



THE IMPORTANCE OF COMMUNITY LIFELINES

Between 2016 and 2019, an estimated 75% of Americans were impacted directly or indirectly by natural or manmade disasters. In response to these numerous unprecedented multi-billion dollar disasters, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) developed a [Community Lifelines \(CL\)](#) construct for the Federal Emergency Management Agency (FEMA). The CL construct is a framework that provides emergency management agencies (EMA) with a reporting structure for establishing incident stabilization. It allows FEMA to better determine where to deploy limited critical resources and to which entities, including states, localities, tribal nations, and territories (SLTT), during times of emergency.

FEMA has identified seven focus areas (lifelines) under the CL framework; these include: Safety and Security; Health and Medical; Communications; Hazardous Materials; Food, Water, Sheltering; Energy (Power & Fuel); and Transportation.

PROBLEM STATEMENT

Currently there is no systematic means to identify, inquire, ingest, manage, and analyze the authoritative data needed to assess, share, and act upon the status of CLs in the impacted area. The Community Lifeline Status System (CLSS) reporting construct will facilitate a data-driven approach to support standards-based reporting across areas impacted by a disaster.

THE OBJECTIVE OF THE CLSS

The CLSS effort led by DHS S&T will develop this reporting construct to provide the emergency management community with a comprehensive systematic approach to lifeline status planning, monitoring, and reporting. It is an iterative multi-year project that will be tested and operationalized for use by SLTT EMAs and FEMA.

PRIORITY: Life Saving

EFFORT: Stabilization of Lifelines



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

Description of the FEMA Community Lifeline Concept (FEMA, 2019).

CLSS TASKS

The CLSS project is divided into the following tasks: Project Management; Operational Requirements Documentation; System Design; System Development; Test and Evaluation; and Transition & Deployment.

Operational Requirements Documentations

DHS S&T and its performer, G&H International, will examine and document the operational requirement that will support successful development and implementation of the CLSS. A Steering Committee and working groups will be established to support requirements definition, module development, and initial pilot testing. The CLSS Steering Committee will oversee the development of the CLSS throughout the base period of performance: September 2022 to September 2023. Options years will be used to refine, enhance, and implement the CLSS.

System Design

The performer will use research findings to design a CLSS that meets operational needs of the stakeholders. The CLSS will consist of four components: (1) Lifeline Data Library Model; (2) Incident Stabilization Planning Module; (3) Analysis Planning Module; (4) Lifeline Reporting Module.

System Development

The performer will build prototypes of four CLSS models utilizing information and data gathered from the preceding tasks.

Test and Evaluation (T&E)

The performer will conduct rigorous T&E to identify and correct any gaps in the CLSS prototype models and begin moving them to an interim operational capability.

MILESTONES & DELIVERABLES

CLSS T&E Plan Award	+ 8 Months
CLSS Prototype Deployment Award	+ 11 Months
Pilot Test Reporting Award	+ 11 Months

SPONSORING ORGANIZATIONS

- DHS S&T
- DHS Office of the Secretary
- FEMA

