will take action to:

Share federal building security standards and practices with the private sector

DHS, together with GSA, NIST and other federal departments and agencies will develop a program to share federal building protection standards, vulnerability and risk assessment methodologies, best practices, and technology solutions (e.g. physical barriers, closed-circuit television, intrusion detection devices, CBR detection sensors, and explosive detection systems) with commercial facility owners and operators.

Facilitate efficient dissemination of threat information

DHS, in concert with the intelligence and law enforcement communities, will explore processes and systems to enable the timely dissemination of threat indications and warning information to commercial facility owners and operators.

Implement the Homeland Security Advisory System

DHS will collaborate with commercial facility owners and operators to align the Homeland Security Advisory System with specific measures and procedures pertinent to commercial facility security.

Explore options for incentives for the implementation of enhanced design features or security measures

DHS will explore options to facilitate incentives for commercial owners and operators who incorporate specific security and safety features into their facility design, or who adopt specific processes, procedures, and technologies that serve to deter, prevent, or mitigate the consequences of terrorist attacks.

Improve building codes for privately owned facilities

NIST will develop a comprehensive set of building codes for privately owned facilities designed to better assure structural integrity, minimize probability of collapse, and increase resistance to high-temperature fires.