



**NSDI Cooperative Agreement
Institution Building and Coordination Project
Agreement Number: 04HQAG0188
Final Project Report**

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PROJECT NARRATIVE

PREMISE AND METHODOLOGY:

Centralina Council of Governments, in partnership with Catawba Regional Council of Governments, the City of Charlotte and the UNC Charlotte Urban Institute, is working to develop a strategy for consistent, current, and seamless GIS data region-wide. The defined region includes 16 counties and their municipalities. Coordinating this effort is a Grant Team comprising at least one representative from each of the partners.

On November 19, 2004, the Steering Committee for this effort convened an organizational meeting in the Centralina Council of Governments conference room. In attendance were representatives from the cities of Charlotte, Concord, and Rock Hill; the counties of Cabarrus, Gaston, Iredell, Lancaster, Lincoln, Mecklenburg, Rowan, Union, and York; and regional, state and federal organizations including: NC Center for Geographic Information and Analysis, US Geographic Survey, Federal Geographic Data Committee, Charlotte Regional Partnership, Charlotte Area Transit System, Western Piedmont COG, Catawba Regional COG, UNC Charlotte, and Centralina COG.

Initially, an overview of the project was presented including State and Regional significance. The balance of the meeting was a facilitated discussion to solicit work program input, issues to be addressed, scheduling, and additional participants to be considered. Members of the Grant Team presented information on current similar efforts, which transitioned to a discussion about the various focus areas that would have to be developed for this to be a successful venture. The Steering Committee decided that the four focus areas most relevant to project success were: Finance, Marketing, Governance, and Technology. Subcommittees were formed, each charged with developing a plan for a focus area. The Steering Committee also agreed that the members of the Grant Team would serve as staff to the Steering Committee and channel communication between the subcommittees and the Steering Committee.

Subcommittee meetings occurred over the next six months. The Technology Architecture Subcommittee considered the current environment of GIS data in the region, prepared a gap analysis of the data, and mapped out a possible future environment of data collection, standardization and sharing. The Governance Subcommittee researched organizational structures of similar efforts and prepared a plan including membership and data standards, policies and a phased implementation. The Business Plan Subcommittee addressed program costs and revenues issues and the Marketing and Communication Subcommittee worked to propose a branded identity for the project along with a strategy to inform the region about what we were doing.

Periodically, the Steering Committee convened to receive reports from the Subcommittees and to provide a forum for open discussion on the information brought forth. The discussions guided the subcommittees' work and maintained the focus on the overall goal of the project. Steering Committee meetings also allowed committee members and guests to share information about on-going projects that required regional

data and how the existence of a standard regional database would facilitate these projects. Presentations from the Charlotte Area Transit System, the Mecklenburg County Bioterrorism Data Effort, and the Regional Traffic Demand Model emphasized the need for consistent data and the cost savings associated with the existence of such a network. We also received information and support from Central Piedmont Community College, the recipient of a training grant from the Department of Labor, specifically for GIS studies. These exchanges helped to shape the project by getting input from potential users.

DESIRED OUTCOMES:

The vision of the group was to provide its members and other cooperating organizations with accurate, timely, consistent, and seamless multi-jurisdictional Geographic Information Systems (GIS) data for local and regional planning and public service delivery.

Through the cooperative effort, each member is able to take advantage of savings in staff time, services, training, data and other (GIS) related expenses. Members cooperate in data sharing, development of seamless and consistent data and the maintenance of a common data access point. The spatial data is established using the Federal Geographic Data Committee (FGDC) and NC OneMap standards.

The Cooperative's mission would be accomplished through:

- ◆ Establishment of data standards (edge-matching and context normalization);
- ◆ Cooperative acquisition of data, software, hardware, and access services through grants and matching funds;
- ◆ Establishment, maintenance, and administration of a spatial GIS data clearinghouse or depository;
- ◆ Electronic and personal inter-connection of members;
- ◆ Distribution of data and maintenance responsibilities among members; and
- ◆ Education, training, and technical support.

The group's goal was to be a strategic partner in the success of the member organizations in implementing and maintaining their GIS in a timely, accurate and cost effective manner. The group would also aim to be the key source of high quality GIS base data and a leader in sharing GIS data and providing technical expertise in GIS technology among public agencies and not-for-profit organizations in the central Carolinas area. To accomplish these goals, the guiding principals of the group would be:

- ◆ Adding value and reducing data costs to the members through cooperation, standardization, and quality assurance;
- ◆ Responsiveness to member needs for complete, accurate, and timely data;
- ◆ Equitable sharing of the costs of common resources and services;
- ◆ Openness of membership to all eligible organizations;

- ◆ Lowest possible subscription rates for data and related services to encourage membership;
- ◆ Commitment to the professional development of members' GIS staff and the distribution of GIS technology in the region;
- ◆ Organizational structure that can provide the resources to assist the development of the Framework.

BUSINESS CASE:

Using several examples of data collection costs for recent regional projects, the Business Subcommittee identified cost savings that could be realized by future regional endeavors if the necessary data were being compiled in an on-going basis. The Oregon Geographic Information Council (OGIC) was cited as an example of a statewide effort with a good return on investment.

Based on the desired outcomes and methodology, the subcommittee identified costs of the effort as: and additional \$150,000-\$175,000 for the initial adoption phase in which this Strategic Plan is presented to potential members for adoption and tactical plans developed for its implementation in the subsequent startup phase. Once the plan was adopted, the anticipated startup funding needs are \$450,000-\$500,000 with on-going funding around \$350,000-\$400,000 a year thereafter.

CHALLENGES:

Many local governments' budgets are currently being cut which will undoubtedly make it difficult to justify spending money on member dues. However, if the return on investment is sufficient, the local governments will see the value of participating. By providing consistent, seamless, timely data that reduces the effort that participating members must expend to collect, standardize and create, the Cooperative will more than pay for its costs.

Another challenge faced by the organization will be building and maintaining cooperation among the members to achieve the Cooperative goals while retaining and respecting their autonomy. In the Central Carolinas region, there are several larger governmental units that have more resources, power and leverage than the smaller units. This inequity sometimes leads to distrust between the jurisdictions. One challenge to overcome will be to get each jurisdiction to think not just locally, but regionally in terms of what will best serve the entire region.

Part of the challenge for the Governance Subcommittee was to identify an organizational structure that would both serve the purpose of being "tight" enough to meet the scale, scope and complexity needed for such an effort, without being so "loose" that it would fall apart. Organizations need structure. However, the Governance Subcommittee felt that an organization with too many rules and regulations would not be well received by the members. While the Cooperative would gather regional information, it is not politically feasible to structure it as a regional authority.

Several challenges will directly affect the Technology Architecture Subcommittee group. One such challenge is how will the data physically be shared? Will the data be stored on one main computer or will the data be physically stored on the members' computers with a central data access point? What security issues will this method of sharing data present for our members? In many cases, the answers to this question will depend on the members' technological resources.

The final challenge facing the group is generating the political support of the elected officials. While the benefits of seamless, consistent, GIS data may be apparent to a planner or a GIS director, the benefits may not be as obvious to an elected official who is often not as technically immersed in the day-to-day operations of data and GIS. The Marketing Subcommittee's challenge will be to sell the benefits of the effort to the elected officials who also control the financial considerations.

As the effort continues, the issue of contribution of time by members may become an issue. Meetings and membership on the committees are an important part of the governance structure. As the effort continues, the time asked of members could become burdensome if not carefully watched. Each member must contribute equally so that a few members do not unfairly have to overcompensate.

NEXT STEPS

At this time the challenges of funding and time commitment have overcome the initial enthusiasm and desire for the project.

The initial intent of this effort was to engage elected officials and/or management level individuals at the ground level of the project. The actual participants were more technical in nature. While this made for a good committee to develop the model, it also made for a great disconnect to those with the ability to allocate funds for the project.

The announcement of the projected cost for the project became an insurmountable obstacle to the group. We could not identify avenues of effectively communicating the need for this process to such a diverse group of jurisdictions in our 16-county region. Therefore, we could not find a workable funding solution to continue the effort.

FEEDBACK AND OBSERVATIONS

The cooperative agreement program was very helpful in allowing us to state the premises for the effort and to bring people together for the discussions. Each participant provided much more matching time/funds than required but that was due to the design of the project.

Perhaps we saw this as the one-time opportunity to convene such a group to talk about this type of endeavor. In retrospect, it seems that we took on a challenge beyond our

fiscal capabilities. All of the grant funds and much more than the required match were spent on development of the plan. Once we were nearing the end, we had no funds to promote the plan. Developing our model among a smaller group could have made a difference in the outcome but then again, we would have been face with the political situation of who would be included in the smaller group and who/why would be excluded.

Participants in this effort began and remained very enthusiastic until the cost issues came up. If there had been an easily identifiable funding source or mandate that would make such cooperation unavoidable, then we would have continued. Organizational budget concerns made progress unaffordable to group members.