

Real-Time Geospatial Data Sharing Across Platforms to Enhance NWS Operational Impact-based Decision Support Services to Core Partners

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Geographic Information Systems (GIS) and mapping platforms are used by stakeholders to provide a single identical display of relevant operational information in real time (i.e., critical infrastructure, hazards, deployed personnel, population stats, evacuation routes, etc.). When using GIS or geospatial mapping tools, intelligent decision making and the development of effective and valuable decision support services require collaboration between those who interpret the data (authors, analysts, and subject matter experts) and those who make decisions based on that data (managers and team leaders).

Achieving a “common picture” among multiple users in real time using map-based data and current technologies was limited to an individual's discovery and display of geospatial intelligence products on their interactive maps and the transmission to others of their desktop view using existing screen-sharing technologies. Remote participants see only a broadcast image of the presenter's desktop while their own local map displays remain static, non-collaborative, and unable to incorporate the information shown in the presenter's desktop video stream. Furthermore, when the screen-sharing session is over, all remote users cease to see the map with relevant information displayed.

GeoCollaborate®, an SBIR³-funded collaborative technology, achieves total and true commonality and permits collaboration across all stakeholders accessing data using disparate interactive web maps, GIS platforms, or Common Operating Pictures (COPs). In the same way that map services bring real-time map information to maps, GeoCollaborate® is a network service that permits real-time data sharing and collaboration across an unlimited number of disparate web maps. The concept behind GeoCollaborate® is simple: it lets anyone securely author the content of a lead web map, share content, and collaborate in real time or offline with other web maps that are following with nothing more than a browser and a network connection.

A briefing of current activities will be provided, with specific emphasis on how GeoCollaborate® could potentially enhance National Hurricane Center's collaborations and communications with its international partners.

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