



The Civilian/Military Response Interface

- The Department of Defense is always **in support of** civilian authorities
 - The Colorado National Guard is the **first military responder for Colorado**
- The Department Of Defense provides Defense Support of Civil Authorities when:
 - Civilian resources have been exceeded
 - A civilian capability does not exist
 - Always based on a request for support from some civilian authority

Capabilities

Per the Colorado State Emergency Operations Plan – the National Guard is a supporting agency for all Emergency Support Functions with the exception of Long Term Community Recovery and Mitigation.

National Guard capabilities revolve around ten major components – “The Essential Ten”.



Command and Control



Aviation



Security



Engineering



Maintenance



Transportation



CBRN(E)*



Logistics

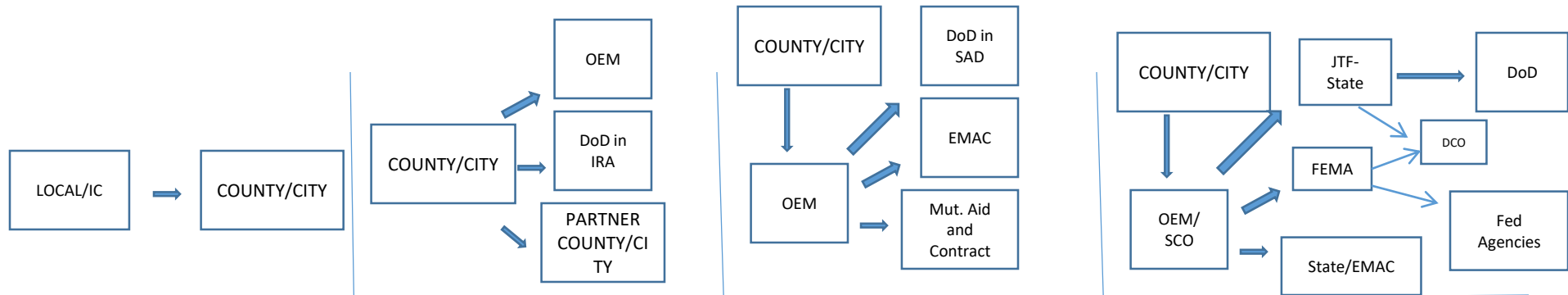


Medical



Communications

Concept of Support



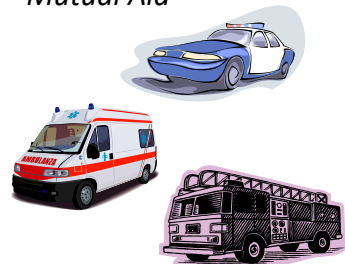
First Response



Initial Attack

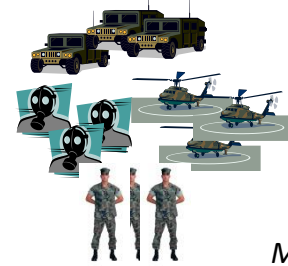


Mutual Aid



State Level Emergency

NG in SAD

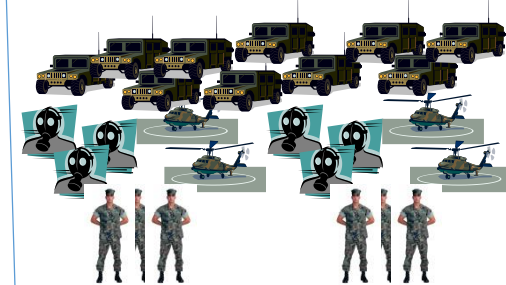


Mutual Aid and state authorized support



Federal Level Emergency

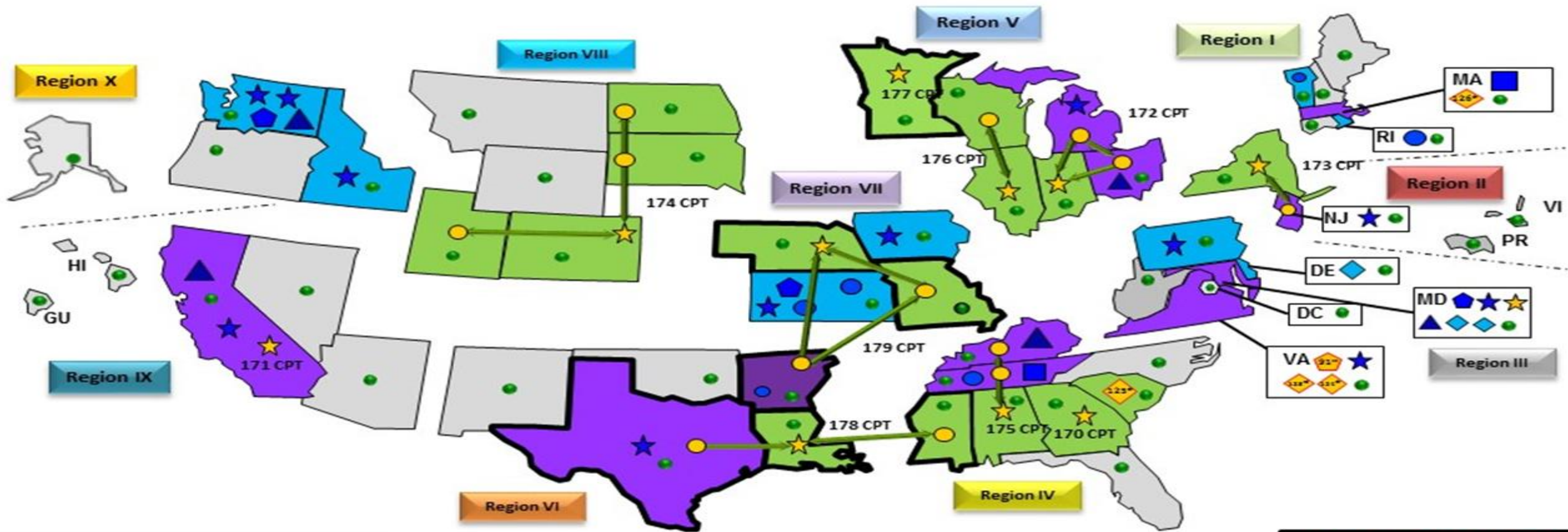
Dual Status Command



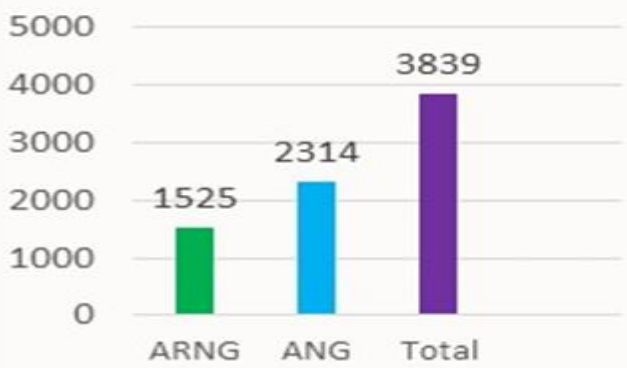
Federal Agency Support and Specialized Expertise



National Guard Cyber Unit Laydown



Total NG Cyber Force

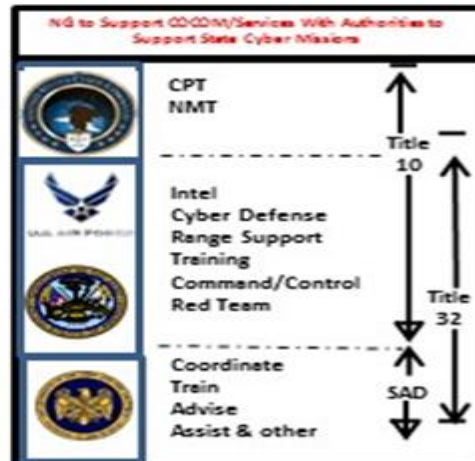


- NG Units Supporting Combatant Commands**
- ▲ ANG Cyber Ops Group supporting CPT
 - ★ ANG Cyber Ops Squadron supporting CPT
 - ◊ ANG Cyber Ops Squadron supporting NMT
 - ▲ ANG ISR Cyber Squadron
 - Cyber ISR Group

- NG Units Supporting Service Missions**
- ◊ ARNG Brigade Headquarters
 - ◊ ARNG Battalion Headquarters
 - ★ USA Cyber Protect Team (CPT) Team Qs
 - CPT detachments

- ANG Units Providing Cyber Mission Support**
- - 177 IAS (KS) - 299 NOSS (KS) - 102 NWS (RI)
 - 223 COS (AR) FY 18 - 229 IOS (VT) - 119 COS (TN)

- Defensive Cyberspace Operations Element DCOE)**
10 x PAX to protect the DODIN and provide State support for (DOMOPS)



CPT / DCO-E Comparison

- Cyber Protection Team (CPT) → threats
- Defensive Cyber Operations-Element (DCO-E) → vulnerabilities (CNDSP*)

DCO-E

- Defends the Guard Enterprise
- Systems Focused
- High ROI Enterprise Security
- Vulnerability Centric
- Trained for General Defense and Response
- Guided by CIO
- Cyber Train/Advise/Assist
- Fixed Position
- Support to NIPR/SIPR
- Foundation – Title 40 U.S.C
- T32 / State Active Duty Only

Protect • Monitor, Analyze & Detect •
Respond • CND Sustainment

Joint Core

- Vulnerability Scanning
- IAVA Validation
- Compliance Assessment
- Metrics Reporting
- Intelligence Review
- Tactical SME Support

*118 CNDSP Tasks Validated
DODI 8530.01aa and ESM v8*

CPT

- Defends a Mission
- Key Terrain Focused
- High ROI Mission Security
- Threat Centric
- Trained Specific Threats
- Trained for Specific Terrain
- Executes CCDR/Svc Mission
- OPLAN/CONPLAN Assignable
- Support beyond NIPR/SIPR
- Deployable
- Foundation – Title 10 U.S.C.
- T32 / T10 / SAD (possible)

Prepare • Protect • Engage • Sustain

CyberOps

CNDSP

DODIN Ops

Overlap in Operational Environment

CPT

CONG Cyber Task Force Packages

The Colorado National Guard task organizes its cyber forces to provide flexible and adaptable capability to the Governor in order to meet his needs:

Vulnerability Assessment Package

2-3 Soldiers

Threat and vulnerability assessment

Unclassified adversary tactics, techniques, and procedures

Situation Awareness and Information Sharing

Training and education

Advise and Assist Package

2-4 Soldiers

Cyber analysis capabilities to include forensic examination of networks and systems

Unclassified adversary tactics, techniques, and procedures

Situation Awareness and Information Sharing

Infrastructure support and network monitoring

Training and education

Large Vulnerability Assessment Package

6-10 Soldiers

Threat and vulnerability assessment

Unclassified adversary tactics, techniques, and procedures

Situation Awareness and Information Sharing

Infrastructure support and network monitoring

Incident response, mitigation, and recovery

Training and education

Perform tasks to determine root cause of cyber attacks

Colorado Critical Infrastructure Identified

Life Safety Implications During Cyber Incidents

Sector	Life Safety Implication
Water and Waste Water	Lifeline sector *
Energy	Lifeline sector *
Communications	Lifeline sector *
Transportation	Lifeline sector *
Government	At risk populations likely depend on timely and accurate access to government services for their basic needs.
Emergency Services	This sector is primarily used to ensure life safety of the population. Loss of access to or use of cyber capabilities could significantly impact essential services.
Healthcare and Public Health	This sector is directly responsible for life saving care of the population. It relies heavily on access to IT infrastructure to provide essential services. Loss of access to IT infrastructure and data significantly impacts care during cyber incidents.
Chemical	Manufacturing processes in the chemical sector rely on secure IT operation to safely handle feed stock and to complete chemical manufacturing processes. These operations can pose a substantial danger to local populations if exposed to a cyber attack.
Dams	Physical dam operation can expose downstream populations to significant volumes of water and create a life threatening situation if not done with proper care and coordination. Automated dam controls exposed to a cyber attack could create this life threatening situation.

Lifeline sectors are specifically called out in the National Infrastructure Protection Plan 2013 as being essential to the operation of most critical infrastructure sectors. Cyber impacts to this sector are assumed to have the potential for negative impact on life safety.