# Final Report for Kentucky's Fifty States Initiative Project

Category 3: Fifty States Initiative

**Date:** March 5, 2011

**Agreement Number:** G09AC00064

**Project Title:** Commonwealth of Kentucky Geospatial Strategic Plan

# **Organization:**

Division of Geographic Information Commonwealth Office of Technology Office of Application Development 100 Fair Oaks Lane Frankfort, Kentucky 40601 Phone: 502-564-6231

http://gis.ky.gov/



## **Principal Investigator:**

Thomas Rossman, Director (Acting) Division of Geographic Information

Phone: 502-564-6412

E-mail: thomas.rossman@ky.gov

## **Collaborating Organizations:**

Geographic Information Advisory Council

Commonwealth Office of Technology Office of Enterprise Technology

101 Cold Harbor Drive Frankfort, KY 40601 Phone: 502-564-1635

E-mail: GIAC.Inquiry@ky.gov

http://technology.kv.gov/gis/Pages/GIAC.aspx

United States Geological Survey

Bruce Bauch, USGS Geospatial Liaison for KY

National Geospatial Program Office

9818 Bluegrass Parkway Louisville, KY 40299 Phone: 502-493-1945

E-mail: bbauch@usgs.gov

http://liaisons.usgs.gov/geospatial/Kentucky/



## **Executive Summary**

Funding from a Fifty States Initiative, Cooperative Agreement Program (CAP) grant made possible the development of the Commonwealth Geospatial Strategic Plan (CGSP) by the Geographic Information Advisory Council (GIAC) of the Commonwealth of Kentucky, in concert with the Commonwealth Office of Technology's Division of Geographic Information (DGI). Following its reconstitution, and working closely with DGI, the GIAC held three listening sessions around the Commonwealth to gather stakeholder input for the development of the CGSP. An on-line survey gathered additional feedback from those who could not attend the listening sessions. Thus, the CGSP reflects the general trends of feedback received from the in-person listening sessions and meetings, in addition to broad themes and preliminary statistics from the online feedback. The objectives and action items in the CGSP are the result of the open and inclusive process used to gather information used in its development, making it an accurate representation of the needs of the Commonwealth as seen by its major stakeholders in the latter part of 2010. A more thorough and comprehensive analysis of the large number of feedback responses will be one of the objectives in the next cycle of plan discussion and revision at the GIAC level, resulting in a actualized version of the CGSP and specific business plans to fund geospatial activities in the Commonwealth. Based on the recommendations issued by the community through the CGSP, DGI will develop business plans for two data need priorities, namely a statewide LiDAR acquisition program and the development of an address repository/geocoding service.

### **Project Narrative**

## A. Project Activities

- 1. The planning process was initiated on July 15<sup>th</sup>, 2010 with the first meeting of the new GIAC; at this meeting, Dr. William (Drew) Andrews was appointed Chair of GIAC's Strategic Planning Committee.
- 2. A supporting committee of volunteers from GIAC membership and the interested community at large was formed. DGI staff was committed to support the effort. Due to the restricted time frame, a concerted effort was made to engage the community at large, to gauge interest in the future of geospatial data in Kentucky, and solicit feedback.
- 3. A series of three listening sessions the last one held during a plenary session at the 2010 Kentucky GIS Conference invited open feedback from the geospatial community in Kentucky. Verbal comments were recorded and discussed; the themes that arose from these discussions guided the general structure of the developing strategic plan. All attendees were encouraged to also submit their comments and feedback through the online survey.
- 4. A series of communication meetings were also held with various representative constituent groups to ensure that feedback from those communities were reflected in the plan; these attendees were also encouraged to utilize the online feedback form.
- 5. Information recorded at a series of breakout-group focus sessions at the 2008 "Mapping and Monitoring Land-Resource Change: Bridging the Geospatial Divide for Decision Making" Conference, as well as feedback from GIAC Strategic Planning Committee members, was used to guide the development of questions for the online survey. The online feedback survey was posted in early September 2010and was advertised through the KYGIS Listserv.

6. Feedback was also encouraged from GIAC constituent communities and the membership of the Kentucky Association of Mapping Professionals (KAMP). A total of 208 responses were received through the online survey. The shortened planning time-frame prevented complete analysis of the online survey results for this plan. Full analysis and review of the feedback will be used to continue the planning process going forward.

## **B.** Project Outcomes and Deliverables

- A draft version of this strategic plan was presented to a meeting of the GIAC on November 18, 2010. Public comment on the draft was accepted through November 30, 2010 and incorporated in the final GIAC-approved CGSP version 1.0 posted on its Website (<a href="http://technology.ky.gov/gis/Documents/KentuckyGeospatialStrategicPlan\_2010\_v1.pdf">http://technology.ky.gov/gis/Documents/KentuckyGeospatialStrategicPlan\_2010\_v1.pdf</a>)
- The comments received on the original draft are included in a separate document available from the GIAC Website (<a href="http://technology.ky.gov/gis/Documents/GIAC\_PublicCommentsOnStrategicDraft\_201012.pdf">http://technology.ky.gov/gis/Documents/GIAC\_PublicCommentsOnStrategicDraft\_201012.pdf</a>)
- 3. As a result of the development and GIAC's sanctioning of the CGSP, DGI applied for but did not receive funding for the development of two business plans in late 2010 early 2011.

#### C. Inclusiveness of the Effort

In Kentucky, a strong and diverse geospatial community-of-practice represented the "right fit" stakeholder community for participation in the planning effort. With the exception of DGI staff – who charged their labor to the grant - a vast number of professionals in the community volunteered their time. This added scope width, content depth, as well as detail and expediency to the final thrust leading to the production and delivery of the CGSP.

#### D. New Stakeholder Groups/Organizations are Brought into Statewide Coordination

Communication and collaboration within the geospatial community was definitely compromised for several years after the GIAC was disbanded. This, in conjunction with decreasing funding and personnel made it increasingly difficult for DGI and others to devote significant resources to outreach.

Entities such as the Kentucky Association of Mapping Professionals (KAMP) have participated effectively in outreach activities and have worked to maintain a sense of community. It is important that such groups work closely with the GIAC and DGI in the future to underscore the importance of the Commonwealth's geospatial activities. KAMP and DGI have each supported the state GIS Conference in past years, which has become a key tool for interagency and interdisciplinary communication and training in the geospatial community.

In the absence of an active GIAC, DGI performed, and still performs, a number of outreach activities to the Kentucky geospatial community. DGI has worked closely with the GIAC in

conducting the listening sessions performed as part of this strategic plan development effort. This effort resulted in reopening of communication channels and re-establishment of relations between groups of stakeholders and professionals.

### E. Will Statewide Coordination Change as a Result of this Project?

- 1. The composition of the GIAC was legislated several years ago and will be reviewed as part of the implementation of the CGSP. The current COT Commissioner, Mr. Steve Rucker, serves by statute as the Chairperson of the GIAC.
- 2. One of the goals of the proposed comprehensive strategic planning process will be to review the composition and role of the GIAC and recommend possible changes needed. As technology continues to evolve at an ever increasing rate, it may be necessary to increase the flexibility of the GIAC in terms of its composition. It may be desirable to have the Chair of the GIAC be a full time position, but that has yet to be determined.
- 3. Pending recommendations in the next version of the CGSP, it may be necessary to seek legislative changes if it is determined to be in the best interests of all of the stakeholders to change the makeup of the GIAC.

#### F. Success Factors Critical to Successful Development of the CGSP:

- 1. In addition to the FGDC grant, DGI (administratively under the Finance and Administration Cabinet/Commonwealth Office of Technology [COT]/Office of Application Development [OAD]) provided personnel for implementation of the listening sessions, document development, logistical and communication support, online survey, and KYGIS listserv coordination.
- 2. The Kentucky Geological Survey at the University of Kentucky provided support and permission for Dr. William (Drew) Andrews' time in pursuing feedback and coordinating the strategic planning effort.
- 3. The Kentucky Area Development Districts (ADDs) of Big Sandy ADD and Pennyrile ADD, and Northern Kentucky Area Planning Commission hosted listening sessions at their facilities.
- 4. The Kentucky Association of Mapping Professionals (KAMP) provided communication support, as well as volunteer time at the annual Kentucky GIS Conference.
- 5. A community of engaged and dedicated professionals and practitioners existed in Kentucky.
- 6. A framework of agencies was available to provide support.
- 7. A pre-existing, fully capable infrastructure for data production, management, and distribution.
- 8. Community has numerous relationships established that can facilitate communication and collaboration.

#### G. Some Factors which Slowed Development of the CGSP:

- 1. Reconstitution of the GIAC was delayed by forces beyond the control of DGI, which left a shortened time frame for development of the strategic plan.
- 2. Poor communication and coordination while the GIAC was inactive has left community relationships fragile with the need to re-build communication channels as a pre-requisite to the development of CGSP.

3.	Economic conditions decreased the possibilities for government geospatial stakeholders to travel to listening sessions.

# H. Highlights of GIAC meetings



COT Commissioner and GIAC Chair (former), Phil Baughn, during GIAC's first meeting (07-15-10).



DGI Director Tom Rossman presents the CAP grant during the GIAC's first meeting. (07-15-10).



GIS Manager Kent Anness (DGI) presents during GIAC's first meeting (07-15-10).



COT Commissioner and GIAC Chair (acting), Lori Flanery, welcomes the Council to its second meeting (11-18-10).



Strategic Planning Committee Chair, Dr. William (Drew) Andrews, presents the CGSP to GIAC during its second meeting (11-18-10).

## **Next Steps**

- **A.** Continuance of Current Effort: the following phases or steps have been identified as essential to providing continuity to this effort:
  - 1. <u>Refinement of the CGSP</u>: The first phase will be for the GIAC to refine this strategic plan. The second phase of the process will be to build relationships among key stakeholders. Concurrent with these two steps, the third phase will be to address selected identified data needs.

The CGSP needs to be refined and enhanced with detail to make it more actionable. As an ongoing effort to document the strategic goals for the Commonwealth geospatial community, it will be refined and communicated to the stakeholders for input.

Now that the GIAC has been revitalized, it can work to see that as many people as possible are aware of this plan. The GIAC will be in a position to solicit feedback from people and organizations to add detail where detail is needed. It is important that this plan is widely distributed. The GIAC will work with DGI, the Kentucky Association of Mapping Professionals (KAMP), and other groups to see that distribution is sufficient.

As feedback becomes available through the first half of 2011, new versions of the plan will be developed. This will lead to a proposal to develop a more detailed Business Plan in late 2011.

2. <u>Building relationships</u>: In addition to soliciting feedback through listening sessions and surveys, consideration will be given to reviewing the composition of the GIAC to determine if its currently defined membership best meets the needs of the Commonwealth.

This debate will need to take place both within the GIAC and among the other geospatial stakeholders within the Commonwealth. Since any change will require a political consensus, since the makeup of the GIAC is defined in statute, no date can be given as to when this can be accomplished.

3. <u>Meeting Data Needs:</u> A need has been identified for better parcel data availability. Discussions will begin in early 2011 to determine what technical or organizational barriers exist to improve parcel data access. We expect to have recommendations by mid-2011.

In early January, 2011, DGI intends to begin work on a plan to acquire additional LiDAR data for the Commonwealth. In December 2010 DGI intends to work on seeking funding to develop that plan with the expectation that data can be acquired beginning in late 2011.

Also in early January 2011, DGI intends to develop a plan to offer an address repository and geocoding service to all state and local agencies and public organizations. The goal will be to implement this plan by the end of 2011.

### B. Viability and Sustainability of the Project

For Kentucky, like most states, the recent great recession has taken a toll on revenues and budgets. This represents the largest risk to our future work. If the economy remains weak, DGI could be impacted beyond the current fragile condition, and this would cascade down to its many stakeholders. The economy could also limit the GIAC in its ability revitalize itself. Finally, a weak economy has the potential to negatively impact stakeholders at the county and local level, as well as academia and the private sector.

On a positive note, however, GIS technology can help stakeholders reduce costs. By increasing productivity, organizations at all levels may be more amenable to making geospatial investments.

As a corollary of the CGSP project, the following activities are envisioned as mission-critical for providing viability and sustainability to the project in years to come:

- 1. <u>Strategic Plan Recalibration</u>: Measuring the first two goals of the plan will be completed through the listening sessions and surveys. We have a benchmark set of data from the listening sessions and surveys used to develop this plan. We should see improvement in the satisfaction level expressed by stakeholders as we refine the plan and continue implementation. Areas of dissatisfaction will be indicators that changes in the plan maybe be needed or that timetables are inadequate.
- 2. <u>Community Engagement and Sustainability:</u> Once the refined Strategic Plan has been created by the GIAC, additional listening sessions and virtual town hall meetings will be held around the Commonwealth to communicate, educate and inform the geospatial community. Feedback will be sought through the use of these listening sessions and an on-line survey, and other interactions with the community. Presentations will also be scheduled with multiple geospatial professional organizations within the Commonwealth, and at the State GIS Conference.
- 3. <u>Business Plan Development:</u> DGI will seek funding for the planning and acquisition of LiDAR data for the Commonwealth. It is expected that many counties and local governments and agencies will be willing to contribute to this effort. DGI already has key technological components necessary to take a lead in addressing/geocoding services for the Commonwealth. Funding will be sought for the design, planning and implementation of an address repository service. This function will be implemented as a web service that should be affordable to all who need it.

#### C. Assistance Needs

The following assistance categories have been identified as essential for retaining Kentucky's leadership in the geospatial governance sector, while maintaining engagement and synergy with the broader geospatial community in the nation:

- Maintaining fluid relations with NSGIC: Director Rossman's attendance to the NSGIC
  Mid-year Conference was a great opportunity to share the results of this project with and
  learn from other states' geospatial initiatives. In the past, lack of funding to attend
  NSGIC conferences was a large factor in preventing this exchange to proceed with the
  necessary fluidity and timeliness.
- 2. <u>Business plan and return on investment analysis funding</u>: DGI is willing to devote limited but valuable expert staff time to develop proposals for business plans and return on investment, provided such funding opportunities are made available to the division, particularly in the amounts required to undertake projects identified in the CGSP as priority initiatives.

3. <u>GIAC funding:</u> the GIAC does not have a budget. How GIAC will be funded in the future will be determined as one of the outcomes of the implementation of this Strategic Plan. The fact that the GIAC has been unable to procure and allocate funds has been a severe constraint.

#### **Attachments**

- 1. Commonwealth Geospatial Strategic Plan
- 2. Strategic Plan Draft Public Comments

### Feedback on the Cooperative Agreements Program

- 1. What are the CAP Program strengths and weaknesses?
  - 1.1. Strengths:
    - A coordinated vision and charge to the states participating
    - Great availability of materials such as templates and examples from similar efforts
    - Comprehensive, helpful and content-rich Web presence
    - Process is clear in its outline, goals/objectives and procedures
    - Resource personnel was available, responsive and helpful at all times
  - 1.2. Weaknesses: None.
- 2. Where does it make a difference?

Without this funding opportunity, DGI would not have been able to devote the necessary staff time to coordinate and promote the processes of reconvening GIAC, or assisting it in the development of the CGSP.

3. Was the assistance you received sufficient or effective?

Because of volunteer contributions from the community, the amount of the grant was more than enough to cover all expenses incurred by DGI. The up-side effect was the added efficacy and effectiveness to the way the CAP funds available were used. Matching requirements were hard to meet by DGI due to several issues, among them the state's deep recessionary budget resulting in increased workloads for staff and management.

4. What would you recommend that the FGDC do differently?

Perhaps a continuation grant is needed to cover the gap between the point in time when a strategic plan is developed and agreed upon, and that when a business plan proposal is finalized. The Business Plan and the Return on Investment phases of the Fifty States Initiative appear to be "a bridge too far" to cross, once the first stage strategic planning effort is complete.

5. Are there factors that are missing or additional needs that should be considered?

- Regional-level strategic planning and coordination (i.e. including neighboring states) could be pursued as an added benefit of single-state efforts.
- The resulting strategic plan could be nurtured into maturity and implementation with continuation grants that are not just focused on business plans or return on investment analyses.

## 6. Are there program management concerns that need to be addressed, such as the time frame?

Not a program "management" aspect per se, but a design issue is an area of concern. Different states progress along their strategic planning processes with variable pace. Going forward, perhaps a more "customizable" approach to the continuation of Fifty States activities past the first step of getting a strategic plan developed allowing for intermediate, fundable steps would be beneficial.

## 7. If you were to do this again, what would you do differently?

As a result of administrative turnover, rapidly changing agency priorities determined that the initial process of planning and coordinating the steps necessary for the development of the plan to be long and drawn-out. A more steady and consistent response on the recipient agency's part past the early stages of the project would have contributed to the overall timeliness of this successful effort.

Slightly over twenty-percent of the CAP funds awarded to Kentucky were disbursed (\$10K approximately out of \$47K), as reported in the project close-out financial report. Several factors are responsible for this outcome, such as the way in which the project was managed by DGI from the beginning and how the implementation was coordinated towards the end with great and positive participation from the community. In addition, the matching contributions promised were hard to accrue as budget constraints affected DGI staff workloads. As the deadlines were approaching, DGI's coordination was greatly potentiated and synergized by the volunteer efforts contributed by geospatial professionals in the Commonwealth.

Obviously, the shortcomings indicated above would serve as lessons for improvements in future projects.