

COMMUNITY LIFELINES IMPLEMENTATION

*Comprehensive information for understanding & implementing
lifelines during incident response*



Version 2.0 November
2019

Section I: Lifelines Overview

Incorporating Community Lifelines into Response

FEMA developed the community lifelines construct to increase effectiveness in disaster operations and better position to respond to catastrophic incidents. The construct allows emergency managers to:

- Characterize the incident and identify the root causes of priority issue areas
- Distinguish the highest priorities and most complex issues from other incident information

WHY A LIFELINES CONSTRUCT?

- Lifelines provide an outcome-based, survivor-centric frame of reference that assists responders with the following:
 - Rapidly determining the scale and complexity of a disaster
 - Identifying the severity, root causes, and interdependencies of impacts to basic, critical lifesaving and life-sustaining services within impacted areas
 - Developing operational priorities and objectives that focus response efforts on the delivery of these services by the most effective means available
 - Communicating disaster-related information across all levels of public, private, and non-profit sectors using a commonly understood, plain language lexicon
 - Guiding response operations to support and facilitate integration across mission areas

Toolkit 2.0

The 4th Edition of the *National Response Framework* formalizes the lifelines construct in national level response doctrine.

Much of this doctrine, directly or by reference, is required for use in planning & response under Iowa law and administrative rule.

- Toolkit Version 2.0 reflects refinements and improvements to the lifelines construct based on stakeholder feedback and lessons learned from incidents and exercises
- Major Changes:
 - Refined components and subcomponents
 - Developed stabilization target examples
 - Revised and expanded planning content, consistent with Regional All-Hazards Plan revisions

Lifelines, Core Capabilities, ESFs

The interrelationship of Emergency Support Functions (ESF), Core Capabilities, and lifelines can be thought of in terms of means, ways, and ends.

- **Means:** ESFs and other organizing bodies—the means—are the way we organize across departments and agencies, community organizations, and industries to enhance coordination and integration to deliver the Response Core Capabilities.
- **Ways:** Response Core Capabilities describe the grouping of response actions—the ways—that can be taken to stabilize and re-establish the lifelines. EOC's can use Lines of Effort (LOE) to operationalize the Core Capabilities (the ways) for response and recovery planning and operations.
- **Ends:** Lifelines describe the critical services within a community that must be stabilized or re-established—the ends—to alleviate threats to life and property.

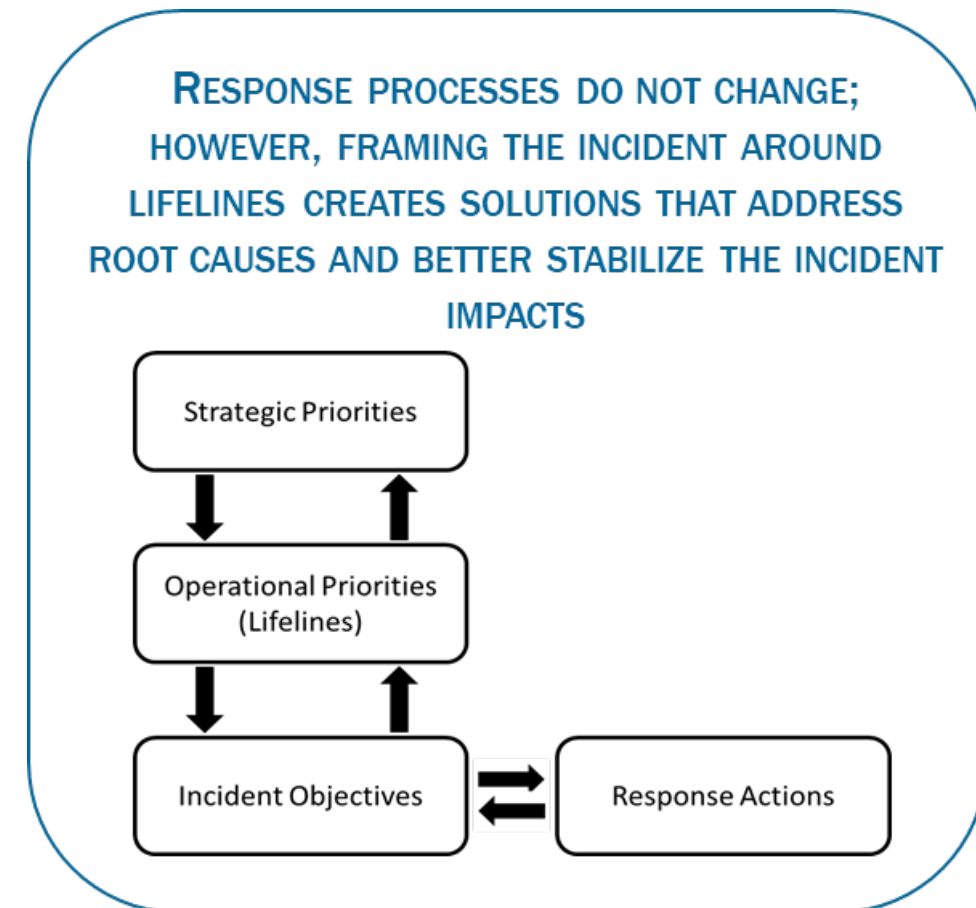
Community Lifeline Implementation

Community lifelines reframe incident information to provide decision-makers with impact statements and summarize the root causes of disruptions to lifeline services. This construct maximizes the effectiveness of federally supported, state managed, and locally executed response.

- Incorporating the lifelines primarily impacts how incident information is framed, organized, and reported during response
- Emergency Support Functions (ESF), Core Capabilities, response operations, procedures, and key elements of doctrine remain fundamentally the same

Some changes include:

- How we understand, prioritize, and communicate incident impacts
- The structure and format of decision-making support products (e.g., briefings, forms)
- Planning for incident impacts and stabilization both prior to and during incidents



Community Lifelines Defined

A CONSTRUCT FOR OBJECTIVES-BASED STABILIZATION EFFORTS

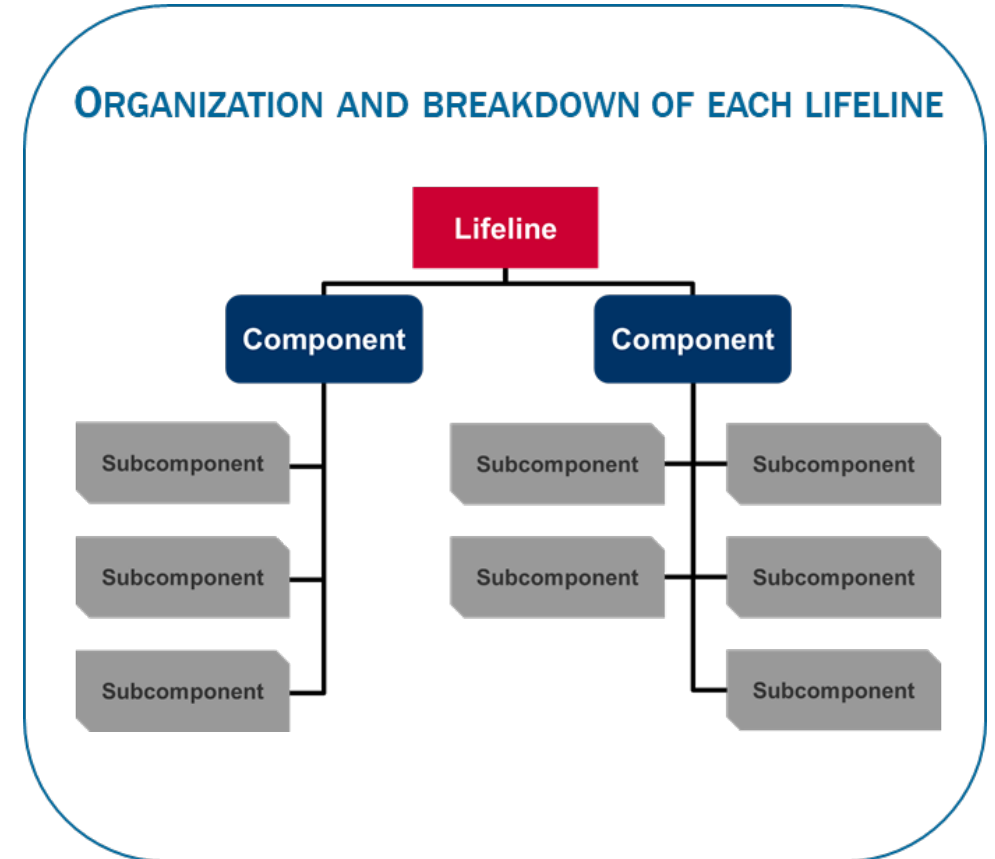
A lifeline enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security.



- Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function
- Lifelines are the integrated network of assets, services, and capabilities that are used day-to-day to support the recurring needs of the community
- When disrupted, decisive intervention (e.g., rapid service re-establishment or employment of contingency response solutions) is required to stabilize the incident

Deconstructing Community Lifelines

- Each lifeline is composed of multiple components and subcomponents that help define the services that make up that lifeline
 - Components represent the general scope of services for a lifeline
 - The components are further divided into relevant subcomponents that provide a granular level of enabling functions for the delivery of services to a community
- Lifelines and components are fixed, but the subcomponents may be adjusted as necessary

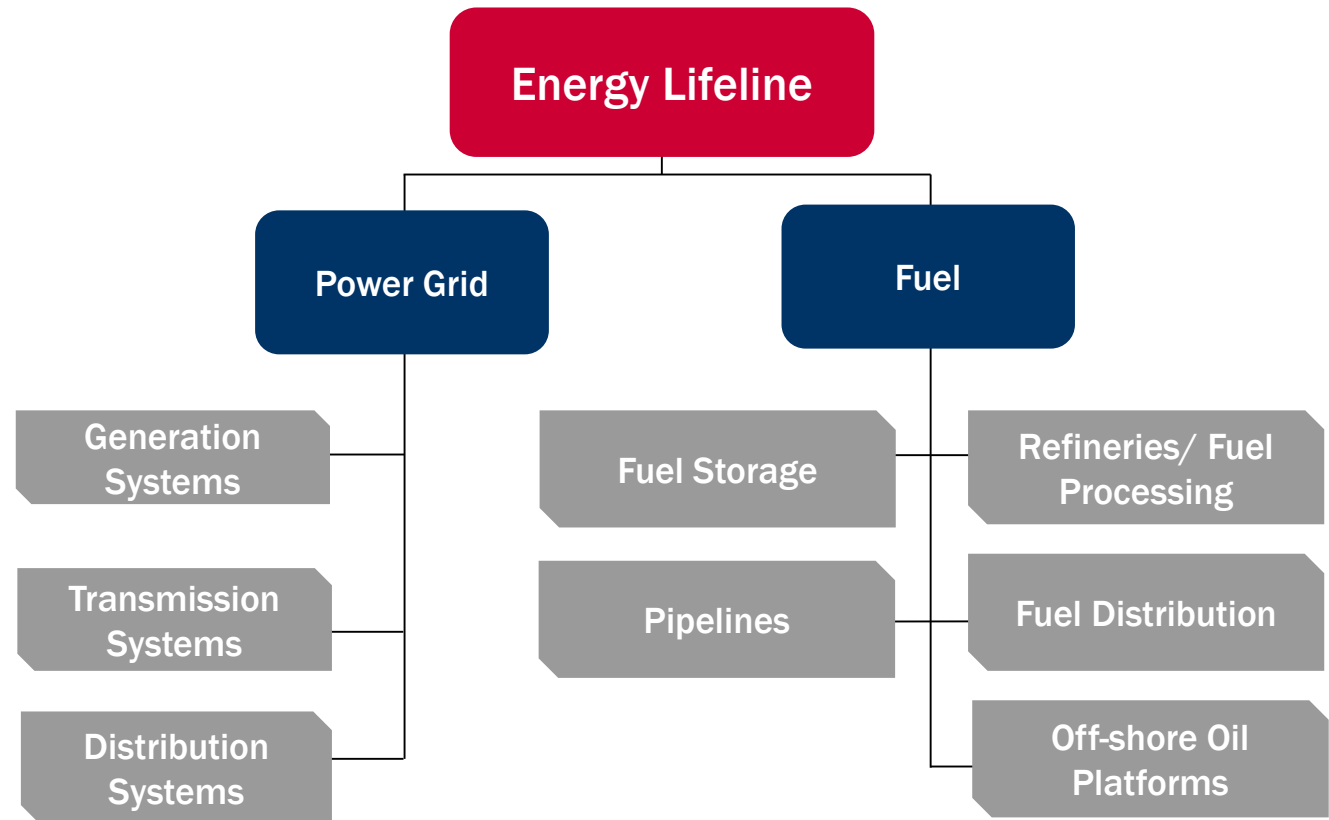


Note: Not every incident will impact all of the lifelines or components

Community Lifeline Construct

Example components and subcomponents: Energy Lifeline

- The graphic provides an example breakdown of the Energy Lifeline into its relevant components and subcomponents
- The subcomponents define each component and are subject to change depending on incident circumstances



Community Lifeline Components



Multiple components and subcomponents establish the parameters of the lifeline; component-level assessment is required to determine the condition of each lifeline.

1. Safety and Security

- Law Enforcement/Security
- Fire Service
- Search and Rescue
- Government Service
- Community Safety

2. Food, Water, Shelter

- Food
- Water
- Shelter
- Agriculture

3. Health and Medical

- Medical Care
- Public Health
- Patient Movement
- Medical Supply Chain
- Fatality Management

4. Energy

- Power Grid
- Fuel

5. Communications

- Infrastructure
- Responder Communications
- Alerts, Warnings, and Messages
- Finance
- 911 and Dispatch

6. Transportation

- Highway/Roadway/Motor Vehicle
- Mass Transit
- Railway
- Aviation
- Maritime

7. Hazardous Material

- Facilities
- HAZMAT, Pollutants, Contaminants

ASSESSMENT

Status	<i>“What?”</i>
Impact	<i>“So What?”</i>
Actions	<i>“Now What?”</i>
Limiting Factors	<i>“What’s the Gap?”</i>
ETA to Green	<i>“When?”</i>



Safety and Security

COMPONENTS AND SUBCOMPONENTS

Law Enforcement/Security

- Police Stations
- Law Enforcement
- Site Security
- Correctional Facilities

Fire Service

- Fire Stations
- Firefighting Resources

Search and Rescue

- Local Search and Rescue

Government Service

- Emergency Operation Centers
- Essential Government Functions
- Government Offices
- Schools
- Public Records
- Historic/Cultural Resources

Community Safety

- Flood Control
- Other Hazards
- Protective Actions



Food, Water, Shelter

COMPONENTS AND SUBCOMPONENTS

Food

- Commercial Food Distribution
- Commercial Food Supply Chain
- Food Distribution Programs (e.g., Food Banks)

Water

- Drinking Water Utilities (intake, treatment, storage, and distribution)
- Wastewater Systems
- Commercial Water Supply Chain

Shelter

- Housing (e.g., homes, shelters)
- Commercial Facilities (e.g., hotels)

Agriculture

- Animals and Agriculture



Health and Medical

COMPONENTS AND SUBCOMPONENTS

Medical Care

- Hospitals
- Dialysis
- Pharmacies
- Long-Term Care Facilities
- VA Health System
- Veterinary Services
- Home Care

Patient Movement

- Emergency Medical Services

Fatality Management

- Mortuary and Post-Mortuary Services

Public Health

- Epidemiological Surveillance
- Laboratory
- Clinical Guidance
- Assessment/Interventions/Treatments
- Human Services
- Behavioral Health

Medical Supply Chain

- Blood/Blood Products
- Manufacturing
 - Pharmaceutical
 - Device
 - Medical Gases
- Distribution
- Critical Clinical Research
- Sterilization
- Raw Materials



Energy

COMPONENTS AND SUBCOMPONENTS

Power Grid

- Generation Systems
- Transmission Systems
- Distribution Systems

Fuel

- Refineries/ Fuel Processing
- Fuel Storage
- Pipelines
- Fuel Distribution (e.g., gas stations, fuel points)
- Off-shore Oil Platforms



Communications

COMPONENTS AND SUBCOMPONENTS

Infrastructure

- Wireless
- Cable Systems and Wireline
- Broadcast (TV and Radio)
- Satellite
- Data Centers/Internet

Alerts, Warnings, and Messages

- Local Alert/Warning Ability
- Access to IPAWS (WEA, EAS, NWR)
- NAWAS Terminals

911 & Dispatch

- Public Safety Answering Points
- Dispatch

Responder Communications

- LMR Networks

Finance

- Banking Services
- Electronic Payment Processing



Transportation

COMPONENTS AND SUBCOMPONENTS

Highway/Roadway/Motor Vehicle

- Roads
- Bridges

Mass Transit

- Bus
- Rail
- Ferry

Railway

- Freight
- Passenger

Aviation

- Commercial (e.g. cargo/passenger)
- General
- Military

Maritime

- Waterways
- Ports and Port Facilities



Hazardous Materials

COMPONENTS AND SUBCOMPONENTS

Facilities

- Oil/HAZMAT Facilities (e.g. chemical, nuclear)
- Oil/HAZMAT/Toxic Incidents from Facilities

HAZMAT, Pollutants, Contaminants

- Oil/HAZMAT/Toxic Incidents from Non-Fixed Facilities
- Radiological or Nuclear Incidents

Incident Stabilization

The lifelines construct is used to focus response actions on incident stabilization; thus the expected objective is to stabilize all lifelines.

- **Stabilization** occurs when basic lifeline services are provided to survivors, either by **rapid re-establishment of lifeline services** or through the employment of a **contingency response solution**
 - Stabilization may occur through the employment of **contingency response solutions** that are intended to restore service, but only for a very limited duration or through a temporary measure
 - An example may include emergency measures to clear debris from a roadway or the provision of mobile communications services or the utilization of a "tent" hospital to provide medical care for a community
 - May be necessary to stabilize lifelines until temporary fixes to infrastructure are completed, and may require sustained resources and continuous evaluation
 - **Re-establishment of lifeline services**, a longer-term stabilization solution, implies the normal lifeline service providers are available within the community through emergency infrastructure repairs or other means, alleviating the requirement for contingency response solutions.
 - Examples may include emergency repairs, installation of generators to run a critical facility without grid power, or resuming the commercial supply chain to a community

Lifeline Stabilization Targets (1 of 2)

Stabilization Targets for each lifeline are developed collaboratively with key stakeholders including local, state, regional, and national stakeholders.

Stabilization Targets should reflect goals defined in deliberate planning and should be validated and refined throughout the incident.

- **Example stabilization targets:**
 - Safety and Security Lifeline: Threats to life safety are no longer a concern for all response personnel and impacted communities. Government essential functions, including executive leadership, are operational. Sufficient search and rescue assets are on-scene to assist all survivors. Sufficient fire resources are available to support fire suppression efforts.
 - Food, Water, Shelter Lifeline: All survivors, their pets, and service animals have access to food, water, and sanitation. Sheltering (including reception, capacity, and wrap-around services) is supporting the displaced population. Sufficient resources are in place to sustain agricultural requirements.
 - Health and Medical Lifeline: All survivors, their pets, and service animals have access to required medical and veterinary care. Emergency medical systems are capable of managing patient movement requirement. Public health services are accessible to all survivors. Sufficient temporary fatality management support is in place to meet processing demand. Medical supply chain capable of adequately resupplying medical care providers.

Lifeline Stabilization Targets (2 of 2)

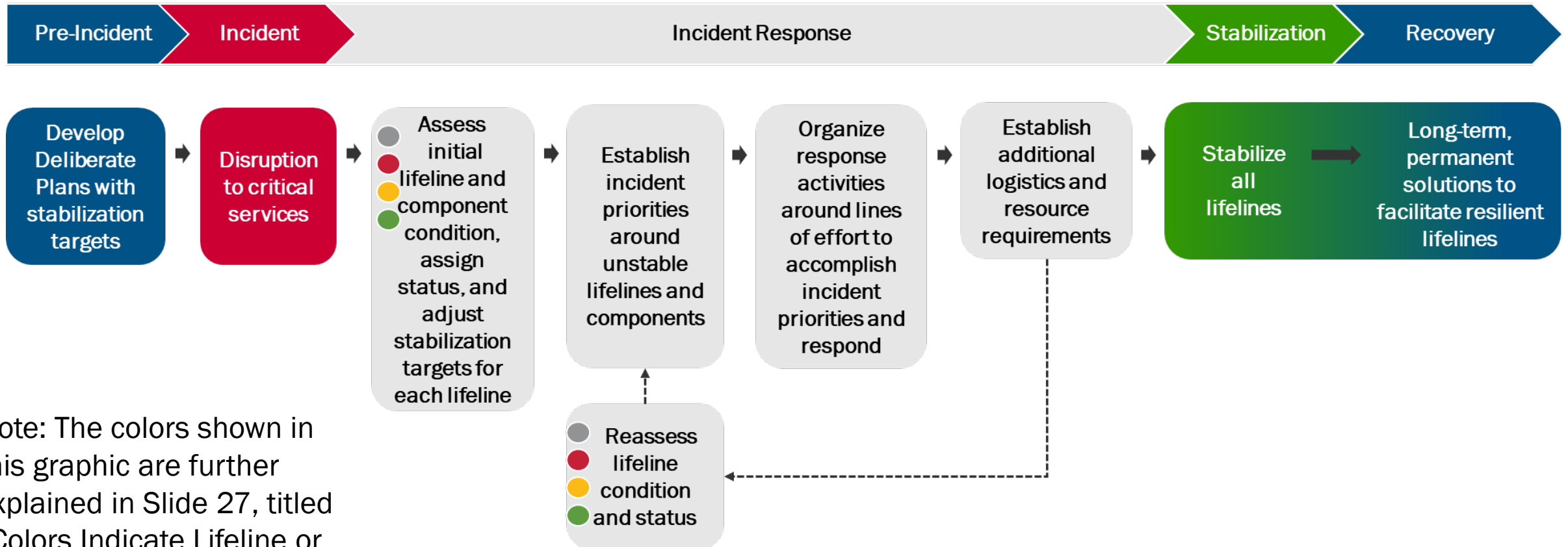
Stabilization Targets for each lifeline are developed collaboratively with key stakeholders including local, state, regional, and national stakeholders.

Stabilization targets should reflect goals defined in deliberate planning and should be validated and refined throughout the incident.

- **Example stabilization targets:**
 - Energy Lifeline: Generators are providing temporary emergency power at critical facilities necessary to stabilize other lifelines. Fuel distribution is available for responders. Sufficient fuel distribution is available for survivors, including to support individuals dependent on power for life-sustaining medical care.
 - Communications Lifeline: Survivors have access to commercial communications infrastructure to contact or be contacted by emergency services. Land mobile radio communications network is operational. Public safety answering points are available to the public. Survivors have access to financial services.
 - Transportation Lifeline: Multimodal routes (air, rail, road, port) are clear of debris and accessible by normal or alternate means.
 - Hazardous Material Lifeline: All contaminated areas are identified and secure.

Lifelines Drive Response

Incident responders assess lifeline condition, establish priorities, organize lines of effort, and respond until the lifelines are stabilized



Note: The colors shown in this graphic are further explained in Slide 27, titled “Colors Indicate Lifeline or Component Condition”

Determining Lifeline Condition

The condition of each lifeline depends on the capability of the underlying components, and is informed by situational awareness reports, impact assessments, and conversing with partners across the public, private, and non-profit sectors

Applying the following questions and understanding the incident is critical in determining the condition of a lifeline and components:

- Did the incident disrupt services to survivors provided by component capabilities?
- What is the extent of the disruption and impact on response and survivors?
- Has a solution to the disruption been identified?
- Has that solution been converted into a plan of action?
- Has that plan of action been resourced?
- Are there limiting factors that are preventing stabilization? If so, to what extent are they limiting services? If not, how long to reach stabilization?
- Are there contingency response solutions in place? How long until emergency repairs are completed?
- When can permanent repairs begin?
- Did the incident create a surge demand exceeding component capabilities?

Analyzing Components


Lifeline components can be analyzed using six assessment categories that capture essential information for response decision-makers

Categories	Description
Component	Identify the component.
Status <i>(What?)</i>	Summarize the root cause(s) of disruption to lifelines services.
Impacts <i>(So What?)</i>	Explain the disaster impacts to specific communities, disaster survivors, and response operations. Detail how the survivor experience or response operation will improve if this component is stabilized. Specify the impacted areas and population totals.
Actions <i>(Now What?)</i>	Describe the actions that are being taken to stabilize and re-establish the disrupted services. Summarize the most critical actions being taken across the Whole Community.
Limiting Factors <i>(What's the Gap?)</i>	Express issues that are preventing services from being stabilized or re-established. Such issues can stem from another lifeline/component, resource shortfall, management, policy, etc.
Estimated Time to Status Change and Re-establishment Requirements <i>(When?)</i>	Provide current component condition or an estimated timeframe for when a change in condition is expected.

Example Component Analysis



Transportation

Categories	Description
Component	Mass Transit  Sub-component: Bus
Status	Bus services are unavailable due to road debris.
Impacts	100,000 survivors have no access to public transportation nor emergency support services.
Actions	Local jurisdictions are prioritizing route clearance to critical facilities, U.S. Army Corps of Engineers assigned to supplement state and local authorities with route clearance and debris removal efforts, modified mass transit schedules are being executed as roads become passable, micro transit being utilized on roads passable to smaller vehicles, but not buses, messaging of modified routes through numerous information/messaging platforms and outlets (radio, television, social media).
Limiting Factors	Full service will not resume until the routes are cleared and roads inspected.
Estimated Time to Status Change and Re-establishment Requirements	Full service estimated to resume in a week, with a modified service available as roads become clear.

Colors Indicate Lifeline or Component Condition

Unknown: Grey

- Indicates the extent of disruption and impacts to lifeline services is unknown (Unknown)

Unstable: Red

- Indicates lifeline services disrupted and no solution identified or in progress (Unstable, no solution in progress)

Stabilizing: Yellow

- Indicates lifeline services disrupted but solution in progress with estimated time to stabilization identified (Unstable, solution in progress)

Stable: Green

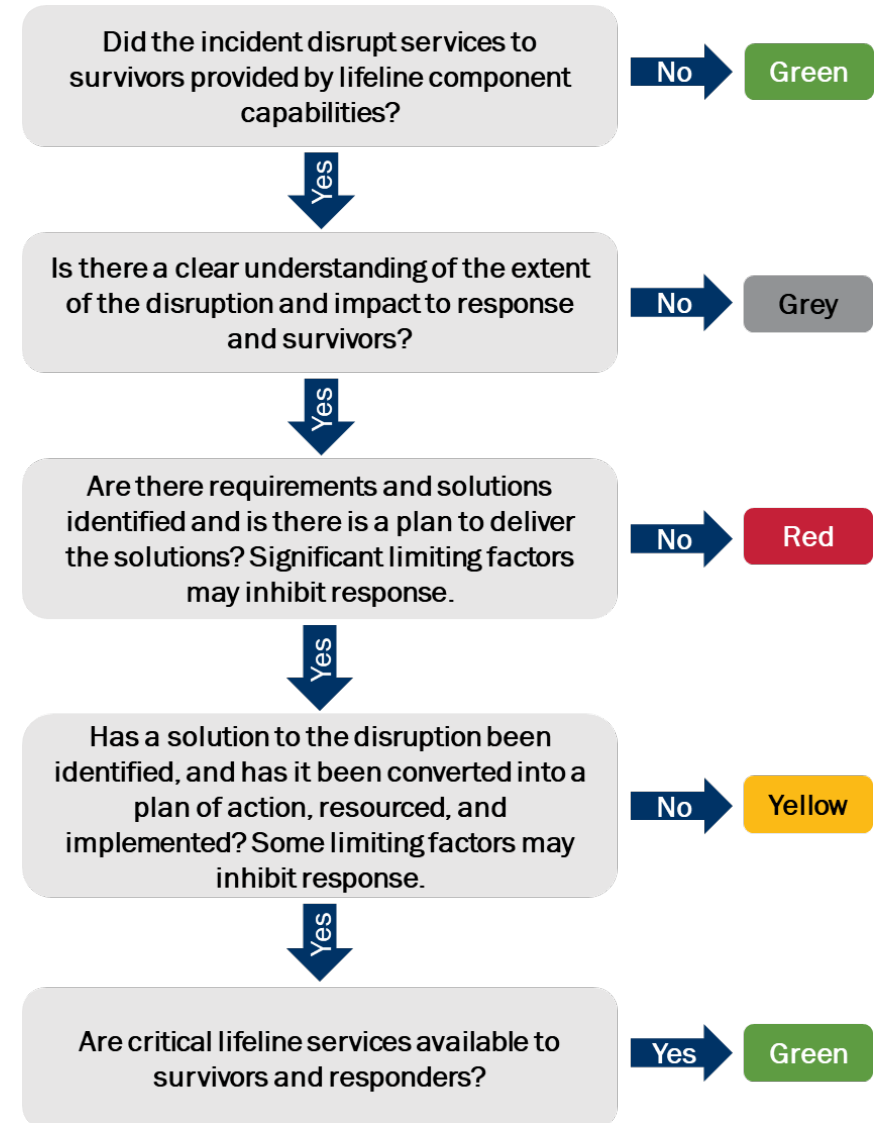
- Indicates lifeline services are stabilized, re-established, or not impacted (Stable)
- *Note: Green Components may still be severely impacted*

Administrative: Blue

- Blue does not indicate an operational status or condition; it is used for administrative purposes, such as presentations and briefings

Assigning a Condition

- Assess lifeline conditions as incident circumstances evolve and over the course of response operations
 - A color designation represents a snapshot in time for that response operational period
- Stabilization targets will provide the baseline against which lifelines can be compared
- The flowchart shows an example of how responders may think through assigning lifelines a color
- *Blue does not indicate an operational status or condition; it is used for administrative purposes, such as presentations and briefings*



Example Condition Designations

Below are example analyses for the Water Infrastructure component of the Food, Water, Shelter lifeline and corresponding color determination for each.

Status	Example
Grey	Assessment teams have been unable to establish status of water infrastructure.
Red	The community's drinking water is believed to be compromised and contaminated by flood waters. Plan to provide water to survivors not yet established.
Yellow	Bottled water mission identified and resourced, but transportation issues restricting delivery.
Green	Bottled water mission supporting survivor needs until water service re-established.
Blue	Blue does not indicate an operational status or condition; it is used for administrative purposes, such as presentations and briefings.

Implementation of Community Lifelines

Emergency Management endeavors to incorporate community lifelines into its planning and reporting products. This section provides an overview and examples of how the lifelines are anticipated to be incorporated.

Planning products:

- All Hazards Plans
- Incident Action Plans
- Support Plans
- Strategic Plan updates
- Guideline updates

Reporting products include:

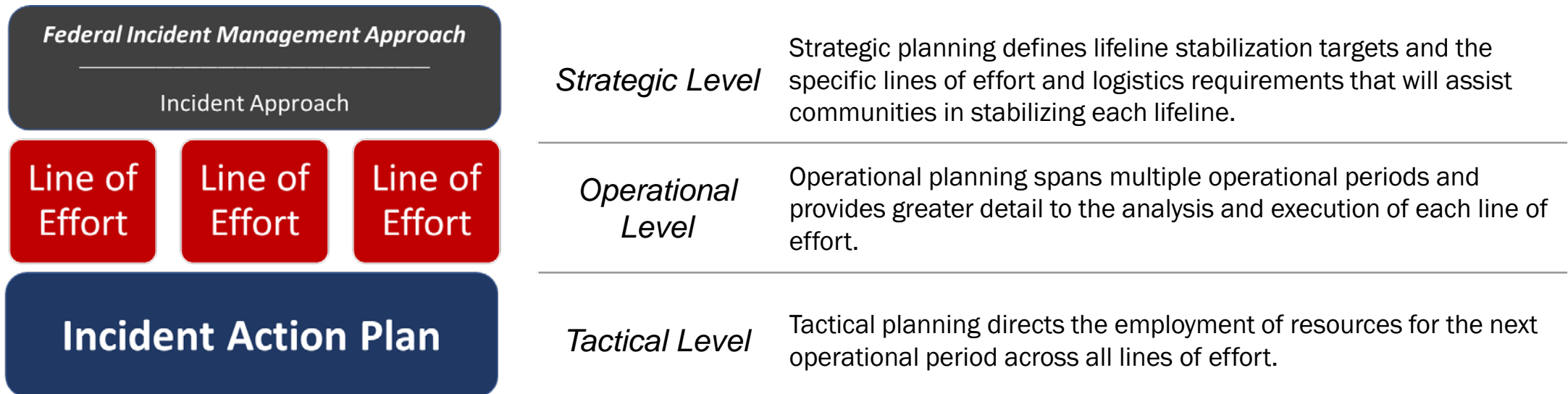
- Senior Leadership Brief (SitReps)
- Daily Operations Brief
- County Threat Advisory System (CTAS) Advisories

Section II: Lifelines and Operational Planning

Community Lifelines and Planning

- **Deliberate Planning:** Incorporate lifelines into deliberate planning products, including defined stabilization targets for each lifeline
- **Crisis Action Planning:** During an incident, deliberate stabilization targets are adjusted to the active response based on an analysis of lifeline impacts and stabilization projections
 - This analysis provides support to leadership decisions and prioritization of response activities for each operational period, including the development of strategies, operational priorities, and objectives

Lifelines enable crisis action planning efforts at all levels



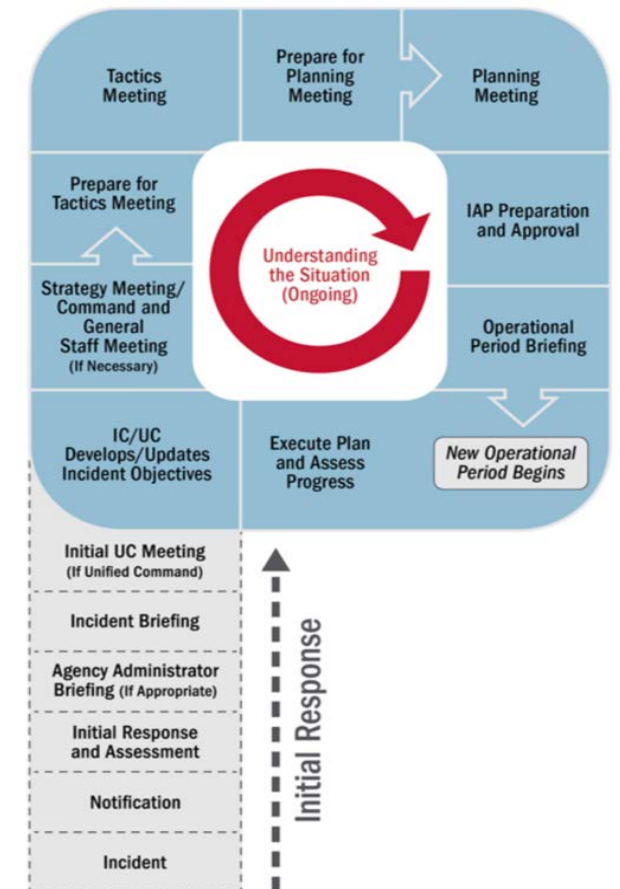
Example: Energy Lifeline may include three distinct Lines of Effort – Temporary Emergency Power, Power Restoration, and Fuel Distribution

Example: Food, Water, Shelter Lifeline may include two distinct Lines of Effort – Sheltering and Commodity Distribution

Current v. End States & Goal Setting

Assessment process that is foundational to Emergency Operations and widely understood as the Phase 1 “Leg” of the Incident Action Planning “P”.

- Continuously reassessed and revised
- Current State or Maximum Anticipated Impact
 - What do we know? – Facts
 - How bad could it be? – Assumptions
- End States and Goals
 - What are the lifeline Stabilization Targets we are striving to achieve?
 - What are the Recovery Outcomes we are striving to achieve?
 - How do we know we have been successful?



Lifeline Stabilization Problem Frame

Planning Factors <i>(Maximum Anticipated or Known Impacts)</i>	Lifeline Stabilization Targets	Assistance Lines of Effort
<p>Safety & Security: # of buildings with at least extensive damage # of fire station facilities with at least moderate damage # of police station facilities with at least moderate damage # of government offices with at least moderate damage # of dams/levees at risk of failure and/or at least moderate damage # of isolated communities # of facilities requiring federal security support # of survivors requiring SAR assistance</p>	<p>Safety & Security: Threats to life-safety are no longer a concern for all response personnel and impacted communities. Government essential functions, including executive leadership, are operational. Sufficient search and rescue assets are on-scene to assist all survivors. Sufficient fire resources are available to support fire suppression efforts.</p>	<p>Safety & Security</p> <ul style="list-style-type: none"> • Damage Assessment (Anticipated) • Search and Rescue (In Progress) • Restoration of Public Infrastructure – Police, Fire (Anticipated)
<p>Food, Water & Shelter: # of people seeking short-term public shelter # of households w/o potable water on H+1 #/% of water systems with at least moderate damage # of wastewater leaks/breaks % of grocery stores w/o power</p>	<p>Food, Water & Shelter: All survivors, their pets, and service animals have access to food, water, and sanitation. Sheltering, including cellular reception, capacity, accessibility, and wrap-around services, is supporting the displaced population. Sufficient resources are in place to sustain agricultural requirements.</p>	<p>Food, Water & Shelter</p> <ul style="list-style-type: none"> • Sheltering Operations (In Progress) • Emergency Repairs and Augmentations to Infrastructure [Water] (Anticipated) • Temporary Housing [Repair, Rental Assistance, Direct Housing] (Anticipated)
<p>Health & Medical: # of total injuries/fatalities #/% of total hospital beds function on H+1 # of medical facilities with at least moderate damage</p>	<p>Health & Medical: All survivors, their pets, and service animals have access to required medical and veterinary care. Emergency medical systems are capable of managing patient movement requirement. Public health services are accessible to all survivors. Sufficient temporary fatality management support is in place to meet processing demand. Medical supply chain capable of adequately resupplying medical care providers.</p>	<p>Health & Medical</p> <ul style="list-style-type: none"> • Temporary Emergency Power (In Progress) • Healthcare Systems Support (In Progress)
<p>Energy (Power & Fuel): # of households w/o power on H+1 # of natural gas pipelines leaks/breaks #/% of gas stations w/o power or out of fuel # of critical facilities w/o power # of fuel (gallons) needed for generators through H+7</p>	<p>Energy (Power & Fuel): Generators are providing temporary emergency power at critical facilities necessary to stabilize other lifelines. Fuel distribution is available for responders. Sufficient fuel distribution is available for survivors, including to support individuals dependent on power for life-sustaining medical care.</p>	<p>Energy (Power & Fuel)</p> <ul style="list-style-type: none"> • Temporary Emergency Power (In Progress)
<p>Communications: # of facilities with at least moderate damage # of banks/ATMs inoperable</p>	<p>Communications: Survivors have access to commercial communications infrastructure to contact or be contacted by emergency services. Land mobile radio communications network is operational. Public safety answering points are available to the public. Survivors have access to financial services.</p>	<p>Communications</p> <ul style="list-style-type: none"> • Emergency Repairs and Augmentations to Infrastructure [Comms] (Anticipated) • Temporary Emergency Power (In Progress)
<p>Transportation: # of highway bridges with at least moderate damage # of railway bridges with at least moderate damage # of airport runways with at least moderate damage # of port facilities with at least moderate damage</p>	<p>Transportation: Multimodal routes (air, rail, road, port) are clear of debris and accessible by normal or alternate means.</p>	<p>Transportation</p> <ul style="list-style-type: none"> • Emergency Repairs and Augmentations to Infrastructure (Anticipated) • Debris Management [Road] (Anticipated)
<p>Hazardous Materials: # of oil systems facilities with at least moderate damage # of total debris (tons) # of hazardous materials facilities damaged # of derelict vessels</p>	<p>Hazardous Materials: All contaminated areas are identified and secure.</p>	<p>Hazardous Materials</p> <ul style="list-style-type: none"> • Debris Management [Sunken, Derelict & Displaced Vessels] (Anticipated) • Hazardous Waste (Anticipated)

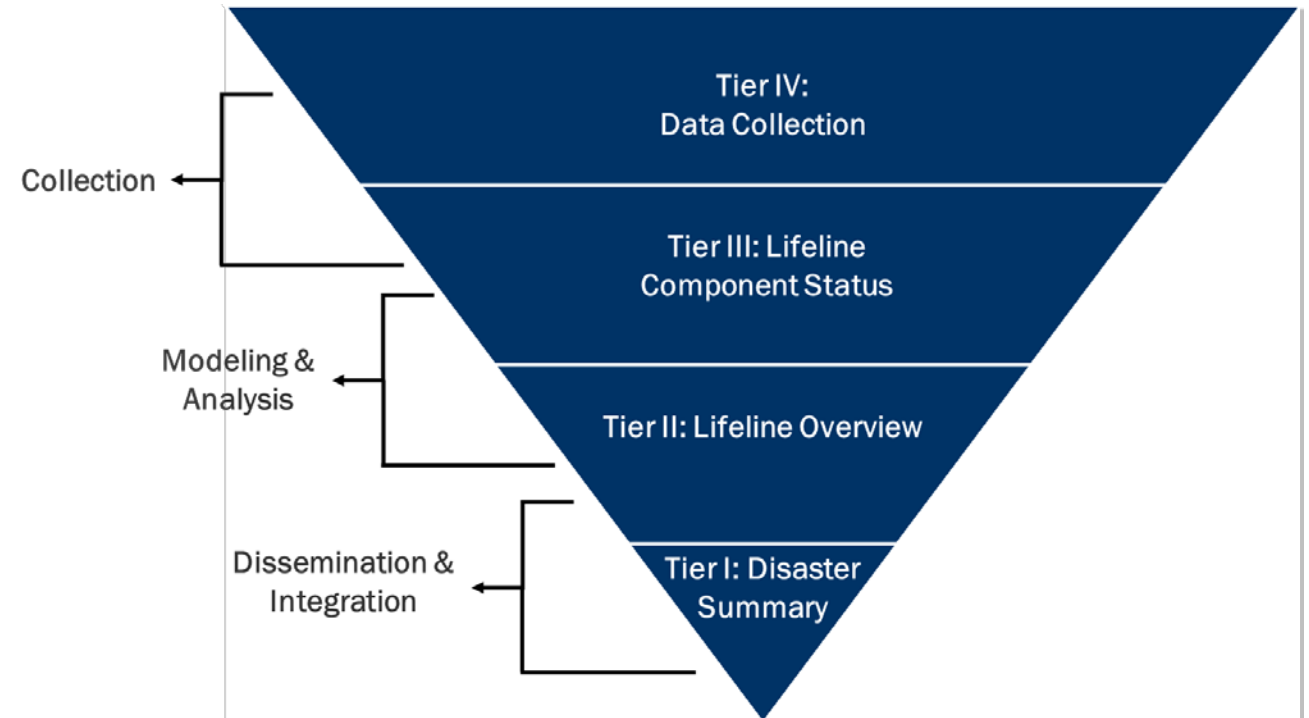
**Section III:
Situational Awareness
and Reporting**

Information Management

Intelligence Collection Cycle



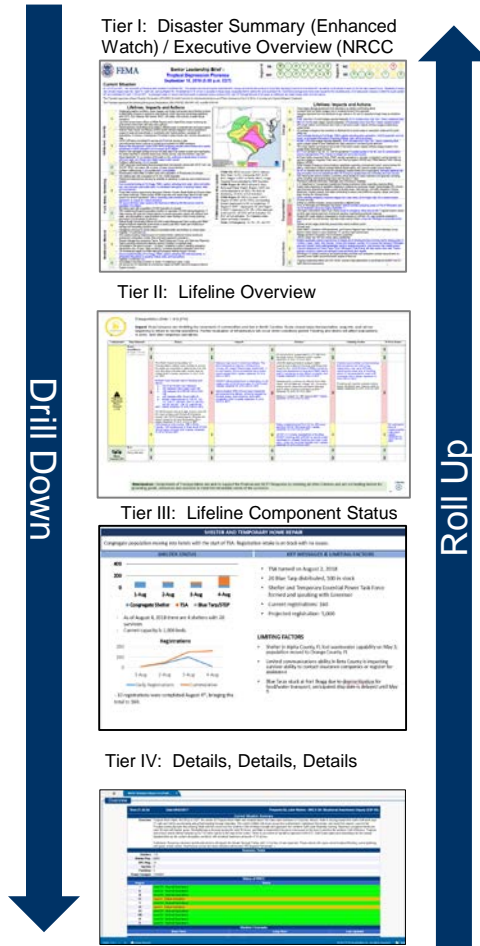
Tiered Senior Leadership Brief Design



The Senior Leadership Brief (Situation Report) development process enables the collection, analysis and dissemination of incident information to generate the *What? So What? Now What? And When?* for decision

Senior Leadership Brief

Senior Leadership Brief (SLB) format (Situation Reports) integrate community lifelines and discuss components and subcomponents and identify interdependencies between lifelines.



Tier I: Disaster Summary

- Executive Summary
- Significant EMA and/or Inter-agency Actions
 - Information should reflect high level impacts, stabilization actions, or limiting factors for each lifeline

Tier II: Lifeline Overview

- Synopsis of lifeline condition
 - Information should reflect status, impacts, actions, limiting factors, and an anticipated timeline for stabilization for each lifeline component

Tier III: Lifeline Sub-Component Condition Indicators

- Granular information regarding lifeline components to include status, actions, key messages, limiting factors
 - Charts, graphs, etc.
 - GIS products




Tier IV: Lifeline Essential Elements of Information (Data Collection)

- Information is reported and collected to develop a Common Operating Picture
 - Data collection from all incident levels to include field, regions, state, national, and interagency

Senior Leadership Brief Tier I: Disaster Summary


Tier I of the SLB includes executive-level information summarizing the situation, lifeline condition, and critical impacts, actions, and limiting factors for the lifeline

- **Disaster Summary:** Includes the most pertinent information in each stage of response
- **Lifeline Assessment:** Assessing and reporting on lifeline conditions is recommended by Situation Unit and validated by leadership
- **Lifeline Condition:** Is based on the underlying components, and is informed by situational awareness reports, impact assessments, and conversing with partners across public, private, and non-profit sectors
- **Additional Products may Include:** Incident Maps, updated information from ICPs and Liaison Officers, EOC status, Regional & State Emergency Operations Center status, and overall posture including Emergency/Disaster Declarations, and local EOC status

 EMERGENCY MANAGEMENT SENIOR LEADERSHIP BRIEFING		Declarations
Incident Name _____		
SLB #X	XX-XX-2021	XX:XX CST
Current Situation		Community Lifelines – Current Status & Trends
		
		
Community Lifelines: Impacts & Actions		Community Lifelines: Impacts & Actions
Safety & Security		Energy
Food, Water, Shelter		Communications
Health & Medical		Transportation
		Hazardous Materials



Senior Leadership Brief Tier II: Lifeline Component Info.

- The SLB Tier II identifies the status, impact, actions, limiting factors, and estimated time to condition change and re-establishment requirements for each lifeline component



Transportation (Slide 1 of 3) [GR]

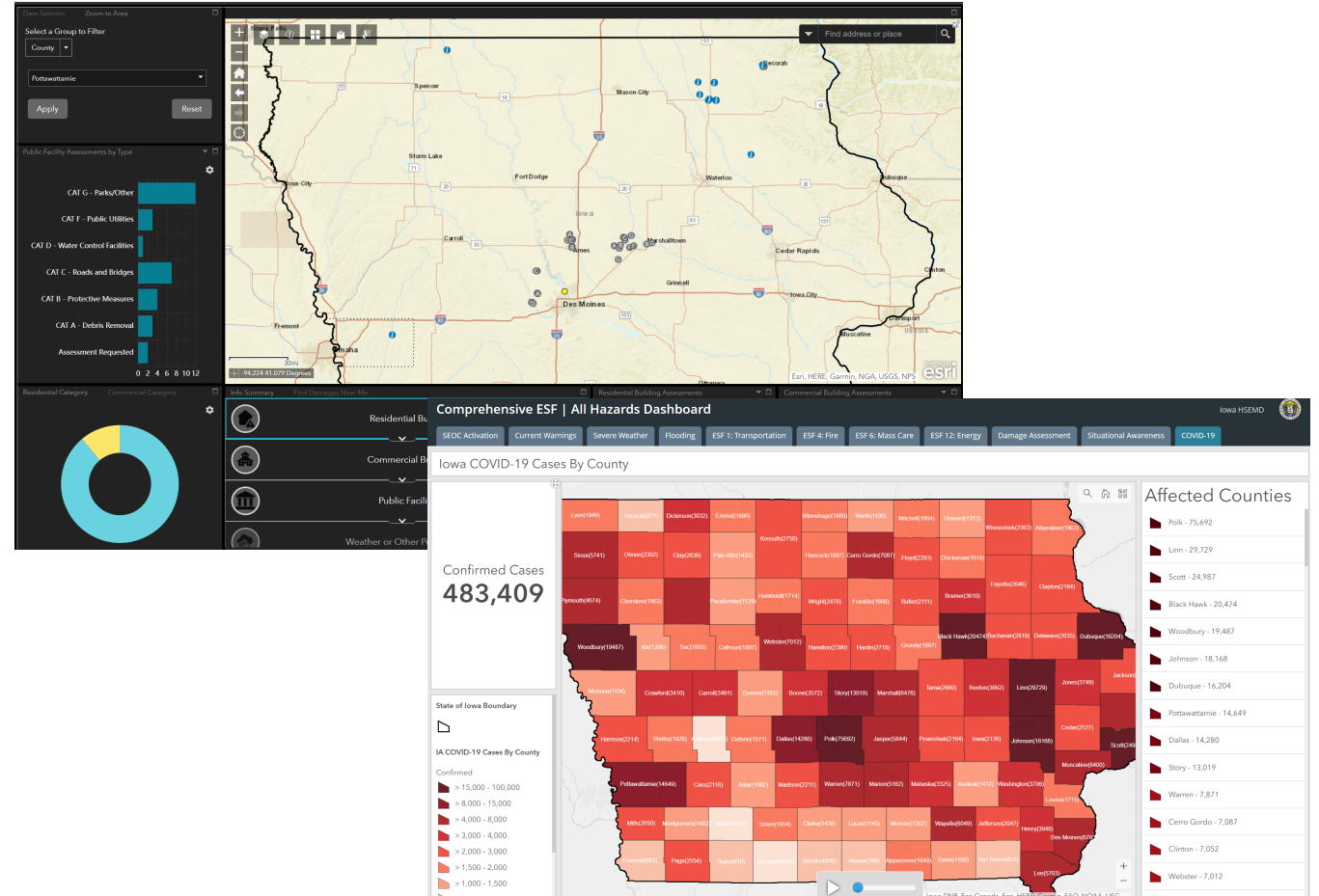
Summary Statement: States working to support evacuation orders, implemented contraflow operations and tolls suspensions; 10 FL airports remained closed; rail carriers in FL, GA, and NC suspend operations.

Component	Subcomponents	Status	Impact	Actions	Limiting Factor	ETA to Green	
 Highway/ Roadway Motor Vehicle [GR]	•Roads •Bridges	Private sector supply chain networks report communications, refueling, air/sea port & unloading capabilities, rail/road access, and reentry will be key factors to resume commodity flows post storm (NABOC Snapshot, Sept. 4, 2019, 2:30 p.m. EDT) ALL	ALL	Private Sector supply chain networks postured additional capacity and capability in the southeast US; prepared to resume commercial commodity flows post-storm, barring impacts to transportation infrastructure (NABOC Snapshot, Sept. 4, 2019, 2:30 p.m. EDT) Major ridesharing company preparing to support official shelter openings (NABOC Snapshot, Sept. 4, 2019, 2:30 p.m. EDT)	ALL	ALL	
		Major shipping company report services remain operational in all locations, except locations with curfew or evacuation areas. (NABOC Update Snapshot, Sept. 3, 2019, 6:00 p.m. EDT)	FL	Strong winds will shift any construction materials and make evacuation challenging. (Evacuation Liaison Team Call, Sept. 3, 2019, 2:30 p.m. EDT)	FL	FL Department of Transportation authorized emergency response vehicles to bypass weigh station facilities (ESP-1 Update, Sept. 4, 2019, 2:00 a.m. EDT)	FL
		Contraflow on I-16 has ended and residents in evacuated areas will not be allowed to return until roadways/bridges are determined safe after TS force winds (GA Emergency Management, Sept. 4, 2019, 2:39 p.m. EDT)	GA	GA	Major highway shoulders swept clear; will be open to traffic once evacuation orders are issued by Florida officials (ESP-1 Update, Sept. 4, 2019, 2:50 a.m. EDT)	GA	GA
			NC	NC	NC Ferry Division suspended collection of tolls to assist in the evacuation of the NC Outer Banks (State of North Carolina, Sept. 4, 12:46 a.m.)	NC	NC
		SC Department of Transportation (SCDOT) implemented contraflow operations for I-26 and US 278 (ESP-1 Update, Sept. 4, 2019, 12:30 p.m. EDT)	SC	SC	Contraflow operations will discontinue Sep. 4 at 3 p.m. (ESP-1 Update, Sept. 4, 2019, 12:30 p.m. EDT)	SC	SC
 Mass	•Bus •Rail	ALL	ALL	SCDOT expanded motorist assistance, highway patrol coverage, and staged wrecker service on I-95 and I-64 in response to increased traffic on these facilities (ESP-1 Update, Sept. 4, 2019, 9:00 a.m. EDT) Draw bridges and swing bridges locked down temporarily as precaution (ESP-13 Update, Sept. 4, 2019, 2:00 a.m. EDT)	ALL	ALL	

Stabilization: Components of Transportation are able to support the Federal and SLTT Response by enabling all other Lifelines and are not limiting factors for providing goods, resources and services to meet the immediate needs of the survivors.

Senior Leadership Brief Tier III: Visualization Tools

- The SLB Tier III provides visualization of the lifeline and component conditions such as:
 - Geographical Information System (GIS) products
 - Charts, graphs, and other supplemental materials which can be used for resources such as commodities



Senior Leadership Brief Tier IV: Information Collection

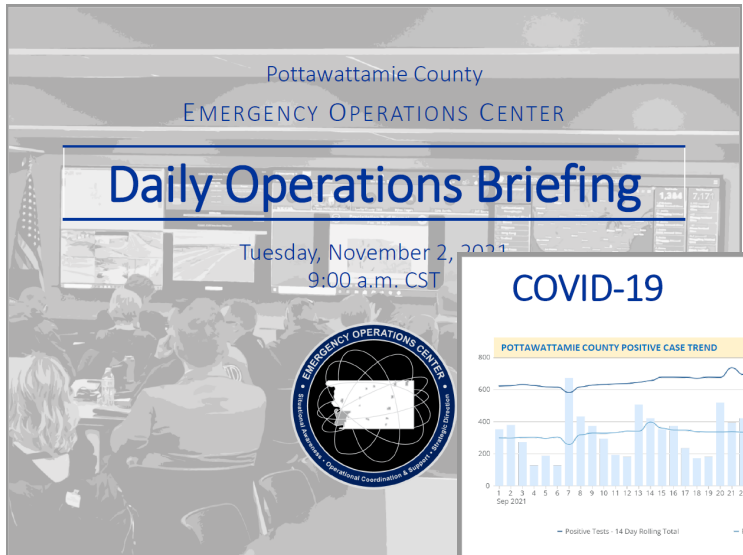
- The SLB Tier IV serves as a form of Data Collection
- Information is reported and collected to develop a Common Operating Picture
- Collection needs are identified through the release of Essential Elements of Information based on the present situation as well as the the method and cadence to report information

Analyze Data and Information		
Estimate Cascading Events <ul style="list-style-type: none"> • Evaluate potential consequences of action or inaction. • Develop mitigation actions. • Identify trends. • Engage technical specialists. 	Use Demographics <ul style="list-style-type: none"> • Identify impacted cultural diversity. • Identify potential vulnerabilities. • Inform damage assessments. • Identify potential service needs: <ul style="list-style-type: none"> • Disabilities, access, functional needs • Critical transportation needs 	Analyze Information <ul style="list-style-type: none"> • Verify, organize, prioritize & track • Convert raw data to useful info. • Identify/address misinformation. • Clarify incomplete information. • Identify incident-specific essential elements of information and critical information requests.
Identify Critical Information <ul style="list-style-type: none"> • Recognize incident-specific critical information to be disseminated immediately. • Ensure incident response partners are providing essential elements of information in line with planned dissemination rhythms. 		Prepare Products <ul style="list-style-type: none"> • Situation reports. • Situation briefings. • Specialty reports. • Operational displays and briefing tools. • Incident response tools and information for responders.

Disseminate Information		
Develop Rhythm <ul style="list-style-type: none"> • Develop a schedule for regular release of information. • Obtain approvals for distribution. • Determine distribution lists. • Determine distribution methods. 	Critical Information <ul style="list-style-type: none"> • Establish process to identify, verify, distribute critical information. <ul style="list-style-type: none"> • Coordinate with ESF #15 for public distributions. 	Displayed Information <ul style="list-style-type: none"> • Develop and maintain situational information and significant event data within the EOC.
Visual Support <ul style="list-style-type: none"> • Utilize visualizations such as graphs, photos, and maps to graphically depict information. 	Outputs <ul style="list-style-type: none"> • Mapping/geospatial data and sources. • Web-based products. • Paper maps. • Situation reports and briefings. • Specialty reports. • Displays, briefings tools, operational tools, and other information products as identified. 	Security <ul style="list-style-type: none"> • Ensure proper security when sharing sensitive, classified, or protected information. • Ensure all personnel involved in the incident are aware of information security requirements.

Daily Operations Briefing

- The Daily Operations briefing provides an overview of the current emergency management situation county-wide
- PCEMA has organized its summary of significant incident information within this briefing around the community lifelines and based off of the FEMA daily briefing model



Pottawattamie County
EMERGENCY OPERATIONS CENTER

Daily Operations Briefing

Tuesday, November 2, 2021
9:00 a.m. CST

Current Ops / Monitoring

EOC Status: **LEVEL III** Normal / routine countywide watch, warning or sustained incident support activities

New Significant Incidents / Ongoing Ops

- Covid-19

Hazard Monitoring

- Drought Status – no change

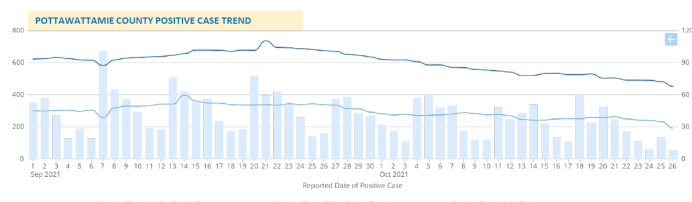
PCEMA Common Operating Picture

Community Lifelines Status

Lifeline	Status	Trend	Comments or Component / Sub-component News
Safety & Security		◀	No incident-related impacts.
Food, Water, Shelter		◀	No incident-related impacts.
Health & Medical		◀	Public Health & healthcare continue to provide vaccine & are preparing for administration to children 5-11 y/o. Hospitals continue to see staffing challenges & increased patient acuity non-Covid.

COVID-19

POTTAWATTAMIE COUNTY POSITIVE CASE TREND



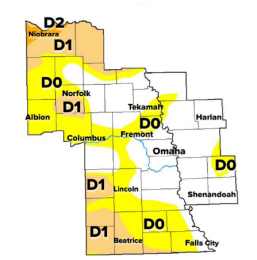
Legend: Positive Tests - 14 Day Rolling Total, Positive Tests - 7 Day Rolling Total, Positive Tests - Daily Total

Hospital	Total Beds	Beds Available	ICU Available	Staff Status	Total Covid+ Inpatient	Hospitalized from Covid	Covid+ in ICU
CHI Mercy CB	88	5	1		13	0	9
Jennie Edmundson	108	20	2		16	16	5

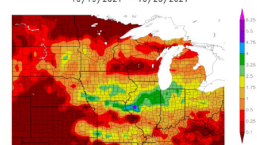
As of 10-31-2021 (Total Covid+ inpatients identify admitted patients for other primary cause but Covid+ or found to be Covid+)

Drought Status

All of western Iowa saw a one category improvement with the exception of small parts of Monona and Harrison Counties.



Previous 7 Day Precipitation Totals
10/19/2021 - 10/25/2021



Location	October to Date Precipitation	October to Date Departure	YTD Precipitation	YTD Departure
Norfolk, NE	2.03"	+0.06"	25.00"	+0.23"
Omaha, NE	4.50"	+2.40"	32.24"	+3.27"
Lincoln, NE	4.03"	+2.09"	26.11"	-0.55"
Tekamah, NE	3.25"	+1.44"	33.15"	+7.23"
Falls City, NE	2.18"	-0.36"	31.90"	+0.47"
Clarinda, IA	missing	missing	30.40"	-2.59"
Albion, NE	1.28"	-0.68"	24.00"	-1.06"
Beatrice, NE	2.25"	+0.13"	24.05"	-4.74"
Columbus, NE	3.20"	+1.05"	26.71"	+0.39"
Fremont, NE	4.35"	+2.31"	33.35"	+5.56"

Intensity:



PCEMA