

Joint State of Missouri and FEMA Region VII

New Madrid Seismic Zone Earthquake Interagency Operations Plan



FEMA

Leaders Intent

- Save/sustain lives.
- Alleviate human suffering.
- Ensure continuity of local government functions.
- Stabilize, maintain, and/or restore essential services and infrastructure.

This Plan Supports The LEOP

Local Emergency Operations Plan



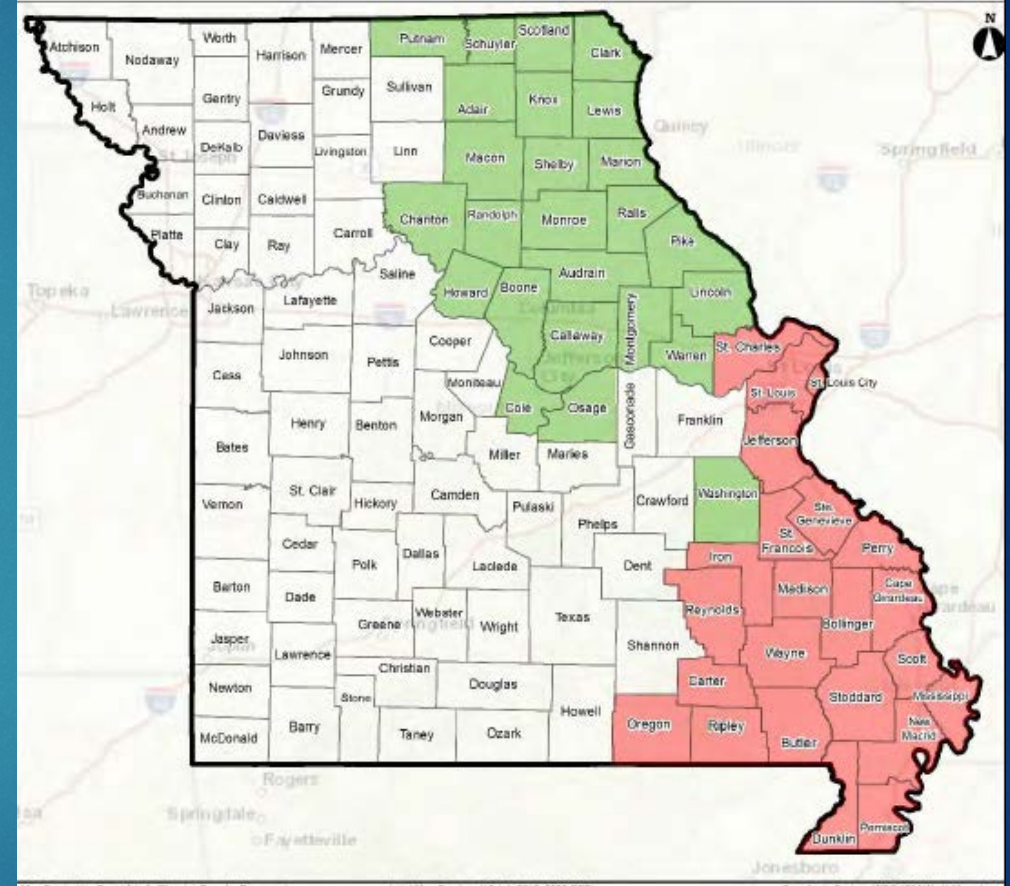
State Emergency Operations Plan



NMSZ Interagency Plan

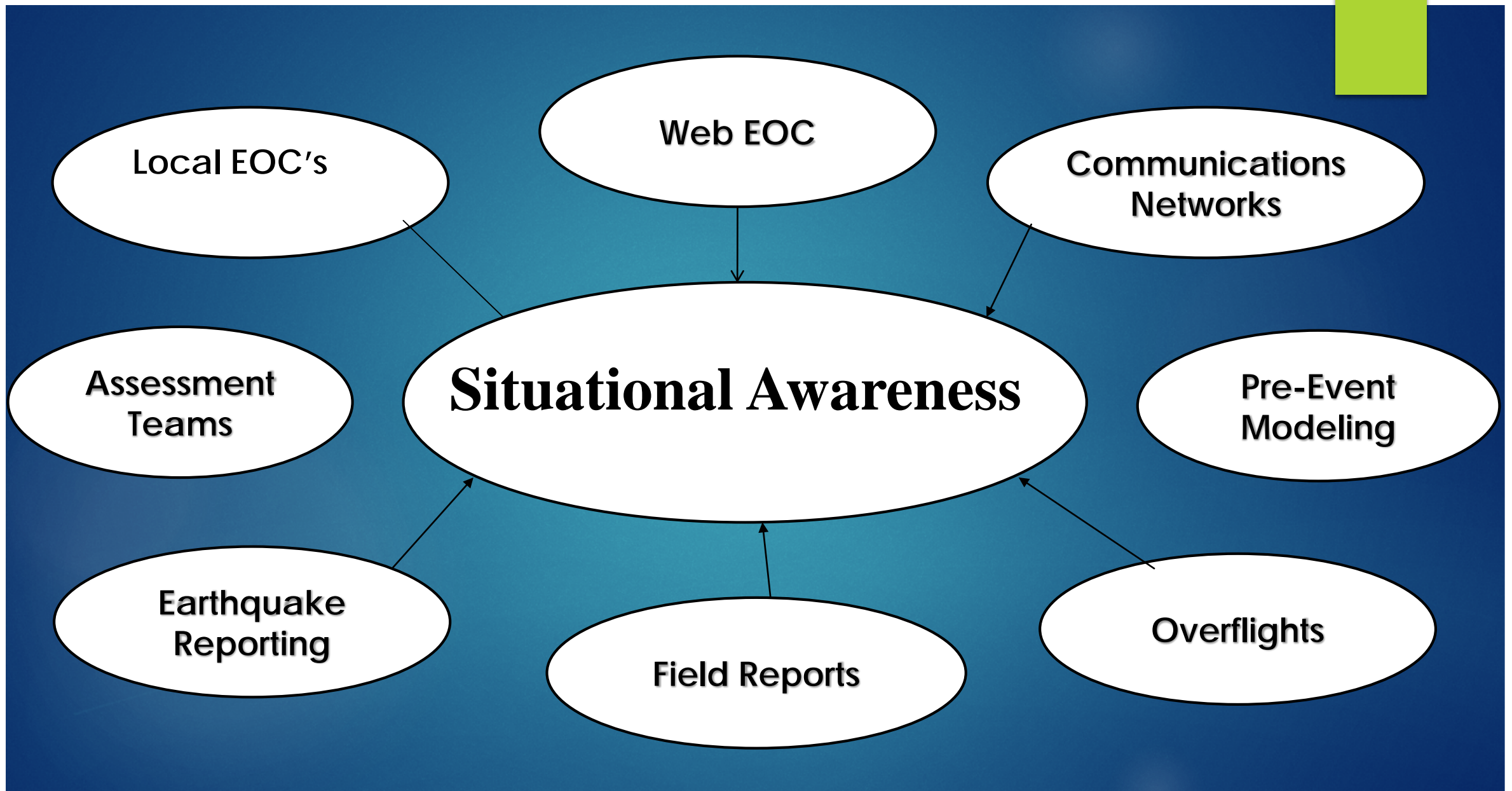


National Response Framework



How Do We Coordinate?

- Initial Assessments Will Drive the Response
- By WebEOC, Phone, Fax, Email, Radio
- Implementing Communications Will Be Top Priority



Common Operating Picture



Local ICPs

Local EOC's

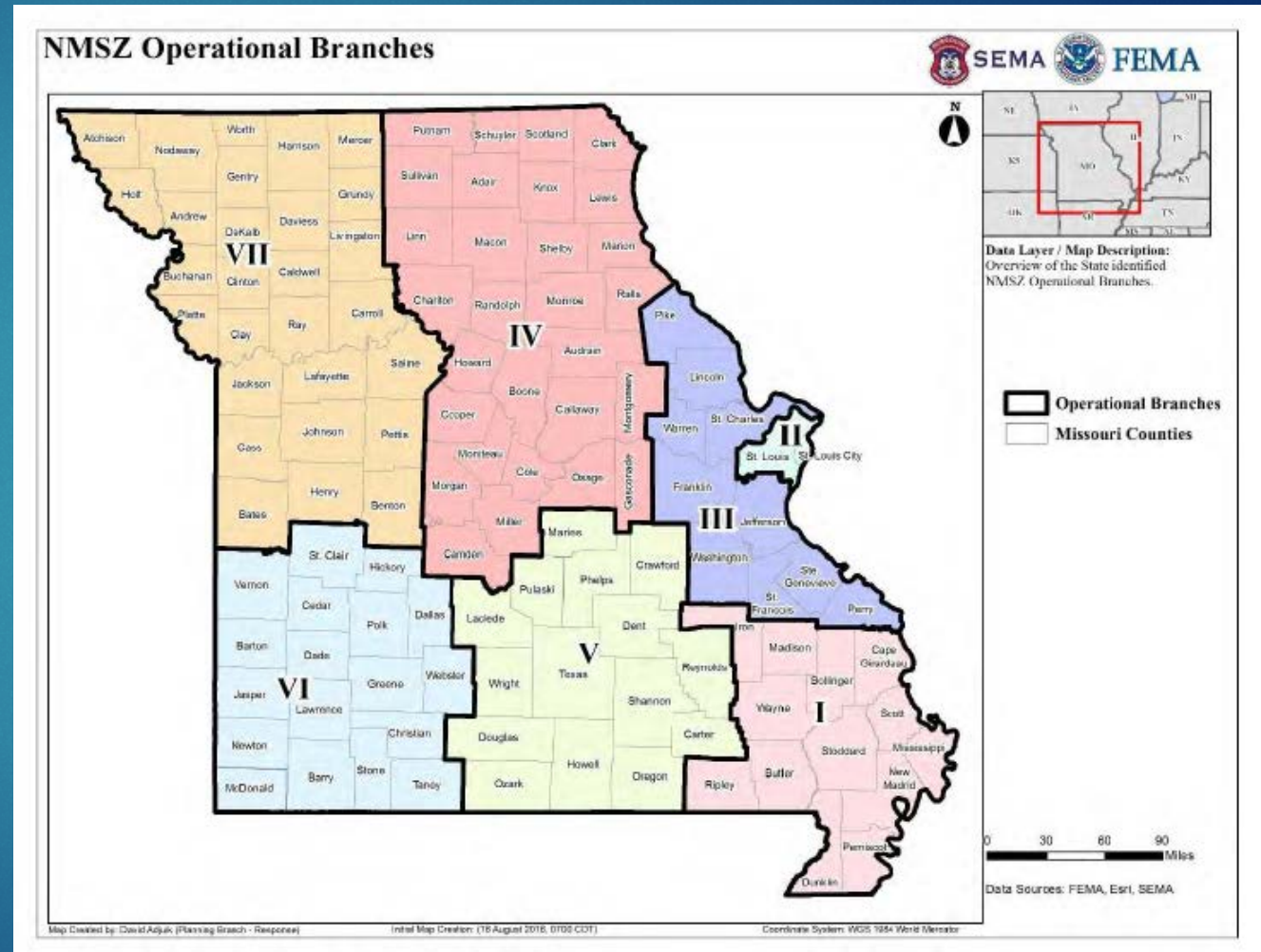
Branches/MACCs

FEMA Joint Field Office

State Emergency
Operation Center

FEMA Regional
Coordination Center

Organizational Structure



Transport Routes

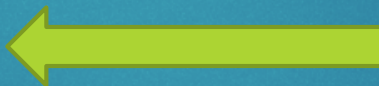
Assessments Yield Transportation Plans

Resources move toward needs



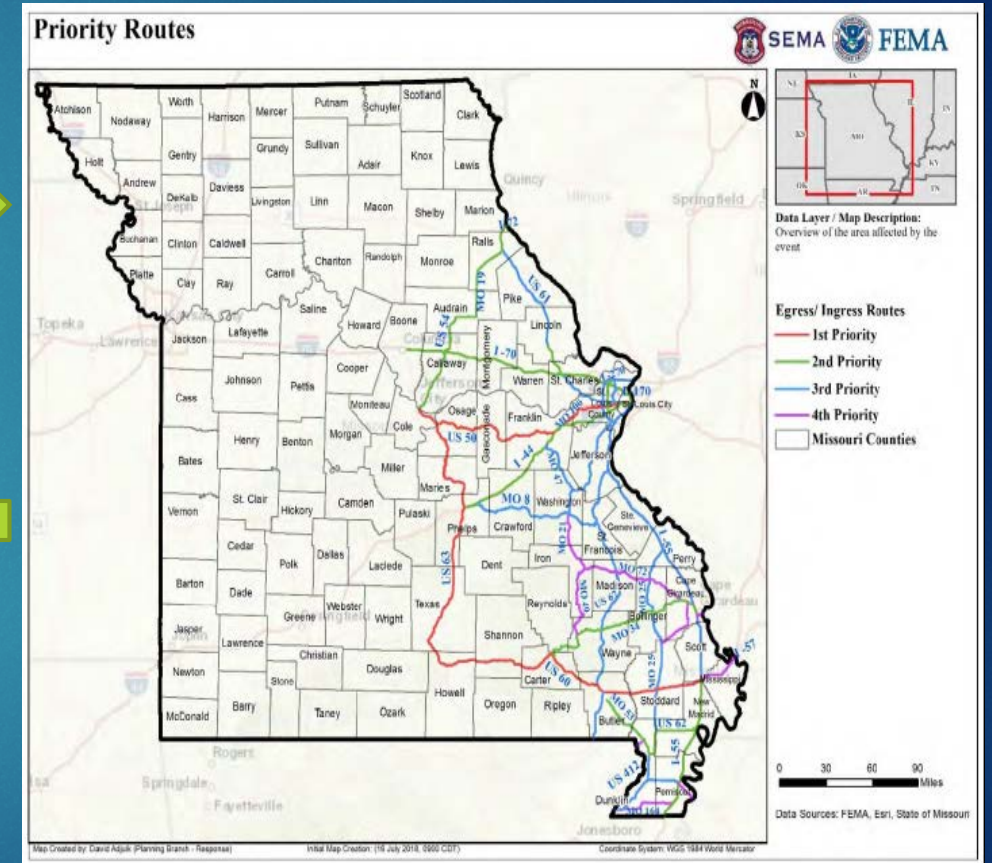
Emergency Routes identified

Victims move toward services



Evacuation Plan

Respite Sites along evacuation routes



Search and Rescue and Medical Care

MO Task Force 1 + Additional USAR Teams

MO Disaster Medical Assistance Teams

State of Missouri Technical Rescue Teams

Additional Resources Requested thru EMAC



Route Resources Toward Affected Areas

Up to 22,000 National Guardsman

Aircraft- MONG, MSHP, MO Conservation
Civil Air Patrol, DOD

Emergency Management Assistance
Compact (EMAC) 40+ MONG, 200+ SEMA

Most Resources Will Come From The West



Provide Sustainment To Victims

Food, Water, Shelter provided at
Points of Distribution (POD)

Provided To Locally Identified Sites

Goal Is To Move Resources To
Closest POD By Land Then Distribute
By Air If Required



Sustain the Response

Incident Support Base – Logistic Support

Joint Staging Areas – Resources Awaiting Assignment

Responder Support Camps- Responder Food, Water, Shelter

Air Operations Base- Aviation Resources Awaiting Assignment

Points of Distribution- Survivors can obtain life supporting commodities

Pull from State/Federal Resources – Push Toward Local Needs

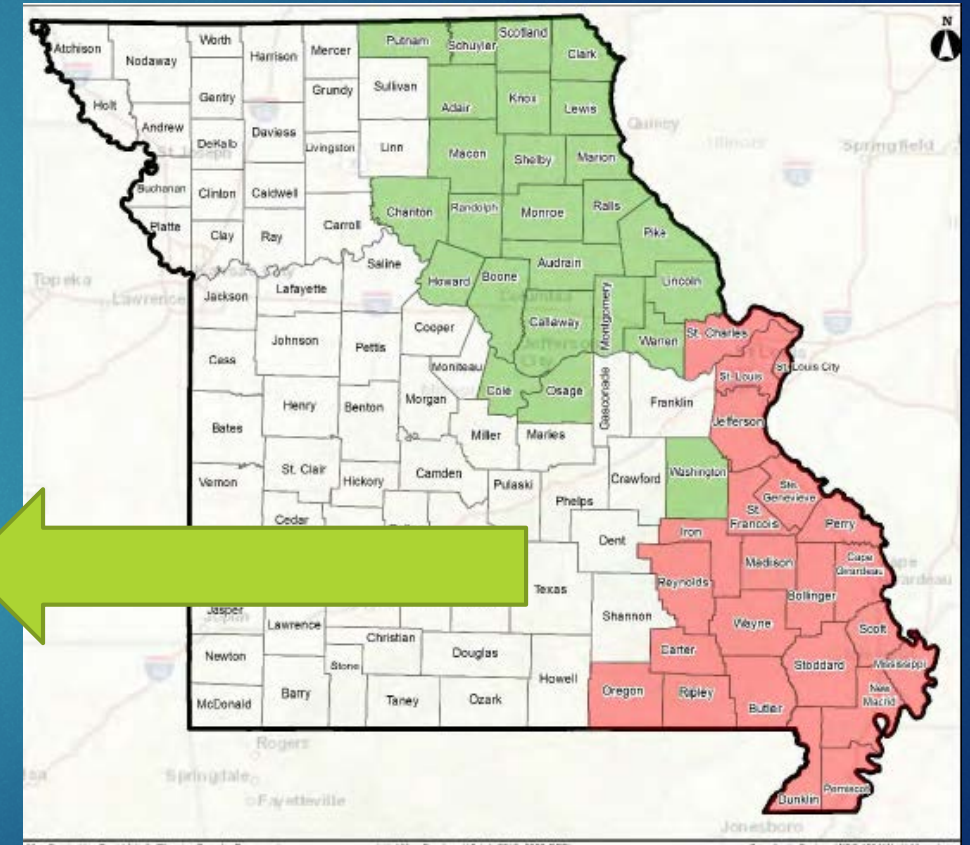
Route Evacuees Toward Services

Estimates Of 842,000 Displaced And Up To 300,000 Evacuees

Moved Toward Services In State and Beyond

Evacuation Plan To Be Developed

Route Coordination and Respite Sites
Approx. Every 50 Miles on Evac Routes



2 Weeks Ready?

Communications Plan

Non-Perishable Food

Medicines/First Aid

Power/Batteries

Family Reunification Plan



We Have A Plan – You Need One Too!!

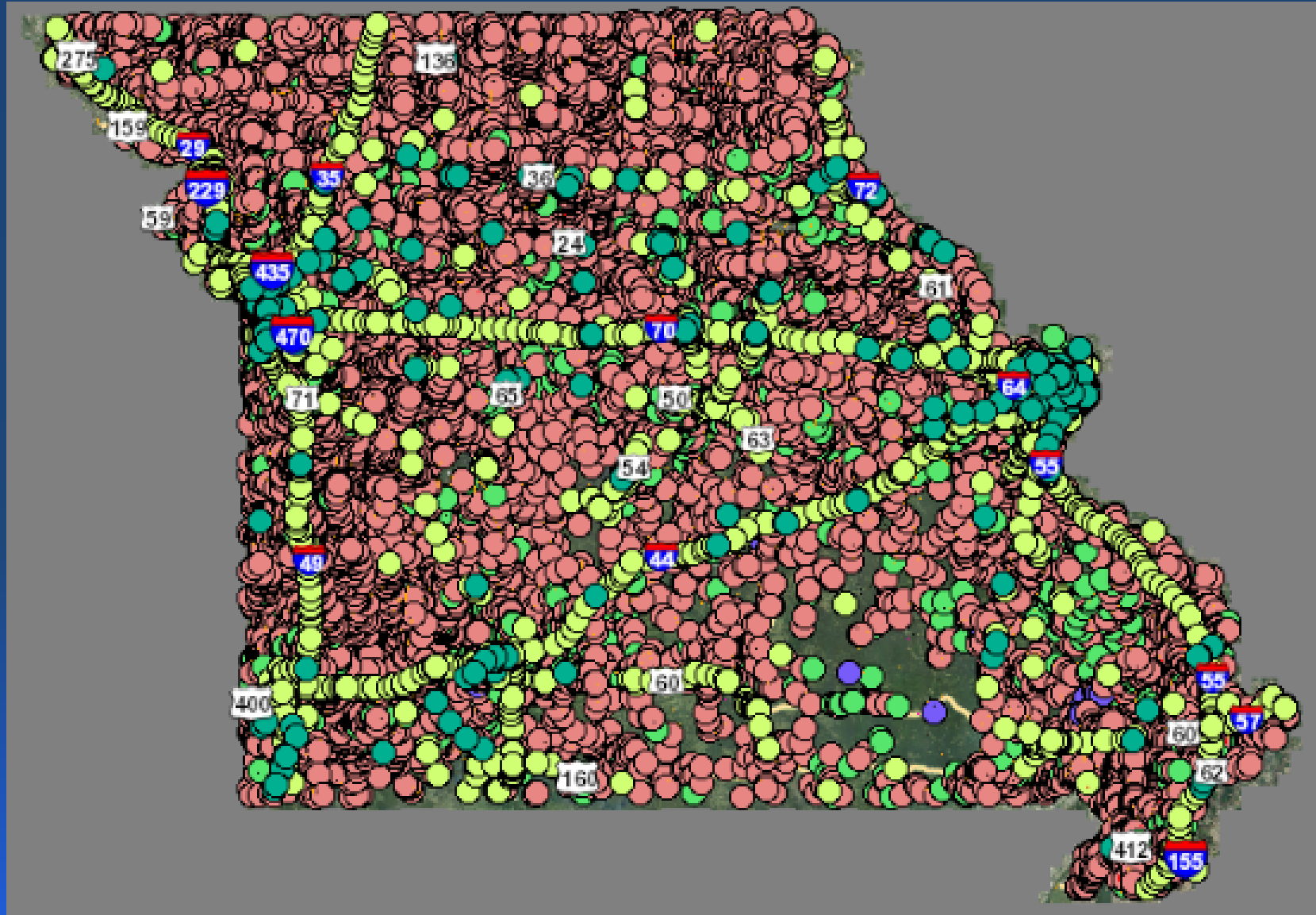
Desired End State

- Initial response operations and lifesaving activities have concluded.
- Critical infrastructure is returning to normalcy.
- Strategic recovery planning is occurring, utilizing mitigation strategies to build a more resilient Missouri.

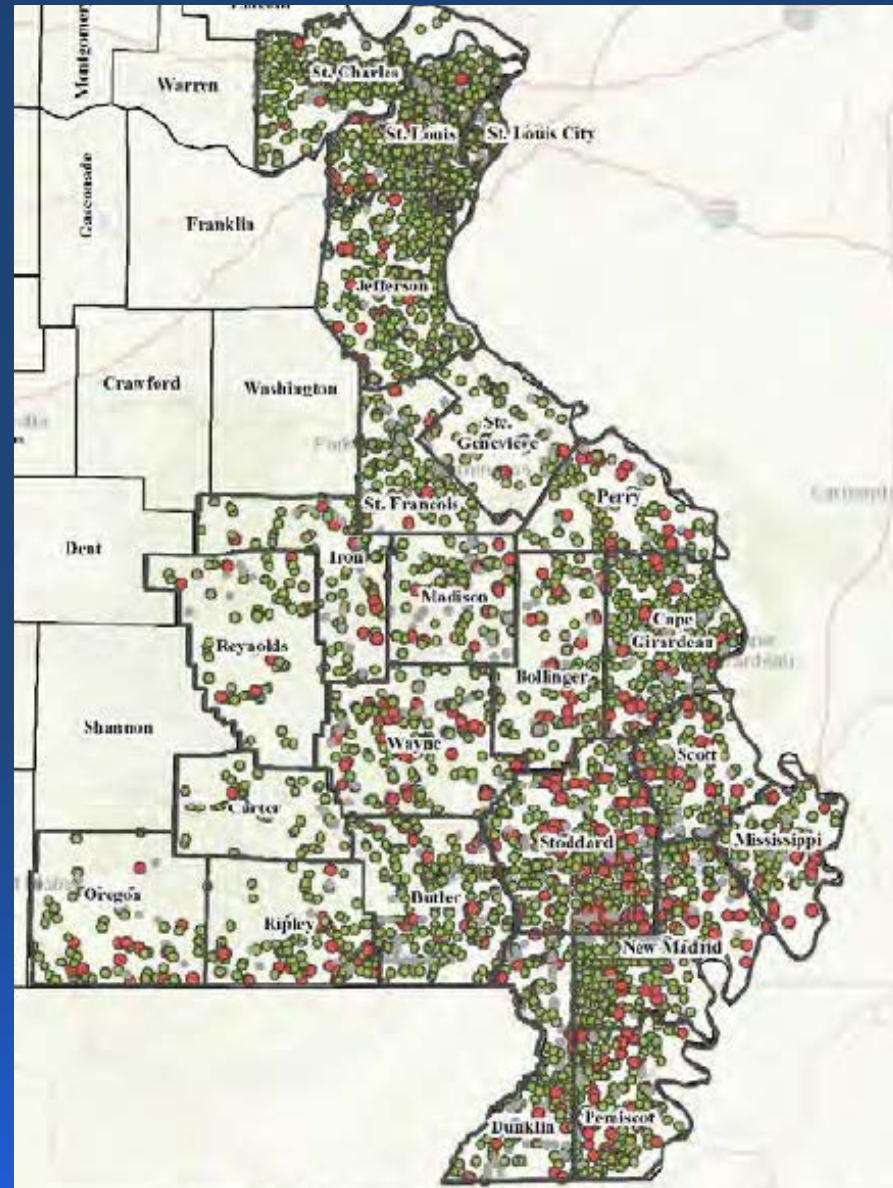
Estimated Damage to Roads/Bridges

- **2009 MAE Center Volume II data summarized impacts within the 22 highest-impacted Missouri counties:**
 - 1,004 bridges damaged or destroyed
 - 28 airports destroyed
 - 6.5 million tons of debris created
 - 842,002 individuals displaced

Bridges



Bridges



Magnitude 7.5 - Commerce_RLME

Version 5

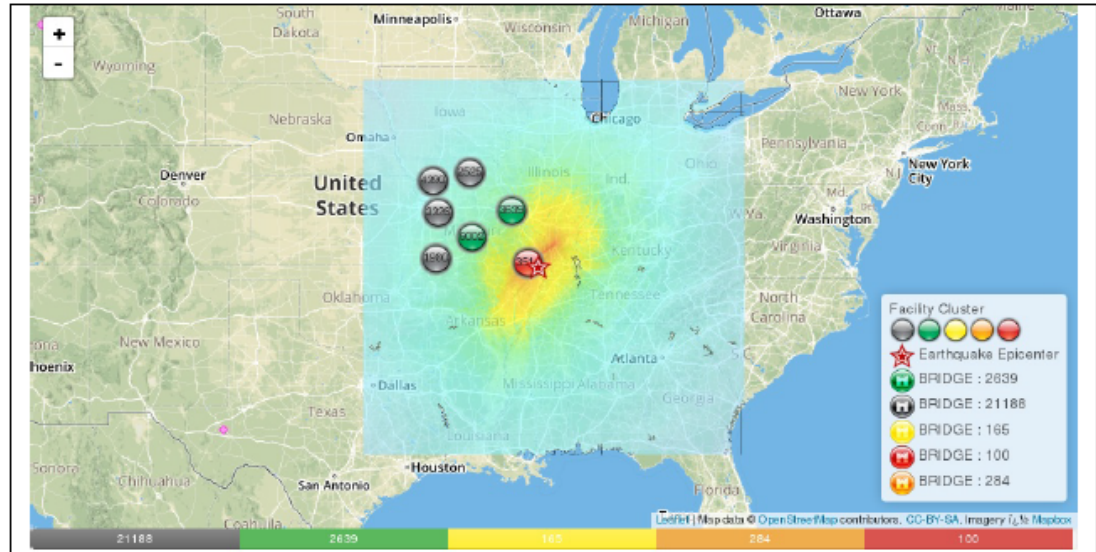
Origin Time: 2017-05-12 18:52:32 GMT

Created: 2018-07-24 18:14:56 GMT

Latitude: 36.94254 Longitude: -89.73817

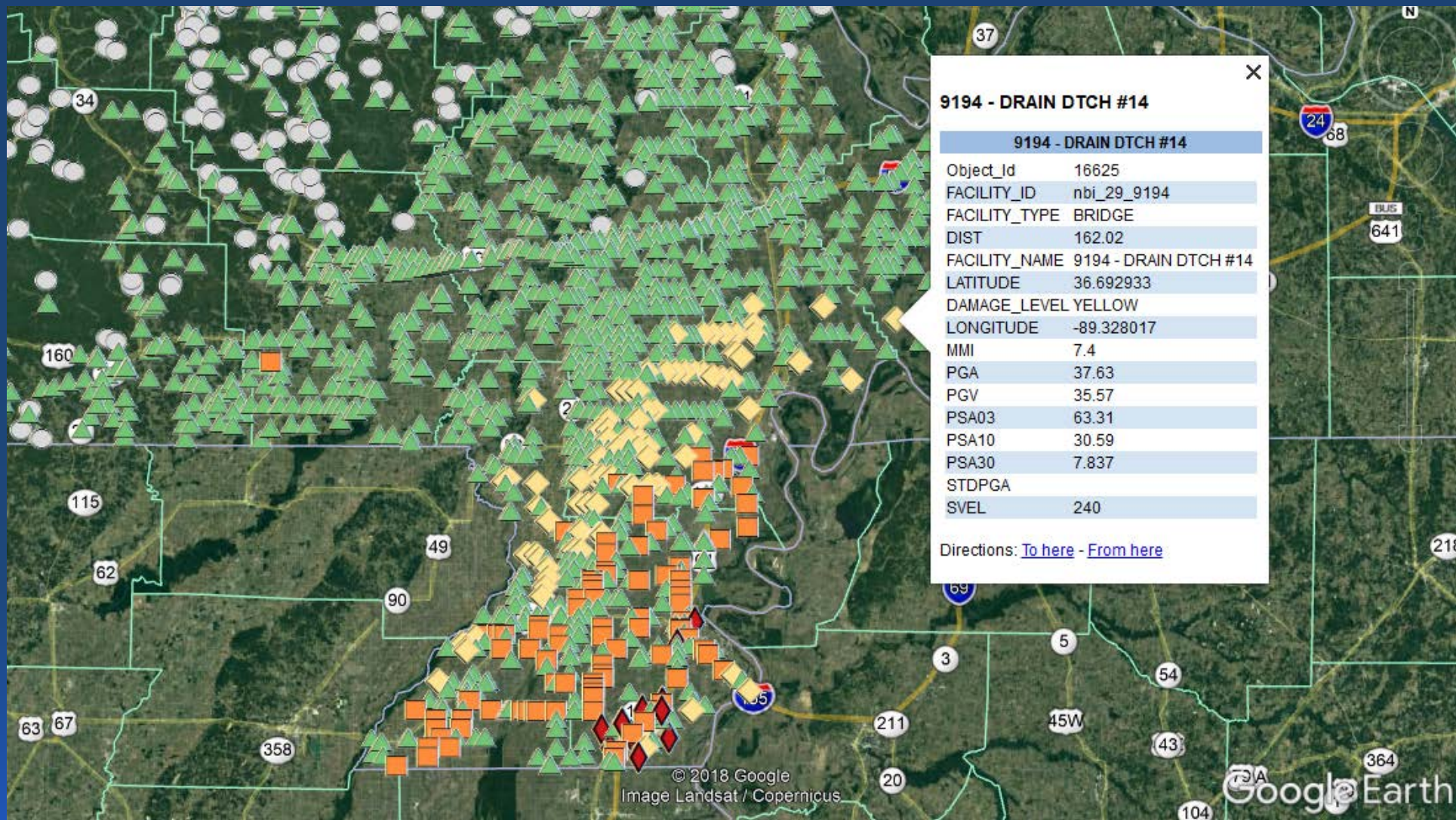
Depth: 19.6455 km

These results are from an automated system and users should consider the preliminary nature of this information when making decisions relating to public safety. ShakeCast results are often updated as additional or more accurate earthquake information is reported or derived.



Type	ID	Name	Ep. Distance (km)	Inspection Priority	PGA (%)	PGV (cm/s)	PSA 1s (cm)	MMI	Vs30 (m/s)
BRIDGE	29_14360	14360 - WAHITE DRAIN DTCH	2.78	High	80.95	76.06	71.96	VIII	
BRIDGE	29_8169	8169 - DRAIN DTCH #35	2.97	High	80.21	74.15	70.21	VIII	
BRIDGE	29_14561	14561 - DRAIN DTCH	3.42	High	75.91	74.66	70.73	VIII	
BRIDGE	29_14577	14577 - LITTLE RVR	5.14	High	63.97	68.38	65.07	VII	
BRIDGE	29_16539	16539 - DRAIN DTCH NO 2	5.81	High	77.33	74.37	70.45	VIII	
BRIDGE	29_6967	6967 - DRAIN DTCH #24	5.95	High	85.26	80.81	76.26	VIII	
BRIDGE	29_16563	16563 - LITTLE RVR	6.04	High	83.81	82.87	78.17	VIII	
BRIDGE	29_16478	16478 - DTCH NO 2	6.1	High	82.15	79.41	75.01	VIII	
BRIDGE	29_9829	9829 - DRAIN DTCH #37	6.36	High	84.45	82.03	77.38	VIII	
BRIDGE	29_16617	16617 - DTCH NO 1	7.26	High	82.18	78.83	74.47	VIII	
BRIDGE	29_16504	16504 - DTCH NO 1	7.59	High	77.2	77.86	73.63	VIII	
BRIDGE	29_16463	16463 - DTCH NO 2	8.12	High	83.99	83.35	78.62	VIII	
BRIDGE	29_6165	6165 - DRAIN DTCH 1 DIST	8.53	High	79.95	80.73	76.26	VIII	
BRIDGE	29_15781	15781 - ANGLE DRAIN DTCH	9.52	High	86.12	84.62	79.75	VIII	
BRIDGE	29_6190	6190 - DRAIN DTCH 2 DIST	9.55	High	84.21	82.82	78.12	VIII	
BRIDGE	29_6166	6166 - DRAIN DTCH 4 DIST	9.88	High	83.02	82.37	77.71	VIII	

* MMI level may extend beyond map boundary; some facilities may not appear on the map due to space restriction



Local/Regional Response Objectives

- Activate regional response plans
- Establish communications
- Begin road & bridge assessments
- Conduct emergency debris clearance operations
- Initiate regional re-routing plans
- Determine status of other transportation modes

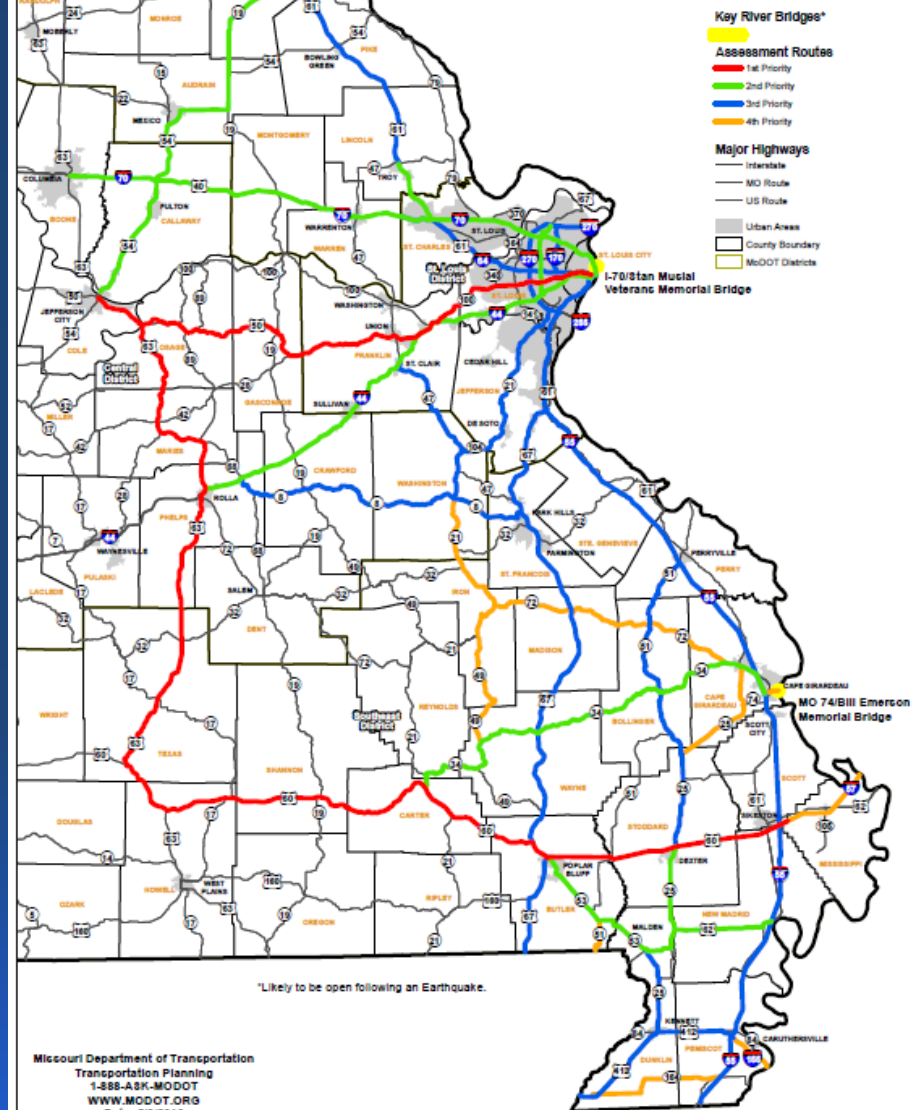
Assessing Transportation Status

- **Utilize any available status information**
 - MoDOT inspection team reports
 - External source reports (MONG, MSHP, EMD's)
 - Social media postings (if available)
- **Generate GIS situation status map**
 - MoDOT Traveler Information Map layer
 - MoDOT Emergency Status Map layer
 - Other agency status layers

Ingress/Egress

- **Pre-determined emergency routes detailed in plan**
 - 4 levels of inspection priority
 - Highest likelihood of viability
 - Least number of bridge crossings

Missouri Earthquake Emergency Highway Routes



Missouri Department of Transportation
Transportation Planning
1-888-ASK-MODOT
WWW.MODOT.ORG
Date: 6/6/2018



Responder & Evacuee Movement

- Model potential traffic flow of evacuees/responders
- Coordinate route management and mass care plans
- Determine roadway limitations
- Analyze use options for available routes
- Determine alternative transportation options

What Do We Need From You?

- Prepare the public
- Coordinate messaging
- Feed status information to the SEOC



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Missouri National Guard

New Madrid Seismic Zone – Response Concept Brief

14 February 2019

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Agenda

- **MONG Mission Statement and Leader Intent**
- **Organizational Approach and Concept of Operations**
- **Southeast Missouri Concept of Operations**
- **Saint Louis Area Concept of Operations**
- **EMAC, T32 Augmentation and Gap Fill**
- **T10 Augmentation and Gap Fill**
- **Response Final Notes**
- **MONG Sustainment**
- **Questions**



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Mission Statement and TAG's Intent

Mission: Upon 6.0 or higher NMSZ earthquake, MONG rapidly musters and deploys to pre-designated regions to conduct IAA, search & extraction, security, sustainment operations and other tasks as requested in support of civil authorities (CA).

Purpose: To save lives, minimize human suffering, restore key infrastructure, and ensure continuity of government.

Objectives:

1. Rapidly establish effective command, control, and communications (C3), to enable unity of effort
2. Enable a common operating picture and rapid decision making via immediate incident awareness and assessment (IAA).
3. Deploy/employ MONG capabilities in support of CA/Continuity of Govt to:
 - Support lifesaving and life sustainment measures.
 - Protect, assess, restore CIKR and essential services.
 - Protect the populace: Provide security support to law enforcement (LE) in lead.
 - Support traffic control/evacuation operations as necessary.
 - Establish joint logistics and communications to sustain MONG forces and supported CAs.
4. Protect the force (aftershock threats / secondary effects).
5. Synchronize MONG strategic messaging with joint information center (JIC)

End State: MONG has concluded NMSZ consequence management and subsequent aftershocks such that CA can conclude the recovery phase and have released MONG assets.

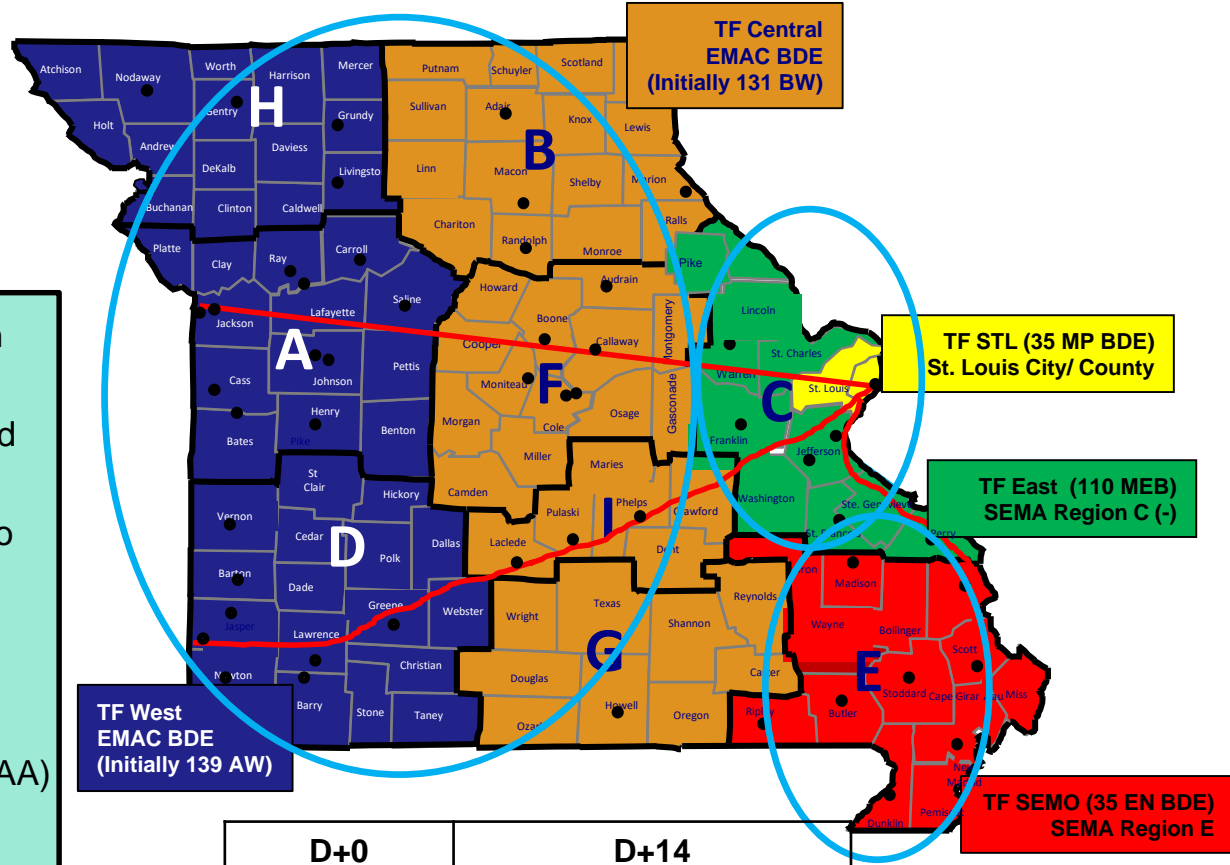
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MONG NMSZ Task Force Concept of Operation

- MONG conducts initial response with organic capabilities
- EMAC and T10 capabilities integrated into operations upon arrival in state
- Functional TF/JTFs provide GS/DS to Geo TF CDRs state-wide
- SEMA and MONG Mission Sets
 - Establish C3
 - Incident Awareness & Assessment (IAA)
 - Lifesaving/Search and Rescue
 - HAZMAT response
 - Life Sustainment & Evac Support
 - Emergency Route Clearance
 - Sustainment Ops/LOCs
 - Support population mass care/shelter
 - Support population emergency medical
 - Safety and Security Operations
 - Manage/Operate RSOI Activities
 - Receive/Integrate National Resources
 - Restoration of Essential Services



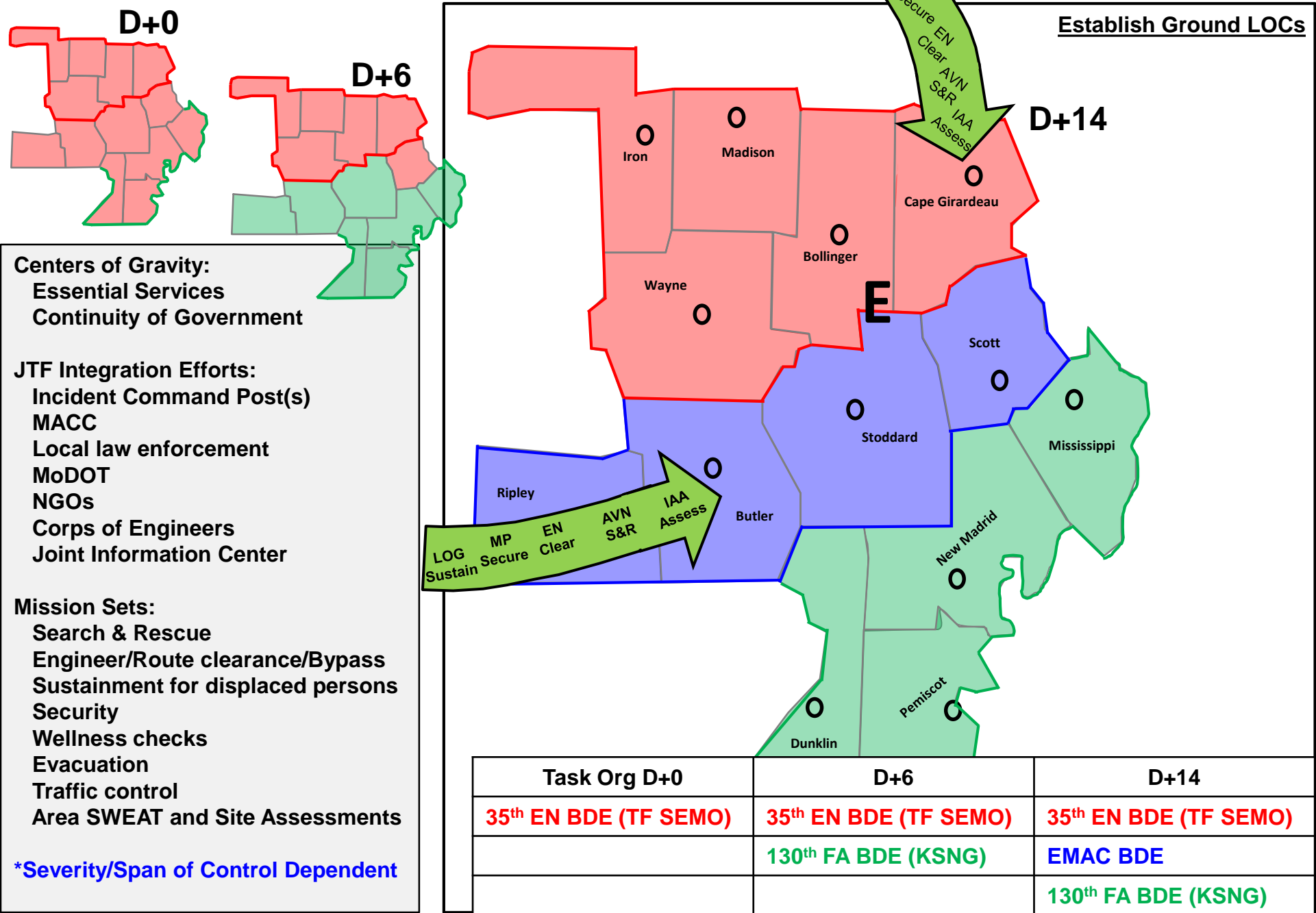
D+0	D+14
5 GEO TFs	8 GEO TFs (3x EMAC)
6 FUNC TFs	6 FUNC TFs (4x EMAC)

- | | |
|--|--|
| <u>GEO Task Forces (5)</u> <ul style="list-style-type: none">- 110 MEB- 35 MP BDE- 35 EN BDE- 131 BW ~ (EMAC)- 139 AW ~ (EMAC) | <u>FUNC Task Forces (6)</u> <ul style="list-style-type: none">- TF JRSOI (140 RTI)- TF AVN (1107 AVN Group ~ (EMAC)- TF Sustainment (Initially 70 TC ~ (EMAC)- TF Engineer (Initially 35 EN BDE ~ (EMAC)- TF CBRN (EMAC)- TF MED (MO Med Det) |
|--|--|



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SEMO CONOP

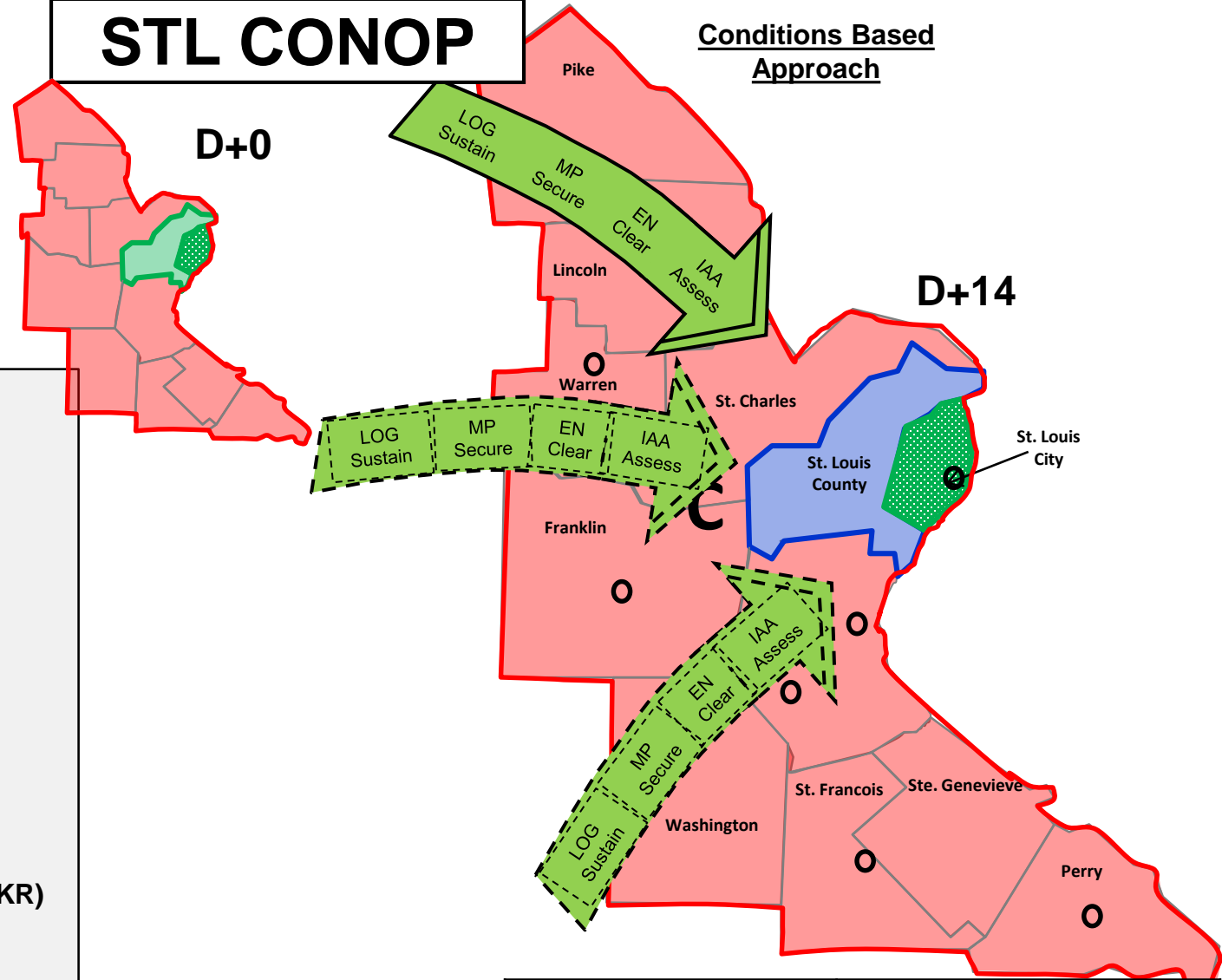




STL CONOP

Conditions Based
Approach

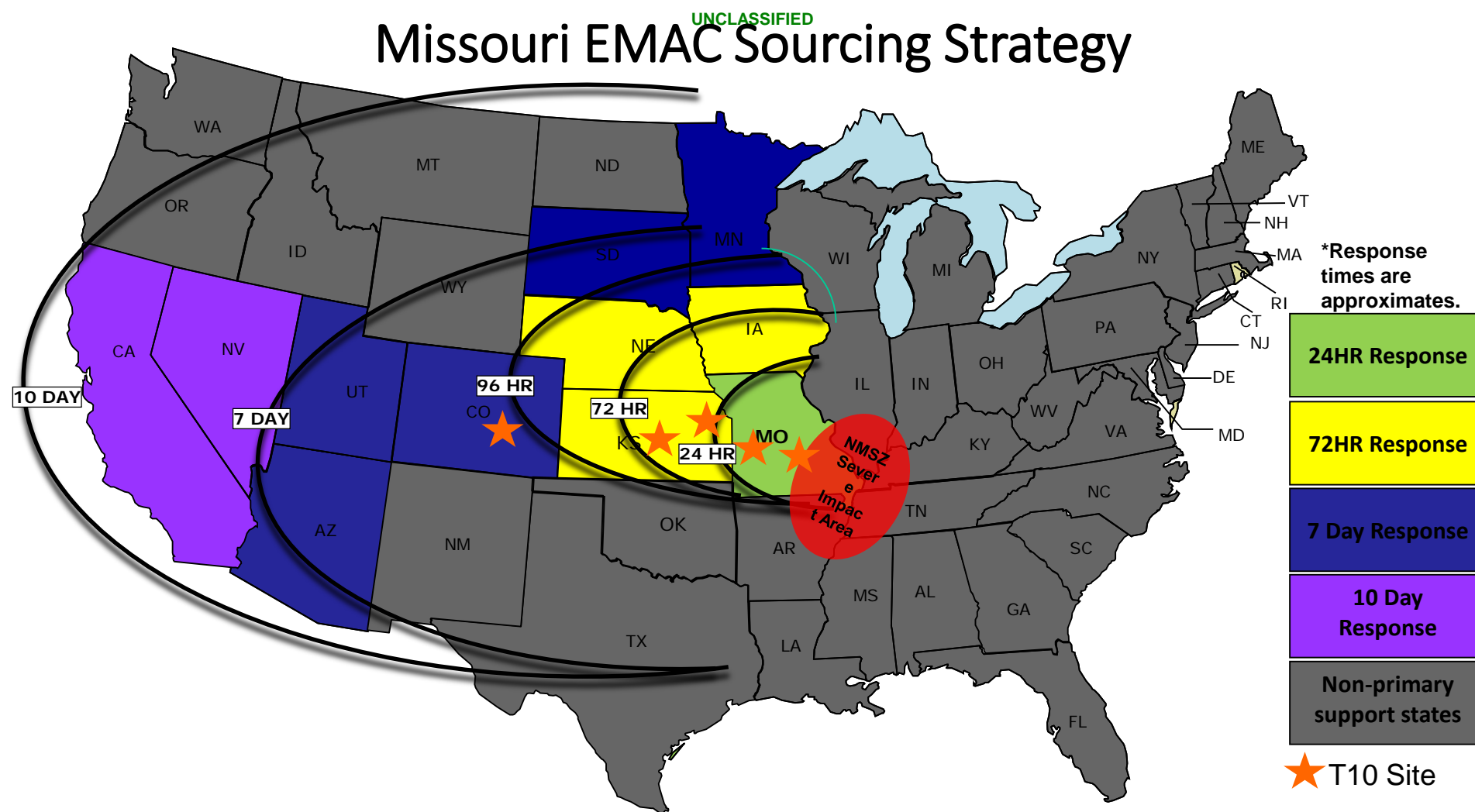
- Centers of Gravity:**
Essential services
Continuity of Government
- JTF Integration Efforts:**
Incident Command Post(s)
MACC
Local law enforcement
NGOs
Corps of Engineers
Joint Information Center
- Mission Sets:**
Logistics/Commodities
Engineer/Route clearance
Law enforcement/Security (CI/KR)
Wellness checks
Evacuation
Traffic control
- *Severity/Span of Control Dependent*



Task Org D+0	D+14
35 th MP BDE (TF STL)	35 th MP BDE (TF STL)
110 th MEB (TF East)	110 th MEB (TF STL CNTY)
	EMAC BDE



Missouri EMAC Sourcing Strategy



Up to ~ 22,000 Title 32 National Guard Soldiers and Airmen could potentially be EMAC'd to Missouri in the event of a catastrophic NMSZ earthquake (geographically deconflicted across the nation)

To mitigate the 7-10 day full T32 response, MONG will request temporary T10 support from local Army and Air Force bases (and the Federal Reserve)



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Title 10 (Active Duty and Federal Reserve) Assistance Requirements

Active Duty Army, Navy, Marines, Air Force & Federal Reserves
Pre-scripted Mission Assignments (NMSZ Response)

- Civil Affairs Units
- Multirole Bridging Companies, Bridging
- General Engineering Units (Horizontal and Route Clearance)
- Air Medical Evacuation
- Medical Logistics & Veterinary Medicine Assistance
- Rotary Wing Aircraft Units (CH-47 and UH-60)
- Water Production/Purification Units
- Port Assessments & Dive Teams
- Airport Assessments and Repair
- Civil Engineer Assessments of LOCs, CI/KR, and Repair
- Quartermaster Units

MONG and National Guard have gaps during NMSZ in these areas

Title 10 (Active Component and Federal Reserve) will augment as well Defense Coordinating Officer has ~ 40 prescribed Mission Assignment Tasking Orders (MATOs) to meet the gaps identified above

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MONG Sustainment

- This plan specifically covers T32 military self sustainment
- T10 forces will do the same
- Civil Authorities don't need to plan resources to support military responders
- Forward sustainment assets are available for SEMA/FEMA/local civil authority tasking (when/as requested), to ultimately care for the impacted citizens

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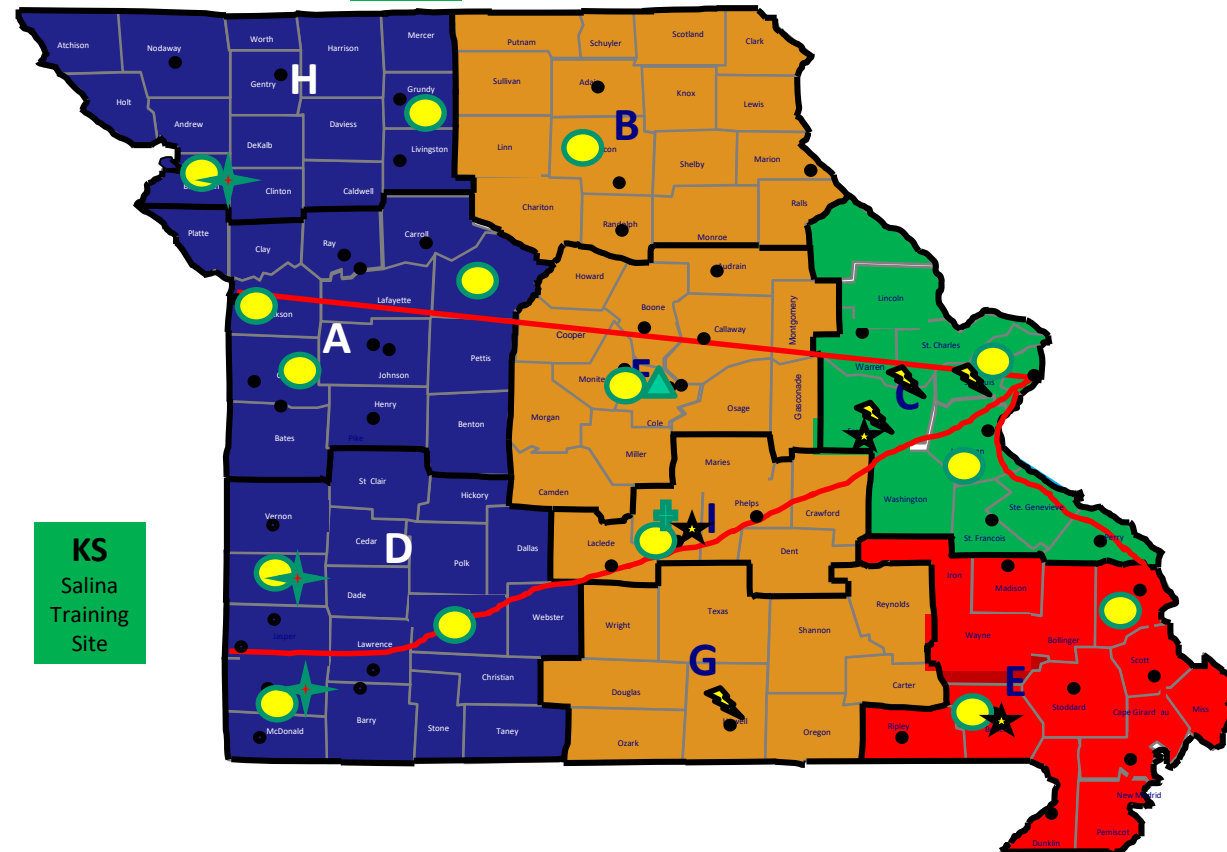


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SEMA and MONG Resource Map

NE
Camp
Ashland

IA
Camp
Dodge



KS
Salina
Training
Site

LEGEND

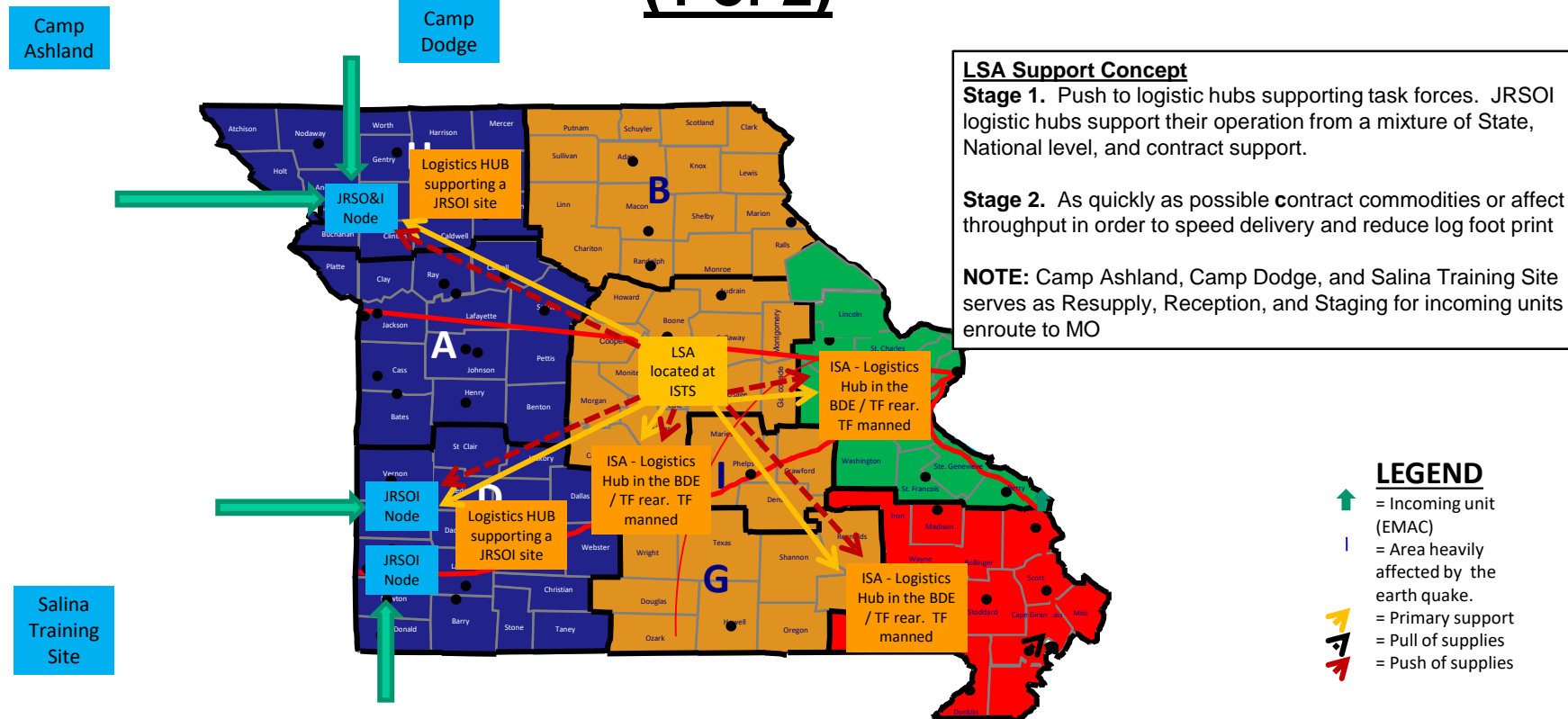
- = Logistic Support Area (LSA - MONG)
- = Intermediate Staging Area (ISA - MONG)
- = Joint Staging Area (JSA - SEMA).
- = Incident Support Base (ISB - SEMA)
- = Joint Reception Staging Onward Movement and Integration (JRSO&I site - MONG)
- = Staging area (MONG, outside of the State)
- = Field Maintenance Site (FMS - MONG)

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Distribution Concept (Push-Pull)

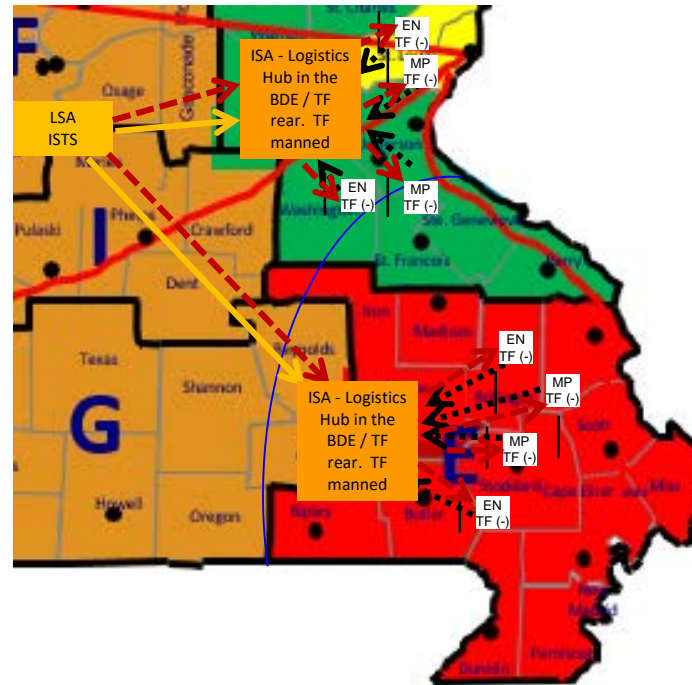
(1 of 2)





Distribution Concept (Push-Pull)

(2 of 2)








LSA Support Concept

Stage 1. Push to Brigade Support Areas (BSA) logistic hubs supporting task forces. TFs are responsible to set up these hubs – the LSA TF is responsible to tailor the commodity packages and to transport coordinate the delivery of supplies.

Stage 2. It is the TF decision on how best to deliver commodities within their AO (a push or pull of supplies). If needed the TF may request additional assets from the LSA such as PLS which may have a further operational reach in rough terrain.

Stage 3. As quickly as possible contract commodities or affect throughput in order to speed delivery and reduce log foot print.

LEGEND

-  = Incoming unit (EMAC)
-  = Area heavily affected by the earthquake.
-  = Primary support
-  = Pull of supplies
-  = Push of supplies



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LSA Establishment ISTS, Jefferson City, MO



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Pertinent Equipment Capabilities Logistics Centric

Pertinent equipment capabilities:

- PLS (Palletized Load System)
- TWPS (Tactical Water Purification System); 3,000GPH
- Engineer Horizontal equipment (loaders)
- HWWVS
- Troop transport (GSA & Busses)
- Air assets
- 1438th Bridge boats
- Fuel Tankers (to support within)



These items may traverse the last tactical mile or sustain populations in the last tactical mile

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Response Specifics and Local Actions

- Initial Response: at 6.0 or higher, all MONG (statewide) will immediately report to armories and begin preparing (- EMTs, firefighters, police, key governmental officials, and those immediately impacted)
- Flexibility and scalability (we don't know what we don't know across all agencies, how bad it will be, or exactly where) – Plan for the worst, prepare for the worst, and remain flexible (aftershocks, aftershocks, aftershocks)
- All agencies are considering all sources and avenues of approach (air, ground, rail, water [probably a combination of all]) to provide assistance to impacted citizens as quickly and effectively as possible
- Listen to local radio, internet, TV, etc. for critical information and key points
- Follow guidance and obey the law

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Questions?

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