Clermont County
Governance and Organizational Structure
Best Practices Review and Analysis Report

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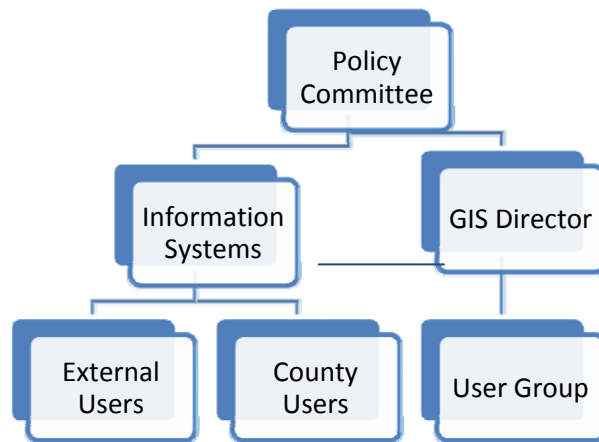
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REPORT OVERVIEW

1.1 REPORT INTRODUCTION

Geocentric Consulting, Inc. presents this Governance and Organizational Structure Best Practices Review and Analysis Report for Clermont County. Geo-centric has investigated twenty counties across Ohio to look for patterns of best practices related to governance and GIS program management structures, funding arrangements and GIS operations configurations.

1.2 DEFINITIONS

Formal GIS Policy Committee: A formal GIS Policy Committee is meant to represent any formalized Board or governing body that has been officially designated, either through Resolution, enactment of By-laws or other formal means and would include set protocols and procedures to enable governance and establishment of policy for a County GIS program. Typically minutes are recorded; motions are made and accepted, etc. Conversely, an informal GIS Policy Committee would include generalized decision making through ad-hoc meetings, phone calls, correspondence, etc.

GIS program governance: This describes a County's formal or informal GIS Policy Committee characteristics.

GIS program funding: This only includes financial support for a GIS program for expenses such as personnel and benefits, data, hardware, software and supplies, etc. In-kind expenses such as temporary or occasional staff time are not considered GIS program funding for the purposes of this study. Categories include *centralized* where a single department or agency provides financial backing; *multi-participant* where two or more departments or agencies provide financial support; and *decentralized* where funders are independent from one another.

GIS program management model: This term is meant to convey the departmental organization by which the day to day overall management of the GIS program is handled. Categories include *centralized* where the large majority of management decisions reside within a single department or agency; *multi-participant* where two or more departments or agencies manage the GIS program; and *decentralized* where islands of authority exist.

GIS staff resource model: This phrase is intended to capture the pattern of location of staff that uses GIS software as a part of their daily work routine. GIS staff includes all GIS desktop software users from "power users" to less skilled GIS technicians. This does not include casual users of GIS applications such as Internet web sites or simple viewers

such as ArcReader (ICMAPS Light). Categories include *centralized* where the overwhelming majority of skilled GIS personnel reside within a single department or agency; *multi-participant* where two or more departments or agencies house skilled GIS practitioners; *decentralized* where GIS personnel exist in disparate departments and no single department houses leadership staff; and finally, *outsourced* where consultants, contract hires or other non-County employees are made use of.

Number of GIS staff in managing department: Simply put, the number of GIS personnel is listed here. FT stands for full-time and PT for part-time. This is a little inexact when a GIS program's management model is multi-participant; then it may not be clear that there is only one department or agency making significant managerial decisions regarding the GIS program. I chose what appeared to be the primary department in these cases.

Number of GIS staff in user departments: This lists the number of GIS staff in the organization external to the primary managing department.

GIS user group: This encompasses any group of GIS users that meets on a regular or semi-regular basis to discuss GIS related issues.
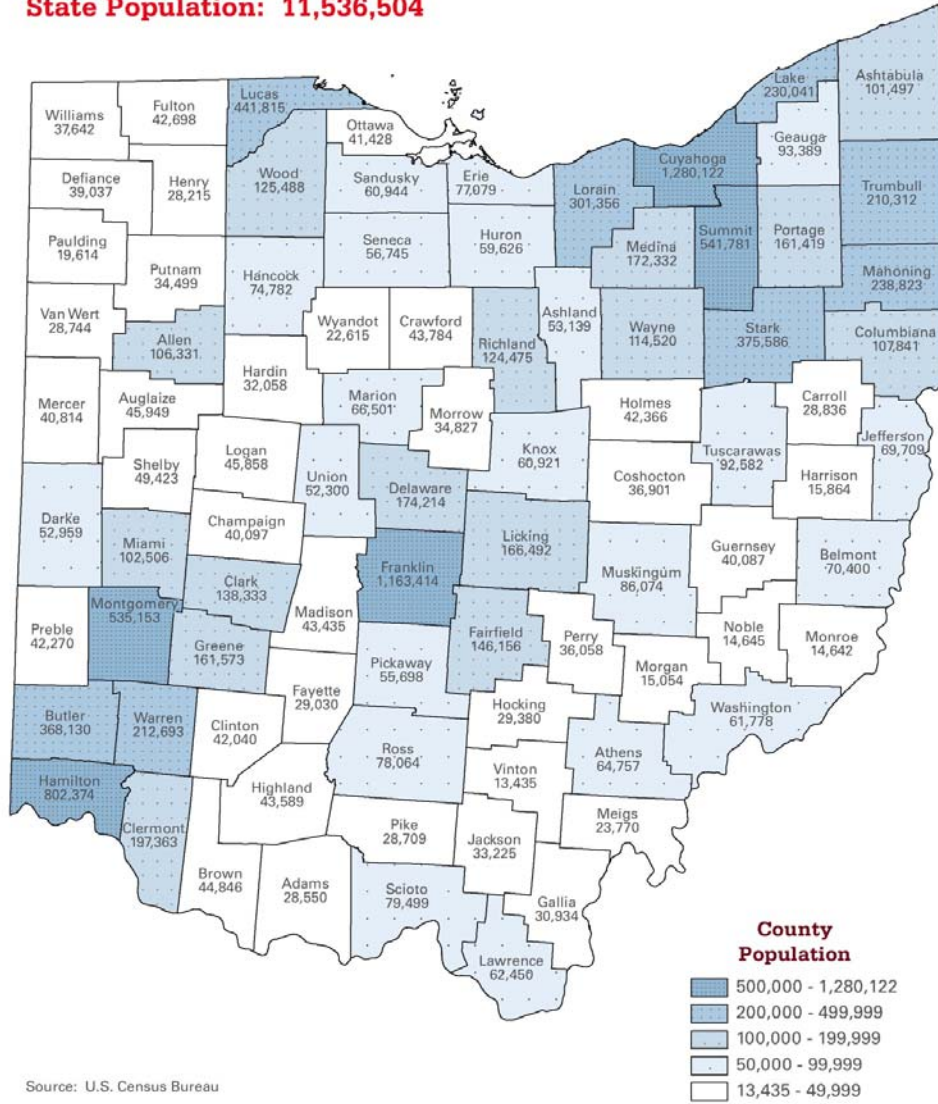
1.3 OHIO COUNTY PARTICIPANTS

The process employed to develop this report included interviews and the investigation, compilation and analysis of existing information from twenty Ohio Counties, their websites and other sources. Counties that are reported on are detailed below in Table 1-1 Study Participants.

Allen County	Mahoning County
Ashtabula County	Medina County
Clark County	Miami County
Columbiana County	Portage County
Delaware County	Richland County
Fairfield County	Trumbull County
Geauga County	Tuscarawas County
Greene County	Warren County
Lake County	Wayne County
Licking County	Wood County

Table 1-1
Study Participants

Using county population as a guide, I gathered information on those counties that had roughly between 100,000 and 240,000 residents. As the below map shows, the counties with more than this jump to being quite large and below this threshold many are much smaller.

Figure 1
County 2010 Population

Below is a bar chart of the population spread of the study participants. Clermont County has approximately 197,363 residents and is designated with a star below.
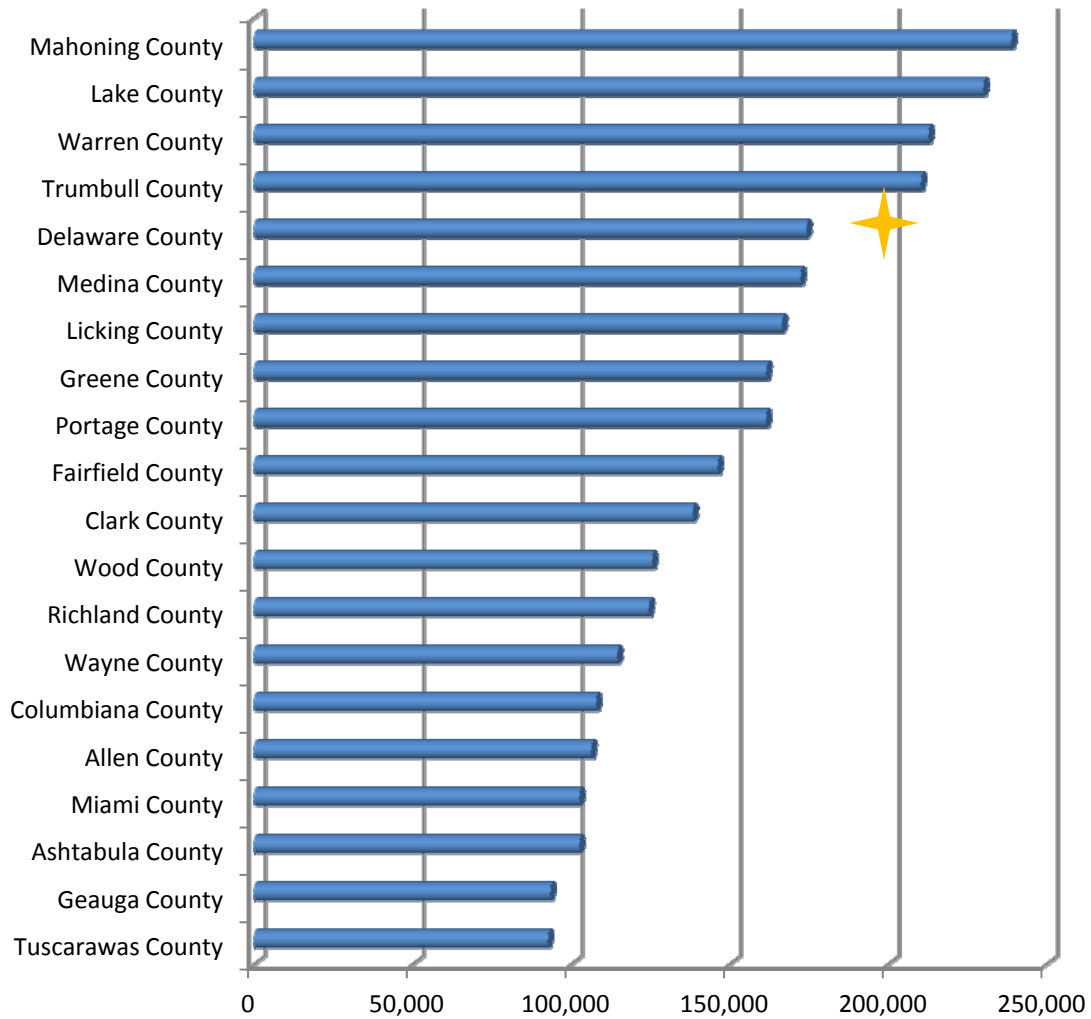

Figure 2
Target Counties 2010 Population

COUNTY GEOSPATIAL GOVERNANCE AND ORGANIZATION

2.1 INTRODUCTION

It is evident that GIS programs are like snowflakes – no two are identical. Many factors influence the characteristics of a County GIS program; financial resources, leadership personalities and style, human resource issues, politics, technology infrastructure and support capabilities thereof, decision making processes and more.

The information presented here is not meant to convey the concept that there is a right way and a wrong way to develop Enterprise GIS. However, there are some practices that foster an organization's strengths to be best utilized and to minimize wrong turns on the GIS roadmap.

2.2 OBSERVATIONS AND ANALYSIS

Formal GIS Policy Committee / GIS program governance: I was surprised at the low number of formal GIS Policy Committees at four out of nineteen. Given the many issues challenging an Enterprise GIS implementation, I strongly believe that a formal GIS Committee provides a forum for elected and appointed officials to come to agreement. Commitments and decisions are documented helping to ensure follow through on sometimes thorny issues. Defining clear lines of responsibility and accountability in the development and maintenance of the GIS program is achieved in a transparent manner. A notable number of respondents voiced an interest in having a more structured policy level management structure and increased departmental involvement at that level.

GIS program funding: Financing the GIS program is obviously a key determinant of success. How it is funded is not nearly as important as the level of funding. Resolving funding disagreements is a critical aspect to the health of a program and a true indicator of excellence in leadership.

GIS program management model: Fifteen of the counties surveyed use the *centralized* model. These structures of departmental organization are a function of the process by which the GIS program has developed and matured. Whether it is *centralized* or *multi-participant* may not impact the effectiveness of the GIS program; however, a centralized structure should result in faster decision making and less fragmentation from the plan. These models reflect on the amount of resources available, how widespread the GIS skill sets have migrated and to some extent how various elected officials and department heads have embraced GIS usage. Clearly, a *decentralized* situation results in the waste of tax dollars from duplication of work, software, hardware, training and economies of scale.

GIS staff resource model: At little over half (10) use the *multi-participant* model where two or more departments or agencies house skilled GIS practitioners. Having resources in multiple departments is desirable as these departments will have staff at hand to work on their applications as opposed to waiting on the availability of the single department's staff. The *centralized* model can be effective when numerous staff support the GIS program. Again, a *decentralized* situation results in the waste of tax dollars from duplication of work, software, hardware, training and economies of scale. The o*utsourced* model is unusual here because currently this is the sole resource for the County with no staff internally. All counties use consultants and contractors periodically. Relying solely on consulting will result in a more costly approach in the long run as consultants are more expensive than County workers and non-county employees may not have the institutional knowledge or vested interest that County staff may have.

Number of GIS staff in managing department: The number of staff here ranged from one to seven with an average of 2.9. This is obviously related to funding priorities and realities of County finances. The more GIS staff there is the greater the benefits are that can be realized from the GIS program.

Number of GIS staff in user departments: These numbers ranged from zero to nine, not considering Clermont County and Warren County. *Clermont County blew the doors off of all but one of the surveyed counties with thirty-eight employees (Warren Co. has 25).* I used the total number of ArcGIS Desktop licenses for this Clermont County tally, including supporting copies for dispatch and R911. Clearly, as more GIS capable staff are spread throughout an organization, the greater are the benefits that accrue.

GIS user group: Nine counties are using User Groups to improve communication and collaboration of their GIS programs. This is a very good method of keeping people informed of changes and providing momentum, excitement and direction to GIS staff. It is recognized that a five counties had three or less GIS staff reducing the need for this.

The Clermont Barometer

Clermont currently embraces all of the preferred practices studied here. For reasons described above, I support the continued operation of the Clermont County GIS Policy Committee. Fiscal support of the GIS program in Clermont County has been quite strong with widespread benefits being achieved as evidenced by the 130 applications identified in my initial report. Clermont County uses the preferred *centralized* GIS program management model and the *multi-participant* GIS staff resource model. Staffing in Clermont County GIS is on par with the average cited and the number of users county-wide dwarfed all the other counties. Lastly, you are employing not one, but two user groups, again exceeding all the other counties studied.

Well done. I find no areas in need of recommendations for improvement.

2.3 COUNTY INFORMATION

Allen County

GIS program governance: Allen County has a formal GIS Policy Committee which consists of the County Auditor, the County Engineer, the County Sanitary Engineer, Regional (County) Planning and the City of Lima.

GIS program funding: Funding for the GIS program is from the County Auditor, the County Engineer, the County Sanitary Engineer and the City of Lima.

GIS program management model: Allen County manages their GIS program centrally, out of the County Auditor's Office with input from the Policy Committee members.

GIS staff resource model: Allen County applies the hybrid model of GIS staff resources with the Tax Map Office housing the primary GIS staff but also having some expertise in the Planning Department.

Number of GIS staff in managing department: 2

Number of GIS staff in user departments: 1

GIS user group: None.

Ashtabula County

GIS program governance: Ashtabula County does not have a formal GIS Policy Committee. The County Auditor is leading the County expansion of GIS and is working in concert with the E 911 Board for strategic direction decisions.

GIS program funding: Funding for the GIS program is primarily from the County Auditor. Partial funding comes from the E911 Board budget which relies heavily on the E911 cell phone surcharge.

GIS program management model: Ashtabula County manages their GIS program centrally, out of the County Auditor's Office with assistance in the emergency response area from the E911 Board members.

GIS staff resource model: Ashtabula County applies the outsourced model of GIS staff resources with the Auditor hiring consulting assistance and the E911 Board also relying heavily on consulting assistance.

Number of GIS staff in managing department: 0 (Consultant)

Number of GIS staff in user departments: 2 PT (Plus consultant)

GIS user group: None.

Clark County

GIS program governance: Clark County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program.

GIS program funding: Funding for the GIS program is from the County Auditor with a transfer fee of $1.00 per $1,000 with a cap of $200,000. General Fund monies provide additional revenues above the transfer tax ceiling.

GIS program management model: Clark County manages their GIS program centrally, out of the County Auditor's Office GIS Department.

GIS staff resource model: Clark County applies the hybrid model of GIS staff resources with the GIS Department housing the primary GIS staff and additional expertise residing the Public Works and Health Departments and the Soil and Water Conservation District.

Number of GIS staff in managing department: 1 FT, 1 PT

Number of GIS staff in user departments: 3

GIS user group: Yes, focused towards experienced users.

Columbiana County

No GIS is being implemented in Columbiana County.

Delaware County

GIS program governance: Delaware County has a formal GIS Policy Committee. The County Auditor is leading the County GIS program.

GIS program funding: Funding for the GIS program is from the County Auditor.

GIS program management model: Delaware County manages their GIS program using a centralized model. Leadership is out of the County Auditor's Office but quarterly meetings are held with County Departments to solicit input into GIS program policy and direction. Additionally, informal policy input from the Delaware County GIS User Group is considered.

GIS staff resource model: Delaware County applies the hybrid model of GIS staff resources with the GIS Department housing the primary GIS staff and additional expertise residing the Engineer's Office and the Planning, Sanitation and Health Departments.

Number of GIS staff in managing department: 5 FT 1PT

Number of GIS staff in user departments: 4

GIS user group: The Delaware County GIS User Group (DCGUG) meets periodically.

Fairfield County

GIS program governance: Fairfield County has an informal GIS Policy Committee between the County Auditor and County Engineer. They are leading the County GIS program.

GIS program funding: The County Auditor funds 70% of the costs and the County Engineer funds 30%. There used to be General Fund assistance earlier in the project.

GIS program management model: Fairfield County manages their GIS program centrally, out of the County Auditor's Office.

GIS staff resource model: Fairfield County applies the centralized model of GIS staff resources with the Auditor housing the primary GIS staff.

Number of GIS staff in managing department: 3

Number of GIS staff in user departments: 2

GIS user group: There is a GIS Technical Committee comprised of the County GIS Staff and staff from the City of Lancaster. A GIS Committee meets annually to gather feedback from users. This includes representatives from all County departments, Cities, Villages and Townships plus some users from the private sector.

Geauga County

GIS program governance: This County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program for the Auditor's Office and all other agencies are responsible for their GIS maintenance and development.

GIS program funding: The County Auditor funds the Auditor's Office GIS infrastructure and provides the resources for aerial imagery, both orthogonal and oblique.

Other agencies fund their own GIS operations and have access to the aerial imagery and other GIS base layers maintained by County Offices.

GIS program management model: Geauga County manages their GIS program in a multi-participant approach. The County Auditor manages the central GIS hardware, software and networking infrastructure and major data acquisitions but all other departments are self-reliant per the County Auditor.

GIS staff resource model: Geauga County applies the hybrid model of GIS staff resources with each department housing its own GIS staff for GIS maintenance and development.

Number of GIS staff in managing department: 3 FT 1 PT

Number of GIS staff in user departments: 2 FT 3 PT

GIS user group: None.

Greene County

GIS program governance: Greene County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program. Previously a GIS Committee involved the County Engineer and Sanitary Engineer and the Sheriff's Office. After funding from these entities stopped, the GIS Committee faded away.

GIS program funding: Funding for the GIS program is from the County Auditor.

GIS program management model: Greene County manages their GIS program using a centralized approach. The County Auditor manages the County GIS program which is housed in the Data Processing Department presided over by the Auditor.

GIS staff resource model: Greene County applies the centralized model of GIS staff resources, out of the County Auditor's Office. The Engineer does fund one Tax Map maintenance staff member.

Number of GIS staff in managing department: 5

Number of GIS staff in user departments: 0

GIS user group: There is a user group of County users that meets periodically.

Lake County

GIS program governance: The GIS Board is the policy committee for Lake County. The Board is comprised of the County Engineer, the County Auditor and the County Commissioners.

GIS program funding: The County Auditor funds 30% of the costs, the County Engineer funds 30%, the Utilities Department funds 30% and 10% comes from the Emergency Management Agency, E911 and other miscellaneous contributors. There used to be General Fund assistance earlier in the project.

GIS program management model: Lake County manages their GIS program using a centralized approach. The GIS Department manages the County GIS program.

GIS staff resource model: Lake County applies the multi-participant model of GIS staff resources with the GIS Department housing the primary GIS staff and additional expertise residing the Engineer's Office, the Planning, Utilities and Health Departments and the Soil and Water Conservation District.

Number of GIS staff in managing department: 4

Number of GIS staff in user departments: 9

GIS user group: County users meet on an as needed basis. The GIS Users of Northern Ohio is operated by the Lake County GIS Director. The GIS Users of Northern Ohio is one of the nation's longest running geospatial user groups, meeting bi-monthly since the early 1990s and includes nearly 300 members.

Licking County

GIS program governance: There is no formal GIS policy board for Licking County. Informal policy management occurs between the County Commissioners, County Auditor and County Engineer.

GIS program funding: A large portion of the funding for the GIS program comes from the County Commissioners; departmental project specific funding is provided from the County Auditor and County Engineer.

GIS program management model: Licking County manages their GIS program using a centralized approach. The Information Technology Department manages the County GIS program.

GIS staff resource model: Licking County applies the hybrid model of GIS staff resources with the IT Department housing the primary GIS staff and additional expertise residing in the Planning Department.

Number of GIS staff in managing department: 2

Number of GIS staff in user departments: 2

GIS user group: Yes, an internal Licking County Users Group meets monthly with Planning facilitating an additional stakeholders meeting every 3-4 months.

Mahoning County

GIS program governance: Mahoning County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program.

GIS program funding: Funding for the GIS program is from the County Auditor. Previously a GIS Policy Board involved the County Engineer and the Sanitary Engineer. Somewhat recently, the GIS Policy Board has not been functional due to the discontinuation of funding from these entities.

GIS program management model: Mahoning County manages their GIS program using a centralized, yet distributed approach. The GIS Department manages the County GIS program and the GIS Department is comprised of individuals from the Auditor's Office, the Engineers Office and the Sanitary Engineers Office.

GIS staff resource model: Mahoning County applies the hybrid model of GIS staff resources with the GIS Department housing the primary GIS staff but they are actually employees from the three funding departments.

Number of GIS staff in managing department: 1

Number of GIS staff in user departments: 2

GIS user group: None.

Medina County

GIS program governance: There is no formal GIS policy board for Medina County. Informal policy management occurs between the GIS Coordinator and the County Engineer, (Tax Maps), Sanitary Engineer, County Planning Department, the County Park District and the Soil & Water Conservation District.

GIS program funding: The funding for the County GIS Program is distributed between the County Engineer, the Sanitary Engineer, the County Planning Department, the County Park District and the Soil & Water Conservation District.

GIS program management model: Medina County manages their GIS program in a multi-participant approach. The County Engineer manages the GIS tax maps and all other departments manage themselves versus by a central department.

GIS staff resource model: Medina County has a decentralized model of GIS staffing resources. There is not a formal structure and the various departments maintain and develop their GIS resources and infrastructure.

Number of GIS staff in managing department: The County Engineer has 1 FT and 2 PT. Not really a managing department but closest to it.

Number of GIS staff in user departments: 4PT

GIS user group: A County User group meets bi-monthly.

Miami County

GIS program governance: Miami County has a formal GIS Policy Committee. The County Auditor is leading the County GIS program.

GIS program funding: Funding for the GIS program is primarily from the County Auditor with some financial assistance from the Sheriff's Office and the Emergency Management Agency.

GIS program management model: Miami County manages their GIS program centrally, out of the County Auditor's Office.

GIS staff resource model: Miami County applies the centralized model of GIS staff resources with the Auditor's Office housing the primary GIS staff.

Number of GIS staff in managing department: 3

Number of GIS staff in user departments: 0

GIS user group: None.

Portage County

GIS program governance: There is no formal GIS policy board for Portage County. Informal policy management occurs between the County Auditor and the County Engineer.

GIS program funding: The County Auditor funds 90% of the costs, the County Engineer funds 10%.

GIS program management model: Portage County manages their GIS program using a centralized approach. The Auditor's Office manages the County GIS program with the GIS Coordinator located in the Information Technology Department.

GIS staff resource model: Portage County applies the hybrid model of GIS staff resources with the Auditor's Office housing the primary GIS staff person and other user departments applying expertise for their respective departments.

Number of GIS staff in managing department: 1

Number of GIS staff in user departments: 2 FT 8 PT

GIS user group: A Portage County user group meets somewhat regularly including representatives of the County Planning Department, the County Auditor, the County Engineer and several municipalities.

Richland County

GIS program governance: The GIS program in Richland County is governed through the GIS Consortium whose members include the County Auditor, the County Engineer, the County Regional Planning Commission, the Soil and Water Conservation District, the Cities of Mansfield, Shelby and Ontario, the Villages of Lexington, Butler, Lucas and Bellville and Washington Township. In 2005 the Consortium was organized as an Official Standing Subcommittee of Richland County Regional Planning Commission.

GIS program funding: All members of the GIS Consortium pay according to a formula that allocates one half of the cost responsibility on the basis of population and one-half on land area. Further, some of a local government's financial share is assigned to other groups, such as the County Engineer and the Regional Planning Commission.

GIS program management model: Richland County manages their GIS program in a multi-participant approach. The GIS Consortium GIS Manager is the overall GIS Program manager but the GIS Consortium members provide guidance as well. The Auditor also has a separate GIS presence with iasWorld versus the GIS Consortium's AccuGlobe GIS from Digital Data Technologies, Inc.

GIS staff resource model: Richland County applies the hybrid model of GIS staff resources with the Planning Commission housing the GIS Consortium management staff and additional expertise residing in the Auditor's Office, County Engineer (Tax Map) and the Soil and Water Conservation District.

Number of GIS staff in managing department: 1

Number of GIS staff in user departments: 3

GIS user group: The GIS Consortium meets on a monthly basis.

Trumbull County

GIS program governance: Trumbull County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program.

GIS program funding: Funding for the GIS program is from the County Auditor.

GIS program management model: Trumbull County manages their GIS program using a centralized approach. The County Auditor manages the County GIS program.

GIS staff resource model: Trumbull County applies the hybrid model of GIS staff resources with the Auditor's Office housing the primary GIS staff person and County Planning, the Sanitary Engineer's Office applying expertise for their respective departments.

Number of GIS staff in managing department: 5

Number of GIS staff in user departments: 3

GIS user group: None.

Tuscarawas County

GIS program governance: There is no formal GIS policy board for Tuscarawas County. Informal policy management occurs between the County Auditor, County Engineer, County Commissioners, County Planning Department, the Sheriff's Office, the Emergency Management Agency and the Soil & Water Conservation District.

GIS program funding: Funding for the GIS program is distributed between all GIS user departments.

GIS program management model: Tuscarawas County manages their GIS program using a centralized approach. The County Auditor manages the County GIS program.

GIS staff resource model: Tuscarawas County applies the centralized model of GIS staff resources with the Auditor's Office housing the primary GIS staff.

Number of GIS staff in managing department: 4

Number of GIS staff in user departments: 6 PT

GIS user group: None.

Warren County

GIS program governance: The GIS program is jointly managed by a Steering Committee managed by the County Auditor, the County Engineer and the Director of Data Processing Department with the Board of County Commissioners and the Map Room Supervisor also represented.

GIS program funding: Approximately, the County Commissioners fund 60%, the County Auditor 20%, and the County Engineer funds 20%.

GIS program management model: Warren County manages their GIS program centrally, out of the Warren County GIS Department.

GIS staff resource model: Warren County applies the centralized model of GIS staff resources with the GIS Department housing the primary GIS staff.

Number of GIS staff in managing department: 6

Number of GIS staff in user departments: 25

GIS user group: None. GIS Department staff meets regularly.

Wayne County

GIS program governance: Wayne County does not have a formal GIS Policy Committee. The County Auditor is leading the County GIS program with informal policy management between the County Planning Department, the Sheriff's Office, the Emergency Management Agency, the Health Department and the Soil & Water Conservation District.

GIS program funding: The County Auditor provides annual funding for the GIS program and the Wireless 911 fund financed a major program in the past.

GIS program management model: Wayne County manages their GIS program using a centralized approach. The County Auditor manages the County GIS program. The County Auditor maintains parcel mapping in GIS and the County Engineer maintains Mylar Tax Maps resulting in duplication of this task.

GIS staff resource model: Wayne County applies the centralized model of GIS staff resources with the Auditor's Office housing the primary GIS staff person.

Number of GIS staff in managing department: 1

Number of GIS staff in user departments: 0

GIS user group: None

Wood County

GIS program governance: There is no formal GIS Policy Committee. There are two separate GIS programs in Wood County. One is housed in the County Auditor's Office and one in the County Engineer's Office. There are two cadastral web applications for the County.

GIS program funding: The County Auditor and County Engineer fund their GIS programs separately.

GIS program management model: Wood County manages their GIS programs in a decentralized approach, although a centralized approach was expressed by the interviewee. The County Auditor manages his GIS program through a GIS Director and the County Engineer manages their GIS program through a GIS Analyst.

GIS staff resource model: Wood County applies the decentralized model of GIS staff resources with the County Auditor and the County Engineer hosting their respective primary GIS staff person.

Number of GIS staff in managing department: 1 in each department

Number of GIS staff in user departments: 0

GIS user group: None.

SECTION 3
SURVEY TABLES AND GRAPHS

3.1 INTRODUCTION

This section contains the summary presentation and statistical analysis of all the information gathered for this study in tabular and graphical format. The information presented allows for quick interpretation of the characteristics of the Governance and Organizational Structure of the twenty counties included in this analysis.

Please note that in Table 3-2: Management and Staffing Models, GIS Staff and User Groups, the county names are hyper-linked to their GIS websites for your perusal.

GOVERNANCE AND FUNDING MATRIX

P = Policy Committee   IP = Informal Policy $ = Funds GIS program

County	GIS Managed	GIS Funded	County Auditor	County Engineer	County Commish.	County Utilities	County Planning	County Parks	City/Vlg./ Twp.	Sheriff/E 911	County EMA	County IT Dept.	County Health	Soil & Water
Allen County	Centralized	Multi-participant	P $	P $		P $	P		P $					
Ashtabula County	Centralized	Multi-participant	IP $							P $				
Clark County	Centralized	Centralized	IP $		IP $									
Clermont County	Centralized	Multi-participant	P $	P $	P $	P						P		
Columbiana County	No GIS													
Delaware County	Centralized	Centralized	IP $											
Fairfield County	Centralized	Centralized	IP $	IP $										
Geauga County	Multi-participant	Multi-participant	IP $	$		$	$	$		$	$		$	$
Greene County	Centralized	Centralized	IP $	IP		IP	IP			IP				
Lake County	Centralized	Multi-participant	P $	P $	P	$				$	$			
Licking County	Centralized	Centralized	IP $	IP $	IP $							P		
Mahoning County	Centralized	Multi-participant	P $											
Medina County	Multi-participant	Multi-participant	IP $	IP $		IP $	IP $	IP $						IP $
Miami County	Centralized	Centralized	IP $							$	$			
Portage County	Centralized	Multi-participant	IP $	IP $										
Richland County	Multi-participant	Multi-participant	P $	P $			P $		P $					P $
Trumbull County	Centralized	Centralized	IP $											
Tuscarawas County	Centralized	Multi-participant	IP $	IP $	IP $		IP $			IP $	IP $			IP $
Warren County	Centralized	Multi-participant	IP $	IP $	IP $							P		
Wayne County	Centralized	Multi-participant	IP $				IP			IP $	IP		IP	IP
Wood County	Decentralized	Decentralized	IP $	IP $		IP	IP							

Geo-centric Consulting, Inc.

Table 3-1
Governance and Funding Matrix

21

County (GIS websites hyperlinked)	Program Management	Staff Resources	Staff Mngmt. Dept	Staff Other Depts.	User Group
Allen County	Centralized	Multi-participant	2	1	no
Ashtabula County	Centralized	Outsourced	0	1	no
Clark County	Centralized	Multi-participant	1.5	3	yes
Clermont County	Centralized	Multi-participant	3	38*	yes
Delaware County	Centralized	Centralized	5.5	4	yes
Fairfield County	Centralized	Multi-participant	3	2	yes
Geauga County	Multi-participant	Centralized	3.5	3	no
Greene County	Centralized	Centralized	5	0	no
Lake County	Centralized	Multi-participant	4	9	yes
Licking County	Centralized	Multi-participant	2	2	yes
Mahoning County	Centralized	Multi-participant	1	2	no
Medina County	Multi-participant	Decentralized	2	2	yes
Miami County	Centralized	Centralized	3	0	no
Portage County	Centralized	Multi-participant	1	4	yes
Richland County	Multi-participant	Multi-participant	1	3	yes
Trumbull County	Centralized	Multi-participant	5	3	no
Tuscarawas County	Centralized	Centralized	4	3	no
Warren County	Centralized	Centralized	7	25	no
Wayne County	Centralized	Centralized	1	0	no
Wood County Eng GIS	Decentralized	Decentralized	3	3	no

Table 3-2
Management and Staffing Models, GIS Staff and User Groups

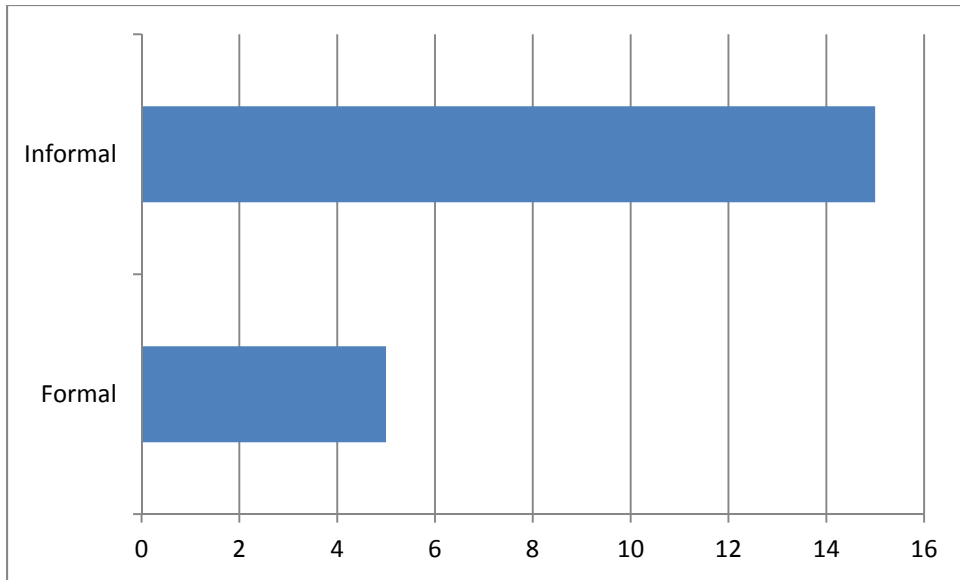* - Total number of ArcGIS Desktop licenses (ArcInfo, ArcEditor, ArcView)

Figure 3
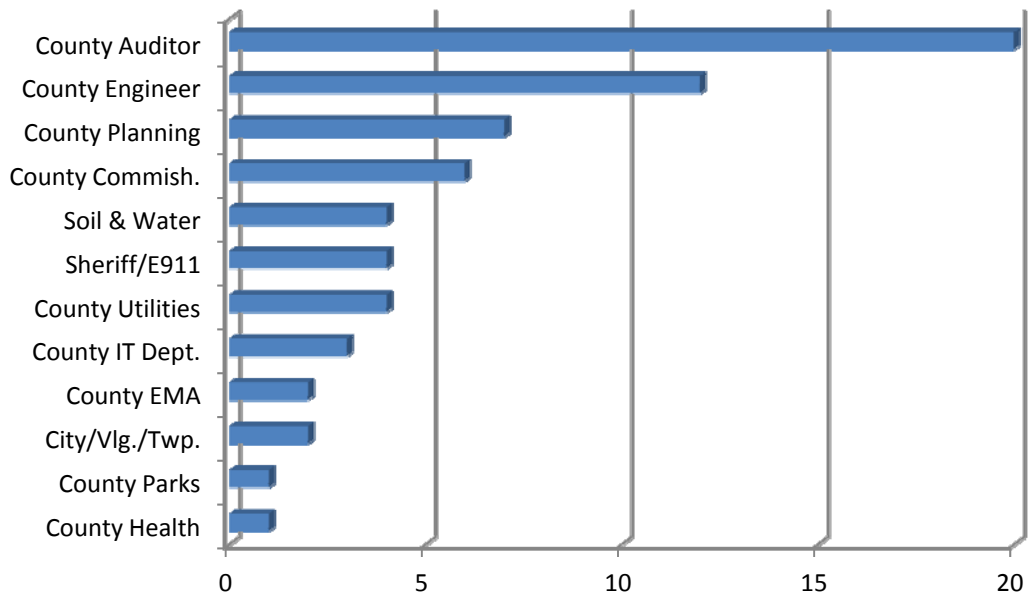GIS Policy Committee Types
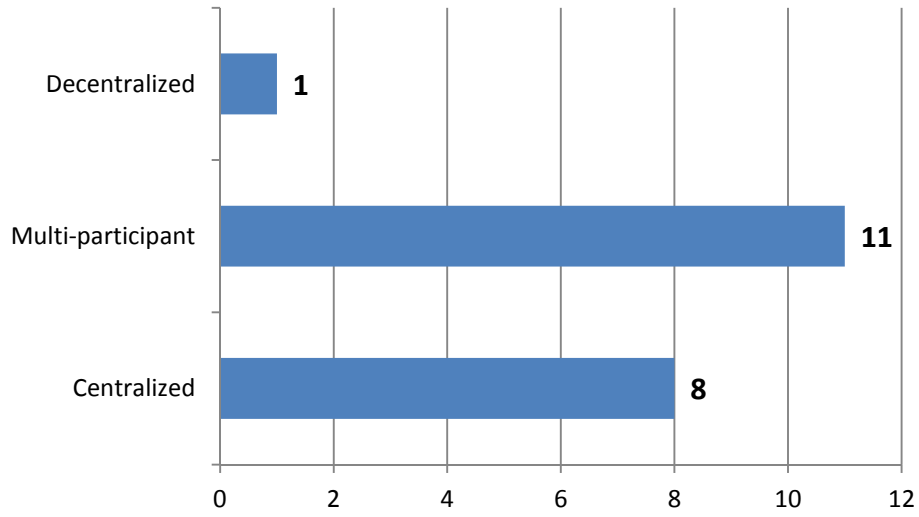

Figure 4
County Departments with Policy Input

Figure 5
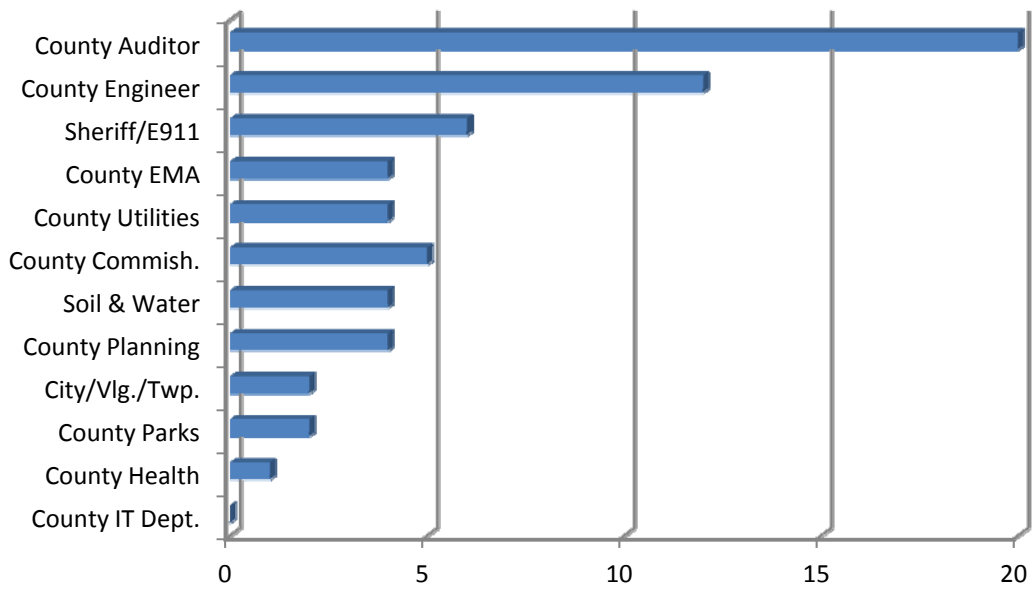County GIS Program Funding Characteristics

Figure 6
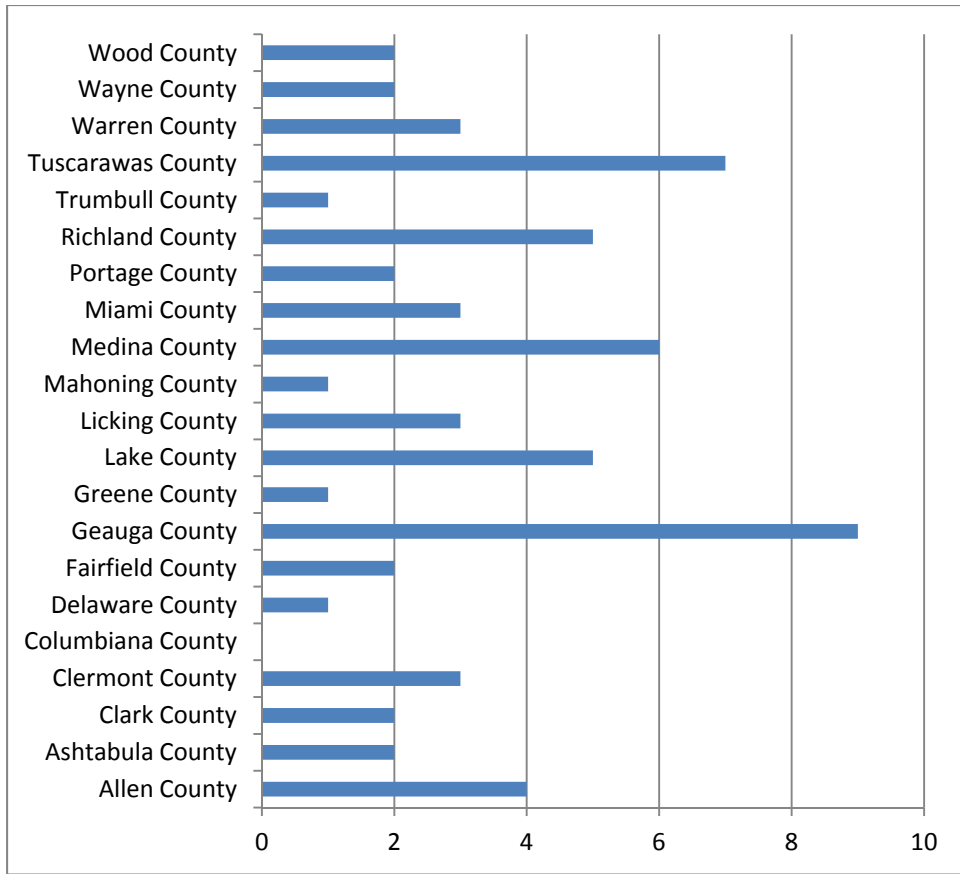County Departments Funding GIS Programs

Figure 7
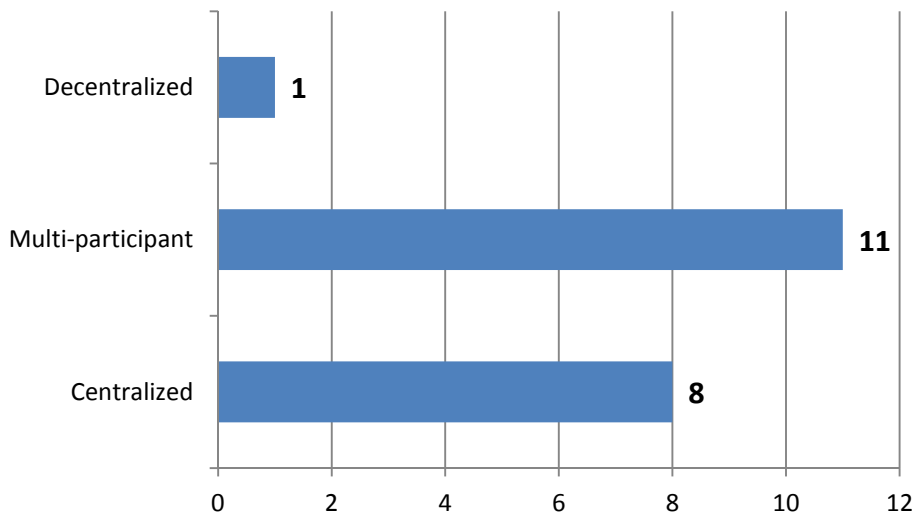Total Number of Funding Departments by County
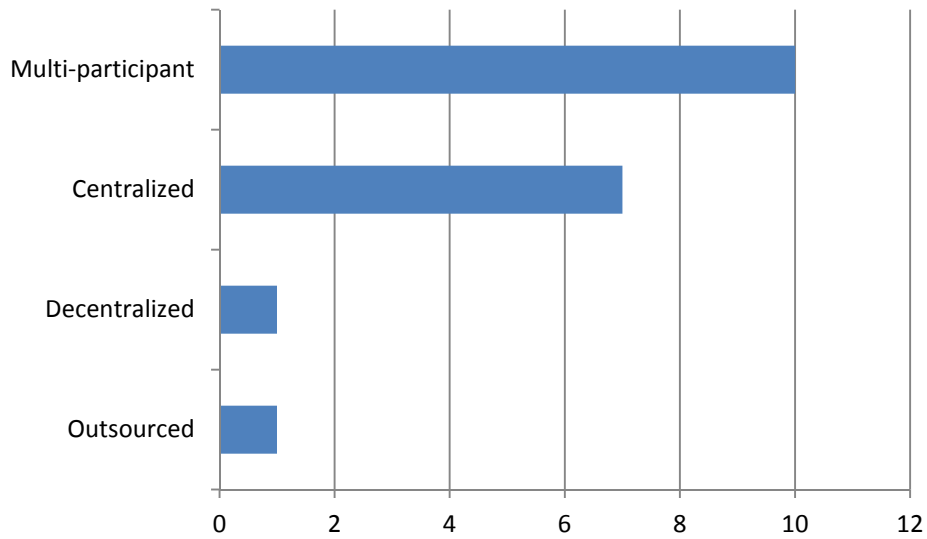

Figure 8
County GIS Program Management Totals

Figure 9
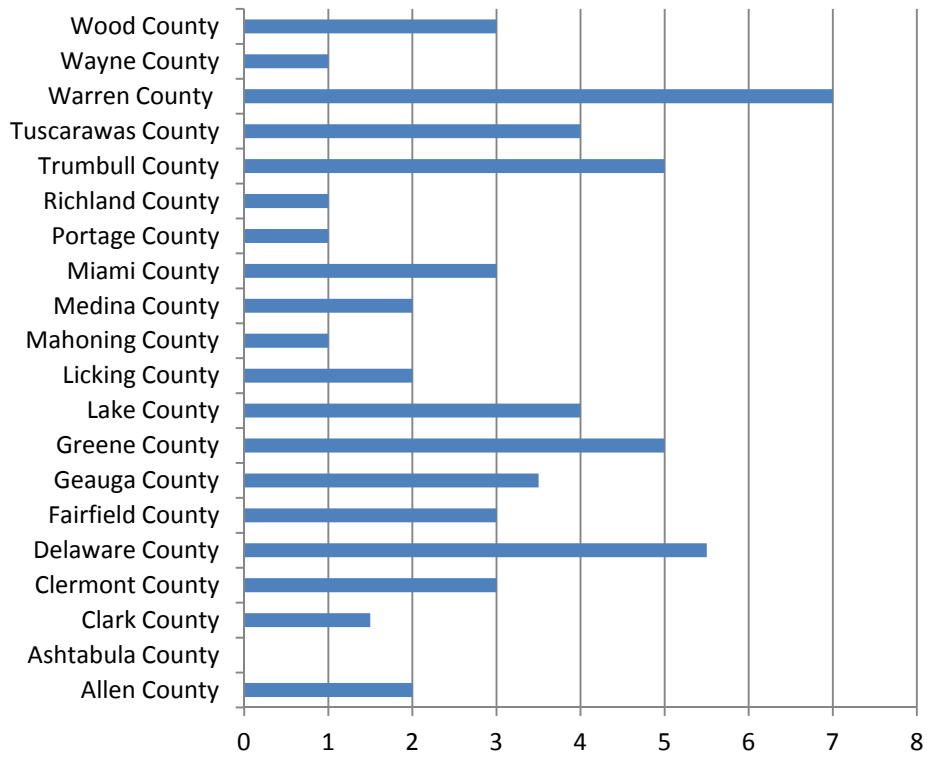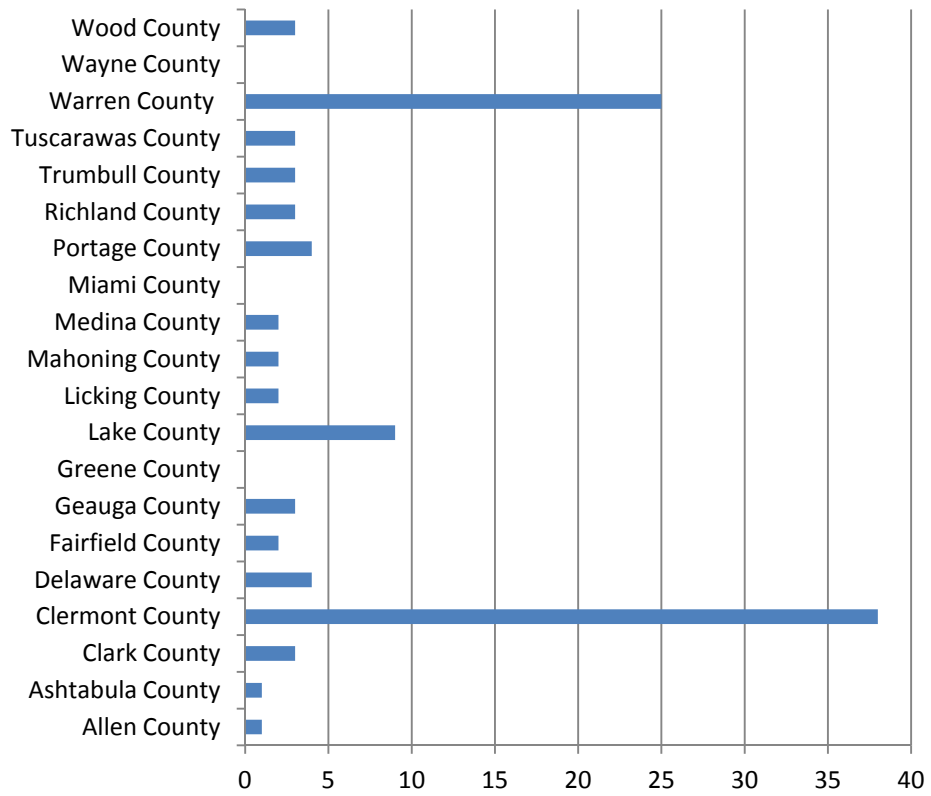County GIS Staff Resource Models

Figure 10
GIS Staff in Managing Dept. by County

Figure 11
GIS Staff in Other Depts. by County