

# FDLP Academy

April 29, 2020

## DHS Geospatial Management Office (GMO) Open Resources

U.S. DEPARTMENT OF HOMELAND SECURITY  
OFFICE OF THE CHIEF INFORMATION OFFICER  
GEOSPATIAL MANAGEMENT OFFICE



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SOLUTIONS DEVELOPMENT DIRECTORATE





- DHS Geospatial Management Office
  - Background/About
- Homeland Infrastructure Foundation Level Data (HIFLD)
  - HIFLD Open
  - HIFLD Secure
- GeoSpatial Concept of Operations (GeoCONOPS)
- Geospatial Information Infrastructure (GII)
- Questions





The GMO provides homeland security operators the secure reliable platform and tools they need for geospatial analysis, visualization, mapping, and collaboration on diverse sets of mission critical data.

### Enterprise Access to Mission-Essential Geospatial Data

- Provides enterprise access to mission essential geospatial data
- Supports and maintains DHS geospatial applications
- Maintains a shared geospatial architecture
- Synchronizes intergovernmental policies, strategies, tools, and services

### Analysis, Visualization and Collaboration

- Increases access to and sharing of geospatial information
- Provides geospatial visualization through GeoCoding as a Service
- Supports interactive and heat mapping
- Collects and provides access to imagery, base maps, operational data, and foundation data

### Training and Operational Support

- Provides GeoTechnical Support as a Service
- Builds geospatial tradecraft
- Standardizes operating procedures
- Provides field self-service applications, tools, and services





## Homeland Security Infrastructure-Level Data (HIFLD)

Homeland Infrastructure Foundation-Level Data (HIFLD)

HIFLD Open Data

This site provides National Foundation-Level geospatial data within the open public domain that can be useful to support community preparedness, resiliency, research, and more. The data is available for download as CSV, KML, Shapefile, and accessible via web services to support application development and data visualization.

For updates about HIFLD data, guide, know specific conversion issues, or notifications page.

Events and Updates  
Explore what's updated for HIFLD

Homeland Security Enterprise (HSE) Geospatial Concept of Operations (GeoCONOPS)

HSE GeoCONOPS

Want to help, contribute, or get involved in the community?

Get Involved

Understand how the geospatial community supports Homeland Security Missions and National Preparedness.

GOAL: Improve geospatial national preparedness by increasing the overall capacity and capability necessary, at all levels of government, to identify and utilize geospatial data, capabilities, and resources in order to conduct homeland security activities and improve national preparedness.

<b>Stakeholders</b> Identify geospatial stakeholders across all levels of government, supporting homeland security and PPD-8.	<b>GeoData &amp; Products</b> Search and discover geospatial data and products available to your mission.	<b>Capabilities</b> Find geospatial resources and capabilities to aid in mission planning, rehearsal, and execution.	<b>Tradecraft</b> Access training, operating procedures, templates, and other resources.	<b>Best Practices</b> Discover methods and innovative practices for improving geospatial mission support.
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Understand how the geospatial community works to unify operations that integrate and synchronize existing geospatial capabilities to support Prevent, Protect, Mitigate, Respond, and Recovery missions.

Prevent Protect Mitigate Respond Recover

Homeland Security Enterprise (HSE) Geospatial Concept of Operations (GeoCONOPS)

## DHS NOC COP Application

DHS NOC COP Application

Incident Tools Reporting Tools Help 1071

Incident Reports

Senior Leader Chief

Overview: Hurricane MATTHEW has weakened to a Category 3 hurricane and is forecast to move along the east coast of the PL peninsula through tonight, and near the coast of GA and SC on 8 Oct.

DHS GII Geospatial Information Infrastructure

Contact Us About GII Portal Announcements

GMO Services  
Geospatial Management Office: Who we are and how we can help you with your geospatial application and data needs.

Who is this GII? Request a Group Request Service Access Make a Map GII Catalog

Data  
Provides enterprise access to mission essential geospatial data.

Applications  
GII application portfolio provides situational awareness, standards based, geospatial concept of operations, secure data, shared and trusted data.

HIFLD Open HIFLD Secure IPAWS Grids DHS COP Cyber COP IIT COP NBIC

Geospatial Information Infrastructure (GII)







**A federal partnership and governance structure delivering mission critical geospatial data required to protect and defend the homeland.**





## HIFLD Open Data

This site provides National foundation-level geospatial data within the open public domain that can be useful to support community preparedness, resiliency, research, and more. The data is available for download as CSV, KML, Shapefile, and accessible via web services to support application development and data visualization.

For updates about HIFLD data, guidance on metadata, and known shapefile conversion issues, please access the HIFLD notifications page.



### Events and Updates

Explore what's new and updated for HIFLD Open.



### Feedback

We want to hear from you.



### Data Catalog

Download the most up-to-date HIFLD Catalog.

- Available to all
- Over 300 layers
- Download by shapefile, csv, KML
- Link to APIs
- As data are updated, they are reposted





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HIFLD

## HIFLD Open Website Demonstration



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Homeland Infrastructure Foundation-Level Data (HIFLD)

DHS.GOV DHS.GII FGDC.GOV HIFLD

## HIFLD Secure Data

This site provides both FOUO and commercially licensed geospatial foundation level data within the secure Geospatial Information Infrastructure (GII) Platform to support homeland security and homeland defense missions. All users must abide by the access and use constraints which can be found [here](#). Data is available both as downloadable shapefiles and geospatial web services/APIs. For assistance in navigating or using the site, please contact [hifld@gii.dhs.gov](mailto:hifld@gii.dhs.gov).

Are you directly supporting Homeland Security, Homeland Defense, or Emergency Preparedness on a State or Federal level? If so, you may be eligible to access additional licensed HIFLD data

[Request Access](#)

[Explore Categories](#)

- Requires a Homeland Security Information Network (HSIN) account
- Over 100 layers
- Secure vs. Secure and Licensed





Layer Name	Platform	Update/Notes
Public Health Departments	Open	Updated
U.S. Federal Reserve Systems	Open	Updated
Major State Government Buildings	Open	Updated
Intermodal Freight Facilities	Open	New to HIFLD
National Inventory of Dams (NID)	Open	Moved from Secure to Open
Area Code Boundaries	Open	Removed From HIFLD Open
Natural Gas Market Hubs	Open	Removed From HIFLD Open
Gold Bullion Repositories	Open	Removed From HIFLD Open
Defense Industrial Base (DIB) Facilities	Secure	Updated
Office for Bombing Prevention (OBP) National Counter-IED Capabilities Analysis Database (NCCAD)	Secure	Updated





## Licensed Access – Current as of Feb 2020

HLS Mission Partner Affiliation	Parcel Data	Roads & Routing 2019	Roads & Routing 2020	Business Points
Federal				
State				
Local / Tribal / Territorial				

*\*During the time of a presidentially-declared national emergency or crisis, NGA and/or designee may provide full access of the entire data set to non-Federal governmental disaster/emergency response agencies and personnel (referred to as "State, Local, Tribal, and Territorial Mission Partners") who are supporting HLS/HD missions. You must provide your FEMA POD number to obtain access during these instances.*





- Catalog of how federal, state, and locals are supporting the Homeland Security mission geospatially.
- Available to all
- Nothing hosted on the site – only how to access
- Updated as new material is available
- Dependent on community input

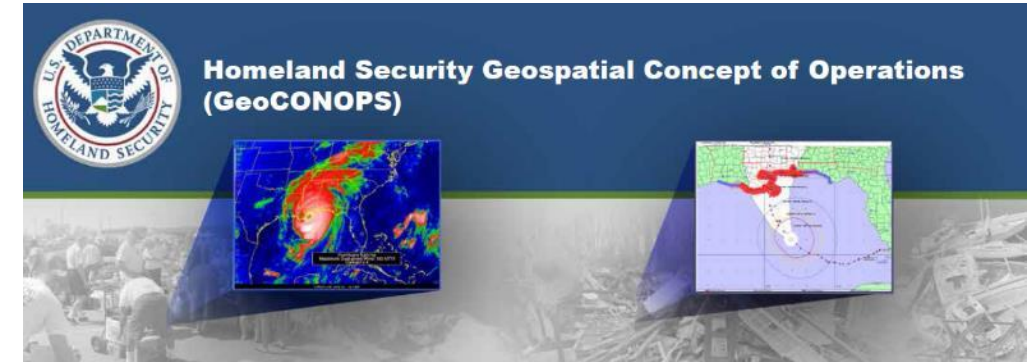
The screenshot shows the HSE GeoCONOPS website. At the top, it features the Department of Homeland Security logo and the title "Homeland Security Enterprise (HSE) Geospatial Concept of Operations (GeoCONOPS)". Below this is a navigation bar with icons for "Security", "Response", and "Coordinating and Integrating". The main content area includes a "Get Involved" button, a "GOAL" section with a target icon, and five categories: Stakeholders, GeoData & Products, Capabilities, Tradecraft, and Best Practices. At the bottom, there is an information icon and a row of five red buttons labeled "Prevent", "Protect", "Mitigate", "Respond", and "Recover".







- Written as a response to Hurricane Katrina support
- Documented who is involved and what data and products are needed
  - “When this happens, do this.”
- Available, but not updated



comprehensive framework for organizing features of interest to the homeland security community.

Immediately following an event, priority is given to the collection of key information on the nature and scope of damages. This data is formally defined as Essential Elements of Information (EEI) and typically collected under the guidance of an Information Collection Plan (ICP). The EEIs contribute directly to situational awareness and revolve around a time-based reporting cycle. The overall list of EEIs may vary by a specific event or type, but generally include information such as: disaster boundaries, socio-economic impacts, and status of communications, transportation systems, and CI.

The information collection and analysis process evolves through the life cycle of the event. Initially, predictive modeling may provide estimates for an EEI, prior to field information becoming available. As the event response progresses, the EEI will be populated with data pulled from Situation Reports, and later through ground truth sources. As priorities shift to sustained response and initial recovery, the ICP is adjusted to reflect changing requirements and the EEIs adjust as the key activities determine what information is essential.

### 2.2.3 Common Operating Data

The Homeland Infrastructure Foundation-Level Data Working Group (HIFLD WG) fosters key HD/ HLS partnerships that are focused on acquiring and sharing authoritative homeland infrastructure data (HISD Gold and Freedom) governed by community standards. The Working Group addresses geospatial requirements for HD, HLS, and Emergency Prevention, Protection, Mitigation, Response, and Recovery mission readiness. Leveraging its broad interagency access, the HIFLD Working Group has partnered with a number of key organizations to accomplish its primary goal of developing a common homeland infrastructure data foundation. Additional

information on the HIFLD WG can be found in *Appendix F*.

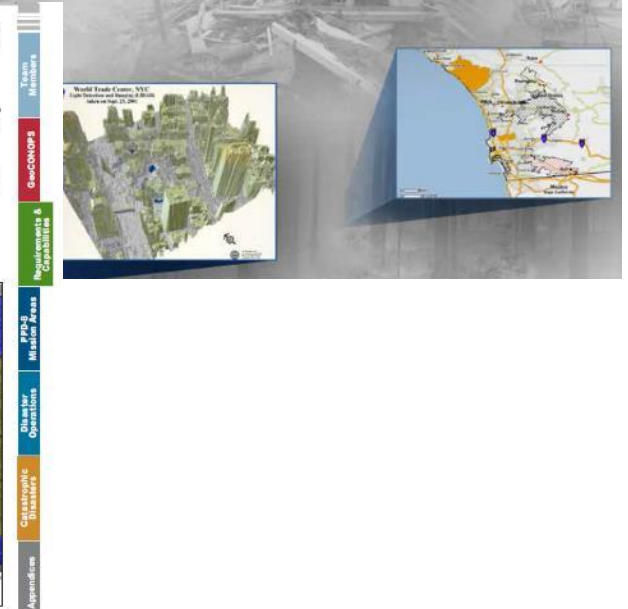
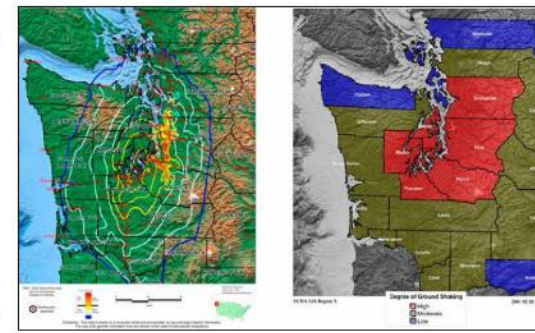
### 2.3 Imagery and Derived Products

RS is a general reference to any remotely sensed information, predominately imagery-type products from satellite and aircraft sources. Imagery can be invaluable following an event, providing the ability to view impacts in the disaster area from a remote location over large expanses with minimal effort. To make the most of RS technology, it must be accessed in a timely manner, analyzed by qualified methodologies, and disseminated efficiently. Imagery and the data derived from it can identify damaged areas and specific target locations, or serve as a base-

map product for use with other data sets. This section discusses the use of imagery for damage assessments (see *Figure 2-1*).

#### 2.3.1 Areas of Expertise

With proper coordination, RS data can be available to any user to assist with mission support requirements. For Stafford Act events, RS efforts are coordinated by FEMA through the JFO, BRCC, and NRCC RS Coordinators. Working with the USGS, NGA, DHS, and other federal departments and agencies, imagery is acquired, analyzed, and disseminated using the Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) Process (see *Figure 2-2 on page 24*).







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# GeoCONOPS

## GeoCONOPS Website Demonstration



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<https://cms.geoplatform.gov/geoconops/geoconops-home> 13



- Sensitive But Unclassified (SBU)-level platform to host shared geospatial enterprise applications, tools, and information
- Available to all users across the entire homeland security/defense enterprise (Federal, State, Local, Tribal and Territories)
- Search, discover and access:
  - Imagery & Base Maps
  - DHS Operational Data
  - Foundational Data
- Access existing common applications and services
  - Geocoding, DHS COP, etc.





- Store and share geospatial information
  - Private or public based on requirements
- Create and share derived geospatial products
- Easily build interactive maps and custom apps
  - Field Collection, Story Maps, Heat Maps, Dashboards, Situational Awareness App

■ <https://gii.dhs.gov/gii>





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