

## **GICC - Technical Advisory Committee Meeting**

**November 22, 2011, 1-3pm**  
**333 E. Six Forks Rd., 3rd Floor, Conference Room #1**  
**Phone Number: 919-212-3145**  
**Web Conference: <https://its.ncgovconnect.com/ncom>**

### **MINUTES**

Colleen Sharpe, Dianne Enright, John Farley, Tom Morgan, David Giordano, Brett Spivey, Jeff Brown, and on the phone, Tobin Bradley and Doug Newcomb

#### 1. NC OneMap viewer prototype

Brett gave a brief overview of the agile development effort to create a viewer for NC OneMap. This is a collaborative, incremental approach for application development. He presented the first iteration or prototype for TAC review and comment.

The current viewer was developed with code from The National Map with a focus on making connections via web mapping services with local data producers. There were many tools and lots of layers.

Project Planning in 2010 included the following requirements:

- Simple Viewer to allow display of hosted data services
- Simple Viewer to preview data
- Improve download and map services speed/performance
- Provide transparent and seamless WMS capability to see geospatial information from different jurisdictions

Our approach

- KISS principle (keep it simple!)
  - Speed & simplicity
- Don't simply rebuild existing application
- Primarily a data discovery tool that supports two levels of users
  - Where's my house?
  - Preview and evaluate data for use in my project
- Integrate other base maps/capabilities
- Avoid plug-ins

Brett recommends not using Flash or Silverlight to avoid plug-ins.

Brett displayed a prototype of a Data Explorer with these elements:

- Add a service (data) – this function is to add WMS and REST to start
- Search geoportal – keyword search
- Switch basemaps – eight choices
- Print

- Identify
- Navigate or zoom
- Turn layers on and off
- View legend

Buttons for Add Service, Search GPT, Choose Base Map and Print were shown across the top. There is a pop-up for Layers and Legend (WMS does not require a legend). WMS supports identify function. The default base map includes the “community maps” provided to Esri by NCDOT and CGIA.

“Add service” to map; -- requires a URL from the user. Not for the casual user. Doug suggested a tool tip to help explain what it is. John added that another approach could be to pre-define services in a pop-up – e.g., weather, imagery, etc.

Brett further explained that the software includes Open Layers and Esri Javascript API. The projection is Web Mercator to accommodate the commercial basemaps; CGIA has added Web Mercator projection to WMS capabilities files. Partners would need to add that projection to their WMS, too, or the services may not show up in a map viewer. John agreed that Web Mercator is fine for data exploring, but he cautioned about the positional accuracy—Web Mercator is not reliable for representing distance. Doug noted a work around involving re-projecting services, but that would diminish performance.

Regarding “add a service”, John explained that beyond data, in the future we could be adding a web feature service or functional services (e.g., geoprocessing). Tobin pointed out that for performance, you could consider adding plain tile (cached) services; WMS has latency; Brett agreed and noted that caches have issues on the back-end (e.g., cache has one projection that would require reprojection). David clarified that “add a service” is for something outside of what is discoverable through the geoportal.

Tobin: “Add service” is useful, but it should not be as prominent. User should see the search option first. Doug suggested “add external service” (far right near print) – same projection. Add a warning tag (about projection) and suggestions on functionality when selected Tom and Doug would like to retain it the “add service” option, in a less prominent location.

Also, the search button could be “Add” or “Find Data” for a simpler representation. Or there could be a search box instead of a button invoking another window.

Colleen suggested that there may be popular layers to check on (or drop down). However, the available base maps have different layers, some redundant to the data a user may have discovered. John added that base maps are limited – features have labels, but attributes are not accessible.

There could be data (e.g. building footprints) that are not on a base map or if they are, are out of date compared to an available map service?

The group concurred on a data discovery emphasis for a viewer, above all. Tom reminded the group of the risk of a viewer becoming a sore point for users if it is not useful or comparable to competing tools.

David explained that a viewer enables a user to see more than one search result displayed at a time (unlike some of the geoportal resources that can be displayed one-at-a-time via the Preview link). The requirement is for a user to have an easy way to see a dataset of interest in context. Brett explained that any service that is part of the NC OneMap database is part of the geoportal; and, yes, we could return datasets for a user defined extent. David emphasized the viewer as a preview tool, not intended to replace the geoportal as the focal point for data discovery.

Tobin and Doug agreed that the technology direction proposed by Brett and David is good; and Web Mercator is suitable for discovery. Doug added that mobile devices are moving away from Flash and Silverlight, so avoiding those options makes sense.

Beyond keyword searches for data, the group spent time describing functionality where a user defines an area or extent and gets search results for data in that area (not knowing which layers to request for an area of interest, but wanting to see what is available). Colleen pointed out that the added value of a viewer is to enable a spatial search for data. Iteration 2 will need the spatial component.

Regarding analytic capabilities of map viewers, Tobin noted that a service aggregator is a challenge to develop. The group concurred that viewer requirements did not include higher functionality like that. Doug suggested that some way to point to tools for data analysis and local resources to help interpret data would be useful.

Colleen asked about geoportal solutions in other states for comparison. More research would be needed on that.

Coleen offered that TAC can help define NC OneMap and set realistic expectations. The group had ideas about branding the geoportal as NC OneMap, making it the main entry point for users. There was recognition, also, that the “map viewer” option in the current geoportal is a Flex viewer that is not sustainable by staff and does not meet requirements.

John urged the NC OneMap team to revisit the list of requirements, identify any gaps, define success criteria, and plan a roll-out of a newly branded refreshed NC OneMap (portal) with the data explorer, and clarify the next set of enhancements. He emphasized a focus on data users (who derive benefits) and focus on data discovery, not programmatic items. John and Colleen plan to make a request to Tim Johnson to find a way to devote a project manager to roll out the refreshed NC OneMap.

Brett noted that the geoportal met something like 8 of 12 high or medium requirements. He suggested that redesign of the Portal and the NCOneMap program website could be done

concurrently and consistently to be part of the concept equivalent to an NC OneMap “re-opening under new management.”

Brett and David will work on TAC recommendations for wrapping up version 1, with anticipation of user feedback and potentially new requirements from users for future versions.

TAC will meet in mid-December to review the next iteration.

## 2. Technical architecture

At 3:00 PM, the group decided to postpone a discussion of technical architecture for a future meeting.

The next will be December 20, 2011 at 1:00 PM in the same location – third floor of 333 Six Forks Road.