COMMUNITY LIFELINES IMPLEMENTATION TOOLKIT

Comprehensive information and resources for implementing lifelines during incident response



Organization

Content in this toolkit is organized into the following four sections:

1 .	Lifelines Overview	Slide 3
	Lifelines and Operational Planning	
3.	Situational Awareness and Reporting	Slide 49
	Icons and Templates	Slide 58

Companion documents to the toolkit may include:

- Cover Sheet
- Presenter's Guide
- Fact Sheet
- Templates
 - Lifeline Card Template
 - Senior Leadership Briefing (Tier I) Template
 - Senior Leadership Briefing (Tier II) Template
 - IM SLB Tiers I and II Template
 - Incident Approach Template

Section I: Lifelines Overview

Incorporating Community Lifelines into Response

FEMA developed the community lifelines construct to increase effectiveness in disaster operations and better position the Agency 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.

- 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

Evolution of the Community Lifelines Concept

While Toolkit 2.0 still focuses on the Response Mission Area, FEMA continues to examine the application of community lifelines across the disaster lifecycle and all five mission areas.

- Driving Lifeline Resilience through:
 - □ Preparedness: Reorganizing Threat & Hazard Identification and Risk Assessments by lifeline
 - ☐ **Protection:** Assessing lifeline infrastructure vulnerability
 - ☐ Recovery: Transitioning stable lifelines to recovery outcomes
 - ☐ Mitigation: Reducing lifeline vulnerability through mitigation activities

The Lifelines Toolkit will continue to be refined as the construct evolves

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. FEMA executes 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

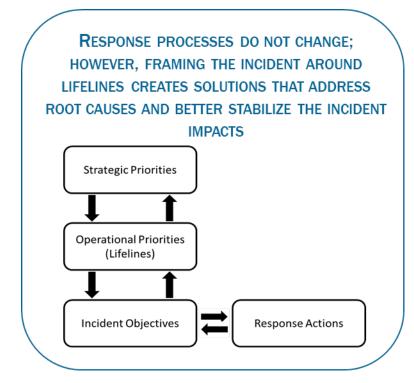
THE CONTEXT... FRAMING 1.0 VS. 2.0

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 <u>critical government and business</u> <u>functions</u> and is <u>essential to human health and safety or economic security</u>.













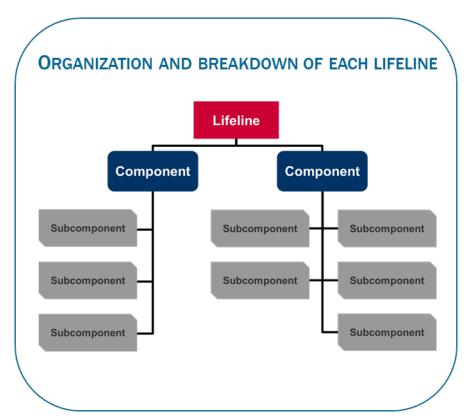


- Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function
- Lifelines are the integrated network of assets, services, and capabilities that are used day-today to support the recurring needs of the community
- When disrupted, 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

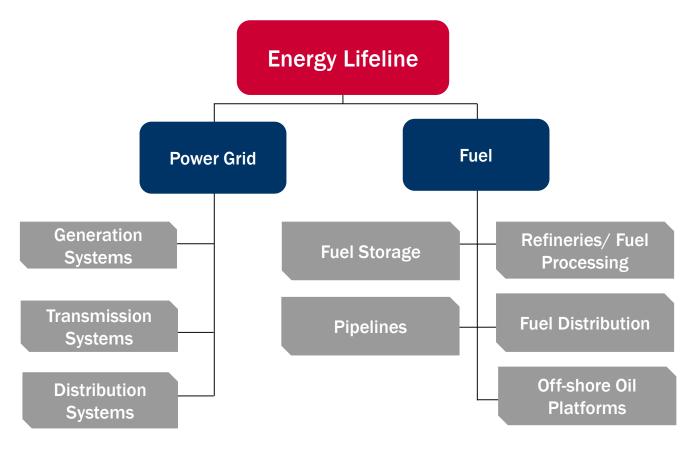
Note: Not every incident will impact all of the lifelines or components



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 "What?" Impact "So What?" Actions "Now What?" Limiting Factors "What's the Gap?" ETA to Green "When?"



Safety and Security

COMPONENTS AND SUBCOMPONENTS

Law Enforcement/Security	Fire Service	Search and Rescue
Police Stations	Fire Stations	 Local Search and Rescue
Law Enforcement	 Firefighting Resources 	
Site Security		
Correctional Facilities		

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

Community Safety

- Flood Control
- Other Hazards
- Protective Actions

Food

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

Agriculture

Animals and Agriculture

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)



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



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

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 reestablishment 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.

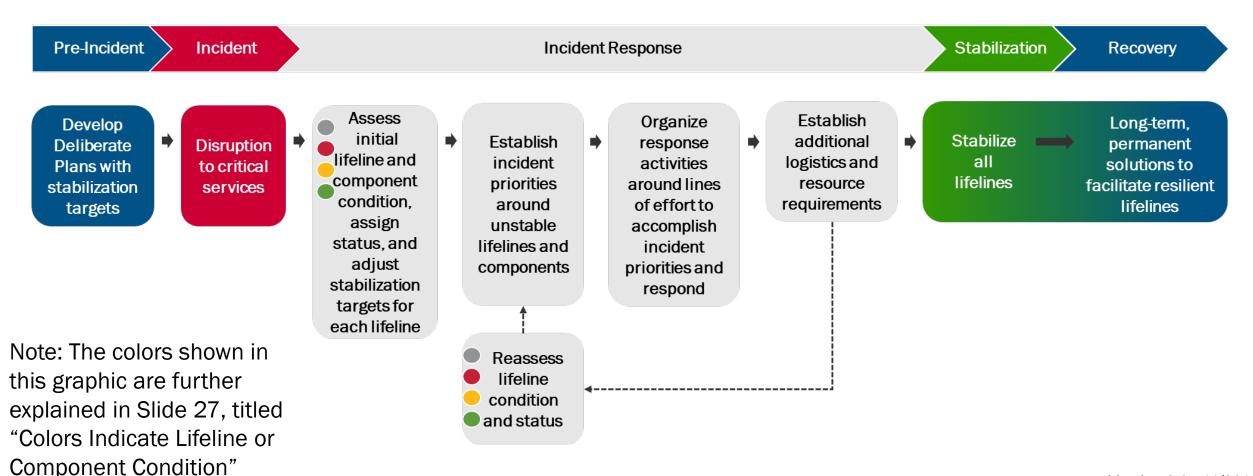
Stabilization targets should reflect goals defined in deliberate planning and should be validated and refined throughout the incident.

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.
- <u>Transportation Lifeline</u>: 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



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 (What?)	Summarize the root cause(s) of disruption to lifelines services.
Impacts (So What?)	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 (Now What?)	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 (What's the Gap?)	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 (When?)	Provide current component condition or an estimated timeframe for when a change in condition is expected.

Example Component Analysis



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**

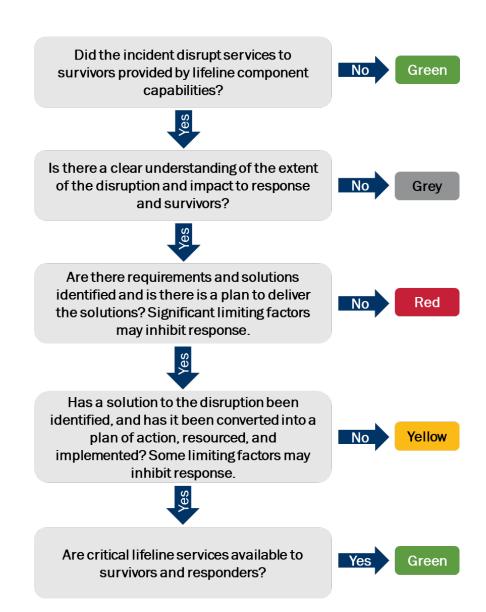
- Indicates lifeline services are stabilized, re-established, or not impacted (Stable)
- Note: Green Components may still be severely impacted

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.

FEMA's Implementation of Community Lifelines

FEMA incorporates community lifelines into its planning and reporting products. This section provides an overview and examples of how the lifelines have been implemented to date.

Planning products include:

- All Hazards Plans
- Information Analysis Brief
- Incident Action Plan
- Incident Approach
- National/Regional Support Plan

Reporting products include:

- Senior Leadership Brief / SitReps
- Daily Operations Brief
- SPOT Reports

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

Deliberate Planning and All-Hazards Plan Updates

 Deliberate planning incorporates defined stabilization targets for each lifeline and the lines of effort to stabilize each lifeline

FEMA is developing stabilization targets for lifelines to include in its update of Regional All

Hazards Plans

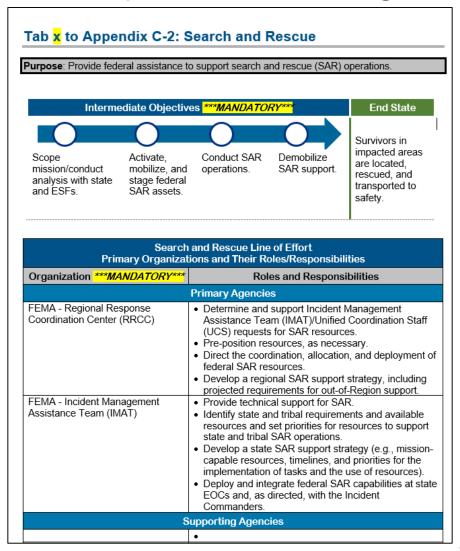


Deliberate Planning

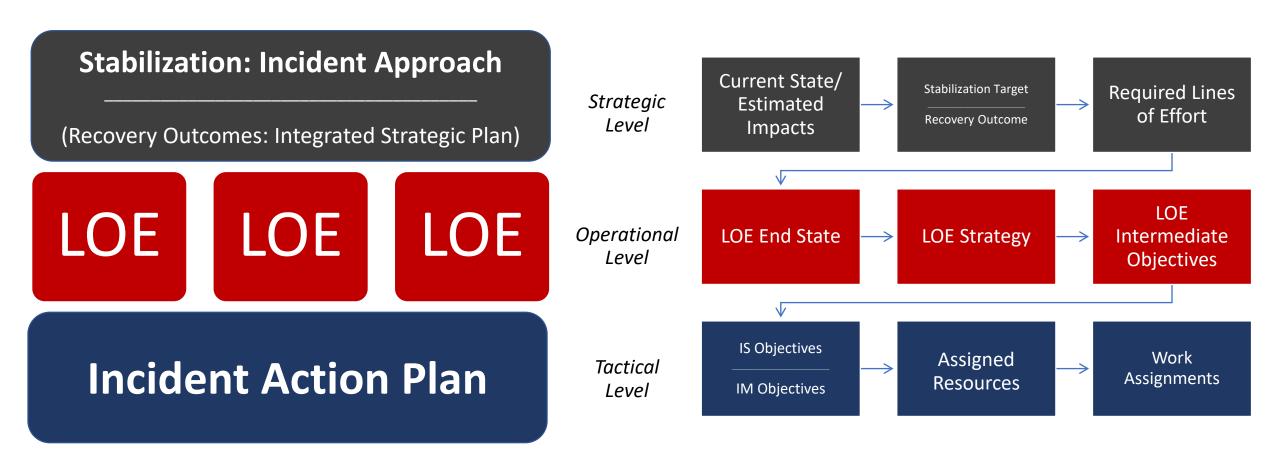
Deliberate Plan Components

- <u>Base Plan</u> Identifies lifeline
 Stabilization Targets
- Annex B Information gathering and analysis to support decisions and to assess progress in achieving lifeline Stabilization Targets
- Annexes C & D Strategy development and functional planning through Lines of Effort (LOE) to achieve Lifeline Stabilization Targets

Example of Deliberate Planning



Crisis Action Planning – Products and Relationships

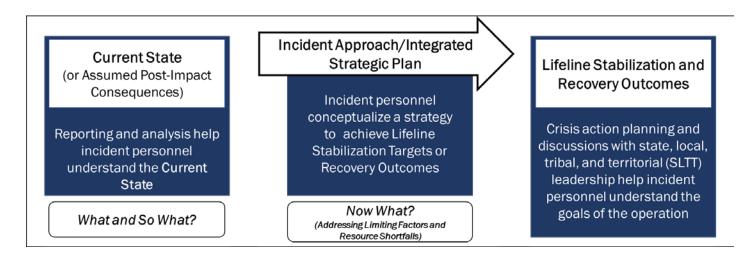


Crisis Action Planning - Strategic

Strategic Level of Planning



Disaster Strategy Development



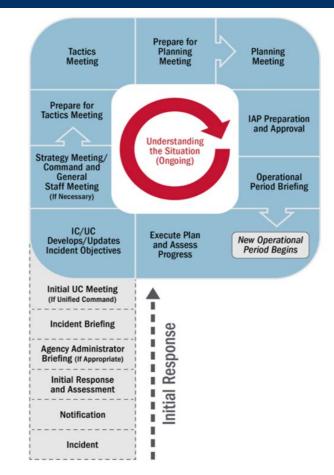
Role of Strategic Planning During an Incident

Strategic planning during the response phase of an incident provides an incident-wide approach to incident management and support. It provides a mechanism for crisis action planning that integrates deliberate plans into the operation; adapting deliberately planned Lines of Effort to achieve lifeline stabilization. The resulting Incident Approach, focusing on lifelines, provides guidance and informs resource deployment and employment decisions, establishment of Task Forces and Crisis Action Planning Teams, and the development of incident objectives.

Current v. End States & Goal Setting

Assessment process that is foundational to FEMA 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

Lifeline Stabilization Targets

Food, Water & Shelter: All survivors, their pets, and service animals have access to food, water, and

Health & Medical: All survivors, their pets, and service animals have access to required medical and

Public health services are accessible to all survivors. Sufficient temporary fatality management

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-

support is in place to meet processing demand. Medical supply chain capable of adequately

veterinary care. Emergency medical systems are capable of managing patient movement requirement.

supporting the displaced population. Sufficient resources are in place to sustain agricultural

sanitation. Sheltering, including cellular reception, capacity, accessibility, and wrap-around services, is

Safety & Security: # of buildings with at least extensive damage	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	Safety & Security Damage Assessment (Anticipated)
# of fire station facilities with at least moderate damage	operational. Sufficient search and rescue assets are on-scene to assist all survivors. Sufficient fire	Search and Rescue (In Progress)
# of police station facilities with at least moderate damage	resources are available to support fire suppression efforts.	Restoration of Public Infrastructure – Police, Fire
# of government offices with at least moderate damage		(Anticipated)
# 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		

requirements.

resupplying medical care providers.

sustaining medical care.

of wastewater leaks/breaks % of grocery stores w/o power **Health & Medical:** # of total injuries/fatalities #/% of total hospital beds function on H+1 # of medical facilities with at least moderate damage

Planning Factors (Maximum Anticipated or Known Impacts)

Energy (Power & Fuel): # of households w/o power on H+1 # of natural gas pipelines leaks/breaks

of banks/ATMs inoperable

of critical facilities w/o power

Communications:

Transportation:

of total debris (tons)

of derelict vessels

Food, Water & Shelter:

of people seeking short-term public shelter

#/% of water systems with at least moderate damage

of households w/o potable water on H+1

#/% of gas stations w/o power or out of fuel

of facilities with at least moderate damage

of fuel (gallons) needed for generators through H+7

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

of hazardous materials facilities damaged

Transportation: Multimodal routes (air, rail, road, port) are clear of debris and accessible by normal or **Transportation** alternate means.

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.

Emergency Repairs and Augmentations to Infrastructure [Port] (Anticipated) • Debris Management [Road, Port] (Anticipated)

[Comms] (Anticipated)

Food, Water & Shelter

Health & Medical

Energy (Power & Fuel)

Communications

[Water] (Anticipated)

Housing] (Anticipated)

Sheltering Operations (In Progress)

Temporary Emergency Power (In Progress)

Healthcare Systems Support (In Progress)

Temporary Emergency Power (In Progress)

• Temporary Emergency Power (In Progress)

• Emergency Repairs and Augmentations to Infrastructure

Hazardous Materials

Debris Management [Sunken, Derelict & Displaced Vessels] (Anticipated) Hazardous Waste (Anticipated)

Federal Assistance Lines of Effort

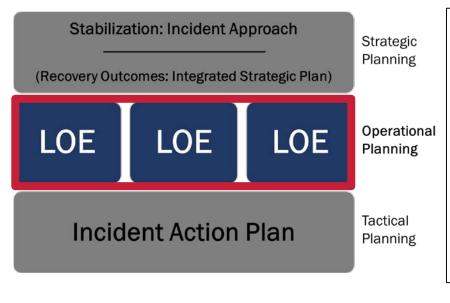
Emergency Repairs and Augmentations to Infrastructure

Temporary Housing [Repair, Rental Assistance, Direct

Hazardous Materials: All contaminated areas are identified and secure. **Hazardous Materials:** # of oil systems facilities with at least moderate damage

Crisis Action Planning - Operational

Operational Level of Planning



When is an LOE Operational Plan Necessary?

- Currently available resources are insufficient
- Unconventional resource delivery sequencing is necessary due to location or environmental restriction
- Lifeline interdependencies are preventing stabilization
- Atypical resource types or capabilities are required to stabilize a lifeline
- Exceptionally high duration of instability
- Timeframe to achieve either lifeline stabilization or Recovery Outcome is unnaturally shortened due to external pressures

Line of Effort Operational Plan

Some LOEs may have complexities that require **atypical solution sets**. These solution sets should be generated through the **Crisis Action Planning Process** and should result in an **LOE Operational Plan**. This Plan develops details of the tasks to achieve the intermediate objectives, the resources required, and identifies and mitigates risks that may inhibit achieving the objectives due to a lack of resources or other non-resource limiting factors.

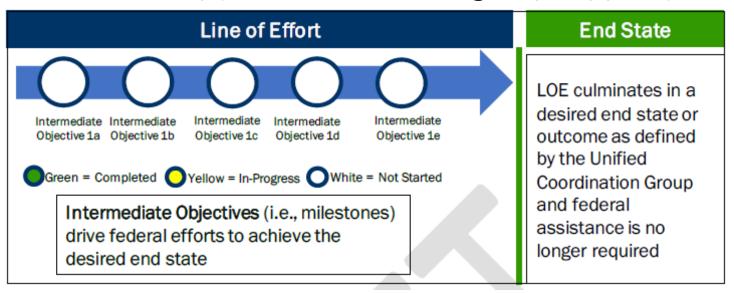
Defining Lines of Effort

LOEs are the specific mission-sets required to stabilize the lifelines. For FEMA Operations, LOEs are activities that a state, tribe, or territory can ask FEMA and the interagency to manage the consequences of an incident.

- LOEs are the operationalization of core capabilities (the ways) for response and recovery planning and operations. Core Capabilities are the general competencies required during response used for preparedness assessment. Lifelines identify source of instability, whereas LOEs address solutions to resolve lifeline instability.
- Planning for the delivery of each LOE allows the development of strategy across all required ESFs to mobilize, employ, and demobilize resources applicable to that mission, including the identification of key intermediate objectives or milestones in the execution of that mission.
- LOEs are intended to jump-start crisis action (adaptive) planning. LOEs help incident personnel at all
 levels to visualize how federal interagency capabilities can support lifeline stabilization by clearly
 articulating and communicating the strategy to meet federal assistance requests.
- Functional LOEs are focused on addressing end states for stabilization of lifelines.
 - Note: Each Function may address more than one lifeline

Lines of Effort

17 standard Lines of Effort below have been agreed upon by all ten FEMA Regions to be included in their All Hazards Plans currently being updated. Additional Lines of Effort may be used or created based on region or incident. As a note, some of the LOEs that were taken out of the components of lifelines because they were LOEs and therefore not inherent to a community (i.e. evacuation, sheltering, temporary power).



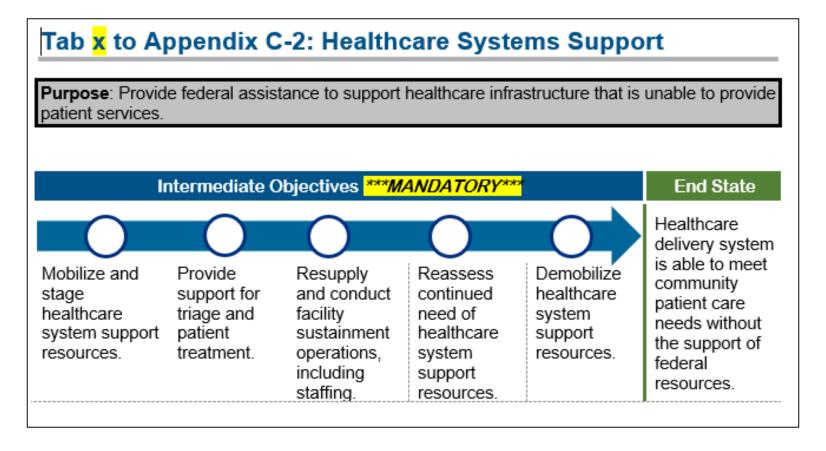
- Damage Assessment
- Debris Management
- Emergency Repairs or Augmentation to Infrastructure
- Evacuation, Reception, Re-entry, and Return
- Fatality Management
- Hazardous Waste

- Healthcare Systems Support
- Medical Transportation
- Natural and Cultural Resource Protection & Restoration
- Private Sector Coordination
- Public Information and Warning

- Responder Security and Protection
- Restoration of Public Infrastructure
- Search and Rescue
- Sheltering Operations
- Temporary Emergency Power
- Temporary Housing (Repair, Rental Assistance, Direct Housing)
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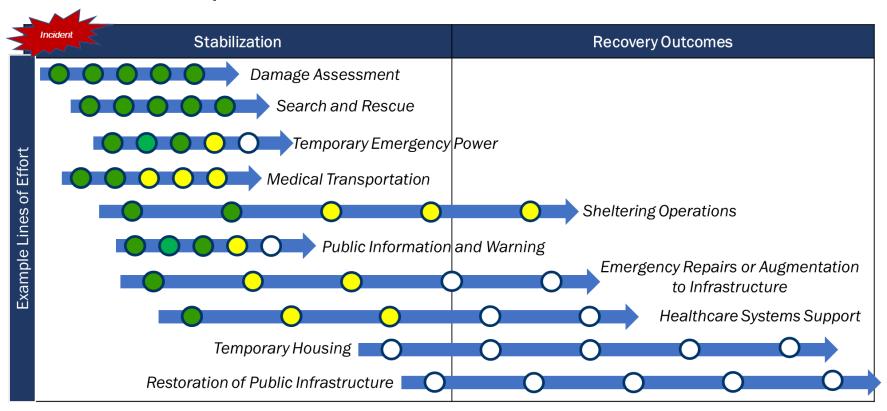
Example: Healthcare Systems Support LOE

Lines of Effort Dissection



Phasing

Example Lines of Effort Across Outcome-Focused Phases

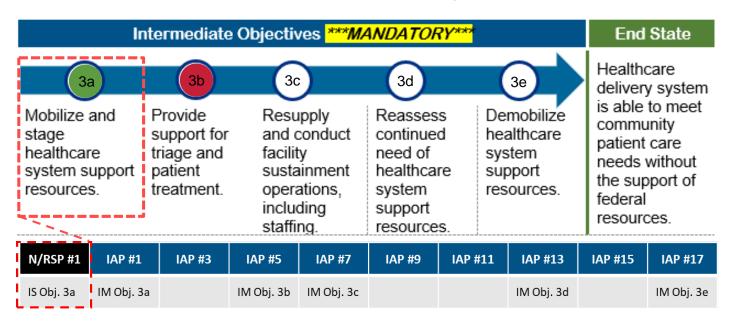


Phasing lays out the focus of the execution of LOEs in a logical sequence to break the operation into manageable parts. LOEs are initiated and conclude at different times in a disaster. It is important to recognize that phase culmination is often reached at different times in different geographic areas across a single incident.

Crisis Action Planning - National/Regional Support Plan

(N/RSP)

Lines of Effort and the N/RSP

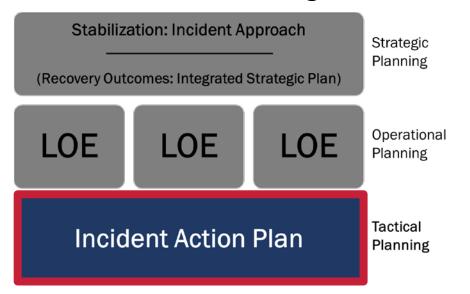


Incident Support Objectives

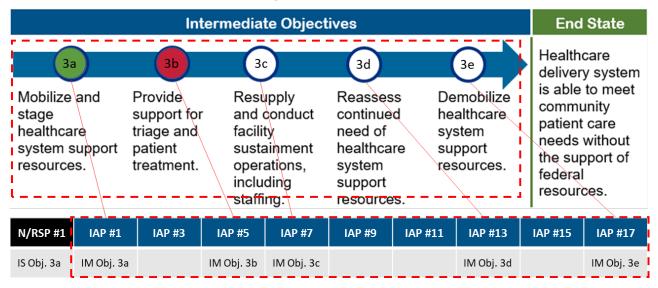
The N/RSP utilize objectives and associated tasks to drive federal support actions either prior to an event (notice) or immediate post event (no-notice). Objectives in an N/RSP generally involve the ordering, activating, staging, and outfitting of resources for further employment at the incident management (IM) level. Many, if not all, objectives in an N/RSP can serve as the starting point for LOEs as defined in deliberate planning. Due to the limited scope of RRCC and NRCC tactical control during initial response, most, if not all, LOEs will be in an early stage of execution upon transfer to IM.

Crisis Action Planning - Tactical

Tactical Level of Planning



Example Line of Effort

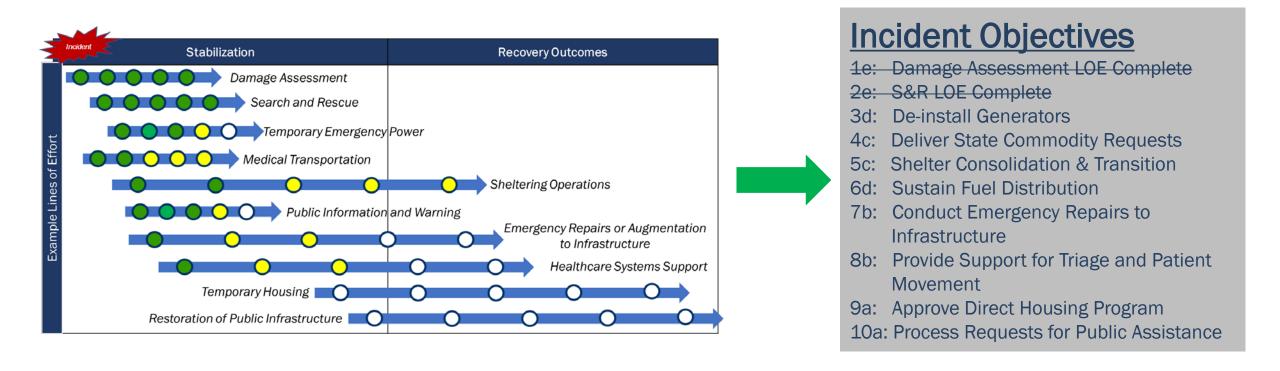


Lines of Effort and the Incident Action Plan Objectives on the ICS Form 202

Incident objectives are **developed and anticipated for each LOE** as points across the continuum from the current state to the **end-state for the federal assistance mission**. Within a few operational periods, as planning is matured, **incident leadership can anticipate the sequence of incident objectives across the LOE**. Similarly, through evaluation of performance and effectiveness of the LOE, incident leadership can anticipate **when incident objectives will be achieved**, and transition to the next incident objective across the LOE.

IAP Incident Objectives

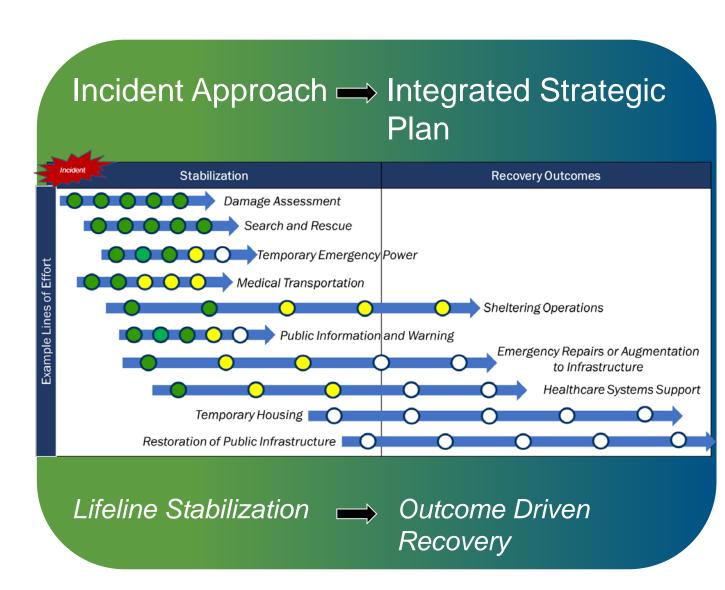
Transitioning Line of Effort Intermediate Objectives into Incident Objectives



IAP objectives can be developed based on the current intermediate objective for each active LOE.

Transition to Integrated Strategic Planning

- Once lifelines begin to stabilize, and incident personnel can anticipate operations beyond stabilization, the IM Planning Section initiates the development of the Integrated Strategic Plan (ISP)
- The Incident Approach informs the ISP, and once the first ISP is published, the Incident Approach is sunset
- While many LOEs developed in the Incident Approach will culminate relatively early in the lifecycle of the incident, several LOEs developed in the Incident Approach will transition to longer-term operations and be included in the ISP



Recovery Outcomes

Recovery Outcomes by Recovery Support Function

Recovery Support Function	Recovery Outcome	
Community Planning and Capacity Building	Resilient recovery of SLTT communities	
Economic	Sustainable, diversified and resilient economy	
Health and Social Services	Sustainable and resilient health, education, and social services systems	
Housing	Adequate, resilient, and affordable housing	
Infrastructure Systems	Restored, modernized, hardened, and resilient systems	
Natural and Cultural Resources	Restored, preserved, risk-resistant, and resilient systems	

These are the *National-level outcomes* as approved by RSFLG Undersecretaries, which SLTTs can use as a reference point for tailoring their own *recovery outcomes*.

When stabilization of community lifelines are achieved, the **focus of the mission shifts** to achieving **Recovery Outcomes.** The **Outcome Driven Recovery** model drives an approach that emphasizes **long-term resilient solutions** across all lifelines and other aspects of a community. To the greatest extent possible, recovery operations will utilize similar reporting templates (e.g., SLB Tier I and II) contained in this toolkit, but modified to reflect recovery outcomes by RSF rather than stabilization targets by lifelines.

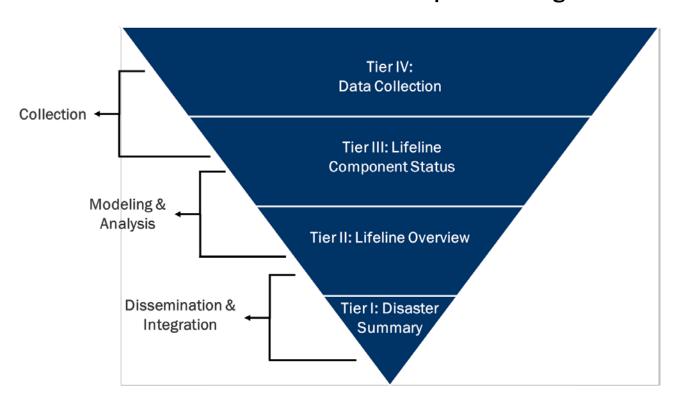
Section III: Situational Awareness and Reporting

Information Management

Intelligence Collection Cycle

5 Evaluation & Olivection & Olivection & Analysis 3

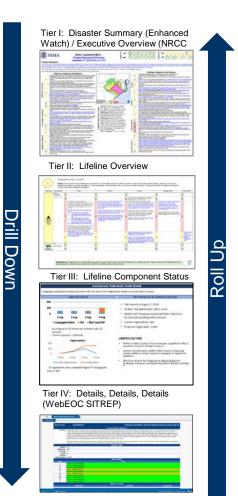
Tiered Senior Leadership Brief Design



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

Senior Leadership Brief

FEMA's Senior Leadership Brief (SLB) format was revised to integrate community lifelines and discuss components and subcomponents and identify interdependencies between lifelines.



The NRCC now uses an updated SLB Template, which is made up of four Tiers:

Tier I: Disaster Summary

- Executive Summary
- Significant FEMA and/or Interagency 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)

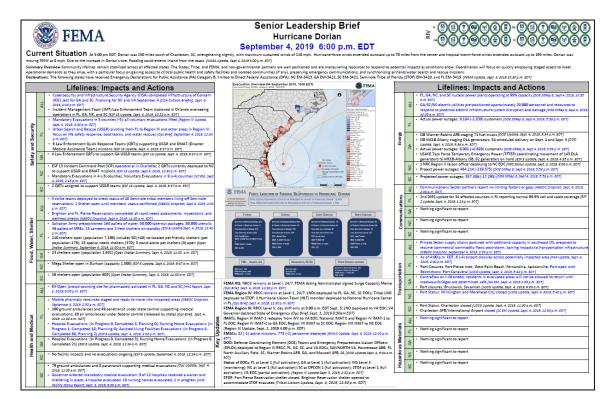
- Information is reported and collected to develop a Common Operating Picture
 - Data collection from all incident levels to include field, regions, state, national, and interagency

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Senior Leadership Brief Tier I: Disaster Summary

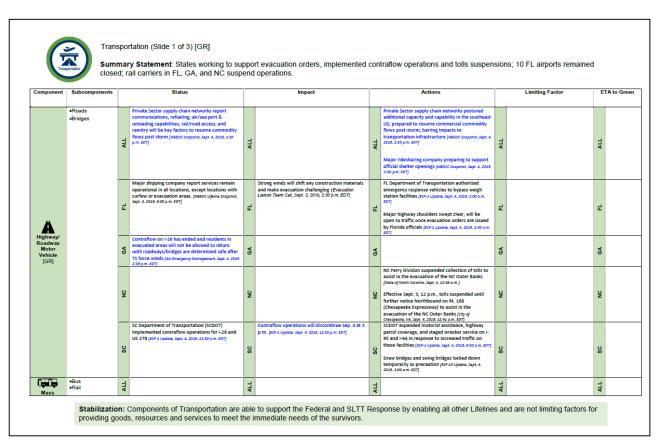
Tier I of the SLB includes executive-level information summarizing the situation, lifeline condition, and critical impacts, actions, and limiting factors for the lifeline

- 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: Force Laydown Map, updated information on IMAT and Liaison Officer (LNO) locations, RRCC status, State Emergency Operations Center status, and overall posture including Emergency/Disaster Declarations, and EOC status



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



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 (Situation Report)
- Information is reported and collected to develop a Common Operating Picture



SPOT Reports

- SPOT Reports are issued when incidents of such significance occur that immediate notification becomes necessary
- An image of the FEMA SPOT Report is provided along with an alternative method of organizing incident impacts around lifelines

Lifeline Impacts

Safety and Security:

- Alert Orders issued for WA-TF1 as a Type 1 (70-member) task force.
- All 911 services are operational (NICC)

Food, Water, and Sheltering:

- · Many homes and buildings reportedly damaged (APD)
- Precautionary boil water advisory in place from Anchorage Water Waste and Utility (APD)
 Health/Medical:
- · No injuries or fatalities reported
- No injuries of fatalities reported
- All major medical facilities are open; emergency rooms are accepting patients Energy:
- Over 32,000 customer power outages reported across the affected area.
 Communications:
- · All 911 lines are operational

Transportation:

- · Anchorage Airport at "Ground Stop" (closed) for evaluations
- · Multiple reports of damaged bridges and roads buckling or collapsing

Hazardous Waste:

· No impacts reported

NATIONAL WATCH CENTER

FEMA HEADQUARTERS - WASHINGTON, DC fema-nwc@fema.dhs.gov | 202-646-2828



FEMA NWC SPOTREP: Incident – Location (Initial, <or>
 Update #, <or>
 Update # – FINAL, as of HH:MM a.m. / p.m. EST / EDT: Topline Message)

Updates in Blue (Remove if initial)

Incident Description: This is the bottom line up front (BLUF). It shouldn't change.

Time of Incident: HH:MM a.m. / p.m. EST / EDT, Month ##, 2018 (When it occurred or will occur – it shouldn't change)

Sources: List of organizations the information came from.

Current Situation (as of HH:MM a.m. / p.m. EST / EDT):

Use an "as of" time in parenthesis above showing when the information was last received/updated. Continue with the 5Ws providing any expanding information and analysis. This is where you would put PAGER info, tsunami info, winter storm forecast, etc.; Format this section as best fits the need.

Impacts: This section can be edited to break down by state or region if a multi-state or multiregion event; Regions with most significant impacts first. Minimal list of impacts include:

- Fatalities / Injuries: None reported
- Evacuations: None reported
- Shelters / Occupants: None reported
- Power Outages: Minimal reported
- Transportation: No impacts reported
- Other: N/A
- Initial SPOTREP may have little or no known impacts. Report what you know at the "as of"

State/Local Response:

- State information such as EOC Activation Levels, Declarations, Deployments, Etc.
- Local information such as county or city response efforts (high-level stuff)

FEMA Response:

- Regional information first, followed by headquarters
- Multi-regional incident report on the most severely impacted region first
- Avoid "Not Activated" and "Steady State" if a Region is listed; they are at least monitoring the
 events as they unfold

Follow-up: The FEMA NWC will provide additional reporting as information becomes available.

Follow-up: Barring significant developments, this will be the FEMA NWC's final report for this incident.

Insert large graphics at the end of the reports.

Daily Operations Briefing

- The Daily Operations briefing provides an overview of the current emergency management situation nationwide
- FEMA has organized its summary of significant incident information within this briefing around the community lifelines

Hurricane Dorian

Situation

Hurricane Dorian continues to move along the Southeast US coast and is expected to approach South Carolina today. Life-threatening storm surge and dangerous winds expected along portions of the coasts of GA, SC, and NC and portions of southeast VA and the southern Chesapeake Bay, regardless of the exact track of Dorian's center.

Watches/Warnings:

- Storm Surge Warning: Savannah River to Poquoson, VA;
 Pamlico and Albemarle Sounds, Neuse and Pamlico Rivers
- Hurricane Warning: Savannah River to the North Carolina/Virginia border; Pamlico and Albemarle Sounds
- Tropical Storm Warning: North Carolina/Virginia border to Chincoteague, VA; Chesapeake Bay from Smith Point southward
- <u>Tropical Storm Watch:</u> North Chincoteague, VA to Fenwick Island, DE; Chesapeake Bay from Smith Point to Drum Point; Tidal Potomac south of Cobb Island; Woods Hole to Sagamore Beach, MA; Nantucket and Martha's Vineyard, MA





Lifeline All lifelines remain GREEN

Safety and Security

 Mandatory evacuations in effect in FL (1 county); SC (8 counties) and NC (6 counties)

Food, Water, Shelter

- FEMA Commodities have arrived at ISBs (NBEOC)
- Region IV: 113 (-26) shelters with 6.6k (-2.7k) occupants (FL: 32/1816; GA: 13/2,038; SC: 33/2015; NC: 35/792) (ESF-6 as of 6:00 a.m.
- 1 Mega shelter open in Durham, NC with 1.5k capacity (ESF-6 as of 4 Sept 11:00 a.m. EDT)

Energy

- SC: 190K reported without power (Eagle- I as of 7:30 a.m.EDT)
- Fuel industry partners affirm fuel supplies and distribution remain stable (NBEOC)

Transportation

- Airports: SC: Charleston International Airport, Florence Regional Airport, and regional/county airports closed; NC: Wilmington International Airport closed (FAA as of 6:00 a.m.)
- Ports: Canaveral and West Palm Beach re-opened with restrictions;
 GA: Savanah and Brunswick closed; SC: Charleston closed; NC:
 Wilmington and Morehead City closed (USCG Update as of 6:00 a.m.)

Section IV: Icons and Templates

Templates

- Templates can assist in lifeline implementation during incident response
- Each emergency management office may adapt these templates to fit their specific requirements
- Current templates included in the toolkit 2.0 are the following:
 - Lifeline Card Template
 - Senior Leadership Brief Tier I and Tier II Templates
 - IM SLB Tiers Template
 - Incident Approach Template

All files can be found in the companion folder "Lifeline Templates" included with this toolkit.

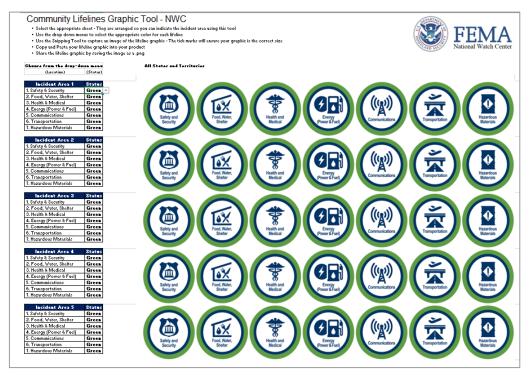
Guidance for Using Lifeline Icons

- Lifeline icons should be used consistently and appropriately when added to any incident response products
- Icons should be colored blue when representing the steady-state and/or when no incident status is indicated
- All other colors are defined in Section I with exact color values shown below

Name	RGB Value*	Shading	
Grey	RGB 145-147-149		
Red	RGB 197-32-56		
Yellow	RGB 251-186-22		
Green	RGB 94-156-66		
Blue	RGB 1-82-135		
*RGB – Red, Green, Blue			

Editing Lifeline Icons*

- The community lifelines graphic tool provides an easy method for quickly adjusting the colors for all lifeline icons
- Follow the instructions included in the tool to assign colors and then copy over the icons
 to other products as necessary



^{*}The Graphic Tool allows all seven icons to be easily color-coded, ordered, and spaced at the same time; the Icon Library provides easy access to individual icons with pre-set colors so no alteration or editing should be required

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Icon Library (1 of 2)



Icon Library (2 of 2)



Your Feedback Matters!

Please send questions, comments, or feedback to Lifelines@fema.dhs.gov

Thank you!



FEMA