VISUAL ANALYTICS FOR COMMAND, CONTROL, AND INTEROPERABILITY ENVIRONMENTS
A U.S. Department of Homeland Security Center of Excellence

VACCINE

Symbol Store (Searchable Store for Map Symbols)

PRODUCT

The Research

The focus of Symbol Store research is to share point symbols for maps, particularly those used commonly in emergency management tasks. These tasks can include disaster mitigation and response planning activities as well as direct response and situational assessment mapping in the immediate aftermath of a disaster. Additionally, they can include remediation mapping efforts as communities engage in recovery efforts.

What Symbol Store Does

Symbol Store is a web-based prototype tool that holds map symbols collected from U.S. government and public domain symbol sets designed by independent cartographers. Users can use keyword-based searches on www.symbolstore.org, and they also can search using time (most recent uploads), contributor and symbol categories. As Symbol Store's user base grows, the popularity of certain symbols also can be a search criteria.
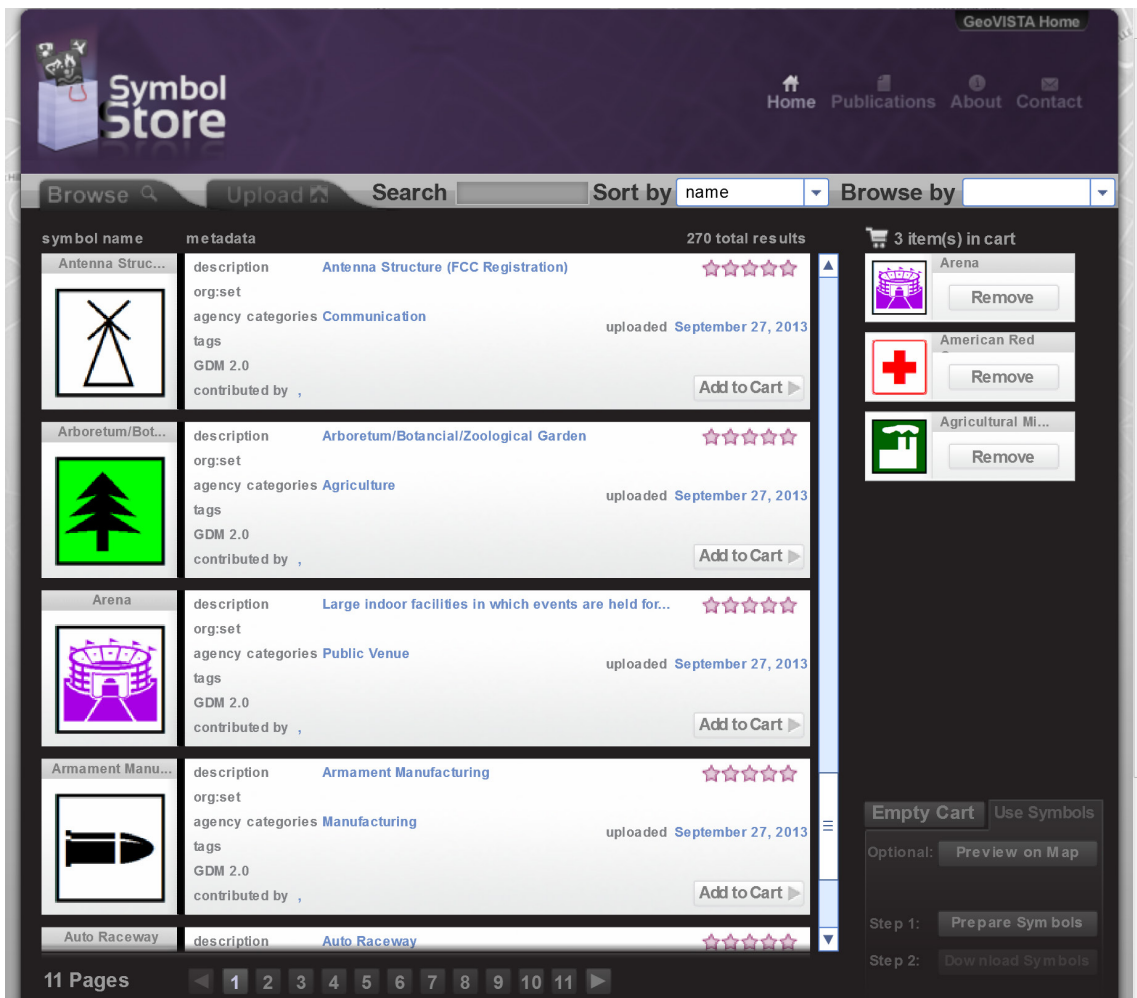
Symbol Store's initial prototype interface with symbols contributed from Infrastructure Information Collection Division.

Why it is Useful //

Several agencies within the U.S. Department of Homeland Security use maps as part of their daily operations, and those agencies need consistency to communicate and cooperate with one another. One clear need is that since emergencies are time-sensitive in terms of response, the rate at which responders and officials can read and interpret a map can make the difference between life and death and property saved or lost.

The need for Symbol Store was based on a comprehensive analysis of map symbol use by DHS and collaborating emergency management organizations at the state and local level. This analysis identified a substantial mismatch between some prior efforts to develop map symbol standards and the wide range of application cases for which DHS has primary responsibility. This mismatch resulted in duplication of map symbol sets and sometimes conflicting map symbols that could lead to confusion on the part of map users in a rapidly evolving crisis. Further systematic work with emergency map producers and users guided the development of Symbol Store and map symbol choices.

So far, a great deal of effort has gone into developing new symbol standards to support map interoperability in defense, crisis management and humanitarian mapping domains, however much less progress has been made toward making symbols easy to discover and share.

Symbol Store has over 2,400 map symbols that can be previewed on various map designs before downloading, including mobile symbols. This can improve the capacity for cartographers to design easily legible maps, and for users to read maps easily and respond quickly. Qualified users also can share their own images for others to search.

Symbol Store's upload interface.
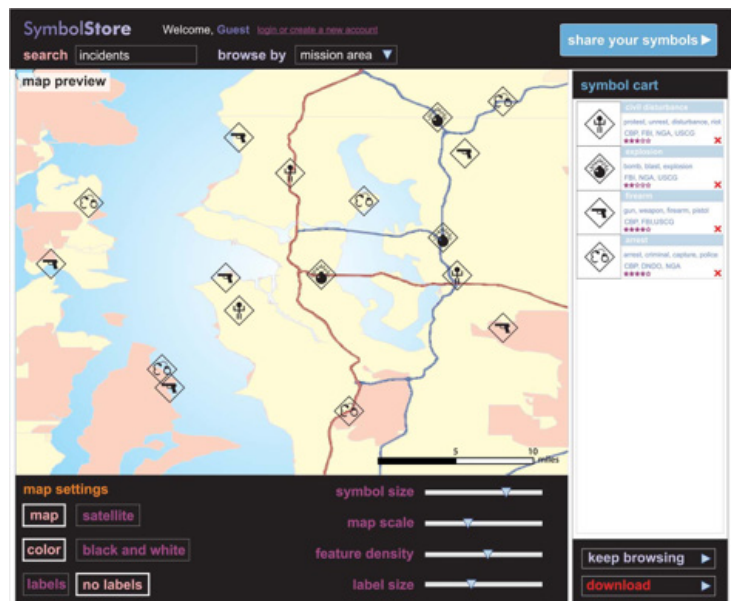
The map preview function.

Contact Us

Want to find out how VACCINE's research can help your organization? Email **vaccine@purdue.edu** or visit **www.visualanalytics-CCI.org**.

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