

# VACCINE

Visual Analytics for Command, Control, and Interoperability Environments  
A U.S. Department of Homeland Security Center of Excellence

## Coast Guard Search And Rescue Visual Analytics (cgSARVA)

**Benefit:** cgSARVA is a vital component for analyzing and assessing operational efficiencies of different Coast Guard missions across the United States. The system aids with the risk assessment of potential staffing changes. The analyst will be able to understand the distribution of incidents, the risk, and the benefits involved with reallocation or reduction of resources.

### Mission Need

The Coast Guard Search and Rescue Visual Analytics (cgSARVA) is an interactive system that has been designed to assist U.S. Coast Guard decision makers and analysts in understanding and assessing the operational efficiencies of different Coast Guard missions at different organizational levels.

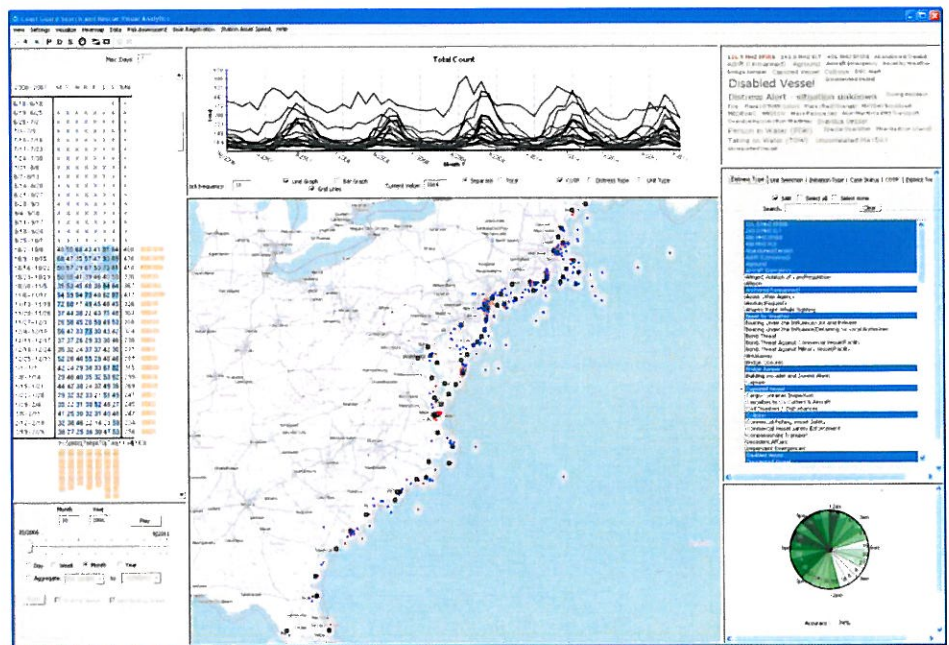
cgSARVA provides an interactive user interface and provides a suite of tools that enables the visualization, analysis and assessment of different Coast Guard missions. The system allows an analysis of the potential risks to the maritime environment associated with notional station closures and reallocation of different resources in terms of response time, potential lives and property lost, and provides optimal direction as to the nearest available station in case of such station closures. The system enables the analysis of trends, patterns and anomalies associated with the distribution of cases in both space and time conducted by the Coast Guard throughout the U.S. The system has been developed utilizing a user-centered approach where the expertise of several different Coast Guard analysts and decision makers has been leveraged in the design process of the system.

### Collaborators:

- United States Coastguard (U.S. Coast Guard's Fifth District, Ninth District, Headquarters and Atlantic Area Commands)

### Funded by:

- U.S. Department of Homeland Security, Command, Control and Interoperability Center of Excellence



Linked views for spatiotemporal analysis of U. S. Coast Guard SAR cases. The main viewing area shows the map view with the points showing the locations of SAR incidents in the east coast of the United States.

Early Development

Lab Prototype

Commercial Product

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