USTRANSCOM JDPAC / SDDC TEA

• Organization Overview
• Programs for National Defense
  • Railroads / Seaports / Highways
• Military Highway Needs and Challenges

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Chief, Highways for National Defense
JDPAC/TEA
“Wears three hats”
- Director, JDPAC
- Director, Transportation Engineering Agency (TEA)
- Special Assistant for Transportation Engineering

- Joint Distribution Process Analysis Center (JDPAC) created out of BRAC 2005
- CONOPS Approved 2007 – “Analytic Engine for USTRANSCOM and Component Commands”
- Full Operational Capability - October 2010
JDPAC/TEA – What We Do

• Operational Analysis
  – Future/Current Ops Supporting Analysis
  – Workload Forecasting
  – Cost Based Decision Support Analysis

• Deployability Analysis
  – Mobility Force Structure Sufficiency/Readiness
  – Operations Plans (OPLANs) Feasibility
  – Transportability Engineering
  – Modeling, Simulation & Optimization Capabilities
  – Transportation Data

• Transportation Engineering
  – National Defense Programs: Highways / Railroads / Seaports
  – Defense Access Roads
  – Traffic Engineering
  – Transportation Infrastructure

Together, we deliver.
Special Assistant for Transportation Engineering (SATE)

- Charged with providing executive-level representation for DoD on all transportation engineering matters related to National Defense Programs and related engineering services
- Authorized to conduct direct liaison with DoD Components, civil authorities, and commercial entities
- Program oversight includes:
  - Highways for National Defense (HND)
  - Railroads for National Defense (RND)
  - Ports for National Defense (PND)

These programs ensure DOD can readily access and utilize the Nation’s civil sector infrastructure to support major force deployments by assessing the sufficiency and viability of all elements of the related infrastructure

- Established under authority of Defense Production Act (1950), Federal Civil Defense Act (1950), and the National Security Act (1947)
- Identify facilities and resources, both government and private, essential to the national defense and mobilization readiness
- Coordinate with State and local highway agencies in the management of all Federal, State, city, local, and other highways, roads, streets, bridges, tunnels, and publicly owned highway maintenance equipment to assure efficient and safe use of road space during national security emergencies

It is the intent of the Programs for National Defense is to serve as a conduit for the partnership between civil sector authorities and the DOD in order to comply with these provisions and plan for potential emergencies.
Department of Defense
‘Programs for National Defense’

Railroads / Seaports / Highways
Mission

- Ensure America’s civil rail network meets defense needs
- Identify and ensures retention of civil rail lines important to DoD in peace and war
- Ensure enough rolling stock (railroad cars) are available to meet defense needs

What We Do

- Strategic Rail Corridor Network (STRACNET) designation
- Abandonment analysis
- Merger/bankruptcy analysis
- Other clearance and access issues

Partner and Liaison Organizations

- Military Services
- Federal Railroad Administration (FRA)
  - Office of Policy
  - Office of Safety
- Commercial railroads
- State rail planners
- American Association of Railroads (AAR)
- American Railway Engineering and Maintenance-of-Way Association (AREMA)
- Surface Transportation Board (STB)
**Ports for National Defense (PND)**

**Mission**

- Provide transportation specialists information necessary to identify and use U.S. Strategic/Alternate Seaports
- Minimize military’s impact on U.S. commercial seaports
- Facilitate DoD focus on maintaining readiness of select ports (vice many) required to enable the military to effectively deploy to the next fight
- Provide the basis for agreements that ensure priority use of port facilities

**What We Do**

- Provide seaport-specific throughputs to analysts and planners using the highest-possible degree of simulation that is available to support major programmatic and strategic mobility studies
- Document seaport infrastructure and capabilities in reports for National Port Readiness Network stakeholders and military planners
- Collect/update GIS Infrastructure Data
- Special analyses

**Partner Organizations**

- MARAD
  - Co-administers the strategic seaport program
  - Coordinates PPO development
  - Generates monthly readiness reports for strategic seaports
- Coast Guard
- Port Authorities
PND - Strategic and Alternate Seaports

- Seattle
- Tacoma
- Everett
- Lamberts Point Docks
- San Diego
- Long Beach
- Oakland
- Richmond
- Port Hueneme / Oxnard Harbor District
- San Diego
- Port Arthur
- New Orleans
- Lake Charles
- Corpus Christi
- Beaumont
- Gulfport
- New York / New Jersey
- Philadelphia
- Virginia / Newport News
- Morehead City
- Wilmington
- Savannah
- Jacksonville / Blount Island Marine Support Facility
- JB Charleston / Charleston
- MOTSU
- MOTCO
- Indian Island
- Guam
- Anchorage
- Seward
- Valdez
- Pearl Harbor
- Honolulu
- Everglades

Legend:
- Yellow: Commercial Strategic Seaports (17)
- Red: Military Strategic Seaports (6)
- Blue: Alternate Seaports (14)
- Green: Alternate Military Seaport (1)
Highways for National Defense (HND)

Mission

- Ensure that national defense is served by adequate, safe and efficient public highway systems
- Identify and Integrate Defense Needs Into Public Highway Programs
- Establish policy and provide guidance on the safe use of public highway systems by DoD assets

What We Do

- Develop and update the Strategic Highway Network Corridor (STRAHNET) and STRAHNET Connectors
- Coordinate with FHWA to ensure standard vertical clearance routes
- Focal point for the Federal Lands Access Program & the Emergency Relief for Federally Owned Roads Program
- Proponent for defense regulation on permits for military movements on US public highways.
- Publish Directory of Highway Permit and Movement Control Officials
- Coordinate Military emergency preparedness issues with FHWA, States and other agencies

Partner Organizations

- Military Services/installations
- Federal Highway Administration
- State Departments of Transportation
- American Association of State Highway and Transportation Officials (AASHTO)
- Transportation Research Board (TRB)
1919 Motor Transport Corps Convoy on ‘Lincoln Highway’

- 3000 mile convoy from Washington, D.C. to San Francisco, CA
- 28 yr old Major Dwight D. Eisenhower participated
- 4 objectives:
  - Encourage ‘construction of through-route and transcontinental highways’
  - Procure ‘recruits for the Motor Transport Corps’
  - Exhibit “to the public the motor vehicle for military purposes
  - Study and observe the ‘terrain and standard army vehicles’
- Metrics:
  - 81 vehicles suffered ‘230 road incidents’ which forced 9 to retire
  - From Illinois through Nevada, practically all roadways were unpaved
  - Convoy ‘broke’ and repaired multiple wooden bridges, including 14 in Wyoming alone
  - Planned average speed of advance was 15mph; actual was 5 mph over 56 travel days
Dwight D. Eisenhower National System of Interstate and Defense Highways

• Championed by namesake
  – 1919 Army Convoy
  – Exposure to ‘Reichsautobahn’ system – first implementation of Germany’s Autobahn network

• Construction was authorized by the Federal Aid Highway Act of 1956

• Specs:
  – Two lanes minimum in each direction
  – Lanes that were 12 feet in width
  – Right shoulder to be 10-foot wide and paved
  – Design that allowed speeds of 50-70 miles per hour
  – No intersections, traffic signals or rail crossings
  – An estimated 55,000 bridges were built to accommodate the requirement for uninterrupted traffic flow.

• Milestones:
  – October 1974: Nebraska becomes first state to complete all of its mainline highways
  – October 1979: Final section of I-5 complete (connects Canada with Mexico)
  – August 1986: Final section of coast-coast I-80 complete (in Utah –50 miles from the site of the ‘golden spike’)
  – August 1990: Final section of coast-coast I-10 complete (in Arizona)
  – September 1991: Final section of coast-coast I-90 complete (in Idaho)
  – October 1992: Final section of coast-coast 70 complete (in Colorado)

• One of the primary reasons for building the Interstates was national security

"Much of the success of Operation Desert Storm was due to our logistical ability to rapidly move troops to theater. The US highway system supported the mobilization of troops and moved equipment and forces to US embarkation ports – the was KEY to successful deployment.”

Lt Gen Kenneth Wykle / Deputy Commander / US Transportation Command

Initial cost estimate was $25B over 12 years; final cost $114B over 35 years (over $500B adjusted for inflation)
STRAHNET is a system of about 61,000 miles of highways, including the Interstate System. An additional 2,000 miles of STRAHNET Connectors link important military installations and ports. Together, STRAHNET and the Connectors define the total minimum public highway network necessary to support Defense deployment needs. STRAHNET was originally established in 1956.
A DOD surge deployment would require large-scale rapid movement of military equipment by road and rail from major military installations to Strategic Seaports:
- Some deployment cargo would be containerized, however the majority would be ‘rolling stock’ equipment, to include oversize/overweight and tracked vehicles
- Over 8,000 commercial trucks required on first day; 80,000+ commercial trucks required in first 150 days
- Anticipate that over 15,000 DoD vehicles would self-deploy to Strategic Seaports via convoy on the STRAHNET
- Containerized AA&E shipments sent via STRAHNET to Ammo Ports

Within each state, Defense Movement Coordinators (National Guard) assist with obtaining permits and with the scheduling of convoys to reduce military congestion

Ensuring that the states and local agencies are familiar with their roles and responsibilities in supporting military deployments requires consistent active collaboration

Aside from a surge DOD deployment, the highway network is a critical enabler of Defense Support of Civil Authorities (DSCA) events to save lives, prevent human suffering and mitigate property damage:
- Natural disasters – hurricanes, earthquakes, fires etc
- CBRE response
Military Deployment Guide Book

• Purpose - Developed by FHWA and SDDC as a guide, best practices and is a good resource for State DOT’s Permit and Emergency Management
  *Currently being Updated*

• Typical Military Deployments Description
  – Warning Order (assistance may be needed by military)
  – Notice to Deploy (Units defined, activation occurs)
  – Convoy Movements

• Key Concepts for Permitting
  – Permit requests may be made by the most expeditious means.
  – Oversize/Overweight permits must be coordinated with the State and Locals.
  – Moves may be made without written permits provide they are later confirmed in writing.

Military/State must develop coordination procedures/plans and agreements to avoid delay
Highway Challenges

• Issuance of clearances on over-size / over-weight shipments is a challenge during peacetime; would be exacerbated during wartime

• Develop agreements between State and DoD on predetermined routes (fort to port) and specific military vehicles to expedite OS/OW permitting

• It is essential that routes connecting forts to ports are not just identified by DOT’s, but evaluated, analyzed and maintained on a recurring basis to ensure they continue to meet the needs of the DOD at times of national emergencies.

• Request States to adopt performance measurements and prioritize projects that support National Defense
Questions