CALIFORNIA GIS STRATEGIC PLAN PHASE 2: REGIONAL PARTICIPATION

Regional Workshop #2: Sacramento, CA October 17, 2007

Prepared for:

California GIS Council & California Geographic Information Association

Prepared by:

Michael Baker Jr., Inc.

Baker

Prepared on: October 19, 2007

CALIFORNIA PHASE 2 STRATEGIC PLAN : REGIONAL WORKSHOP 2 Sacramento. CA

I. PREWORKSHOP SURVEY RESULTS

A. Sacramento Regional GIS Council (Workshop Representation)

1) Regional Organizational Capacity

- Technology is not meeting business needs in networking, data exchange, data storage, or hardware capabilities, but is suitable for software capabilities.
- Funding is considered minimal. Cost sharing agreements are the only listed funding mechanism.
- There are less than 5 staff available to support GIS efforts. There are minimal onsite paid employees and retained consultants.
- Strong executive support is occasionally available.
- There is a formal process for project oversight. Cost shared projects run though the Sacramento Regional GIS Committee and are managed by SACOG. Other informal data creation projects are managed at the county level. There is usually no firm schedule due to funding constraints.
- There is not 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, >1 m horizontal accuracy, 4-12 mths old, from County Governments)
 - Ortho Imagery (meets USGS standards, 0.5-1.0m horizontal accuracy, >1 year old, from NAIP and 1,100 square miles of Merrick six inch.)
 - Transportation (meets standards for a Data model developed off of UNETRANS project, 0.5-1.0m horizontal accuracy, 4-12mths old, from County level coordination groups)
 - Hydrography (meets National High Resolution Hydrography Dataset standards, >1m horizontal accuracy, >1 year old, from USGS)
 - Governmental Units (no standards, >1 m horizontal accuracy, 4-12 mths old, from Local Jurisdictions, County LAFCOs)
 - Street Addressing (meets NENA Standard from a UNETRANS derived data model, >1 m horizontal accuracy, 4-12 mths old, from Local Governments)
- The top 5 regional datasets this region would like to develop next are:
 - Buildings and Facilities
 - Flood Hazards
 - Vegetation
 - Biological Resources
 - Wetlands

3) Regional Implementation

 This region has used the Imagery for the Nation, the California Spatial Library, and the California Environmental Information Catalog, but not the 50 States Initiative.



Sacramento, CA

- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
 - Provide leadership in the development and sharing of geospatial data
 - Provide leadership in the development and sharing of geospatial web services and tool
 - Provide leadership in the establishment of GIS technology and data standards
 - 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 Coordinate the investment of State Agency dollars
- This region believes the GIO should be placed in the new office of the State's Chief Information Officer.

B. Bay Area Regional GIS Council (Workshop Representation)

1) Regional Organizational Capacity

- Technology is not meeting business needs in networking, data exchange, data storage, software or hardware capabilities.
- Funding is considered minimal. One time grants are the only listed funding mechanism.
- There is no staff available to support GIS efforts. There are adequate volunteers.
- Strong executive support is often available.
- There is a formal process for project oversight.
- There is a need to implement policies that would facilitate data sharing.

2) California Spatial Data Infrastructure

- This region has none of the seven core framework and eleven California-centric data theme datasets available.
- The top 5 regional datasets this region would like to develop next are:
 - Cadastral
 - Ortho Imagery
 - Transportation
 - Street Addressing
 - Buildings and Facilities

3) Regional Implementation

- This region has used the Imagery for the Nation, the California Spatial Library, and the California Environmental Information Catalog, but not the 50 States Initiative.
- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
 - Provide leadership in the development and sharing of geospatial data



Sacramento, CA

- Provide leadership in the development and sharing of geospatial web services and tool
- Provide leadership in the establishment of GIS technology and data standards
- Promote best practices for methods and procedures related to the use and development of geospatial data and geographic information systems
- Coordinate appropriate use of GIS through outreach and networking of potential and expert users
- Facilitate training for skills related to use and development of geospatial information and geographic information systems
- Coordinate and administer grants related to geospatial information and geographic information systems
- Act as Chief Marketing Director, GIO must know client business
- This region believes the GIO should be placed in the new office of the State's Chief Information Officer.

C. Humboldt Area Regional GIS Collaborative (Workshop Representation)

1) Regional Organizational Capacity

- Technology is suitable for networking, data exchange, data storage, software or hardware capabilities.
- Funding is ranked 3 (on a 1 to 4 scale, with 4 minimal). Support from ABAG, AMBAG, or SaCOG is the only listed funding mechanism.
- There is less than five staff available to support GIS efforts. There are minimal on-site paid employees.
- Strong executive support is occasionally available.
- There is no 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, >1 m horizontal accuracy, 4-12 mths old, digitized by jurisdiction staff)
 - Transportation (no standards, >1 m horizontal accuracy, 4-12 mths old, from Tiger, DLG)
 - Governmental Units (no standards, >1 m horizontal accuracy, 4-12 mths old, from parcels)
 - Street Addressing (no standards, > 1 m horizontal accuracy, 4-12 mths old, from parcel site address)
 - Flood Hazards (no standards, > 1 m horizontal accuracy, >1 year old, from FEMA Q3)
- The top 5 regional datasets this region would like to develop next are:
 - Ortho Imagery
 - Elevation

Baker

Sacramento, CA

- Geodetic Control
- Public Land Conveyance Records
- Soils

3) Regional Implementation

- This region has used the Imagery for the Nation, the California Spatial Library, and the California Environmental Information Catalog, but not the 50 States Initiative.
- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
 - Provide leadership in the development and sharing of geospatial data
 - Provide leadership in the development and sharing of geospatial web services and tool
 - Provide leadership in the establishment of GIS technology and data standards
 - Promote best practices for methods and procedures related to the use and development of geospatial data and geographic information systems
 - Coordinate appropriate use of GIS through outreach and networking of potential and expert users
 - Facilitate training for skills related to use and development of geospatial information and geographic information systems
 - Coordinate and administer grants related to geospatial information and geographic information systems

D. San Joaquin Valley Regional GIS Council (Workshop Representation)

1) Regional Organizational Capacity

- Technology is not meeting business needs in the area of data exchange, but is considered suitable in regards to networking, data storage, hardware, and software capabilities.
- Funding is ranked 3 (on a 1 to 4 scale, with 4 minimal). There are no funding mechanisms in place.
- There is less than five staff available to support GIS efforts. There are adequate on-site employees, minimal retained consultants, and minimal volunteers.
- Strong executive support is occasionally available.
- There is no 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:
 - Elevation (no standards, >1 m horizontal accuracy, >1 year old, from USGS DEM)
- The top 5 regional datasets this region would like to develop next are:
 - Elevation
 - Street Addressing
 - Utilities



Sacramento, CA

- Flood Hazards
- Biological Resources

3) Regional Implementation

- This region has used the California Spatial Library, and the California Environmental Information Catalog, but not the 50 States Initiative, or the Imagery for the Nation.
- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
 - Provide leadership in the development and sharing of geospatial data
 - Provide leadership in the development and sharing of geospatial web services and tool
 - Provide leadership in the establishment of GIS technology and data standards
 - 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
- This region believes the GIO should be placed in a state agency that is
 programmatically neutral with broad, enterprise wide responsibilities --e.g., the
 State Library, the Governors' Office of Planning and Research (OPR) or the
 Department of Technology Services (DTS)

E. Sierra Nevada Regional GIS Council (Workshop Representation)

1) Regional Organizational Capacity

- Technology is not meeting business needs in the areas of data storage, data exchange, hardware, or software, but is considered suitable in regards to networking capabilities.
- Funding is ranked 2 (on a 1 to 4 scale, with 4 minimal). Cost sharing agreements are the only listed funding mechanism.
- There is less than five staff available to support GIS efforts. There are adequate on-site employees and minimal volunteers.
- Strong executive support is often available.
- There is 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:
 - Ortho Imagery (no standards, 0.5-1.0 m horizontal accuracy, >1 year old, from air photo)
 - Elevation (no standards, >1 m horizontal accuracy, >1 year old, from USGS)
 - Governmental Units (no standards, >1 m horizontal accuracy, 1-3 mths old, from County assessor and lafco records)



Sacramento, CA

- Flood Hazards (no standards, >1 m horizontal accuracy, >1 year old, from FEMA)
- Cultural and Demographic Statistics (no standards, >1 m horizontal accuracy, >1 year old, from Census Bureau)
- The top 5 regional datasets this region would like to develop next are:
 - Cadastral
 - Ortho Imagery
 - Transportation
 - Hydrography
 - Geodetic Control
 - Street Addressing

3) Regional Implementation

- This region has used the Imagery of the Nation, but not the California Spatial Library, the California Environmental Information Catalog, or the 50 States Initiative.
- The establishment of a GIO is viewed as important.
- This region sees the GIO fulfilling the following responsibilities:
 - Provide leadership in the development and sharing of geospatial data
 - Provide leadership in the development and sharing of geospatial web services and tool
 - Promote best practices for methods and procedures related to the use and development of geospatial data and geographic information systems
 - Coordinate appropriate use of GIS through outreach and networking of potential and expert users
 - Coordinate and administer grants related to geospatial information and geographic information systems
- 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 2 had representation from Sacramento Regional Collaborative, Bay Area Regional GIS Council, Humboldt Area GIS Collaborative, San Joaquin Valley Regional GIS Council, and Sierra Nevada Regional GIS Council. In all, 29 individuals and 5 Collaboratives were present for the discussion. 7 individuals were from local government, 12 from state government, 5 from federal government, and 8 from private entities.



Sacramento, CA

CURRENT SITUATION

1) SWOT Analysis

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Resources Wonderful human capital Best Practices (some with champions) Geospatially enabling a business line Largest of investment in GIS (by State) Wide adoption/ momentum Heavy GIS activity (most of worlds software created here)	Not all counties have widely adopted GIS	Consider that we are building a base resouces for the state not just some GIS datasets	
Many of the core seven data sets and some of the CA-centric eleven are created at the local level.	 Regionals not all inclusve; counties within regionals and full California coverage No incentive to participate at State level 	 A lot of IT infrastructure needs to be developed to support a CA-SDI. Google as a data sharing resource. 	 The top several core datasets are created at the local level. Filtering them up to the state could/will be a challenge. The locals and regions do not care about public domain data. They care about sharing data with their own constituents and sometimes surrounding neighbor
Communication/Coordination There was a lot of feedback on how to form the collaboratives and counties ultimately decided. Move towards (stopped) saying GIS and focus on solutions	 There is a disconnect between the state and federal governments, and smaller groups. The regional collaborative structure may not be representative of the entire footprint. Not all parts of the state have regional collaboratives Not a common clear message 	 The State stated that they, as a facilitator, need to articulate more clearly what their objectives are. The Collaboratives could then respond whether they agreed. There is an opportunity for regional collaboratives to meet with state government. This is best pursued by CA GIS Council 	 There is no belief in the business potential of GIS. Some people have stopped saying "GIS" and simply talk about what information you can give them. As you go up management you can speak less technically. Imperial County works closely



STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
		 and CGIA. There is an opportunity to expand the Regional Collaboratives to cover every county. Regional Collaboratives should look at how they're composed and make appropriate adjustments. Use NSGIC postcard templates 	within itself and doesn't feel a need to "define" itself.
 Funding California has the largest investment in GIS of any state and the majority of local governments are adopting it and seeing it as a program they must have. 	• There are no incentives for the regional collaboratives. This is a program where the feds and the state are asking for information, but a	There are bond measures to support infrastructure. Some of this money might be available for data development.	Lack of recurring funding year to year
Google and GPS have advanced GIS and the public's perception.	formal structure is not in place. There is no significant funding for a lot of the things the regions would like to see happen.	 When advocating for GIS funding, it is best to get the point across in 55 words or less; tied to a business purpose Need to have someone at the top advocating for GIS and all of its benefits. 	
Data Development	Disconnected initiatives	• Callahandian fan a annuan aarl	• Managaia tha haat in a sating hat
 Plenty of innovative technology in place. Tremendous data development activites; many redundant and many not coordinated 	Disconnected initiatives	Collaboration for a common goal	 Money is the best incentive but some localities do not trust the state. There is also the question of where the money would come from and where it would go. There's a threat that this grant will run and things will go back to status quo.



Sacramento, CA

REQUIREMENTS

1) Regional Discussion of Data Sharing and Standards

The regions expressed that they would be supportive of data standards for the data that has not yet been developed or are not already in development. There would be a large cost to transition data from one format to another. It would be beneficial if the cities and counties did not have to adopt the standard, that this would take place at the regional level.

It was reinforced that there must be something given back to the local governments from the state if there is any cost involved. Otherwise this sounds like an unfunded mandate. Regional Collaboratives, however, are a unique entity because of how they are defined.

Discussion debated how the standards should be developed. Should local standards drive regional standards or should standards be driven down from federal government to state government to local government. There is generally a "disrespect" from local government towards state initiative as they have been burnt previously. Why would standards be different? BAR-GC has agreed to a regional standard which is a major accomplishment.

None of the regions want to develop their own standards. They would like to use a template. It would be beneficial to have a regional template that illustrates a statewide standard.

There was positive feedback from the regions who confirmed that they would like to facilitate datasharing within and among regions, as long as it is not burdening. If the standards are difficult for local entities, the state should provide technical tools, resources, and funding to help them adopt standards.

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

The question was posed, is service oriented architecture a reality. Nationally there is a lot operating. Representatives for the state described federated data efforts as the most likely given the IT environment that exists today. There was no doubt that it's desirable, but questions were raised about feasibility given that there are currently no standards.

There has been incremental data development for BAR-GC. They would like to build a regional data repository. They would benefit from a state level strategic plan and state efforts to help regional collaboratives build those data repositories. Data sharing could then be taken to another level. They would need outside support to build these repositories until it is self funded by users.

There has been a federated parcel data model that is ready to be adopted.

IMPLEMENTATION



Sacramento, CA

1) State Support

Active support from the state could involve:

- Hosting data similar to CALSIL.
- Acting as an authoritative verifier of value and quality of data.
- Confirm that data meets a certain standard through metadata.
- Initiating meetings of agencies at similar levels
- Provide a "state seal of approval." This is low cast and provides tremendous value at the local level and can encourage maintenance of good data sets.
- Provide funding for regions to develop data repositories.
- Provide architecture that allows local government to view data at a regional level.
- Provide a Service Oriented Architecture (SOA)

The state emphasized that the local government/regional collaboratives should show a reason that the state should fund something. They should use appropriate business processes (NSGIC Business Case template) to outline this.

The priorities for Caltrans is currently climate change and developing a blueprint (land use planning).

2) Governance

There should be an office established that can provide services, not just watch on the sidelines.

State workshop attendees mentioned that the trend is that more local governments are controlling funding. Caltrans is trying to enroll local governments. It was also mentioned that the state wouldn't get a GIO until it gets a CIO. Getting a GIO without a CIO is not going to go anywhere. Who actually has incentive to pay for all of this? Could a CIO become a champion for GIS without a GIO? One example is LA County, where GIS is growing fast. The challenge there is coordination. People understand GIS, but coordination challenges have prevented them from being a far along as they would like.

State workshop attendees mentioned that their next big GIS project is the census. This is the next project where GIS has a justification for funding.

The question was posed, what do you need for the CA GIS Council? Responses included:

- Based upon funding (which is none) they are doing pretty well.
- They should provide guidance on how to solidify collaboration and take it to the next level.
- They should provide guidance on how to write agreements or arrangements.
- The council needs to gain more official status. They should have the status of a board.



CALIFORNIA PHASE 2 STRATEGIC PLAN : REGIONAL WORKSHOP 2 Sacramento, CA

- There are no ties to policy. Nobody is going to report up what happened in the meetings. In order to have official standings, they need to follow public meeting laws, which they don't currently do.
- They should facilitate communication with counties that are not yet part of a regional collaborative.
- GIS Council should represent traditional GIS, information technology, and policy interests.

