# *Unifying Disparate Trusted Data in Real-Time to Improve Decision Making*

***From space to oceans, NOAA's observing systems, forecasts and models can be unified collaboratively***

*"You never know who you are going to be sharing your information with during a crisis…you need a flexible way to share information with current and new trusted partners, on the fly, in a secure and collaborative way."*

***Tom Moran, Executive Director, All Hazards Consortium***

In today's interconnected world, every second can make a difference in either preventing an incident or responding to an event that affects the Nation's critical infrastructure. The ability of federal, state, local, tribal, territorial, and private sector partners to share accurate information quickly is essential to the Nation's security and resilience. [1]

The Federal SBIR program, a powerful Federal streamlined innovation and acquisition program that can be used across all agencies, has facilitated the development of a unique geospatial collaboration technology that rapidly and more effectively puts trusted disparate data to work across platforms and on any device to improve situational awareness, inform decision makers, advance science and communications, and help to engage the public.

USE CASE: GC CAN UNIFY AND SHARE DISPARATE TRUSTED DATASETS FROM NOAA TO SUPPORT MARINE OPERATIONS INCLUDING NOAA CHARTS, NWS MARINE FORECASTS (SIG WAVE HEIGHT, TROPICAL CYCLONE FORECASTS, WINDS), GOMO OCEAN OBSERVATIONS, MODEL OUTPUT FOR OIL TRANSPORT, PORT STATUS AND EVEN CLOSE AREAS OF THE OCEAN TO MARINE TRAFFIC IN COORDINATION WITH USCG AND OTHER AGENCIES IF NEEDED.

**GeoCollaborate (GC)** provides a patented solution to **rapidly** stand up an 'on/off' information sharing environment internally within your agency or externally to a broader trusted partner base that can deliver critical data products (i.e. operational products, prototype products), when you need it most, for as long as you want…as a crisis is developing, while **preserving the security of your data**. It doesn't replace websites, portals, or hubs, it turbocharges them for better access and use.


*Figure 1: GeoCollaborate enables trusted data from disparate locations (i.e. websites, hubs, portals) to be shared across any platform in a real-time synchronous collaborative environment to improve situational awareness and decision making. Data analytics, machine learning or model output can be shared and validated by comparing to actual observations in a collaborative environment.*

[1] INFORMATION SHARING: A VITAL RESOURCE FOR CRITICAL INFRASTRUCTURE SECURITY AND RESILIENCE, DEC 2019 https://www.cisa.gov/information-sharing-vital-resource

GC enables a leader such as subject matter expert to identify relevant data and temporarily share it across any platform to improve efficiencies, such as to use or validate observations from multiple sources. When you need rapid access and to scale the sharing of your information to tens, hundreds or thousands of trusted partners, GC delivers.

Through years of development and by leveraging SBIR investment, GeoCollaborate is now operational and allows sharing of data without local downloading or storage, on an easy-to-use interface, implementing log-on credentials as needed, and customization as desired.

## How GeoCollaborate Works

A designated set of credentialed LEADERS are connected to FOLLOWERS by joining a simple secure web link then turning **GeoCollaborate** ON. Within seconds, all participants are looking at the same map and data across platforms and on any device. The LEADER has control over the movement of all followers' maps in real-time for an interactive, dynamic, and synchronous collaboration experience that allows and empowers each follower to interact with the data and later zoom in on their area of interest. Each collaborator can turn their session off and move around the information shared without taking possession of the data or losing additional shared information. Geospatial messaging can be used highlight specific areas and provide information in real-time, and a wide range of OGC-compliant and other dataset formats can be integrated (web services, KML, feature, dynamic, images and even documents). After the active leader-follower collaboration session a dashboard with the layers presented becomes available 24/7.

**GeoCollaborate**'s approach has no specific bandwidth requirements to operate successfully. Data from the provider is shared into each of the followers' devices but **CANNOT** be downloaded or saved. The LEADER has ON/OFF sharing authority, which can also result in a superior briefing and interactive experience. **GeoCollaborate** does **NOT** allow the data to be stored locally which has beneficial FOIA results.

In addition to the All-Hazards Consortium, **GeoCollaborate** is being used to improve data sharing and collaboration between DHS and the Sensitive Information Sharing Environment (SISE), the US Census Bureau, and various agencies within NOAA including the National Weather Service (NWS) National Water Center (NWC), the Hurricane Research Division (HRD) and NOAA's Global Ocean Monitoring & Observing (GOMO) office to help monitor ocean observation platforms and assist in identifying gaps in ocean observations that could be filled to improve hurricane forecasting. As the need for trusted information sharing between private sector businesses grows, particularly in Climate Services and the new Blue Economy, **GeoCollaborate** offers a secure, efficient, rapid, and innovative means to connect decision makers with trusted data. As an SBIR Phase III technology, the pathway has been established for a rapid and simple acquisition process at the Federal level.

*For additional information contact: Dave Jones, CEO (dave@stormcenter.com) 410-203-1316 (410-271-4413 m)*
*GeoCollaborate® was developed under the Federal SBIR program (Small Business Innovation Research) and has been awarded Phase III status, meaning sole-source justification for every US Federal Agency. White House/SBA Tibbetts Award Winner for innovation.*