



*FISCAL YEAR 2000  
JULY 1, 1999 - JUNE 30, 2000*

—●—  
*KATE SHERMAN  
FORUM CHAIR*

—●—  
*STU DAVIS  
EXECUTIVE DIRECTOR*

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***THE OHIO GEOGRAPHICALLY REFERENCED INFORMATION PROGRAM ANNUAL REPORT***



## GIS IN OHIO

### BOB TAFT, GOVERNOR

*"We stand on the doorstep of the next frontier. This time, the frontier is not the western edge of America or the cutting edge of industry. Our frontier is knowledge and technology - a place where Ohio must be a leader among states and nations. But it's not enough to imagine the future. We must build it."*

### GREGORY JACKSON, CIO

*"The value of GIS technology has been underestimated within State Government. Our ability to efficiently and effectively deliver and improve customer service is directly related to our ability to leverage information technologies, such as GIS."*

## OGRIP COUNCIL

Stuart Davis, Ohio Department of Administrative Services, Chair • Barry Bennett, Ohio Department of Development • David Blackstone, Ohio Department of Transportation • David Crecelius, Ohio Department of Natural Resources • John Childs, Ohio Environmental Protection Agency • Mark Salling, Higher Education • Michael Paprocki, Ohio Association of Regional Councils • Jim Brosnahan, Regulated Public Utilities • Barbara Curtiss, County Auditors Association of Ohio • Joseph Merritt, County Commissioners Association of Ohio • James Nimz, County Engineers Association of Ohio • Phil Honsey, Municipal League (Cities, Towns & Villages) • Lisa Swain, Municipal League (Population greater than 100,000) • Kate Sherman, OGRIP Forum Chair

## 2000 FORUM OFFICERS

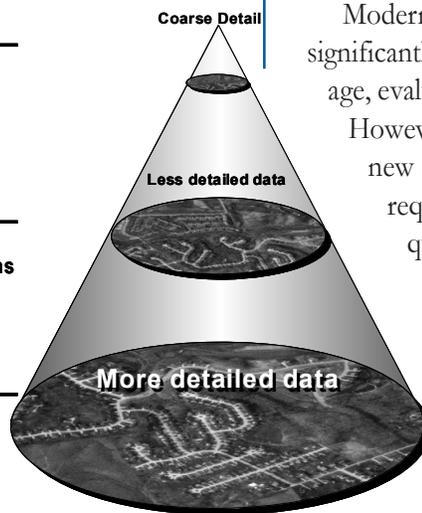
Kate Sherman, Chair • Bob Brinkman, Vice-Chair • Gene Hinterschied, Past Chair • Shane Farnsworth, At-Large Representative • Bob Weaver, At-Large Representative



**Federal Level Apps**  
**Programs**  
**Regional multi-state**  
**Minimum Attributes**  
**Low Resolution**  
**Least \$\$**

**State Level Apps**  
**State & Federal Programs**  
**Multi-County Multi-State**  
**Less Attributes**  
**Lower Resolution**  
**More \$\$**

**Local Level Apps**  
**Serve People**  
**Multi-Neighborhood**  
**More Attributes**  
**Higher Resolution**  
**Most (BIG) \$\$**



## FUTURE

### DATA SHARING AND DATA INTEGRATION

*by Stu Davis, Executive Director*

State and local government work together on many initiatives including emergency preparedness, economic development, natural resources and transportation. Even when state government works independently it tries to take advantage of local data where it is available and accessible.

Unfortunately, while each local government may independently be interested in the same issues and have similar service responsibilities, their technical development has for the most part been uneven and inconsistent. Even in local governments and state agencies where digital data is available, users must confront diverse data definitions, varied formats and inconsistent applications and procedures. As state agencies are required to work over multiple jurisdictions these inconsistencies result in incredibly low productivity and high project costs.

Modern information technologies are significantly expanding our capacity to manage, evaluate and analyze information. However, new opportunities are creating new demands. Decisions makers are requiring more and better information quicker because of the impending ramifications of these decisions.

Much has been said regarding the benefits of Geographic Information System (GIS) technology. The true benefits are in the integration and analysis

capabilities of this technology. It is not just a mapping tool. GIS is allowing organizations at all levels to integrate datasets providing a more complete picture of the impact and relationships surrounding events or decisions. This continued integration is critical for Ohio to remain competitive and to function more efficiently.

For many years government was satisfied in focusing their work within their political or jurisdictional borders. Today, to be successful in the implementation of any number of critical service applications communities, counties, local organization and state agencies are required to look beyond their jurisdictional boundaries and their own mandated functions. We, in government, can no longer act and respond in a vacuum. Economic development, labor analysis, emergency preparedness, health concerns, transportation and comprehensive planning, delivery of services, and natural resource evaluation and protection in most cases require state and local governments to consider a multi-county, regional and/or state perspectives to be successful and effective.

OGRIP serves this purpose. OGRIP communicates areas of opportunity for integration and collaborative efforts in and between governments. We try to leverage state and local tax dollars in support of spatial data development and enhancement are being well spent.

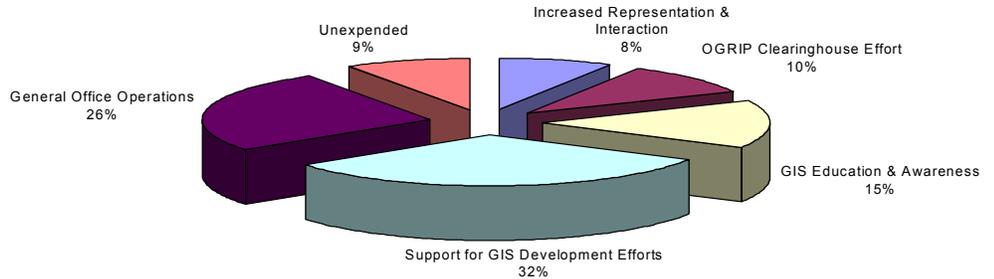
The key to Ohio's future competitiveness is our ability to vertically integrate information to support all levels of government. For this reason, OGRIP has talked about vertical integration for some time. The basis of vertical integration can best be described as capturing spatial information once, at its most detailed level, maintain this spatial information and making it available to others.

*Continued on back page*

# FINANCES

## TOTAL FUNDING

General Revenue	401,791.00	71%
Special Rotary	161,819.00	29%
<b>Total</b>	<b>563,610.00</b>	



## TOTAL EXPENDITURES

### Increased Representation and Interaction

Administrative Support	41,268.07	
Training/Conferences	6,387.34	
Printing/Communications	75.95	
<b>Total</b>	<b>47,731.36</b>	<b>8%</b>

### OGRIP Clearinghouse Effort

Administrative Support	30,951.05	
DOQQ Enhancement		
Metadata (includes Add-On)	26,250.00	
<b>Total</b>	<b>57,201.05</b>	<b>10%</b>

### GIS Education and Awareness

Administrative Support	61,902.10	
NGS Advisor Program	11,300.00	
OGRIP Academy	9,162.31	
<b>Total</b>	<b>82,364.41</b>	<b>15%</b>

### Support for GIS Development Efforts

Administrative Support	30,951.05	
Telecommunications Network		
Analysis	900.00	
DOQQ Enhancement (includes Add-on) w/o metadata	146,744.00	
<b>Total</b>	<b>178,595.05</b>	<b>32%</b>

### General Office Operations

Administrative Support	41,268.07	
Maintenance/Supplies	5,066.44	
Data Processing Equipment	10,679.00	
General Operating Expenses	91,154.80	
<b>Total</b>	<b>148,168.31</b>	<b>26%</b>

### Unexpended

Payroll & Contracts	30,036.03	
Maintenance/Supplies/Equip.	19,022.72	
Misc.	491.07	
<b>Total</b>	<b>49,549.82<sup>1</sup></b>	<b>9%</b>

<b>Total Expenditures</b>	<b>563,610.00</b>	
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<sup>1</sup>The unexpended or lapsed funds were transferred to the Cost Benefits Analysis program at the beginning of Fiscal Year 2001.

## HIGHLIGHTS

- Completion of DOQQ Enhancement project.
- Continued support and participation in the National Geodetic Survey (NGS) Advisor Program.
- OGRIP Academy program presented to local government officials on GIS and its benefits in their community.
- Continued educational presentations throughout the year to various state and local government agencies and organizations.
- Coordinated the 2000 Ohio GIS Conference Program as well as assisted with many conference activities.

# 2000 PROJECTS AND ACTIVITIES

## OBJECTIVE #1

### Increased Representation and Interaction

#### HIGHLIGHTS

- Executive Order 2000-05T
- Forum Officers
- Central Ohio GIS Outreach

Efforts to increase representation and interaction among the various entities involved in GIS activities statewide are ongoing within OGRIP. The past year has brought many new perspectives to the OGRIP community with the participation of additional representatives.

#### Executive Order 2000-05T

Governor Taft issued this revised executive order expanding the OGRIP

Council through including representatives from various county offices and a second municipal representative. Additionally, the inclusion of a representative from the regional council level ensures that the Council now has formal representation from state, county, regional, and local levels as well as the academic community. This group represents the majority of spatial data generators and users in Ohio.

#### Forum Officers

During fiscal year 2000, guidelines were defined for the selection of OGRIP Forum officers. The formalized guidelines allow anyone from the Ohio GIS community to be nominated as an officer candidate, regardless of prior participation in the Forum meetings. Candidates must submit a statement detailing their goals for the year they will serve as an officer, along with a personal biography. The information is then distributed to the membership prior to the election. The new guidelines allow for broad representation of the Forum membership in the slate of officers, while ensuring that the officers understand the OGRIP mission and its long-term goals.

#### Central Ohio GIS Outreach

To better understand the need for spatial data sets in Ohio, we worked with several central Ohio organizations as they attempted to define a set of core spatial data beneficial to numerous organizations. The resulting list of spatial data called the Framework will be useful as a foundation upon which to build entity-specific data sets and will enable OGRIP to assist with prioritizing the statewide spatial digital data to be made available to the Ohio GIS user community. The end result was consistent with the National Spatial Data Infrastructure (NSDI) and Federal Geographic Data Commission (FGDC) Framework.

## OBJECTIVE #2

### OGRIP Clearinghouse Effort

OGRIP and the GIS Support Center continue to distribute and disseminate information through formal clearinghouse activities via the Internet and on compact disc (CD). Digital geospatial datasets (files containing GIS data in graphic form, along with associated attributes indentifying the graphics) and the metadata (textual information describing or cataloging the digital spatial datasets) must be made available at the user sites. These activities serve as foundations for future development and support Ohio as well as national initiatives. The following initiatives support the development of a spatial data clearinghouse.

#### Digital Orthophoto Quarter Quadrangle (DOQQ) Metadata

GIS data is developed for a particular use at a particular level of accuracy and resolution. Each digital data set is appropriate for some applications and inappropriate for others. To facilitate appropriate use of the statewide data sets distributed by the GIS Support Center, one component of the DOQQ enhancement project was the development of metadata on the image files. Information contained in the metadata files allows users to judge whether these images are appropriate for their application. The metadata conforms to the national metadata standards and gives users critical information about the DOQQ data set.

#### Vendor Profiles

One of the major functions of OGRIP is to provide the right information to the right people at the right time. As part of the ongoing project to make the OGRIP web site a vehicle for this function, a mechanism was set up allowing vendors to post profiles of their services on the web site. The profiles can be searched by various key words so that the response to an information request is a brief as possible. Vendors are responsible for posting and maintaining their information in this database, although content is screened before it is actually posted to the web site. This database may be accessed through our site at [www.state.oh.us/ogrip](http://www.state.oh.us/ogrip).

#### HIGHLIGHTS

- Digital Orthophoto Quarter Quadrangle (DOQQ) Metadata
- Vendor Profiles

# 2000 PROJECTS AND ACTIVITIES

## OBJECTIVE #3

### GIS Education and Awareness

#### HIGHLIGHTS

- OGRIP Academy
- NGS Advisor Program
- Spatial Data Cost Benefit Analysis

OGRIP continues to educate Ohio on the advantages and benefits of GIS technology. We must raise the awareness of GIS as a tool to support public and private organizations in their related business functions. We continue to do this through the following initiatives.

#### OGRIP Academy

The first educational event for the Academy was held in May 2000 with participants from eight of the more than 20 Ohio counties in the early planning stages of a GIS project. Various knowledgeable Ohio GIS users presented a highly informative program explaining how a GIS can benefit a county and outlining the steps to initiate a GIS project. The second day of the seminar was devoted to a hands-on session, allowing the participants to actually experience for themselves the power of GIS. Data sets easily available from the GIS Support Center, as well as Census data, provided the framework data for this part of the Academy program.

#### National Geodetic Survey (NGS) Advisor Program

After a hiatus in which there was no National Geodetic Survey Advisor for Ohio, Dave Connors returned to Ohio to again serve in this capacity. During the period Ohio did not have an advisor, OGRIP assisted with efforts to make survey information easily available to users. We also kept in contact with the national NGS office to explain the need for and desire to have a state advisor. OGRIP continues to provide partial funding for this position.

#### Spatial Data Cost Benefit Analysis

A project to gather information regarding spatial data management (including maintenance activities) in state agencies was further developed during the year. The actual analysis will be undertaken in the next fiscal year. This undertaking requires the cooperation and coordination of numerous individuals from the various state agencies and will inventory state spatial data sets for twelve state agencies. It should be completed by Fiscal Year 2002.

## OBJECTIVE #4

### Support for GIS Development Efforts

#### Updated 2000 Funding Document

To support cooperative GIS development, OGRIP must continue to identify external grants and other funding mechanisms to support GIS implementation. This includes defining procedures for geospatial data development in consistent and readily available formats. OGRIP continues to provide assistance to local governments and state agencies in the areas of research and assistance in support of various proposed GIS development efforts. The following initiatives address the support that OGRIP provides to the state of Ohio.

#### Digital Orthophoto Quarter Quadrangle (DOQQ) Enhancement Project

An important part of the clearinghouse effort is ease of use for the statewide data sets distributed by the GIS Support Center. Realizing that the standard format of the DOQQs was difficult to use and to bring into common GIS software, an initiative was undertaken to reproject the DOQQs to the Ohio State Plane coordinate system, package the images by county, and compress the image files to greatly reduce the file size. The compression process reduced the size of each digital file by a factor of 20:1. The DOQQs are now available over the Internet in a choice of formats and sizes, thereby making the data more useful to the Ohio GIS community. The county-wide image files are also available on a CD.

#### HIGHLIGHTS

- Updated 2000 Funding Document
- Digital Orthophoto Quarter Quadrangle (DOQQ) Enhancement Project

# EXECUTIVE DIRECTOR REPORT

The mission of the Ohio Geographically Referenced Information Program (OGRIP) is to encourage GIS activities that enhance the development and use of reliable digital geospatial data through communication, coordination and cooperation for all levels of government and the private sector. We accomplish this mission by:

- educating organizations GIS and other related technologies;
- communicating the benefits of GIS and cooperative efforts;
- raising awareness regarding GIS initiatives in Ohio;
- identifying points of contact in organizations focused on the development and usage of geographic data;
- identifying data sources and resources for potential use for organizations;
- instilling the perspective of developing community resources to further the partnerships for geographic data development and GIS programs; and
- continuing to provide direction regarding enabling technologies beneficial to Ohio.

Our vision is to encourage the creation of digital geographic data of value to multiple users, and foster the ability to easily determine what geographic data exist, as well as the ability to easily access and use these data.

One of OGRIP's major accomplishments this year was the completion of the Digital Orthophoto Quarter Quadrangle (DOQQ) Enhancement Project. This project was initiated by OGRIP to assist the numerous agencies who use these digital images. DOQQs are digital photographs of the entire state that represent a quarter of a USGS 7.5 minute quadrangle. Rather than each agency

compressing and re-projecting the digital images for their own use which leads to inefficiencies and redundant activities, the enhancement will be done once and made available to all - saving time, money and effort. The Department of Natural Resources, Department of Transportation, Environmental Protection Agency, Ohio Penal Industries, Department of Administrative Services and the Ohio Geographically Referenced Information Program have provided funding and are participating in this project making this a multi-agency initiative. This will make the DOQQs more accessible, easier to use, more manageable, and will ultimately increase usage for everyone.

OGRIP also initiated and sponsored the 2000 OGRIP Academy. The Academy was held Thursday and Friday, May 11-12, in Columbus. There were twenty-six representatives from twelve county offices (Auditors, Commissioners, Engineers and Planners) and other local officials that participated in a two-day session describing GIS applications and benefits for countywide and regional cooperative GIS programs. The first day's afternoon sessions included discussions on development strategies for building a countywide GIS as well as financial and legal issues related to GIS implementation. The second day offered participants hands-on demonstrations of county specific spatial data sets in Ohio. The purpose of the Academy was for county officials to realize and understand the importance of GIS and the benefits that can be achieved through countywide, cooperative GIS programs.

We are also pleased to report that Governor Taft signed Executive Order 2000-05T expanding the OGRIP Council and giving local government more voice in the OGRIP decision making processes. Although the structure of the OGRIP Council has served us well for many years, expansion of the OGRIP Council to include more representation from local government was necessary because of the increase in GIS activity at the local level. The expanded order includes the original members of the OGRIP Council as well as an additional representative from the Ohio Department of Development (ODOD). In addition to this added state agency representative, five additional local government representatives were added. They include a representative each from the Ohio Association of Regional Councils

(OARC), the County Auditor's Association of Ohio (CAAO), the County Commissioners Association of Ohio (CCAO) and the County Engineers Association of Ohio (CEAO) as well as one additional representative from the Municipal League representing cities with a population greater than 100,000. Expansion will increase vertical integration, coordination and cooperation between state and local government activities.

This year, OGRIP also hosted two important community events.

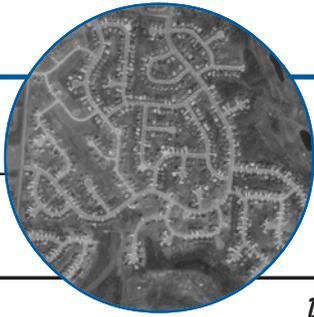
The first, the 9<sup>th</sup> Annual Ohio GIS Conference, the premier GIS conference in the state, was held Tuesday through Thursday, Oct. 26-28, 1999 at the Marriott North Hotel and was a big success. Approximately 500 Geographic Information Systems (GIS) professionals from across the state converged on Columbus to listen and learn about GIS. Sixty-three speakers participated in the two and one-half-day program with presentations on issues from satellite imagery to conversion alternatives and from procurement of services to technical standards. An expanded exhibit area allowed 35 GIS firms from across the nation to demonstrate and display their wares to conference attendees.

The other is the National GIS Day on November 19, 1999. Governor Bob Taft issued a proclamation declaring this day as GIS Day in Ohio. Thirty-four other United States governors as well as public officials in the Czech Republic and Canada also made GIS Day declarations. With this tremendous support, this first-time event quickly caught on worldwide with over ninety-one countries participating. This global participation helped make GIS Day an overwhelming success. The initial goal to educate one million people was far surpassed with the education of 2.4 million children and adults.



**STU DAVIS**  
**EXECUTIVE DIRECTOR**

# SUCCESSSES



## DOQQ ENHANCEMENT PROJECT

Over the years, the Department of Transportation has developed one of the most complete GIS center-line roadway networks in the nation ... and has identified the DOQQs as the base to be used for development.

- Dave Blackstone, ODOT

### DIGITAL ORTHOPHOTO QUARTER QUADRANGLE PROJECT COMPLETED

The Digital Orthophoto Quarter Quadrangle (DOQQ) Enhancement project was completed during the 2000 fiscal year. This project was initiated by OGRIP to assist the numerous agencies who use these digital images with compression and reprojection of the images for their own use. This has led to cost saving and time savings for many state agencies. The departments of Administrative Services, Natural Resources and Transportation, as well as the Environmental Protection Agency, Ohio Penal Industries and OGRIP, funded and participated in this beneficial project. For more information, please contact the OGRIP office.

## FORUM PRESENTATIONS

### FOCUS ON GIS EDUCATION

In the fiscal year 2000, OGRIP identified the need for a change in the Forum meeting structure. Much of the business functions were redirected, as instructed in the Governor's Executive Order, back to the OGRIP Council, leaving the Forum meeting as an opportunity for educational focus for GIS professionals throughout the state of Ohio. Because of this, OGRIP decided to host an educational topic at each Forum meeting, dictated by suggestions from Forum members. These topics were presented by various GIS professionals after which the floor was open for discussion and questions. This new focus provided much assistance to various counties within Ohio as well as provided many agencies with opportunities to learn about varying GIS activities that might support their various initiatives.

To ensure fairness, if a vendor presented, they were asked to focus on the topic at hand and not promote their product. In addition, all members were given an opportunity to speak or to comment on each and every subject. OGRIP has received numerous positive comments on this new concept to the OGRIP Forum meeting and will continue this approach into the next fiscal year.

As always, everyone is welcome to attend the Forum meetings and we welcome suggestions from all members.

## EXECUTIVE ORDER 2000-05T EXPANSION

### MORE LOCAL GOVERNMENT REPRESENTATION

The Governor's expansion of the OGRIP Council to allow for additional local government interaction positions Ohio for better relationships and long lasting partnerships in the future. The expansion includes the County Commissioners, Auditors and Engineers as well as additional representation from Municipal Government and the Regional Councils. This group now represents the majority of spatial data generators and users in Ohio.

## OGRIP BEST PRACTICES AWARDS

The overriding aspect of this year's recipients is that they exemplify the goals and objectives of OGRIP through participation and cooperation.

- Stuart Davis, OGRIP

### 2000 OGRIP BEST PRACTICES AWARD WINNERS



CHERYLE CULLER ACCEPTING FOR THE CITY OF DEFIANCE.

## **FUTURE (CONT.)**

*Continued from page 3*

Ohio can successfully accomplish vertical integration through partnerships and incentives. We are beginning to identify and develop data sharing standards to support these partnerships. We are initiating efforts to better articulate and define spatial information needs for these levels of government as well as identify specific data formats acceptable to all for integrating and sharing data. These activities will begin in earnest within the next fiscal year.

Through OGRIP, state and local government will continue to define spatial needs and requirements as well as search out projects that integrate activities to ensure state and local government obtain results desirable to both. These projects will in time create a foundation of reliable, spatially accurate and maintained spatial information that organizations in all levels of government can build upon. This will in turn provide the foundation for interoperability of applications.

## **FISCAL YEAR 2000 PUBLICATION LISTING**

- Updated 2000 Funding Document
- Digital Orthophoto Quarter Quadrangle (DOQQ) Metadata Documentation
- Geodetic Control Program Outline
- Framework Document
- OGRIP Best Practices Awards Document
- OGRIP Academy Report
- GIS Contacts Booklet
- Digital Orthophoto Quarter Quadrangle (DOQQ) Enhancement Document
- Vendor Profile Listing
- 2000 Ohio GIS Program



**OHIO GEOGRAPHICALLY REFERENCED INFORMATION PROGRAM**

**OHIO DEPARTMENT OF ADMINISTRATIVE SERVICES**

**COMPUTER SERVICES DIVISION**

**77 S. HIGH STREET, 19TH FLOOR**

**COLUMBUS, OH 43215**