



### Company History

Buffalo Computer Graphics is a global provider of Geographic Information Systems (GIS), Incident Management and Mass Notification solutions, as well as training simulation systems, and custom engineered products for a variety of industries. A veteran-owned U.S. Small Business, BCG has provided its private sector and government customers with superior products and outstanding service for over twenty-five years. The ability to provide unique, custom-tailored solutions, as well as products that can integrate with an organization's existing infrastructure is what sets BCG apart from its competitors.

### GIS Software & Services

Custom GIS Software Development

- Custom Web Applications
- Spatial Data Management
- Mobile Applications

GIS Infrastructure Planning & Development

- GIS Infrastructure Design
- GIS Services Development
- Needs Assessment & Implementation Planning

### Clients

BCG has been responsible for the design and development of custom hardware and software applications for customers including the New York State Department of Health, the New York State Emergency Management Office, the New York State National Guard, the Minnesota Department of Homeland Security, the Vermont Department of Emergency Management, Guam's Department of Homeland Security, Niagara Region Canada and the counties of Erie, Niagara, Chautauqua, Westchester and Orange County New York.

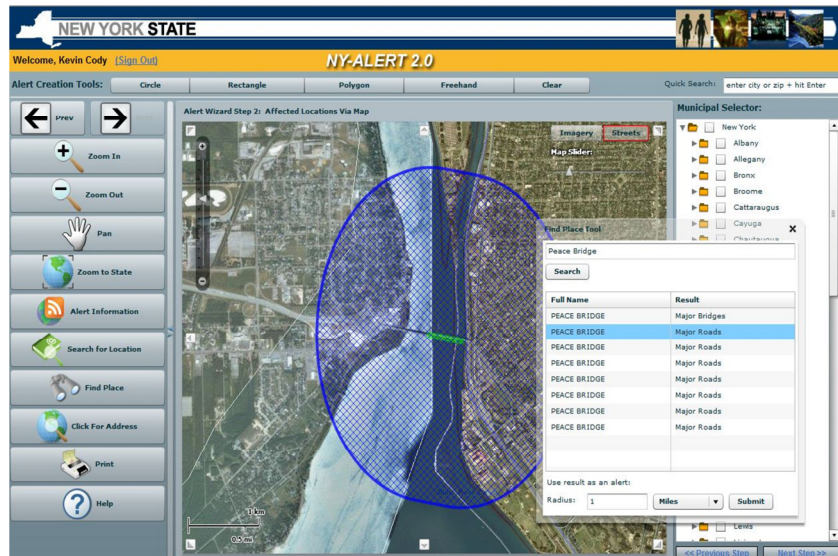
### Support

In addition to working closely with our customers to determine their exact needs, BCG prides itself on the ability to provide quick and expert support for all installed systems. This includes immediate phone support, on-site assistance, and both formal and informal training classes for all of our products.

### Recent Awards

Buffalo Computer Graphics has been awarded the 2010 ESRI Business Partner of the Year for the Northeastern region.

The **NY-ALERT** system is a web based **Mass Notification System** developed for the State of New York by Buffalo Computer Graphics (BCG). It is designed to contact a large amount of individuals through a variety of means including phone, SMS, email, pager, and fax. The NY-ALERT system takes in imported contact data (e.g. E-911, SUNY student information, etc.) along with civilian entered data through a public interface.



The NY-ALERT system was developed utilizing ESRI ArcGIS Server 9.3.1, ESRI FLEX API, Microsoft SQL Spatial 2008 and Microsoft .NET Framework 3.5 in order to place alerts based on limitless geographic parameters. Geographic boundaries for an alert can scale from as tiny as a few homes in the case of a contained incident such as a fire, to a large scale public alert. The geographic boundaries also enable the precision to exactly define the area wherein persons need to be alerted, which consequently dictates who to alert.

The process of utilizing geographic based alerts begins with geocoding the civilian addresses. The geocoding function accounts for user errors by checking for misspelled streets and incorrect zip codes or city names. It also accounts for multiple matches, giving the user the option to select from a number of returned results in the case of a non-exact match. If a match cannot be found, a public facing web viewer is utilized so that a user can easily find and place an appropriate point. Every geocoded civilian point is then added to a highly optimized database for fast lookup during alert intersection calculations.

This application required a GIS infrastructure designed to support over 1,000 concurrent and active map users in 2008. Later, it was discovered, that the demand may be higher than originally anticipated. BCG, in conjunction with ESRI, designed and built a GIS architecture that can serve the needs of the public of New York State. NY-ALERT 2.0 has been active since 2009, successfully delivering these services to the public.

