Work Plan

GIS Technical Advisory Committee

The purpose of the GIS Technical Advisory Committee (TAC) is to review and recommend specifications related to interoperability of hardware, software and databases to enable data sharing, as well as approaches or guidelines for developing, installing, and managing the components of GIS infrastructure. The state (SGUC), local (LGC) and federal (FIC) user committees appoint members to the TAC. The committee also includes representatives from the Office of the State Chief Information Officer, from the NC Secretary of State's Land Records Management Program, from the GICC (appointed by the Chair), and from CGIA.

Goals

A. Under direction of the GICC, support the mission of the Council by responding to GIS technical opportunities and issues affecting state and local governments in North Carolina.
B. Provide guidance on technical issues related to geospatial data and GIS as a component of the statewide technical architecture.
C. Exercise foresight and leadership, and approach technical matters in a competent and timely manner.

Objectives and Benefits

Objective	Expected Benefit
1. Provide an assessment of the statewide technical architecture for GIS in an annual report to the Council.	The GICC and its committees will be better informed on technical architecture issues in North Carolina as they relate to GIS and geospatial data.
2. Recommend specifications to ensure interoperability of hardware, software, and databases, and to facilitate data exchange.	Technical advice will better inform the GICC, its committees, and stakeholders.
3. Provide technical advice, expertise and leadership for specific technical issues of concern to the Council.	Questions and concerns from GICC members will be considered and answered in a timely way.
4. Align findings and recommendations of the GIS TAC, when practical, with the policies and standards of the National Spatial Data Infrastructure (NSDI).	North Carolina will be well positioned for federal grant proposals, cooperative agreements, and collaborative projects with the US Geological Survey, other federal agencies, the Library of Congress, and other states.

Major Tasks Numbered by Objective 2014-2015 (* indicates priority for this fiscal year)

Objective number and task number	Lead Member	Date Initiated	End Date	Status
*1.1. Provide assessment on technical issues related to geospatial data and	Dan Madding, OITS Rep.	11/12/14	6/30/15	

Work Plan
GIS Technical Advisory Committee

Objective number and task number	Lead Member	Date Initiated	End Date	Status
GIS as a component of the statewide technical architecture. Define how GIS technology and geographic data fit into architecture.				
*1.2. Prepare an annual report on technical architecture for GIS in NC	Joe Sewash (CGIA)		6/30/15	Component of GICC Annual Report
*2.1. Define best practices and guidelines for data exchange interoperability. Define needs (if any) for updated or additional state standards beyond the current set adopted by GICC.	Dan Madding		6/30/15	
3.1. Assess cloud-based solutions for geospatial data and mapping, an ongoing topic with SGUC. Coordinate with SGUC to include information about business uses, functionality, limitations, and costs.	Dan Madding, Dianne Enright (SGUC Rep.)		6/30/15	
3.2. Define mobile applications used in local and state gov't. Determine whether published data and map services are optimized for use in these apps. Assess whether time needed to execute business processes in the field can be reduced by using mobile apps.	Dan Madding, Dianne Enright (SGUC Rep.), Tobin Bradley (LGC Rep.)		3/31/15	
3.3. For the purpose of offline devices in the field, identify ideal compression ratios of MrSID imagery for various business processes, considering image clarity, disk storage space, and performance.	Dan Madding, Doug Newcomb (FIC Rep.), Kelly Eubank (NC DCR)	7/1/14	12/11/14	
4.1. Review GICC concerns and develop responses; review requests and solutions in the context of NSDI	Dan Madding	7/1/14	6/30/15	Ongoing
5.1. Inform the GICC of tasks and progress	Dan Madding	8/13/14	5/9/15	Ongoing

Work Plan
GIS Technical Advisory Committee

Additional Information on Specific Tasks

1. *(Tasks 1.1, 1.2)* The TAC will establish a workgroup to research the existing Technical Architecture guidelines of the State Office of Information Technology Services (OITS). The TAC will review the existing standard(s) and provide feedback on their suitability for use with geographic data. While this objective mainly relates to state agencies, the TAC will attempt to create a checklist(s) for smaller local governments relating to common system design components for internal reference purposes. The TAC will review State OITS's technical architecture guidelines and attempt to develop a template version for smaller state agencies to use when going through the project/application review process for the first time.
   An expected benefit would be to help make the application review process seem less daunting to first time applicants and smaller state agencies. Another potential benefit could be State OITS having more consistent applications and thus a quicker review time for approvals. Lastly, but most importantly the GIS community wants to start a dialogue with State OITS to make sure the architecture guidelines are applicable and meet the needs of GIS professionals. Workgroup members will include Patrick Blalock (OITS), Tim Pursell (OITS), John Farley and NCDOT staff member(s) (NC DOT), Allan Sandoval (DOC), Allan Axon (NC DENR), Joe Sewash (CGIA), David Giordano (CGIA), and Daniel Madding (NCDA&CS), with members from the local government committee to be determined.

2. *(Task 3.1)* The TAC will review existing documentation relating to third party or cloud based solutions for hosting (geospatial) map services. While ArcGIS Online will be the main focus, the workgroup will also research other options including any open source alternatives. As a result of the research relating to third party or cloud based solutions for hosting (geospatial) map services the TAC hopes to release a document to help GIS professionals better understand the benefits and challenges of hosting map services in the cloud with services like ArcGIS Online. This objective will be assigned to a workgroup whose members will likely include, John Farley and NCDOT staff (NC DOT), Dianne Enright (NC DHHS), Tobin Bradley (Mecklenburg County), Allan Axon (NC DENR), John Cox (DOA), and David Giordano (CGIA).

3. *(Task 3.3)* The TAC will research technical issues relating to the compressing of aerial imagery and create a short (4-6 pages) overview document. This document will be published on the GICC website for interested parties to review. The document may also serve as an educational tool for the NC 911 Board's ortho project; explaining why the State chooses the compression ratios for the products it delivers to the local governments. This objective will be assigned to a workgroup whose members will likely include, Daniel Madding (NCDA&CS), Darrin Smith (CGIA), Don Early (NC DOT), Hope Morgan (NC DPS), Doug Newcomb (US FWS), Jeff Brown (CGIA), David Giordano (CGIA), Kelly Eubank (NC CR) and several members of the NC Division of Cultural Resources.

Work Plan
GIS Technical Advisory Committee

Timetable for Numbered Tasks

July to September	October to December	January to March	April to June
1.1. Provide assessment on technical issues related to geospatial data and GIS as a component of the statewide technical architecture.	1.1. Provide assessment on technical issues related to geospatial data and GIS as a component of the statewide technical architecture.	1.1. Provide assessment on technical issues related to geospatial data and GIS as a component of the statewide technical architecture.	1.1. Provide assessment on technical issues related to geospatial data and GIS as a component of the statewide technical architecture.
3.3. For the purpose of offline devices in the field, identify ideal compression ratios of MrSID imagery.	1.2. Prepare an annual report on technical architecture for GIS in NC	3.2. Define mobile applications used in local and state gov't.	2.1. Define best practices and guidelines for data exchange interoperability.
			3.1. Assess cloud-based solutions for geospatial data and mapping.
			4.1. Review GICC concerns and develop responses; review requests and solutions in the context of NSDI.
			5.1. Inform the GICC of tasks and progress.

Ongoing Responsibilities
Members are responsible for communicating the work of the TAC to their respective committees and constituents.

Dependencies
GICC initiatives and concerns during the year may alter priorities.