CALIFORNIA GIS STRATEGIC PLAN PHASE 2: REGIONAL PARTICIPATION

Regional Workshop #7:
Escondido, CA
November 15, 2007

Prepared for:

California GIS Council &
California Geographic Information Association

Prepared by:

Michael Baker Jr., Inc.

Baker

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CALIFORNIA PHASE 2 STRATEGIC PLAN : REGIONAL WORKSHOP 7
Escondido, CA

I. PREWORKSHOP SURVEY RESULTS

A. San Diego Regional GIS Council (Workshop Representation)

1) Regional Organizational Capacity
- Technology is not meeting business needs in networking or data storage, but is suitable for data exchange, software or hardware capabilities.
- Funding is considered minimal. Cost sharing agreements are the only listed funding mechanism.
- There is no staff available to support GIS efforts. There are no minimal volunteers.
- Strong executive support is occasionally available.
- There is not a formal process for project oversight.
- There is a need to implement policies that would facilitate data sharing.

2) California Spatial Data Infrastructure
- The following datasets are available for this region:
    - Cadastral (no standards, 0.5-1.0 m horizontal accuracy, 1-3 mths old, from Various sources including the County Assessor and local jurisdictions)
    - Ortho imagery (no standards, >1 m horizontal accuracy, >1 year old, from Various sources)
    - Transportation (no standards, 0.5-1.0 m horizontal accuracy, <1 mth old, from various local and state agencies)
    - Elevation (no standards, >1 m horizontal accuracy, >1 yr old, from USGS, 1970s)
    - Hydrography (USGS NHD Standards, >1 m horizontal accuracy, >1 yr old, from USGS NHD)
    - Geodetic Control (no standards, <0.5 m horizontal accuracy, 1-3 mths old, from San Diego County and local agencies land surveys)
    - Governmental Units (no standards, >1 m horizontal accuracy, 4-12 mths old, from various sources including LAFCO and County Assessor tax rate areas)
    - Street Addressing (no standards, <1 mth old, from various local agencies and emergency response)
    - Flood Hazard (FEMA Standards, >1 m horizontal accuracy, >1 yr old, from FEMA and local agencies)
    - Vegetation (no standards, >1 m horizontal accuracy, >1 yr old, from various sources including photo interpretation)
    - Cultural and Demographic Statistics (no standards, >1 m horizontal accuracy, >1 yr old, from various sources including SANDAG and US Census)
    - Soils (NRCS Standards, >1 m horizontal accuracy, >1 yr old, from NRCS)
    - Wetlands (USFWS NWI Standards, >1 m horizontal accuracy, >1 yr old, from USFWS NWI)
    - Earth Cover (no standards, 0.5-1.0 m horizontal accuracy, 4-12 mths old, from various sources including SANDAG and local agencies)

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- The top 5 regional datasets this region would like to develop next are:
  - Ortho Imagery
  - Elevation
  - Utilities
  - Building and Facilities
  - Vegetation

3) Regional Implementation
- This region has used the California Spatial Library, and the California Environmental Information Catalog, but not the 50 States Initiative or Imagery for the Nation.
- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
  - Promote best practices for methods and procedures related to the use and development of geospatial data and geographic information systems
  - Coordinate and administer grants related to geospatial information and geographic information systems
  - Lobby for funds; stewardship/ promotion of GIS

- This region believes the GIO should be placed in the new office of the State's Chief Information Officer.

II. REGIONAL WORKSHOP 2 SUMMARY

ATTENDENCE

Workshop 7 had representation from the San Diego Regional GIS Council. In all, 19 individuals and one Collaborative were present for the workshop. Eleven individuals were from local government, 1 from state government, 1 from federal government, and 6 from private entities.

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CURRENT SITUATION

1) SWOT Analysis

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Communication/Coordination • San Diego has a very open GIS community. • There are not a lot of regional jurisdictional issues because there is a regional Council of Government and Metropolitan Planning Organization that has taken an active role in using and promoting GIS. • There is collaboration across the region whenever they create standards. This is possible because there is an active GIS Council with representatives from both the public and private sectors. • There is a lot of communication and agreement about how tasks need to be prioritized. • There are good GIS educational programs at local colleges. • Early on (1980's) there were high level champions for GIS in San Diego County.	• There is no longer a high level/political champion for GIS. • While the Collaborative is very participatory, there is no political power. They come up with great standards, but the implementation process is difficult. • Historically, the regional agency acted as a leader, but more recently other agencies have taken more active roles. The region needs to reevaluate their role. • All of the GIS managers came through the technical side of GIS and aren't good at navigating policy issues.	• ESRI International User conference each year reinforces our common platform. • SANGIS is currently re-formulating itself.	• Empire building • Retirement is a threat. GIS has been in San Diego for 30 years and experienced people are leaving the work force
Data Sharing • There is a precedent of data sharing and common guidelines. They meet as a group and vet/approve standards. • There is an open portal for all data. • A long history of imagery sharing partnerships. This gives momentum	• There is not a regional data sharing agreement. Almost everything is done informally by the City of San Diego, the County of San Diego, and SANDAG. • Several counties near San Diego do	• There is a formal agreement between the city and the county that is able to be reengineered. • There is an open portal where people can get GIS information, unless it is data that specifically	• With consumer GIS there is increased internal agency pressure on the liability and the legality of information made available. • They are currently using

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STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
for additional data sharing opportunities. • Everyone is using the same platform (ESRI) and the same projections etc.	not share their data and some believe in charging for data.	can't be shared.	standards that have not been updated since they were created in 1988 and 1992. This is becoming an increasing problem.
Funding • A history of organizing to build and sustain regional data.	• There is a lack of funding and a lack of political support. It is a constant struggle to maintain a viable source of funding that is sustainable.	• Try to leverage GIS more to influence policy issues. Project managers with business focus need a mechanism to be educated on how they should leverage GIS. • There are regional initiatives relating to homeland security and the fire geodatabase that can be built upon to increase GIS funding. • There is a need to promote awareness of the value of GIS for decision making to elected officials. It needs to be demonstrated that they are meeting regional business needs with GIS. Build upon opportunities for GIS analysis and decision making such as the recent fires and promote GIS during those time so that there will be more backing during normal times. • Opportunity to use the ESRI conference to build publicity.	• SANGIS has lost funds because there are no longer paid subscribers given the impact of the CA Attorney General Opinion.
Data Development • There is already a lot of data that is current and readily available.	• A lot of the current GIS work is graphic-oriented and focuses on making maps. There isn't a lot of	• Evaluate data replication and data check-in and check-out. • Use the libraries inherent	• Data development has been a regional focus. Today many applications are being

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STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
	analysis being done for policy or business decisions.	capabilities to organize and archive GIS data.	developed without a focus. • New hires need programming and IT skills. It has proven difficult to retain personnel. • New users are good at creating applications but not as good at how to create good foundation data. • Some students are really good at one aspect of GIS, but it used to be one person that was very diverse. Now you have to combine the proper people to get what you had with one person. You also have to pay enough and provide upward mobility. • The rise of consumer GIS has changed the expectations of users within an agency. There are more requirements on the GIS department.

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REQUIREMENTS

1) Regional Discussion of Data Sharing and Standards

This collaborative is willing to follow standards as long as they can have input into what those standards are. They are in the process of creating standards and are gathering feedback first.

The problem with creating/changing standards is that there are a lot of old applications that expect data to be a certain way. Changing the data requires applications to change which requires funding. An ETL approach may be possible.

The City and County of San Diego are the 'guerrillas' and must adopt the standards or it is never going to happen. The key is to create a "minimum" standard. Participants didn't see why the city or county wouldn't be willing to adopt.

The question was asked, are there processes or programs that you have to support that require aggregated data? Answers included:

- FEMA floodplains
- Caltrans and functional road classifications
- National Hydrography Dataset
- Bureau of Land Management. (County parcel impacts on conservation parcels.)
- Tribal- boundaries, roads, parcels.
- Sensitive species habitat information provided to State Fish and Game Dept and US Fish and Wildlife Service
- Holland vegetation classification code map.

2) Regional Discussion of Federated Data Efforts and Incentives for Participation

With federated data there is a challenge with timing. Different datasets have different times that they were captured. There's also an issue with currency and having the most current data available.

If the regions collected the data from the communities, and the states collected the data from the regions, this would empower the GIS Councils. There could be regional servers that the state brings together. Practicality is a concern. Attribute matching is less of a concern than edge matching the data

San Diego Regional GIS Council is compiling data. They would need to be given the authority to store information and allow people to download it. San Diego GIS Council is one of the few entities that does daily updates of the parcel layers. Most other entities are quarterly or semiannually. Even San Diego GIS Council doesn't update all the parcels, just the areas of development.

The scheduling of data updates should be made public. The region needs to know when the state is going to update the data so they can get on the same schedule. What

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mechanism will be in place at the state level to ensure that updates are actually made? The region needs to know it's worthwhile to invest time and money.

It was noted that there is a lot value to historical data. Old data should be archived. The libraries are a logical place to organize and archive data. Attendees felt that historical snapshots need to be retained to understand change over time.

There is a lot of data that is available at some agencies but not at others. You can't consolidate at the state level if at the county level there are holes, because you can't get comprehensive consolidated coverage. You need to have a way to let the user know there's no known information built in certain areas and that it is not a data creation hole

The state will likely end up coordinating regional servers. There needs to be a way to coordinate the data and advertise to the public (make it similar to Google Earth). Some agencies might get excited about participating and filling in the data holes.

The question is still, how do you consolidate the data of different types. One entity may create vector polygons and another entity may use raster grids. As you change from region to region, the lines become polygons and the holes become squares.

There needs to be a legislative initiative that defines what is public and what's available to the public for free. The state needs to level the playing field because San Diego provides free data, but there our other counties that make you pay, and sometimes those fees are very large. There is also a security issue after 9/11.

IMPLEMENTATION

1) State Support

The state was encouraged to provide:

- Money
- Standards. If you're going to put together something for everybody to view, you have to have standards.

  It was noted that often, at the state level, they are not using the same standards across agencies or they are not using the same platform which hinders implementation. An example of pending common standard is that the State Fire Code is forcing a re-write at the regional level.

2) Governance

1. How might the California GIS community succeed absent a state coordinating entity like a GIO? Responses included:

- San Diego should continue working as a region and reach out to other surrounding regions. Attendees believed that sharing data across regions will be

hard to do. There may not be any common regional applications, so the regions may not care.

- The state agencies are actually hurt more than the individual regions by the lack of consolidated state data. There was commentary about Google consolidated data and why the region could not follow this model.

- The entity of the GIO does not matter. Accomplishing the seven tasks identified in the survey are what matter. But to accomplish all seven might take a GIO.
    1. Provide leadership in the development and sharing of geospatial data
    2. Provide leadership in the development and sharing of geospatial web services and tool
    3. Provide leadership in the establishment of GIS technology and data standards
    4. Promote best practices for methods and procedures related to the use and development of geospatial data and geographic information systems
    5. Coordinate appropriate use of GIS through outreach and networking of potential and expert users
    6. Facilitate training for skills related to use and development of geospatial information andg eographic information systems
    7. Coordinate and administer grants related to geospatial information and geographic information systems

- It comes back to having a champion. The comment was made, to have a GIO would be an accomplishment in and of itself, but it would not affect the way the region did business. Others disagreed and said it would affect the way they did business.

- In the absence of a GIO, there is no advocate that is specific to GIS. There is a need for someone to facilitate discussion. Someone needs to show politicians the benefits of GIS and "Walk softly but carry a big laptop."

Commentary around the CA GIS Council:

2. What do you need/want from the California GIS Council to further regional GIS efforts?

- The Council should become more visible. If you don't see them, you don't know them, and you don't care about them.

- The Council should hammer out agreements between the cities, counties, regions, and states.

3. What improvements can be made to the existing California GIS Council governance structure? What's working? What's not?

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- It has been set up such that the chair of each region can be a representative on the Council. In reality this does not happen. This needs to happen because the state needs to know what the needs of the regions are.

- Efforts need to be bottom up and not top down. It needs to be set up so the base is the region and it moves upwards. A lot of times efforts actually come down from the state, but they don't know the specifics about each region. They are making decisions completely blind about what's going on with GIS. It was asked why stop at the region. Why not go down to the local level. The answer was given: because at the regional level they have a Council.

- The GIS Council has had its measure of success only because of its relationship to CGIA and a handful of people on the Council. The model for the Council that is presented on paper is good, but isn't exactly what happens. The reality of participation is bad. Someone should address the structure of the Council and determine if the roles should be handled by different entities.

- The Council is a volunteer agency. They need funding to make things happen. CGIA can handle funds and has funding.

- It seems like it would make more sense to have a single entity instead of both the CGIA and the CA GIS Council.

4. What suggestions do you have for top priority strategies, goals and objectives for the California GIS Council that would help regional and local GIS efforts?

Accomplishing the seven tasks identified in the survey are what matter. Add number 8 which is advocacy.