Oklahoma
Office of Geographic Information

Strategic & Business Plan
for

Fiscal Years
2008 – 2010

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Executive Summary

Since the late 1980s, state agencies have discussed using Geographic Information System (GIS) technology to support capturing, managing, manipulating, analyzing, and displaying spatially referenced data for solving complex planning and management problems. In 1991, the State of Oklahoma Strategic Plan for GIS Development was created. In 1994, Oklahoma SB722 authorized the Oklahoma Conservation Commission (OCC) to "coordinate the preparation of a Strategy for Developing a Geographic Information System for the State of Oklahoma, focusing on, but not limited to, natural resources." To assist the OCC in the Strategy preparation, the Oklahoma Geographic Information System Council was originally created with 11 members, primarily environmental state agencies. The Oklahoma GIS Council and Conservation Commission presented a GIS strategy to the Oklahoma State Legislature in May 1996.

The eight strategies in the May 1996 strategic plan have produced significant results even though the Council is an unfunded state entity, and a review indicates that the strategies are on-going. An examination of the strategies also indicated a compelling need for an up-to-date needs assessment of entities currently engaged in GIS activities.

In 2004 when HB 2457 created the Office of Geographic Information (OGI), it also authorized the position of a State Geographic Information Coordinator. This legislation specified that the OGI be located in the OCC. The OGI legislation included the following 11 mandates:

The Office shall:

1. Provide staff support and technical assistance to the Council established pursuant to Section 1501-205.1 of Title 82 of the Oklahoma Statutes;

2. Establish a central statewide geographic information clearinghouse to maintain data inventories, information on current and planned Geographic Information System applications, information on grants available for the acquisition or enhancement of geographic information resources, and a directory of geographic information resources available within the state or from the federal government;

3. Coordinate any grant programs for local governments to establish and maintain Geographic Information Systems as such programs may be established by the Legislature;

4. Coordinate multi-agency Geographic Information System projects, including working with state and local agencies in the development and maintenance of statewide data and Geographic Information Systems;

5. Provide access to both consulting and technical assistance, and education and training on the application and use of geographic information technologies to state and local agencies;

6. Develop, maintain, update, and interpret Geographic Information System standards under the direction of the Council and working with state and local agencies;

7. Provide Geographic Information System services, as requested, to agencies wishing to augment their Geographic Information System capabilities;

8. Evaluate, participate in pilot studies, and make recommendations on Geographic Information System hardware and software in cooperation with other agencies;

9. Prepare proposed legislation and funding proposals for the Legislature that will further coordinate and expedite the implementation of Geographic Information Systems as recommended by the Geographic Information Council and approved by the Executive Director of the Conservation Commission;

10. Address data sensitivity issues so that information is made available to the public but protects confidentiality of the information; and

11. Provide an annual report to the Governor and Legislature on the status and needs of the geographic information infrastructure of the State of Oklahoma.

Additionally HB 2457 removed the word “System” from the Council’s official title and increased the Council membership to 19 by adding representatives outside the natural resources arena. Regular Council meetings have produced significant progress toward making Oklahoma geographic information available to the public, both within Oklahoma and across the nation. The legislative mandates did not include funding for the initiatives. See Appendix III-C for the complete text of the present legislation affecting the Council and OGI, Sections 1501-205.1205.3 of Title 82 of the Oklahoma Statutes.

To comply with the Oklahoma State Legislature’s mandate and to fulfill the National Spatial Data Infrastructure (NSDI) Category 3 Grant requirements, the Council has developed a three-year strategic plan that includes funding requests. This three-year strategic plan will ensure that great advancements in coordinating GIS activities in Oklahoma continue and that other significant activities that support the implementation of the National Spatial Data Infrastructure evolve.

To ensure successful completion of the three strategic directions in the three-year plan – (1) Building a Sustainable Future, (2) Marketing Geographic Information as an Important Decision Making Tool, and (3) Maximizing Geographic Information Benefits for the State – the State Office of Geographic Information must be funded and staffed. No longer can the State be satisfied with the current status of our geographic information infrastructure.

The Council reviewed the OGI mission, embraced its vision, and supports its goals. Each element of the legislated mandate was carefully reviewed and addressed in the strategic plan. The Strategic Planning Team must be complimented for their work in putting together a visionary plan that is specific, measurable, attainable, results oriented, and time bound.

The remarkable response to the needs assessment from the stakeholders in the development of the plan indicates a solid customer and support base. The two primary strategic directions emerging from the needs assessment--(1) coordination of data acquisition, discovery, development and distribution and (2) education, training and user support – are clearly critical components of the strategic plan.

Although many of the stakeholders in GIS activities compete for technology funds, the needs assessment clearly indicates a strong desire for sharing and partnering to conserve and leverage limited human and financial resources in geographic information technology.

On the immediate horizon and certainly over the next three years, specific challenges face the OGI, the most critical and immediate being the funding for the office, particularly a state coordinator and support staff. The rapid adoption of popular internet mapping programs such as Google Earth has accelerated the public's demand for geographic information. No longer can the growing demand for leveraging and building a geographic infrastructure be met by the Oklahoma Conservation Commission staff that also has other important duties and responsibilities.

In order for the OGI to fulfill its mission and vision and accomplish the goals of the strategic plan, the Oklahoma Conservation Commission is requesting $371K to fund the Office of Geographic Information and to staff three positions. The three strategic directions of (1) Building a sustainable future, (2) Marketing GI as an important decision making tool, and (3) Maximizing GI benefits for the State will not happen by maintaining the status quo. The measurable outcomes implicit in the plan will demonstrate the tangible benefits of an active and funded OGI supported by an involved Council.

The mission of the OGI is much greater than conserving natural resources. It uniquely represents each of the 19 entities represented on the Council plus other state, regional, local, tribal, federal, academic, non-profit and private sector stakeholders. The men and women who have given their expertise and time to launch Oklahoma into the 21st Century to a place of significance in geographic information services realize its value to Oklahoma's geographic information infrastructure, economic development, disaster response capacity, agriculture, environmental issues, natural resource management and security of the citizens of our state. We have much to be grateful for their hard work, initiative, insight and foresight.

Mike Thralls
Chair, Oklahoma State Geographic Information Council
Executive Director, Oklahoma Conservation Commission

Strategic Planning Methodology

In March 2006, Phase One of the Office of Geographic Information (OGI) strategic planning began by a representative of the OGI attending a workshop at the National States Geographic Information Council (NSGIC) Mid-Year Meeting in Annapolis, Maryland. Phases Two through Six (assumptions, mission and vision, long-term goals, objectives and action plans) began after the Council adopted a proposal to hire a facilitator to guide it through the strategic planning process approved by the Oklahoma Office of State Finance and financially supported by a NSDI Grant from the Federal Geographic Data Committee.

The three-year strategic plan was developed using the NSGIC Strategic Plan Template to fulfill the requirements of the NSDI Category 3 Grant. According to NSGIC, the many natural disasters that occurred during 2005 was the compelling reason for all members of the geospatial community to work together to build effective statewide spatial data infrastructures (SSDI) to serve and protect citizens. Certainly Oklahoma shares that compelling reason because of the state disasters that have occurred in the recent past such as ice storms, tornadoes, and wild fires.

A Strategic Planning Team (SPT) comprised of representatives from the Council and key stakeholders in the GIS technology community planned a needs assessment and two follow-up focus groups to precede the official strategic planning development sessions. The SPT ensured the planning process began on a firm foundation of a thorough environmental scan and a survey of the customers and stakeholders. Using the results of the needs assessment and the focus groups, the team met on three days to complete the environmental study, write the mission and vision for the Office of Geographic Information, determine the strategic directions, and identify goals and key performance measures. In tandem with the SPT's developing goals for the yet-to-be funded Office of Geographic Information, the Council is developing job description classifications for geographic information positions to be submitted to the State Office of Personnel Management for approval.

The comprehensive needs assessment was distributed electronically to 213 stakeholders representing the Oklahoma geographic information community. The purpose of the needs assessment was to find out who is using GIS technology, what the level of usage is, what the future need for GIS is, what types of activities or support stakeholders want from the OGI, how they believe the OGI should be funded, and if they support a statewide GIS conference. The 143 responses represented a 67 percent return rate. The categories of respondents included state, federal, regional, county, municipal, non-profit, private, utility, energy, education, military, and tribal entities. See Appendix I for a brief discussion of the results of the survey, the complete set of survey questions and responses along with some selected charts and graphs.

The needs assessment was followed by two focus groups (in Tulsa and Oklahoma City). The invitations (75) were sent to those who indicated an interest in attending on their returned needs assessment. The focus groups were also a statistical representation of the population surveyed in the needs assessment. The focus groups processed five questions: a visioning question and questions about OGI's strengths,

weaknesses, opportunities and threats. See Appendix II for the questions and a composite of the responses.

The Strategic Planning Team that completed the strategic planning process is to be complimented for its dedication and effectiveness. Their thorough review of the current status of GIS in Oklahoma and careful planning creates a clear path for establishing geographic information technology in Oklahoma that will help numerous state, regional, and local agencies enhance the quality of life in the State.

Current Situation

The Oklahoma legislature in 2004 HB 2457 established an Office of Geographic Information (OGI) in the Oklahoma Conservation Commission with the 11 mandates listed in the Executive Summary. Although some of these mandates are being partially addressed through volunteer efforts of some Council members, the majority of these duties will not be fully implemented without permanent funding for the OGI. The Council and OGI recognize that effectively and efficiently fulfilling the mandates requires a strategic plan which articulates clearly the purpose, values, roles, objectives, strengths and weaknesses of the Office.

The SPT and focus groups identified a number of strengths. The fact that legislation created an OGI puts Oklahoma in an enviable position compared to other states who desire to participate in the NSDI Initiative. A motivated GIS user group and existing partners and networks clearly have helped in establishing the existing GIS clearinghouse. Oklahoma has GIS expertise in its stakeholder community. Our colleges, universities and career tech institutions provide good GIS education. A foundation is in place.

Along with the strengths are many weaknesses – all of which are problems that can be solved with support at the executive and legislative levels. Oklahoma has no state geographic information coordinator. The legislative support to fund such a position has not been forthcoming. Without a driver, the vehicle for geographic information coordination in Oklahoma has been on a wobbly track. An OGI without champions for geographic information technologies in all the stakeholder communities at the highest levels is a vehicle without a driver. Territorialism among state agencies and stakeholders can be resolved with consensus building around the legislated mission for OGI in Oklahoma. Some of the unwillingness to share data stems from misunderstanding the value of data sharing and the security of data.

Opportunities have grown exponentially as GIS popularity explodes. Oklahoma has the opportunity of coordinating and cooperating not only with the growing use within the State but also with neighboring states and national organizations. The State is within the window of opportunity to becoming a leader in GIS technology.

Some of the threats to the effectiveness and efficiency of the OGI in meeting the legislated mandates come from the fact that mandates were legislated without funding and unfunded programs become lackluster or never evolve without a champion. The rapid technological change and needs for data have resulted in territorialism as the

stronger stakeholders who understand the benefits capture them, while the benefits of synergy among stakeholders lapses.

Public sector respondents were the bulk of those who responded to the needs assessment, the majority as follows: State - 38 percent; Regional, County, and Municipal - 28 percent. The expertise level of those responding is characterized as "professional" – 73 percent. Most of those who responded were actively engaged in GIS activities in their work. When asked how long they had been engaged in GIS activities, 39 percent said more than ten years. The five to ten year group represented 44 percent of the respondents. Although a few observations from the survey will be discussed below, the complete survey with results along with a few selected graphs and charts are in Appendix I.

When asked about management of their data layers, 47 percent of the respondents indicated that they had over thirty data layers in their GIS database and that 56 percent develop and maintain more than ten data layers. Also, 84 percent of respondents use aerial photography in their GIS, which indicates the high importance of this data layer.

The range of annual expenditures for all GIS activities indicates that the GIS user community is comprised of a relatively balanced mix of small, moderate and large GIS shops. However, when looking at expenditures outside of the organization on services, training, or data, we see a picture suggesting that over 90 percent of this activity is handled in-house. With regard to GIS data, 76 percent of respondents indicated that they share data with other organizations, with only 6 percent charging for this data which further supports this activity being handled in-house.

The present use of GIS technology represented in the respondents' answers emphasizes the need for providing and maintaining data layers to meet the needs of a very diverse range of applications and uses. This need is reinforced by the response to the present or future need for GIS with emphasis on Environmental Issues, Emergency Management/Disaster Planning and Regional Planning & Coordination.

When asked to rank the value of certain types of activities or support if the OGI could provide them, 81 percent (considering the moderate & high categories) wanted data distribution and exchange. Similarly, those wanting data standards and workshops were 76 percent of the respondents. Over 60 percent wanted coordination of state activities, data maintenance, education, training, and technical assistance. These types of services and activities emphasize a need for a State Coordinator.

Mission

The Oklahoma Office of Geographic Information (OGI) provides geographic information services to governments, academia, industry and the public. The Office:

- Supports the GI Council with technical assistance.
- Coordinates and promotes geographic information awareness, activities, data, and training.
- Develops standards, policies, and operating procedures.
- Maintains a centralized statewide clearinghouse of accurate and timely data while protecting data security.
- Facilitates data development, sharing and access.
- Fosters the values and benefits of GIS technology to ensure good stewardship of the State's resources.

Vision

The Oklahoma Office of Geographic Information's statewide spatial data infrastructure is consistent with appropriate national standards and supports the notion of a National Spatial Data Infrastructure or NSDI, thereby promoting Oklahoma as a national leader in leveraging Geographic Information Systems to benefit both the State and the Nation.

Practical Three-Year Vision

The Office of Geographic Information (OGI) is:

- Stable and sufficiently funded and has established geographic information related job classifications for state employees.
- Increasing its operational efficiency through coordination and partnerships.
- The official Oklahoma information clearinghouse for geographical data.
- Increasing geographic information awareness through exceptional outreach opportunities.
- Coordinating affordable and customized training for all levels of expertise.
- Recognized as the reliable and first choice source for geographical information services and expertise.
- Recognized as a national GIS leader.

A Vision of the Office's Products & Services

- Coordinates data, activities, multi-agency GIS projects, data maintenance, and local government grants.
- Prioritizes data; acquires, develops, and maintains statewide GIS layers.
- Provides support to the State Geographic Information Council.
- Ensures legislative support and funding for GIS technology and services.
- Maintains a statewide geographic information clearinghouse, including resources and contacts.
- Promotes public education, awareness, and data access.
- Evaluates and recommends GIS hardware and software.
- Fosters partnerships.
- Provides access to consulting, technical assistance, education, and training on GIS technologies.
- Ensures quality, accurate, and timely data.
- Implements standards and procedures adopted by the State Geographic Information Council.
- Ensures protection of sensitive data.
- Submits annual reports to the legislature.

Values & Behaviors

Because the Office of Geographic Information is physically located in the Oklahoma Conservation Commission (OCC) and has embraced its values and behaviors, the Strategic Planning Team chose to adopt OCC's values and behaviors with adaptations relevant to the OGI's mission.

- Personal accountability and responsibility: Individual professionalism and initiative results in effectiveness and efficiency.
- Integrity: Loyalty to the mission and truthfulness results in a reputation of excellence and trustworthiness. Ensure protection of sensitive data.
- Respect and courtesy: Maintaining positive, productive professional relationships fosters strong partnerships and camaraderie even among those who compete for limited human and financial resources. We can disagree agreeably and thereby foster synergy.
- Timeliness, effective communication, and quality of work: These priorities promote behaviors that help us leverage the resources we have.
- Creativity and innovation: Using ingenuity and creativity, we can manage our human and financial resources to reach our objectives and implement our strategies.

To echo OCC: we will honor responsibility, accountability, honesty, and communication so the image of the Office of Geographic Information will be that of a State office with a reputation of excellence.

Strategic Directions, Long-Term Goals & Key Performance Measures Summary

Strategic Directions

1. Building a Sustainable Future

2. Marketing Geographic Information as an Important Decision Making Tool

3. Maximizing Geographic Information Benefits for the State

Long-Term Goals & Key Performance Measures for each of the # Strategic Directions

Building a Sustainable Future

I. Goal: Prepare budget for FY2008 – 2010.
Key Performance Measure:
Budget approved by both the Council and OCC

2. Goal: Complete three-year strategic plan for calendar years 2007-2009.
Key Performance Measure:
Strategic Plan approved by the Council and OCC.

3. Goal: Develop State Coordinator and geographic information job classifications and descriptions for approval.
Key Performance Measure:
Job descriptions approved by the Council, OCC Executive Director and OPM.

4. Goal: State Geographic Information Coordinator hired and dedicated solely to OGI initiatives.
Key Performance Measure:
OGI State Coordinator hired with permanent funding.

5. Goal: Conduct awareness campaign with agency directors and legislative leaders.
Key Performance Measure:
Presentations made to a minimum of ten agency directors and legislators.

6. Goal: Establish executive level Council and legislative commitments.
Key Performance Measure:
Conduct regular separate Council meetings as Executive Level / Legislative Meeting.

7. Goal: Establish OGI strategic review process.
Key Performance Measure:
Strategic Planning Team completed progress reviews and updates of the current strategic plan.

8. Goal: Conduct annual review and update of OGI Strategic Plan
Key Performance Measure:
Council reviewed and approved OGI Strategic Plan for calendar years 2007-2009.

9. Goal: Develop Professional Geographic Information Organization for Oklahoma
Key Performance Measure:
Geographic information professional organization active in Oklahoma.

	Calendar Year		
Goals	**2007**	**2008**	**2009**
1. Prepare budget for FY2008 – 2010	X		
2. Complete three-year strategic plan for calendar years 2007-2009	X		
3. Develop GI job classifications & descriptions for approval	X		
4. GI Coordinator dedicated solely to OGI initiatives on board	X		
5. Awareness campaign with agency directors & legislative leaders	X	X	X
6. Establish executive level Council & legislative commitments	X	X	X
7. OGI strategic review process established	X	X	X
8. Annual review & update of OGI strategic Plan	X	X	X
9. Develop Professional GI Organization for Oklahoma		X	X

Marketing Geographic Information as an Important Decision Making Tool

1. Goal: Create comparative analysis report to project ROI.
Key Performance Measure:
Report clearly highlights GIS benefits and ROI.

2. Goal: Develop pilot project to increase awareness of GIS need.
Key Performance Measure:
Pilot project identified, completed and evaluated.

3. Goal: Increase website utility.
Key Performance Measure:
Listed an average of six new/additional items each year with 10 percent increased annual usage.

4. Goal: Conduct GIS awareness campaign across Oklahoma
   Key Performance Measure:
   Publications, brochures, and other awareness tools distributed across the state to executive level, stakeholders, legislators, governmental and tribal entities, public service organizations, K-12 educators, and general public.

5. Goal: Plan and host annual statewide conference featuring best practices recognition.
   Key Performance Measure:
   Best Practices awarded at the successful conference attended by more than 250 people.

6. Goal: Foster training and education.
   Key Performance Measure:
   Coordinated four training and education opportunities for the GIS community by the end of 2009.

	Calendar Year		
Goals	**2007**	**2008**	**2009**
1. Create comparative analysis report to project ROI	X		
2. Develop pilot project to increase awareness of GIS need.	X	X	
3. Increase utility of website	X	X	X
4. Conduct GIS awareness campaign across Oklahoma	X	X	X
5. Host annual statewide conference featuring best practices recognition		X	X
6. Foster training and education		X	X

Maximize Geographic Information Benefits for the State

1. Goal: Participate in national multi-state geographic information organizations.
   Key Performance Measure:
   More than 25 Oklahoma geographic information professionals attended regular meetings, seminars, and or workshops.

2. Goal: Participate in regional and national coordination efforts.
   Key Performance Measure:
   Attend 100 percent of Regional/ National Coordination meetings.

3. Goal: Initiate data sharing/stewardship opportunities among specific stakeholders.
   Key Performance Measure:
   Three sharing/stewardship agreements initiated each year.

4. Goal: Organize an integrated data development consortium.
   Key Performance Measure:
   Consortium in place and data layer priorities established.

5. Goal: Leverage existing national organization participation.
   Key Performance Measure:
   More than 25 Oklahoma geographic information professionals attending the meetings bring back and share information.

6. Goal: Leverage national resources and initiatives to receive maximum benefits for the Oklahoma geographic information community.
   Key Performance Measure:
   Documented at least four national resources and initiatives taken advantage of annually.

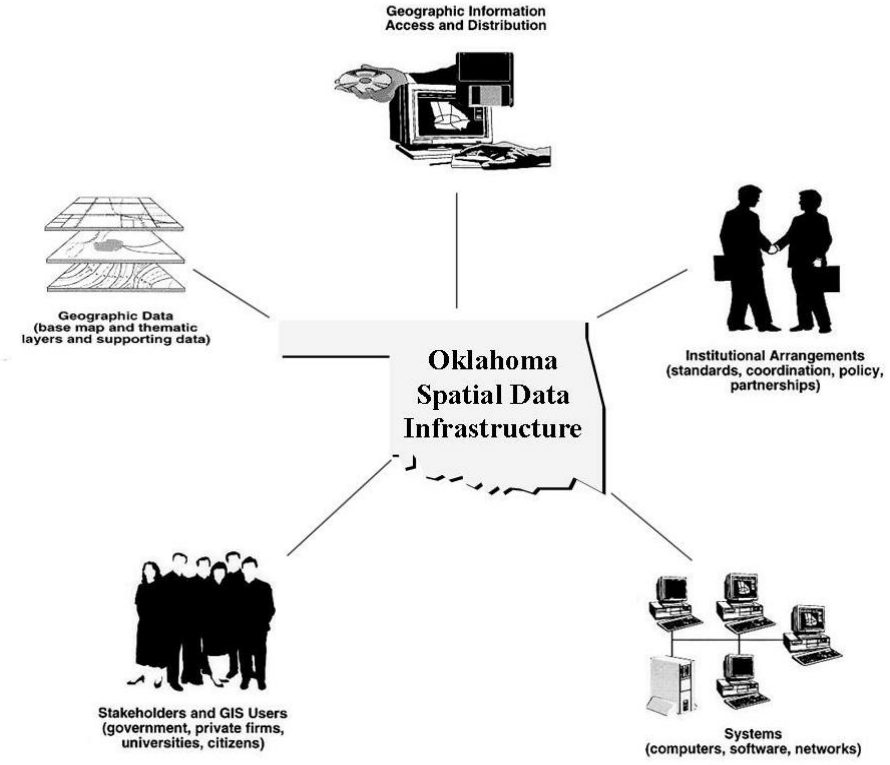
7. Goal: Develop partnerships for data acquisition and stewardship.
   Key Performance Measure:
   Three partnership or stewardship agreements in place.

8. Goal: Establish official statewide information clearinghouse.
   Key Performance Measure:
   Resources and information identified, content and services launched, maintained and continuously up-dated.

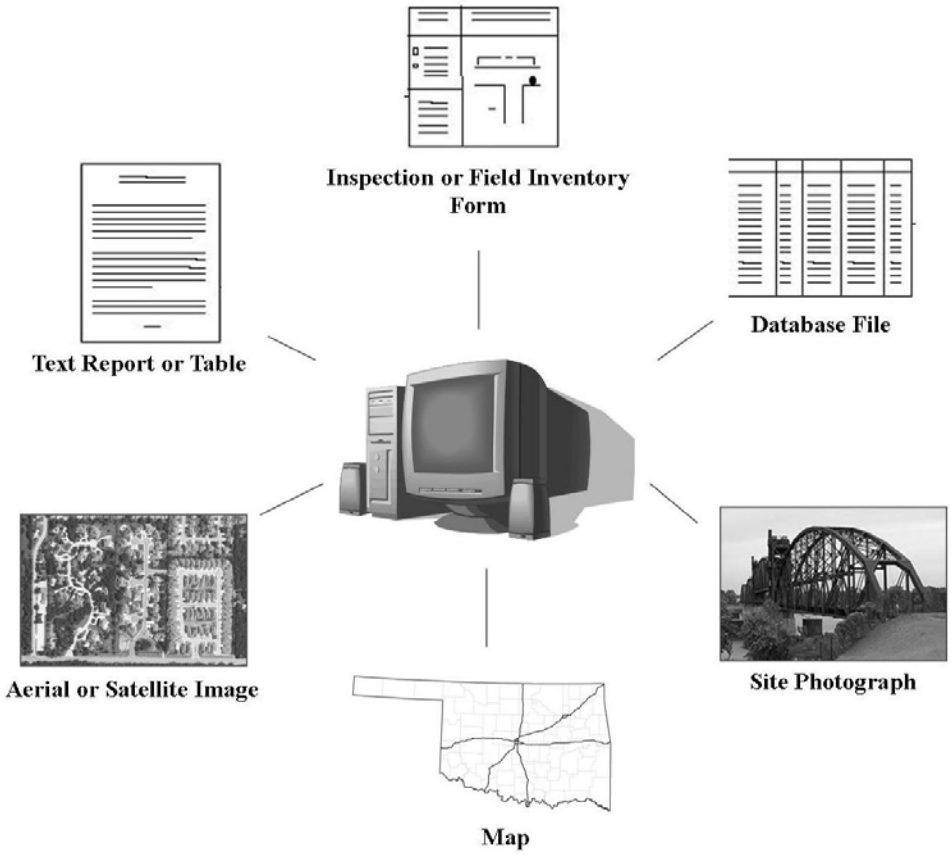
	Calendar Year		
Goals	**2007**	**2008**	**2009**
1. Participate in national multi-state GI organizations	X	X	X
2. Participate in regional & national coordination efforts	X	X	X
3. Initiate data sharing opportunities among specific stakeholders	X	X	X
4. Organize an integrated data development consortium	X		
5. Leverage existing national organization participation	X	X	X
6. Leverage national resources & initiatives	X	X	X
7. Develop partnerships for data acquisition & stewardship	X	X	X
8. Establish official statewide information clearinghouse	X	X	X

Requirements: Benefits & Justification for Establishing a Funded OGI for the State of Oklahoma

An important role of the OGI and the Council is to lead and encourage continued development and use of the Oklahoma Spatial Data Infrastructure (OSDI). The OSDI is modeled after the NSDI which is defined as the "*technology, policies, and people necessary to promote geospatial data sharing throughout all levels of government, the private and non-profit sectors, and academia."* The term "infrastructure" is key to the understanding of OSDI. Infrastructure is defined as the "underlying base or the basic facilities, equipment, services, and installations needed for growth and functioning of a community or organization." In the same manner that roads are vitally important to the State's infrastructure, the data, systems, people, and institutional arrangements that comprise the OSDI provide public and private organizations with the foundation for progress. Graphically the OSDI can be represented as illustrated below:



For quite some time geographic information experts have recognized that nearly 80 percent of the information collected by governmental agencies, utility companies and commercial firms has a geographic feature. These organizations require accurate and timely answers to fundamental location questions that impact operations and decision-making in the office and in the field. GIS technology is the tool of choice to integrate the multitude of complex and disparate datasets into a format that supports decision-making in today's governmental and business environment (see illustration that follows).



In order for GIS technology to be widely adopted in day-to-day operations, free and readily available geographic information needs to be available from a broadly supported and well-developed OSDI. This availability will not occur without full-time, effective coordination. Successful implementation of an OSDI will result in the delivery of numerous benefits to organizations, businesses and individuals in the State. Although there are numerous examples of how GIS has benefited society, quantifying these benefits, especially from a cost/benefit analysis can be difficult. One study, the Joint Nordic Project Report, found the cost-benefit ratio to range from 1:1 to 1:7 across a broad scope of GIS implementations.

Opportunities arising from a fully supported and functioning OSDI include:

- **Better Decision-Making, Service, and Responsiveness** to citizens by providing staff and management with the information needed to respond quickly to problems or concerns, providing quality service, and to make sound, equitable decisions, which take into account all pertinent issues and impacts.

- **Partnerships and Resource Sharing** using the fundamental basis of GIS as an integrator of information to leverage partnerships and encourage joint projects, sharing of systems and data, and encouraging uniform practices based on sound standards. GIS is a proven catalyst for State/Local government collaboration as well as public/private partnerships to share funds and resources.

- **Productivity Gains** by greatly reducing labor and cost in accessing information, integrating multiple data sources, performing complex analyses, and presenting information in map form. Staff efficiency gains with GIS in the range of 20 to 60 percent have been observed in government agencies.

- **Cost Avoidance** through more effective management of transportation and utility infrastructure (lower maintenance costs), reducing damage from natural disasters because of better planning, and protecting organizations from costly legal or regulatory challenges by providing critical information. In certain settings, the use of GIS technology has contributed to savings of 10 to 25 percent in infrastructure maintenance and repair costs. While avoidance of costs for unpredictable events cannot be estimated, State and municipal governments have used GIS effectively to avoid millions of dollars in expenditures while saving lives and property.

- **Increased Information Security & Integrity** through the automation of geographic information on maps, drawings, and tabular records thereby protecting it from catastrophic loss (fire or flood) and providing an environment where it can be effectively updated and maintained.

- **Catalyst for Technology Advancement** by stimulating the growth of the private GIS industry in Oklahoma and enhancing related economic and educational benefits.

- **Quality of Life Enhancement** where GIS technology contributes directly to the planning and development work that influences the long-term quality of the State's economic, environmental, and cultural environment and the welfare of its citizens.

These benefits of GIS technology ring true with the State's strategic initiatives as Oklahoma sets the groundwork for the next 100 years. Governor Brad Henry in his recent second-term inaugural address stated:

> *We can look to the past for inspiration, and we can look to the future with optimism, but it is in this moment, in our present momentum, that real work must be done. Now is the time for us to dream. Now is the time to chart a course for Oklahoma's zenith. Now is the moment to embrace the exciting opportunities before us and take bold action.*

Simply stated, "Better GIS Technology enables Better Decision-Making which results in A Better Future for Oklahoma."

Business Environment Assessment

Eight dimensions of the business environment profoundly influence the future of geographical information services for the State of Oklahoma and the Office of Geographical Information (OGI). The needs assessment and focus groups gave clear information about the importance of geographical information for the safety, security, and economic development of the State. The following summarizes a portion of the findings.

Economy

The state's economy is becoming more diverse and income levels are on the rise. Oklahoma's economic expansion has paralleled that of the nation in that it is becoming more and more global. The bi-directional flow of products and services across our state boundary has increased dramatically in recent years increasingly linking our economy to the national and global marketplace. The proliferation of the Internet coupled with the decreasing cost of technology to access this resource has exponentially enabled more and more businesses and individuals access to information resources they can use in making day-to-day decisions. A fully functional OGI is critical in ensuring that accurate and timely geographic information is available for these decision-making opportunities that lie within and outside our state borders.

Social/Political/Demographics

The population growth in Oklahoma has increased the demand from urban areas for large geographic information datasets such as aerial photography. This demand is partly due to readily available and affordable high-speed internet service. On the other hand, demand by rural residents for this type of geographic information is equally strong, but access is often limited by the present infrastructure delivering internet service to rural Oklahoma. This presents challenges and opportunities to the OGI in meeting the needs of the State's rural customers.

Lifestyle changes have demonstrated a growing demand for geographic information in areas such as safety, travel, recreation, transportation, weather, health and education to name a few. As the scope and diversity of the GIS user community grows, increasing demands will be placed on the OSDI to provide the desired geographic information content and services. To ensure that these demands are met, coordination of these activities by the OGI will become even more important.

Several studies have shown a highly positive correlation of internet and computer use with family income and education attainment. Likewise, as the income and educational level of Oklahoma's population rises there will likely be growing demands for geographic information and higher expectations in the quality of that information. The OGI and the OSDI will be challenged to provide ever increasingly rich and robust geographic information services.

Government & Regulatory

The Federal Geographic Data Committee (FGDC) has developed an action plan for the Fifty States Initiative which outlines a fundamental change in the way all governments should work together to build the National Spatial Data Infrastructure (NSDI). Instead of the current philosophy of random grants and partnerships, this program emphasizes strategic and business planning with specifically targeted implementation grants, performance measures and incentives to accomplish this initiative. In cooperation with the FGDC, the National States Geographic Information Council (NSGIC) has outlined nine criteria that are essential for effective statewide coordination of geospatial information technologies. The ninth criteria states that the Federal government works through the statewide coordinating authority. Furthermore it is stated that it is essential that Federal agencies use statewide GIS Coordination offices and councils, such as the OGI and the Council as a type of "clearinghouse" to make sure that grant opportunities are being used wisely to implement the business plans of the states. This approach will lead to greater coordination which will help to minimize duplications of effort.

To facilitate this model of coordination between the Federal government and the States, the United States Geological Survey (USGS) National Geospatial Program Office (NGPO) has set a goal to have a full-time NSDI Partnership Liaison in each of the fifty states. In October 2006 the Oklahoma NSDI Partnership Office was established and the position of USGS Geospatial Liaison was filled. Without a full-time, paid state coordinator in the OGI, effective coordination of Oklahoma geospatial activities will not be realized.

Competition

One of the goals of the OGI is to reduce the competition within the GIS community for limited resources through the development of partnerships and sharing of data. Competitive energies should be channeled through efforts securing grants and cooperative agreements with the Federal government and entities outside of Oklahoma. Establishing partnerships with neighboring states to secure benefits and opportunities for the broader regional GIS community will also be pursued. Finally, working within national organizations such as NSGIC on national initiatives such as Imagery for the Nation will further reduce competition on a national scale. This collaborative effort will result in less duplication of effort and will achieve a greater efficiency in using scarce financial resources while at the same time provide a consistent and timely imagery base for the nation.

Technology

The creation, capture, maintenance and distribution of geographic information is very sensitive to and dependent on technology. Technological innovations applicable to these activities continue to appear at an accelerating rate. The OGI will strive to stay abreast of these changes in technology and their application to the mission of providing geographic information services to the GIS community.

Freely available web applications such as MapQuest, Google Maps, Yahoo! Maps and TerraServer have been partly responsible for the growing demand for geographic information by the general public. The deployment of personal freeware such as Google Earth Free will continue to drive the demand for geographic information with increasingly rich content.

As technology advances so does the need to stay current through training and education. The OGI will work with our partners in the GIS community to facilitate training opportunities dictated by our ever-changing technological environment. Also, the OGI, working with OSDI stakeholders within and outside Oklahoma, will seek out grant opportunities to assist in funding various GIS initiatives.

Markets & Customers

The needs assessment survey illustrated the broad base of customers that use geographic information within the state. One group that may not have been represented in the survey is the growing number of private citizens who are using geographic information in a somewhat transparent way through web interfaces such as Google and Yahoo to locate people and businesses through address searches. As pointed out in earlier discussions, this segment is growing at an increasing rate which will increase the demand for geographic information and services.

Another segment of the GIS user community is customers outside as well as inside Oklahoma's borders seeking economic opportunities within our state. The Internet has placed Oklahoma’s geographic information on the doorstep of the global marketplace. The importance of a central clearinghouse providing official, up-to-date and accurate geographic information covering all segments of Oklahoma’s infrastructure and opportunities is vital to this market.

However, the majority of customers of geographic information are those within the state carrying out their day-to-day work activities. The present strategic planning process has enlisted the help of the present GIS user community to identify products and services important to them. These products and services have been listed previously. The OGI is committed to providing these products and services to our present and future customers.

Industry Trends & Best Practices

The consumption of geographic information within government, business and individual user environments is increasing at a rapid rate. On one end of the spectrum, the integration of geographic information into a variety of applications is becoming more and more transparent to the user. On this front, GIS technology is following the same evolution that has occurred over the past ten years with regard to the integration of GPS (Global Positioning System) technology into everyday products and applications. This evolution has resulted in the removal of the user from the intricacies of the technology and allows them to focus on “getting the job done.”

On the other end of the spectrum, the convergence of new technologies and business requirements is fostering new three-dimensional geospatial applications. Implementation of these systems requires a new set of skills and knowledge requiring the manipulation of complex 3-D data and innovative visualization techniques for presentation and decision-making.

Somewhere between these two is the trend to take GIS applications to the field. The remote computing applications integrate GPS technology with GIS applications giving the user the ability to process geographic information in real-time outside of the office environment. As wireless internet connections become more prevalent and robust, this trend will rapidly accelerate.

The geographic information user community is becoming more aware of data security and the importance of disaster preparedness. This awareness is driving the trend to a more enterprise wide implementation of data management and protection. Coupled with this trend is more centralization of standards to ensure the interoperability of geographic information across jurisdictions and applications.

The adoption of Open Source software for all forms of government applications is rapidly expanding. Likewise it has been deployed in a variety of business and private applications. “Open Source” refers to software whose programming code can be viewed, modified and changed by its users. Generally this software is available free of charge but developers sometimes charge for enhancements, technical support or other related services. A wide variety of open source GIS software is available that adheres to the Open GIS Specifications developed by the Open Geospatial Consortium.

The OGI will strive to keep abreast of these developing trends and cutting edge technologies so that the geographic information user community can receive informed recommendations.

Production & Internal Environment

The current Council and those with OGI responsibilities have had a “can do” attitude for fulfilling the 11 mandates of HB 2457. The Conservation Commission’s agency program and management structure changes have allowed a considerable amount of energy to be devoted to geographic information activities. However, to reap the benefits of statewide emphasis on geographical information, additional specialized resources dedicated to geographic information are required to produce effective and efficient outcomes.

Financial Recommendation

Like most strategic investments, there is an upfront cost to begin implementation, with a larger return on investment to be realized in the future. Legislation creating the Office of Geographic Information (OGI) defined eleven duties that support the Oklahoma Spatial Data Infrastructure. To date some of these duties have been minimally addressed by member agencies of the Council without funding earmarked for these efforts. The strategic directions, goals and key performance measures identified through this strategic planning process cannot be accomplished without stable and consistent funding of the OGI. Therefore, the OGI must be staffed and equipped to carry out its legislated mission. The proposed budget for the operation of the OGI for fiscal years 2008 through 2010 is found in Appendix III-A.

The majority of the funding request is for staff to fulfill the operational requirements of the office. In fiscal years 2008 and 2009, three FTE positions are requested. The position of State Geographic Information Coordinator is specifically mentioned in the legislation and has responsible for developing and managing a statewide program to coordinate the State of Oklahoma's investment in geographic information technology. The detailed job description of this position can be found in Appendix III-B.

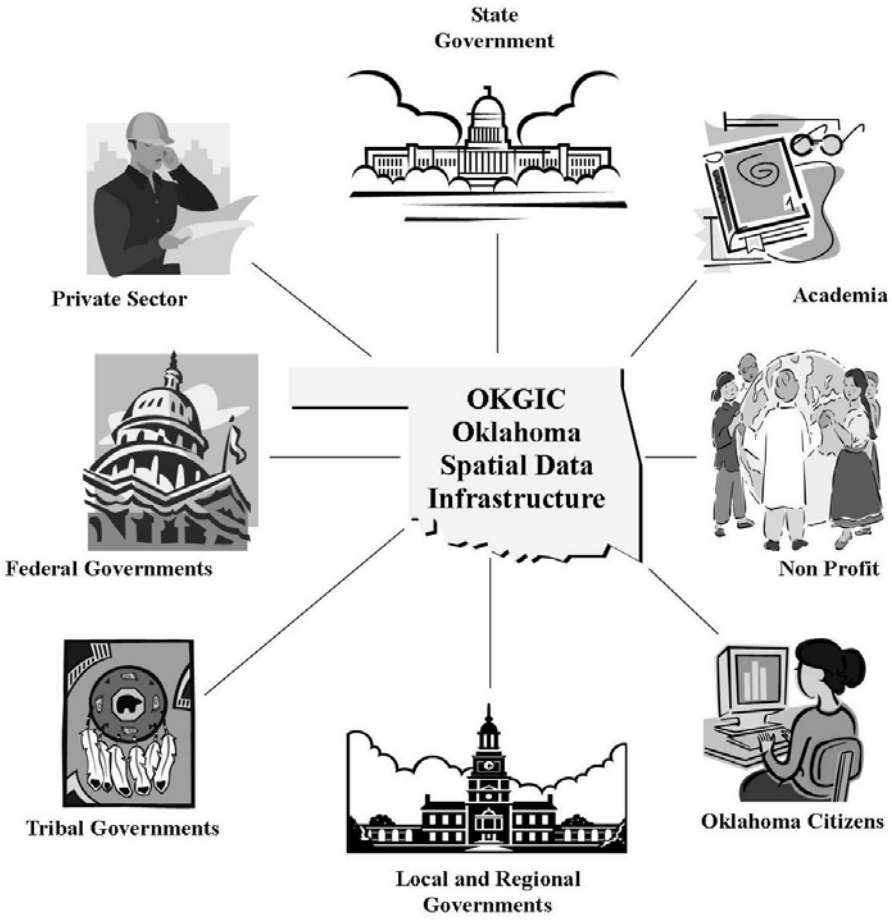
Two additional positions are being requested to support the OGI activities as outlined earlier in this document. The GIS Specialist will provide mapping services as requested, work with stakeholders on planning and delivering workshops, training and other educational outreach activities. This employee will also work closely with data stewards and data providers across the state in implementing data sharing agreements and partnerships. The Information Technology Specialist's primary job duties will be developing and maintaining web mapping services and supporting databases, GIS web pages, data downloading capabilities and the metadata catalog, all of which will support the central clearinghouse activity.

The remainder of the budget request is for hardware and software to support the clearing- house; for basic office equipment and furniture; and for travel expenses related to developing data sharing agreements and partnerships, in-state and out-of-state meetings and conferences. The Oklahoma Conservation Commission (OCC) will provide administrative support, which will include office space, payroll, leave management, copier/fax service and communications. Additionally, the OCC will provide large format plotter and scanner support.

APPENDIX I – A

Needs Assessment Survey Results

The purpose of the needs assessment is to survey the stakeholders, i.e., the potential customers for the OGI, in what their needs are in GIS technology and services. The analysis of the responses provides insight into the current status of GIS among the stakeholders and their perception of future needs. It reveals common, as well as diverse, needs and interests among the stakeholders. A general depiction of the OSDI stakeholders is illustrated by the following graphic.



The needs assessment was critical in assisting the Strategic Planning Team (SPT) in clarifying the mission of the OGI by identifying who it serves and what products and services it should be providing. It also begins to bring into focus a vision for the next three years in implementing an effective OSDI. Plus it provides a foundation on which the stakeholders can build partnerships and share a vision that will allow them to work together toward common goals.

A GIS Needs Assessment Survey was developed by a workgroup with representatives from the Oklahoma Geographic Information Council, Oklahoma Association of Regional Councils, USGS NSDI Liaison Office and CommuniSkills consultant, Dr. Mary Jo Major.

Surveys from other state organizations were reviewed and provided a starting point for this effort. Online survey software (Zoomerang), made available through the Oklahoma Department of Commerce, was used to develop and deploy the survey via the Internet to the stakeholders. The group identified 213 individual stakeholders representing 180 organizations. Emails were sent to stakeholders with the link to the online survey. Additionally, the link to the survey was posted on the OKGIS ListServer seeking input from the GIS user community in general. The survey was distributed to the stakeholders on September 19, 2006 and closed on October 3. There were 143 completed responses to the survey representing 111 different organizations. This represents a 67 percent response indicating a GIS user community that is very interested in the possibility of a funded, fully-functional OGI as established by the legislation.

APPENDIX I – B

Needs Assessment Survey

Section 1 - General Information

1. Contact Information
143 Responses

2. What activity best describes your organization?		
Federal	9	8%
State	37	27%
Regional	14	8%
County	7	5%
Municipal	18	12%
Tribal	11	8%
Military	3	1%
Education	8	5%
Energy	8	6%
Utilities	3	2%
Private	21	14%
Non-Profit	4	3%
Other	0	2%
Total	143	100%

Section 2 - Current GIS Activities

3. What is your expertise in GIS (Geographic Information Systems)?		
None	7	5%
User (One who uses GIS applications created by others but does not create or edit data.)	31	22%
Professional (One who creates GIS applications &/or creates, maintains or edits data.)	105	73%
Total	143	100%

4. Does your department/division currently use GIS?		
Yes	138	97%
No - Skip to Question 33	5	3%
Total	143	100%

5. How long has GIS been used in your department/division?		
< 1 yr	7	5%
1 - 2 yrs	17	12%
3 - 5 yrs	40	29%
6 - 10 yrs	21	15%
> 10 yrs	54	39%
Total	139	100%

6. At what stage of implementation is GIS in your department/division?		
Being Considered	2	1%
Initial Stages of Development	14	10%
Few Users & Applications	37	27%
Extensive Use, Few Users	37	27%
Extensive Use, Many Users	49	35%
Total	139	100%

7. Does your department/division contract out any GIS work to outside entities? (Check all that apply)		
No	71	51%
Public Entities (Universities, State Agencies, etc)	29	21%
Private Entities	54	39%

8. How is GIS currently staffed in your department/division? (Check all that apply)		
Full-Time Staff	106	76%
Part-Time Staff	33	24%
Intern / Students	18	13%
Contractor / Service Provider	24	17%
No Staff	15	11%

9. How many staff do GIS full-time in your department/division?		
None	44	32%
1 - 2	53	39%
3 - 5	28	20%
6 - 10	2	1%
> 10	10	7%
Total	137	100%

10. How many staff do GIS part-time in your department/division?		
None	58	42%
1 - 2	55	40%
3 - 5	10	7%
6 - 10	8	6%
> 10	7	5%
Total	138	100%

11. How many GIS users are in your department/division (excluding GIS staff)?		
None	21	15%
1 - 2	35	25%
3 - 5	36	26%
6 - 10	9	7%
> 10	37	27%
Total	138	100%

12. How many data layers are in your department/division's GIS database?		
< 10	24	18%
10 - 20	26	19%
21 - 30	22	16%
> 30	65	47%
Total	137	100%

13. How many data layers does your department/division develop & maintain?		
None	13	10%
1 - 2	15	11%
3 - 5	18	13%
6 - 10	14	10%
> 10	76	56%
Total	136	100%

14. Does your department/division use aerial photography in its GIS?		
Yes	114	84%
No - Skip to Question 17	22	16%
Total	136	100%

15. If Yes, what resolution of aerial photography do you use? (Check all that apply)		
< 6 inch	14	13%
6 inch	28	25%
1 foot	33	30%
1 meter	66	59%
2 meter	44	40%
> 2 meter	16	14%
Other	13	12%

16. Does your department/division currently purchase aerial photography for its GIS?		
Yes	51	45%
No	62	55%
Total	113	100%

Section 3 - Current GIS Technology Infrastructure

17. Which company's GIS software is used at your department/division? (Check all that apply)		
Autodesk	28	20%
Bentley Microstation	9	7%
Caliper/Maptitude	1	1%
ERDAS	9	7%
ESRI	130	94%
Intergraph	9	7%
MapInfo	10	7%
Oracle Spatial	9	7%
Other, please specify	13	9%

18. What operating system does your GIS run on? (Check all that apply)		
Linux	4	3%
Macintosh	0	0%
Windows	137	99%
UNIX	4	3%
Other, please specify	2	1%

19. How is your department/division networked? (Check all that apply)		
Local Area Network (LAN)	126	91%
Wide Area Network (WAN)	34	25%
Wireless	30	22%
Not Networked	2	1%
Other, please specify	0	0%

20. How is your department/division connected to the Internet? (Check all that apply)		
T1	96	70%
DSL	24	18%
ISDN	3	2%
Dial-up	8	6%
Wireless	15	11%
Broadband Cable	9	7%
Not Connected	2	1%
Other, please specify	12	9%

Section 4 - Existing GIS Activities

21. What is the estimated range of annual expenditures for all GIS activities, including personnel, of your department/division for the last year?		
< $10,000	29	21%
$10,000 - $50,000	24	17%
$50,000 - $100,000	17	12%
$100,000 - $250,000	21	15%
> $250,000	25	18%
Unknown	23	17%
Total	139	100%

22. What is the estimated percent of your department/division's annual expenditures for GIS activities spent outside of your organization for services and/or training (NOT for hardware, software, data, etc.)?		
0%	15	11%
< 10%	73	53%
10% - 20%	10	7%
20% - 30%	5	4%
> 30%	8	6%
Unknown	26	19%
Total	137	100%

23. What is the estimated percent of your department/division's annual expenditures for GIS activities spent outside of your organization for GIS data (NOT for hardware, software, services, training, etc.)?		
0%	32	23%
< 10%	66	48%
10% - 20%	7	5%
20% - 30%	2	1%
> 30%	4	3%
Unknown	27	20%
Total	138	100%

Section 5 - Data Sharing & Exchange

24. Does your department/division share digital geographic data with other organizations?		
Yes	105	76%
No	26	19%
Unknown	8	6%
Total	139	100%

25. If yes to question 24, does your department/division charge for this data?		
Yes	7	6%
Sometimes	33	28%
No	66	57%
Unknown	10	9%
Total	116	100%

26. If yes to question 24, does your department/division restrict usage of the data you share?		
Yes	28	27%
Sometimes	38	37%
No	25	25%
Unknown	11	11%
Total	102	100%

27. Does your department/division receive digital geographic data from other organizations?		
Yes	117	86%
No	11	8%
Unknown	8	6%
Total	136	100%

28. If yes to question 27, is your department/division charged for this data?		
Yes	8	7%
Sometimes	55	45%
No	52	43%
Unknown	7	6%
Total	122	100%

29. If yes to question 27, is the usage restricted for the data your department/division receives?		
Yes	13	12%
Sometimes	64	57%
No	24	21%
Unknown	11	10%
Total	112	100%

30. If your department/division is involved in exchanges of digital geographic data, how does your department/division transfer/receive data? (Check all that apply)		
CD	104	84%
DVD	77	62%
Email	98	79%
External Hard Drive	40	32%
Flash Drive/USB Drive	47	38%
FTP	88	71%
HTTP	37	30%
Tape	4	3%
Other, please specify	3	2%

31. How frequently does your department/division exchange digital geographic data?		
Hourly	1	1%
Daily	10	8%
Weekly	10	8%
Monthly	15	12%
Annually	1	1%
As-Needed/Periodically	85	68%
Other, please specify	3	2%
Total	125	100%

Section 6 - Use of GIS Technology

32. Rank how your department/division is utilizing GIS technology in the following categories. (Please be patient, buttons may load slowly)

Top number is the count of respondents selecting the option. Bottom % is percent of total respondents selecting the option.	1 Unknown	2 None	3 Low	4 Moderate	5 High
Agricultural Production Systems	17 13%	88 66%	15 11%	5 4%	8 6%
Business &/or Facility Management	10 8%	57 43%	27 20%	25 19%	14 11%
City/Town Resource Management	6 5%	55 41%	20 15%	22 17%	30 23%
Construction	9 7%	53 40%	31 23%	27 20%	13 10%
County Government Resource Management	8 6%	59 44%	27 20%	22 17%	17 13%
Economic Development	9 7%	46 35%	37 28%	25 19%	16 12%
Educational Systems	14 11%	67 51%	34 26%	10 8%	7 5%
Electrical Distribution System Management	19 14%	72 55%	22 17%	11 8%	8 6%
Emergency Management/Disaster Planning	14 11%	32 24%	26 20%	37 28%	24 18%
Environmental Issues	8 6%	26 19%	31 23%	34 25%	35 26%
Natural Resource Management	12 9%	39 29%	29 22%	26 19%	28 21%
Oil, Gas &/or Mining	14 11%	66 50%	16 12%	13 10%	23 17%
Parcel Management	8 6%	53 40%	23 17%	23 17%	25 19%
Pipeline Planning, Construction, Maintenance	15 11%	70 53%	16 12%	12 9%	19 14%
Public Health Programs	15 11%	67 50%	26 20%	13 10%	12 9%
Public Safety/Law Enforcement	13 10%	51 39%	37 28%	15 11%	16 12%
Real Estate-Land Development	8 6%	68 51%	27 20%	18 13%	13 10%
Recreational	13 10%	77 58%	24 18%	14 11%	4 3%
Regional Planning & Coordination	6 5%	35 26%	37 28%	27 20%	28 21%
Routing of Vehicles &/or Goods/Services	15 11%	78 59%	21 16%	12 9%	6 5%
Social Services	19 14%	79 59%	23 17%	9 7%	3 2%
Telecommunications	15 12%	80 63%	18 14%	10 8%	5 4%
Transportation	12 9%	59 44%	24 18%	23 17%	16 12%
Waste Management	13 10%	70 54%	21 16%	18 14%	8 6%
Wastewater Management Systems	13 10%	64 48%	16 12%	17 13%	22 17%
Water Distribution System Management	14 11%	59 44%	18 14%	22 17%	20 15%

33. Rank your department/division's present or future need for GIS in the following categories. (Please be patient, buttons may load slowly)					
Top number is the count of respondents selecting the option. Bottom % is percent of total respondents selecting the option.	1 Unknown	2 None	3 Low	4 Moderate	5 High
Agricultural Production Systems	16 12%	69 53%	23 18%	12 9%	10 8%
Business &/or Facility Management	11 8%	41 32%	29 22%	27 21%	22 17%
City/Town Resource Management	5 4%	52 40%	20 15%	22 17%	31 24%
Construction	8 6%	55 42%	25 19%	22 17%	20 15%
County Government Resource Management	6 5%	55 43%	19 15%	26 20%	23 18%
Economic Development	10 8%	40 31%	21 16%	23 18%	36 28%
Educational Systems	11 9%	49 38%	34 27%	25 20%	9 7%
Electrical Distribution System Management	17 13%	60 47%	23 18%	16 12%	13 10%
Emergency Management/Disaster Planning	7 5%	26 20%	19 15%	32 25%	45 35%
Environmental Issues	9 7%	22 17%	15 12%	26 20%	58 45%
Natural Resource Management	12 9%	31 24%	24 18%	26 20%	37 28%
Oil, Gas &/or Mining	14 11%	52 40%	22 17%	16 12%	25 19%
Parcel Management	10 8%	42 32%	25 19%	19 14%	36 27%
Pipeline Planning, Construction, Maintenance	13 10%	55 43%	25 19%	15 12%	21 16%
Public Health Programs	14 11%	51 39%	25 19%	24 18%	18 14%
Public Safety/Law Enforcement	11 9%	43 33%	20 16%	27 21%	28 22%
Real Estate-Land Development	11 8%	52 40%	23 18%	26 20%	19 15%
Recreational	17 13%	55 43%	30 24%	17 13%	8 6%
Regional Planning & Coordination	6 5%	28 22%	19 15%	36 28%	41 32%
Routing of Vehicles &/or Goods/Services	12 9%	54 42%	22 17%	25 19%	17 13%
Social Services	16 12%	65 49%	24 18%	19 14%	8 6%
Telecommunications	16 12%	67 52%	18 14%	19 15%	10 8%
Transportation	8 6%	47 36%	27 21%	25 19%	23 18%
Waste Management	13 10%	55 43%	20 16%	20 16%	20 16%
Wastewater Management Systems	13 10%	52 41%	15 12%	20 16%	28 22%
Water Distribution System Management	13 10%	51 40%	13 10%	21 16%	31 24%

Section 7 - Activities of the State Geographic Information (GI) Council &/or State Office of Geographic Information (OGI)

34. Prior to this survey, were you aware of the OGI or State GI Council?		
Yes	124	87%
No	19	13%
Total	143	100%

35. Have you or a representative of your department/division ever attended a State GI Council meeting?		
Yes	108	77%
No	33	23%
Total	141	100%

36. Rank the value of the following types of activities or support that could be provided to your department/division by the OGI. (Please be patient, buttons may load slowly)

Top number is the count of respondents selecting the option. Bottom % is percent of total respondents selecting the option.	1 Unknown	2 None	3 Low	4 Moderate	5 High
Certification	12 9%	18 13%	30 22%	40 29%	36 26%
Coordination of State Activities	15 11%	13 10%	23 17%	36 26%	49 36%
Data Distribution/Exchange	7 5%	6 4%	13 9%	37 27%	75 54%
Data Maintenance/Up-Dating	8 6%	14 10%	21 15%	38 28%	55 40%
Data Standards	7 5%	10 7%	15 11%	36 26%	69 50%
Education	7 5%	8 6%	35 26%	36 26%	50 37%
GIS Services	9 7%	17 12%	42 30%	34 25%	36 26%
Grant Writing	13 10%	34 25%	31 23%	30 22%	26 19%
Group Purchases	14 10%	30 22%	31 23%	35 26%	24 18%
Technical Assistance	9 7%	11 8%	33 24%	46 34%	37 27%
Training	4 3%	11 8%	27 20%	40 29%	54 40%
Web Hosting	11 8%	35 26%	34 26%	24 18%	29 22%
Workshops	3 2%	4 3%	26 19%	52 38%	53 38%

37. Which organizations should receive services from OGI for free? (Check all that apply)		
General Public	24	17%
GI Council Member Agencies	67	48%
Participating Organizations	79	57%
Public Agencies (Federal, State, Regional, Local, etc.)	94	68%
Everyone	33	24%
No One	3	2%
Other, please specify	9	6%

38. How should the OGI be funded? (Check all that apply)		
GI Council Member Dues/Fees	50	36%
Grants	94	69%
Legislative Appropriation	107	78%
Participating Organization Dues/Fees	43	31%
Sales of Geographic Information	40	29%
Service Contracts	39	28%
Training & Workshops	70	51%
User Fees	30	22%
Other, please specify	6	4%

39. Do you think a general, statewide GIS conference would be beneficial to the Oklahoma GIS community?		
Yes	129	91%
No	1	1%
No Opinion	12	8%
Total	142	100%

40. Would you be willing to support a statewide GIS conference in any of the following ways? (Check all that apply)		
Coordination Staff	43	33%
Equipment	12	9%
Exhibitor	44	34%
Facilities	8	6%
Financial Sponsorship	9	7%
Participation	112	85%
Presentations	64	49%
Training	25	19%
Other, please specify	5	4%

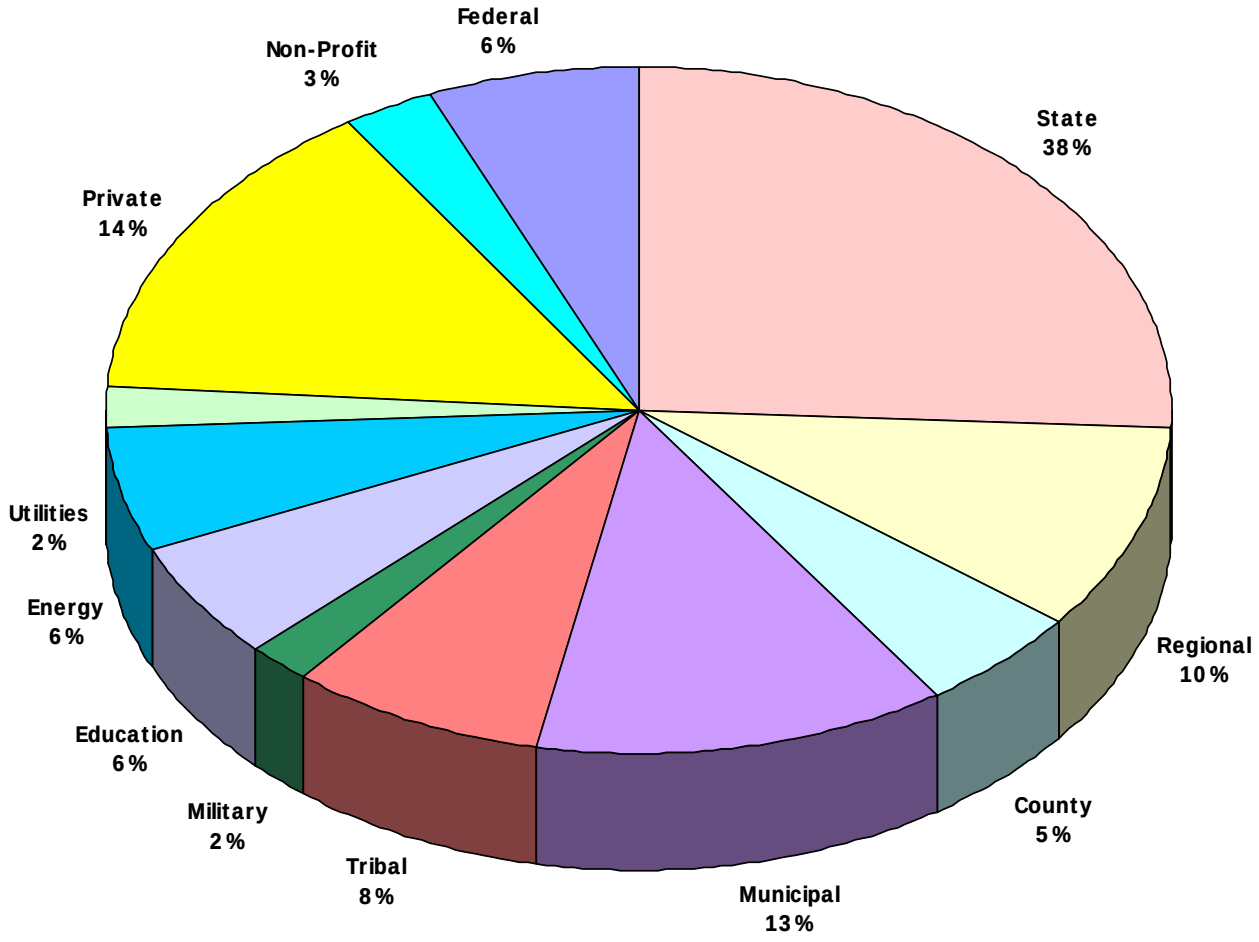
41. Would you be willing to attend a GIS planning focus group meeting? (Check all that apply)		
In Oklahoma City	108	77%
In Tulsa	48	34%
No Participation	16	11%

42. Would you like your contact information added to the GI Council mailing list to receive notification of future Council activities?		
Yes	121	85%
No	22	15%
Total	143	100%

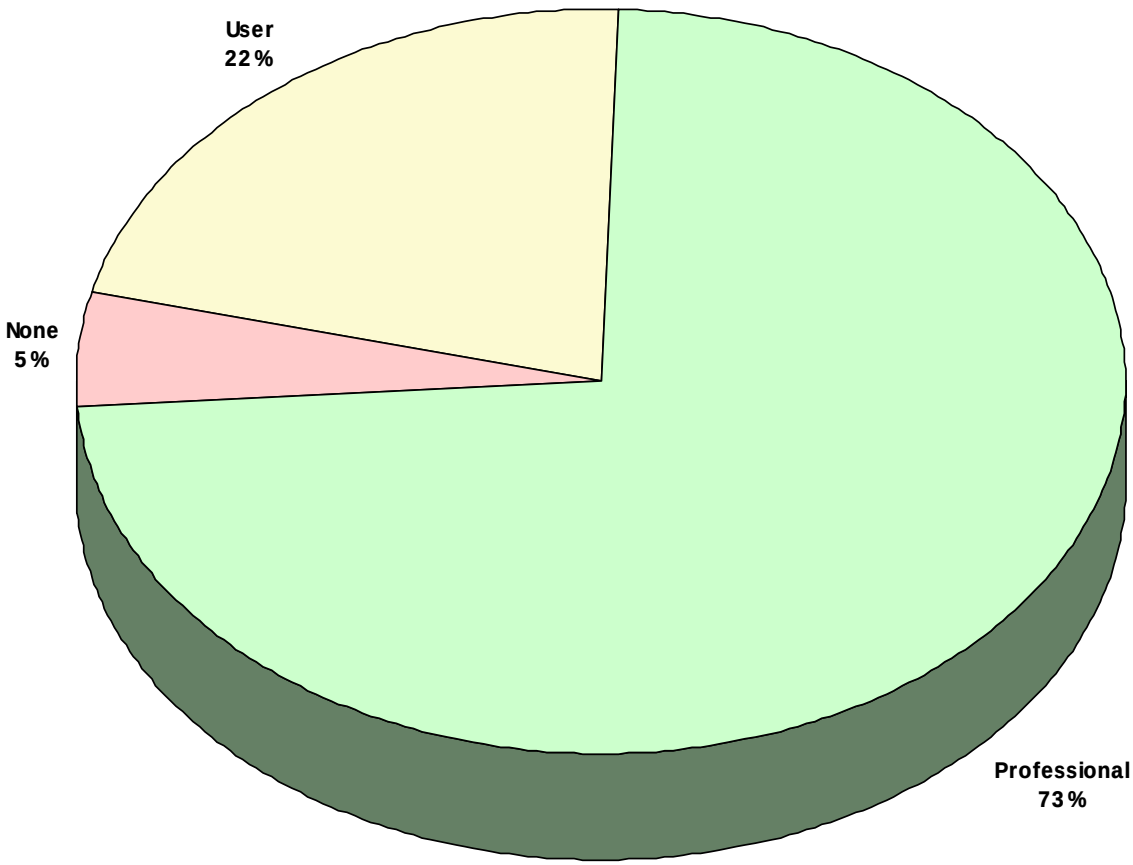
APPENDIX I – C

Selected Charts & Graphs

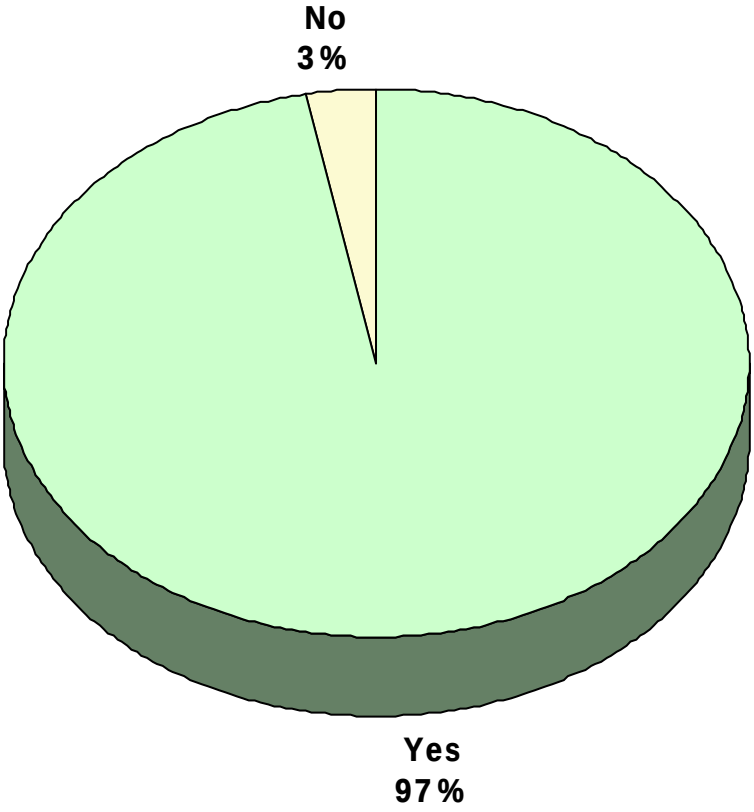
2. What activity best describes your organization?



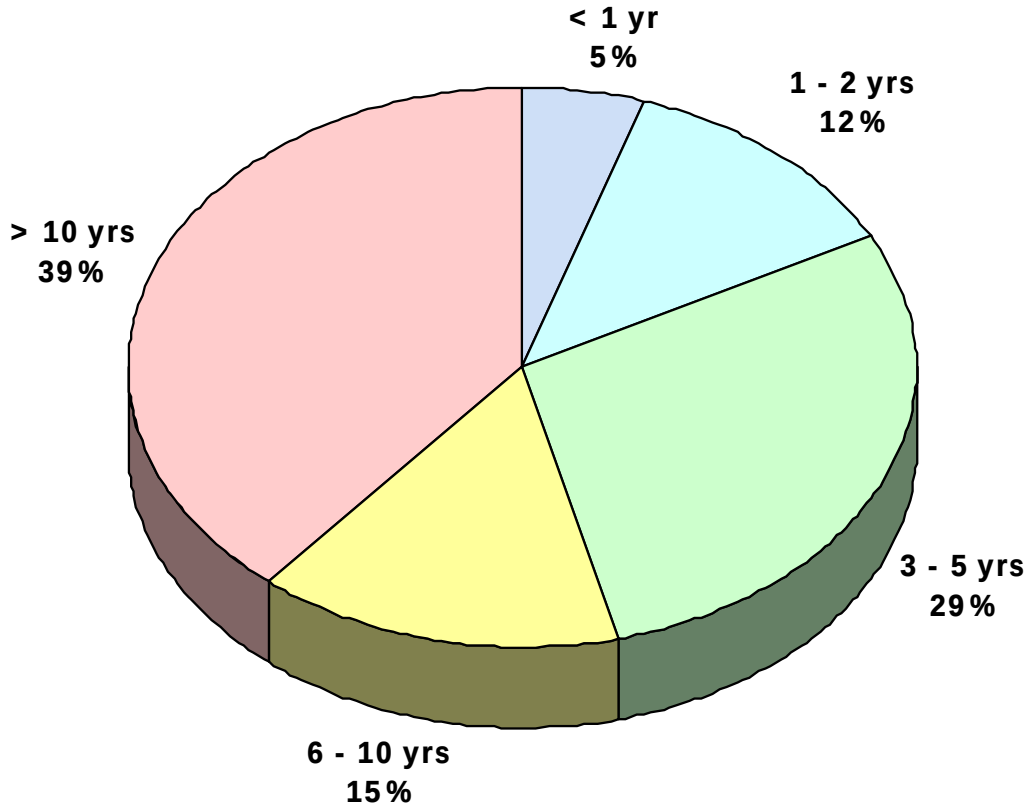
3. What is your expertise in GIS (Geographic Information Systems)?



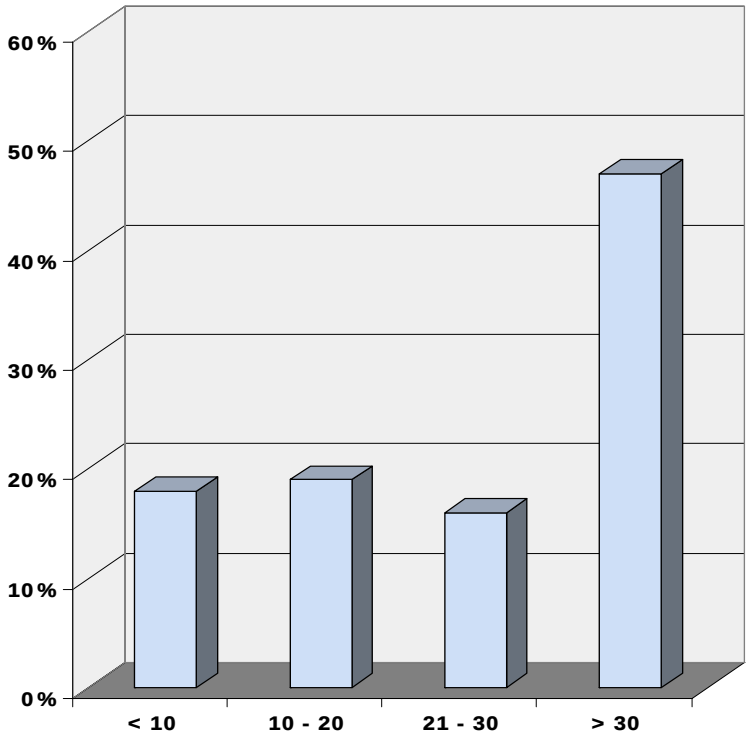
4. Does your department/division currently use GIS?



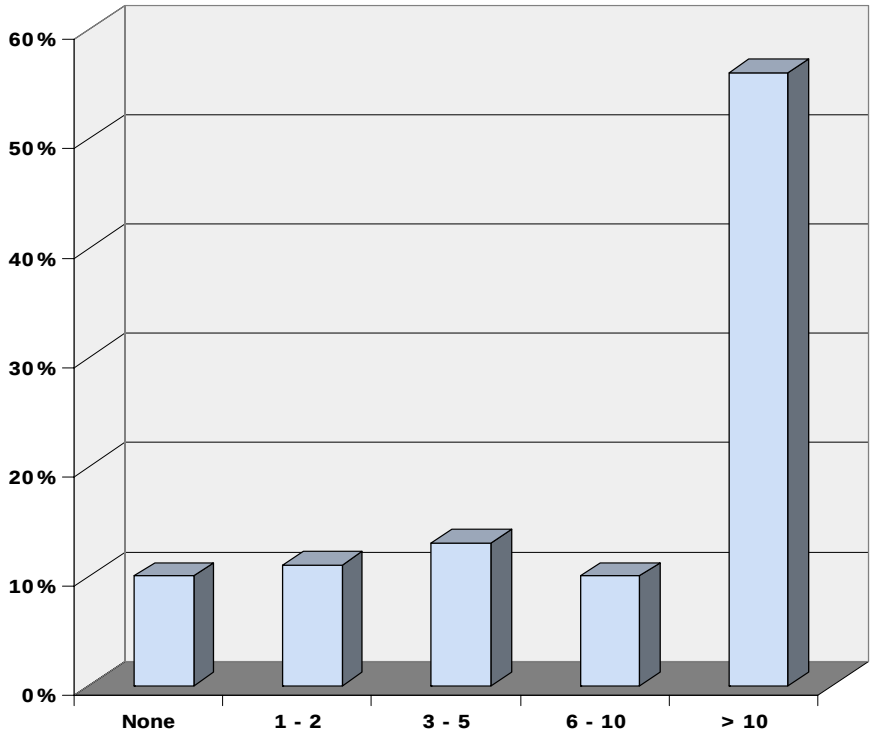
5. How long has GIS been used in your department/division?



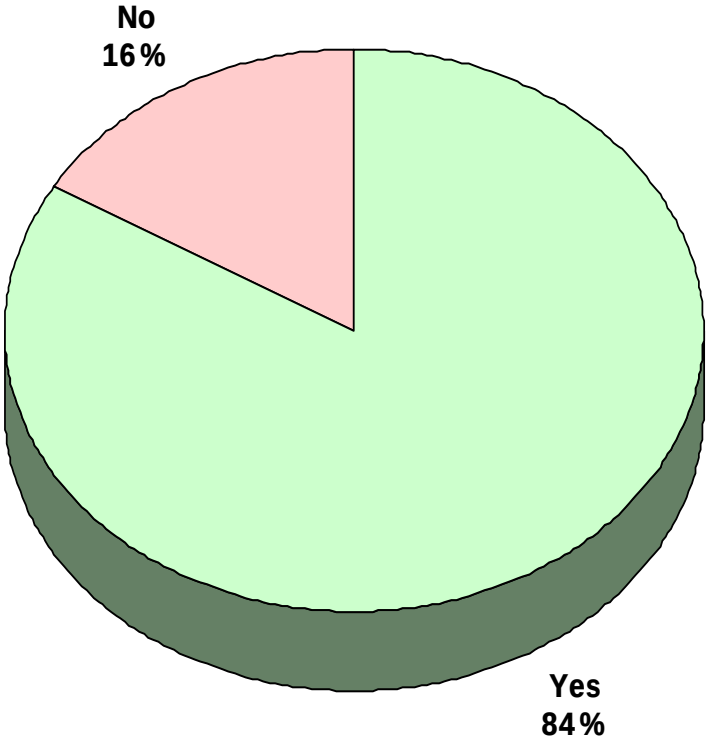
12. How many data layers are in your department/division's GIS database?



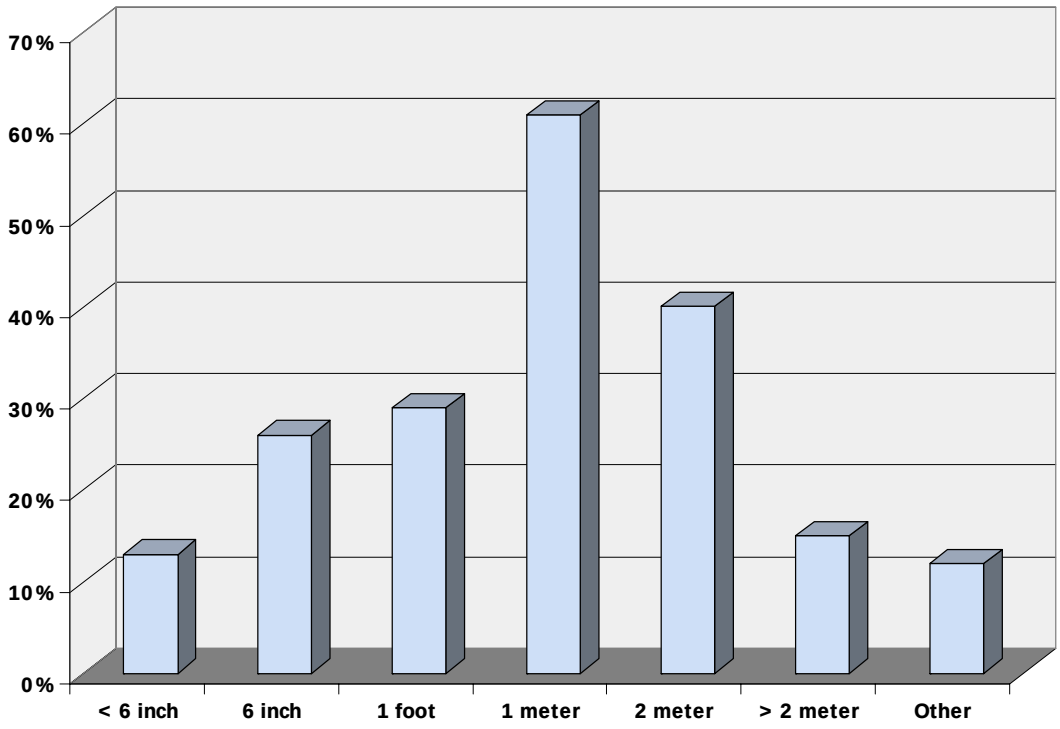
13. How many data layers does your department/division develop & maintain?



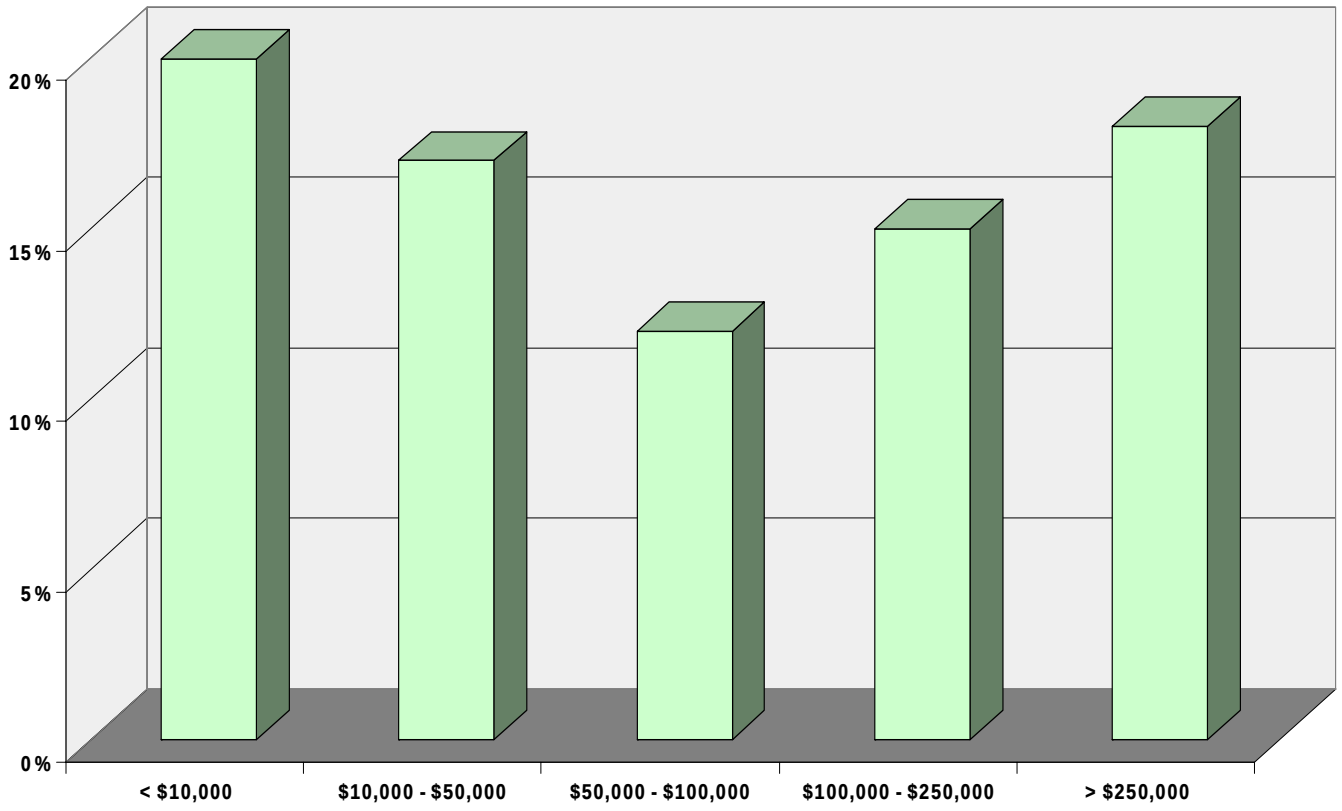
14. Does your department/division use aerial photography in its GIS?



15. If Yes, what resolution of aerial photography do you use? (Check all that apply)

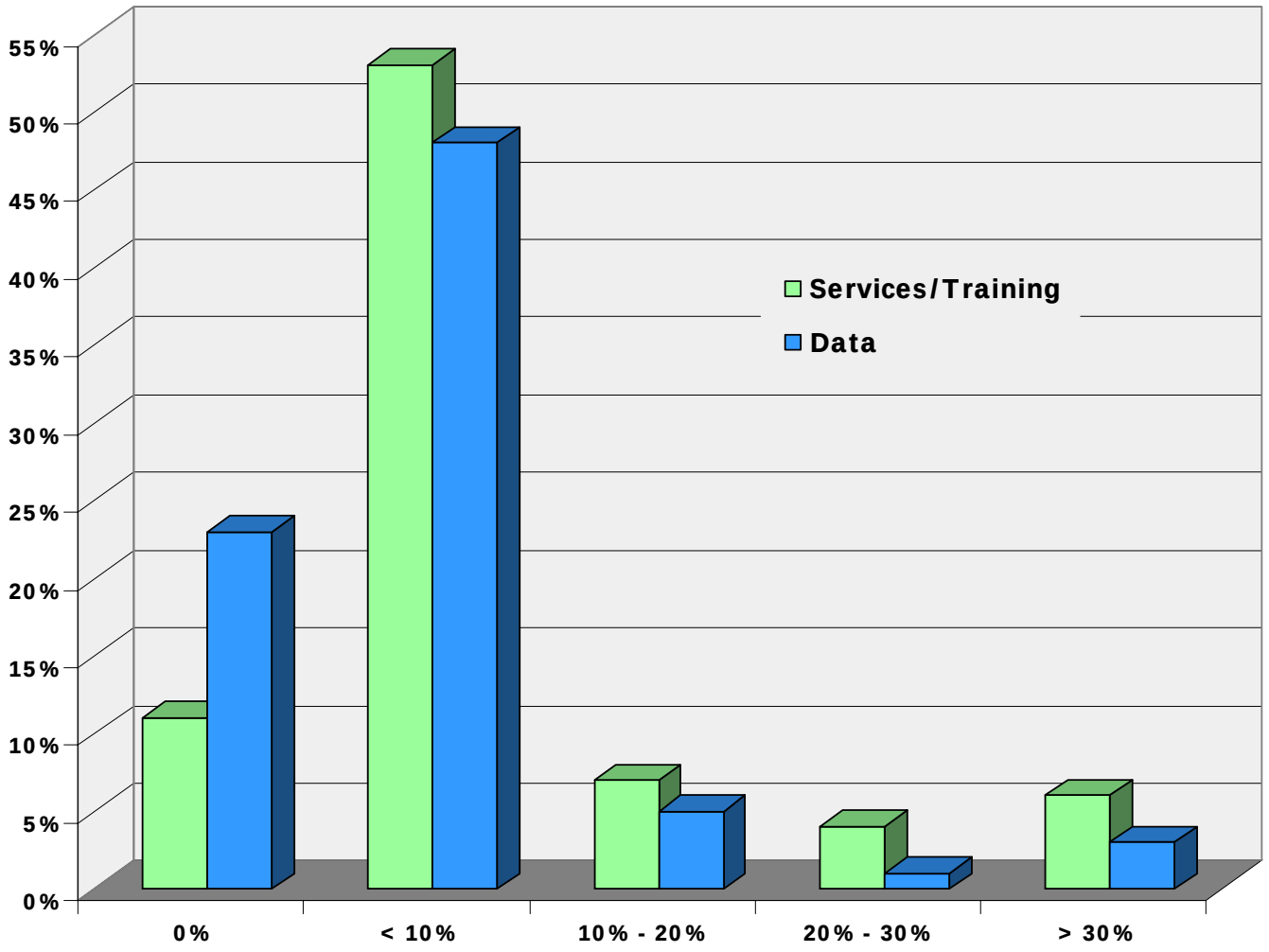


21. What is the estimated range of annual expenditures for all GIS activities, including personnel, of your department/division for the last year?



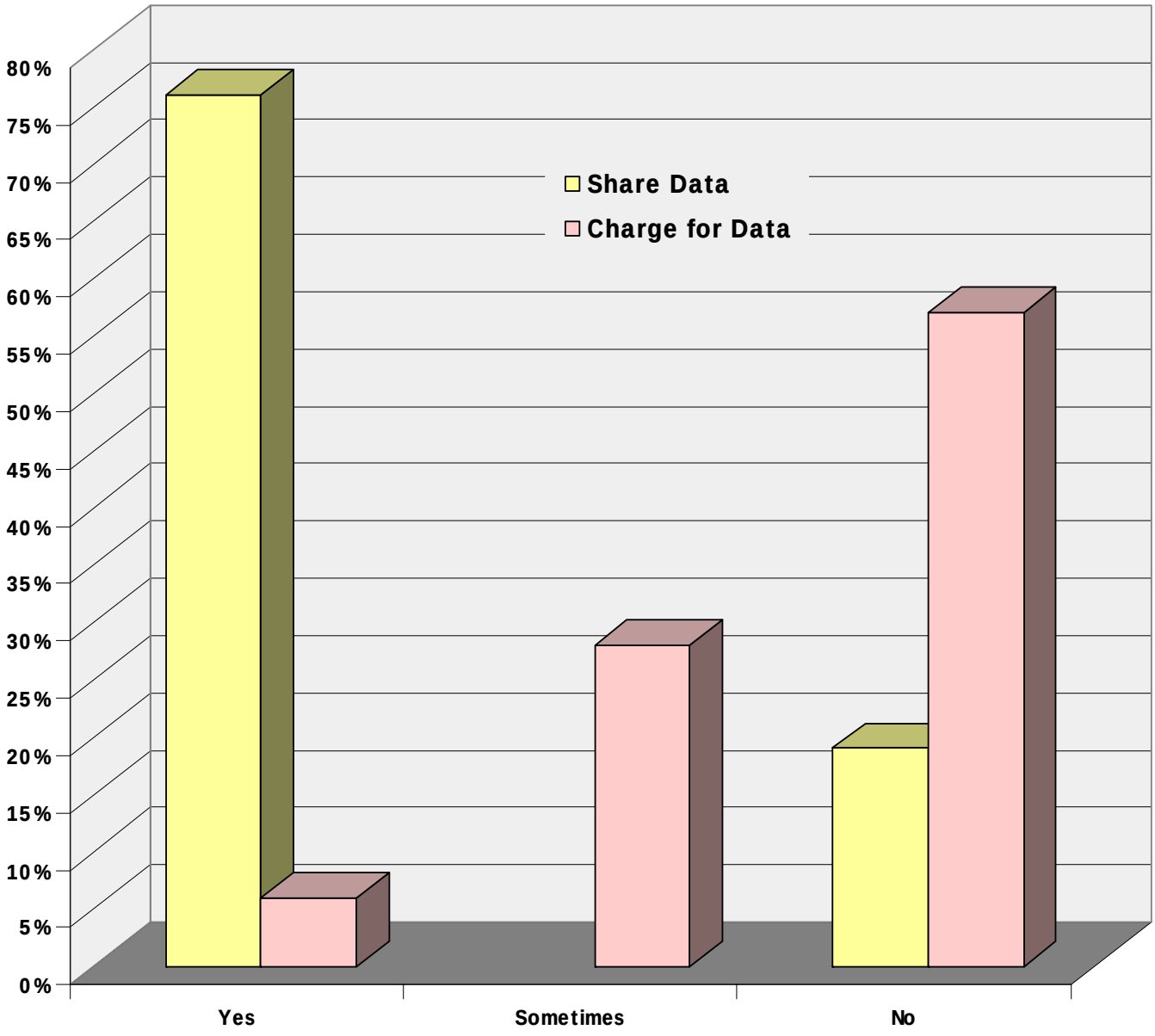
22. What is the estimated percent of your department/division's annual expenditures for GIS activities spent outside of your organization for services and/or training (NOT for hardware, software, data, etc.)?

23. What is the estimated percent of your department/division's annual expenditures for GIS activities spent outside of your organization for GIS data (NOT for hardware, software, services, training, etc.)?

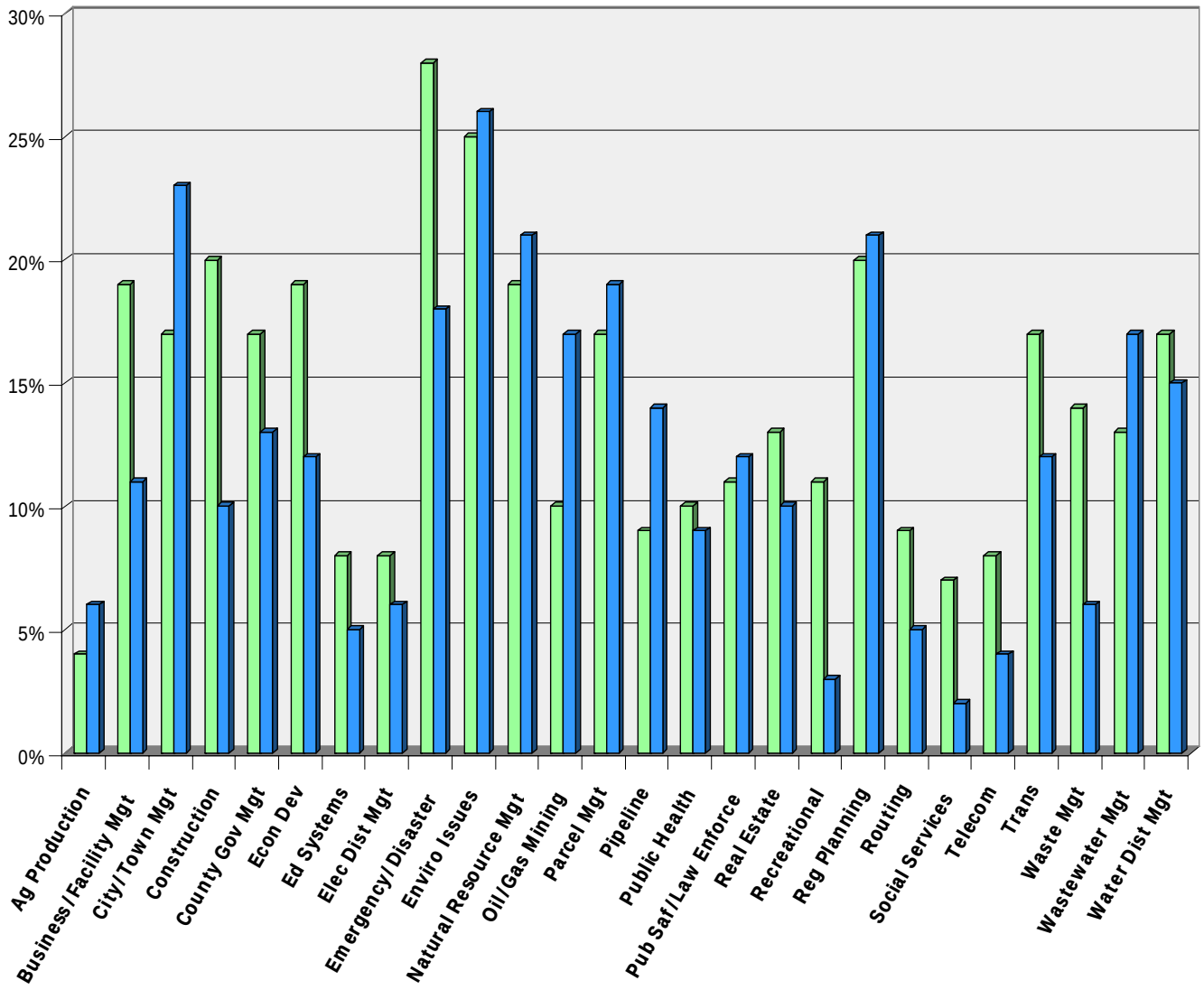


24. Does your department/division share digital geographic data with other organizations?

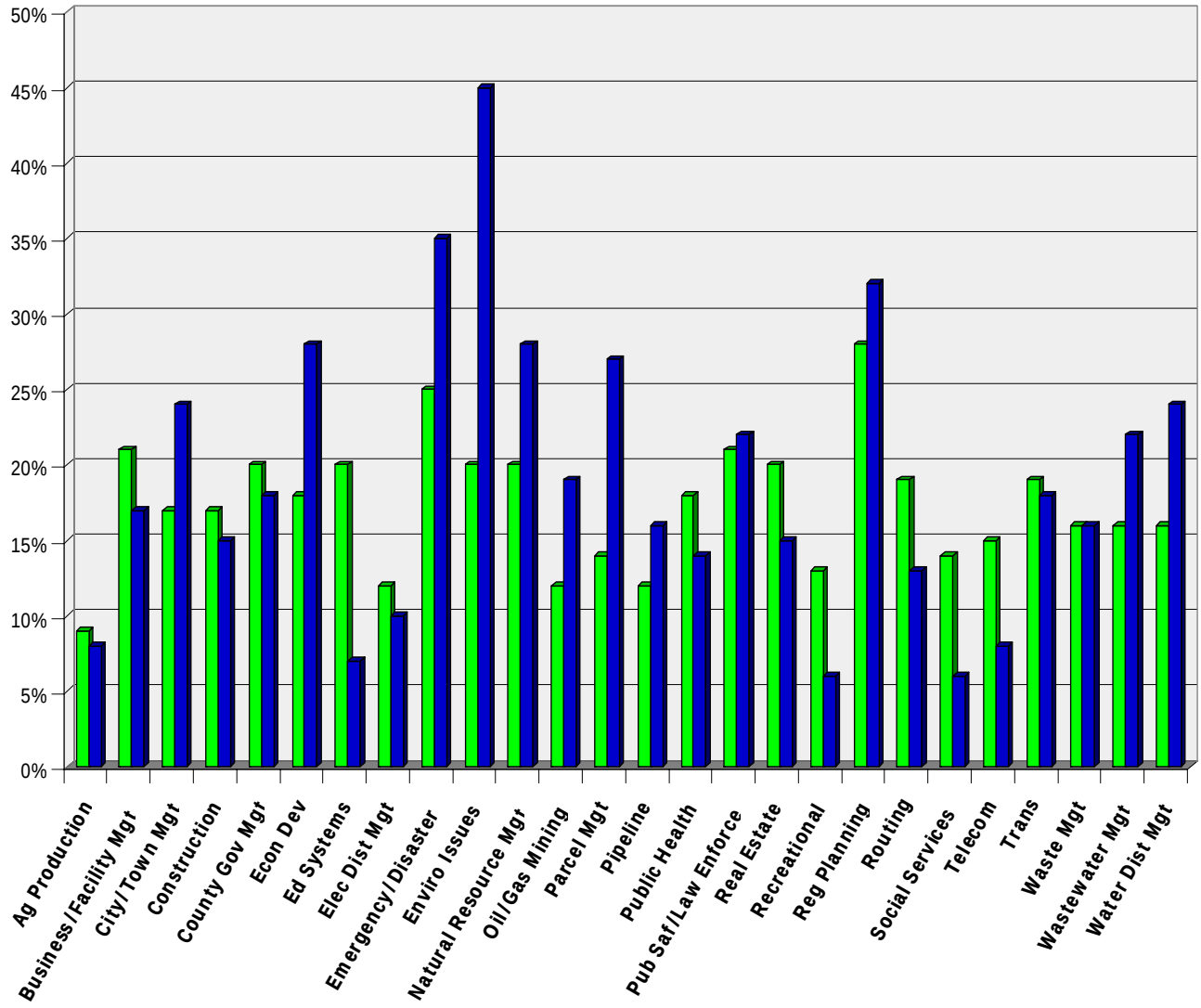
25. If yes to question 24, does your department/division charge for this data?



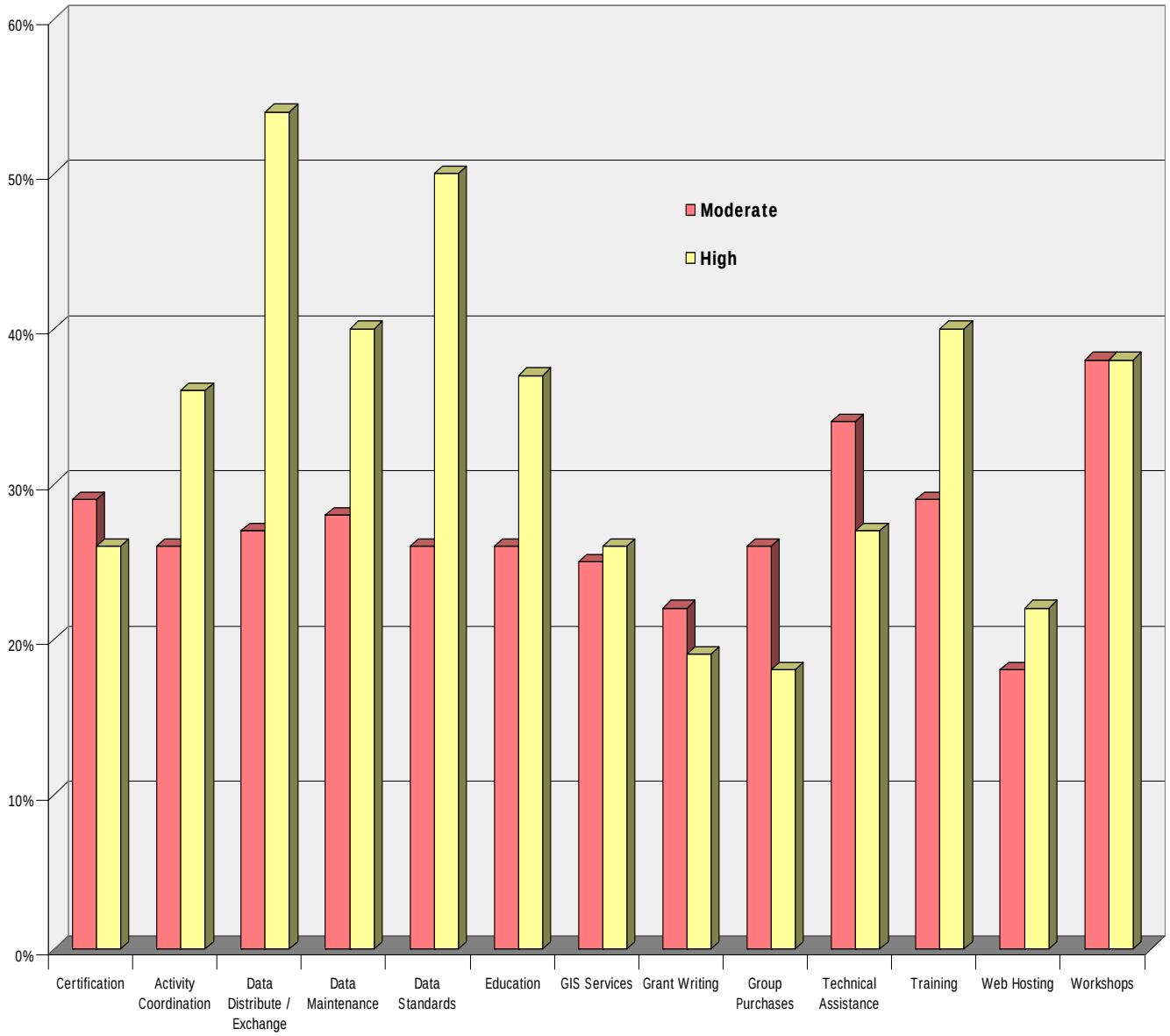
32. Rank how your department/division is utilizing GIS technology in the following categories.



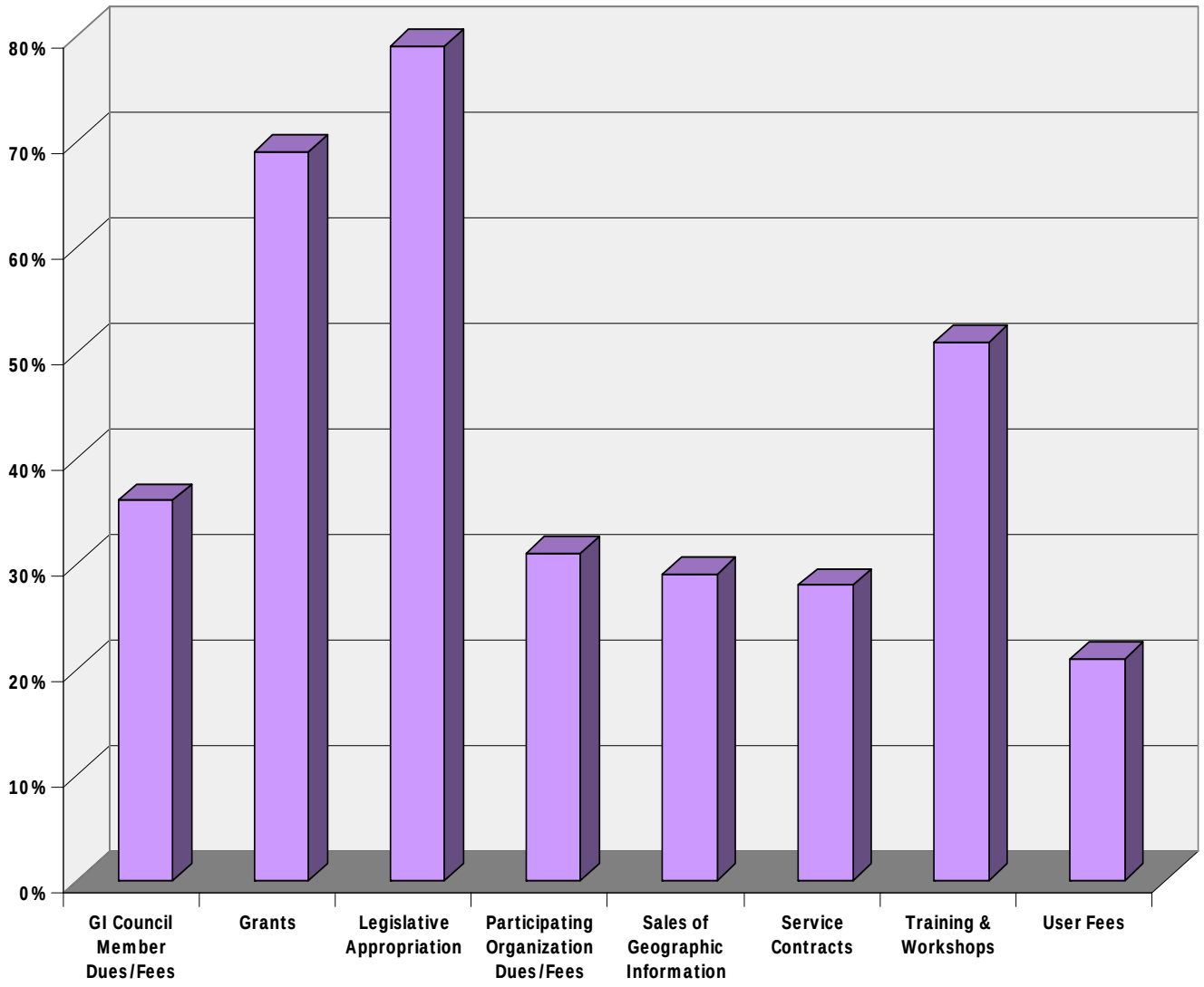
33. Rank your department/division's present or future need for GIS in the following categories.



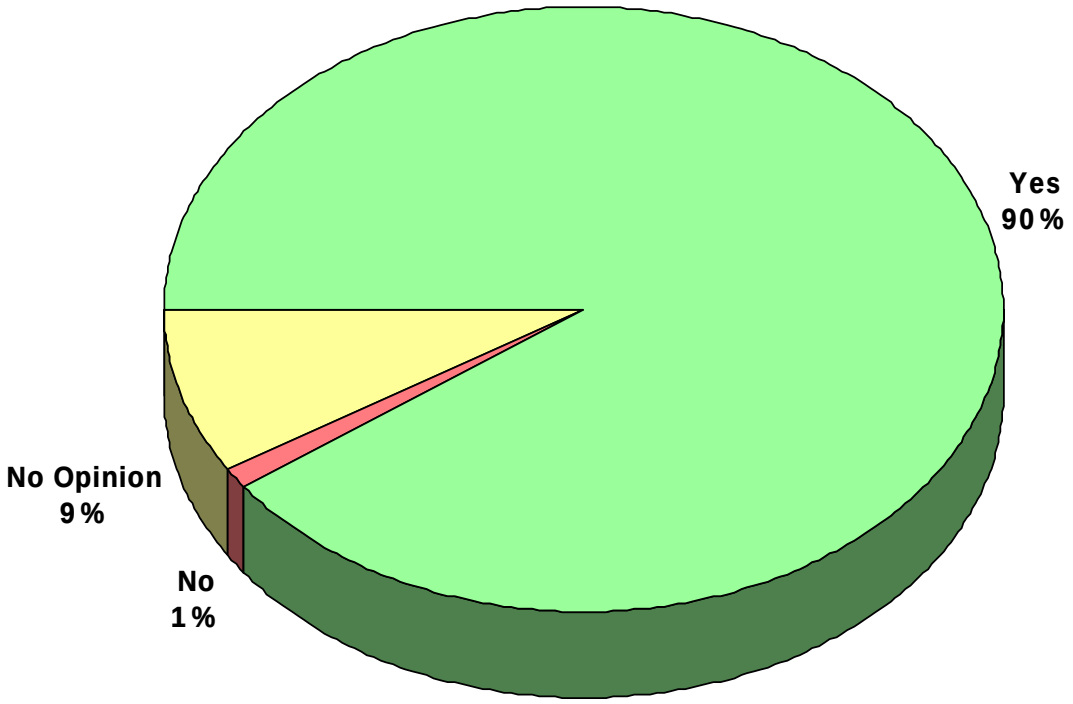
36. Rank the value of the following types of activities or support that could be provided to your department/division by the OGI.



38. How should the OGI be funded? (Check all that apply)



39. Do you think a general, statewide GIS conference would be beneficial to the Oklahoma GIS community?



APPENDIX II – A

Focus Group Results

The focus group meetings were designed to build on the results of the needs assessment-not replicate it. The purpose was to discover the existing strengths and weaknesses, opportunities and threats that the OGI needs to consider in strategic planning and building a case for funding.

Survey participants were asked if they would be willing to attend a focus group meeting in either Tulsa or Oklahoma City. Only 11 percent chose not to participate, indicating a willingness of to 89 percent to participate. Based on the number of responses, several respondents indicated they did not have a preferred location but could attend either location.

The initial goal of 40 attendees at each location ended up with 30 participants at Oklahoma City and 16 in Tulsa. Invitees were selected from the categories of organizations listed in question 2 of the Needs Assessment Survey. Additionally, the number of invitees from each organization was to be in the same proportion as the response from that category in the survey. Although scheduling conflicts kept some invitees from attending, the result was a very good distribution of stakeholders from the various types of organizations that responded to the survey.

Each focus group was given an opportunity to answer five questions: one being a "visioning" question while the other four individually focused on strengths, weaknesses, opportunities and threats. Within each focus group, the visioning question was answered collectively as one group. For the remaining four questions, the group was divided into four sub-groups. Simultaneously, each sub-group would answer one of the four questions, placing their answers into a manila envelope. At the conclusion of the allotted time, the manila envelope for that particular question would be passed to the next group. In this fashion each group would answer all four questions.

After all groups answered all four questions, each group posted the answers to their original question. The answers were organized using a "modified" affinity method. Everyone was allowed an opportunity to read all answers to all four questions. Each participant was given six sticky dots per question that they could use to "vote" for their preferences for the most important or "best" answer.

Question # 1: Vision

Picture the Office of Geographic Information (OGI) successfully providing services and activities to your GIS community. What products, services, activities, are being provided that you find useful and are excited about?

From this visioning question the answers from the two focus groups provided two distinct strategic directions for the OGI. Listed below are these strategic directions and the activities and services the OGI is envisioned in providing to the state's GIS stakeholders.

I. Coordination of Data Acquisition, Discovery, Development & Distribution

A. Coordination of Acquisition, Discovery & Development (OKC)
1. Coordinate Data, Acquisition & Quality
2. Coordinated All Data Layers between All Groups
3. Coordinate Development & Maintenance of Statewide GIS Data Layers

B. Data Coordination & Distribution (TUL)
1. Data Distribution
2. 1 repository for data sharing / exchanging
3. Data Acquisition Coordination
4. Official Data Layers
5. Supporting State Level Programs with Spatial Components
6. Automated Notification of Data Changes / Additions

C. Data Development (TUL)
1. Provide Street Centerline Data for Geocoding
2. Georeference Data
3. Provide Utility Data
4. Increasing # of State Benchmarks
5. High Resolution Aerials
6. Aerial High Resolution
7. Regularly Scheduled Ortho Flights

D. Coordinate State GIS Standards (OKC)
1. Ensured Compatibility for All Data
2. Standardization of Data
3. Standards
4. Statewide GIS Layer Standards
5. Provided Standards for Metadata

E. Standards & Guidelines (TUL)
1. Data & Metadata Standards
2. Standards for Data & Personnel
3. GIS Specific IT Guidelines
4. Resolution Guidelines 1:24K

F. Statewide Data Clearinghouse (OKC)
   1. Library of Resources & Services
   2. Clearinghouse for GIS Data
   3. Consolidated Metadata / Data Clearinghouse
   4. Data Clearinghouse
   5. Provided Easy Access to All Data

G. Coordinate Provisions of Web Services (OKC)
   1. Promote Web Services
   2. Hosting (No Cost) of GIS Web Applications
   3. Statewide Streaming Feature / Data Server
   4. Non GIS Public Access to Data

II. Education, Training & User Support

A. Professional Development & Outreach (TUL)
   1. Contacts / Network for all Types of OK GIS website
   2. Postings for Jobs / Who's Who/ Training Opportunities / Certification
   3. Statewide Conference
   4. Training / Education
   5. Conference for Networking - Not Software Specific
   6. Training Programs
   7. Training & Seminars
   8. Support of Workshops for Local GIS Training Hosted by OGI

B. Outreach & Education (OKC)
   1. Public Awareness / Education
   2. Promotes Benefits of GIS Statewide
   3. Provided Outreach & Education for all Groups & Students
   4. Established State GIS Conferences

C. Training (OKC)
   1. Provide Subsidized GIS Education / Training
   2. Training (Local Affordable)
   3. Coordinates Statewide GIS Training (Internships)

D. Technical Facilitation (OKC)
   1. Be Recognized as a Center of GIS Expertise
   2. Technical Assistance & Information Broker
   3. Provided all Groups Technical Assistance to Integrate All Information

E. User Support (TUL)
   1. Collective Purchasing for Software (Statewide Contracts)
   2. Grant Funding & Writing
   3. Facilitate Support Services for Projects
   4. Provide Vital Support Services - Data Housing, Web Services Storage, Newsletters, Contracts
   5. Interactive GIS Needs Assessment for Public Use

F. Newsletters, Contracts (TUL)
   1. Interactive GIS Needs Assessment for Public Use

G. Coordinate Funding Opportunities (OKC)
   1. Work with Legislature to Maintain Funding
   2. Obtain Grants
   3. Coordinate Grant Opportunities & Applications
   4. Grant Writing Assistance / Info
   5. High Percentage of Grants Funded
   6. Secure Funding for GIS Activities

H. Make Certain GIS Software / Hardware on State Contract (OKC)

I. Revenue Generation (Grants, Conferences, Subscriptions) (TUL)

J. Public Relations (TUL)
   1. Legislative Support
   2. Information Dissemination through State / Local Professional Groups
   3. Known as a Recognized Leader in OK GIS Community
   4. National Recognition as GIS Partner

K. Fostering Partnerships (OKC)
   1. Championed Cooperation & Established Relationships between all Groups
   2. Removes Duplication of Services
   3. Project Coordination between Agencies

L. Represented Oklahoma at National Level (OKC)

M. Achieving Goals of Strategic Plan (TUL

Question # 2: Strengths

The GIS community has strengths (assets, positives) already in place that can help the OGI realize the vision. Which ones are important for us to leverage or capitalize on?

	Topic	Votes Tulsa	OKC	Total
A.	SCAUG	10		
	Existing Partnership & Networks	9		
	OK GIS List Server	6		
	Motivated GIS User Group		18	
	Current Data Sharing Coordination		12	
	Total			55
B.	Existing Data (1)	9		
	Existing GIS Clearinghouse		16	
	Lots of Data		13	
	Total			38
C.	Existing GIS Expertise (2)	14		
	Expertise in GIS Community		19	
	Total			33
D.	Legislation in Place (2)	10		
	Existing GIS Legislation		13	
	Total			23
E.	Increased Awareness of GIS Value		22	22
F.	Adequate Training Facilities Available	5		
	Good GIS Education at Collegiate Level (2)	10		
	Training Opportunities in State		2	
	Total			17

Question # 3: Opportunities

What opportunities do you see on the horizon – in the community at large and in the GIS community-that we need to include in our planning?

	Topic	Votes Tulsa	OKC	Total
A.	GIS Popularity Exploding	11		
	Active GIS Community in OK	4		
	Public Interest is High		13	
	Increased GIS Awareness & Use (1)		9	
	Increased GIS Awareness		5	
	GIS is Fast Growing Technology		9	
	Total			51
B.	Leverage Data Needs	11		
	Initiatives (Federal & State) Providing Funding & Mandates	21		
	Economy of Scale (data & software acquisition)		17	
	Total			49
C.	Existing Mentors (Don't reinvent the wheel)	5		
	Good Example for Us to Look At (States, Nations)		15	
	Existence of Other State Models		14	
	Total			34
D.	Coordination of GIS Groups	9		
	Leverage Regional & National Resources (NSGIC)	5		
	Participation in National Organizations	5		
	Making GIS Connections with Existing Sites	4		
	Coordination between Groups to Maximize Efforts	2		
	Cooperation with Neighboring States		3	
	Cooperation with National Organizations		2	
	Total			30
E.	More GIS Data Available	1		
	Accessibility to Data		26	
	Total			27
F.	Secondary & Elementary Education	11		11

Question # 4: Weaknesses

Realizing the vision requires strengths and assets, establishing an effective OGI will also be challenging. What might challenge our current capacity? Where are the weaknesses that will most obviously challenge the pursuit of the vision? Focus on internal issues, situations, processes, procedures, historic attitudes, not blaming or attaching people or groups of people.

	Topic	Votes Tulsa	OKC	Total
A.	No State Coordinator	17		
	Lack of Legislative Support	11		
	Lack of Statewide Coordination	4		
	Lack of Champions / Leadership at All Levels (2)		25	
	Lack of Support		2	
	Lack of Coordination		1	
	Total			60
B.	Lack of Funding (1)	14		
	Lack of Funding (3)		26	
	Total			40
C.	Territorialism between Agencies	11		
	Professional Bickering	7		
	Turf Wars		12	
	Funding Competitions between Agencies		4	
	Varying Agendas		3	
	Total			37
D.	Not Willing to Share Data	6		
	Lack of Willingness to Share Data		18	
	Inability / Refusal to Cooperate		7	
	Total			31
E.	Lack of Participation (Rural/ County/ City)	6		
	Lack of Infrastructure Education	6		
	Lack of Communication		6	
	Overall Agency Buy-In to GIS		5	
	Total			23
F.	No Mission Statement or Business Case (ROI)	5		
	Lack of Marketing & Promotion		9	
	Total			14

Question # 5: Threats

Forearmed is forewarned: pursuing or realizing a vision has a shadow side. What might be the dangers or threats to pursuing the vision that we need to be aware of as we plan? The threats may be the effectiveness of the OGI or the GIS community. Focus on the external issues, situations, processes, procedures, historic attitudes, not blaming or attacking people or groups of people.

	Topic	Votes Tulsa	OKC	Total
A.	Lack of Political Champion	21		
	Not a Legislative Priority		27	
	Total			48
B.	Data Access vs Data Security	11		
	Lack of Maintaining Data (1)	11		
	Data Ownership & Control Issues		12	
	Data Security		5	
	Data Confidentiality		2	
	Total			41
C.	Territorialism	4		
	Public vs Private Missions	9		
	Surveyors	5		
	Coordinating Many & Various Individual Efforts (Turf Issues) (1)	18		
	Threats to Private Industry		2	
	Total			38
D.	Funding (1)	15		
	Redirection of Funds to Support OGI (Angers Other Organizations)	1		
	Competition for Funding (1)		21	
	Total			37
E.	Lack of Understanding of Benefits	21		21
F.	Rapid Technical Changes	5		
	Resistance to Change	6		
	Rapid Technology Advancement		6	
	Total			17
G.	Lack of Resources for Small Communities	17		17
H.	Unreasonable Standards & Other Restrictions (1)	4		
	Potential for Dictating GIS Policy, Standards, Etc		10	
	Total			14

APPENDIX II – B

Action Planning Sheet

Building a Sustainable Future

Goal: Prepare budget for FY2008 – 2010.

Key Performance Measure: Budget approved by both the Council and OCC

Steps or Objectives
1. Consider OGI legislative mandates, mission and goals from OGI Strategic Plan. Gather necessary cost information for budget preparation
2. Prepare three year budget
3. Submit budget to the Council for approval
4. Budget consideration and approval by the Council
5. Budget consideration and approval by OCC
6. Include budget in documents prepared for legislative consideration
7. Review and revise FY '09 budget request
8. Submit FY '09 budget to the Council and OCC for approval
9. Review and revise FY '10 budget request
10. Submit FY '10 budget to the Council and OCC for approval

Action Planning Sheet

Building a Sustainable Future

Goal: Complete three-year strategic plan for calendar years 2007-2009.

Key Performance Measure: Strategic Plan approved by the Council and OCC.

Steps or Objectives
1. The Council forms strategic planning team and gives the strategic planning team authority to hire consultant
2. Strategic planning team contracts with strategic planning consultant
3. Strategic planning team and consultant prepare strategy for data gathering and assimilation to define the current GIS environment
4. Conduct Needs Assessment Survey
5. Conduct Focus Group meetings
6. Hold strategic planning meetings to formulate mission statement, 3-year vision, develop strategic directions, formulate action plans and KPM's
7. Prepare final draft of strategic plan
8. Review of strategic plan by the Council
9. Approval of strategic plan by the Council
10. Approval of strategic plan by OCC

Action Planning Sheet

Building a Sustainable Future

Goal: Develop State Coordinator and geographic information job classifications and descriptions for approval.

Key Performance Measure: Job descriptions approved by the Council, OCC Executive Director, and OPM.

Steps or Objectives
1. Review job descriptions for State Geographic Information Coordinators from other states 2. Prepare job description for State Geographic Information Coordinator 3. Submit State Geographic Information Coordinator job description to OCC Director for approval 4. Review and prepare job descriptions for geographic information job classifications 5. Submit State Geographic Information Coordinator job description to the Council for approval after review by OCC Director 6. Approval by the Council 7. Review and approval of geographic information job classifications by the Council 8. Get letters of support to accompany submittal of geographic information job classifications to OPM 9. Submit geographic information job classifications and letters of support to OPM

Action Planning Sheet

Building a Sustainable Future

Goal: State Geographic Information Coordinator hired and dedicated solely to OGI initiatives on board.

Key Performance Measure: OGI coordinator hired with permanent funding.

Steps or Objectives
1. Budget approved by Legislature / Governor for funding the State Geographic Information Coordinator position 2. Advertise State Geographic Information Coordinator Position 3. Review applications and interview top candidates 4. State Geographic Information Coordinator hired

Action Planning Sheet

Building a Sustainable Future

Goal: Conduct in state awareness campaign with agency directors and legislative leaders.

Key Performance Measure: Presentations made to a minimum of ten agency directors and legislators.

Steps or Objectives
1. Prepare concise, bulleted document showing benefits of OGI. 2. OCC Director meets with agency directors to explain benefits of OGI and seek support for OGI budget. Seeks understanding of various agency needs and how OGI can help them accomplish their mission 3. Key legislators are identified that may be supportive of the OGI. Meet with representatives of key interest groups who can assist with this 4. OCC Director meets with key legislators to explain benefits of OGI and seek support for OGI budget

Action Planning Sheet

Building a Sustainable Future

Goal: Establish executive level Council and legislative commitments.

Key Performance Measure: Conduct regular separate Council meetings as Executive Level / Legislative Meeting.

Steps or Objectives
1. Determine a contact list of executive level Council members 2. Establish a legislative contact / member that would serve as a legislative advocate 3. Determine what actions the Council needs executive / legislative action taken upon. (political, not technical) 4. Designate regular separate Council meeting as Executive Level / Legislative meeting to resolve political issues only

Action Planning Sheet

Building a Sustainable Future

Goal: Establish OGI strategic review process.

Key Performance Measure: Strategic Planning Team completed progress reviews and updates of the current strategic plan

Steps or Objectives
1. Archive the process, information, contact list, & existing knowledge gleaned for the current OGI Strategic planning process 2. Establish a regular schedule for review, evaluation & adaptation if necessary 3. Review progress with the OGI Strategic Planning Group to determine the progress & refocus if necessary

Action Planning Sheet

Building a Sustainable Future

Goal: Conduct annual review and update of OGI Strategic Plan

Key Performance Measure: The Council reviewed and approved OGI Strategic Plan for calendar years 2007-2009.

Steps or Objectives
1. The Council annually forms workgroup to review OGI strategic plan and report to the Council 2. Hold Council meeting annually with agenda item to review and approve OGI Strategic Plan

Action Planning Sheet

Building a Sustainable Future

Goal: Develop Professional Geographic Information Organization for Oklahoma

Key Performance Measure: Geographic information professional organization active in Oklahoma.

Steps or Objectives
1. Look at how other states handle this issue 2. Work with Oklahoma Society of Land Surveyors & the State Board to see what has worked with their relationship & affiliation 3. Set requirements for membership with certain benefits tied to Membership in good standing 4. Serve as technical advisory / best management practices 5. Utilize this professional group to launch statewide conference 6. Serve as setting professional precedence in Oklahoma on geographic information issues in Oklahoma to be taken to the Council for action

Action Planning Sheet

Marketing Geographic Information as an Important Decision Making Tool

Goal: Create comparative analysis report to project Return on Investment (ROI).

Key Performance Measure: Report clearly highlights GIS benefits and ROI.

Steps or Objectives
1. Gather national information concerning how other states have completed Comparative Analysis Report and ROI studies 2. Identify interested group of Council members to work on studies 3. Perform Comparative Analysis Report and ROI studies 4. Report finding to the Council for approval 5. Publish findings to appropriate groups and legislature

Marketing Geographic Information as an Important Decision Making Tool

Goal: Develop pilot project to increase awareness of GIS need.

Key Performance Measure: Pilot project identified, completed and evaluated.

Steps or Objectives
1. Identify a pilot project topic that would help to increase the awareness of GIS 2. Gather information and necessary data to complete pilot project 3. Complete pilot project 4. Advertise success of pilot project to key groups

Action Planning Sheet

Marketing Geographic Information as an Important Decision Making Tool

Goal: Increase website utility.

Key Performance Measure: Listed an average of six new/additional items each year with 10 percent increased annual usage.

Steps or Objectives
1. Establish a central reliable, easily accessed website 2. Inventory available datasets and data stewards 3. Post: ▪ Inventory of datasets ▪ Listserver ▪ Calendar of local/regional meetings, conferences, events (e.g., Council, SCAUG, GIS Day at Capitol, MAGIC) ▪ Training opportunities (Career Techs, community colleges, vendor-supplied) ▪ Software available on State contract ▪ Partnership announcements or results 4. Develop search engine for datasets (or entire site?)

Action Planning Sheet

Marketing Geographic Information as an Important Decision Making Tool

Goal: Conduct GIS awareness campaign across Oklahoma

Key Performance Measure: Publications, brochures, and other awareness tools distributed across the state to executive level, stakeholders, legislators, governmental and tribal entities, public service organizations, K-12 educators, and general public.

Steps or Objectives
1. Survey other states to compile list of uses, benefits, and pitfalls to incorporate into our planning 2. Identify group of volunteers to work on increased awareness 3. Design a poster suitable for exhibits 4. Design a leaflet or brochure with introductory information for managers, the general public and public schools 5. Coordinate the development and distribution of publications, brochures, activities, and other awareness documentation for executive level stakeholders, legislators, governmental and tribal entities, and public service 6. Prepare a fact sheet identifying benefits of using GI statewide ▪ Eliminate redundancy among agencies ▪ Serve as critical information asset for emergency preparation and mitigation/Homeland Security ▪ Enhance State's image and economic development through additional data provision ▪ Leverage GI training costs across departments ▪ Provide maps/data to general public 7. Develop PowerPoint program for presentation to interested groups (Chambers of Commerce, schools…) 8. Invite a specific legislator to attend/address a Council meeting 9. Support GIS Day at places other than Capitol 10. Develop public service announcement to convey the importance of GIS to businesses and the general public

Action Planning Sheet

Marketing Geographic Information as an Important Decision Making Tool

Goal: Plan and host annual statewide conference featuring best practices recognition.

Key Performance Measure: Best Practices awarded at the successful conference attended by more than 250 people.

Steps or Objectives
1. Identify group of volunteers to coordinate conference
2. Determine scope, venue, date, cost of meeting
3. Locate funding source for conference
4. Locate facilities and set date
5. Solicit presenters, trainers, sponsors, exhibitors
6. Develop list of targets
7. Send out press releases
8. Coordinate conference activities and develop guidelines for Best Practice Award
9. Tabulate and evaluate participation, reporting results on website
10. Begin initial planning for following year

Marketing Geographic Information as an Important Decision Making Tool

Goal: Foster training and education.

Key Performance Measure: Coordinated four training and education opportunities for the GIS community by the end of 2009.

Steps or Objectives
1. Identify education and training needs throughout the GIS community 2. Work with local tech centers and software companies to provide training. 3. Identify possible workshops and other educational opportunities that could be offered to the GIS community 4. Coordinate with various GIS groups to provide workshops and other educational opportunities to the GIS community

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Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Participate in National and Multi-State Geographic Information Organizations

Key Performance Measure: More than 25 Oklahoma geographic information professionals attended regular meetings, seminars, and or workshops.

Steps or Objectives
1. Identify Organizations / Resources of Interest 2. Nominate / Appoint a Rep / Liaison to Participate in Efforts 3. Aggressively Advertise / Promote Activities 4. Monitor Participation 5. Report Results / Recommendations / etc to the Council / State Geographic Information Coordinator 6. The Council membership in NSGIC, participation at NSGIC midyear meeting & annual conference; and attend ASPRS national meetings and local chapter meetings. 7. Membership & active participation in MAGIC 8. Attendance, participation, and/or representation at ESRI, NACO, URISA, and League of Municipalities annual meetings

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Participate in Regional and National Coordination Efforts

Key Performance Measure: *A*ttend 100 percent of Regional / National Coordination meetings.

Steps or Objectives
1. Identify All Regional / National Coordination Efforts 2. Nominate / Appoint Representatives to Participate in Efforts 3. Aggressively Monitor Participation 4. Replace Non-Participating Representatives 5. Report Results / Recommendations / etc to the Council / State Geographic Information Coordinator 6. Documented attendance at relevant coordination meetings and provide input on national initiatives such as Imagery for the Nation and Transportation for the Nation, 133 urban areas 7. Develop NHD Stewardship plan and agreement 8. Establish necessary interfaces for sharing data between statewide clearinghouse and The National Map and Geospatial One Stop

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Initiate Data Sharing Agreements between Specific Stakeholders

Key Performance Measure: Three sharing/stewardship agreements initiated each year.

Steps or Objectives
1. Identify Opportunities for Cooperation
2. Form Committee Tasked to Promote / Initiate Agreements
3. Begin Negotiations for First Agreement
4. Continue Promotion / Initiation of Agreements
5. Identify priority dataset needed
6. Identify agencies that have the data and key contact personnel
7. Schedule initial meetings to discuss data sharing and successful agreements
8. Make arrangements to add to information clearinghouse

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Integrated Data Development Consortium.

Key Performance Measure: Consortium in place and data layer priorities established.

Steps or Objectives
1. Set up Council subcommittee to Identify, recommend and initiate consortium activities 2. Select agency representatives to participate on team 3. Data layer priorities established

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Leverage Existing National Organizations

Key Performance Measure: More than 25 Oklahoma geographic information professionals attending meetings and bringing back and sharing information.

Steps or Objectives
1. Identify Organizations / Resources of Interest 2. Nominate a Rep / Liaison to Participate / Coordinate Efforts 3. Aggressively Advertise / Promote Activities 4. Monitor Participation 5. Report Results / Recommendations to the Council / State Geographic Information Coordinator 6. Add links to National organizations websites from state clearinghouse website 7. Seek membership in National organizations and participate in national committees and conferences and related activities 8. Enter into formal partnerships agreements with national organizational 9. Invite speakers from national organizations to speak at the Council and other relevant meetings in Oklahoma

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Leverage National Resources and Initiatives to Receive Maximum Benefits for the Oklahoma Geographic Information Community.

Key Performance Measure: Documented at least four national resources and initiatives taken advantage of annually.

Steps or Objectives
1. Identify Resources / Initiatives of Interest 2. Appoint a Rep / Liaison to Participate / Coordinate in Efforts 3. Monitored participation in National initiatives such as IFTN, 133 UA (Urban Area) initiatives, NAIP & other multi-agency national orthoimagery programs. 4. Be prepared to enter into multi-agency agreements whereby national funding can be leveraged

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Develop Partnerships for Data Acquisition and Stewardship.

Key Performance Measure: Three partnership or stewardship agreements in place.

Steps or Objectives
1. Identify Opportunities for Cooperation 2. Form Committee Tasked to Promote / Initiate Agreements 3. Begin Negotiations for First Agreement 4. Continue Promotion / Initiation of Agreements 5. Enter into NHD Stewardship agreement for State of Oklahoma. 6. Assess data set/layer requirements, prioritize top 5 or so 7. Determine strategy for funding or developing priority data layers, and pursue multi-agency partnership agreements to acquire existing data or develop new data

Action Planning Sheet

Maximize Geographic Information benefits for the State

Goal: Establish Official Statewide Information Clearinghouse.

Key Performance Measure: Resources and information identified, content and services launched, maintained and continuously up-dated.

Steps or Objectives
1. Form Committee to Identify Available Data Sources
2. Identify Potential Resources / Information to Share
3. Create Additional Resources for Sharing
4. Serve Additional Resources to Stakeholders
5. Continue Providing Useful, High Quality Data
6. Report Successes / Failures
7. Assess status: funding and support for existing clearinghouses (Center for Spatial Analysis; OneNet, OCGI, etc)
8. Determine authority and process to identify a site as the official state clearinghouse
9. Identify what content and services will be provided by the site

APPENDIX III – A

Budget Proposal

Salary & Benefits	**FY'08**	**FY'09**	**FY'10**			**S**	**B**		**FY'08**	**FY'09**	**FY'10**
State Geographic Information Coordinator	1	1	1			$70,000	$27,552		$97,552	$97,552	$97,552
GIS Specialist	1	1	1			$41,500	$14,000		$55,500	$55,500	$55,500
IT Specialist	1	1	1			$44,500	$15,000		$59,500	$59,500	$59,500
Grant/Education Specialist	0	0	1			$41,500	$14,000		$0	$0	$55,500
Total									**$212,552**	**$212,552**	**$268,052**
Travel											
Vehicle lease	1	1	1	vehicle, 1500 m/mo @ $700/mo/vehicle				$700	$8,400	$8,400	$8,400
Additional mileage	1	1	1	1000 miles/vehicle/mo @ 0.485/mile					$5,820	$5,820	$5,820
Lodging	12	12	12	nights/month @ $67/night				$67	$9,648	$9,648	$9,648
Per Diem	16	16	16	days/month @ $39/day				$39	$7,488	$7,488	$7,488
Conference fees, travel, lodging, per diem									$4,500	$6,000	$7,500
Total									**$35,856**	**$37,356**	**$38,856**
Data Processing											
Personal Computers	3	0	0						$15,000	$0	$5,000
Desktop Software				ArcGIS, (2) ArcView, MS Off Pro, Acrobat					$20,000	$5,000	$5,000
Software maintenance									$2,000	$5,000	$6,000
Network servers, software, storage, backup									$45,000	$30,000	$30,000
Total									**$82,000**	**$40,000**	**$46,000**
Office Equipment & Supplies											
Furniture	3	0	1						$4,000	$0	$1,500
Copier/Fax	1	0	0						$2,000	$0	$0
Supplies									$3,000	$3,300	$3,500
Total									$9,000	$3,300	$5,000
Administrative Overhead											
Office space, networking, telephone, personnel administration @ 20 % of payroll									**$31,200**	**$31,200**	**$39,500**
Total Budget											
Total									**$370,608**	**$324,408**	**$397,408**

APPENDIX III – B

Job Description

State Geographic Information Coordinator

Basic Purpose:

Within the Office of Geographic Information (OGI), the State Geographic Information Coordinator (SGIC) develops and manages a unique and strategically important statewide program designed to coordinate government investment in geographic information and technology. Under the direction of the Executive Director of the Oklahoma Conservation Commission (OCC), this program will provide staff support and technical assistance to the Oklahoma Geographic Information Council (OGIC). This position will represent the State of Oklahoma on national, regional, and statewide committees that involve Geographic Information System (GIS) issues. The SGIC has the responsibility to coordinate Oklahoma's geospatial information activities and prevent unnecessary duplication, to implement standards to facilitate interoperability of information, to develop information sharing agreements with federal, state, local and tribal governments and to ensure that the duties of the OGI are carried out as specified in 82 O.S. 1501-205.3.

Typical Functions:

1. Facilitate the coordination of GIS activities among state and federal agencies, regional, county, city and tribal governments.

a. Identify Oklahoma's geographic information needs and priorities and to promote cooperation in meeting these needs,

b. Provide ongoing coordination of GIS efforts between state and federal agencies, regional, county, city and tribal governments,

c. Coordinate multi-agency GIS projects,

d. Coordinate any grant programs for local governments to establish and maintain GIS programs that may be established by the Legislature,

e. Provide access to both consulting and technical assistance, and education and training on the application and use of geographic information technologies to state and local agencies,

f. Coordinate efforts with the USGS Geospatial Liaison for Oklahoma and between regional and national coordination organizations such as, the Mid-America GIS Consortium and the National States' Geographic Information Council, respectively,

g. Act as the geographic information expert for the State of Oklahoma.

2. Directs the operation of the Office of Geographic Information.

a. Directs and supervises the GIS coordination program and staff; plans, organizes and assigns work; conducts meetings, workshops, special events; monitors schedules and budgets to meet requirements and deliver desired results,

b. Proactively manages the program to ensure strategic and operational objectives of the OGIC and 82 O.S. 1501-205.3 are met,

c. Prepares and executes a budget for the OGI, with the advice of the OGIC, to be included in the budget for the OCC,

d. Provides GIS services, as requested, to agencies wishing to augment their GIS capabilities. Coordinates with operations or applications staff, contractors, or vendors as needed to provide required services or support,

e. Evaluates, participates in pilot studies, and makes recommendations on GIS hardware and software in cooperation with other agencies. Coordinates requirements for testing, production, scheduling and other actions between technical and operations units; assists in reviewing and analyzing problems and determining solutions,

f. Maintains an inventory of management information services equipment, supplies and materials; reviews technical publications and other information to identify new technology and improvements in hardware and software; makes recommendations concerning new purchases, changes in contract or other actions; prepares and coordinates purchase orders, contracts and other documents as required,

g. Provides access to both consulting and technical assistance, and education and training to users on various types of geographic information technologies including software and hardware; coordinates with technical staff when problems require additional analysis or assistance,

h. Establishes and maintains a central statewide geographic information clearinghouse; at a minimum, this clearinghouse will maintain an inventory of geographic data, information on current and planned GIS applications, information on grants available for the acquisition or enhancement of geographic information resources, and a directory of geographic information resources available within the state or federal government,

i. Addresses data sensitivity issues so that information is made available to the public but protects the confidentiality nature of the information, as provided by law,

j. Prepares proposed legislation and funding proposals for the Legislature that will further coordinate and expedite the implementation of GIS as recommended by the OGIC and approved by the Executive Director of the OCC,

k. Prepares and provides an annual report to the Governor and Legislature on the status and needs of the geographic information infrastructure of the State of Oklahoma,

l. Under guidance of the OGIC, develops and maintains a strategic plan for the implementation and funding of the OGI; Develops, delivers and periodically revises a statewide geographic information plan which shall include provisions for training and education. This plan shall be included in the annual report of the OGI that is to be submitted to the Governor and the Legislature,

m. Develops and recommends standards and procedures to the OGIC that may be applied to geographic information and GIS to promote consistency of data elements; implements standards and procedures as adopted by the OGIC.

Knowledge & Skills:

1. General

a. Broad knowledge and experience working in government at all levels, including understanding of public sector business environment and use of technology

b. Familiarity with the principles and practice of public administration

c. Familiarity with the concepts and practice on information management,

d. Ability to influence others and encourage creative and broad thinking to identify problems

e. Effective use of consensus building to reach decisions

f. Ability to obtain information and insight even when others are reluctant to share,

g. Ability to learn quickly; synthesize complex information; identify key points and communicate results accurately and effectively,

h. Ability to identify appropriate members and develop effective teams with specific knowledge and skills needed to develop solutions and make recommendations,

i. Resourceful in identifying and obtaining information sources needed to perform responsibilities effectively,

j. Ability to work independently and exercise appropriate discretion with a minimum of supervision and produce effective, acceptable results within short time frames,

k. Experience working directly with management and understanding management perspective and requirements,

l. Strong oral and written communication skills including the ability to communicate business and technical concepts and information effectively to a wide range of audiences including the public,

m. Strong interpersonal skills including the ability to work independently with high-level government officials, business and information system managers and staff in federal, state and local agencies, and with division and department managers.

2. Technological/Specific

a. Extremely knowledgeable about geographic data and mapping. The person should be a geographic "visionary."

b. Background in GIS technology and a thorough knowledge of GIS software and familiarity with database software.

c. IT skills, with emphasis on GIS.

d. Knowledge of legal aspects of GIS.

e. Outstanding technical skills in land information and GIS.

f. Thorough knowledge and understanding of parcel indexing and addressing systems.

g. Proven ability to produce reports and papers on policies, advocating appropriate initiatives to governments, partners and related organization.

h. Proven ability to plan and organize work, requiring an in-depth understanding of regional issues and ability to integrate into the work of others.

Education & Experience:

The State Geographic Information Coordinator shall be a graduate of an accredited college or university with a Bachelor's Degree and shall have five years of practical experience in geographic information system or electronic geospatial information development and interchange, three of which shall be in a supervisory capacity.

Special Requirements:

This position will require frequent overnight travel within and outside the State of Oklahoma. Some trips may require the length of stay to be at least one week, including travel on weekends and holidays. Work hours may frequently extend outside normal business hours of 7:00 am to 5:00 pm, Monday through Friday.

APPENDIX III – C

Present Legislation

§82-1501-205.1. Definitions – State Geographic Information Council.

A. As used in this section and in Section 1501-205.2 of this title and Section 3 of this act:

1. "Geographic information" means any data or databases in which location or spatial distribution is an essential element, including, but not limited to, land, air, water, and mineral resources, the distribution of plant, animal, and human populations, real property interests, zoning and other land development regulations, and political, jurisdictional, ownership, and other artificial divisions of geography;

2. “Geographic Information System” or “GIS” means computer systems that allow the analysis of data or databases containing geographic information; and

3. “Statewide data” means geographic information whose spatial extent is defined by the geographic boundary of the state of Oklahoma.

B. There is hereby created a State Geographic Information Council composed of nineteen (19) members as follows:

1. Director of the Oklahoma Conservation Commission or designee;

2. Director of the Department of Environmental Quality or designee;

3. Chair of the Corporation Commission or designee;

4. Director of the Oklahoma Department of Commerce or designee;

5. Commissioner of the Oklahoma Department of Agriculture, Food, and Forestry or designee;

6. Director of the Oklahoma Water Resources Board or designee;

7. Director of the Department of Transportation or designee;

8. State Geographer or designee;

9. Director of the Oklahoma Geological Survey or designee;

10. Director of the Center for Spatial Analysis of the University of Oklahoma or designee;

11. Dean of the Division of Agricultural Sciences and Natural Resources of Oklahoma State University or designee;

12. Director of the Ad Valorem Division of the Oklahoma Tax Commission or designee;

13. A member appointed by the Director of the Conservation Commission from a list of names submitted to the Director from the Oklahoma regional universities;

14. Director of Information Services of the Office of State Finance or designee;

15. Director of Wildlife Conservation or designee;

16. Director of Homeland Security or designee; and

17. Three members to be appointed by the Governor pursuant to subsection C of this section.

C. The Governor shall appoint three members to the Council to serve initial terms as specified by this subsection. Thereafter, the terms of all appointed members shall be four (4) years. Gubernatorial members shall not be appointed more than three successive terms. Incumbent members may continue to serve on the Council until a new appointment is made. Upon recommendation by the Council, the following members shall be appointed by the Governor:

1. A representative of the Oklahoma Association of Regional Councils, appointed for an initial four-year term;

2. A representative of county assessors, appointed for an initial three-year term; and

3. A representative of city government, appointed for an initial two-year term.

D. The chair of the Council shall be the Director of the Oklahoma Conservation Commission or designee. Meetings shall be called by the chair.

E. 1. A majority of the membership of the Council constitutes a quorum for the conduct of business.

2. The Council shall meet at least twice each year, and the chair may call a meeting of the Council as often as necessary to transact business.

F. A member of the Council shall not:

1. Be an officer, employee, or paid consultant of a business entity that has, or an officer, employee, or paid consultant of a trade association for business entities that have, a substantial interest in the geographic information industry and are doing business with state agencies or other governmental units of the state;

2. Own, control, or have directly or indirectly, more than ten percent (10%) interest in a business entity that has a substantial interest in the geographic information

industry and is doing business with state agencies or other governmental units of the state;

3. Be an officer, employee, or paid consultant of a business entity that is connected with any contract or bid for furnishing to any governmental body of the state with Geographic Information Systems, the computers on which they are automated, or a service related to Geographic Information Systems;

4. Be a person required to register as a lobbyist because of activities for compensation on behalf of a business entity that has, or on behalf of a trade association of business entities that have a substantial interest in the geographic information industry; or

5. Accept or receive money or another thing of value from an individual, firm, or corporation to whom a contract may be awarded, directly or indirectly, by rebate, gift or otherwise.

G. The duties of the Council shall include overseeing the Office of Geographic Information concerning the following:

1. Development, adoption, and recommendation of standards and procedures that may be applied to geographic information and Geographic Information Systems to promote consistency of data elements;

2. Development of a strategy for the implementation and funding of a statewide Geographic Information System;

3. Development, delivery, and periodic revision of a statewide geographic information plan and annually reporting to the Governor and the Legislature. Such a plan shall include, but not be limited to, provisions for training and education; and

4. Promotion of collaboration and sharing of data and data development as well as other aspects of Geographic Information Systems.

H. Neither the Council nor its members shall have the power to form or award contracts or to employ staff. Members appointed by the Governor shall serve without compensation.

Added by Laws 1994, c. 386, § 1, emerg. eff. June 11, 1994. Amended by Laws 1995, c. 150, § 1, emerg. eff. May 2, 1995; Laws 2001, c. 35, § 1, emerg. eff. April 9, 2001; Laws 2004, c. 365, § 1, eff. Nov. 1, 2004.

§82-1501-205.2. Geographic Information Revolving Fund.

A. There is hereby created in the State Treasury a revolving fund to be designated as the "Geographic Information Revolving Fund", which shall be under the control and supervision of the Oklahoma Conservation Commission, and subject to the recommendations of the State Geographic Information Council.

B. The fund shall be a continuing fund not subject to fiscal year limitations, and shall consist of all monies specifically appropriated to the fund by the Legislature within the Oklahoma Conservation Commission appropriation. The fund may obtain additional monies through donation by any private entity, obtained by grants or designated by any federal, state or local government agency, as recommended by the State Geographic Information Council and approved by the Executive Director of the Oklahoma Conservation Commission, with specific intention for the purposes of carrying out the duties of the Office of Geographic Information including, but not limited to, the development and maintenance of base map Geographic Information System (GIS) data layers.

C. Monies accruing to the fund may be expended by the Conservation Commission for expenses associated with the Office of Geographic Information.

D. Expenditures from the fund shall be made upon warrants issued by the State Treasurer against claims filed with the Director of State Finance for approval and payment.

Added by Laws 1995, c. 150, § 2, emerg. eff. May 2, 1995. Amended by Laws 2004, c. 365, § 2, eff. Nov. 1, 2004.

§82-1501-205.3. Office of Geographic Information – Manager – Funding – Duties – Cooperation of House of Representatives and Senate.

A. There is hereby established an Office of Geographic Information in the Oklahoma Conservation Commission.

B. The Executive Director of the Oklahoma Conservation Commission shall appoint, after consultation with the Council, a person of suitable training, experience, and knowledge to manage the Office with the title of State Geographic Information Coordinator who shall serve at the pleasure of the Executive Director.

C. The Office may solicit, receive and consider proposals for funding from any state agency, federal agency, local government, university, nonprofit organization, or private person or corporation. The Office may also solicit and accept money by grant, gift, bequest, or other conveyance recommended by the Geographic Information Council and approved by the Executive Director of the Oklahoma Conservation Commission. Additionally, the Office may receive a specific legislative appropriation within the appropriation for the Oklahoma Conservation Commission. Any funds received by the Office shall be deposited into the Geographic Information Revolving Fund pursuant to Section 1501-205.2 of Title 82 of the Oklahoma Statutes.

D. The Office shall:

1. Provide staff support and technical assistance to the Council established pursuant to Section 1501-205.1 of Title 82 of the Oklahoma Statutes;

2. Establish a central statewide geographic information clearinghouse to maintain data inventories, information on current and planned Geographic Information System applications, information on grants available for the acquisition or enhancement of geographic information resources, and a directory of geographic information resources available within the state or from the federal government;

3. Coordinate any grant programs for local governments to establish and maintain Geographic Information Systems as such programs may be established by the Legislature;

4. Coordinate multi-agency Geographic Information System projects, including working with state and local agencies in the development and maintenance of statewide data and Geographic Information Systems;

5. Provide access to both consulting and technical assistance, and education and training on the application and use of geographic information technologies to state and local agencies;

6. Develop, maintain, update, and interpret Geographic Information System standards under the direction of the Council and working with state and local agencies;

7. Provide Geographic Information System services, as requested, to agencies wishing to augment their Geographic Information System capabilities;

8. Evaluate, participate in pilot studies, and make recommendations on Geographic Information System hardware and software in cooperation with other agencies;

9. Prepare proposed legislation and funding proposals for the Legislature that will further coordinate and expedite the implementation of Geographic Information Systems as recommended by the Geographic Information Council and approved by the Executive Director of the Conservation Commission;

10. Address data sensitivity issues so that information is made available to the public but protects confidentiality of the information; and

11. Provide an annual report to the Governor and Legislature on the status and needs of the geographic information infrastructure of the State of Oklahoma.

E. The Oklahoma House of Representatives and Oklahoma Senate may cooperate with the Office of Geographic Information but shall be exempt from all requirements of this section.

Added by Laws 2004, c. 365, § 3, eff. Nov. 1, 2004.