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Empowering People with Spatial Solutions

Non-State GIS Stakeholder Workshop Summary

For:

Minnesota Drive To Excellence
GIS Functional Transformation Project

The Non-State GIS Stakeholder Workshop was conducted on June 24, 2008 in Arden Hills, Minnesota. The goal of this workshop was to brief non-State government GIS stakeholders about the state's GIS Functional Transformation Project and to solicit this community's direct feedback and input into the planning process. Specifically, the intent was to better understand the level of interaction and data sharing between State government entities and the broader GIS community and to seek ideas for how to optimize those interactions.

The workshop was attended by 29 non-State government stakeholders as well as seven additional people (i.e. LMIC staff and consultants) directly involved in the GIS Functional Transformation Project. The non-State government participants represented a broad cross section of GIS stakeholders across the following sectors:

Sector	Number of Participants
Academic institutions	5
County government	9
Federal government	2
Private non-profit	3
Private industry	2
Regional entities	4
Regional GIS user groups	2
Utilities	2
TOTAL	**29**

While most stakeholders were from within the seven-county metropolitan region or surrounding areas, stakeholders traveled from as far as St. Louis, Lyon and Otter Tail counties to participate. A complete listing of workshop attendees is included as Attachment 1 to this document.

The first hour of the workshop consisted of a formal presentation that provided project background and context information. The remaining two hours consisted of an interactive, moderated discussion that identified both issues of concern and opportunities for intergovernmental synergy. Highlights and take home messages from that discussion are summarized below.

Summary Observations from the Workshop Discussion

This summary does not attempt to comprehensively document every comment in chronological order, but attempts to extract themes that seemed to resonate among the participants. The observations are organized under four broad categories that record observations, concerns and suggestions.

1. Support Exists for the State Enterprise GIS Effort

1.1. Non-State stakeholders have gained tremendous value from State government GIS efforts. Local government, non-profits and academic institutions reported that resources such as the orthoimagery and the DNR's Data Deli have added tremendous value to non-state GIS stakeholders. 1000 Friends of Minnesota reported that "small-scale GIS users wouldn't have an ability to become involved with GIS without the head-start provided by State resources."

1.2. The delivery of State data using web services shows promise, and non-State stakeholders are aware of and capable of utilizing this technology. One stakeholder reported "State imagery service is invaluable." Lyon County urged the State to strongly consider expanding the data that are made available via web services specifically suggesting that topography, soils and FEMA floodplains be added. Great River Energy suggested that a State service to deliver multi-county parcel data would be useful. Other participants observed that services would need to be developed to have "service level agreements" (SLAs) that identified their reliability and performance objectives (e.g. 24x7x52 availability). Without such SLAs the services would not be able to be included in "mission critical" applications.

1.3. Some non-State stakeholders, particularly those from smaller jurisdictions, feel that there is potential for the State to provide expanded capabilities – beyond data download and web service access - that locals could take advantage of. Examples of expanded capabilities mentioned include data and application hosting. Data hosting services could include the provision of off-site backup for local governments as well as the ability for the State to distribute local data on behalf of smaller entities (and only when those entities seek those services).

1.4. Based on the recognition of the value of the State's GIS efforts, non-State stakeholders can be advocates for this project. Some non-State stakeholders indicated a willingness to help lobby their legislators understand their need for, and support of GIS programs, including the State's enterprise GIS effort. As such, non-State stakeholders need access to timely information on the status and direction of this project and key milestones. Applied Geographics would observe that the 14 non-State members of the 23 member MN Governor's GIS Council could be one vehicle for providing and disseminating this information.

2. Local Government GIS Efforts

2.1. A number of stakeholders observed that there is not yet full implementation of GIS at the county and local levels of government. In fact, some concern was raised about an emerging schism between GIS "have" and "have not" counties. There was widespread agreement that the State could usefully provide further support to bring "have nots" farther along. While fiscal support would be ideal, other forms of support such as educational material on best practices and GIS returns on investment would also be useful.

2.2. There was some useful discussion about whether there were new and/or alternative GIS models that could be applied to help address GIS gaps. For example, is there an opportunity to apply the MetroGIS regional model in more rural settings? Other alternative models include counties pursuing GIS collaboratively and by pooling resources. Two existing examples were cited:

- Lyon County reports that it has been contracted by its neighboring county, Pipestone County, to build and maintain electronic parcel data.

- Otter Tail County reports that they are discussing formalizing a relationship with Todd County whereby Otter Tail develops and hosts a web-based parcel mapping application on Todd's behalf.

2.3. Some stakeholders observed that the high-profile of the current Drive to Excellence Enterprise GIS effort helps to amplify the importance of GIS and furthers the case for local adoption of the technology. The thinking goes: "if the State is taking this so seriously, shouldn't we be looking at it?"

2.4. Counties showed an interest in educational material that describes the best practices for common activities such as parcel data management and data distribution practices.

2.5. Great River Energy observed that while the counties present at the workshop represented a positive, collaborative attitude, this attitude is not ubiquitous across the state. Great River has attempted to collect county parcel data to aid its right of way planning work and has found a wide variety of data sharing and data pricing practices across the state. Some counties are willing to share their data (or make them available for download) while others hold them tight and/or charge significant fees to obtain them.

3. Data Issues

3.1. While all recognized that the State maintains and distributes important digital data sets, county practitioners observed that in many instances "statewide data" does not have the resolution necessary to meet county needs. Efforts to improve the accuracy and resolution of state data will have a positive impact on increased data sharing and collaboration.

3.2. Washington County reported that even when counties have better data than the state, and make those data readily available to the State, the State is not always in a position to make use of the improved data. For example, although Washington provided the DNR with county parcels, the improved accuracy of the parcel boundaries has not been incorporated into the DNR's protected lands data set. Thus, the local utility of the DNR protected lands data is greatly diminished by its poor overlay with local data. This observation argues that if the State increases its efforts to collect local data it should be prepared not just to use those data for its own purposes but also to use them to improve its own data holdings. St. Louis County observed that there may be a need that goes beyond simple data sharing whereby state and local data sets could be "integrated" with both entities collaboratively maintaining the data. Randy Johnson from MetroGIS referred to this notion as the State providing a "standardized container for federated updates."

3.3. Many stakeholders agreed that data custodianship needs to be better defined, and that there needs to be increased efforts at identifying and/or documenting who the authoritative sources are for various data sets.

3.4. As with several State agencies, non-State stakeholders agreed that local municipal boundary mapping is challenging and inadequate. There are a relatively large number of annexations – estimated at 300-400 /year – and there is no authoritative source responsible for collecting these and including them in a statewide data layer. Similarly, counties that map these annexations do not do so in a uniform manner or on an agreed to schedule. Given the fundamental nature of this data set, an intergovernmental solution is required.

3.5. St. Louis County has created a linkage between allocating money for infrastructure improvements and receiving newly created digital spatial data that describes (i.e., maps) the improvement that was made. Linkages of this nature could be made in other regulatory processes that routinely collect spatial data (e.g. annexation, zoning approvals, sub-division, etc.) and could assist in keeping spatial data current.

3.6. Additional observations on data access and sharing that were made during the workshop included:

- Recognition that data sharing can be complex in light of differing policies and practices – e.g. for confidentiality or restricted access – at different levels of government.

- It would be highly desirable to have all of the State's "best available" data available in a single location where it is easily discoverable and well indexed.

- The easier the *process* is for data sharing, the more likely it is to happen. In other words, complex processes inhibit sharing.

4. Organizational, Governance and Coordination Issues & Approaches

4.1. Several counties (e.g. Wright, Lyon and St. Louis) observed an increasing trend in county government to have GIS aligned with overall information technology management. While some GIS functions (e.g. data and cartography) may remain in departments such as Planning, increasingly there are technical teams located in IT. St. Louis County encourages all departments that utilize GIS technology to have a "GIS point person" who can interface with the central GIS team in IT. As such, it was encouraged that GIS outreach include the broader county IT community.

4.2. Some non-State stakeholders observed that there can be complex and challenging relationships with State agencies and that these relationships can be markedly different if a county is dealing with a regional office or "headquarters" in St. Paul. The implication was that to facilitate the best intergovernmental relationships for GIS it would be highly desirable if St. Paul and the regions were able to apply uniform policies and procedures. Counties also described situations where they are contacted independently by multiple State agencies looking for the same data (e.g. parcels) and that addressing these multiple requests wastes county staff time.

4.3. While most of the participants were enthusiastic proponents of intergovernmental coordination and collaboration, they observed that such efforts were secondary to their primary jobs. In other words, coordination and collaboration is done on a voluntary and at times ad hoc basis. While this has been effective to some degree, and Minnesota has benefited from its longstanding and close-knit GIS community. However, with the explosion of use of geospatial technologies, the voluntary model is breaking down to some degree. There are too many participants and stakeholders for people to effectively coordinate using only their "spare time." Non-State stakeholders seemed to endorse the premise that "voluntary coordination only gets you so far" and that it may be time for a dedicated coordination entity to help with the task.

4.4. MetroGIS, which is widely regarded as a successful, well coordinated regional collaborative, shared elements of their approach for pursuing successful, coordinated public programs. Their approach borrows from a "strategic triangle metaphor"[1] where the three vertices represent: "political legitimacy and authorization," "public value and benefit," and "operational capacity." The metaphor argues that to be successful, you must plan and execute all three elements, while understanding the interrelationship between elements. In the GIS coordination context this might mean:

- There needs to be an authorized, lead GIS coordination entity

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[1] MetroGIS's exposure to the metaphor emanated from an executive seminar taken at the Harvard, Kennedy School of government taught by Professor Mark Moore.

- The benefits and value of GIS coordination need to be clearly enumerated to all coordination participants
- The operational capacity to deliver those benefits must be created for all those participants

4.5. MetroGIS also observed that *people* and *policy*, rather than *technology*, can be the main obstacles to collaboration and an enterprise approach.

4.6. Non-State stakeholders relayed some concern that the state not pursue a "top-down" approach for statewide GIS coordination. Rather, they encouraged the State to envision itself as part of a "network of equals" that collectively benefit from GIS coordination. A non-top-down approach would include vigorous and active communication between the State and other GIS stakeholders as well as investigating the potential for federated models for data management. Under a federated model, rather than creating a single, physically centralized data resource, a "virtual centralization" can be achieved with multiple servers acting in concert to provide a one-stop "experience" that may span several physical locations/servers.

Attachment 1
Workshop Attendees

Name	Agency
Armstrong, Brian	MN County GIS Association
Bitner, David	Metro Airports Commission
Brandt, David	WashingtonCounty GIS User Group
Bundy, Scott	Xcel Energy
Chinander, Gordon	Metro Emergency Services Board
Claypool, David	Ramsey County
Ellickson, Jim	Pine to Prairie GIS User Group
Falbo, Dan	ESRI
Grussing, Jeff	Great River Energy
Jablonsky, Darren	St. Louis County
Johnson, Randy	MetroGIS
Kanfield, William	U of M Admin GIS
Kost, Charlie	SMSU Marshall
Lindberg, Mark	U of M
Martini, Chad	Stearns County
Reed, Nancy	Metro Mosquito Control
Schloeser, Elissa	HousingLink
Stapleton, Jolinda	Ramsey County GIS User Group
Stark, Stacey	Northern MN GIS User Group
Sward, Dan	U of M
Swing, Bill	Wright County
Theroux, Annette	Pro-West & Associates, Inc.
Verbick, Ben	LOGIS
Voltz, Mark	Lyon County GIS
Wahl, Tim	MN Geological Survey
Wakefield, Sally	1000 Friends of MN
Wencl, Ron	USGS
Wendt, Ryan	Lyon County GIS
Zachman, Brenda	USDA Farm Service Agency