

# The Role of ITS in Homeland Security

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# Background

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- 9/11 Brought Focus to the True Meaning of Security
- Predominance of Focus has Been on Air Safety, Border Clearance and Port Security
- Surface Transportation Has not Seen Similar Focus
- Transportation Network is Key to the Economic Vitality of Any Nation
- Intelligent Transportation Systems (ITS) Can be Used By or In Support of Principal Responding Agencies (PRA)
- ITS Can Provide Detailed Information About and Capability to Manage the Surface Transportation Network
- Capability is Growing Day-to-Day

# Stages of Security Program

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- Preparedness
- Prevention
- Protection
- Response
- Recovery



# Preparedness – The Benefits

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- Geographic Information System (GIS) Base Map Provides Commonality
- Historical Traffic Data Flow Provides Focus to the Planning Process
- Traffic Data Provides Basis for “What-if” Analysis
- Alternative Response Routes Can be Identified Based on Traffic and Capacity/Restrictions
- Transportation Management Centers Can be Designated as Alternates and So Equipped
- Special Purpose Equipment Can be Identified and Positioning Sites Identified

# Preparedness – The Problems

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- Majority of Effort Involves Planning and We Are Not Players
- Areas Requiring Pre-Agreement
  - Operational Procedures
  - Data Elements and Message Sets
- Mapping Concerns
  - Common Base Map
  - GIS Layers
  - Addressing Protocols
- Privacy Issues
  - Public Safety Information
  - Medical Data Base
- Liability Issues
  - Cross Jurisdictional Response (Mutual Aid)



# Prevention – The Benefits

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- ITS Integrates Well with Border Clearance Activities
- More Precise Driver Credentials
  - Provides Screen at Border
  - Facilitates Access Control
- Electronic Seals Could Identify and Segregate Potentially Unwanted or Dangerous Cargo
- Permitting Process Could Alter Time and Route of Travel
- Matching Driver Information with Cargo Type Could Provide “Profiling Opportunity”

# Prevention – The Problems

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- Current Communication System Will Not Support
- Cargo Permitting and Driver Licensing Done But Not at National Level – Data Base Exists But Fragmented
- No Single Standard for Cargo Tracking
- No Common Standard Message Set (Except HAZMAT)
- Most Permitting Offices not Connected to Traffic Management Centers – Real Time Visibility Missing
- Most Border Security Systems Not Visible to Traffic Management Centers

# Protection – The Benefits

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- Information Analysis Provides Intelligence and Early Warning
- Critical Infrastructure Monitoring
- Visual and Electronic Detection Devices
- Electronic Tolling and Commercial Vehicle Operation Equipment Provide Active Tracking Capability/Route Adherence Information
- Communication Networks Provide Redundant Capability
- DOT Personnel Are Another Form of Sensor
- DOT Equipment and Supplies Can be Used as Temporary or Permanent Physical Barriers in Higher Stages of Alert

# Protection – The Problems

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- Institutional Concerns Over Sharing Data
  - Liability Issues
  - Privacy Issues
- Budgetary Competition Within a Jurisdiction
- Transportation Management Systems are Boundary Limited
- Conflicting Equipment Utilization Requirements
- Communication System Overload
- Access Control at Facilities

# Response – The Benefits

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- Capability will Support All Forms of Crises – Terrorist and Non-Terrorist Initiated
- Can Also Support Off-Shore Response by Deploying Military Forces
- Direct Benefits
  - GPS-Equipped Transit Vehicles on Non-Scheduled Routes
  - Prioritization Of Traffic Signal Network
  - Real Time Traffic Information
  - Traveler Information System
  - Command Center Facilities and Communication Networks
  - Information Collection Assets
- Supporting Benefits
  - Strategic Rerouting of Traffic
  - Clearance of Evacuation Routes



# Response – The Problems

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- Not Currently a Part of the Solution nor in the Planning Phase
- Crisis Management Team Has Not Included DOT
- Jurisdictional Autonomy and Liability Issues
- “Strategic” Traffic Management a New Tool
- Current DOT Internal Systems Tend to Be Stove-piped or Fragmented
- Requirements for “Sworn” Officer to Make Some Decisions

# Recovery – The Benefits

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- Development of Priority Corridors
- Use of the Traveler Information Systems
- Special Purpose Equipment
- Open Task Order Contracts for Quick Response Assistance
- Prioritization of the Traffic Signal System
- Use of Transit for Relocation



# Recovery – The Problems

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- Current Lack of Interconnection
  - Within the DOT
  - With Other Agencies
- Jurisdictional Autonomy
- Financial Constraints
- May Not Have a Plan to Execute



# What Has to Be Done?

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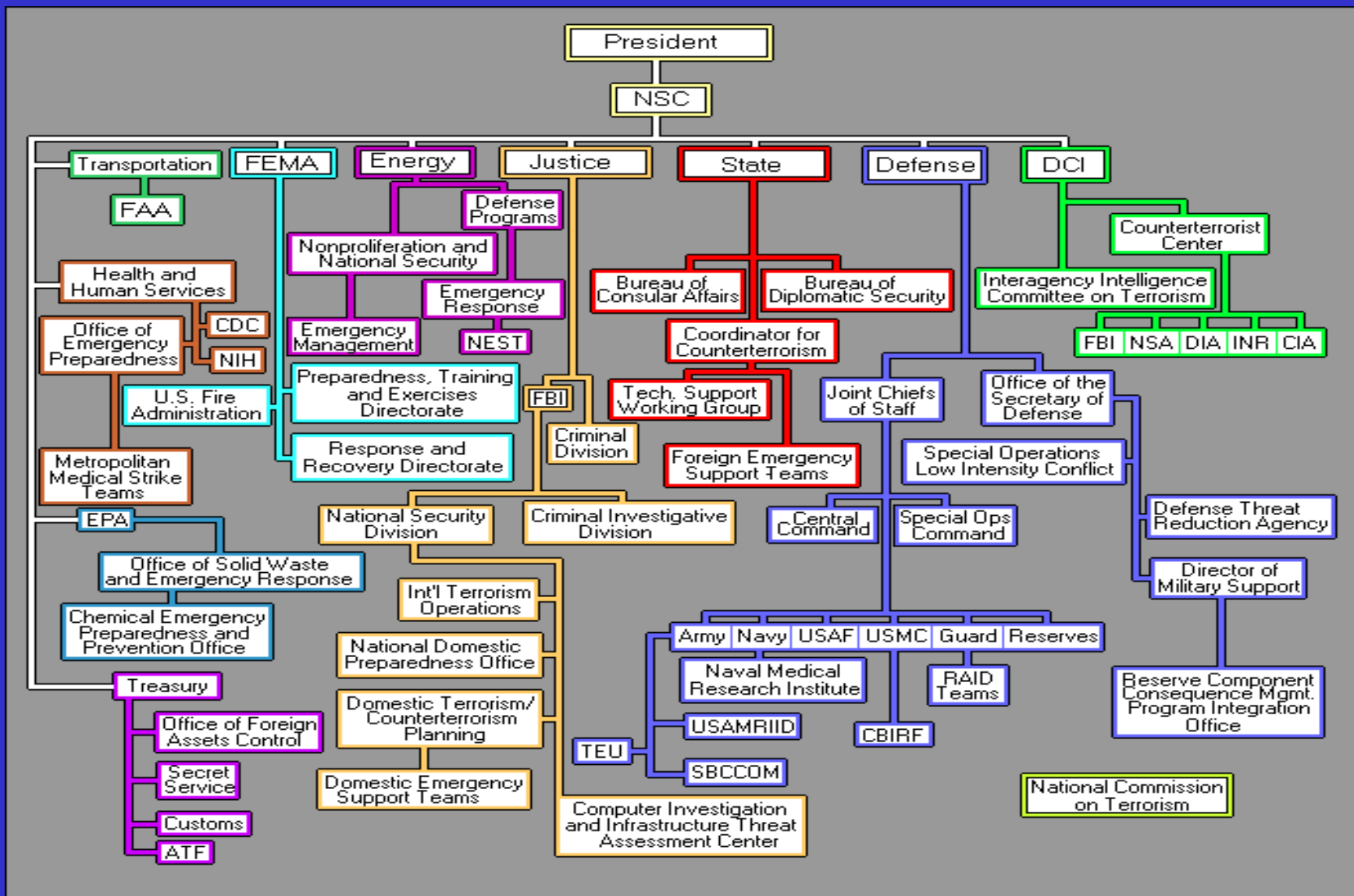
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- Inventory Capabilities
- Approach and Develop Liaison With Responsible Agencies
- Adapt to Operational Methodologies Within Principal Responding Agency Culture (ITS is a Service)
- Continue Development of “Interface” Standards

# Integrated Homeland Security

- Monterey Institute Chart -

# The Challenge



# What Has Been Done

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- Formation of ITS America Board of Directors Homeland Security Task Force
- Formation of ITS America Homeland Security Task Force
- Development and Release of Homeland Security Supplemental to the 10 Year Program Plan
- Revision of ITS America Homeland Security Fact Sheets - (On-Going)
- A Series of Presentations on Homeland Security
- Probable Emphasis on Homeland Security in “TEA - 3”

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- **It Must Be Done!**
    - **It Can be Done!**
      - **It Has Already Been Done!**
        - **Why Haven't You?**
          - Or Have You Already Started?*

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*That's All Folks!*