

# Report For Geographic Information Integration and Analysis Project

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## Summary

CIRGIS has successfully published a web mapping service (WMS) with a variety of local data, including parcels, roads, aerial photography, address points and administrative boundaries with the assistance of the Cooperative Agreement Program. The service is:

<http://www.cirgis.org/wmsconnector/com.esri.wms.Esrimap?ServiceName=CIRGIS&>

The web mapping services are hosted with ArcIMS and ArcSDE on hardware purchased with the assistance of the CAP. Ventura Community College hosts the server and provides high-speed internet access. Consultants and volunteers have acquired the data, designed the service, set up the hardware and software, and devised a plan for ongoing updates, backups and maintenance of the service.

The Administration and Outreach Committee, responsible for finances and outreach, has developed a tracking method for monitoring progress of the project including time accounting for the volunteers in various organizations. We have also publicized our project at three events: [GIS Day 2006](#) at Ventura College; the [CalGIS 2007](#) conference in April 2007; and the [ESRI user's conference](#) in June 2007.

The greatest challenge we faced was obtaining data uniformly from local entities. In some cases, this was simply due to a lack of source data or limited technical ability. In others, data sales policies interfered with our efforts to integrate data from many different agencies. Despite this challenge, however, we succeeded in bringing together a large number of disparate datasets together, in some cases into a uniform model that we designed partly for this project—the Ventura Regional Data Model (VRDM).

As always we could have benefited not only from more cooperation and assistance from data providers in our region, but from assistance from the Catalog Support Team as well. Given the current status of the National Mapping Program, however, we got as much guidance as we could reasonably expect.

## **Data Themes**

We provide aerial photography, assessor's parcels, road centerlines, address points and municipal boundaries as part of our map service. In addition, there are some specific regional layers, such as future aerial photography coverage that we have published as well. There are no restrictions, and we have made it plain that data provided to CIRGIS for this effort should be considered in the Public Domain.

We have created metadata entries for each layer in the California Environmental Information Catalog, but there has been a problem with those layers being harvested by

GOS for reference in the National Map. Our WMS service was registered directly with GOS.

Based on our experience interacting with USGS staff (as partly described above), we believe a great deal more cooperation and guidance would be helpful to us in integrating our efforts with the National Map. We did receive, however, particularly helpful assistance from our state liaison, Carol Ostergren. For future projects, we would benefit from being able to see model installations in detail, get detailed technical assistance, and join discussions on problems and successes with this type of project. The initial meetings with other participants in our grant category were very helpful.

### **Operational Capability**

While our plan is to continue the process of collecting and updating our data, we will rely on volunteer labor and the small amount of income that CIRGIS receives through other activities for maintenance and upgrades. Fortunately, our cost structure is very efficient, due to agreements with Ventura College for hosting and software licensing.

The greatest challenge will be to maintain the relationships with our members that have allowed us to acquire data easily. As people and policies change over time, our goal is to keep our agreements forged in this project in place. A second challenge is once we have fresh data, to post in a regular and timely manner. We have established procedures which can be used to perform the updates, but they must be performed regularly to have value. We have had inconsistent results with some volunteer labor, and our challenge is to find ways of establishing ongoing procedures that are not simply dependent on good will.

### **Challenges**

Our challenges, as partially described above, were to build the infrastructure for web services from scratch, integrate it into the National map, and prepare it for ongoing service. While the grant helped us get over the financial hurdles of equipment purchase and acquiring some specialized expertise, we could have learned more and been more effective if we had been able to work more closely with experienced stewards of the National Map. There were many small technical issues with using ArcIMS as the WMS software that we might have overcome sooner had there been an efficient way to share common knowledge. While this would have required considerably more time and effort from the USGS, in addition to the funds provided, in the future that investment might pay off handsomely with better local components of the National Map.

Our challenge as a small non-profit is to carry on the project of collecting and serving a diverse set of regional data with few resources. The largest users of GIS in the region didn't directly participate, and in some cases frustrated our efforts through data sales policies.

### **Relationship with USGS**

While CIRGIS would always benefit from more engagement with the USGS, our relationship has been extremely productive. CIRGIS has been previously awarded CAP grants for initial startup and for metadata development, and this project built on the foundation provided in those previous agreements. In addition to organization, a website, and hundreds of metadata entries, we now have a regional service that is of great benefit to our members, as well as the National Map. In addition, our imagery acquisition CAPs with USGS have been extremely useful for our members and our region as well.

While we don't currently have an ongoing agreement, we are in the final stages of an imagery acquisition project that has been aided by a CAP, and will be served to users with the infrastructure acquired under this agreement. We would very much like to continue working with the USGS on this project, and our state liaison has been very helpful in helping us integrate our work at the state level as well.

All of our members would like to thank the USGS for the opportunity to benefit from this grant, and for the chance to take part in building the National Map.