Homeland Security Institute

Homeland Security Strategic Planning: Mission Area Analysis

Final

March 28, 2007

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Our mission is to assist the Secretary of DHS, the Under Secretary for Science and Technology, and the DHS Operating Elements in addressing national policy and security issues where scientific, technical, and analytical expertise is required. We also consult with private industry, institutions of higher education, nonprofit institutions, and other government agencies.
We deliver independent and objective analyses and advice to support policy development, decision making, alternative approaches, and new ideas on significance issues.

Our studies and analyses, undertaken by mutual consent with DHS, are organized as Tasks in the annual HSI Research Plan. This report presents the results of research and analysis conducted under
This document represents the results of research and analysis conducted under

Task 05, Homeland Security Strategic Planning,

of HSI's Fiscal Year 2005 Research Plan. The purpose of Task 5 is to develop a planning framework that can be used to guide and prioritize the development of improved homeland security capabilities. The results presented in this report do not necessarily reflect official DHS opinion or policy.

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HOMELAND SECURITY STRATEGIC PLANNING: MISSION AREA ANALYSIS

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PREFACE

The initial draft of this report was prepared based on analysis of the national-level articulations of strategy proceeding from the terrorist events of September 11, 2001. Consequently, the concept of homeland security that underpinned this report's initial presentation of the homeland security mission was terrorism-centric and distinct from activities required to 1) protect American lives and property from major natural disasters and accidents and 2) respond to and recover from the consequences of those events.

The concept of homeland security has continued to evolve, shaped in no small part by the magnitude of natural disasters that occurred in 2005. Subsequent to the completion of the initial draft of this report, the homeland security mission area analysis was refined through a collaborative effort involving the Homeland Security Institute and the Department of Homeland Security's Grants & Training and Science & Technology directorates. This process deliberately employed a revised concept of homeland security that is all-hazards in scope, integrating activities previously subsumed under the rubric of national preparedness. The results of the subsequent mission area analysis now known as the All-Hazards Taxonomy is contained in the addendum to this report. This work will undoubtedly continue to be refined as understanding of the homeland security mission deepens with time, experience, and study.

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EXECUTIVE SUMMARY

This report documents the homeland security (HS) mission area analysis (MAA) conducted by the Homeland Security Institute (HSI).

The HS MAA identifies the activities required to conduct the missions identified in the National Strategy for Homeland Security (NSHS). Accordingly, the HS MAA focuses specifically on the NSHS missions without regard for organizational or jurisdictional boundaries, either inside or outside the federal government. Nevertheless, the HSI study team recognizes that many related planning efforts are underway within the Department of Homeland Security (DHS) and other organizations. Wherever possible, HSI has attempted to identify and incorporate these other efforts, to ensure that the perspectives of all stakeholders are considered.

In developing the MAA, HSI conducted a detailed analysis of national guidance documents, decomposing them into discrete activities related to the NSHS missions across the national scope of HS operations. The HSI analysis also identified a set of common tasks that enable all functions within the HS MAA. These common tasks are those performed/managed not only by DHS, but by all organizations responsible for securing the homeland. Internal (HSI) and external reviews as well as HS-community outreach further refined the MAA.

The MAA hierarchy includes five levels: Goals, Missions, Objectives, Functions, and function-specific Tasks. These describe the HS operational mission space with sufficient granularity to enable the MAA to serve as an effective analysis and measurement tool. HSI facilitated a series of four collaborative interagency workshops to review straw man Objectives and Functions and to develop lists of Tasks associated with each HS Function. A broad range of HS partners participated in each workshop, including representatives from federal, state, and local government organizations. Workshop participants provided valuable insights and observations regarding the elements of the MAA and their definitions.

The resulting MAA provides a logical structure for analyzing and measuring NSHS-derived mission outcomes. The HSI study team recommends that the MAA elements be prioritized and that their framework guide the Department’s analysis of homeland security operational capabilities, needs, and gaps.

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1.0 INTRODUCTION

1.1 Purpose

This report explains the approach used by the Homeland Security Institute (HSI) to conduct the homeland security (HS) mission area analysis (MAA). It also documents the results of that analysis.

1.2 Scope

The National Strategy for Homeland Security (NSHS) provides a clear presentation of national leadership's strategic vision for homeland security involving stakeholders in federal, state, local, and tribal governments as well as the private sector. As defined by the NSHS, homeland security is a concerted effort to "prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur."[1]

The HS MAA provides a hierarchical breakdown of the activities required to achieve this goal (Figure 1). These activities include the objectives, functions, and tasks specified for the missions identified in the NSHS. These five categories of activities describe the HS operational mission space with sufficient clarity to enable the MAA to be an effective analysis and measurement tool. Collectively, the five MAA categories tell what must be done to secure the homeland.

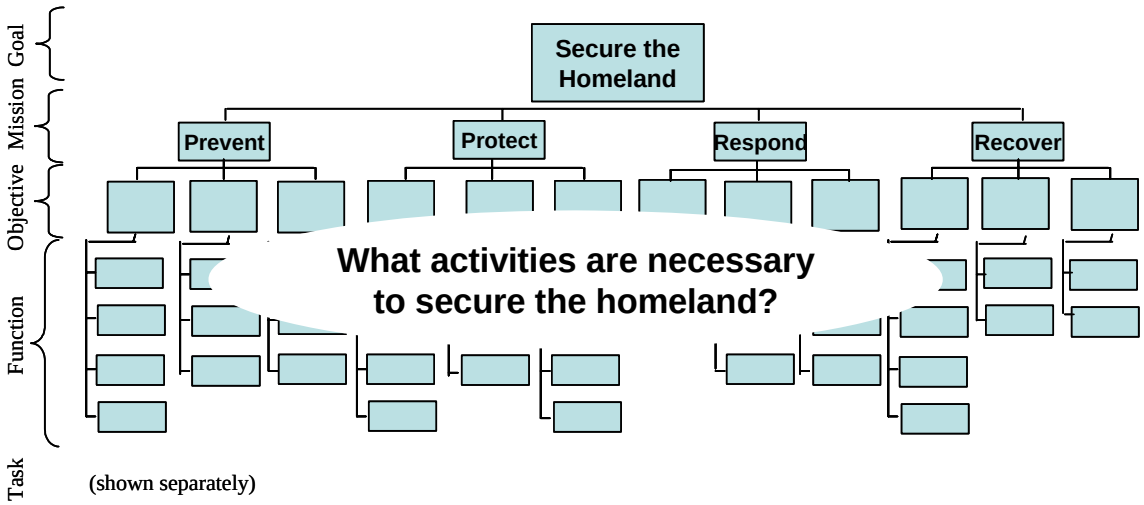

Figure 1. MAA Hierarchy—What Are the Right Objectives, Functions, and Tasks?

The hierarchy establishes a logical relationship among these activities, as shown in Figure 2. A given activity can be thought of as a "what." The hierarchy successively decomposes each "what" into subordinate activities at the next lower level that tells "how." When the decomposition is complete, the hierarchy can be traced both

[1] *National Strategy for Homeland Security*, 2.

downwards—decomposing successive "whats" into "hows," and upwards—each activity supporting the accomplishment of a higher level outcome and answering the question "why."

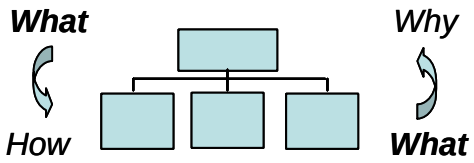

Figure 2. Hierarchy Establishes Logical Relationships

The MAA covers all NSHS missions required to secure the homeland from terrorism, regardless of organizational and jurisdictional restrictions. Any one agency or organization cannot independently secure the homeland. Achieving that goal involves all levels of federal, state, local, and tribal governments as well as a variety of private organizations—each performing vital HS activities. Thus, the HS MAA provides a unifying framework for identifying and coordinating all governmental and private HS mission operations, not just those performed by DHS.

Within the federal government, DHS has primary responsibility for the majority of the HS mission. However, the Department's responsibilities do not cover the entire space. Conversely, not all of DHS's activities are related directly to the HS mission (e.g., preparedness for natural disasters and accidents). The logical relationship between homeland security (which is taken by this report to be terrorism-centric), National Preparedness (against all hazards), and the mission of DHS is shown in Figure 3.

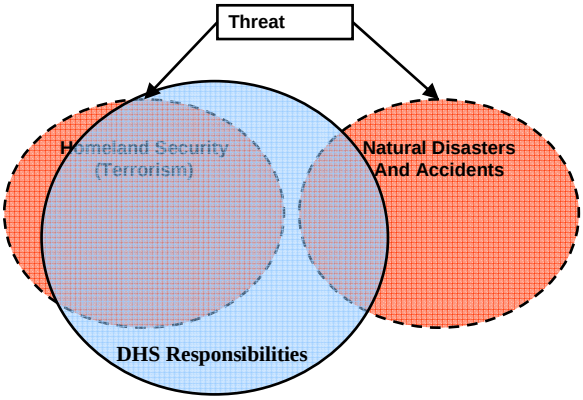

Figure 3: Homeland Security, National Preparedness, and the mission of DHS

The HSI study team identified several related planning efforts within DHS. Two notable examples are the development of the Universal Task List (UTL) under Homeland Security Presidential Directive-8 (HSPD-8), National Preparedness, and the development of the National Infrastucture Protection Plan (NIPP) under HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection. Wherever possible, HSI worked closely with the DHS elements conducting these efforts.

1.3 Background

HSI is tasked by its DHS Sponsor to help develop and implement a capabilities-based planning process "that integrates strategic planning with activities such as threat and vulnerability assessment, mission analysis, risk assessment, investment strategy development, resource allocation, program planning performance-based assessment, and system requirements analysis." The results should "[Help] the Department weigh its options for 'where the next…dollar' should be spent."[2] To accomplish this task, HSI outlined a prototype approach involving three steps:

1. Strategic Prioritization
2. Systems Analysis and Architecture
3. Portfolio Management and Programming

These steps also complement ongoing DHS efforts such as HSPD-8 initiatives that are implementing 1) a national domestic preparedness goal; 2) mechanisms for improved delivery of federal preparedness assistance to state and local governments; and 3) actions to strengthen preparedness capabilities of federal, state, and local entities. A comprehensive capabilities-based process for weighing investment options is required to optimize mission preparedness among all homeland security partners.

Within this context, the HS MAA provides a comprehensive understanding of the HS mission and thus a foundation for the capabilities-based planning process. Decomposing HS missions into their constituent objectives, functions, and tasks provides planners with a framework to use in identifying shortfalls and redundancies, thus helping to guide resource allocation decisions.

[2] Homeland Security Institute, Research Plan, FY05, Tasks 05 and 06.

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2.0 METHODOLOGY

2.1 MAA Hierarchy

The MAA hierarchy was initially constructed by analyzing national guidance documents (e.g., legislation, Homeland Security Presidential Directives, National Security Presidential Directives, the NSHS, the Department of Homeland Security Strategic Plan, and the National Response Plan).

The NSHS provides the goal: "to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur."[3] From this broad starting point, the elements of the MAA hierarchy flow downward in scale and specificity.

To identify the activities in the hierarchy, the study team parsed the national guidance documents into discrete functional statements. These activities are represented on the MAA hierarchy; their titles and their definitions contain language taken directly from the guidance documents.

The team organized these activities in a hierarchy, based on their scope and scale. The initial HS MAA hierarchy consisted of four levels: Goal, Mission, Objective, and Function. Each element at a given level (for example, each Function) is similar in scale. Moreover, each element represents a discrete activity that does not overlap with other activities. Finally, the elements of the hierarchy are arranged according to parent-child relationships; that is, each parent element is decomposed into its children. The fulfillment of the child elements constitutes the fulfillment of the parent element.

To refine the initial draft, HSI leveraged available subject matter expertise. The study team conducted informal interviews of staff from across HSI, as well as formal reviews within the Institute. The team also tapped external sources, including institutional outreach partners and federal government personnel. The task development process (see next section) provided an opportunity for personnel from several federal agencies, state and local governments, and the private sector to review and comment on the MAA Objectives and Functions.

2.2 Task Development

Tasks reside at a level below MAA Functions. Tasks in the MAA are divided into two types: Common Tasks and Function-Specific Tasks.

Common Tasks are those tasks associated with Preparedness, Resource Management, Communications and Information Management, and Supporting Technology (see Figure 1). They enable all Functions and therefore are not included in the list of Tasks associated with each specific Function. The Tasks in this category are derived from national guidance documents. These Common Tasks occur across the entire operational mission

[3] National Strategy for Homeland Security, 2.

space. They not only occur within each MAA function but also within homeland security partner organizations carrying out NSHS missions. The definitions of these Common Tasks are provided in Appendix B.

Function-Specific Tasks are basic discrete HS activities organized into particular sets that enable individuals and organizations to accomplish specific MAA Functions. These Tasks were identified in a series of four collaborative interagency Task Development Workshops facilitated by HSI. These workshops produced a set of Function-Specific Tasks and their respective definitions for each MAA Function (see section 3.0, Results). The workshops used existing products including the foundational work of the UTL to develop the full spectrum of HS tasks. A broad range of HS partners participated in each workshop, including representatives from federal, state, and local government organizations.

The following HS MAA Task Development Workshops were conducted:

- March 16: Intelligence
- April 14: Law Enforcement/Border-Transportation Security
- April 19: Critical Infrastructure Protection
- April 29 [virtual]: Respond and Recover

The first three workshops were one-day sessions facilitated by the HSI study team. The final workshop, Respond and Recover, used existing working groups of the Office for State and Local Government Coordination and Preparedness. HSI provided draft Respond and Recover Task lists to the working groups, who then provided their recommendations electronically.

Before the workshops, the HSI study team developed straw man tasks and definitions, based on the UTL and other sources. HSI provided the straw man task list to the participants, along with other background materials including a list of eight threat families (Chemical, Biological, Radiological, Nuclear, Explosives, Cyber, Assault, and Emerging); and a generic adversary pathway (Decide, Deploy, Plan, Employ, Acquire, Escape).

During the workshops, participants provided insights and observations on the MAA Objectives and Functions. They then discussed the straw man HS Task titles and definitions, and adopted revised language for them based on cross-functional subject-matter expertise.

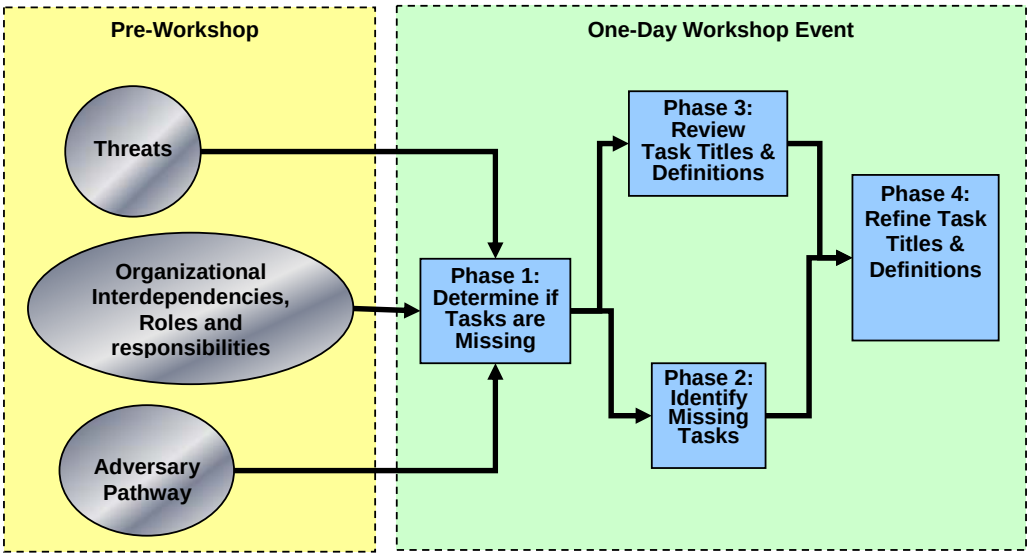

Figure 4. Task Development Workshop Process

Figure 4 illustrates the workshop process in greater detail. In Phase 1 of the process, participants examined the straw man HS Task lists for comprehensiveness and relevance. This assessment was set in the context of organizational responsibilities as well as the threat types and pathways provided earlier. In addition, participants were encouraged to discuss Function titles associated with the relevant Objectives specified in the HS MAA. Phase 2 required participants to develop new Tasks as required. Phase 3 required participants to review and clarify all current Task definitions. In Phase 4, participants developed definitions for all added Tasks.

After the workshops, the HSI team reviewed and incorporated the inputs and provided participants with a revised set of Objectives, Functions, and Tasks. This step allowed participants to see the results of their collective efforts and offer any additional insights/suggestions. Appendix A details all such post-workshop participant commentary. The HSI team analyzed each comment and decided whether it should be accepted, rejected, or modified and incorporated. Appendix A includes the decisions made by HSI analysts as well as their rationale for each decision.

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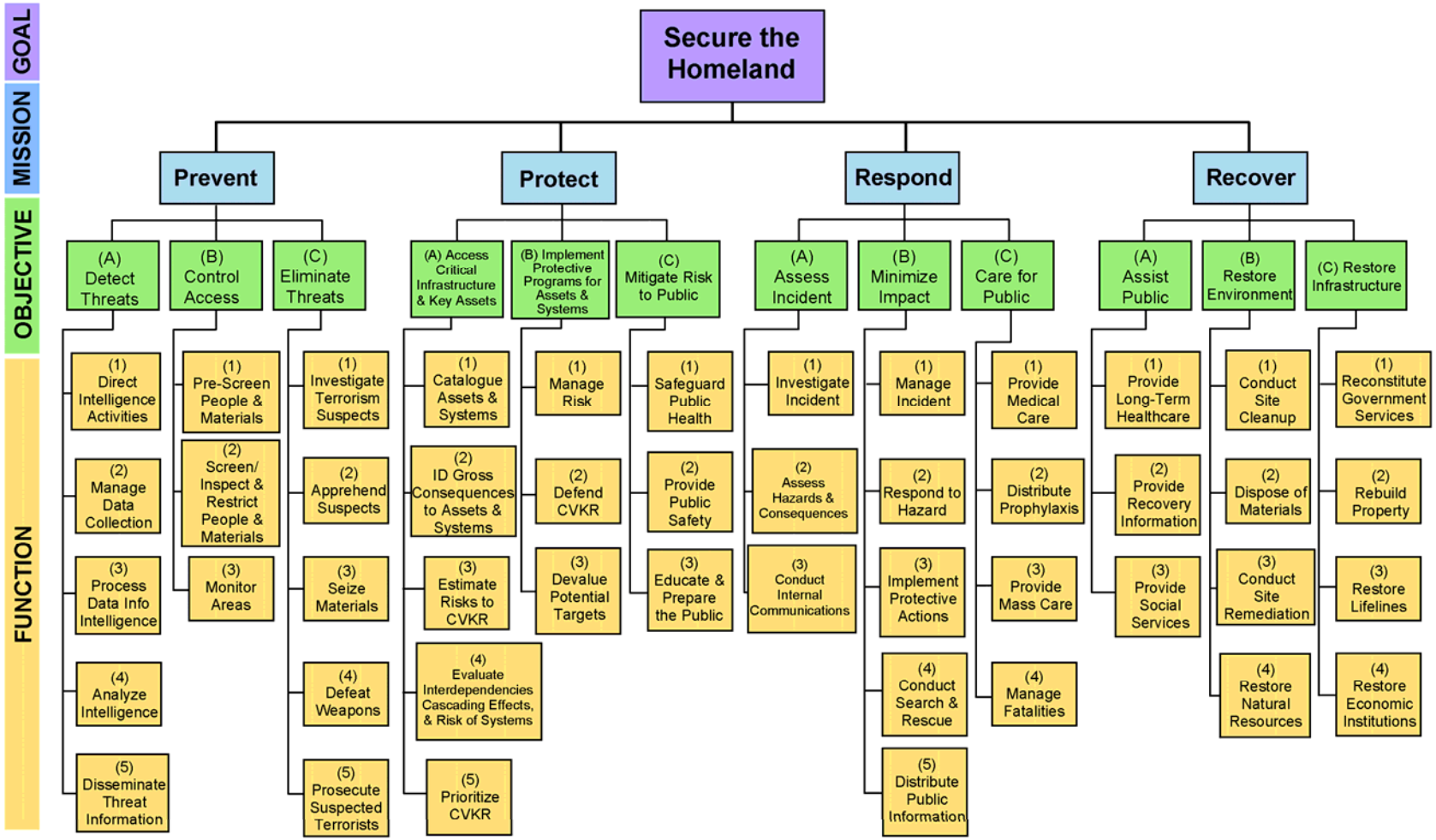
3.0 RESULTS

This section describes the results of interagency Task Development Workshops. These results include the four levels (Missions, Objectives, Functions, and Functions-Specific Tasks) under the overall Goal (Secure the Homeland) of the HSI MAA hierarchy shown on the next page (Figure 5). These results are organized as follows:

- The definitions for each of the four levels
- A series of tables for each Mission and Objective defining its Functions and (Function-Specific) Tasks.



Note 1: Common Tasks occur across all Functions: (A) Planning and Coordination, (B) Preparedness, (C) Resource Management, (D) Communications & Information Management, (E) Supporting Technology.

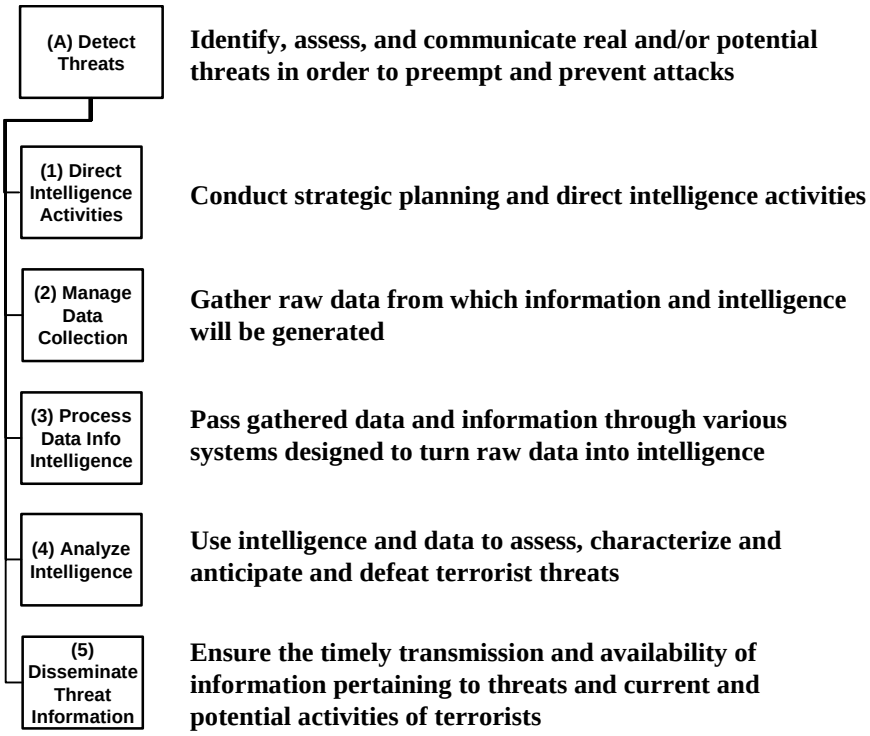
Note 2: Function-Specific Tasks enable the function to be performed.

Figure 5. HSI MAA Hierarchy, Post-Workshops Version

Mission: Prevent

Deter all potential terrorists from attacking America, detect terrorists before they strike, prevent them and their instruments of terror from entering our country, and eliminate the threat they pose.

Objective: Detect Threats



Function: Direct Intelligence Activities: Conduct strategic planning and direct intelligence activities.	
Task	**Definition**
Identify information needs.	Define, coordinate, and prioritize standing (long-term) and short-term information requirements.
Evaluate capability shortfalls.	Determine the adequacy of current capabilities.
Identify information gaps.	Assess intelligence against requirements.
Apply resources.	Refine and allocate capabilities across the U.S. homeland security community (includes intelligence agencies and law enforcement agencies).

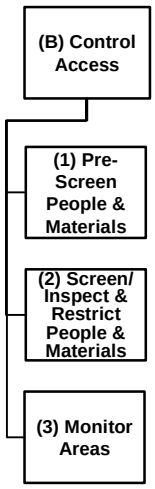
Function: Manage Data Collection: Gather raw data from which information and intelligence will be generated.	
Task	**Definition**
Determine collection requirements.	Translate prioritized information requirements into specific collection options to include identification of collection shortfalls and/or gaps.
Allocate collection resources.	Allocate resources to prioritized requirements.
Collect new data.	Collect data on threats.
Verify satisfaction of collection requirement.	Review data for shortfalls and/or gaps, and identify additional collection requirements.

Function: Process Data Into Intelligence: Pass gathered data and information through various systems designed to turn raw data into intelligence.	
Task	**Definition**
Process data.	Conduct technical and nontechnical processing and exploitation of data.
Develop information for analysis.	Convert collected data into products that can be readily used.

Function: Analyze Intelligence: Gather raw data from which information and intelligence will be generated.	
Task	**Definition**
Review collected data and information.	Determine if information has intelligence value.
Assess validity of information and sources.	Appraise information and the sources from which it comes for credibility, reliability, pertinence, and accuracy.
Integrate information.	Identify and group together related items of information to improve the reliability, credibility, and completeness of the information.
Analyze information.	Apply appropriate techniques to information to derive meaningful intelligence.
Coordinate intelligence analyses.	Validate and evaluate analyses with interagency, state, tribal, regional, and local partners.
Determine intelligence gaps.	Evaluate intelligence, and recommend any necessary improvements to ensure consumers' intelligence requirements are satisfied.
Generate intelligence products.	Produce finished and unfinished intelligence at appropriate classification level and format.

Function: Disseminate Threat Information: Ensure the timely transmission and availability of information pertaining to threats and current and potential activities of terrorists.	
Task	**Definition**
Determine intelligence end-user product requirements.	Identify user and user requirements for finished intelligence products to include transmission mechanism, classification, format, and timeliness.
Disseminate intelligence.	Provide timely intelligence products in the appropriate format and classification to identified users.
Provide indications and warning.	Report time-sensitive intelligence on terrorist activities that could threaten the United States.

Objective: Control Access



Conduct security functions to prevent entry of terrorists and the instruments of terrorism to the United States and/or access to targets and natural resources of the United States

Pre-screen and analyze people and materials en route to or within the United States to identify high risk individuals and materials

Inspect or examine people and materials to identify individuals, substances, devices, or other items that pose a danger

Monitor borders, territorial seas, points of entry into the United States and adjacent areas, and potential terrorist targets, especially critical infrastructure nodes and conveyances

Function: Pre-Screen People and Materials: Pre-screen and analyze people and materials en route to or within the United States to identify high-risk individuals and materials.	
Tasks	**Definitions**
Develop lookout lists.	Create listings of people/materials with attributes potentially related to terrorist activities.
Identify people/material requiring further inspection.	Analyze information pertaining to travel and trade with the United States to identify people/material requiring further inspection—to include coordination with foreign governments (e.g., analyze passenger manifests, bills of lading, etc.)—for suspicious activity.
Conduct background checks.	Screen applicants/employees/others who will have access to conveyances, key assets, and/or information (clear employees for access to and handling of sensitive information before permitting access to sensitive areas.
Notify proper authorities of suspicious activity.	Relay information to appropriate U.S. authorities (e.g., notify federal authorities of suspicious individuals/trade shipments destined to arrive and/or transit in the United States).

Function: Screen/Inspect and Restrict People and Materials: Inspect or examine people and materials to identify individuals, substances, devices, or other items that pose a danger.	
Task	**Definition**
Grant access to conveyances/facilities.	Authorize interaction with or entry into restricted conveyances, facilities, and regulated cargo (e.g., HAZMAT).
Screen/Inspect individuals and materials.	Inspect and validate documentation (e.g., verify not-on-lookout lists).
Maintain post-inspection integrity of individuals and materials.	Ensure people and materials are secure and not permitted to be contaminated after prescreening/inspection.
Restrict movement of suspicious people/ material when required.	Restrict the movement of those people/materials suspected of being related to terrorism.
Notify proper authorities when required.	Notify officials when inspection yields individuals/materials potentially related to terrorist activities.

Function: Monitor Areas: Monitor borders, territorial seas, points of entry into the United States and adjacent areas, and potential terrorist targets, especially critical infrastructure nodes and conveyances.	
Task	**Definition**
Manage monitoring activities.	Direct, determine, prioritize, and integrate monitoring activities.
Monitor key assets.	Maintain visibility of vehicles, people, and material coming to and departing from key assets.
Monitor border.	Maintain visibility of vehicles, people, and material coming to and departing from the United States.
Track movement.	Detect movement and transfer of terrorists and/or material.
Report observations.	Provide operational information to identified users in a timely manner.
Deploy detection systems.	Provide surveillance and information systems to facilitate early detection and mitigation.

Objective: Eliminate Threats

Function: Investigate Terrorism Suspects: Track and probe terrorists, suspected terrorists and terrorist activities.	
Task	**Definition**
Gather actionable intelligence.	Review actionable intelligence regarding terrorist suspect activities.
Conduct surveillance of suspects.	Monitor terrorist suspects to gather evidence based on actionable intelligence.
Interview victims and witnesses.	Gather information and/or evidence from witnesses regarding threats and/or incidents.
Seek appropriate court authorities.	Seek issuance of appropriate court authority to facilitate investigative efforts.
Employ appropriate investigative methods.	Use appropriate investigative techniques including forensic examination, polygraph, financial, and communications investigations, etc.
Preserve evidence.	Process and document evidence to include maintaining a chain of custody that can be used in the apprehension and eventual prosecution of a suspect.
Conduct public affairs operations.	Implement public outreach and/or awareness programs, public service announcements, and public diplomacy.

Function: Apprehend Suspects: Seize and detain suspected terrorists under proper authority.	
Task	**Definition**
Identify suspects.	Positively recognize suspected terrorists .
Locate suspects.	Identify the location of suspected terrorists.
Survey suspects.	Monitor the suspect's movements, activities, and associates.
Interview suspects.	Gather information from interviews pertaining to unlawful acts, terrorism, or other potentially harmful activities.
*Apprehen*d suspects.	Detain and/or arrest suspects and process them in the judicial system under proper authority.
Transport suspects.	Move suspect from arrest location to secure facility.
Dismantle terrorist training.	Eliminate terrorist training capabilities, both physical and cyber, including the sources of support.
Conduct public affairs operations.	Implement public outreach and/or awareness programs, public service announcements, and public diplomacy.

Function: Seize Materials: Intercept and seize information, substances, components, technologies, and weapons potentially used for terrorist activities under proper authority.	
Task	**Definition**
Identify suspect conveyances.	Identify conveyances employed in terrorist activities.
Intercept/board conveyance.	Enter conveyance of potential terrorist material to include sea vessels, airplanes, trains, trucks, automobiles, and cyber systems.
Identify materials.	Positively identify materials and associated hazards.
Divert conveyance.	Direct the delivery of a terrorist material away from its destination.
Track conveyance and/or materials.	Locate and track conveyances and/or materials employed in terrorist activities, and maintain contact.
Search for materials.	Search suspect sites for potential terrorist material, including information, substances, components, technologies, and weapons, under appropriate authority.
Inspect materials.	Examine, verify, and seek materials, including information, substances, components, technologies, and weapons potentially used for terrorist activities.
Render materials safe.	Neutralize threat agents, materials, computer code, precursors, and residual products to make them safe.
Maintain custody of materials.	Secure and document materials under positive control of appropriate authorities including the establishment of chain of custody.
S*tore* materials safely.	Label and place materials in appropriate secure storage.
Transport materials safely.	Implement standard packaging and transport procedures for known or suspected terrorist material.
Dispose of suspected/ known material.	Destroy, retain, or transfer materials under appropriate authority.
Conduct public affairs operations.	Implement public outreach and/or awareness programs, public service announcements, and public diplomacy.

Function: Defeat Weapons: Neutralize, by dislocating, disabling, and/or destroying, terrorist weapons.	
Task	**Definition**
Identify weapon.	Positively identify weapon and associated hazards including possible secondary devices.
Conduct threat modeling and simulation.	Provide threat predictive analyses to support weapons defeat operations and consequence mitigation.
Track weapon/ delivery system.	Identify and track the path of the terrorist weapon and its delivery system.
Neutralize weapon-delivery system.	Render the weapon's delivery system safe, ineffective, unusable, or harmless.
Secure weapon.	Isolate and control the weapon, including establishing a safety perimeter.
Transport weapon safely.	Implement standard safe packaging and transporting procedures for known or suspected weapons.
Divert weapon/delivery system.	Redirect the delivery of a terrorist-controlled weapon away from its intended target in order to mitigate potential consequences.
Safeguard public welfare.	Act to safeguard the community good, e.g., evacuation, shelter in place.
Render weapon safe.	Neutralize threat agents, materials, computer code, precursors, and residual products to make them safe, ineffective, unusable, or harmless.
Dispose of suspected/ known material.	Destroy, retain, or transfer materials under appropriate authority.
Conduct public-affairs operations.	Implement public outreach and/or awareness programs, public service announcements, and public diplomacy.

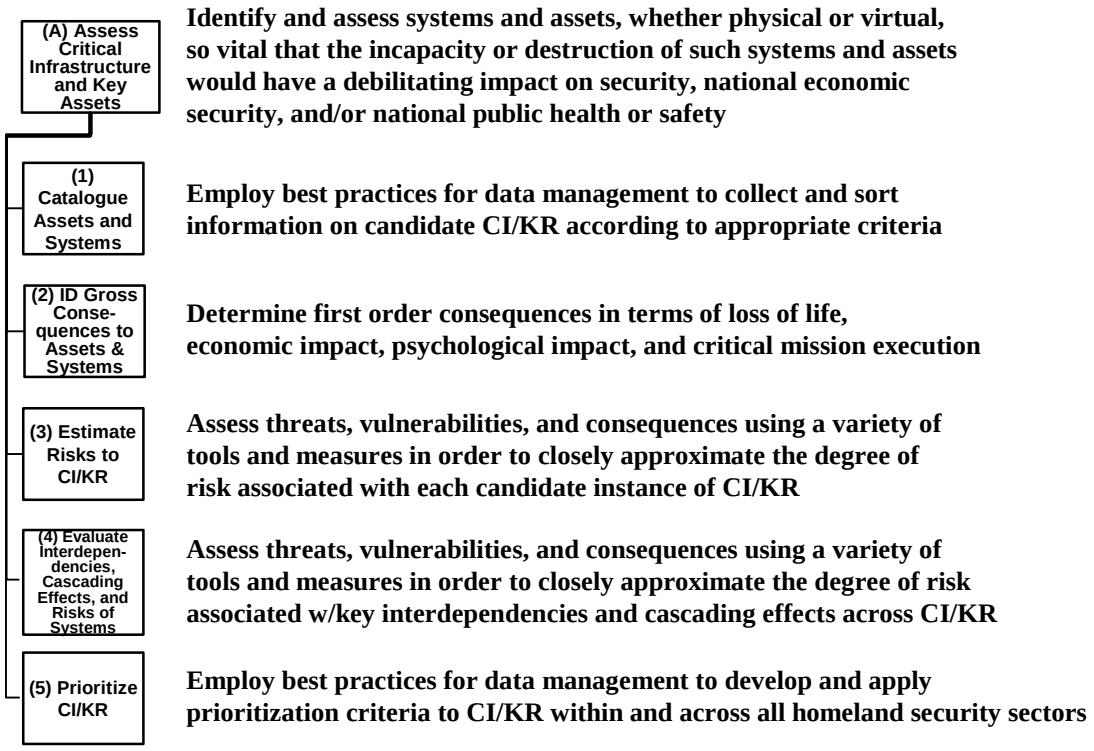
Function: Prosecute Suspected Terrorists: Apply the full range of legal measures and processes against suspected terrorists and their supporters.	
Task	**Definition**
Detain suspects.	Confine suspects in a secure facility under appropriate authority.
Review the formal investigation.	Assess legal sufficiency and completeness of the investigation through investigative reports to ensure requisite elements of probable cause have been met.
Initiate criminal charges.	Convene grand jury or follow appropriate charging process to formally charge suspects.
Conduct pretrial hearings.	Hold required pretrial arraignment hearings, including bail and bond hearings, in front of appropriate judicial body.
Conduct extradition hearing where appropriate.	Institute extradition proceedings, when necessary, in order to transfer suspects from one jurisdiction to another.
Conduct deportation proceedings where appropriate.	Institute deportation proceedings when necessary in order to remove suspects from U.S. territory to their country of citizenship or other destination as appropriate.
Adjudicate case.	Perform all tasks necessary to bring case before proper tribunal (e.g., research, draft pleadings, conduct plea bargain discussions, litigate case).
Impose the sentence for convicted terrorists.	Impose sentence in accordance with the court's disposition/rulings.
Provide for appeals process.	Perform all tasks necessary to handle appeal of case.
Conduct public affairs operations.	Implement public outreach and/or awareness programs, public service announcements, and public diplomacy.
Initiate asset forfeiture.	Auction, retain, or transfer to the government the terrorist financial assets and other property.

Mission: Protect

Reduce the likelihood of attack on assets/resources or systems, and limit the impact should an attack occur.

Objective: Assess Critical Infrastructure and Key Assets

In the material presented below, the terms Critical Infrastructure/Key Assets (CI/KA) and Critical Infrastructure/Key Resources (CI/KR) are used interchangeably. The MAA Study team uses both terms to present the findings generated by the interagency workshop participants as they were recorded during the actual workshop events.



Function: Catalogue Assets and Systems: Employ best practices for data management to collect and sort information on candidate CI/KR according to appropriate criteria.	
Task	**Definition**
Establish criteria for data collection.	Define the specific information that needs to be collected within a sector.
Collect data.	Access infrastructure and resource information (e.g., facilities, systems, key personnel), including information from CI/KR owners and operators.
Verify data.	Ensure that information collected is reliable and accurate.
Store data.	Secure information according to established standards and protocols.
Generate reports.	Prepare outputs of data, analysis, and synthesis consistent with end user requirements.
Share information.	Provide data/reports to end users based on their needs and in accord with established standards, protocols, and security requirements.
Maintain data.	Assess routinely the relevance, accuracy, completeness, quality, and timeliness of data, and modify as required.

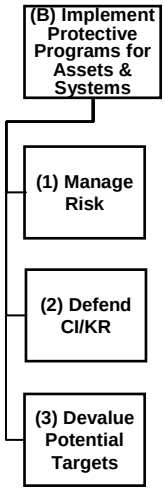
Function: Identify Gross Consequences to Assets and Systems: Determine first order consequences in terms of loss of life, economic impact, psychological impact, and critical mission execution.	
Task	**Definition**
Assess potential consequences.	Identify results of CI/KR being destroyed, disrupted, exploited, or otherwise compromised.
Verify data.	Ensure that information collected is reliable and accurate.
Generate reports.	Prepare outputs of data, analysis, and synthesis consistent with end-user requirements.
Assess potential consequences.	Identify results of CI/KR being destroyed, disrupted, exploited, or otherwise compromised.
Verify data.	Ensure that information collected is reliable and accurate.
Generate reports.	Prepare outputs of data, analysis, and synthesis consistent with end-user requirements.

Function: Estimate Risk to CI/KR: Assess threats, vulnerabilities, and consequences using a variety of tools and measures to closely approximate the degree of risk associated with each candidate instance of CI/KR.	
Task	**Definition**
Assess potential consequences.	Identify results of CI/KR being destroyed, disrupted, exploited, or otherwise compromised.
Analyze vulnerabilities in light of threats.	Determine how vulnerabilities are affected by threats and actions available to reduce these vulnerabilities.
Develop tools and methods for vulnerability assessments.	Create and continuously enhance the means to accurately identify and assess vulnerabilities.
Determine probability of success.	Calculate the chance of an attack coming to fruition against an asset.

Function: Evaluate Interdependencies, Cascading Effects, and Risks to Systems: Assess threats, vulnerabilities, and consequences using a variety of tools and measures to closely approximate the degree of risk associated with key interdependencies and cascading effects across CI/KR.	
Task	**Definition**
Develop risk assessment tools and methods.	Design and develop standard tools and methods to assess risk due to interdependencies.
Map relationships.	Detail sector roles and responsibilities for interacting with other federal agencies, state and local governments, and the private sector.
Analyze interdependencies within sectors.	Delineate risks affecting critical assets in a sector and their probable effects on other assets within the same sector.
Analyze interdependencies across sectors.	Delineate risks affecting critical assets in one sector and their probable effect on other sectors.
Normalize data.	Ensure that all data are consistent in scope, scale, and methodology to enable comparison within and across sectors.
Verify data.	Ensure that information collected is reliable and accurate.
Store data.	Secure information according to established standards and protocols.
Generate reports.	Prepare outputs of data, analysis, and synthesis consistent with end-user requirements.
Share information.	Provide data/reports to end users based on their needs and in accord with established standards, protocols, and security requirements.
Maintain data.	Assess routinely the relevance, accuracy, completeness, quality, and timeliness of data, and modify as required.

Function: Prioritize CI/KR: Employ best practices for data management to develop, and apply prioritization criteria to CI/KR within and across all homeland security sectors.	
Task	**Definition**
Develop cross sector prioritization criteria.	Rank relative importance of CI/KR across sectors using a variety of methodologies.
Apply criteria against CI/KR risks across all sectors.	Sort CI/KR risks in all sectors against prioritization criteria to create a comprehensive rank-ordered list.
Normalize data.	Ensure all data are consistent in scope, scale, and methodology to enable comparison within and across sectors.
Verify data.	Ensure that information collected is reliable and accurate.
Store data.	Secure information according to established standards and protocols.
Generate reports.	Prepare outputs of data, analysis, and synthesis consistent with end-user requirements.
Share information.	Provide data/reports to end users based on their needs and in accord with established standards, protocols, and security requirements.
Maintain data.	Assess routinely the relevance, accuracy, completeness, quality, and timeliness of data and modify as required.

Objective: Implement Protective Programs for Assets and Systems



Protect critical infrastructures and key assets to deter and mitigate terrorist attacks

Determine the most cost-effective and balanced set of countermeasures to reduce strategic, tactical, and operational risk

Protect assets by mitigating or delaying the actual attack

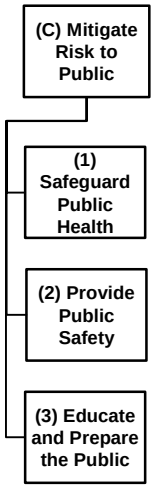
Reduce the attractiveness of a target by lessening potential consequences

Function: Manage Risk: Determine the most cost-effective and balanced set of countermeasures to reduce strategic, tactical, and operational risk.	
Task	**Definition**
Gather information.	Incorporate range of information available, including prioritized risk assessment data, relevant guidelines, regulations, security directives, best practices, private sector data, Sector Coordinating Councils, Government Coordinating Councils, etc.
Identify risk reduction options.	Identify protective and devaluation measures based on risk assessments that can be applied to specific classes of assets or systems both within and across sectors.
Estimate the reduction in risk based on threat, vulnerability, and consequence (loss reduction analysis).	Use a systems-analysis approach, taking into account unintended consequences; include the four dimensions of consequences: numbers of lives lost, economic damage, psychological impact, and impact on mission execution.
Estimate the cost of execution (cost-benefit analysis).	Use a systems-analysis approach; include interdependencies and range of costs (e.g., social costs, privacy, safety, etc.).
Generate optimum risk reduction strategy.	Balance cost and risk reduction (for particular risks as well as portfolio of risk reduction options); apply resource allocation methodologies to produce balanced strategy that can reduce risks to a prioritized list of critical assets or systems across sectors.
Implement risk reduction strategy.	Implement the chosen strategy while remaining cognizant of regulations, standards, guidelines, security directives, etc.
Monitor compliance with risk reduction strategies.	Ensure compliance within the regulatory environment.
Communicate risk.	Inform owners, operators, key personnel of potential threats, vulnerabilities, ways to protect themselves against these risks using a variety of media, educational outlets; include a feedback loop in the process.

Function: Defend CI/KR: Protect assets by mitigating or delaying the actual attack.	
Task	**Definition**
Protect key personnel.	Ensure the safety of critical personnel; methods may include exposure protection, inoculation, PPE, prophylaxis, etc.
Harden assets and systems.	Design and/or implement layered array of permanent and persistent security measures (e.g., structural integrity, physical barriers, CCTV, sensors) designed to limit the vulnerability of critical infrastructure and key resources to the spectrum of relevant threats.
Restrict access.	Establish reliable and persistent mechanisms (e.g., buffer zones, checkpoints, guards) for limiting entry and exit to CI/KR to only authorized persons, conveyances, materials, and information.
Deploy assets to defend.	Execute the plan designed to defend CI/KR; assets employed may include humans, dogs, equipment, weapon systems, etc.

Function: Devalue Potential Targets: Reduce the attractiveness of a target by lessening potential consequences.	
Task	**Definition**
Disperse critical components.	Include both the physical and cyber realm (e.g., expand the distance between the physical locations of assets to minimize the overall potential damage) in the dispersal.
Develop redundancies.	Enhance robustness of critical infrastructure, key assets, and key personnel, particularly in essential function systems (utilities, cyber, communications, etc.), by integrating duplicative capabilities that provide back-up functionality when primary assets are degraded or destroyed.
Remove high consequence aspects of high value targets.	Change the characteristic(s) of a target in some way (e.g., using less hazardous materials, planning, and pre-event positioning) to limit the magnitude/duration of consequences and facilitate rapid recovery.
Relocate key resources	Withdraw or remove key resources (assets, systems, and/or key personnel) from high risk areas.

Objective: Mitigate Risk to Public



Implement measures to protect the public and mitigate the potential consequences of threats

Implement protective measures to limit the vulnerability of the public and/or animals potentially at risk to specific threats

Provide protection, security planning and technical assistance, technology support, and public safety in pre-incident situations

Inform the public about potential threats and vulnerabilities and ways to protect themselves against these risks using a variety of media and educational outlets

Function: Safeguard Public Health: Implement protective measures to limit the vulnerability of the public and/or animals potentially at risk to specific threats.	
Task	**Definition**
Conduct appropriate public health surveillance and testing processes.	Monitor the health of the general population and special high risk populations, carry out field studies and investigations, monitor injury and disease patterns and potential disease outbreaks; not limited to monitoring people, also included is the surveillance of livestock, agriculture, water, and air; link regional, national, and international medical surveillance networks to track the spread of disease outbreaks.
Assure provision of available preventative medicines and vaccines.	Maintain a stockpile preparedness program at all levels (Federal, tribal, state, and local).
Maintain notification and information exchange systems.	Maintain a secure reporting and notification system that provides rapid and accurate receipt of reports of disease outbreaks and other acute health events.
Provide preventive medical treatment.	Provide prophylaxis to those at risk.
Develop laboratory plans, procedures, and protocols.	Develop laboratory plans, procedures, and protocols to provide rapid and effective laboratory services.

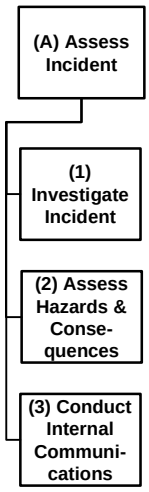
Function: Provide Public Safety: Provide protection, security planning and technical assistance, technology support, and public safety in pre-incident situations.	
Task	**Definition**
Conduct public safety and security assessment.	Analyze potential factors that affect resources and actions needed for public safety and security.
Provide site security.	Provide security forces and establish protective measures around the potential incident site or hazard.
Provide traffic and crowd control.	Address public safety by directing the public away from potentially hazardous situations in an orderly and efficient manner.
Force protection.	Provide for the protection of emergency responders and other workers operating in a high-threat environment.

Function: Educate and Prepare the Public: Inform the public about potential threats and vulnerabilities and ways to protect themselves against these risks using a variety of media and educational outlets.	
Task	**Definition**
Develop strategic communications plan.	Develop pre-tested, easily understood messages addressing the public's concerns about threats, and identify credible community spokespersons.
Distribute public information materials identifying hazards and threats.	Employ the full range of communications media (print, broadcast, Internet, etc.) as required to ensure that the public has broad access to relevant safety and security information, especially key steps for recognizing and responding to likely hazards and threats.
Provide public safety and security education programs.	Design and implement courses of instruction regularly available to the public at regional, state, tribal, and local levels that provide information regarding best practices for public safety and security related to events of mass effect.
Develop public protective action guidelines.	Research, articulate, refine, and distribute best practices for public safety and security related to events of mass effect.
Prepare volunteers for incident support.	Maintain and expand national programs preparing volunteers to recognize and respond to relevant hazardous materials and threats.

Mission: Respond

Implement immediate actions to save lives, protect property, and meet basic human needs.

Objective: Assess Incident



Determine the nature of the incident, investigate the cause of the incident, assess the situation, identify critical and unmet needs, provide recommendations for protective actions, and identify and coordinate acquisition and delivery of required assets and/or resources

Probe all possible sources and/or causes of an incident

Recognize, identify, analyze, confirm, and evaluate the immediate consequences of an incident

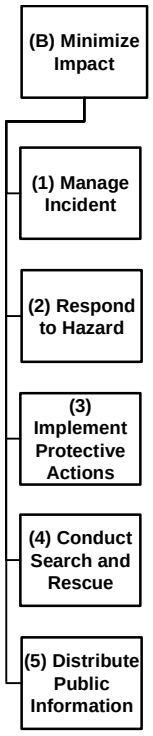
Conduct internal communications and disseminate information during an emergency to provide situational information to all necessary organizations

Function: Investigate Incident: Probe all possible sources and/or causes of an incident.	
Task	**Definition**
Obtain assets needed for investigative operations.	Procure necessary personnel, equipment, technology, etc., to conduct investigative activities.
Conduct investigations.	Determine the causal particulars of the incident, e.g., the "who, what, where."
Obtain technical assistance and laboratory support.	Obtain more in-depth analysis of information collected during investigation.
Create incident/crime scene reports.	Document and preserve information gathered from the scene of the incident.

Function: Assess Hazards and Consequences: Recognize, identify, analyze, confirm, and evaluate the immediate consequences of an incident.	
Task	**Definition**
Conduct public health/ casualty assessment.	Assess and determine the status of the public's health via epidemiologic investigation(s).
Assess integrity of physical infrastructure.	Conduct building, public works, and engineering assessments.
Deploy surveillance/detection equipment.	Use equipment and techniques to monitor the incident and identify the extent and nature of the incident.
Assess weather conditions.	Obtain the weather forecast and assess conditions to conduct hazard zone protection; assess how the weather will potentially impact an incident site, and develop mitigation measures accordingly.
Classify incident scene areas.	Determine/rate the extent of damage of various sites within the effected area, i.e., hot, warm, and cold zones.
Conduct ongoing risk/ damage assessment.	Periodically reevaluate and update the assessment of incident damages and consequences.

Function: Conduct Internal Communications: Conduct internal communications, and disseminate information during an emergency to provide situational information to all necessary organizations.	
Task	**Definition**
Establish and maintain response communi-cations network.	Develop, implement, and maintain communications capabilities to assure information availability and sharing.
Operate incident site communications.	Facilitate on-site communication.
Implement interoperable information systems.	Ensure that information passed is transmitted and understood by all users/systems.
Provide information system security.	Protect the systems used and information passed.
Activate back-up communication and information systems.	Provide for information sharing and redundant communication capabilities should a system fail.

Objective: Minimize Impact



Implement and coordinate immediate actions to contain the direct effects of an incident

Control access to impacted site(s) and manage and command all activities in the area(s)

Reduce or eliminate ongoing risks to persons or lessen the actual or potential effects or consequences of an incident, including removing contamination to acceptable levels from individuals, animals, equipment, and facilities

Guard the public from potentially hazardous effects of an incident, including evacuation, shelter-in-place, and isolation/quarantine

Locate and extricate victims

Disseminate situational information to the public

Function: Manage Incident: Control access to impacted site(s), and manage and command all activities in the area(s).	
Task	**Definition**
Activate incident command system.	Establish a unified command system involving all stakeholders to coordinate/activate response functions.
Manage and disseminate public information.	Inform the public of the status of the incident and protective actions to take.
Control access to the impact site(s).	Coordinate and provide transportation/logistics support, activate approved traffic control plan, and identify and establish incident perimeter zone.
Provide telecommunication and information technology support.	Ensure communication among incident commanders and managers
Manage physical resources impacted by an incident.	Provide engineering and other support for structures, public works, and infrastructure systems, e.g., turn on/off utilities, identify failing buildings and structures, etc.
Establish systems for describing, inventorying, requesting, and tracking resources.	Detail the status of all resources used in managing the incident.
Demobilize response resources.	Reallocate/release resources that were acquired but are no longer needed.

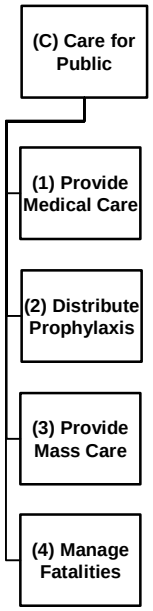
Function: Respond to Hazard: Reduce or eliminate ongoing risks to persons or lessen the actual or potential effects or consequences of an incident, including removing contamination to acceptable levels from individuals, animals, equipment, and facilities.	
Task	**Definition**
Identify affected populations and infrastructure.	Determine those people, animals, and/or infrastructure (equipment and facilities) affected by an incident.
Isolate affected populations and infrastructure.	Separate those people, animals, and/or pieces of infrastructure (equipment and facilities) contaminated in an incident from their surroundings (this task also includes measures to shelter-in-place) to the extent possible.
Coordinate and conduct firefighting support/operations.	Extinguish fires and mitigate associated threats.
Coordinate and conduct oil and HAZMAT response.	Mitigate the potential threats associated with these materials.
Coordinate and conduct explosive devise detection, defusing, and disposal operations.	Mitigate/eradicate the danger posed by explosive devises.
Secure contamination sources and effected areas.	Isolate and secure (i.e., prevent access to) sources of contamination and the areas effected.
Identify assets required for decontamination activities.	Determine those assets/resources most applicable given the specifics of the incident.
Procure assets required for decontamination activities.	Develop contamination site safety plan and acquire those assets/resources most applicable given the specifics of the incident.
Decontaminate affected populations and infrastructure.	Remove contamination to acceptable levels from individuals, animals, equipment, and facilities.

Function: Implement Protective Actions: Guard the public from potentially hazardous effects of an incident, including evacuation, shelter-in-place, and isolation/quarantine.	
Task	**Definition**
Coordinate public safety and security response.	Integrate the capabilities and responsibilities of public safety and security assets in the response effort.
Identify safety/security asset requirements.	Determine what capabilities and capacities are required to ensure scene/zonal and public security.
Acquire required safety/security assets/resources.	Procure those assets/requirements necessary to protect the public.
Provide public safety and security support.	Ensure safety/security, e.g., evacuation, shelter-in-place, isolation, quarantine, etc.
Activate approved traffic control plan.	Reroute/design traffic flow patterns to allow egress for those affected by an incident as well as to minimize public exposure to potential hazards.

Function: Conduct Search and Rescue: Locate and extricate victims.	
Task	**Definition**
Determine search and rescue course of action.	Determine search and rescue requirements given the location, nature of the incident, etc.
Coordinate search and rescue efforts.	Integrate the capabilities and responsibilities of all assets in the search and rescue effort; coordinate the search and rescue response.
Deploy search and rescue teams.	Deploy teams based on assessment of the incident.
Conduct urban search and rescue operations.	Conduct urban search and rescue operations as required .
Conduct water search and rescue operation.	Conduct water search and rescue operations as required.
Redeploy to home base.	Reevaluate strategy, reassess operating environment, etc. with returned search and rescue teams.

Function: Distribute Public Information: Disseminate situational information to the public.	
Task	**Definition**
Prepare emergency public information plans.	Determine information to be delivered to the public, i.e., determine what is to be delivered, who is to deliver it, through what medium, etc.
Coordinate emergency public information.	Direct and control public information releases, e.g., through the joint information system (JIS).
Designate individual(s)/ organization(s) to address the public.	Provide unified face to the public to ensure uniformity of message.
Provide emergency health and medical information.	Activate warning systems, and provide critical information and warnings in order to convey information to both the media and the public prepared in multiple languages and using a range of media (e.g., printed materials, handouts, TV, radio, Internet, text messaging, etc.)

Objective: Care for Public



Implement immediate actions to save lives and meet basic human needs to minimize the impact of an incident and prevent further harm

Provide immediate medical support to individuals and/or animals affected by an incident

Provide preventative medical measures to affected and/or potentially affected individuals

Meet basic needs of individuals and/or animals affected by an incident, including sheltering of persons, organizing feeding operations, collecting and providing information on victims to family members, and coordinating bulk distribution of emergency relief items

Identify, decontaminate, and dispose of remains

Function: Provide Medical Care: Provide immediate medical support to individuals and/or animals affected by an incident.	
Task	**Definition**
Coordinate the medical response.	Establish/activate an emergency command and triage system.
Mobilize emergency health care specialists and health care providers.	Direct needed general and specialized health care personnel to locations where they are most needed.
Conduct triage.	Identify range of injuries suffered by victims, ranging from casualties to minor injuries; triage, treat, and transport as appropriate.
Provide immediate emergency aid.	Provide life-saving assistance to those in need, e.g., first aid, bandaging, blood products, crisis intervention, etc.
Track patient status and location.	Identify and track by condition and location those affected by an incident; monitor for trends.

Function: Distribute Prophylaxis: Provide preventative medical measures to affected and/or potentially affected individuals.	
Task	**Definition**
Implement prophylaxis protocols.	Determine population segment requirements regarding prophylaxis, i.e., who needs what based on the incident and identified hazard/threat; implement appropriate monitoring and reporting mechanisms for follow-up and recording.
Provide prophylaxis.	Administer prophylaxis to necessary population segments.
Assure provision of prophylaxis.	Ensure availability of preventative medications or treatments for the identified hazard or threat.

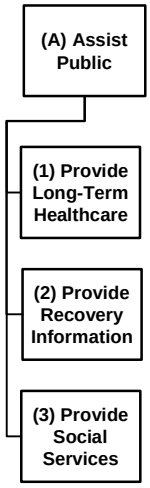
Function: Provide Mass Care: Meet basic needs of individuals and/or animals affected by an incid including sheltering people, organizing feeding operations, collecting and providing information on victims to family members, and coordinating bulk distribution of emergency relief items	
Task	**Definition**
Activate emergency shelters.	Execute and implement plans to determine requirements and get necessary shelters established and operating.
Provide food and mass care support.	Coordinate and supply food and mass care requirements.
Provide temporary housing.	Coordinate and supply housing to those requiring it.
Establish reception/ victim assistance centers.	Coordinate and activate personnel/locations to assist those affected by the incident.
Arrange for animal shelter services.	Coordinate and activate resources for sheltering animals.
Provide food and mass care support.	Coordinate and supply food and mass care requirements.
Provide temporary housing.	Coordinate and supply housing to those requiring it.
Establish reception/victim assistance centers.	Coordinate and activate personnel/locations to assist those affected by the incident.
Arrange for animal shelter services.	Coordinate and activate resources for sheltering animals.

Function: Manage Fatalities: Identify, decontaminate, and dispose of remains.	
Task	**Definition**
Collect human and animal remains.	Collect remains; preserve evidence and chains of custody.
Isolate human and animal remains.	Segregate corpses and related material
Identify and tag human remains.	Establish identity of deceased humans.
Prepare for disposal of diseased human and animal remains.	Remove safely and prepare remains for disposal or transfer.
Perform autopsies and other investigative/ scientific inquiries.	Determine cause of death and perform other related forensic and scientific investigations (e.g., amount of exposure to a harmful contaminant, effect of contaminants on the body, etc.).
Release remains to mortuary services.	Transfer the custody of noncontaminated remains to mortuary services.

Mission: Recover

Develop, coordinate, and execute service- and site-restoration plans and reconstitute government operations and services through individual, private-sector, nongovernmental, and public assistance programs.

Objective: Assist Public



Help individuals impacted by an incident to return to pre-incident levels, where feasible

Provide for the long term mental and psychological healthcare of affected individuals

Inform the public as to how to go about receiving aid throughout the recovery process

Supply individuals with social service assistance

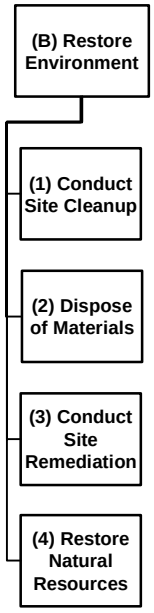
Function: Provide Long-Term Healthcare: Provide for the long-term mental and psychological healthcare of affected individuals.	
Task	**Definition**
Provide long-term medical care.	Render necessary long-term health care to victims and first responders.
Provide behavioral, substance abuse, counseling, and mental health services.	Supply crisis counseling, family support services, behavioral and mental health services to public and first responders.
Restore critical medical services.	Reorder and restore health and medical supplies and materials; restore all stockpiles to pre-incident levels.
Provide medical claims assistance.	Offer services to public to facilitate and/or expedite the medical claims process.
Monitor persons for adverse treatment reactions.	Observe and monitor persons who have received medical care to maintain awareness of adverse reactions to medical treatments or prophylaxis.
Establish a health/disease registry of victims and/or responders at risk.	Develop and maintain a database identifying persons (public and first responders) at risk for complications for injuries or treatment received.
Conduct ongoing vector control.	Monitor, protect, and/or prevent entry to an identified carrier from one possible host to another.
Conduct long-term health care monitoring.	Conduct health care observations of affected persons and/or first responders.
Conduct long-term health care assessment.	Analyze results of health care monitoring.

Function: Provide Long-Term Healthcare: Provide for the long-term mental and psychological healthcare of affected individuals.	
Task	**Definition**
Provide comprehensive stress management strategies, programs, and crisis response teams.	Offer a variety of stress management programs for exposed persons.

Function: Provide Recovery Information: Inform the public on how to go about receiving aid throughout the recovery process.	
Task	**Definition**
Inform public about services offered.	Provide culturally sensitive information and/or educational materials to the public about all of the services that may be available to them (health education, financial, legal, medical, counseling, etc).
Inform public about recovery efforts.	Make information and/or educational materials available to the public about ongoing recovery efforts.
Collect, process, and disseminate disaster welfare and family reunification information.	Make information and/or educational materials available to the public about long-term effects of an incident, ongoing evacuations, and any other necessary information.

Function: Provide Social Services: Supply individuals with social service assistance.	
Task	**Definition**
Conduct response-related activities for nutritional assistance.	Identify and arrange ordering, transportation, storage, and dispersal of food and food related products.
Identify long-term housing needs.	Coordinate efforts among assistance groups to identify those individuals who need long-term housing assistance.
Establish public assistance centers.	Set up centers to support public's needs including those of special-needs communities, non-English speaking persons, and those with medical conditions requiring special attention.
Provide volunteer services.	Establish plans to utilize volunteers and coordinate with NGOs and other volunteer organizations; activate plans for identification, credentialing, and placement of unaffiliated, spontaneous volunteers.
Conduct donations management.	Perform all necessary measures including monitoring and reviewing procedures for receipt, inventories, deployment, and disposal of donations.
Provide community services.	Offer legal and financial counseling.
Provide expedited processing of benefits claims.	Provide expedited processing of benefits and claims resulting from an incident.

Objective: Restore Environment



Reestablish or bring back to a state of environmental or ecological health the water, air, and land and the equilibrium, which exists among and between water, air, and land and all living things

Take short-term, immediate actions to address and remove releases of hazardous substances that require expedited response

Remove and/or eliminate animal remains and/or agricultural materials, as well as other materials, equipment, and facilities affected by an incident

Investigate and cleanup any known or suspected discharge or threatened discharge of contaminants, including, preliminary assessment, site investigations, remedial investigations, remedial alternative analyses, and remedial actions

Return ecosystem to a close approximation of its condition prior to disturbance

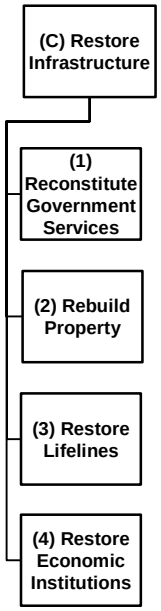
Function: Conduct Site Cleanup: Take short-term immediate actions to address and remove releases of hazardous substances that require expedited response.	
Task	**Definition**
Provide for isolation/quarantine for natural resource and agricultural threats.	Prevent the movement of contaminated or potentially contaminated agricultural products or natural resources from the secure zone.
Conduct environmental decontamination.	Conduct site cleanup; institute mass biosecurity/decontamination measures.
Conduct product tracing to determine source, destination, disposition of adulterated/contaminated products.	Monitor movements, and ensure security of adulterated/contaminated products.

Function: Dispose of Materials: Remove and/or eliminate animal remains and/or agricultural materials, as well as materials, equipment, and facilities affected by an incident.	
Task	**Definition**
Collect and isolate animal remains.	Decontaminate, identify, and dispose of animal remains.
Develop protocols for disposing of materials.	Determine rules, roles, and responsibilities for the disposal of materials.
Provide clean-up material and equipment.	Procure and/or assure distribution of required resources.
Dispose of contaminated agricultural products to include animals.	Safely remove and discard or destroy material, as appropriate.
Dispose of contaminated food.	Safely remove and discard/destroy contaminated foods.
Dispose of diseased human remains.	Remove safely, dispose of, destroy, or release human remains to mortuary services, as appropriate.
Dispose of oil, HAZMAT, and other debris.	Remove safely and discard materials.

Function: **Conduct Site Remediation**: Investigate and cleanup any known or suspected discharge or threatened discharge of contaminants including preliminary assessment, site investigations, remedial investigations, remedial alternative analyses, and remedial actions.	
Task	**Definition**
Conduct long-term environmental impact assessments.	Inspect, monitor, and assess need for remediation actions in affected areas.
Conduct long-term assessments of affected or potentially affected animals (including livestock and wildlife).	Monitor animals in affected areas to determine if or to what extent contamination or disease have occurred.
Determine wildlife exposure and disposition.	Monitor wildlife to determine if they were exposed to hazardous substances, and make decisions about their disposition.
Conduct disease risk assessment and surveillance.	Conduct disease surveillance and epidemiological studies.
Support food recovery.	Determine if food and/or food supply is contaminated and dispose of contaminated products (embargo food, inspect, clean, and/or monitor food facilities).

Function: Restore Natural Resources: Return ecosystem to approximation of its condition prior to disturbance.	
Task	**Definition**
Restore air quality.	Re-establish the air quality harmed by an event or its aftermath.
Restore water quality.	Re-establish quality of water harmed by an event or its aftermath.

Objective: Restore Infrastructure



Restore infrastructure in affected communities in order to return to pre-incident levels, where feasible

Reinstate government services and operations interrupted by, or in response to, an incident

Rebuild physical structures so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards

Ensure the restoration of any and all utility services interrupted by, or in response to, an incident

Restore institutions needed to sustain economic growth and re-establish public confidence

Function: Reconstitute Government Services: Reinstate government services and operations interrupted by, or in response to, an incident.	
Task	**Definition**
Coordinate and conduct the recovery operation.	Develop re-entry plans, coordinate infrastructure assessments, and prioritize recovery sequence.
Develop community economic recovery plans, programs, and procedures.	Develop mitigation, recovery, and economic stabilization programs, plans, and procedures designed to restore community to pre-incident levels, and coordinate community recovery and mitigation actions.
Establish long-term recovery goals.	Assess needs and capabilities of community/area in order to create achievable recovery goals.

Function: Rebuild Property: Rebuild physical structures so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards.	
Task	**Definition**
Develop plans, protocols, and procedures for buildings, public works, and engineering services and departments.	Identify critical infrastructure and interdependencies; manage mutual aid agreements.
Conduct building repairs.	Provide public works, building regulation, and engineering support during recovery.
Conduct inspections and assessments.	Carry out inspections and safety assessments of public and private buildings in affected areas.
Implement recovery and restoration activities.	Manage, schedule, and coordinate restoration of critical infrastructure service, facilities, and assets.

Function: Restore Lifelines: Ensure the restoration of any and all utility services interrupted by, or in response to, an incident.	
Task	**Definition**
Assess damage to energy and utility production and distribution infrastructure.	Evaluate effects of incident on utility infrastructure.
Coordinate energy related support.	Identify public and private resources able to provide immediate restoration of key facilities and utilities..
Conduct energy recovery and restoration operations.	Work to restore utilities damaged during an event.
Assess incident impact on production, distribution, and use of energy.	Survey energy producers and distributors to determine overall supply production and distribution capacity; assess impact of energy loss on impacted area (persons, residences, businesses, etc.).

Function: Restore Economic Institutions: Restore institutions needed to sustain economic growth and re-establish public confidence.	
Task	**Definition**
Provide economic stabilization, community recovery, mitigation support, and financial restitution to financial systems/institutions.	Assess economic consequences as the local, state, and federal levels.
Provide community services.	Have trained personnel available for the provision of financial, unemployment and financial counseling (loans, grants, etc.) to affected persons.

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4.0 RECOMMENDATIONS

The HSI study team recommends that:

- The task sponsor encourage DHS senior leadership to prioritize the elements of the HS MAA. The Analytic Hierarchy Process (AHP) or the Analytic Network Process (ANP) could be used for that purpose.
- HSI help determine the interrelationships and interdependencies of HS MAA Tasks through the development of HS architecture.
- HSI develop performance measures for all levels of the HS MAA elements. Such an effort should be coordinated with related DHS efforts such as the national preparedness planning being conducted to implement HSPD-8.
- DHS planners use the HS MAA framework and performance measures to 1) identify gaps in homeland security capability and 2) guide the development of solutions.
- DHS's institutional missions be functionally decomposed. Institutional mission space is not addressed in great detail either by the MAA Taxonomy resulting from the interagency task development workshop process or in the proposed revised version (the All-Hazards Taxonomy) developed by G&T and interagency stakeholders. Decomposing DHS's institutional missions would provide value to the Department's senior leadership as a powerful analytic tool in establishing priorities and budget tradeoffs essential to a resource-constrained environment.

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5.0 ADDENDUM

The version of the HSI five-level MAA Hierarchy resulting from the workshop process provided DHS and its interagency stakeholders (including federal, state, local, tribal, and private sector) with a unifying framework for identifying and coordinating an integrated approach for HS mission activities. This MAA Taxonomy has been used by the DHS Science and Technology Directorate (S&T) and the DHS Chief Financial Officer Planning and Estimating Office (CFO PA&E) to assist in identifying potential gaps in homeland security programs.

The concept of homeland security has continued to evolve as the taxonomy has been used and as world events have continued to unfold. The initial draft of this report was prepared based on the analysis of the national-level strategy developed after the terrorist events of 9/11. Consequently, the concept of homeland security that underpinned this report's initial presentation of the homeland security mission space centered on terrorism and did not include activities required to:

- Protect American lives and property from major natural disasters and accidents.
- Respond to and recover from the consequences of those events.

Since completing the initial draft of this report, the homeland security mission area analysis has been refined through collaboration involving the HSI and DHS's Preparedness and Science and Technology Directorates. This process has employed a revised concept of homeland security —all hazards in scope, integrating activities previously subsumed under national preparedness. The results of the subsequent mission area analysis, now known as the All-Hazards Taxonomy, are contained in this addendum.

The Evolving Taxonomy

Three key events provided the impetus for continued refinement of the MAA Taxonomy:

- The lessons learned from the use of the taxonomy by S&T and CFO PA&E
- The excess of natural disasters in 2005
- The attempt by the DHS Office of Grants and Training (G&T) to use the MAA to evaluate the Universal Task List (UTL) and the UTL's associated Target Capabilities List (TCL)

Each key event showed that further work was needed on the MAA to broaden its scope while simultaneously refining and sharpening the focus of each of its elements.

The use of the MAA Taxonomy by S&T and CFO PA&E highlighted inconsistencies in how functions and capabilities were defined, particularly in the Prevent and Protect mission areas. The natural disasters of 2005 dramatically highlighted the need to look beyond terrorism-related events and establish a broader decomposition of the homeland security mission, focusing on all hazards rather than only terrorism. G&T's attempt at mapping the UTL and TCL to the MAA Taxonomy to identify potentially missing target capabilities highlighted two critical issues: first, all target capabilities are not of the same size, scale, and format; and second, the MAA Taxonomy includes Functions that are

process focused and those that are operations focused, making mapping with TCL more difficult.[4]

In response to these issues, HSI, G&T, and other elements supporting G&T began an MAA Taxonomy refinement process in parallel with work to enhance and expand the TCL. Refinement consisted of reviewing, clarifying, and making the objectives, functions, and tasks more precise, incorporating them into a proposed new version of the Taxonomy that involves an all-hazards focus and synchronizes the Taxonomy with the TCL.

Synchronization consisted of three key activities: *first*, the original taxonomy's process-focused Objectives and Functions were removed and replaced with operations-focused Objectives and Functions where appropriate. In doing this, G&T, HSI, and interagency stakeholders developed a method for standardizing changes to the taxonomy.[5] This method includes technical definitions for key taxonomy terms such as "Objective," "Function," and "Task," and rules for making further modifications to the MAA framework.[6] *Second*, after the MAA Taxonomy was reviewed and expanded to reflect an all-hazards perspective, the target capabilities were mapped to the Taxonomy. This mapping highlighted gaps and redundancies in the existing target capabilities.7 Third, the Common Tasks of the post-workshop version of the MAA Taxonomy were exchanged for a set of Capability Elements that are operationally similar. These elements are listed within each capability of the TCL and thus generally correspond to most All-Hazards Taxonomy functions.

Rationales for proposed changes in each original MAA Taxonomy Mission Area are consistent with creating a unifying framework that supports mappings Target Capabilities cleanly to operationally-oriented MAA Functions.

In the Prevent mission area, proposed edits arose from three particular needs. *First*, the Detect Threats Objective functions were changed from process-oriented functions into operational-oriented functions. *Second*, the Control Access Objective required more narrowly worded functions to minimize overlap between functions. *Third*, the Eliminate Threats Objective required some language changes to become consistent with the modified functions under the Detect Threats Objective. A summary of changes in the Prevent mission area is provided in Figure 6 below.

[4] Process-focused functions refer to a generic practice or course of action (not necessarily homeland security related) without referring to desired outcome. Operations-focused functions, by contrast, refer to a specific type of action that homeland security partners perform and include some indication of the desired outcome.

[5] Appendix D summarizes the rules for this method.

[6] Appendix C provides the definitions for the MAA/All Hazards Taxonomy levels.

[7] Appendix E provides the results of the mapping.

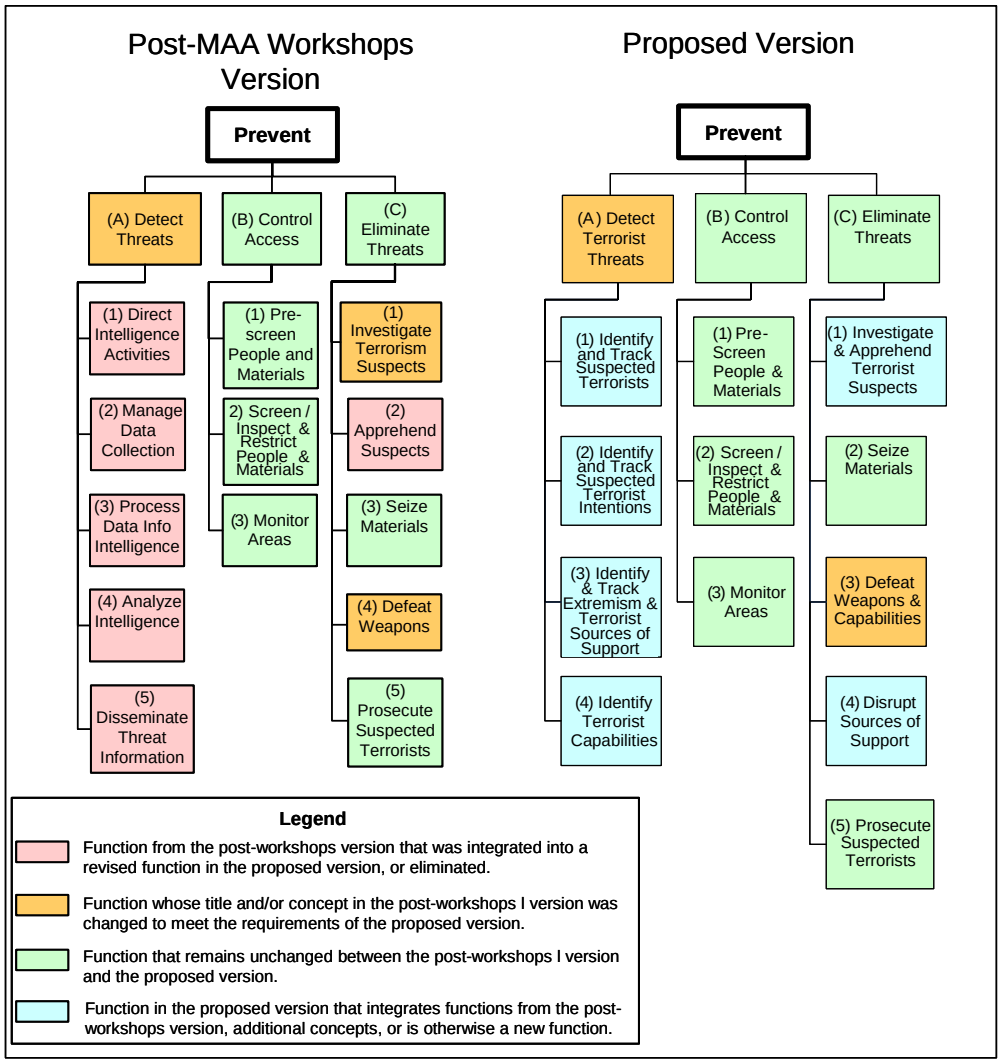


Figure 6. Comparison of Original and Proposed Prevent Mission Structures

In the Protect mission area, proposed modifications were also driven by three specific requirements. *First*, Objectives under Protect in the original MAA Taxonomy were changed from process-oriented into operational-oriented functions. *Second*, the Protect mission area was reconciled with the National Infrastructure Protection Plan (NIPP) framework. In this regard, Functions addressing physical assets and systems were organized together as were Functions addressing living beings, whether humans or animal. Particularly, the term “public health protection” was used to cover medical/biological dangers and the term “life safety protection” was used to cover physical dangers. *Third*, language used in the Protect mission area was made consistent with the responder community’s "protection" terminology. A summary of proposed changes to the Protect mission area is provided in Figure 7 below.

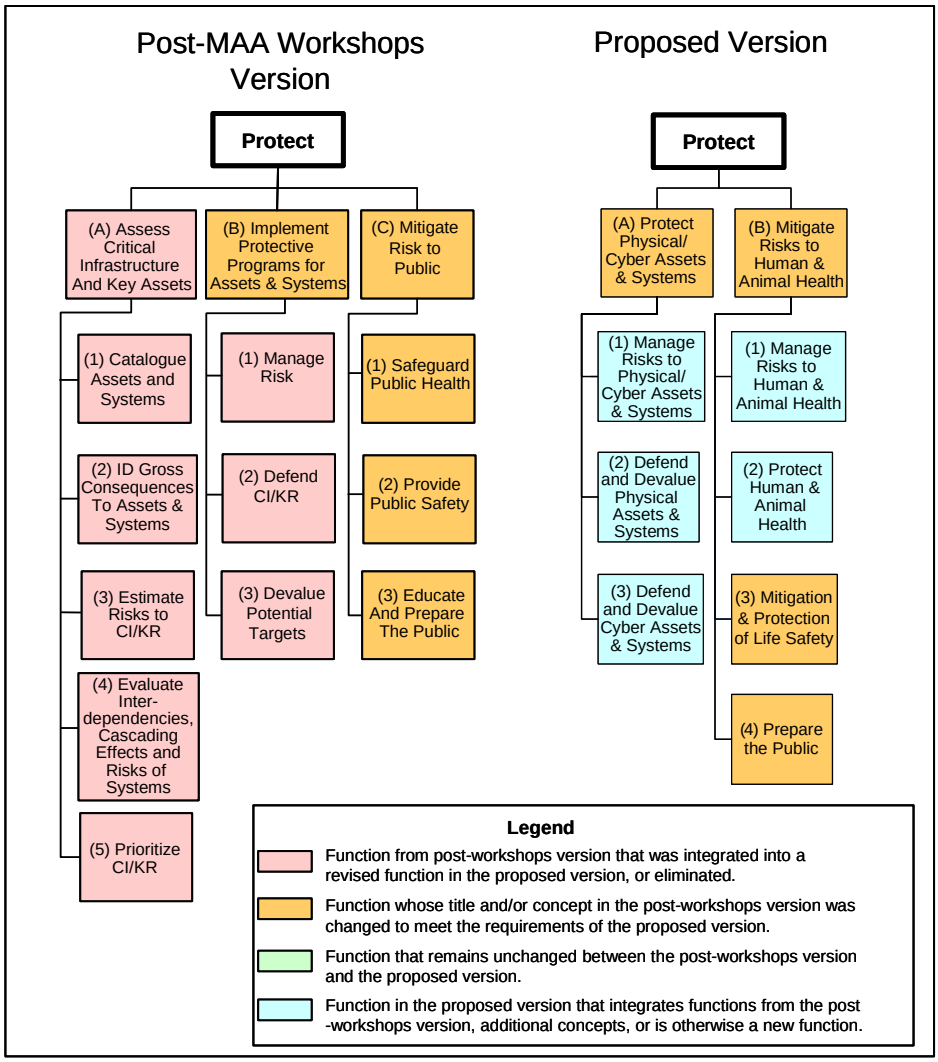


Figure 7. Comparison of Original and Proposed Protect Structures

Common Tasks vs. Capability Elements

The post-workshops version of the MAA Taxonomy and the TCL both contain sets of general enablers. In the MAA Taxonomy, these are the Common Tasks that apply to each MAA Function in addition to its Function Specific Tasks. In the TCL, the Capability Elements apply to each of he Target Capabilities and define the resources needed to perform critical tasks to specified performance levels. In addressing the role of the general enabler in the proposed All-Hazards Taxonomy, the participants decided it was best to use the Capability Elements used in the TCL to characterize the general enablers of the All-Hazards Taxonomy. A comparison of the common tasks and capability elements is provided in Figure 8 below.

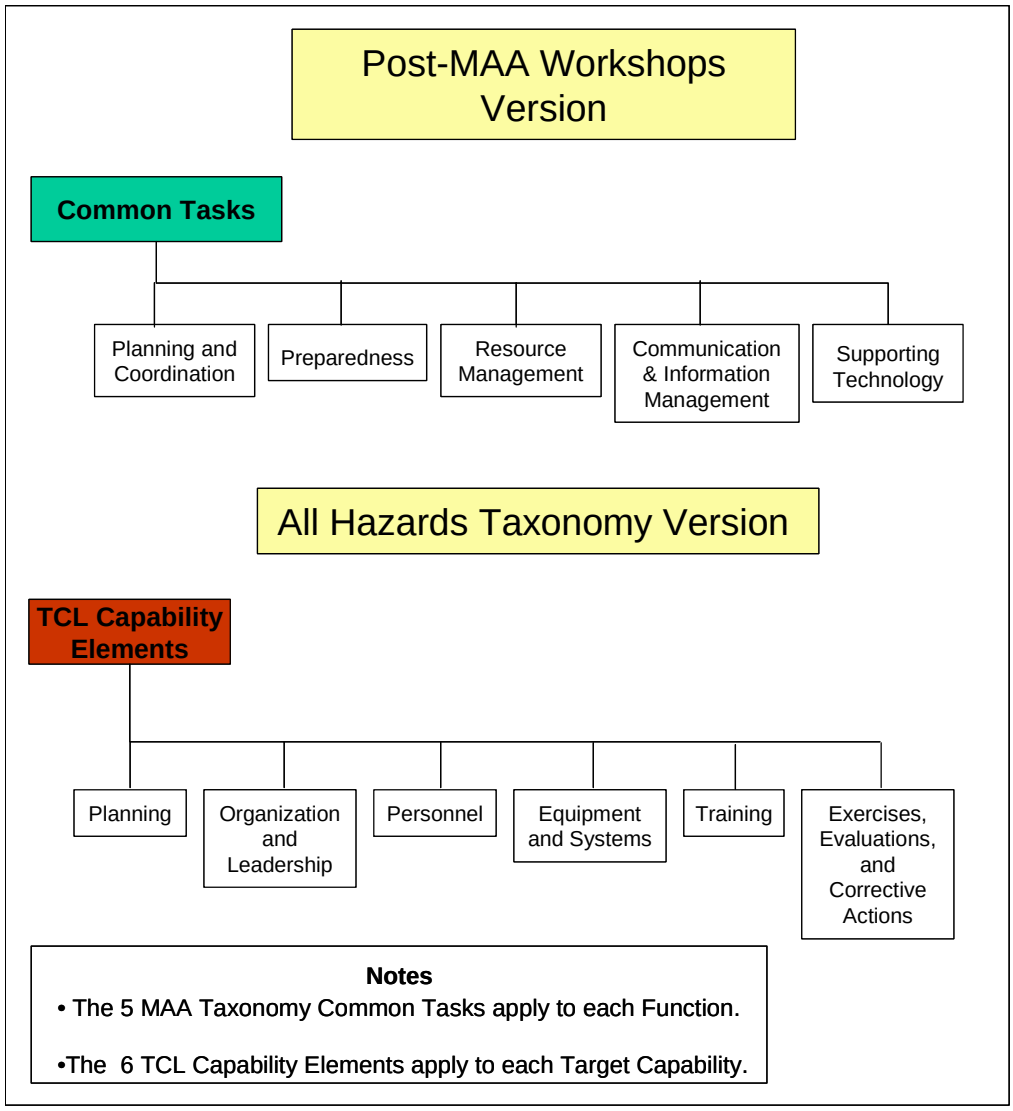
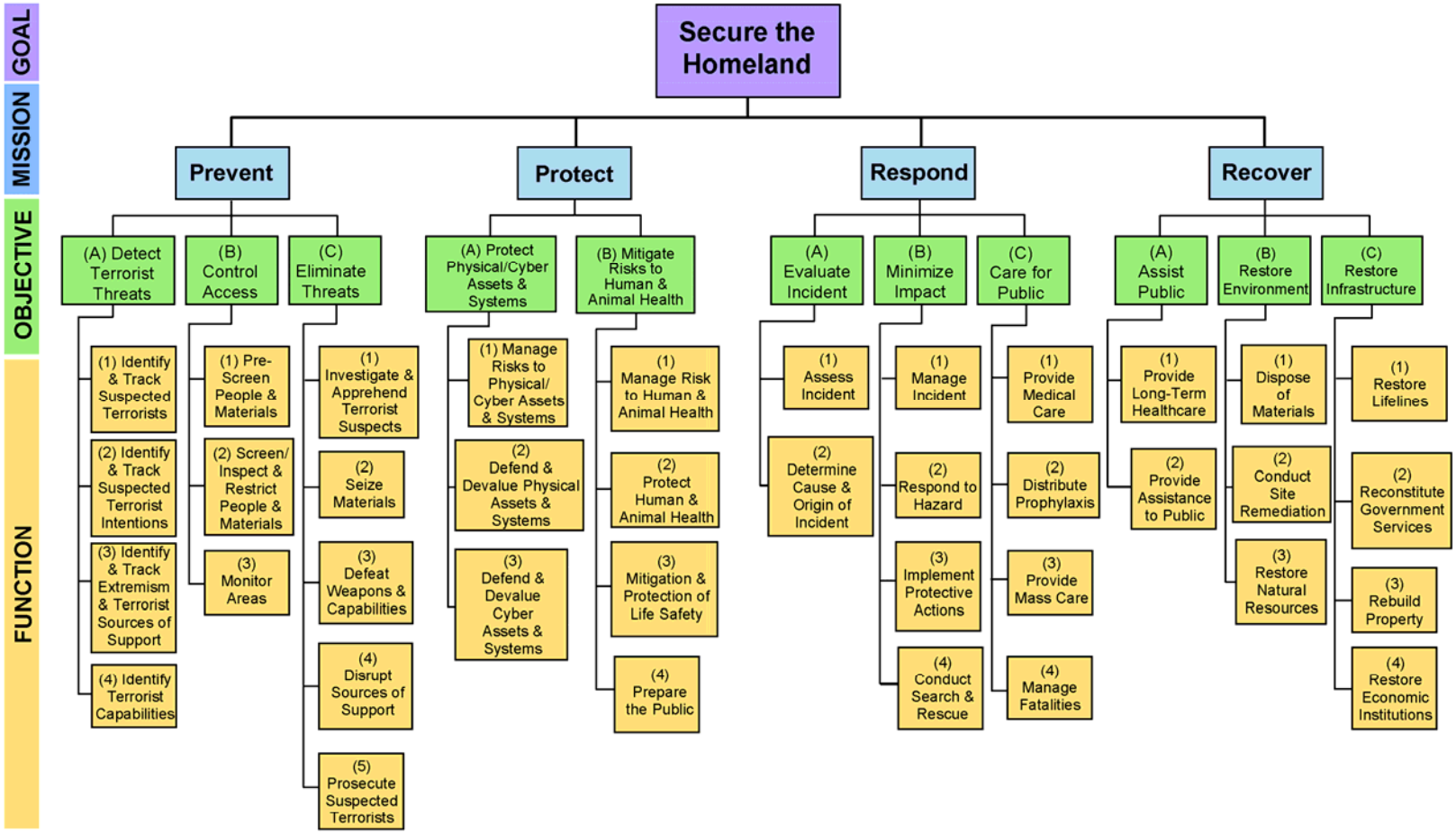


Figure 8. Transition from Common Tasks to Elements of Capability

After incorporating all changes developed through the G&T-led refinement, the MAA Taxonomy now appears as the All-Hazards Taxonomy shown in Figure 9.



Note 1: Common Tasks occur across all Functions: (A) Planning and Coordination, (B) Preparedness, (C) Resource Management, (D) Communications & Information Management, (E) Supporting Technology.

Note 2: Function-Specific Tasks enable the function to be performed.

Figure 9. Updated All Hazards Taxonomy (Effective August 2006)

APPENDIX A: TASK DEVELOPMENT WORKSHOP REPORT: COORDINATION INPUTS

A=accepted; R=rejected; M=modified

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
1.	Prevent B1	CUBIC	Change into two Tasks: "Pre-Screen People" and "Pre-Screen Materials."	R	Workshop participants concluded that the functional capabilities required for screening people and materials are similar and should therefore remain one function.
2.	Prevent B2	CUBIC	Change into two Tasks: "Screen/Inspect and Restrict People" and "Screen/Inspect and Restrict Materials."	R	Workshop participants concluded that the functional capabilities required for screening people and materials are similar and should therefore remain one function.
3.	Prevent C5	CUBIC	Question: Should state or federal warrants be issued to initiate charges for prosecution? (Considering: Virginia law, for one, allows capability to set "no bond" whereas federal law requires "a bond be set.") Seems like it would be easier, less error prone, etc., to initiate state charges contempora-neously, and later move the cases to the respective federal courts. However, if initiated as federal charges contemporaneously, then training, forms, and cross design-nation would be necessitated).	R	The organizational responsibility is irrelevant as long as the functional capability is captured. (The task list is concerned with the "whats" and not the "whos.")
4.	Prevent B1	CUBIC	Screen applicants/employees/others who will have access to convey-ances and key assets and/or information (e.g., clear employees for access and handling sensitive information or before permitting access to sensitive areas).	A	The change broadens the scope and adds clarity.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
5.	Prevent B1	CUBIC	Relay information to appropriate U.S. authorities (e.g., notify federal authorities of suspicious individuals/trade shipments destined to arrive and/or transit the U.S.).	A	The change broadens the scope and adds clarity.
6.	Prevent B2	CUBIC	Ensure people and materials are secure and not permitted to be contaminated after pre-screening/inspection.	A	The change adds clarity.
7.	Prevent B2	CUBIC	Restrict the movement of [Delete: …those…] people/materials suspected of being [Delete: …related to…] [Add: …involved in…] terrorism.	R	The workshop agreed on the existing definition.
8.	Prevent B2	CUBIC	Notify officials when screening/inspections yields individuals/materials potentially [Delete: …related to…] [Add: …involved in…] terrorist activities.	R	The workshop agreed on the existing definition.
9.	Prevent B3	CUBIC	Monitor borders, territorial seas, points of entry [Add: .. , transit points…] into the U.S. and adjacent areas, and potential terrorist targets, especially critical infrastructure nodes and conveyances.	R	The workshop agreed on the existing definition.
10.	Prevent B3	CUBIC	Maintain visibility of vehicles, people, and material entering, departing, and transiting the U.S.	A	The change broadens scope and adds clarity.
11.	Prevent B3	CUBIC	Detect movement and transfer of terrorists and/or material.	A	The change broadens the scope.
12.	Prevent B3	CUBIC	Provide [Delete: …timely…] operational information to identified users [Add: …in a timely manner…].	A	The change adds clarity.
13.	Prevent C	CUBIC	1st Title box below: Change Task title: “Eliminate Threats” to “Neutralize Threats” Change Task definition: “Eradicate ….” to “Neutralize.”	R	The workshop agreed on the task title and definition.
14.	Prevent C1	CUBIC	Track and probe [Add: …terrorist, …] suspected terrorists and activities.	A	The change adds clarity.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
15.	Prevent C1	CUBIC	Monitor terrorist suspect to gather evidence [Add: …, and/or deter acts of terrorism…], based on actionable intelligence.	R	The concept of deterrence was discussed at the workshop and was identified as an outcome of all tasks throughout the hierarchy.
16.	Prevent C1	CUBIC	Interview victims and witnesses [invert because victims usually interviewed first, witnesses second] and Gather information and/or evidence from [Add: …victims and…] witnesses regarding threats and/or incidents.	A	Subject matter expert provided input.
17.	Prevent C1	CUBIC	Seek appropriate court authority [change from authorities to authority].	A	The change adds clarity.
18.	Prevent C1	CUBIC	Utilize appropriate investigative techniques, including forensic examination, polygraph, financial and communications investigations, etc.	A	The change adds clarity.
19.	Prevent C1	CUBIC	Process and document evidence, to include maintaining a chain of custody [Delete: …, that can be utilized in…] [Add: …to sustain…] the apprehension and [Delete: …eventual…] prosecution of [Delete: …a…] suspect.	R	The workshop agreed on the definition.
20.	Prevent C2	CUBIC	3rd Title box below: Change Task definition to read: "Seize and detain suspected terrorist under appropriate authority."	A	The change adds clarity.
21.	Prevent C2	CUBIC	Identify suspected terrorists [Delete: "Positively"].	R	Workshop discussion stressed the need for this statement to be qualified with "positively."
22.	Prevent C2	CUBIC	Detain and/or arrest suspects and process them in the judicial system under appropriate authority.	A	The change adds clarity.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
23.	Prevent C3	CUBIC	Intercept and seize information, substances, components, technologies, and weapons potentially used for terrorist activities under appropriate authority.	A	The change adds clarity.
24.	Prevent C3	CUBIC	Direct the delivery of a terrorist material away from its intended destination, populated areas and/or critical infrastructure.	R	The addition narrows the scope and generality of the task, limiting the applicability.
25.	Prevent C3	CUBIC	Locate and track conveyances and/or materials used in terrorist activities. Maintain contact.	A	The change adds clarity.
26.	Prevent C3	CUBIC	Inspect, examine, and seek mate-rials, including information, sub-stances, components, technologies, and weapons potentially [Delete: …used for…] [Add: …useable in] terrorist activities.	R	This change broadens the scope of the task to include all possible items that can be used for terrorism, not only the items actually being used for terrorism pur-poses that concern us.
27.	Prevent C3	CUBIC	Neutralize threat agents, materials, computer code, precursors and residual products to make them safe [Delete: …ineffective, unusable or harmless].	A	The change adds clarity.
28.	Prevent C3	CUBIC	Change task definition to Preserve evidence, secure and document materials under positive control of appropriate authorities including the establishment of a chain of custody.	R	The workshop agreed on task title and definition.
29.	Prevent C3	CUBIC	Safely secure materials.	R	The workshop agreed on task title and definition.
30.	Prevent C4	CUBIC	Positively identify weapon and associated hazards including possible secondary devices.	A	The change adds clarity.
31.	Prevent C4	CUBIC	Identify and track the path of the terrorist weapon and its delivery system.	A	The change adds clarity.
32.	Prevent C4	CUBIC	Render the weapon's delivery system safe, ineffective, unusable, or harmless.	A	The change adds clarity.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
33.	Prevent C4	CUBIC	Implement standard safe packaging and transporting procedures for known or suspected weapons.	A	The change adds clarity.
34.	Prevent C4	CUBIC	Neutralize threat agents, materials, computer code, precursors, and residual products to make them safe, ineffective, unusable, or harmless.	A	The change adds clarity.
35.	Prevent C5	CUBIC	Assess legal sufficiency and completeness of the investigation through investigative reports to ensure requisite elements of probable cause have been met.	A	The change adds clarity.
36.	Prevent C5	CUBIC	[Delete: Charge suspects with crime]. [Add: Initiate criminal charges] Initiate criminal charges, convene grand jury or follow appropriate charging process to formally [Delete: indict] [Add: charge] suspects.	A	The subject matter expert provided input.
37.	Prevent C5	CUBIC	Hold required arraignment, pretrial hearings, including bail and bond hearings, [Delete: in front of] [Add: before] appropriate judicial body.	A	The subject matter expert provided input.
38.	Prevent C5	CUBIC	When necessary, institute extradition proceedings in order to [Delete: …move…] [Add: transfer] suspects from one [Delete: …to different jurisdictions] [Add: jurisdiction to another jurisdiction].	A	The subject matter expert provided input.
39.	Prevent C5	CUBIC	[Delete: Confine/supervise convicts] [Add: Impose sentence in accordance with] [Delete: … according to the…] court's disposition/ruling.	A	The subject matter expert provided input.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
40.	Protect A5	USCGHQ	Suggest using caution when using terms such as ROI and cost-benefit analysis. CG experience is that measures of returns and benefits are highly subjective and qualitative at best. "Subject matter expertise" and "gut feelings," if you will, don't lend themselves to concrete rankings.	A	The change broadens the scope.
41.	Protect B1	USCGHQ	This is the second occurrence of the use of measures of effectiveness, i.e., "cost effective." See first comment.	R	National guidance dictates that homeland security actions must be taken in a cost-effective manner.
42.	Protect B1	USCGHQ	If the suggestion at the end of the "Observation" paragraph is taken, you will have the situation where a task matches the function "Identify risk reduction options."	A	The change adds clarity in the hierarchy.
43.	Protect B1	USCGHQ	Another occurrence of the use of measures of effectiveness. See first comment.	R	National guidance dictates that homeland security actions must be taken in a cost effective manner.
44.	Protect B2	USCGHQ	Task: "Protect key personnel," Change: Precede this task with a task that identifies essential or key personnel.	R	The identification of key personnel is included in the "Collect data" task under Protect A1.
45.	Protect, Respond, and Recover	HHS	**10 Key Public Health Components:** 1. Monitor Health Status 2. Diagnose and Investigate 3. Inform, Educated, and Empower 4. Mobilize Community Partnerships 5. Develop Policies and Plans 6. Enforce Laws and Regulations 7. Link People to Services 8. Assure a Competent Workforce 9. Evaluate Effectiveness, Accessibility, and Quality 10. Research	M	The first thing the team did was ensure that the 10 key public health components were accounted for in our MAA. We agreed that the first two (Monitor Health Status and Diagnose and Investigate) were explicitly housed in the MAA (within the Investigate Incident and Safeguard Public Health functions). The remaining 8 fall within "Common Tasks" underlying all elements of the tree.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
46.	Protect C	HHS	On the Safeguard Public Health slide, add the task "Develop and test crisis and emergency risk communication plans." The definition to be added for that task is "Crisis and emergency risk communication is the effort by experts to provide information to show an individual, a family, and/or a community how to make the best possible decisions about their well-being within nearly impossible time constraints and help people ultimately to accept the imperfect nature of choices during the crisis."	A	The team felt that this idea does, in fact, need to be called out specifically, and fits most logically at the task level in the "Mitigate Risk to Public" branch, within the "Educate and Prepare the Public" function (see next paragraph for an explanation of this box title). All elements of the definition for this task ("Crisis and emergency management risk communication is the effort...") have been incorporated into the definitions of the existing tasks within the "Educate and Prepare the Public" function.
47.	Protect C3	HHS	On the Mitigate Risk to Public slide, in addition to Safeguard Public Health and Provide Public Safety, add "Educate the Public" and "Develop Pre-Tested Messages." The box connected to the right of "Educate the Public" should read, "Provide 6th grade-level scientific education on threats to increase the public's understanding of chemical, biological, radiological, and nuclear threats." The box to the right of "Develop Pre-Tested Messages" should read "Use scientific methodology to develop easily understood messages addressing the public's concerns about threats and to identify credible community spokespersons."	M	The "Educate the Public" piece was raised to be included in the function title (hence the change to "Educate and Prepare the Public"). Thanks for calling this out and stressing the education piece we had missed. Next, we incorporated the "Develop Pre-tested Messages" suggestion in the following way: we created a new task, within the "Educate and Prepare the Public" function entitled "Develop Strategic Communications plan," with the following definition: "Develop pre-Tested,

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
					easily understood messages addressing the public's concerns about threats, and identify credible community spokespersons."
48.	Respond A3	NGB	Several areas required a Task that includes use of a developed checklist. A checklist ensures all possible responders and resources have been contacted. Specifically, under Respond (A) Assess Incident (A3) Conduct Internal Communications, add checklist on task line 42.	R	The use of a checklist can generally be thought of as a solution for fulfilling one or more of the tasks. It is not a functional capability.
49.	Respond A3	NGB	Additionally, in A3 I don't know about the term "Internal"; however, the National Guard is both local and national.	A	The term “Internal” includes communication between proper authorities at all levels. The term is left generic to broaden the scope and ensure applicability across all homeland security missions.
50.	Respond B1	NGB	Under Respond (B) Minimize Impact (B1) Manage Incident, a checklist Task should be added somewhere between lines 17–21.	R	The use of a check-list can generally be thought of as a solution for fulfilling one or more of the tasks. It is not a functional capability.
51.		NGB	The National Guard has a large concern on where and when its participation will be required. With the current Operational tempo of NG units deploying to combat zones, preparedness on additional mission takings is a paramount issue. Future possible DoD Requests For Assistance should be discussed. DHS's RFAs to DoD will most likely be tasked to the Guard.	N/A	We added a comment regarding the role of the National Guard.
52		NGB	The future threat will operate across an integrated, seamless, global battlespace, and the	N/A	We added a comment regarding the role of the National Guard.

#	MAA Element	Source	Comment	Decision A/R/M	Rationale
			National Guard is the only force that can operate across the entire spectrum of that battlespace by leveraging its unique ability to operate in State Active Duty, Title 32, and Title 10 statuses.		
53.		NGB	Uncertainty will mark the future environment, and adaptability is the key to success in an uncertain environment. Ongoing National Guard efforts and new initiatives provide that adaptability.	N/A	We added a comment regarding the role of the National Guard.

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APPENDIX B: MAA COMMON TASK DEFINITIONS

Common Task	Definition	Source
Preparedness	Build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness includes: • Planning, training, and exercises • Personnel qualification and certification standards • Equipment acquisition and certification standards • Publication management processes and activities • Mutual aid agreements and Emergency Management Assistance Compacts (EMACs)	National Response Plan
Resource Management	Coordinate and oversee tools, processes, and systems that provide incident managers with timely and appropriate resources during an incident. Historically, resource management has been an issue at incidents, both large and small. Resources are defined as personnel and major items of equipment supplies, and facilities available for assignments to incident operations and for which status is maintained.	National Response Plan National Incident Management System
Communications and Information Management	Identify the requirements for a standardized framework for communications, information management, and information-sharing support at all levels of incident management. • Incident management organizations must ensure that effective, interoperable communications processes, procedures, and systems exist across all agencies and jurisdictions. • Information management systems help ensure that information flows efficiently through a commonly accepted architecture. • Effective information management enhances incident management and response by helping to ensure that decision making is better informed.	National Incident Management System
Supporting Technology	Provide supporting technology and technological systems essential to implement incident response actions. Examples include: • Voice and data communication systems • Information management systems such as recordkeeping and resource tracking • Data display systems Supporting technologies also include specialized technologies that facilitate ongoing operations and incident management activities in situations that call for unique technology-based capabilities.	National Incident Management System

APPENDIX C: MAA/ALL HAZARDS TAXONOMY LEVEL DEFINITIONS

Term	Definition	Foundation
Mission	The principal components of strategic goals	Derived from homeland security strategic goals established by the Legislative and Executive branches of government
Objective	A series of related operations aimed at accomplishing a strategic mission within a given time and space	Derived directly from homeland security and interagency strategic documents
Function	An operation performed by multiple professional skill sets to accomplish a common objective	Derived from Department-specific documents
Task	A discrete action that enables a function to be accomplished by individuals or organizations	Derived from standard operating procedures

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APPENDIX D: MAA/ALL HAZARDS TAXONOMY MODIFICATION RULES

Changes to any level of the Taxonomy (or to Capabilities) should follow the sequence outlined below:	
1.	Definitional change
2.	Title change
3..	Deletion or addition (of capability, function, objective, or mission)

Rules for Capabilities	
1.	Definition: A capability is a combination of resource elements required to achieve a desired outcome.
2.	A capability applies to only one function and therefore applies to one mission.
3.	A capability speaks to an outcome, not a process.
4.	Capabilities have an operational focus.
5.	Capabilities are composed of associated common/supporting tasks.
6.	Capabilities are essential to save lives and/or avoid substantial property losses.
7.	Capabilities do not define “basic services,” for operational response, but deal with incremental ability to address large scale events.
8.	Several capabilities may apply to the same function.

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APPENDIX E: MAPPING MAA/ALL HAZARDS TAXONOMY FUNCTIONS AND TARGET CAPABILITIES

Prevent	
MAA/All Hazards Taxonomy Function	**Phase I & II Target Capabilities**
Identify and Track Suspected Terrorists.	Identification and tracking of suspected terrorists
Identify and Track Terrorist Intentions.	Identification and tracking of terrorist motivations
Identify and Track Extremism and Sources of Support.	Recognition and tracking of extremism Determination and tracking of terrorist support
Identify Terrorist Capabilities.	Determination of terrorist ability to execute threats
Prescreen People and Materials.	Pre-entry detection
Screen/Inspect and Restrict People and Materials.	Port of entry inspection Infrastructure/facility access screening Transportation screening Credentialing
Monitor Areas.	Border control
Investigate and Apprehend Terrorist Suspects.	Law enforcement investigation and operations
Seize Materials.	Interdiction/seizure of materials Interdiction/seizure of terrorist assets and weapons
Defeat Weapons and Capabilities.	Defeat of weapons
Disrupt Sources of Support.	Disruption of terrorist sources of support
Prosecute Suspected Terrorists.	Prosecution of suspects

Protect	
MAA/All Hazards Taxonomy Function	**Phase I & II Target Capabilities**
Manage Risk to Physical/Cyber Assets and Systems.	Risk management
Defend Physical Assets & Systems.	Defense and devaluation of physical assets and systems Denial of access to materials that may be weaponized
Devalue Cyber Assets & Systems.	Defense and devaluation of cyber assets and systems
Manage Risks to Human and Animal Health.	Epidemiological surveillance and investigation Food and agricultural safety and defense Environmental monitoring

Protect	
MAA/All Hazards Taxonomy Function	**Phase I & II Target Capabilities**
	Natural hazard monitoring Public health laboratory testing
Protect Human and Animal Health.	Stockpile management
Mitigate and Protect Life Safety.	Mitigation and protection of life safety
Prepare the Public.	Pre-incident public education

Respond	
MAA/All Hazards Taxonomy Function	**Phase I & II Target Capabilities**
Assess Incident.	Scene and consequence assessment
Determine Cause and Origin of Incident.	Incident scene investigation
Manage Incident.	Onsite incident management Emergency operations center management Critical resources logistics and distribution Responder health and safety Emergency public information and warning
Respond to Hazard.	Explosive device response operations Firefighting operations/support WMD/Hazardous materials response and decontamination Animal health emergency support
Implement Protective Actions.	Isolation and quarantine Public safety and security response Citizen protection: evacuation and/or in-place protection Environmental health
Conduct Search and Rescue.	Urban search and rescue Water search and rescue
Provide Medical Care.	Triage and prehospital treatment Medical surge Medical supplies management and distribution
Distribute Prophylaxis.	Mass prophylaxis
Provide Mass Care.	Mass care (sheltering, feeding, and related services)
Manage Fatalities.	Fatality management

Recover	
MAA/All Hazards Taxonomy Function	**Phase I & II Target Capabilities**
Provide Long-Term Health Care.	Long-term healthcare
Provide Assistance to Public.	Long-term assistance for affected persons Resettlement and repatriation of affected persons
Dispose of Materials.	Debris and hazardous waste management
Conduct Site Remediation.	Site remediation
Restore Natural Resources.	Natural resource restoration
Restore Lifelines.	Restoration of lifelines
Reconstitute Government Services.	Reconstitution of government services
Rebuild Property.	Structural damage and mitigation assessment
Restore Economy and Institutions.	Economic and community recovery Restoration of economy and institutions

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