



GIS and National Incident Management System Policy

Carla Boyce, FEMA

Changing Outcomes



FEMA



OklahomaCityBombing.com



JD Cash



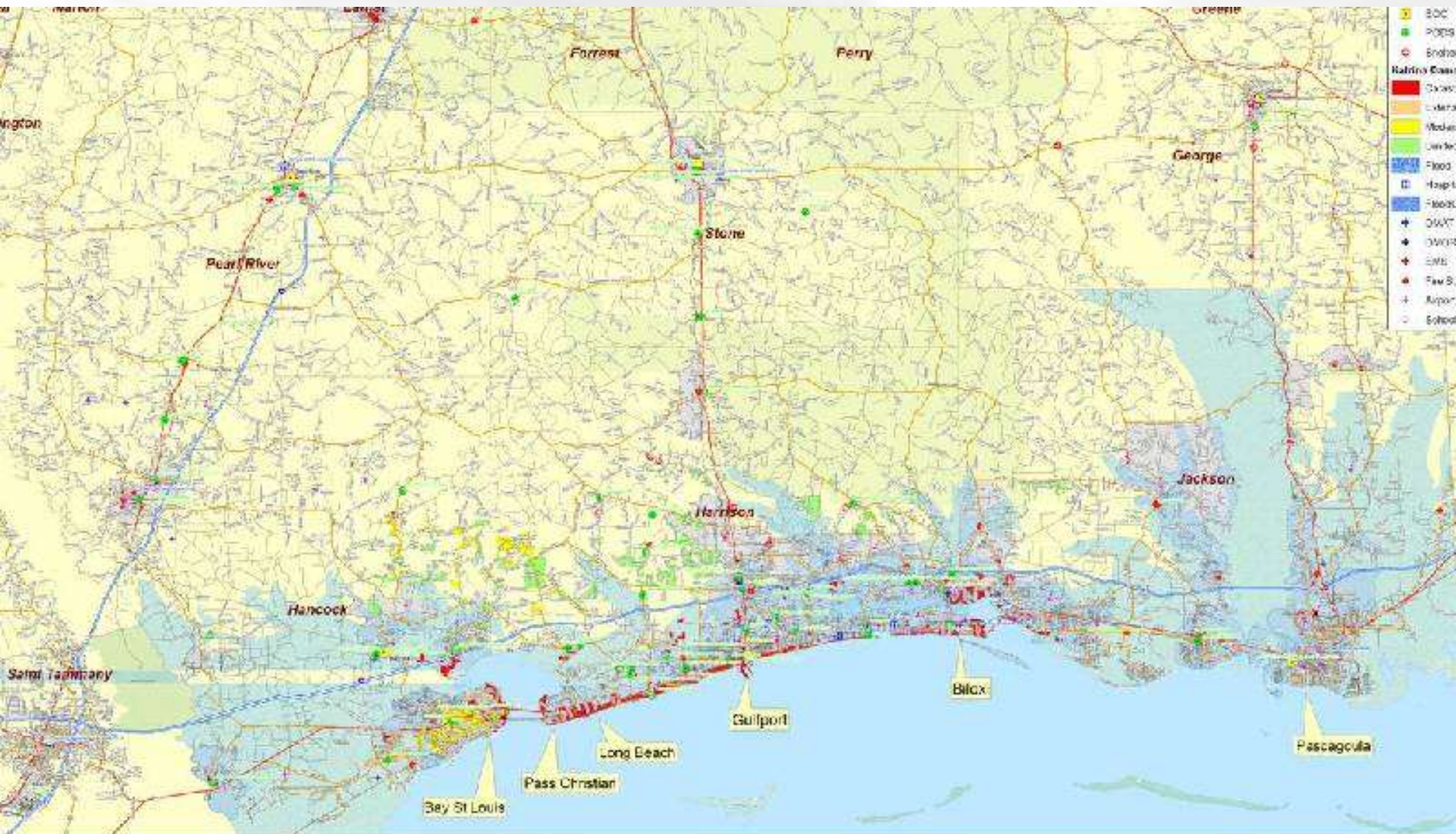
2004 Florida Hurricane Season



FEMA



2005 Hurricane Katrina (Mutual Aid)



| | | | | |
|--|---|---|---|--|
| | <p>Department of Community Affairs Division of Emergency Management</p> | <p>Emergency and Relief Facilities Southern Mississippi</p> | <p>NOTE: Based on Mutual Aid Request 9/10/05 11:14 AM EDT</p> | <p>Created by: Robert Rowland BOC GIS Date created: September 12, 2005 File Name: V:\GIS\2005\Hurricane\Map\Map-10-10-05.mxd</p> |
|--|---|---|---|--|

Recurring Theme



- Haiti
- Japan



- Joplin
- Irene

Implementing A Common Frame of Spatial Reference For Homeland Security, Emergency/Disaster Response, Recovery, and Mitigation The U.S. National Grid (USNG)

From the Hurricane Andrew GIS Coordinator's after-action report to the Center for Army Lessons Learned, 10/06/92

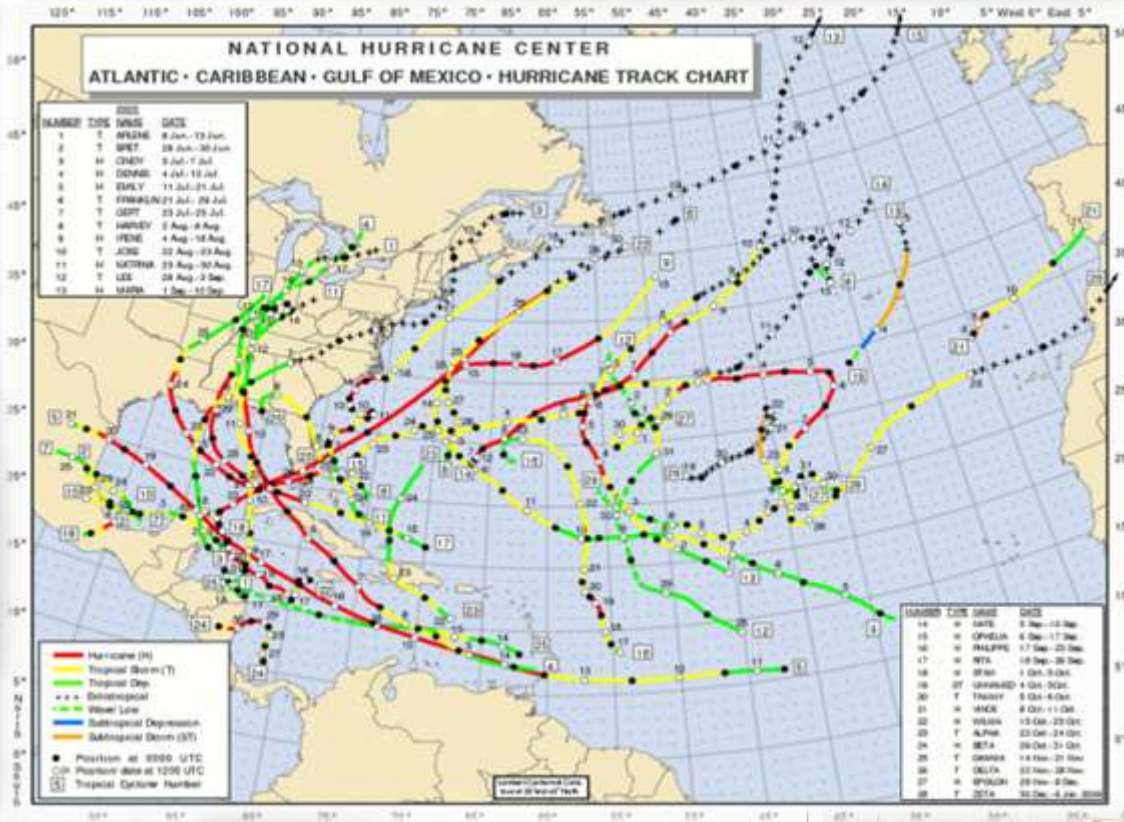
"General information type maps with no UTM grid, in a disaster environment without street signs, few recognizable landmarks with no response specific data were very nearly useless... An actual accounting of all the requests for emergency assistance that went without, or the delay encountered by the countless movements of personnel, food, and equipment will likely never accurately be tallied...."

(USNG is based upon UTM.)

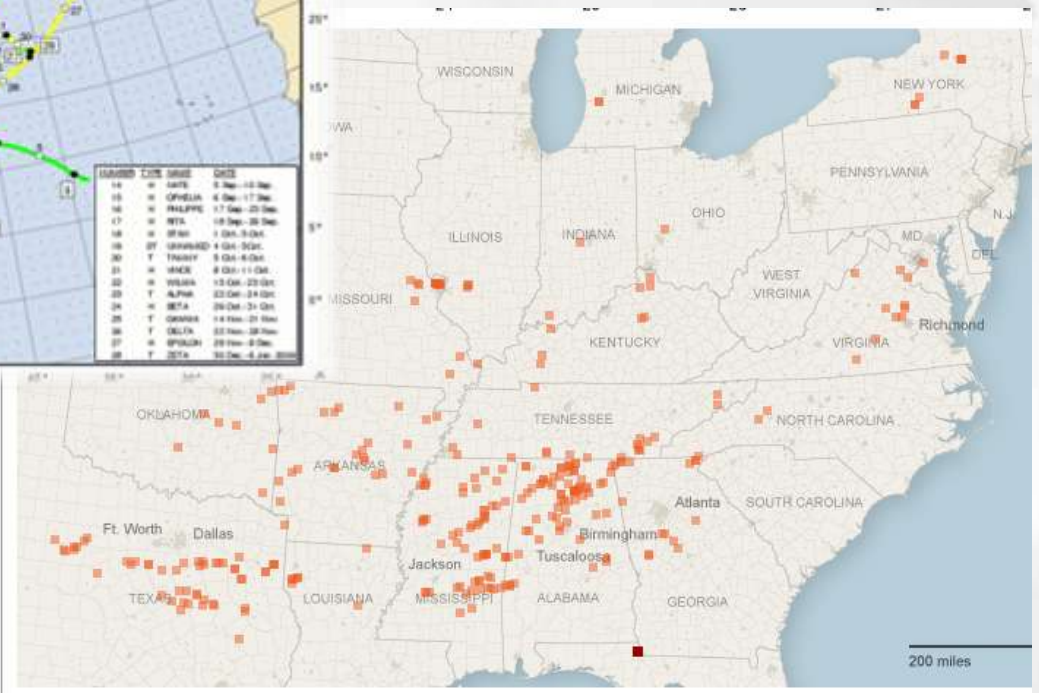
The Same (Map) Sheet of Music: Following the troubled 1992 Hurricane Andrew response, the U.S. Military in its 1993 "capstone doctrine" for domestic support operations (FM 100-19) termed the

Nearly every after action report, post any large scale or regional disaster clearly indicates ...

Common Language: Actionable Information



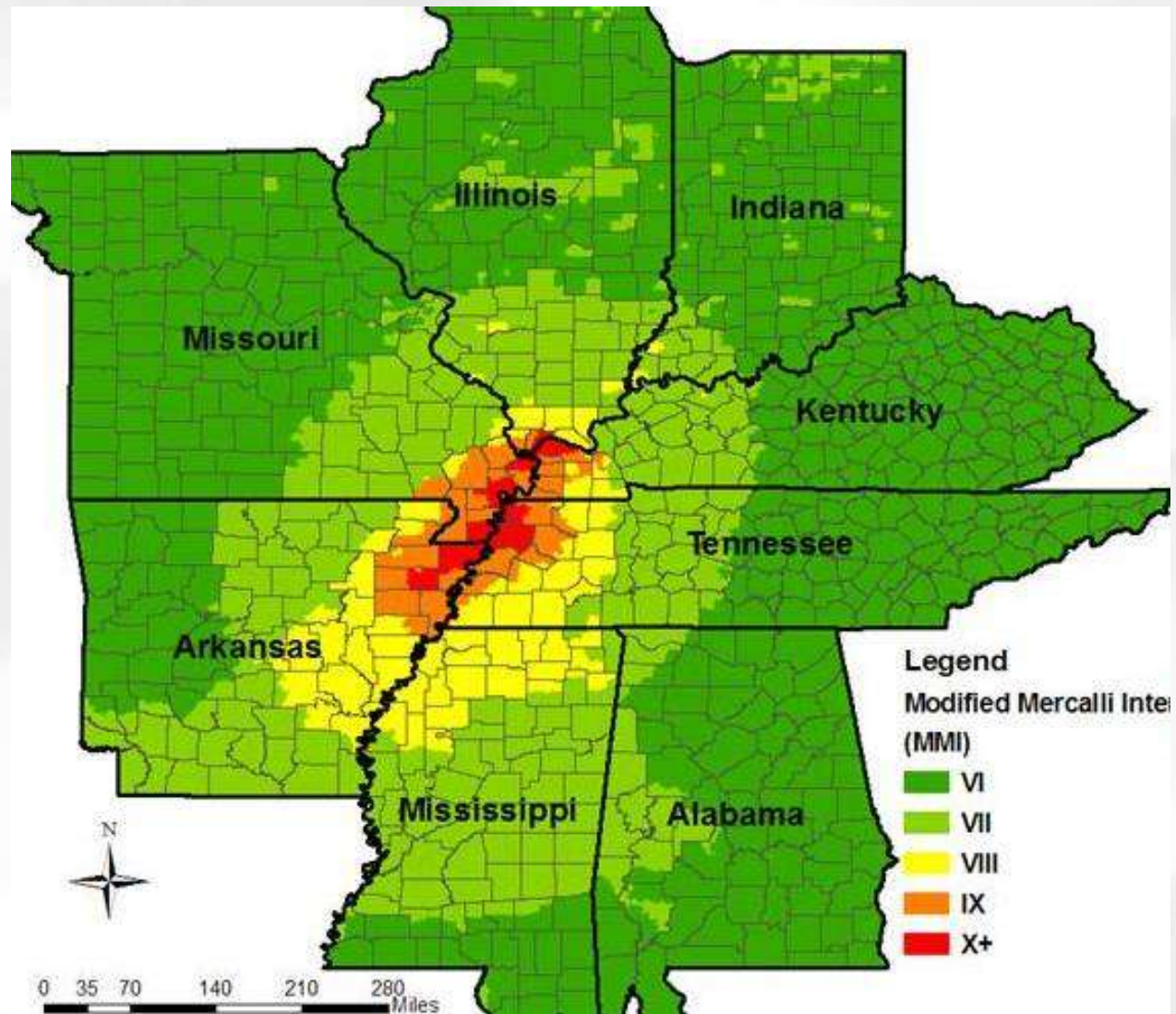
- Situational Awareness
- Unified Operations



Not if...When

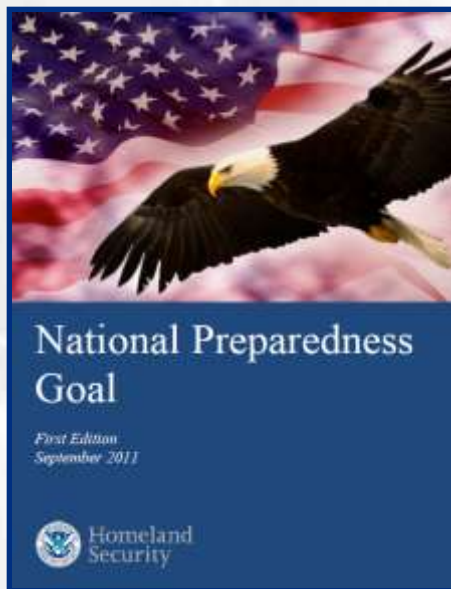


- 8 States directly impacted
- 4 FEMA Regions
- ~12 Million ppl
- Mutual aid will be necessary from across the country



■ National Preparedness Goal (Secure & Resilient Nation)

– 31 Core Capabilities



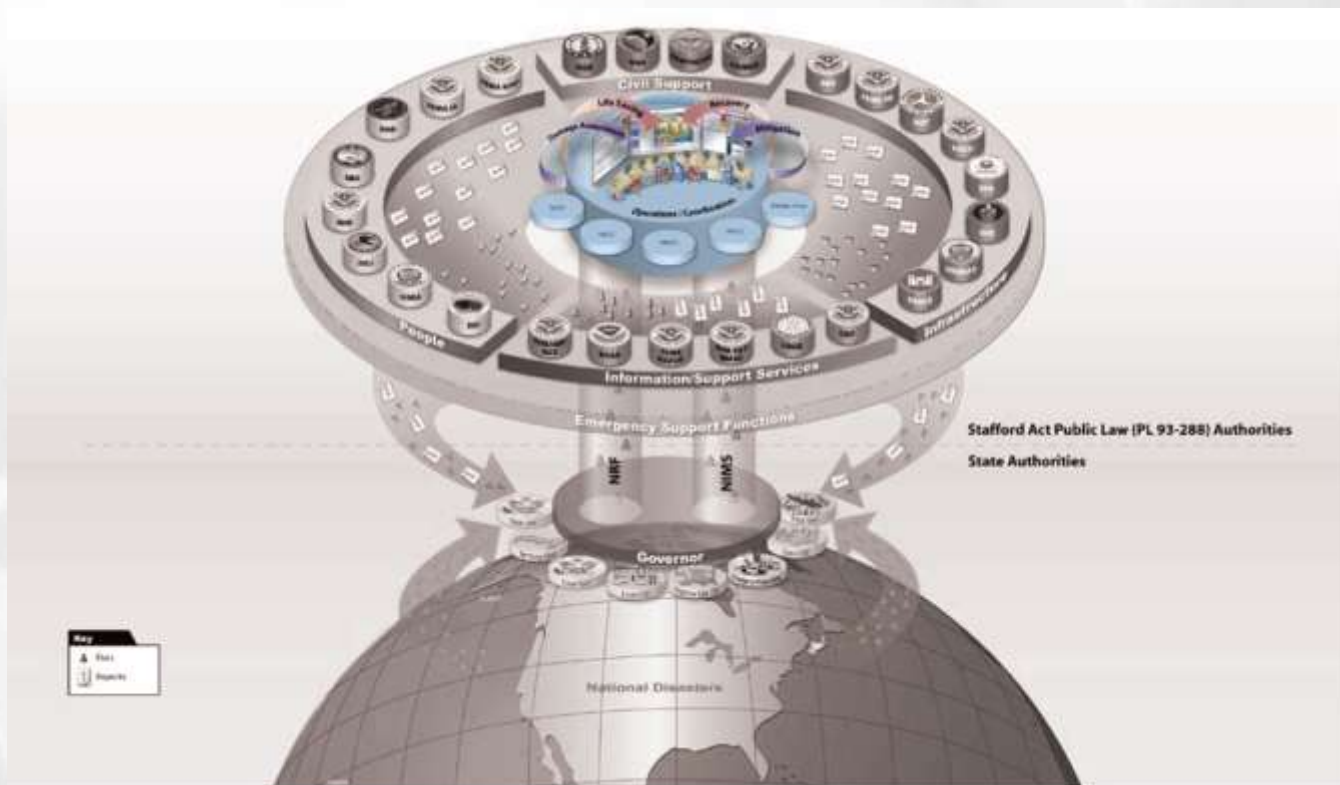
| Prevention | Protection | Mitigation | Response | Recovery |
|--|--|--|---|--|
| Planning | | | | |
| Public Information and Warning | | | | |
| Operational Coordination | | | | |
| Forensics and Attribution Intelligence and Information Sharing Interdiction and Disruption Screening, Search, and Detection | Access Control and Identity Verification Cybersecurity Intelligence and Information Sharing Interdiction and Disruption Physical Protective Measures Risk Management Protection Programs and Activities Screening, Search, and Detection Supply Chain Integrity and Security | Community Resilience Long-term Vulnerability Reduction Risk and Disaster Resilience Assessment and Hazard Identification | Critical Transportation Environmental Response/Health and Safety Fatality Management Services Infrastructure Systems Mass Care Services Mass Search and Rescue Operations On-scene Security and Protection Operational Communications Public and Private Services and Resources Public Health and Medical Services Situational Assessment | Economic Recovery Health and Social Services Housing Infrastructure Systems Natural and Cultural Resources |

GIS - GIS - GIS

Core Capabilities Operational Coordination



“Establish and maintain a unified and coordinated operational structure and process” *supporting all mission areas*



National Incident Management System



FEMA

What NIMS is:

A **comprehensive**, nationwide, **systematic** approach to Disaster Management

A set of preparedness concepts and principles for any hazard

Essential **principles** for a common operating picture and **interoperability** of communications and information management

Standardized procedures

Scalable, so it may be used for all incidents

A **dynamic** system that promotes ongoing management and maintenance

What NIMS is NOT:

A response plan

Only the Incident Command System or an organization chart

A communications plan

Only applicable to certain emergency management incident response personnel

Only used during large-scale incidents

A static system



- **National Incident Management System
(Doctrine)**

- **National Preparedness System
(Strategy)**
 - Threat/Hazard Identification & Risk Assessment
(Guidance)

 - National Planning System
 - National Frameworks
(Doctrine & Strategy)

 - Federal Interagency Operations Plans
(Strategy & Tactics)

Thank You



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Questions?

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