



**HOMELAND SECURITY GEOSPATIAL ENTERPRISE
ARCHITECTURE**

**ATTACHMENT G BUS 2
GEOSPATIAL BUSINESS ACTIVITY**

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1.0 HLS GEOSPATIAL BUSINESS ACTIVITIES

(Geospatial) Location is a foundational property for modeling and understanding HLS (Homeland Security) business activities. It is a ubiquitous information ingredient in the HLS mission. Location can be exploited as a unifying information theme to better understand the context of most real and abstract phenomena associated with HLS. Location, in its simplest form, can be used to depict where something is on the earth. It is contextually simple and intuitive to most people. Location is the way that people commonly understand and relate to the world around them.

The role of location, geospatial data and technology in the HLS mission is defined in terms of *Geospatial Business Statements*. These statements are based upon the *Geospatial Business Language* (See HLS Geospatial Business Language: Key Terms, Attachment G.Bus.1). Most HLS Business Activities have one or more such statements. The statements describe the main uses of geospatial data and technology, and the main *Geospatial Applications* (and application components) involved in the HLS enterprise. (Data are denoted in *italics*.) Many of the applications include non-geospatial data and technology, and may be predominantly non-geospatial in nature. As such, the value of geospatial service components is crucial to many HLS Business Activities. HLS applications will need authorized access to these components when and where they are needed in the HLS enterprise.

The table below maps HLS Business Activity to *HLS Geospatial Role*, where the role is expressed in terms of *Geospatial Business Statements* (column 5) and *Geospatial Applications* (column 6). The first HLS Business Activity, HLS007, lists several *Geospatial Business Statements* that apply across the enterprise. These broadly relevant applications are only listed under the first activity and are not repeated for many other activities in which they apply. On the other hand, a number of more specialized *Geospatial Business Statements* and *Geospatial Applications* are repeated for several business activities. This is done where necessary to emphasize specialization, and because we tended towards redundancy in cases where there is overlap between HLS Business Activities.

Finally, it is important to note that many *Geospatial Applications* will have several specialized implementations. For example, it is unlikely that there will be a single *Mission Planning* application. Rather, the complexity and diversity of mission operations necessitates the need for specialization and diversity of mission planning business processes/sub-processes/applications. However, there will be a number of common geospatial service components and associated data upon which all *Mission Planning* applications will depend.

HLS Business Activity				HLS Geospatial Role	
Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Identify Threats & Vulnerabilities	HLS007	Conduct Threat Assessments	Identify and locate threats (both foreign and domestic) to America's critical infrastructure and key assets and perform tactical threat analysis to minimize the risk of the threat. Develop mitigation strategies to minimize the impact of the threat.	<ul style="list-style-type: none"> - Reference applicable <i>base categories</i> of <i>HLS framework data</i>⁴ to meet HLS geoprocessing needs. - Conduct Critical Infrastructure Inventory Management to create, update, reference and share⁵ <i>critical asset</i> and <i>key asset inventories</i> and <i>status</i>. Update, reference and share <i>threat assessments</i> that are associated with <i>critical asset</i> and <i>key asset inventories</i>. - Conduct Threat Analysis. Create, update, reference and share <i>threat</i> data and assign probability and severity. Create, update, reference and share <i>threat assessments</i> (i.e., geospatial analysis results) as they pertain to <i>key</i> and <i>critical assets</i>. Reference related <i>incident</i> and <i>event</i> data, <i>threat intelligence</i> and other <i>intelligence</i> data in support of threat 	<ul style="list-style-type: none"> - Critical Infrastructure Inventory Management⁶ - Threat Analysis - Situation Awareness - Security Planning - Mission Planning - Electronic Navigation - Mission Rehearsal - Countermeasure Planning - Threat Consequence Analysis - Warning/Alert Management - Data Collection

¹ The *Geospatial Business Statements* are based upon a common *Geospatial Business Language*, a *lingua franca* comprised of the key terms used in describing the role of geospatial in the HLS enterprise. (See HLS Geospatial Business Language: Key Terms, Attachment G.Bus.1)

² The main classes of geospatial data used in HLS business activities are denoted in *italics*. (See HLS Geospatial Data Dictionary, Attachment G.Data.3.)

³ Any applications or application components that create, update, reference, share and/or exploit geospatial data and/or the geospatial properties of any HLS business data. Certain applications are broadly functional across the HLS enterprise. These applications are only listed under the first business activity, HLS007.

⁴ The Base categories of HLS Framework Data are referenced throughout the HLS enterprise and include The National Map, critical assets, key assets, etc. This *Geospatial Business Statement* will not be repeated for the remaining HLS Business Activities.

⁵ The term 'share', as used herein, refers to data sharing between federal, state, local, tribal and private organizations through network-accessible, standards-based services.

⁶ Critical Infrastructure Inventory Management is not directly associated with this activity, per se. But, this application is required to support this and other HLS value chains that involve key assets and critical assets.

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>analysis.</p> <ul style="list-style-type: none"> – Conduct Situation Awareness. Create, update, reference and share <i>situational awareness</i> data (i.e., geospatial analysis results) for near-real time <i>threats</i>, and resulting from tactical threat analysis. This data may contribute to a collaborative <i>Common Operating Picture (COP)</i> or <i>Mission-Specific Operating Picture (MSOP)</i>. Create, update, reference and share <i>situation reports</i>. – Conduct Security Planning, Mission Planning/Navigation/Rehearsal and Countermeasure Planning for threats. Create, update, reference and share <i>threat mitigation strategies</i> (i.e., <i>security plans, countermeasures, mission plans</i>), <i>navigation guidance</i> for mobile assets and <i>mission rehearsal models</i> in geospatial context, as they apply to <i>key assets</i> and <i>critical assets</i>. – Conduct Threat Consequence Analysis. Create, 	<ul style="list-style-type: none"> – Management⁷ – Data Collection Planning⁸ – Data Acquisition/Generation⁹ – Geospatial Data Transfer¹⁰ – Threat Detection – Hazard Modeling, Analysis & Mapping – Hydraulic-Hydrographic Modeling – Map Publication¹¹ – COP Manager¹²

⁷ The means to define and manage requests for new data, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

⁸ The means to plan, schedule and allocate requests for new data to collection assets, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

⁹ The means to acquire, collect, process or generate new data, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

¹⁰ The means to transfer geospatial data between database nodes, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

¹¹ The means to produce finished softcopy and hardcopy maps for use in HLS operations, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

¹² The means to manage the scope and resources associated with a Common Operating Picture, which cuts across the HLS enterprise. This application will not be repeated for the remaining activities.

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>update, reference and share <i>threat predictions</i> and <i>threat consequence assessments</i> (i.e., geospatial modeling and analysis results from Consequences Assessment Tool Set resulting from the modeling, simulation and analysis of the threat and the potential consequences of a threat in a chosen environment.</p> <ul style="list-style-type: none"> – Conduct Warning/Alert Management. Create, update, reference and share <i>threat warnings</i> and <i>alerts</i> resulting from threat analysis (in geospatial context). – Conduct Data Collection Management. Create, update, reference and share <i>collection requirements</i> (requests for new geospatial data) based upon data needs for threat analysis. – Conduct Data Collection Planning. Create, update, reference and share <i>collection plans</i> with schedule, tasking and resource allocations for specified data collection assets. – Conduct Data Acquisition/Generation. Create, update, reference and share appropriate geospatial data holdings with newly acquired/collected/processed/generated data. – Conduct Geospatial Data Transfer to transfer geospatial data between enterprise database nodes. Perform database synchronization operations. Used to accomplish replication operations between redundant nodes. Used to accomplish data rollup operations for HLS framework data (synchronize data up the local-state-federal chain). Create, update, reference and share associated <i>transaction reports</i> and <i>audit trails</i>. – Conduct Threat Detection through employment of sensors to detect/monitor chemical, biological and 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>other <i>threats</i> in air and water. Create, update, reference and share sensor <i>observations</i>. Detect threats through screening and analysis of sensor <i>observations</i>. Create and share derived <i>threats, alerts, notices or watches</i>.</p> <ul style="list-style-type: none"> - Conduct Hazard Modeling, Analysis & Mapping. Create, update, reference and share <i>hazard maps</i> (e.g., floodplain maps) that convey the potential impacts of natural and human-induced hazards. - Conduct Hydraulic-Hydrographic Modeling in support of floodplain modeling and mapping. Create, update reference and share <i>floodplains</i>. - Conduct Map Publication to produce <i>maps</i> that depict <i>asset inventories, threat assessments, security plans, etc.</i> - Conduct COP Manager to manage and monitor the scope and collaborative resources pertaining to an HLS operations subject/area of interest. Create, update, reference and share the <i>COP</i> and associated MSOPs, which are derived from the managed, collaborative resources. The COP Manager manages the ‘big picture’ and provides the means to select and allocate resources, manage and monitor collaboration activities, monitor status and performance of resources, and monitor and manage external communications. 	
Identify Threats & Vulnerabilities	HLS008	Conduct Risk Assessments	Identify, locate , analyze, mitigate and communicate vulnerabilities and threats (probability and severity) across all infrastructure sectors and perform threat-vulnerability analysis (map threats to	<ul style="list-style-type: none"> - Conduct Risk Analysis. Create, update, reference and share <i>risk assessments</i> (i.e., geospatial analysis results), as they pertain to <i>key assets, critical assets</i>, and associated <i>threats</i> and <i>vulnerabilities</i>. Spatially correlate <i>threats</i> to <i>vulnerabilities</i>. The results of these analyses may create or update <i>threat</i> or <i>vulnerability</i> data. Reference related <i>incident, event/occurrence, threat intelligence</i> and 	<ul style="list-style-type: none"> - Risk Analysis - Situation Awareness - Security Planning - Mission Planning - Electronic Navigation - Mission Rehearsal - Countermeasure Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			<p>vulnerabilities) to identify triggers and thresholds (value of asset vs. cost of countermeasure) and develop tactical preventative actions. Value assets to determine appropriate countermeasures. Determine what steps should be taken in order to reduce vulnerability, disable threats, and/or mitigate risks associated with incidents/events.</p>	<ul style="list-style-type: none"> - other <i>intelligence</i> data in support of risk analysis. - Conduct Situation Awareness. Create, update, reference and share <i>situational awareness data</i> (i.e., geospatial analysis results) that results from risk analysis and conveys severity and probability of <i>threats</i> and <i>vulnerabilities</i>. This data may contribute to a <i>MSOP</i>. Create, update, reference and share <i>situation reports</i>. - Conduct Security Planning, Mission Planning/Navigation/Rehearsal and Countermeasure Planning for risks. Create, update, reference and share <i>risk mitigation strategies</i> (i.e., <i>security plans, countermeasures, mission plans, navigation guidance</i> for mobile assets and <i>mission rehearsal models</i>, in geospatial context, as they apply to <i>incidents</i> and <i>events</i>). - Conduct Critical Infrastructure Inventory Management to update, reference and share <i>risk assessments</i> that are associated with <i>critical asset</i> and <i>key asset</i> inventories. 	<ul style="list-style-type: none"> - Critical Infrastructure Inventory Management
Identify Threats & Vulnerabilities	HLS017	Conduct Vulnerability Assessments	<p>Identify, locate, analyze, and communicate vulnerabilities of America's critical infrastructure and key assets. Project the consequences of possible attacks against specific facilities or sectors of the economy or government to allow authorities to strengthen defenses against different threats. Develop mitigation</p>	<ul style="list-style-type: none"> - Conduct Vulnerability Analysis. Create, update, reference and share <i>threat</i> and <i>vulnerability</i> data in geospatial context for <i>key</i> and <i>critical assets</i>, and assign probability and severity. [e.g. Locate and identify potential delivery conduits in existing geospatial data (Heating, Ventilation & Air Conditioning (HVAC), below ground utilities, etc).] Create, update, reference and share <i>vulnerability assessments</i> (i.e., geospatial analysis results), as they pertain to <i>key</i> and <i>critical assets</i>. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of vulnerability analysis. - Conduct Threat Consequence Analysis. Create, update, reference and share <i>threat consequence</i> 	<ul style="list-style-type: none"> - Vulnerability Analysis - Threat Consequence Analysis - Security Planning - Mission Planning - Electronic Navigation - Mission Rehearsal - Countermeasure Planning - Facility Mapping & Management - Critical Infrastructure Inventory Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			strategies to minimize vulnerabilities.	<p><i>assessments</i> (i.e., geospatial modeling and analysis results) resulting from the modeling, simulation and analysis of the <i>threat</i> and the potential consequences of a <i>threat</i> in a chosen environment.</p> <ul style="list-style-type: none"> - Conduct Security Planning, Mission Planning/Navigation/Rehearsal and Countermeasure Planning for vulnerabilities. Create, update, reference and share <i>threat/vulnerability mitigation strategies</i> (i.e., <i>security plans, countermeasures, mission plans</i>), <i>navigation guidance</i> for mobile assets and <i>mission rehearsal models</i>. - Create, update, reference and share <i>real property</i> data and <i>facilities</i> for facility mapping, management and security. - Conduct Critical Infrastructure Inventory Management to update, reference and share <i>vulnerability assessments</i> that are associated with <i>critical asset</i> and <i>key asset</i> inventories. 	
Manage the Flow of People and Goods	HLS010	Examine People and Things	Screen persons and things (goods, personal possessions, luggage, credentials, travel documents, manifests, agricultural products, etc.) for the purpose of determining compliance with laws, regulations, and standards - in the course of facilitating the flow of people, goods, and services to the homeland. Receive declarations,	<ul style="list-style-type: none"> - Conduct Screening and Risk Analysis to screen parties (persons/organizations). Review (reference), update and share <i>party records</i> and assess geospatial-based risk factors for profiling and screening. Reference <i>threat</i> and <i>threat intelligence</i> for profiling and screening. - Conduct Screening and Risk Analysis to screen things. Review (reference) <i>shipping manifests</i> and assess geospatial-based risk factors. Reference <i>threat</i> and <i>threat intelligence</i> for profiling and screening. Reference, update and share <i>goods/cargo</i> records for current <i>location/time/identity/activity/status</i> and <i>route of goods/cargo</i> and <i>conveyances</i> (reference this data too) for profiling and screening. 	<ul style="list-style-type: none"> - Screening and Risk Analysis - Suspicious Activity Reporting - National Security Special Event Reporting

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			<p>appraise/value merchandise, process entry documentation, examine visa and quota restrictions and documents to determine whether an extended or secondary examination is required. Assess monetary fines and other non-monetary sanctions based on an entity's actions and violations of the law.</p>	<ul style="list-style-type: none"> - Conduct Suspicious Activity Reporting. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of entry for suspicious persons/goods. Create and share <i>suspicious activity report</i>. - Conduct National Security Special Event (NSSE) Reporting. Create <i>Event/Incident</i> record (<i>location/time/identity/activity/status</i>) for NSSE threats. 	
<p>Manage the Flow of People and Goods</p>	<p>HLS011</p>	<p>Manage Requests for Government Benefits</p>	<p>Receive and analyze information (examine documents and credentials) and adjudicate (decide to grant or deny) applications for government benefits (e.g., immigration-related benefits, refugee and asylum requests, import/export licenses, post disaster assistance claims). Process applications timely and accurately. This includes the full immigration life cycle and related activities (e.g., including receipt of application or request, processing,</p>	<ul style="list-style-type: none"> - Conduct Screening and Risk Analysis to screen persons for certain benefits. Create, update, reference and share person and organization <i>benefit records</i> for geospatial information about persons, and screen/profile this data for the purpose of immigration-related benefit processing. Create, review (reference), update and share <i>background checks, interviews</i>, etc. Create, reference, update and share associated <i>risk assessments</i> (i.e., geospatial analysis results) by analyzing <i>background checks, interviews</i>, etc. for associated geospatial-based risk factors indicating potential criminal/terrorist activities. - Conduct Suspicious Activity Reporting based upon screening results. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of suspected threat/criminal activities. Create and share <i>suspicious activity report</i>. - Conduct Disaster Assistance for the purpose benefits processing. Create, update, reference and share <i>hazards, related assessments</i> [e.g., Digital 	<ul style="list-style-type: none"> - Screening and Risk Analysis - Suspicious Activity Reporting - Disaster Assistance

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			scheduling, fingerprinting, background checks, interviews, adjudications, decisions, appeals, court proceedings, etc.	Flood Insurance Rate <i>Maps</i> (DFIRMs) for lending institutions and flood insurance purposes (Human Services – Individual Assistance & Public Assistance), post disaster Housing Habitability data (<i>damage assessments</i> pertaining to individual structures and public infrastructure) for rebuilding purposes, etc.] Reference <i>address</i> of disaster assistance applicants.	
Manage the Flow of People and Goods	HLS012	Monitor Non-US Citizens	Verify that non-US citizens comply with the terms under which they were granted the right to enter and stay in the United States. (e.g., work program, parole, MS&D bonds, student study program, etc.). This includes keeping a record of the person’s status current and up-to-date.	<ul style="list-style-type: none"> – Conduct Screening and Risk Analysis to screen persons for compliance with immigration regulations. Reference <i>person</i> records for non-US citizens. Create, <i>reference</i>, update and share associated <i>risk assessments</i> (i.e., geospatial analysis results) by analyzing updated current and historical <i>location/time/identity/activity/status</i> for person, as well as referencing and updating <i>intelligence</i>, and examining geospatial-based risk factors as indicators of suspicious or criminal activities. – Monitor Persons. Create, update, reference and share <i>location/time/identity/activity/status</i> of person (access <i>person</i> records). – Conduct Suspicious Activity Reporting. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of suspected threat/criminal activities. Create and share <i>suspicious activity report</i>. 	<ul style="list-style-type: none"> – Screening and Risk Analysis – Monitor Parties – Suspicious Activity Reporting
Manage the Flow of People and Goods	HLS093	Categorize People and Things	Assign a risk value to people, goods, personal possessions, luggage, credentials, travel documents, etc. Classify commodities to assess tariffs.	<ul style="list-style-type: none"> – Conduct Screening and Risk Analysis to categorize person, goods, personal possessions, luggage, credentials, travel documents, etc. according to their associated risk. <ul style="list-style-type: none"> o Reference <i>person</i> records and analyze geospatial-based risk factors for people.. Assign risk factor and update <i>person records</i>. 	<ul style="list-style-type: none"> – Screening and Risk Analysis – Tariff Management (geospatial component)

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<ul style="list-style-type: none"> ○ Reference <i>goods</i> records and analyze geospatial-based risk factors for goods. Assign risk factor and update <i>goods records</i>. – Conduct Tariff Management. Classify commodities by <i>place of origin</i> and <i>place of destination</i> (reference this data) for the purpose of assessing tariffs, and update <i>goods records</i> accordingly. 	
Manage the Flow of People and Goods	HLS094	Establish Credentials	Issue permits and licenses for individuals and things, and produce license, permit or other valid credential for use by the individual (e.g., temporary work permits, boating licenses and documentation, etc.)	<ul style="list-style-type: none"> – Conduct Screening and Risk Analysis to screen persons for the purpose of permit/license processing. Reference <i>person records</i> and analyze geospatial-based risk factors for people. Create, reference, update and share <i>License/Permit</i> records to reflect <i>location</i> and <i>time</i> of application/issuance. – Conduct Screening and Risk Analysis to screen goods (things) for the purpose of permit/license processing. Reference <i>goods records</i> and analyze geospatial-based risk factors for goods. Create, reference, update and share <i>License/Permit</i> records to reflect <i>location</i> and <i>time</i> of application/issuance. – Conduct Suspicious Activity Reporting. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of suspected criminal activities. Create and share <i>suspicious activity report</i>. 	<ul style="list-style-type: none"> – Screening and Risk Analysis – Suspicious Activity Reporting
Manage the Flow of People and Goods	HLS095	Verify Credentials	Verify the identity of the individual/thing against the credential provided. Validate the authenticity of credentialing document (e.g., license, permit, broker license, travel, work, or identity document, etc.)	<ul style="list-style-type: none"> – Conduct Screening and Risk Analysis to verify identity of Person. Reference <i>person records</i> and related <i>intelligence</i> and analyze geospatial-based risk factors for people. Create <i>verification event</i> record (<i>location & time</i>) as part of <i>person records</i>. Update <i>person records</i> for monitoring purposes. – Conduct Screening and Risk Analysis to verify identity of goods (things). Reference <i>goods records</i> and related <i>intelligence</i> and analyze 	<ul style="list-style-type: none"> – Screening and Risk Analysis

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				geospatial-based risk factors for goods. Create <i>verification event</i> record as part of <i>goods records</i> . Update <i>goods records</i> for monitoring purposes.	
Manage the Flow of People and Goods	HLS113	Establish Identity	Establish identity of individuals by capturing biographical and biometric information on individuals. Establish identity of goods by capturing specified physical characteristics.	– Conduct Biographical Analysis. Create, update, reference and share <i>biographical</i> , geospatial temporal crosschecks and biometric data for persons (<i>person records</i>). Reference <i>case</i> , <i>event</i> and <i>intelligence</i> records for use in biographical analysis.	– Biographical Analysis
Manage the Flow of People and Goods	HLS119	Verify Identity	Confirm the identity of an individual. This may include the need to capture and compare a biometric.	– Conduct Screening and Risk Analysis to verify a person's identity. Reference <i>person</i> records for <i>biographical</i> , geospatial temporal crosschecks and biometric data.	– Screening and Risk Analysis
Prevent Incidents	HLS014	Conduct Investigations	Conduct investigations (Preliminary Inquiry, Full Field Investigation) related to law enforcement cases or events. This includes encountering individuals and making preliminary status determinations. This includes investigating crimes against our nation's currency and financial systems; agriculture, alien smuggling, as well as terrorist incidents.	– Monitor and/or track assets, parties (persons or organizations) and conveyances in the conduct of investigations. Create, reference and share <i>observations</i> from sensors and persons. Create, update, reference and share the geospatial context of <i>cases</i> and related <i>occurrences</i> (suspicious activities), <i>alerts</i> , <i>notices or watches</i> , for conveyances, assets or persons. Reference <i>party</i> , <i>asset</i> and <i>conveyance</i> data, as necessary. Create, update, reference and share <i>situational awareness</i> for monitoring operations. Create, update, reference and share <i>situation reports</i> . – Monitor <i>locations</i> in the conduct of investigations. Create, reference and share <i>observations</i> from sensors and persons. Create, update, reference and share the geospatial context of <i>cases</i> and related	– Monitor Assets – Monitor Parties (Persons and Organizations) – Monitor Conveyances – Monitor Locations (Surveillance) – Asset Inventory Management – Case Analysis – Event Analysis – Biographical Analysis – Mission Planning – Logistics Planning – Situation Awareness – Suspicious Activity Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			<p>Includes investigating in order to disrupt the flow of illegal money derived from global criminal activity. This includes investigation of overstays and referrals from other law-enforcement entities, e.g. investigate illegal import shipments and fraud, immigration-related violations and fraud, combating illegal drug activity, and illegal finance operations.</p>	<p><i>occurrences</i> (suspicious activities), <i>alerts</i>, <i>notices or watches</i>. Create, update, reference and share <i>situational awareness</i> for monitoring operations. Create, update, reference and share <i>situation reports</i>.</p> <ul style="list-style-type: none"> - Manage law enforcement assets (weapons, equipment and materials) to ensure their availability in good working order. Plan for shortages or emergencies. Create, update, reference and share <i>asset inventory</i> data. - Conduct Case Analysis (i.e., data integration, correlation, tracking, etc.) in geospatial context. Reference and update <i>event, case, person, goods</i> (including evidence), <i>cargo, conveyance, incident, threat</i>, and <i>intelligence</i> data as necessary to support analyses. The results of these analyses may create or update <i>case</i> records for investigations and provide input to mission planning and logistics planning. - Conduct Event Analysis (i.e., data integration, correlation, tracking, etc.) in geospatial context. Reference and update <i>event, case, person, goods, conveyance, incident, threat, threat intelligence</i>, and other <i>intelligence</i> data as necessary to support analyses. The results of these analyses may create or update <i>event</i> records for investigations and provide input to mission and logistics planning, as it pertains to investigations. - Conduct Mission Planning. Create, update, reference and share investigation-related <i>mission plans</i> in geospatial context, as they apply to <i>cases</i> and <i>events</i>. This data may contribute to a <i>MSOP</i>. - Conduct Logistics Planning to coordinate and plan the use of assets and personnel for investigations. 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>Create, update, reference and share <i>logistics plans</i>.</p> <ul style="list-style-type: none"> - Conduct Situation Awareness. Create, update, reference and share <i>situational awareness</i> data (i.e., geospatial analysis results) for near-real time operations associated with investigations. This data may contribute to a collaborative <i>MSOP</i>. Create, update, reference and share <i>situation reports</i>. - Conduct Suspicious Activity Reporting. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of suspected criminal activities. Create and share <i>suspicious activity reports</i>. 	
Prevent Incidents	HLS015	Detain People	Hold (confine) a person in custody. Provide for the long-term, safe, secure and humane confinement of detained persons while awaiting proceedings. Includes arranging for detention/bed space.	<ul style="list-style-type: none"> - Perform Site Modeling & Analysis to <i>locate</i> new detention centers¹³. Create, reference, update and share <i>site plans</i>. - Conduct Asset Inventory Management to update facility <i>asset inventory</i> for new and expanded detention centers¹⁴. - Allocate persons to centers and update <i>case</i> and <i>custody records</i> to reflect current detention center <i>location/time/identity/activity/status</i> (Monitor Parties). - Conduct Facility Mapping & Management. Create, update, reference and share <i>real property</i> and <i>facilities</i> data in <i>map, plan</i> and <i>report</i> form for facility management, holding capacity/space utilization and security¹⁵. - Conduct Security Planning for detention centers. 	<ul style="list-style-type: none"> - Site Modeling & Analysis - Asset Inventory Management - Monitor Parties - Facility Mapping & Management - Security Planning - Sensor Management - Security Protection & Management

¹³ Needed in support of this activity.

¹⁴ Ibid.

¹⁵ Ibid.

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>Create, update, reference and share <i>security plans</i>, including details concerning guards, sensor deployments, etc.</p> <ul style="list-style-type: none"> – Conduct Sensor Management. Deploy security sensors and create, update, reference and share <i>observation</i> (and associated <i>sensor data</i>) from security sensors. – Conduct Security Protection & Management. Reference, update and share <i>security plans</i>, reference <i>observations</i> (and associated <i>sensor data</i>), and create, update, reference and share <i>situational awareness</i> for near real time security operations. Create, update, reference and share <i>situation reports</i>. 	
Prevent Incidents	HLS026	Implement Countermeasures	<p>Deploy preventative measures (both tools and techniques) to reduce vulnerabilities and the impact of threats to America's key assets and infrastructure. (e.g. heightened security based on a targeted threat, physical barriers based on an assets vulnerability, etc.) Mitigate impact of natural and human-induced disasters.</p>	<ul style="list-style-type: none"> – Conduct Security and Countermeasure Planning. Create, update, reference and share <i>countermeasures</i> and <i>security plans</i>, including details concerning the geospatial-temporal context of sensor, guard and barrier deployments, and other security measures. – Conduct Sensor Management. Deploy security sensors and create, update, reference and share <i>observations</i> (and associated <i>sensor data</i>) from security sensors. – Conduct Security Protection & Management. Reference, update and share <i>countermeasures</i> and <i>security plans</i>. Reference <i>observations</i>, <i>threat warnings</i>, <i>alerts</i>, <i>notices or watches</i> and <i>threat consequence assessments</i>. Create, update, reference and share <i>situational awareness</i> for near real time security operations, with disposition and status of <i>assets</i>. Create, update, reference and share <i>situation reports</i>. – Conduct Suspicious Activity Reporting. Create 	<ul style="list-style-type: none"> – Security Planning – Countermeasure Planning – Sensor Management – Security Protection & Management – Suspicious Activity Reporting – Mitigation Planning & Analysis

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p><i>event</i> record with <i>location/time/identity/activity/status</i> of suspected criminal activities. Create and share <i>suspicious activity report</i>.</p> <ul style="list-style-type: none"> – Conduct Mitigation Planning & Analysis to mitigate impact of natural and human-induced hazards/disasters. Create, update, reference and share <i>mitigation plans</i> and supporting Geospatial Products to prepare for hazards/disasters (e.g., hurricane, tropical storm preparation and resource planning). 	
Prevent Incidents	HLS027	Monitor Movement of Things	Track the movement of targeted goods, cargo and conveyances (within/to/from the US) to include agricultural products, legal and illegal goods, hazardous and non-hazardous materials for the purposes of protecting and facilitating legal commerce. Could include imports/exports.	<ul style="list-style-type: none"> – Monitor the movement of goods, cargo, and conveyances. Create, update, reference and share the geospatial context of <i>goods, cargo, hazmat</i> and <i>conveyances</i>, i.e., historical and current <i>location/time/identity/activity/status, place of origin, place of manufacture</i>, etc. Reference and update <i>security plans, credentials, transshipment points, shipping route</i> and <i>place of destination</i> for <i>conveyances</i> and <i>cargos</i>. Create, update, reference and share <i>situational awareness</i> for monitoring operations. Create, update, reference and share <i>situation reports</i>. – Conduct Threat Analysis. Create, update, reference and share <i>threat assessments</i> (i.e., geospatial analysis results) as they pertain to <i>goods, cargo, hazmat</i> and <i>conveyances</i>. Reference, update and share <i>security plans</i> for transport operations, based upon threat assessments. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of threat analysis to detect illegal flow of goods, cargo and hazmat. – Conduct Suspicious Activity Reporting. Create <i>event</i> records with 	<ul style="list-style-type: none"> – Monitor Goods & Cargo – Monitor Conveyances – Threat Analysis – Suspicious Activity Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<i>location/time/identity/activity/status</i> of suspected criminal activities. Create and share <i>suspicious activity report</i> .	
Prevent Incidents	HLS029	Safeguard Officials and other designated persons	Provide identified individuals with protective services-- president, vice president, designated individuals, as well as visiting world leaders.	<ul style="list-style-type: none"> - Conduct secure Travel Planning. Create, update, reference and share travel plans containing person's <i>itinerary</i> for safe routes and visitation. - Conduct Threat Analysis to assess risks to safety and security of key persons. Create, update, reference and share <i>threats</i> and <i>threat assessments</i> to key <i>persons</i> (e.g., line of site analysis for force protection and movement, routing analysis for avoidance, access and egress, etc.) and assign probability and severity. Create, update, reference and share <i>threat assessments</i> (i.e., geospatial analysis results) as they pertain to <i>persons</i>. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of threat analysis. [Revisit Travel Planning and update <i>itinerary</i> to mitigate threats.] - Conduct Vulnerability Analysis. Create, update, reference and share <i>vulnerabilities</i> and <i>vulnerability assessments</i> for key <i>persons</i>, in geospatial context, and assign probability and severity. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of vulnerability analysis. [Revisit Travel Planning and update <i>itinerary</i> to mitigate vulnerabilities.] - Conduct Risk Analysis. Create, update, reference and share <i>risk assessments</i> that spatially correlate <i>threats</i> to <i>vulnerabilities</i>, as they pertain to <i>persons</i>. Reference and share <i>threat intelligence</i> and other <i>intelligence</i> data. [Revisit Travel Planning and update <i>itinerary</i> to mitigate risks.] - Conduct Security Planning. Create, update, 	<ul style="list-style-type: none"> - Travel Planning - Threat Analysis - Vulnerability Analysis - Risk Analysis - Security Planning - Security Protection & Management - Suspicious Activity Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>reference and share <i>security plans</i> for protective services and deployment of protective resources, including guards, barriers, details concerning sensor deployments, etc. Plans need to consider (reference) <i>itineraries, threats, vulnerabilities</i> and <i>risks</i>.</p> <ul style="list-style-type: none"> - Conduct Security Protection & Management. Deploy security sensors and create, update, reference and share <i>observation</i> (and associated <i>sensor</i> data) from security sensors. Reference, update (as situation changes warrant) and share <i>security plans, itineraries, threats, vulnerabilities</i> and <i>risks</i>. Reference <i>threat warnings, alerts, notices or watches</i> and <i>threat consequence assessments</i>. Create, update, reference and share <i>situational awareness</i> for near real time security operations. Create, update, reference and share <i>situation reports</i>. - Conduct Suspicious Activity Reporting. Create <i>event</i> record with <i>location/time/identity/activity/status</i> of suspected threat/criminal activities. Create and share <i>suspicious activity report</i>. 	
Prevent Incidents	HLS033	Manage Waterways	Perform port safety and security, waterways management, and commercial vessel safety missions and tasks. Provide a safe, efficient and navigable waterway system to support domestic commerce, international trade and the military sealift	<ul style="list-style-type: none"> - Conduct Waterway Management. Create, reference, update and share <i>Nautical Navigation</i> data and sensor <i>observations</i> pertaining to waterways, ports, harbors, bridges, navigation aids, traffic, traffic control, electronic navigation guidance, fixed hazards and dynamic hazards, and <i>hazmat</i>. Reference <i>weather, electronic charts</i> and <i>Notice to Mariners</i> to support navigation. Create, reference, update and share <i>conveyance</i> (vessel) data to support vessel safety and use. Reference <i>security plans, response plans, mission (patrol)</i> 	<ul style="list-style-type: none"> - Waterway Management - Threat Analysis - Vulnerability Analysis - Risk Analysis - Mission (Patrol) Planning - Electronic Navigation - Mission Rehearsal - Countermeasure Planning - Security Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			<p>requirements for national defense. Provide long- and short-range aids to navigation services (buoys/sensors/breaking ice); charting, tide/current/pilotage information through Notices to Mariners services; vessel traffic services; technical assistance and advice; vessel safety standards and inspection; and bridge administration standards and inspections.</p>	<p><i>plans, recovery plans, and threat, vulnerability and risk assessments</i> as they pertain to waterway and related equipment, personnel and facility health and safety. Apply all data for use in creating <i>situation awareness</i> for daily operations of the marine environment. Create, update, reference and share <i>situation reports</i>, as necessary.</p> <ul style="list-style-type: none"> - Conduct Threat Analysis. Create, update, reference and share <i>threats</i> and <i>threat assessments</i> to waterways and related equipment, personnel and facilities, and assign probability and severity to these threats. Create, update, reference and share <i>threat assessments</i> (i.e., geospatial analysis results) as they pertain to waterway and related equipment, personnel and facilities. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of threat analysis. - Conduct Vulnerability Analysis. Create, update, reference and share <i>vulnerabilities</i> and <i>vulnerability assessments</i> for waterway and related equipment, personnel and facilities, in geospatial context, and assign probability and severity to these vulnerabilities. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of vulnerability analysis. - Conduct Risk Analysis. Create, update, reference and share <i>risks</i> and <i>risk assessments</i> that spatially correlate <i>threats</i> to <i>vulnerabilities</i>, as they pertain to waterways and related equipment, personnel and facilities. Reference and share <i>threat intelligence</i> and other <i>intelligence</i> data. - Conduct Security Planning, Mission Planning/Navigation/Rehearsal and Countermeasure Planning for threats to waterways. 	<ul style="list-style-type: none"> - Security Protection & Management - Suspicious Activity Reporting - Warning/Alert Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>Create, update, reference and share <i>security plans, countermeasures, mission plans, navigation guidance</i> for patrol and surveillance assets, and <i>mission rehearsal models</i>.</p> <ul style="list-style-type: none"> - Implement Security Protection & Management to maintain safe and secure <i>waterways</i> and related assets (<i>equipment</i>), personnel (<i>persons</i>) and <i>facilities</i>. Deploy security sensors and create, update, reference and share <i>observations</i> (and associated <i>sensor data</i>) from security sensors. Reference, update and share <i>security plans</i> (as situation changes warrant). Reference conveyance <i>itineraries</i> and <i>cargos, threats, vulnerabilities, risks, mission (patrol) plans, threat warnings, alerts, notices or watches</i> and <i>threat, threat consequence, vulnerability and risk assessments</i>. Create, update, reference and share <i>situational awareness</i> for near real time security operations. Create, update, reference and share <i>situation reports</i>. - Conduct Suspicious Activity Reporting. Create <i>occurrence</i> record with <i>location/time/identity/activity/status</i> of suspected threat/criminal activities. Create and share <i>suspicious activity report</i>. - Conduct Warning/Alert Management. Create, update, reference and share <i>threat warnings</i> and <i>alerts</i> resulting from nautical threats and risks. 	
Prevent Incidents	HLS090	Provide Physical Security	Strategic use/placement of guards and physical barriers to reduce the vulnerability of an asset/event/person and allowing the lawful entry	<ul style="list-style-type: none"> - Conduct Security Planning. Create, update, reference and share <i>security plans</i> to determine the optimal placement of guards, sensors and physical barriers, including details concerning sensor deployments. - Conduct Sensor Management. Deploy security 	<ul style="list-style-type: none"> - Security Planning - Sensor Management - Security Protection & Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			of individuals into the physical space/area.	<p>sensors and create, update, reference and share <i>observations</i> (and associated <i>sensor</i> data) from security sensors.</p> <ul style="list-style-type: none"> - Conduct Security Protection & Management. Deploy security sensors and create, update, reference and share <i>observations</i> (and associated <i>sensor</i> data) from security sensors. Reference, update and share <i>security plans</i>. Reference <i>threats, vulnerabilities, risks, threat warnings, alerts, notices or watches</i> and <i>threat, threat consequence, vulnerability</i> and <i>risk assessments</i>. Create, update, reference and share <i>situational awareness</i> for security operations. Create, update, reference and share <i>situation reports</i>. 	
Prevent Incidents	HLS096	Categorize Events	Assign a risk value (based on certain criteria) to a specific event (e.g., the Super Bowl, the Kentucky Derby, etc) to determine the vulnerabilities and extent of countermeasures to put in place for security.	<ul style="list-style-type: none"> - Conduct Threat, Vulnerability and Risk Analyses as it pertains to the event. Create, update, reference and share <i>threats, vulnerabilities</i> and <i>risks</i> to event and related assets, personnel and facilities, and assign probability and severity to these threats, vulnerabilities and risks. Create, update, reference and share related <i>threat, vulnerability</i> and <i>risk assessments</i>. <i>Risk assessments</i> spatially correlate <i>threats</i> to <i>vulnerabilities</i>. Reference <i>threat intelligence</i> and other <i>intelligence</i> data in support of these analyses. - Support Event Planning and Analysis related to threats and vulnerabilities. Create, update, reference and share <i>event plans</i> for major events (e.g., Super Bowl). Conduct threat and vulnerability analysis in context with (referencing) <i>event venue</i> (location/time/activity), <i>facilities, assets, personnel (persons), security plans, evacuation plans, mutual aid support plans</i>, etc. The results of these analyses may create or update 	<ul style="list-style-type: none"> - Threat Analysis - Vulnerability Analysis - Risk Analysis - Event Planning and Analysis - Security Planning - Countermeasure Planning - Threat Consequence Analysis - Response Planning - Training Planning & Support

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p><i>vulnerabilities, risks and vulnerability and risk assessments, and impact countermeasures and security plans. This may in turn result in changes to the event venue.</i></p> <ul style="list-style-type: none"> - Conduct Security Planning and Countermeasure Planning for threats and vulnerabilities pertaining to an event. Create, update, reference and share <i>security plans</i> and <i>countermeasures</i>. Plans need to consider (reference) <i>event venue</i>, potential <i>threats</i>, <i>vulnerabilities</i>, <i>risks</i>, etc. - Conduct Threat Consequence Analysis for potential threats to the event and related assets, personnel and facilities. Create, update, reference and share <i>threat predictions</i> and <i>threat consequence assessments</i> (e.g., loss estimation, impact assessments, etc) resulting from the modeling, simulation and analysis of the <i>threat</i> and the potential consequences of <i>threats</i> to the event. The results of these analyses may create or update <i>vulnerabilities</i> and the extent of <i>countermeasures</i>. - Conduct Response Planning to contingency plan for potential <i>occurrences, incidents</i> and <i>EVENTs</i>. Create, update, reference and share <i>response plans</i> that reflect (reference) <i>event venue</i> data, potential <i>threats, vulnerabilities, risks</i>, and their associated <i>assessments</i>. Preplan/plan, schedule and allocate personnel (<i>persons</i>), <i>goods</i> and <i>assets</i> to potential <i>occurrence/incident/EVENT</i> scenarios, given public safety considerations and potential affected <i>locations, facilities, assets</i>, etc to develop response operations plans that convey schedule, tasking and resource allocation for response operations. - Conduct Training Planning & Support for potential <i>occurrence, incident</i> and <i>EVENT scenarios</i>. 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				Create, update, reference and share <i>training plans</i> and <i>training aids</i> , which includes maps and reports that convey objectives/schedules, activity locations and situation context for the exercise. Reference <i>occurrence, incident</i> and <i>EVENT scenarios, threat consequences, assets</i> , personnel (persons), <i>population densities, evacuation routes, mutual aid support facilities</i> , etc.	
Prevent Incidents	HLS097	Test Countermeasures	Use a variety of methods (e.g., intrusion detection, penetration testing, environmental testing, etc.) to determine effectiveness of countermeasure on a periodic or recurring basis.	<ul style="list-style-type: none"> - Develop <i>mission plans</i> for exercises to test the effectiveness of <i>countermeasures</i>. Create, update, reference and share <i>mission plans</i>. Reference and analyze <i>countermeasures</i> and <i>security plans</i> to determine weaknesses that may be exploited. - Conduct Post Mission Analysis to provide feedback on countermeasure effectiveness. Create, update, reference and share <i>post-mission assessments</i>. 	<ul style="list-style-type: none"> - Mission Planning - Post Mission Analysis
Prevent Incidents	HLS098	Patrol Areas of Interest	Patrol and Survey (e.g., watch and listen) areas of interest (e.g. land and sea borders, special events, etc) for illegal or suspicious activities. Tactically deploy resources to monitor and respond to the areas of interest.	<ul style="list-style-type: none"> - Conduct Mission (Patrol) Planning for border patrols. Create, update, reference and share <i>mission plans</i> for patrol and surveillance assets. - Determine Electronic Navigation for surveillance assets. Create, update, reference and share <i>navigation guidance</i> for surveillance assets. - Conduct Mission Rehearsals for patrols and surveillance. Reference <i>navigation guidance</i>. Create, update, reference and share <i>mission rehearsal models</i>. - Conduct Sensor Management. Deploy remote sensing and security sensors and create, update, reference and share <i>observations</i> (and associated <i>sensor</i> data) from security sensors. - Conduct Logistics Planning to coordinate and plan the use of <i>assets</i> and personnel (<i>persons</i>) for patrols. Create, update, reference and share 	<ul style="list-style-type: none"> - Mission (Patrol) Planning - Electronic Navigation - Mission Rehearsal - Sensor Management - Logistics Planning - Asset Inventory Management - Monitor Location - Situation Awareness - Suspicious Activity Reporting - Incident Reporting - Incident Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p><i>logistics plans.</i></p> <ul style="list-style-type: none"> - Manage patrol and surveillance assets. Create, reference, update and share <i>asset inventory</i>. - Monitor <i>locations</i> in the conduct of patrols and surveillance. Create, reference and share <i>observations</i> from reconnaissance and surveillance assets (sensors and persons). Display and analyze <i>observations</i>. Detect threats through screening and analysis of <i>observations</i>. Create and share derived <i>occurrences, events, threats, alerts, notices or watches</i>. - Conduct Situation Awareness to monitor patrol and surveillance operations. Create, update, reference and share <i>situational awareness</i> data (i.e., geospatial analysis results) for near-real time operations. This data contributes to a collaborative <i>COP</i> and <i>MSOP</i>. Reference <i>observations</i> (and associated <i>sensor</i> data) from surveillance assets. Reference germane <i>threats, vulnerabilities, risks, threat warnings, alerts, notices or watches</i>, and <i>threat, threat consequence, vulnerability</i> and <i>risk assessments</i>. Create, update, reference and share <i>situation reports</i>. - Conduct Suspicious Activity Reporting. Create <i>event/occurrence</i> record with <i>location/time/identity/activity/status</i> of suspected threat/criminal activities detected during patrols and surveillance. Create and share <i>suspicious activity report</i>. - Perform Incident Management for incidents that arise through patrol and surveillance operations. Create, update, reference and share <i>incidents</i>. - Perform Incident Reporting to create and share <i>Incident Reports</i> concerning threat/criminal 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				activities detected during patrols and surveillance.	
Disseminate Information	HLS021	Communicate Warnings and Alerts	<p>Disseminate necessary information when specific criteria exceed certain thresholds or specific operating conditions are met. Issue warnings and alerts about individuals suspected of, or wanted for, illegal activity, impending natural disasters, etc.</p> <p>Disseminate information according to established protocols. This includes notifications to law-enforcement entities when individuals are identified who need to be located. Includes a variety of alerts, notices, or lookouts that are to be made available when law-enforcement personnel enter a query about the person so that appropriate action is taken.</p>	<ul style="list-style-type: none"> - Conduct Warning/Alert Management. Create, update, reference and share <i>threat warnings</i> and <i>alerts</i> resulting from Situation Awareness. - Situation Awareness is a key command and control application node for consuming <i>warnings</i> and <i>alerts</i>, and producing <i>alerts</i>, <i>notices</i> or <i>watches</i> (lookouts). Create, update, reference and share <i>situation awareness data</i> for near-real time context of <i>threats</i>, <i>parties</i>, <i>cases</i>, etc, and associated <i>occurrences</i>, <i>alerts</i>, <i>notices</i> or <i>watches</i>. Also, create, update, reference and share <i>situation reports</i>. 	<ul style="list-style-type: none"> - Warning/Alert Management - Situation Awareness

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Disseminate Information	HLS102	Communicate with the Public	Communicate information through a variety of media (radio, television, print ads) to provide guidance on a range of topics including: how to respond to incidents, apply for government benefits, and access government services. Awareness campaigns. Outreach to inform community of risk identification, assessment, and mitigation findings. Provide information to promote the understanding of the various effects of both man-made and natural disasters. This would include "how-to" publications, hazard fact sheets, etc.	<ul style="list-style-type: none"> - Conduct Situation Awareness related to incidents/events for the purpose of compiling geospatial information for public safety and awareness. Create, update, reference and share <i>situation awareness</i> information for the public. Reference risks, risk and damage assessments, warnings, alerts, or notices, weather, and public-oriented plans for preparation, mitigation (location of critical relief site and services), evacuation and response. - Conduct Map Publication to produce <i>maps</i> for public consumption. Create, update, reference and share geospatial <i>reports</i> and <i>maps</i> for public outreach. - Conduct Warning/Alert Management. Create, update, reference and share <i>threat warnings</i> and <i>alerts</i> with public. - Conduct Public Information Outreach to inform the public. Portray <i>maps</i> (e.g., National Flood Insurance Program (NFIP) floodplain maps) and location-based <i>reports</i>, <i>alerts</i>, <i>warnings</i> and <i>emergency declarations</i> concerning <i>threats</i>, <i>threat consequences</i>, response and recovery <i>status</i>, mitigation and <i>situation reports</i>, <i>locations</i> of post disaster services (water, medical, shelter and disaster field offices), and benefits <i>locations</i> through public information (media) channels. Allow the public to interact through these channels (e.g., explore what's happening in their <i>area of interest</i>). Support electronic registration (geocoding) for the application of benefits. Many types of geospatial products produced by geospatial applications across the enterprise may be distributed through public information channels. 	<ul style="list-style-type: none"> - Situation Awareness - Map/Report Publication - Warning/Alert Management - Public Information Outreach

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Prepare for Incidents	HLS006	Stockpile & Deploy Supplies	Identify, acquire, develop, maintain, and distribute resources (e.g., pharmaceutical and medical supplies) that would be required to respond to or prevent incidents and shortages. Monitor the potency of vaccines and replenish supplies as vaccines age.	<ul style="list-style-type: none"> - Conduct Logistics Planning to coordinate and plan the use of assets and personnel for incidents and shortages. Conduct routing and distribution analyses to achieve supply and logistics staging. Determine stockpile locations. Create, update, reference and share <i>logistics plans</i> and <i>situation reports/maps</i>. - Manage the assets required for incidents and shortages, including response equipment and materials, reserve supply of vaccines, pharmaceuticals, and other response supplies in anticipation of future shortage or emergency. Create, update, reference and share <i>asset inventory</i> data. - Conduct Operations Planning. Update <i>operations plans (deployment plans and contingency plans)</i> to reflect asset and personnel resources and locations. - Assemble, distribute and monitor deployable technologies and data to support response and recovery activities. 	<ul style="list-style-type: none"> - Logistics Planning - Asset Inventory Management - Operations Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Prepare for Incidents	HLS106	Conduct Training and Exercises	Conduct training and preparedness exercises with emergency workers, first responders, community leaders, public citizens, and other federal agencies. Includes fire prevention and control, conducting mock exercises requiring different response to mobilize without warning.	<ul style="list-style-type: none"> - Conduct Training Planning & Support for potential threat <i>occurrence, incident</i> and <i>EVENT scenarios</i>. Train for emergency preparation, mitigation, response and recovery. Create, update, reference and share <i>training plans</i> and <i>training aids</i>, which includes <i>maps</i> and <i>reports</i> that convey objectives/schedules, activity locations and situation context for training exercises. Reference <i>occurrence, incident</i> and <i>EVENT scenarios, threat consequences, assets</i>, personnel (persons), <i>population densities, evacuation routes, mutual aid support facilities</i>, etc. Train Geographic Information System (GIS) Reservist to support Federal Response Plan Emergency Support Function 5 “Information and Planning”. - Provide Training Exercise Simulation. The simulations employ geospatial data and technology to simulate different attack scenarios, using <i>training models</i> and supporting databases. The <i>training models</i> (data and encoded procedures) demonstrate how geospatial data and technology is going to perform in local conditions under different attack scenarios. - Conduct Operations Planning. Update <i>operations plans (deployment plans and contingency plans)</i> to reflect results from training lessons learned. 	<ul style="list-style-type: none"> - Training Planning & Support - Training Exercise Simulation - Operations Planning
Prepare for Incidents	HLS107	Coordinate Pre-Response Measures	Support state and local officials in taking actions with an impending disaster, prior to its striking, to minimize its impact. This would include such activities as plotting a hurricane track	<ul style="list-style-type: none"> - Conduct Weather Modeling & Analysis to model/simulate and analyze severe weather conditions for storm tracks. The means to determine <i>nowcasts</i> and <i>forecasts</i> and share this information. The means to generate and disseminate <i>Weather Alerts & Warnings</i>. - Conduct Threat Analysis and Threat Consequence Analysis to support emergency preparation and 	<ul style="list-style-type: none"> - Weather Modeling & Analysis - Threat Analysis - Threat Consequence Assessments - Preparation Planning - Operations Planning - Logistics Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			and modeling wind to support evacuation prior to a hurricane	<p>mitigation for state and local officials. Create, update, reference and share <i>threat (disaster) predictions</i> and <i>threat consequence assessments</i> resulting from modeling, simulation and analysis of a threat and the potential consequences of a threat (e.g., results from CATS, HAZUS, etc.). <i>Threat (hazard) assessments</i> include flood maps, Special Flood Hazard Areas, National Weather Service River Flood Outlook, and areas of high susceptibility from tidal storm surge, hurricane, tornado, landslide, earthquake, fire, tsunami, volcanic events, high winds and other types of natural disasters.</p> <ul style="list-style-type: none"> - Conduct Preparation Planning to produce <i>preparation plans</i> in support of emergency preparation and mitigation. Reference <i>threat predictions</i> and <i>threat consequence assessments</i> to ensure that plans reflect the nature of threats. - Conduct Operations Planning. Update <i>operations plans (deployment plans and contingency plans)</i> to reflect results from <i>threat consequence assessments</i>. - Conduct Logistics Planning to coordinate and plan the use of assets and personnel for an impending disaster. Conduct stockpile, routing and distribution analyses to achieve supply and logistics approaches. Create, update, reference and share <i>logistics plans</i>. - Conduct Mitigation Planning & Analysis to mitigate and lessen the impact of natural and human-induced hazards/disasters, e.g., hurricane and tropical storm preparation. Create, update, reference and share <i>mitigation plans</i> and supporting Geospatial Products (e.g., <i>multi-hazard</i> 	<ul style="list-style-type: none"> - Mitigation Planning & Analysis - Evacuation Planning & Management - Response Planning - Training Planning & Support

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p><i>maps</i>) to reduce or eliminate long-term risk to people and property from hazards and their effects. Reference <i>population densities, evacuation routes, mutual aid support facilities</i> and <i>threat (hazard) assessments</i>.</p> <ul style="list-style-type: none"> - Conduct Evacuation Planning & Management in preparation for a disaster. The means to produce and implement <i>evacuation plans</i> that convey the details pertaining to evacuation of a current or planned disaster/threat area, consisting of maps and reports that convey plan objectives, schedules and details, including estimated population densities, threat locations, threat consequences, evacuation routes, mutual aid support facilities, etc. - Conduct Response Planning to contingency plan for potential <i>occurrences, incidents</i> and <i>EVENTS</i>. Create, update, reference and share <i>response plans</i> (e.g., hurricane, tropical storm preparation and resource deployment planning and activation for Federal Response Plan) that reflect (reference) potential <i>threats, vulnerabilities, risks</i> and associated <i>assessments</i>. Preplan/plan, schedule and allocate personnel (<i>persons</i>), <i>goods</i> and <i>assets</i> to potential <i>occurrence/incident/EVENT</i> scenarios (e.g., hurricane track), given public safety considerations and potential affected <i>locations, facilities, assets</i>, etc to develop response operations plans that convey schedule, tasking and resource allocation. - Conduct Training Planning & Support for potential threat <i>occurrence, incident</i> and <i>EVENT scenarios</i>. Create, update, reference and share <i>training plans</i> and <i>training aids</i>, which includes maps and reports 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				that convey objectives/schedules, activity locations and situation context for training exercises. Reference <i>occurrence, incident</i> and <i>EVENT scenarios, threat consequences, assets, personnel (persons), population densities, evacuation routes, mutual aid support facilities, etc.</i>	
Prepare for Incidents	HLS108	Assess Preparedness Capabilities	Improve community casualty preparedness through coordinating with appropriate external entities. (e.g., GIS, Toxic Registry, Community Evacuation and shelters, etc.). Monitor and track results and findings of the Emergency Management (EM) Accreditation Program based on onsite state assessments.	<ul style="list-style-type: none"> - Assess and enhance, as necessary, the means for communities to conduct Threat Consequence Analysis, Preparation Planning, Evacuation Planning & Management and Mitigation Planning & Analysis in support of emergency preparation and mitigation in order to minimize casualties. 	<ul style="list-style-type: none"> - Threat Consequence Analysis - Preparation Planning - Mitigation Planning & Analysis - Evacuation Planning & Management
Respond to Incident	HLS035	Perform Search and Rescue	Find (Locate) and retrieve people whose health or safety is at risk. Includes search and rescue performed at sea, along the border (Canada and Mexico), and urban/rural (within the U.S.).	<ul style="list-style-type: none"> - Conduct Search and Rescue Planning to preplan/plan, schedule and allocate <i>personnel</i> and <i>assets</i> for search and rescue missions. Determine the <i>geospatial extent</i> of the search area. The means to create, update, reference and share <i>search & rescue plans</i> that convey schedule, tasking and resource allocation for search & rescue operations. Create, update, reference and share related <i>incident/event data, alerts</i> and <i>warnings</i>. Convey the geospatial-temporal context of <i>search & rescue plans</i>, which includes <i>maps</i> and <i>reports</i> that convey search & recovery objectives, schedules, resource deployments, contingencies and the geospatial-temporal situation context for planned search & rescue operations. [Support Federal 	<ul style="list-style-type: none"> - Search and Rescue Planning - Search and Rescue Response - Asset Inventory Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>Response Plan Emergency Support Function (ESF) 9 (Urban Search & Rescue); mapping support for staging, team deployment mapping and resource allocation.]</p> <ul style="list-style-type: none"> - Conduct Search and Rescue Response to support command and control for an <i>incident</i> or <i>event</i> that requires search and rescue. Involves creating and managing <i>situation awareness</i>, monitoring <i>threats</i> and <i>threat assessments</i>, coordinating and monitoring response <i>activities/assets/personnel</i>, communicating with response personnel, etc., determining deployment, routing, search strategies and ingress/egress in support of search and rescue operations, and reporting status to persons in the command and control chain (<i>Situation Reports</i>). Create pertinent <i>communications</i>. Update <i>incident/event</i> records to reflect response results. Reference other supporting geospatial data. - Manage and coordinate response <i>assets</i> (equipment and materials) to ensure their availability for search & rescue operations. Plan for contingencies. Create, update, reference and share <i>asset inventory</i> data. 	
Respond to Incident	HLS036	Contain Incident	Isolate and contain incident to keep from spreading and causing additional harm or damage to persons/facilities/environment. (e.g., response to oil spills to minimize environmental degradation.)	<ul style="list-style-type: none"> - Conduct Threat Consequence Analysis to support emergency response operations required to contain an incident and minimize casualties. Determine <i>geospatial extent</i> and monitor the <i>incident</i> area. Create, update, reference and share <i>threat (disaster) predictions</i> and <i>threat consequence assessments</i> resulting from modeling, simulation and analysis of a threat and the potential consequences of a threat. - Conduct Evacuation Planning & Management to minimize casualties. Create, update, reference and 	<ul style="list-style-type: none"> - Threat Consequence Assessment - Evacuation Planning & Management - Incident Management - Search and Rescue Response - Asset Inventory Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>share <i>evacuation plans</i> that convey the details pertaining to evacuation of the <i>incident</i> area.</p> <ul style="list-style-type: none"> - Conduct Incident Management to support command and control for an incident or event, including situation awareness, monitoring threats and threat assessments, coordinating and monitoring response activities, assets, personnel, etc., and reporting status to persons in the command and control chain (see incident reporting). Create and manage <i>incident/event</i> data. Create and disseminate <i>alerts</i> and <i>warnings</i>. Reference <i>threats</i> and <i>threat consequences</i>. Create, update, reference and/or share <i>situational awareness</i> and <i>situation reports</i> pertaining to the incident (for dissemination to chain of command). Coordinate and monitor response <i>activities/assets/personnel</i>. Reference relevant <i>weather</i> and other supporting geospatial data. Determine <i>containment areas</i>, <i>deployment plans</i> and <i>ingress/egress routes</i> for incidents. Update <i>incident/event</i> records to reflect response results. [Enhance the ability of the United States to manage Domestic Incidents by establishing a single, comprehensive national incident management system (NIMS) with supporting geospatial capabilities.] - Conduct Search and Rescue Response for an incident that requires search and rescue. Involves creating and managing <i>situation awareness</i>, monitoring <i>threats</i> and <i>threat assessments</i>, coordinating and monitoring response <i>activities/assets/personnel</i>, communicating with response personnel, etc., determining <i>deployment</i>, <i>ingress/egress routing</i>, <i>search plans</i> in support of 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>search and rescue operations, and reporting status to persons in the command and control chain (<i>Situation Reports</i>). Create pertinent communications. Update <i>incident/event</i> records to reflect response results. Reference <i>weather</i> and other supporting geospatial data.</p> <ul style="list-style-type: none"> - Manage and coordinate response <i>assets</i> (equipment and materials) to ensure their availability for response and search & rescue operations. Plan for contingencies. Create, update, reference and share <i>asset inventory</i> data. 	
Respond to Incident	HLS037	Apprehend People	Take physical control of persons for the purposes of questioning or ascertaining whether further action is required.	<ul style="list-style-type: none"> - Monitor Persons for apprehension purposes. Create, update, reference and share locations pertaining to persons who are apprehended (access <i>person</i> records for <i>physical address, place of birth, citizenship, location/time/identity/activity/status, travel history</i>, associations with illegal interests, etc). - Conduct Incident Management to support command and control for the apprehension of persons, including <i>situation awareness</i> and <i>situation reporting</i>, monitoring related <i>threats</i> and <i>threat assessments</i>, coordinating and monitoring apprehension <i>activities, assets, personnel</i>, etc., and reporting status to persons in the command and control chain (see incident reporting). - Perform Incident Reporting to create and share <i>Incident Reports</i> concerning the apprehension of persons. 	<ul style="list-style-type: none"> - Monitor Persons - Incident Management - Incident Reporting
Respond to Incident	HLS038	Seize Property	Take official government possession of merchandise, currency, or other articles such as a car, vessel, or aircraft.	<ul style="list-style-type: none"> - Monitor seized property (<i>goods, cargo</i> and <i>assets</i>). Create, reference, update and/or share <i>location/time/identity/activity/status</i> pertaining to confiscations/seizures and <i>locations</i> of detention centers/impounds. Update, reference and share 	<ul style="list-style-type: none"> - Monitor Goods & Cargo - Monitor Assets - Incident Management - Incident Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			Hold until final disposition is reached. This includes detaining cargo and conveyances.	<p><i>case</i> records accordingly. Create, update, reference and share <i>situational awareness</i> for monitoring operations. Create, update, reference and share <i>situation reports</i>.</p> <ul style="list-style-type: none"> – Conduct Incident Management to support command and control for seizure of property, including <i>situation awareness</i> and <i>situation reporting</i>, monitoring related <i>threats</i> and <i>threat assessments</i>, coordinating and monitoring seizure <i>activities, assets, personnel</i>, etc., and reporting status to persons in the command and control chain (see incident reporting). – Perform Incident Reporting to create and share <i>Incident Reports</i> concerning the seizure of property. 	
Respond to Incident	HLS039	Activate Resources in Response to Incident	Deploy people and equipment that play an active role in responding to any kind of incident. (e.g., emergency response teams, medical surge response, etc.) Includes the resources associated with any organization (Department of Homeland Security (DHS), federal, state, local, tribal, maybe even international).	<ul style="list-style-type: none"> – Conduct Incident Management in response to an incident, including <i>situational awareness</i> (and generating <i>situation reports</i>), guiding personnel and resources to the incident <i>location</i>, monitoring (referencing) related <i>threats, threat assessments</i> and <i>threat consequence assessments</i>, coordinating and monitoring response <i>assets</i> and <i>parties</i> (e.g., police, fire, emergency management technician (EMT) and mutual aid assets, incident commander, etc), and reporting status to persons in the command and control chain (see incident reporting). [Support Federal Response Plan ESF 5 (Information & Planning); provide mapping support for staging, team deployment and resource allocation (updated hourly).] – Support navigation to incidents. Use fixed physical <i>navigational aids</i> for dead reckoning. Use analog direction finding, measuring, and positioning equipment in conjunction with <i>maps</i> and <i>charts</i> for 	<ul style="list-style-type: none"> – Incident Management – Electronic Navigation – Incident Reporting – Asset Inventory Management

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>the purpose of navigating to an incident <i>location</i>. Use linear reference systems such as uniform address-interval/street address guide (SAG) to respond to an incident for which street <i>address</i> is the only locator. Identify obstructions to navigation or to locate suitable landing zones near an incident. Create, update, reference and share <i>navigation guidance</i> for response assets.</p> <ul style="list-style-type: none"> - Perform Incident Reporting to create and share <i>Incident Reports</i>. - Manage and coordinate response <i>assets</i> (equipment and materials) to ensure their availability for response operations. Plan for contingencies. Create, update, reference and share <i>asset inventory</i> data. 	
Respond to Incident	HLS046	Manage Removals of People and Goods	Based on legal, health, or safety concerns, coordinate the removal or departure with the accepting country. Preparation of any documentation, including manifests, as required by the accepting country is included in this activity. This includes activities such as issuing and canceling bonds, escorting aliens overseas, etc. This includes activities that are performed to support formal removals and voluntary returns.	<ul style="list-style-type: none"> - Monitor <i>people, goods</i> and <i>cargo</i> for removal. Create, reference, update and/or share <i>location/time/identity/activity/status</i> pertaining to <i>people, goods</i> and <i>cargo</i> and <i>locations</i> of detention centers/impounds. Update, reference and share <i>case</i> records accordingly. Create, update, reference and share <i>situational awareness</i> for monitoring operations. Create, update, reference and share <i>situation reports</i>. - Conduct Site Modeling & Analysis to determine <i>locations</i> of detention centers and shipping depots based upon legal, health, safety and logistics factors. Allocate people and goods to these locations. Reference relevant geospatial data. Create, reference, update and share <i>site/facility plans</i>. 	<ul style="list-style-type: none"> - Monitor Parties - Monitor Goods - Site Modeling & Analysis

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Respond to Incident	HLS109	Arrest People	File official charges and take physical custody of an individual, initiating legal action.	<ul style="list-style-type: none"> – Monitor <i>people</i> who are taken into custody. Create, reference, update and/or share <i>location/time/identity/activity/status, place of birth, citizenship</i>, associations with illegal interests, etc, and the <i>locations</i> of detention centers/impounds. Also update, reference and share <i>case</i> records. 	<ul style="list-style-type: none"> – Monitor Parties
Recover from Incident	HLS040	Investigate Incident	Conduct after action reports and analysis based on root cause analysis, post-incident evacuation studies, and lessons learned from mitigation studies, and close-out of case.	<ul style="list-style-type: none"> – Conduct Post Mission Analysis to assess effectiveness of (need to reference) <i>mission, event, preparation, logistics, response, deployment, evacuation, search & rescue, security, countermeasures</i>, (training) <i>exercise</i> and <i>recovery plans</i>, and also the effectiveness of mission operations (assess <i>incident</i> and <i>situation reports</i>). Reference and correlate relevant historical <i>incident</i> and <i>event</i> data. Create, update, reference and share <i>post mission assessments</i> and <i>after action reports</i> (maps and location-based reports). – Conduct Mitigation Planning & Analysis to determine and assess impact of root cause of an incident/event and mitigate the impact of threats, hazards and disasters. Reference <i>post mission assessments</i> and <i>after action reports</i>. Create, update, reference and share <i>mitigation plans</i> and supporting Geospatial Products to enhance future planning, safety, preparations, response and recovery operations, countermeasures and training for cases, threats, hazards and disasters. 	<ul style="list-style-type: none"> – Post Mission Analysis – Mitigation Planning & Analysis
Recover from Incident	HLS042	Provide Recovery Assistance	Provide access to long-term human services program (e.g. disaster housing, crises counseling, etc.).	<ul style="list-style-type: none"> – Conduct Recovery Planning to preplan/plan, schedule and allocate personnel and assets for incident recovery. Create, reference, update and share <i>recovery operations plans</i> that convey schedule, tasking and resource allocation for recovery operations; share amongst government and non-government relief organizations. Create, 	<ul style="list-style-type: none"> – Recovery Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				update, reference and share <i>locations</i> and <i>route</i> directions to crisis counseling, housing and other recovery centers; share with public.	
Recover from Incident	HLS043	Restore Infrastructure and Key Assets	Restore order to the community through the restoration of utilities, clean-up, decontaminating area, etc.	<ul style="list-style-type: none"> - Conduct Damage Assessment to analyze and determine the extent and nature of damage caused by a threat or natural hazard through the use of imagery and other sensor and human observations. Create, update, reference and share <i>damage assessments</i> to support restoration activities. Generate <i>Location Reports</i> and <i>maps</i> conveying this information. - Conduct Monitor Recovery operations to monitor cleanup, decontamination and restoration efforts at incident locations for subsequent analysis and legal implications. Reference <i>recovery plans</i>. Monitor (measure and observe) contamination areas and create, reference, update and share change in <i>activity/status</i>. Create, reference, update and share location-based <i>after action reports</i> that document recovery progress, as well as <i>environmental impact assessments</i>. [Facilitate the overall activities of the federal government in providing assistance to the affected area, Federal Response Plan, ESF 5 “Information and Planning”. Helps to establish the type and magnitude of damage caused by an incident.] - Conduct Critical Infrastructure Inventory Management to update, reference and share the restoration <i>status</i> of <i>critical asset</i> and <i>key asset inventories</i>. 	<ul style="list-style-type: none"> - Damage Assessment - Monitor Recovery - Critical Infrastructure Inventory Management
Recover from Incident	HLS110	Declare Emergency	Gather information that will assist in the decision to declare a state or federal emergency for the	<ul style="list-style-type: none"> - Conduct Emergency Reporting to declare state and federal emergencies. Reference <i>threats</i>, <i>threat consequence assessments</i>, <i>warnings</i>, <i>alerts</i> and other location-based content germane to the 	<ul style="list-style-type: none"> - Emergency Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			activation of additional resources.	emergency. Create, reference, update and share nature and geospatial extent of the <i>emergency declaration</i> .	
Develop Plans and Performance Measures	HLS048	Develop Operational Plans	Develop and maintain operational plans (e.g. the National Response Plan and supporting operational plans) to prepare for and manage domestic incidents integrating all incident management activities across the continuum from pre-incident awareness, prevention, and preparedness to incident response and post-incident recovery. This also includes ensuring coordination at all levels of government and cooperation with private and public sector entities.	<ul style="list-style-type: none"> - Conduct Operational Planning to plan, schedule and allocate personnel and assets for emergency operations, in a geospatial-temporal context. Create, update, reference and share <i>operational plans</i> that specify the allocation of funds, activities and resources by organization and geographic context (congressional district, state, territory, county, reservations, and cities). Plans may include <i>maps</i> and <i>reports</i> that convey objectives, schedules, deployments, contingencies and the situation context for projected operations, including: threat disposition, blue force disposition, contingency deployments, environmental constraints, loss claims, etc. Plans may also include standard operating procedures for geospatial data acquisition, management and sharing, as well as the geospatial management and investment plans for all levels of government, developed in cooperation with private and public sector entities. 	<ul style="list-style-type: none"> - Operational Planning
Develop Plans and Performance Measures	HLS049	Develop Agency Plans	Develop and maintain the Department strategic and annual performance plans. Includes developing the Department's general and performance goals and the annual accountability reports.	<ul style="list-style-type: none"> - Conduct Performance Planning & Analysis based upon geospatial-temporal objectives and criteria. Track and report on Events, incidents, key assets, vulnerabilities, grants, expenses and funding by geospatial areas (congressional district, state, territory, county, reservations, and cities) for DHS activities. Create, update, reference and share annual <i>performance plans</i> (includes accountability reports) by geospatial areas. Create, update, 	<ul style="list-style-type: none"> - Performance Planning & Analysis - Program Planning

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
				<p>reference and share <i>performance criteria</i>. Conduct Integrated 300B planning and coordinated data acquisition planning.</p> <ul style="list-style-type: none"> – Program plan grants and funding by congressional district, state, territory, county, reservations, and cities for DHS activities. Create, update, reference and share <i>program plans</i>, with management and investment plans by geospatial areas. 	
Develop Plans and Performance Measures	HLS050	Monitor Performance	Monitor and assess, through objective measurement and systematic analysis, the manner and extent to which Department programs and operations achieve intended objectives. Includes conducting evaluations of programs and operations at any level within the organization by parties internal or external to the Department.	<ul style="list-style-type: none"> – Conduct Performance Planning & Analysis based upon geospatial-temporal criteria. Monitor performance by geospatial areas (congressional district, state, territory, county, reservations, cities, and other areas of interest) to support evaluations of programs and operations at any level within the organization by parties internal or external to the Department. Create, update, reference and share geospatial analysis data to support performance monitoring (e.g., how many incidents occurred within two miles of the border with Mexico within the state of Texas). Update, reference and share annual <i>performance plans</i>. Reference <i>performance criteria</i>. [Note: Relates to plans in HLS049] 	<ul style="list-style-type: none"> – Performance Planning & Analysis
Manage Knowledge and Intelligence Information	HLS005	Collaborate/coordinate w/Federal, State, Local Governments, and Private Sector	Provide a collaborative structure for effectively communicating to all levels of government (both horizontally and vertically). Increase collaboration in law enforcement and prevention, emergency response and recovery,	<p>Geospatial provides a foundational basis for the collaborative structure of the HLS Enterprise Architecture (EA), in terms of providing a shared common data foundation (i.e., we can express most HLS data in a geospatial-temporal context), and in terms of providing standards for sharing and collaborating with this data.</p> <p>Geospatial collaboration refers to sharing and</p>	<ul style="list-style-type: none"> – N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			<p>policy development and implementation so that public and private resources are better aligned to secure the homeland and develop complementary systems that avoid duplication and ensure essential requirements are met. Provide information and technical assistance to state and local governments to enhance emergency management capabilities. Coordinate standards, guidance, resources, and technical support. Compile and communicate lessons learned from incidents, homeland security initiatives, and feedback from state and local authorities.</p>	<p>interacting with resources that are based on common geospatial data, service and application standards.</p> <ul style="list-style-type: none"> - Create, update or reference and implement common geospatial data, applications, services and standards as key parts of the collaborative infrastructure across all levels of government and private institutions. These are application-dependent (i.e., the data and applicable standards are dependent upon the specific application context and nature of collaboration. This can vary from activity to activity). Thus, each HLS activity will have to be evaluated to consider collaborative needs. - Support the COP, reaching across the HLS enterprise, to first responders in state, regional and federal emergency operations centers (EOCs) and continuity of operations centers (COOP). This provides a continuum of meaningful geospatial data sharing and improves communication and response time at all levels of government. - Develop memoranda of understanding (MOU) with federal, state, county and municipal mapping agencies for geospatial data sharing. - Develop coordinated data acquisition programs (i.e. FEMA Map Modernization, USGS National Map, NOAA 'LiDAR -Anywhere', Census MAF/TIGER, NIMA, HSIP, etc.) - Ensure eGOV compliance for the Geospatial One-Stop. - Establish data partnerships with National States Geographic Information Council (NSGIC) and Public Interest Groups. 	

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
Manage Knowledge and Intelligence Information	HLS114	Determine Data Sensitivity	Determine access to data and information based on sensitivity, confidentiality, and privacy. Establish, evolve, and maintain effective data manipulation capabilities suitable for used at multiple levels within DHS, and which permit access to the data by external entities, subject to security and privacy requirements. Categorize and tag information based on sensitivity, confidentiality, and privacy criteria.	<ul style="list-style-type: none"> - Provide the means to categorize and tag information based on sensitivity, confidentiality, and privacy criteria that are geospatial in nature (e.g., the location of an asset may impact sensitivity, confidentiality, and privacy) - Provide means to restrict access to some geospatial data (e.g., remote sensing source may be classified; geospatial analysis data may be classified; key and critical assets and key asset data from state, local and private sources may be sensitive) 	- All
Manage Knowledge and Intelligence Information	HLS115	Obtain Specific Case, Person, or Event Information	Obtain all necessary information pertaining to a person, case, or event from internal or external sources. Typically involves the use of biographical and biometric identifiers to retrieve information about immigration history or status, criminal history, financial or credit history, and other personal information. To the extent possible, all	- Conduct Location Search & Reporting to obtain information about a person, case or event from available sources. Reference case, person or event based upon geospatial-temporal query criteria. Generate a <i>Location Report</i> with this information.	- Location Search & Reporting

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			information should be available from a single query and should be based on positive biometric identification of individuals.		
Manage Knowledge and Intelligence Information	HLS116	Share Data Routinely with External Entities	Share data on a regular basis with both internal and external entities. This typically results from interagency agreements and does not include responses to ad-hoc or case-specific inquiries.	<ul style="list-style-type: none"> - Share geospatial data on a regular basis. Support Geospatial One-Stop eGOV initiative. 	<ul style="list-style-type: none"> - All
Perform Research and Development	HLS059	Identify HLS Technology Candidate Solutions	Conduct homeland-specific technology needs assessment and gather understanding of capabilities that exist today or that can be expected to appear in the near term. Conduct Technology Forecasts to meet HLS needs. Monitor new and evolving technologies for detection and interdiction of threats and/or improve technical capabilities of	<ul style="list-style-type: none"> - Conduct homeland-specific geospatial technology needs assessment. - Conduct Geospatial Technology Forecasts to meet HLS needs. - Monitor new and evolving geospatial technologies for detection and interdiction of threats and/or improve technical capabilities of first responders. - Monitor best practice geospatial systems implementations. - Perform Research and Development to establish new technologies for the HLS mission. - Transfer new technologies through the HLS mission. 	<ul style="list-style-type: none"> - N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			first responders.		
Perform Research and Development	HLS061	Evaluate HLS-Related Technology Research Results	Research, test and evaluate new technologies associated with new or improved capabilities to counter chemical, biological, radiological, nuclear, explosive, and cyber threats. Create testing and evaluation programs, utilize existing, or develop new, test beds where technology methods, tools, and approaches can be exercised in a controlled environment and evaluated against common, accepted standards. Includes developing the test beds and measurement-performance standards.	<ul style="list-style-type: none"> - Research, test and evaluate new <u>geospatial</u> technologies. - Perform benchmarking to compare technologies. 	<ul style="list-style-type: none"> - Various applications used in tests/evaluations
Perform Research and Development	HLS062	Conduct Demonstrations and Pilot Deployments	Conduct pilot deployments and demonstrations for HLS-specific technologies. Use simulations and modeling to test how is technology going to perform in local	<ul style="list-style-type: none"> - The Geospatial Management Office (GMO) will conduct pilot deployments and demonstrations for HLS geospatial technologies. - Provide Geospatial Integration & Test Tools that use simulations and modeling to test how geospatial technology is going to perform in local conditions and in different attack scenarios. Create 	<ul style="list-style-type: none"> - Various applications used in pilots/demos - Geospatial Integration & Test Tools

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			conditions and in different attack scenarios (I.e. large-scale attacks).	(or adopt), update, reference and share (coordinate and implement) <i>test models</i> and supporting databases, <i>geospatial standards (data, service, and protocol)</i> and <i>performance criteria</i> . Provide the Reference Architecture for the HLS Geospatial EA. (Managed by the GMO.)	
Perform Research and Development	HLS063	Deploy HLS-specific Advanced Technologies	Field HLS-technologies into an operational environment.	– Provide Geospatial Integration & Test Tools that support testing and integration of HLS geospatial technologies. Create (or adopt), update, reference and share (coordinate and implement) homeland security <i>geospatial standards (data, service, and protocol)</i> and <i>performance criteria</i> . Provide the Reference Architecture for the HLS Geospatial EA. (Managed by the GMO.)	– Geospatial Integration & Test Tools
Develop Policy	HLS065	Develop Policy	Develop directives designed to direct decisions and actions related to the DHS mission.	– Develop policy concerning the employment of geospatial data and technology for the HLS mission (GMO).	– N/A
Develop Policy	HLS111	Set Homeland Security Standards	Develop, coordinate, and implement homeland security standards and performance criteria to provide guidance to federal/state/local/tribunal . (e.g. national emergency management for first responders, homeland security technology standards for chemical, biological, radiological, nuclear, cyberspace and high-	– Provide Geospatial Integration & Test Tools that support testing and integration of geospatial component services and applications. Create (or adopt), update, reference and share (coordinate and implement) homeland security <i>geospatial standards (data, service, and protocol)</i> and <i>performance criteria</i> . Establish <i>geospatial data and intelligence</i> reporting and dissemination <i>protocols</i> between field activities and operation centers at all levels of government. Provide <i>standards</i> , tools, guidance and test and integration support to federal/state/local/tribunal entities. Provide the Reference Architecture for the HLS Geospatial EA. (Managed by the GMO.)	– Geospatial Integration & Test Tools

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			explosive technologies, HLS telecommunication and technology standards, emergency reporting standards across federal/state/local/tribunal , etc.) Establish protocols for information and intelligence reporting and dissemination between field activities and operation centers at all levels of government.		
Develop Policy	HLS118	Audit Compliance	Perform on-site audits of external parties that provide supporting functions to the enterprise, ensuring compliance with mandates, policies and agreements. This includes worksite visits for employer compliance and carrier facilities that may be acting on or performing activities on behalf of the government.	<ul style="list-style-type: none"> - Perform on-site and remote audits of external parties that support the enterprise, ensuring compliance with <i>geospatial standards</i>, mandates, policies and agreements. 	<ul style="list-style-type: none"> - N/A
Manage Human Resources	HLS067	Manage Positions	Create, move, modify, and delete positions required to perform the agency's mission. Includes workforce/workload	<ul style="list-style-type: none"> - Manage positions for enterprise-wide geospatial capabilities (GMO). - Develop position descriptions with specific knowledge, skills and abilities (KSA) criteria for geospatial professionals within DHS organizations. - Add a User Class called Geospatial Specialist defined as one who uses geospatial technology and 	<ul style="list-style-type: none"> - N/A

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			analysis, preparing position descriptions, classifying position descriptions, determining testing required for each position, and determining position sensitivity levels.	data to support the HLS mission; conducts studies, planning and analyses, generates maps and reports; installs, operate and maintains geospatial technology used in the creation, update, manipulation, storage, output, sharing, publishing, and archiving of geospatial data; and who advocates the appropriate use of geospatial technologies by DHS and its stakeholders.	
Manage Human Resources	HLS068	Provide Employee / Management Relations	Coordinate activities and programs to administer benefits and awards, develop grievance procedures, develop performance standards, and assess employee performance and actions involving employees; e.g., termination, suspension, or reprimand. Includes retention and succession-planning activities.	– N/A	– N/A
Manage Human Resources	HLS069	Provide Health and Safety Services	Identify, collect, evaluate, and disseminate employee and environmental health and safety data and information. This includes all employee and environmental testing, ensuring compliance with standards, health and safety incident reporting, and other health services, as well as updating the	– Conduct Health & Safety Monitoring to track the <i>locations</i> of notice of violations (NOV) and reported incidents to assess problem work sites or otherwise dangerous conditions. Perform pre-deployment environmental health and safety evaluations of potential work sites (such as disaster field offices [DFOs]) or other temporary work environments.	– Health & Safety Monitoring

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			employee personnel records.		
Manage Human Resources	HLS070	Provide Employee Compensation	Provide payroll/personnel services; such as employee pay and benefits, benefit open seasons, employee payroll options, salary garnishments, payroll corrections, Time and Attendance submissions, leave audits, lump-sum payment calculations, carrier-billed overtime, etc.	– N/A	– N/A
Manage Human Resources	HLS071	Hire Employees	Advertise vacancies and select qualified applicants.	– Develop staff plans and hire qualified personnel (GMO).	– N/A
Manage Human Resources	HLS072	Provide Employee Training/Education	Provide opportunities to acquire new skills or utilize new knowledge in a specific way using a variety of instructional approaches.	– Develop Training & Education Program for geospatial applications and technologies. Provide training and education to employees (GMO).	– N/A

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Manage Technology	HLS080	Maintain Enterprise Architecture	Develop and maintain a four-layer (business, data, applications, and technology) architecture that includes a target architecture and a multi-year implementation plan.	<ul style="list-style-type: none"> – Develop and maintain the geospatial aspects of the HLS EA (GMO). 	– N/A
Manage Technology	HLS081	Manage IT Investments	Manage the selection, control, and evaluation of IT investments. Establish governance boards. Manage Portfolios.	<ul style="list-style-type: none"> – Manage the selection, control, and evaluation of geospatial IT investments (GMO). Establish governance boards. Manage Portfolios. – Integrate/exploit compatible legacy geospatial IT and eliminate or phase out that which is incompatible with the HLS EA. 	– N/A
Manage Technology	HLS117	Provide IT Services	Provide a variety of IT services to ensure a stable, predictable, automated environment. This includes domain areas such as IT help desk, web development services, network operations support, information security, software development and maintenance, etc.	<ul style="list-style-type: none"> – Provide geospatial-related IT services to ensure a stable, predictable, automated environment. – Identify internal clients in need of geospatial technology training and provide training. 	– N/A
Manage Grants, Procurements, and Acquisitions	HLS082	Administer Agreements and Contracts	Starts upon award of a contract (or start date of an agreement) and ends upon closeout of the contract (or end date of an agreement). These acquisition vehicles are administered and	<ul style="list-style-type: none"> – Provide a means to assess solicitations that involve or could be enhanced by geospatial technologies (e.g. projects which will yield content-rich location data that fills a gap or compliments data in the geospatial data inventory). 	– N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			monitored to ensure performance, delivery, and compliance with terms and conditions. This includes outgoing interagency agreements.		
Manage Grants, Procurements, and Acquisitions	HLS083	Certify Acceptance	Starts when goods or services have been inspected, found without discrepancies, and accepted; ends when the accepting official signs an acceptance document. The accepting official certifies in writing that acceptance is complete.	<ul style="list-style-type: none"> - Develop acceptance criteria and quality assurance metrics for geospatial data (e.g., content, completeness, accuracy, precision, resolution) and compliance with applicable standards for geospatial data and procedures. 	<ul style="list-style-type: none"> - N/A
Manage Grants, Procurements, and Acquisitions	HLS084	Determine Purchase Sources / Methods	Starts upon receipt of a requisition by the purchasing activity from the requiring activity and ends upon selection of the source for the acquisition. A source selection process is conducted.	<ul style="list-style-type: none"> - N/A 	<ul style="list-style-type: none"> - N/A
Manage Grants, Procurements, and Acquisitions	HLS085	Establish Acquisition Vehicle to Procure Goods / Services	Starts upon identification source and ends upon award of a contract or agreement for goods or services. The effort awards an agreement or contract to acquire goods	<ul style="list-style-type: none"> - Develop language for solicitations involving the procurement or acquisition of geospatial data, technology and related services. - Provide a means to assess solicitations that involve or could be enhanced by geospatial technologies. 	<ul style="list-style-type: none"> - N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			or services.		
Manage Grants, Procurements, and Acquisitions	HLS086	Develop Acquisition Requirements	Starts when a requiring activity links a mission need to a planned acquisition and ends upon the expression of such requirements in the appropriate requisition format. A requirement is developed for acquisition.	<ul style="list-style-type: none"> - Provide grant language to ensure the availability of geospatial data, infrastructure and human resources in keeping with the geospatial requirements of DHS. 	<ul style="list-style-type: none"> - N/A
Manage Grants, Procurements, and Acquisitions	HLS112	Administer Grants	Receive solicited and unsolicited proposals, receive applications, decide to grant or deny, monitor performance, transfer grant funds to state/local or private citizens/businesses. Provide grants and low interest loans to individuals, farmers, small businesses and other entities as appropriate. Includes conducting a preliminary damage assessment and preparing associated cost estimates to repair for the	<ul style="list-style-type: none"> - Conduct Damage Assessment to reference and share <i>damage assessments</i> to support grant and loan activities. Generate <i>Location Reports</i> and <i>maps</i> conveying this information. - Lobby Office for Domestic Preparedness (ODP) to place a value on grant applications that include needed geospatial data or technologies. - Provide grant language to ensure the availability of geospatial data, infrastructure and human resources in keeping with the geospatial requirements of DHS. 	<ul style="list-style-type: none"> - Damage Assessment

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			purposes of issuing grants and loans.		
Manage Legal Activities	HLS066	Provide Legal Services	Provide legal analysis of homeland security matters to include analysis of new and existing legislation and statutes. Includes supporting efforts associated with moving a case through the legal system (whether administrative, adjudicative, enforcement, etc.). Also includes cooperating with other organizations (e.g. DOJ for actual prosecution activities).	– N/A	– N/A
Manage Facilities and Property	HLS087	Manage Records	Keep records physically intact, identifiable, and retrievable to allow access by authorized users and to protect legal and financial rights. Additionally, the records are organized into logical groups to facilitate identification, access, and directions for disposition. The records should be stored on the appropriate medium, environment,	– Conduct Location Search & Reporting for the purpose of location-based records management. Reference facilities and property records based upon geospatial-temporal query criteria. Generate a <i>Location Report</i> for the purpose of managing this information.	– Location Search & Reporting

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			safeguards, and management controls based on the value, lifespan, and use of the record.		
Manage Facilities and Property	HLS088	Manage Property	Starts after the Department accepts real or personal property (including facilities) and ends when the decision is made to dispose of the property. Property is controlled to meet maintenance, inventory, and accountability requirements. This includes the oversight and maintenance of bonded warehouses that may be storing uninspected or seized goods. This does not include seized, evidence, or custodial property.	<ul style="list-style-type: none"> - Conduct Facility Mapping & Management to manage real property and facilities. Create, update, reference and share <i>real property</i> and <i>facilities</i> data for management and security purposes. Manage space utilization of existing facilities to assure that space, furniture, and equipment are adequate to support current and future mission requirements. Assure compliance with all applicable laws and regulations. [e.g., National Environmental Policy Act (NEPA) requires map and photographic characterization of the site and its immediate surrounds for potential environmental constraints to proposed action including: wetlands, floodplains, RT&E species habitat, property boundaries, hazardous materials, cultural and historic considerations, archaeological findings, environmental justice, accessibility, demographics, and so on.] - Conduct Critical Infrastructure Inventory Management to update, reference and share the <i>status</i> of <i>critical asset</i> and <i>key asset inventories</i>. - Manage personal property <i>assets/goods</i>. Create, update, reference and share <i>asset/goods inventory</i> data (<i>location/time/identity/status</i>). 	<ul style="list-style-type: none"> - Facility Mapping & Management - Critical Infrastructure Inventory Management - Asset Inventory Management
Manage Facilities and Property	HLS089	Arrange Logistics	Arrange for the distribution of needed resources. For example, providing resources to support ongoing	<ul style="list-style-type: none"> - Implement Location-based Tag & Track technologies (e.g., GPS and RFID) for land, air and sea shipments of needed resources. 	<ul style="list-style-type: none"> - N/A

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			investigations, search & rescue operations, as well as other program activities. Restricted to things, NOT PEOPLE or INFORMATION.		
Manage Facilities and Property	HLS091	Manage Correspondence	Manage incoming and outgoing correspondence. Receive, evaluate, parse for response, track responses, send responses.	– N/A	– N/A
Manage Facilities and Property	HLS092	Provide Travel Services	Prepare travel orders, make reservations, etc. (Administrative Services)	– Conduct Travel Planning. Create, update, reference and share travel plans containing person's <i>itinerary</i> .	– Travel Planning
Manage Budget and Finances	HLS073	Account for Funds	Post and reconcile all financial transactions. Includes: Reconciling Accounts Receivable (including interagency agreements), Commitments, Open Obligations, Financial System Balances, Cash Balances, Capitalized Property, Bond balances, and Payroll accounts. Resolve discrepancies by adjusting or correcting the appropriate records. Maintain the General Ledger. All transaction codes to record accounting events as	– N/A	– N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			debits and credits, are recorded and maintained.		
Manage Budget and Finances	HLS074	Control Budget Resources	Continually monitor, track, and ensure that obligations do not exceed budgetary authority. Utilize management controls to ensure the efficient, effective, and appropriate use of any informational, human, technological, financial, or physical asset available to carry out the Enterprise mission. This includes management activities and initiatives designed to identify management risks and put in place and monitor controls to mitigate the risks. The purpose of these activities is to avoid fraud, waste, and abuse. This is done formally through periodic financial reviews and	– N/A	– N/A

Value Chain	Activity Code	Activity Name	Activity Description	The Role of Geospatial in the Business Activity (Geospatial Business Statements) ^{1, 2}	Geospatial Applications ³
			informally throughout the year. This activity involves all organizations throughout the Enterprise that receive budgetary resources.		
Manage Budget and Finances	HLS075	Disburse Funds	Make payments on certified invoices or other approved payables. Treasury is provided the payment information and is instructed to make payment.	– N/A	– N/A
Manage Budget and Finances	HLS076	Manage Receivables	Create bills for payment by another entity (individual, commercial firm, Federal, state, or local agency) and record the bill in an accounting system. Consolidate prior receivables, negotiate payment plans, and process returned invoices (undeliverable mail). An allowance for doubtful accounts is estimated based on collection experiences with different types of debt and the age of debt.	– N/A	– N/A

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Manage Budget and Finances	HLS077	Distribute Approved Budget	Based on the approved budget and budgetary authority received from Office of Management and Budget (OMB), prepare the Budget Execution Plan and Quarterly Operating Plan. The formal budgetary authority (by program and account) is entered into the official accounting records. While the majority of the budgetary resources (positions, work years, and dollars) are received in the early part of the fiscal year, additional funds may be forthcoming at any time during the current fiscal year.	– N/A	– N/A
Manage Budget and Finances	HLS078	Receive Non-Appropriated Cash	Accept, verify amount of funds received, record proof of payment, and submit for deposit. This includes receipts for applications, fines, breached bonds, fingerprint services, inspections fees, Border Crossing Cards, payments, import fees and taxes, tariffs, etc.	– N/A	– N/A

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			Receipts could include cash, checks, money orders, credit transactions, etc.		
Manage Budget and Finances	HLS079	Obtain Approved Budget	Prepare the base budget, which involves the development of the estimate of resources required to operate the service at a current services level of activity. It also includes the identification and justification of additional resources (above the base level) needed to achieve mission requirements. It may include the preparation and submission of other requests for resources; including enhancements, transfers, reprogramming, supplemental appropriations, etc.	– N/A	– N/A

2.0 ACRONYMS

Acronym	Definition
CATS	Consequences Assessment Tool Set
COOP	Continuity of Operations Centers
COP	Common Operating Picture
DFIRM	Digital Flood Insurance Rate Map
DFO	Disaster Field Office
DHS	Department of Homeland Security
EA	Enterprise Architecture
EM	Emergency Management
EMT	Emergency Medical Treatment
EOC	Emergency Operation Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
GMO	Geospatial Management Office
GPS	Global Positioning System
HAZUS	Hazard-United States
HLS	Homeland Security
HSIP	Homeland Security Infrastructure Program
HVAC	Heating, Ventilation & Air Conditioning
IT	Information Technology
KSA	Knowledge, Skills, Abilities
LiDAR	Light Detecting and Ranging
MAF/TIGER	Master Address File/Topologically Integrated Geographic Encoding and Referencing
MOU	Memoranda of Understanding
MS&D	Master of Science & Doctoral
MSOP	Mission-Specific Operating Picture
NEPA	National Environmental Policy Act

NFIP	National Flood Insurance Program
NIMA	National Imagery and Mapping Agency
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NOV	Notice of Violation
NSGIC	National States Geographic Information Council
NSSE	National Security Special Event
ODP	Office for Domestic Preparedness
OMB	Office of Management and Budget
RFID	Radio Frequency Identification Device
RT&E	Rare, Threatened, or Endangered
SAG	Street Address Guide
USGS	United States Geological Survey