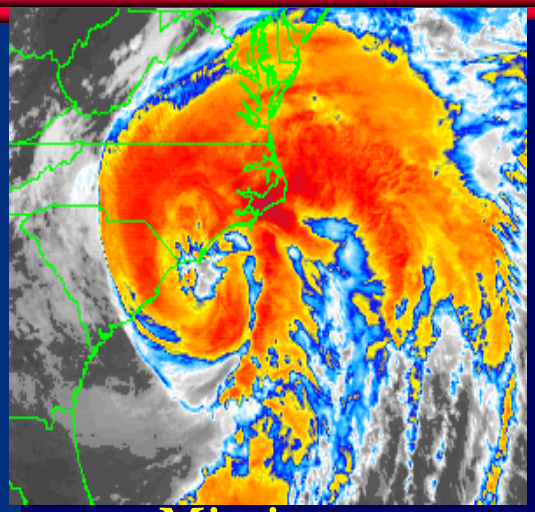
Disaster Assessment and Response Operations

Woodrow Goins Jr.
Director
FEMA Pacific Area Office

FEMA Response Mission & Objectives



Mission

Prepare for and Lead the Federal Government's Response to Terrorist Attacks and Major Disasters

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Objectives

- **Save Lives**
- **Protect Property**
- **Ensures Basic Human Needs are Met**

Response Operations

Effective response operations depend on:

- Accurate and timely **assessments** of damage and unmet needs
- Robust **logistics** capabilities for mobilizing and supporting National-level response operations

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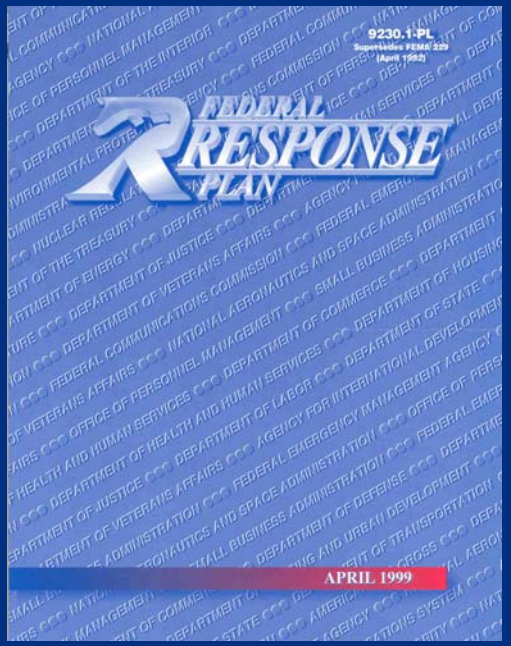
Federal Response Plan

- All-hazards architecture for delivery of Federal assistance
- ESF#5 “Info & Plans” focuses on interagency damage and needs assessments
- 27 Federal agencies/12 Emergency Support Functions (ESFs)



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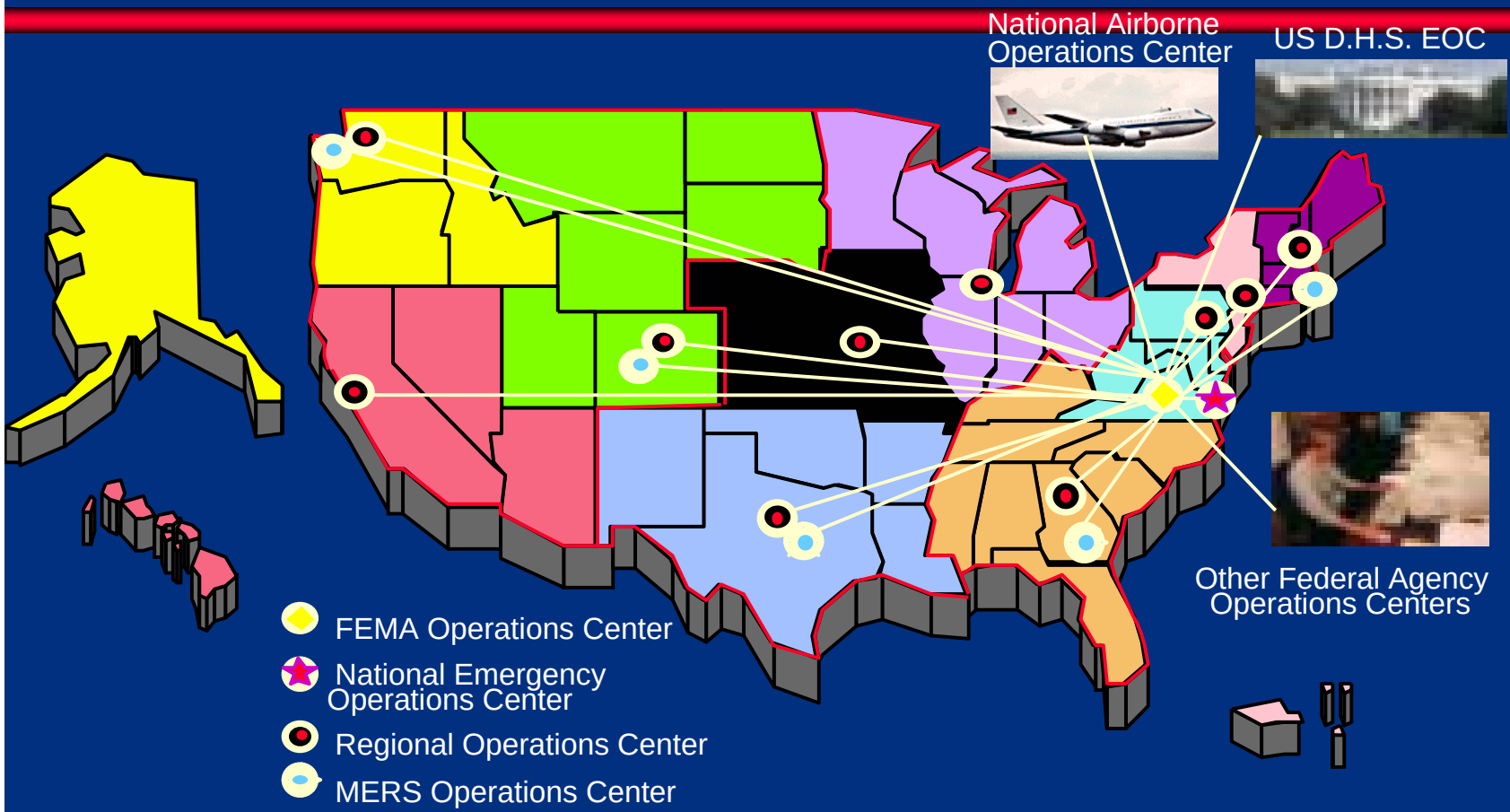
Network of Operations Centers



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National Emergency Operations Center

- Managed by FEMA personnel and other Federal agencies
- Performs continual situation/event monitoring around the world
- Coordinates activation of immediate assessment resources and teams
- Coordinates, prioritizes and deploys Federal response assets
- Provides national-level oversight and coordination

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Damage/Needs Assessment Elements

- Essential elements of information
- Predictive modeling
- Remote sensing
- Ground assessment

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Assessment Elements

Essential Elements of Information:

- Categories or types of information deemed essential to effective decision making
- Baseline EEIs are pre-identified; but situationally modified to meet event requirements

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Assessment Elements

Assessment Support EEIs:

- Predictive modeling impact projections
- Initial needs & damage assessments
- Status of communications systems
- Status of transportation systems
- Status of operating facilities
- Status of critical facilities
- Status of critical distribution systems
- Status of energy systems
- Status of critical resources

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Assessment Elements

Use predictive modeling to determine:

- Potential degree of damage
- Geographic area at-risk or impacted
- Population at-risk or impacted
- Possible locations for operating facilities
- Resources required for unmet needs
- Possible priorities for time-phasing

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Assessment Elements

Predictive modeling examples:

- Sea, Land and Overland Surges from Hurricanes (SLOSH) Models
- Storm Track Modeling
  - National Weather Service (Atlantic)
  - Joint Typhoon Warning Center (Western Pacific)
- National Weather Service Long-Range Forecasting Models

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Hurricane Liaison Team

Hurricane Liaison Team supports effective response to hurricanes by providing capability to exchange information between emergency managers and the National Hurricane Center

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Assessment Elements

Geographic Information System (GIS)

- Portrays critical information for decision-makers
- Computer based system for the capture, storage, retrieval, manipulation and display of geographic information
- Products include maps, tables, demographic information
- Overlayed maps with predicted storm tracks

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Assessment Elements

Use remote sensing (aerial or satellite derived) to:

- Refine predictive modeling data
- Verify field reports
- Determine areas of extreme damage and identify affected populations
- Refine response requirements
- Adjust resource ordering and time-phasing

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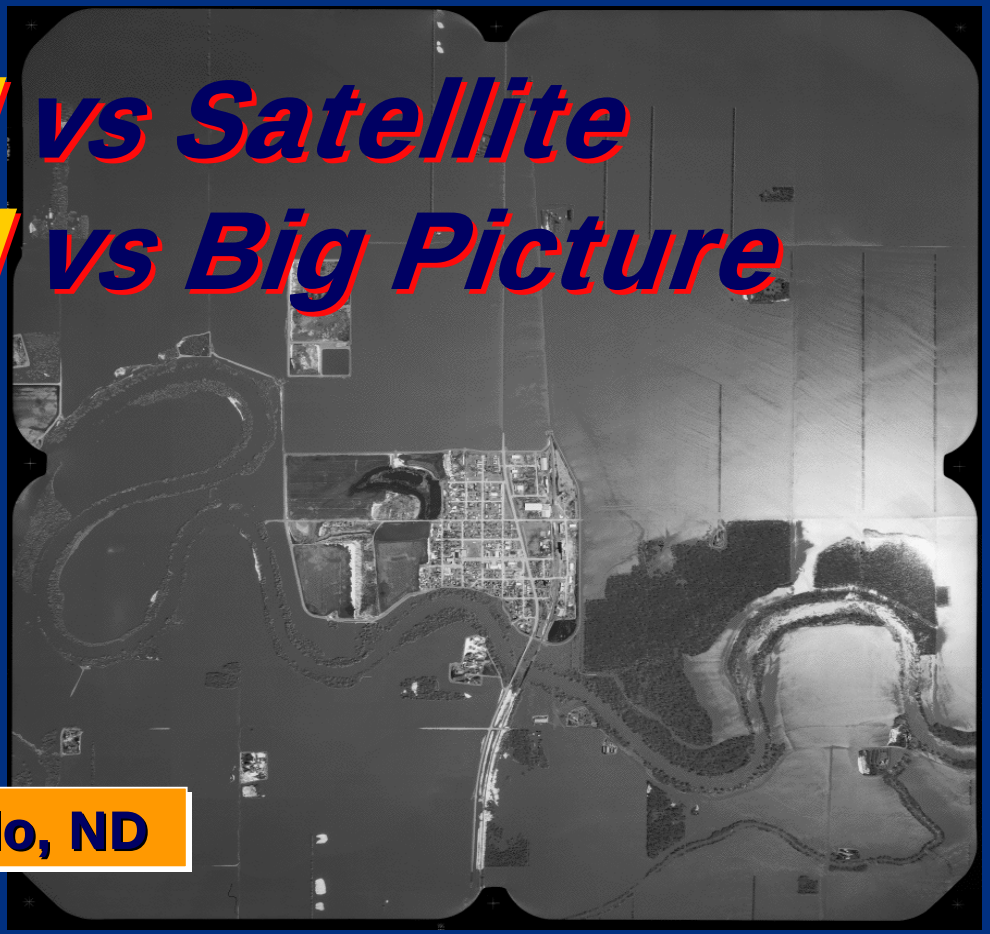
Assessment Elements

Aerial vs Satellite

Detail vs Big Picture



Oslo, ND

Assessment Elements

Rapid Needs Assessment Team

- Small and self-sufficient
- Interagency team of technical experts
- Collects and provides critical assessment information
- Completes mission within 24-72 hours

- ***Critical information used for decision-making***

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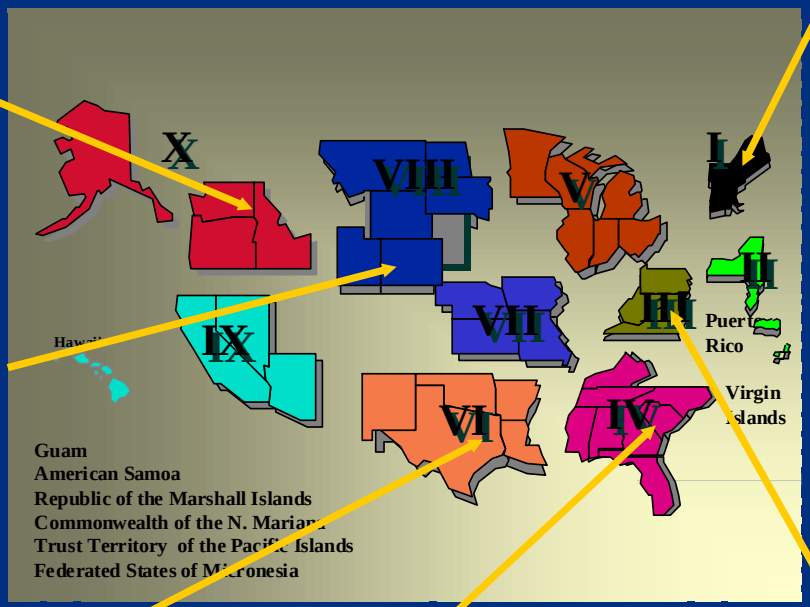
MERS/MATTS



Detachments of Mobile telecom, life support, logistics and operational support, and power generation required for the on-site management of disaster response activities

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Response Teams and Resources

- Urban Search and Rescue Teams
- Disaster Medical Assistance Team
- Hazardous Materials Control Team
- Domestic Emergency Support Team (Terrorism)

- **Emergency Resources:** Water, Ice, Plastic Sheeting, Food, Tents, Meals Ready to Eat, Generators, Medicine, etc.

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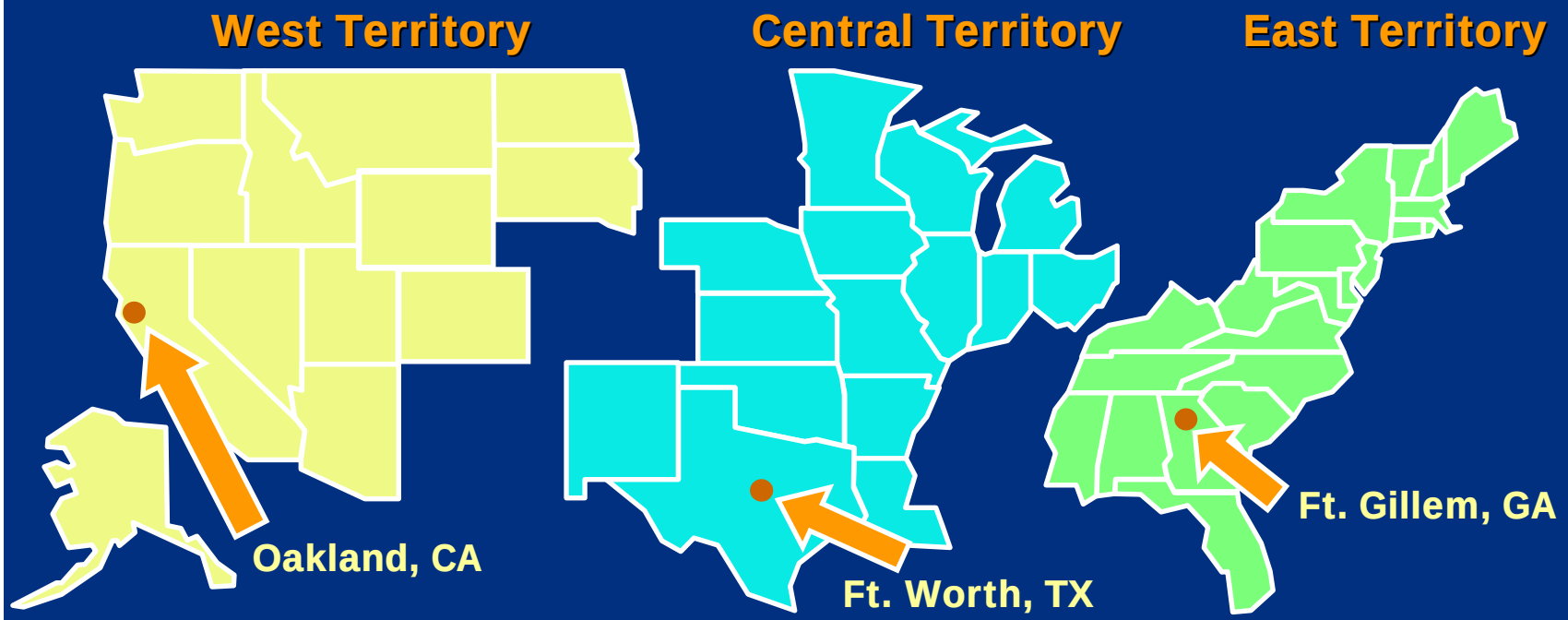
Logistics Facilities



● Logistics Storage Centers

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Time-Phased Deployment

Moving the right resources to the right place at the right time, according to pre-agreed priorities of movement.

- **Time-phasing** controls daily flow of resources into disaster area.
- **Standard resource descriptions** make loading, transport, and storage easier.
- **Coordination** of priorities, transport, and distribution management is critical.

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Emergency Logistics Facilities

Mobilization Center(s)

- Set up *near* disaster area
- Usually military base or airport
- Used for receiving & storing federal resources including emergency teams

Staging Areas

- Temporary sites set-up to facilitate transfer of resources to state and local governments

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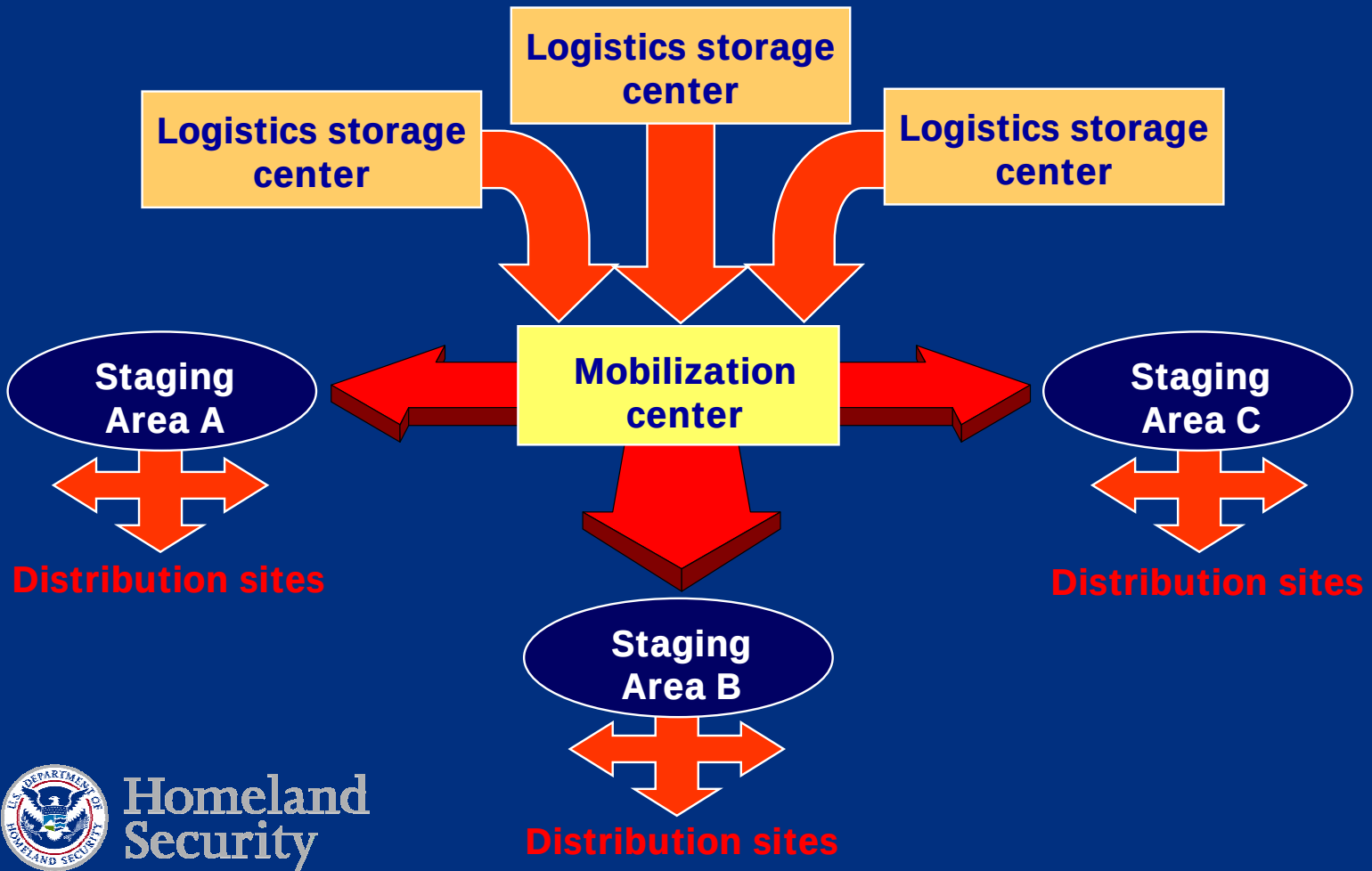
Logistics Facilities



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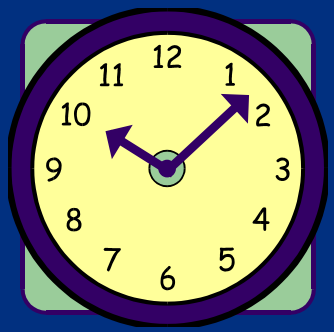
Summary

Get the right *resources ...*

… to the right *place*

… at the right *time*



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Questions?