Splitting Parcels. (Antrim)
Need a short paper describing benefits of GIS to various departments in terms of dollars, better info, time savings, etc. (Bay)
Getting public health data and analysis products from the state! (Branch)
Making the right choices, not duplicating efforts or having to redo. (Chippewa)
Planning an aerial fly-over. (Clinton)
Funding for GIS program. (Grand Traverse)
Funding for GIS program. (Lapeer)
Working with the road commission. (Livingston)
I struggle with the problem of people letting me know what information they need to make a decision. I have all this information out there and they say it looks nice, but no one is using it to make decisions. (Newaygo)
Money !!! (Oceana)
Finding funding with no strings attached. (Otsego)
How do I best use the GIS capabilities to help all departments/public? (Roscommon)
ArcIMS, ArcSDE, Geodatabase. (Saginaw)
Dealing with everything!! How are others doing?? (Sanilac)
Educating the old school. (St. Clair)

How Can the State Help County GIS, 2003

Co-opting digital aerials. (Barry)
Providing a paper or demo showing how their data files, enhanced by the local units, can benefit both parties. (Bay)
Providing public health data and analysis; provide funding for parcel data in trade for the data; coordinate ortho data buys. (Branch)
It would be nice to have uniformity throughout the state, the state could provide that guidance, and possibly some funding. (Chippewa)
Aerial flyover - growth / sprawl / preserve studies. (Clinton)
We could use money and/or possibly equipment to have our section corners GPS’d when surveyors are doing remonumentation. Establishing exact corners would really help with accuracy. They could speed up the process by a hundred years or so, too. (Emmet)
Funding. (Grand Traverse, Muskegon, Antrim)
Funding! Making GIS a county mandated service - It is the year 2003, you know! (Lapeer)
Working with the road commission (Act 51); mandated initiatives for GIS in county and local units of government. (Livingston)
Realizing the true benefits of GIS and supporting GIS through funding, or at least supporting GIS by not cutting its funding. If the State would come forward and truly back and support GIS, then many counties would likely follow suit. (Marquette)
We need to coordinate flyovers. (Newaygo)
Aerial photography, funding (Oceana)
$$$$ Investment. (Otsego)
Coordinating training and certification program so all counties are operating on same principals. (Roscommon)
Giving some financial support ear-marked for GIS. (Saginaw)
Grants, funding, education, training, sharing info. (Sanilac)
Leadership / funding. (St. Clair)
They are doing enough (Van Buren)

This survey was compiled by Valdis Kalnins and Jeroen Wagendorp on behalf of MiCAMP. These results are based on the responses to a survey that was solicited in May of 2003 via e-mail to a key GIS contact person in each county. We apologize to any county that did not receive a survey and encourage more counties to respond next year. Comments regarding the survey can be forwarded to vkalnins@allegancounty.org or jwagendorp@allegancounty.org.

MiCAMP Presents

The 2003 Michigan County GIS Survey

Thanks to the following 42 counties for participating in this year’s survey:

Allegan  Kalkaska
Antrim  Leelanau
Arenac  Livingston
Barry  Macomb
Bay  Manistee
Benzie  Marquette
Branch  Mason
Calhoun  Midland
Cass  Muskegon
Cheboygan  Newaygo
Chippewa  Oceana
Clare  Ogemaw
Clare  Otsego
Clinton  Roscommon
Eaton  Saginaw
Emmet  Sanilac
Grand Traverse  St. Clair
Gratiot  St. Joseph
Houghton  Van Buren
Huron  
Ionia  
Iron  

County GIS - Help Wanted, 2003

2003 Michigan County GIS Survey

How Can the State Help County GIS, 2003

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Giving some financial support ear-marked for GIS. (Saginaw)
Grants, funding, education, training, sharing info. (Sanilac)
Leadership / funding. (St. Clair)
They are doing enough (Van Buren)
Finding a way to hire additional GIS staff needed to meet growing demand for services. (Allegan)
Time availability. (Antrim)
Hardware/Software issues. (Barry)
Awareness and time to show the possibilities of GIS given the minimal time allocation. (Bay)
Training current staff. (Benzie)
Migrating GIS program from 12 partners to primarily county with 11 members; make it part of the business cycle. (Branch)
Staffing and publishing our data at a reasonable cost. (Cass)
Money and staff. (Cheboygan)
Time to explore all of the possibilities of GIS and update our system. (Chippewa)
Getting Manalink so I can use maps with a database. (Clare)
Personnel - due to funding. (Clinton)
Putting some form of mapping on the website. (Emmet)
Funding (Grand Traverse)
State revenue sharing cuts have forced our county to look at eliminating non-mandated services such as GIS (Lapeer)
Funding allocation; structural change in funding; data dissemination; need for IMS intranet and eventually internet. (Livingston)
Accuracy of our state plane coordinate data. (Mackinac)
Budget cuts are the biggest concern currently. There is a chance that there will be no more money for GIS in the upcoming years. Additional concerns are: the expense of various GIS products and services (i.e. digital orthophotography), the lack of a centralized GIS department. (Marquette)
Getting past the political barriers and getting a commitment from departments and administration to truly back GIS for development. (Muskegon)
Getting our parcel lines corrected with GPS section corners. (Newaygo)
Get with local units to correct gaps and overlaps in property descriptions. (Newaygo)
Getting people to use GIS information has been a problem. We are attempting to customize ArcIMS to allow them to automatically print labels, change their zoning codes, etc. (Newaygo)
Dealing with the uninformed and uninterested. (Oceana)
Getting support for my GIS program from my county. (Ogemaw)
Understanding full uses of GIS in county environment and getting extra layers completed with limited personnel and time resources. (Roscommon)
Keeping GIS program alive. (Saginaw)
Money for staff, getting the program going and figuring out how to create a parcel layer. (Sanilac)
Funding (St. Clair)
Convincing administration to put maps and tax roll info on web site that is under construction. We have all of the info ready to go, but are meeting lack of interest by administration. Lots of requests are coming in from the public. (St. Joseph)
Funding and staffing. (Van Buren)
### 2003 GIS Salary Survey conducted by St. Clair County

Provided courtesy of Bill Kauffman, Planner III, St. Clair County

<table>
<thead>
<tr>
<th>County</th>
<th>Position Title</th>
<th>Host Department</th>
<th>Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegan (1)</td>
<td>GIS Director</td>
<td>GIS Department</td>
<td>$49,380 - $60,216</td>
</tr>
<tr>
<td>Allegan (1)</td>
<td>GIS Specialist/Programmer</td>
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<td>$34,695 - $42,308</td>
</tr>
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<td>Allegan (1)</td>
<td>GIS Technician</td>
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<td>$28,350 - $34,569</td>
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<tr>
<td>Bay</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$41,000</td>
</tr>
<tr>
<td>Bay</td>
<td>GIS Technician</td>
<td></td>
<td>$10/hr</td>
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<tr>
<td>Berrien</td>
<td>Land Description Coordinator</td>
<td>Planning</td>
<td>$33,900 - $42,900</td>
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<tr>
<td>Berrien</td>
<td>GIS Specialist</td>
<td></td>
<td>$30,826 - $39,000</td>
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<tr>
<td>Berrien</td>
<td>Technician</td>
<td></td>
<td>$23,159 - $29,300</td>
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<tr>
<td>Calhoun (2)</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$30,860 - 38,400</td>
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<tr>
<td>Clinton</td>
<td>GIS Coordinator</td>
<td>MIS Department</td>
<td>$42,000</td>
</tr>
<tr>
<td>Genesee</td>
<td>GIS Specialist Equalization</td>
<td></td>
<td>$50,422 - $57,627</td>
</tr>
<tr>
<td>Genesee</td>
<td>Property Description Technician</td>
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<td>$32,166 - $50,357</td>
</tr>
<tr>
<td>Genesee</td>
<td>GIS/Mapping</td>
<td></td>
<td>$28,903 - $45,878</td>
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<tr>
<td>Jackson</td>
<td>GIS Technician Equalization</td>
<td>IT Department</td>
<td>$31,000 - $38,000</td>
</tr>
<tr>
<td>Jackson</td>
<td>GIS Technician</td>
<td>IT Department</td>
<td>$41,564 - $50,230</td>
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<tr>
<td>Jackson</td>
<td>Project Mgr GIS &amp; Graphic Svcs</td>
<td>Planning</td>
<td>$75,537</td>
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<tr>
<td>Jackson</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$46,800 - $50,000</td>
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<td>Jackson</td>
<td>GIS Technician</td>
<td></td>
<td>$33,800</td>
</tr>
<tr>
<td>Kalamazoo</td>
<td>No Program Established</td>
<td></td>
<td></td>
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<tr>
<td>Lapeer (4)</td>
<td>Map Technician Equalization</td>
<td>IT Department</td>
<td>$25,688 - $32,095</td>
</tr>
<tr>
<td>Livingston</td>
<td>GIS Manager</td>
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<tr>
<td>Livingston</td>
<td>GIS Application Developer</td>
<td></td>
<td>$49,752 - $60,185</td>
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<tr>
<td>Livingston</td>
<td>GIS Technician Equalization</td>
<td>IT Department</td>
<td>$31,000 - $38,000</td>
</tr>
<tr>
<td>Macomb</td>
<td>GIS Specialist</td>
<td>Planning</td>
<td>$26,929 - $33,657</td>
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<tr>
<td>Macomb</td>
<td>GIS Technician</td>
<td>Equalization</td>
<td>$26,603 - $38,126</td>
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<tr>
<td>Macomb</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$49,946 - $64,635</td>
</tr>
<tr>
<td>Macomb</td>
<td>GIS Analyst</td>
<td></td>
<td>$41,561 - $56,528</td>
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<tr>
<td>Macomb</td>
<td>GIS Technician</td>
<td></td>
<td>$31,549 - $40,829</td>
</tr>
<tr>
<td>Monroe</td>
<td>GIS Specialist</td>
<td>Planning</td>
<td>$26,929 - $33,657</td>
</tr>
<tr>
<td>Monroe</td>
<td>GIS Technician Equalization</td>
<td>Planning</td>
<td>$31,549 - $40,829</td>
</tr>
<tr>
<td>Muskegon</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$49,946 - $64,635</td>
</tr>
<tr>
<td>Muskegon</td>
<td>GIS Analyst</td>
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<td>$41,561 - $56,528</td>
</tr>
<tr>
<td>Muskegon</td>
<td>GIS Technician Equalization</td>
<td>Planning</td>
<td>$31,549 - $40,829</td>
</tr>
<tr>
<td>Ottawa</td>
<td>GIS Coordinator</td>
<td>GIS Department</td>
<td>$49,946 - $64,635</td>
</tr>
<tr>
<td>Ottawa</td>
<td>GIS Analyst</td>
<td></td>
<td>$41,561 - $56,528</td>
</tr>
<tr>
<td>Ottawa</td>
<td>GIS Technician Equalization</td>
<td>Planning</td>
<td>$31,549 - $40,829</td>
</tr>
<tr>
<td>Oakland</td>
<td>GIS User Support Specialist</td>
<td>IT Department</td>
<td>$44,314 - $61,032</td>
</tr>
<tr>
<td>Oakland</td>
<td>GIS/CAD Technicians</td>
<td>County Departments</td>
<td>$34,816 - $54,775</td>
</tr>
<tr>
<td>St. Clair</td>
<td>GIS Analyst</td>
<td>Planning</td>
<td>$37,916 - $42,593</td>
</tr>
<tr>
<td>St. Clair</td>
<td>GIS/CAD Application Technician</td>
<td>Equalization</td>
<td>$35,010 - $40,845</td>
</tr>
<tr>
<td>St. Clair</td>
<td>GIS Specialist</td>
<td>Planning</td>
<td>$31,967 - $36,146</td>
</tr>
<tr>
<td>Saginaw</td>
<td>GIS Programmer/Analyst</td>
<td>GIS Department</td>
<td>$45,000 - $55,000</td>
</tr>
<tr>
<td>Saginaw</td>
<td>Property Description Specialist</td>
<td></td>
<td>$28,000</td>
</tr>
<tr>
<td>Washtenaw</td>
<td>GIS Coordinator</td>
<td>Planning</td>
<td>$49,000 - $65,000</td>
</tr>
<tr>
<td>Washtenaw</td>
<td>GIS Technician I (Technician)</td>
<td></td>
<td>$36,855</td>
</tr>
<tr>
<td>Washtenaw</td>
<td>GIS Technician II (Analyst)</td>
<td></td>
<td>$36,855</td>
</tr>
<tr>
<td>Washtenaw</td>
<td>GIS Technician III (Specialist)</td>
<td></td>
<td>$56,297</td>
</tr>
</tbody>
</table>

(1) Figures from 1999 Salary Survey; (2) Hourly rates with six steps from $14.74/hr to $18.46/hr; (3) Multi-jurisdictional venture creating GIS Authority funded through variety of public sector agencies including the County; (4) Hourly rates with four steps from $12.35/hr to $15.43/hr

### Status of County GIS Programs 2003

- Investigating (5)
- Planned (3)
- Yes (51)

#### Counties with GIS Programs

- Allegan
- Bay
- Berrien
- Calhoun (2)
- Clinton
- Genesee
- Jackson
- Jackson GIS Authority (3)
- Kalamazoo
- Lapeer (4)
- Livingston
- Macomb
- Monroe
- Muskegon
- Ottawa
- Oakland
- St. Clair
- Saginaw
- Washtenaw

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(1) Figures from 1999 Salary Survey; (2) Hourly rates with six steps from $14.74/hr to $18.46/hr; (3) Multi-jurisdictional venture creating GIS Authority funded through variety of public sector agencies including the County; (4) Hourly rates with four steps from $12.35/hr to $15.43/hr
Program budgets proved difficult to estimate. In some cases counties entered no budget even though they had 1 or more FTE’s devoted to GIS. In these cases, an estimated salary of 42,000 (including benefits) was given per FTE. Budget estimates were also difficult for counties where GIS activities occur in multiple departments.

Program revenues were difficult to calculate for counties where GIS occurs in multiple departments. For example revenues from aerial overlays sold by Equalization may have been reported but not zoning maps sold by Planning.
Hardware Used in County GIS Programs

Monitor Sizes in Use:

- 17"
- 19"
- 21"

Number of Counties: 0 5 10 15 20 25

Counties Using Dual Monitors:
- Allegan County
- Clinton County
- Huron County
- Macomb County
- St. Clair County

Counties With Large-format Scanners:
- Allegan County*
- Macomb County
- Marquette County*
- Newaygo County*
- St. Clair County*  
  *Services Available

Counties With Sub-Meter GPS:
- Allegan County*
- Barry County*
- Livingston County*
- Macomb County
- Muskegon County
- St. Clair County
  *Equipment Available

Plotters in Use:
- HP Plotter 26
- Epson Plotter 1
- Other Plotter 1

Computer Processors:
- Pentium IV 12
- Pentium III 13

Software Used in County GIS Programs

2003

Primary GIS Software Used in County GIS Program:
- N/A or No Response (50)
- AutoCAD (1)
- ESRI (24)
- MapInfo (8)

Number of Counties Using Various Software Programs:

- Cmap
- AutoCAD
- MapInfo
- ArcINFO
- ArcView 8x
- ArcGIS
- ArcView 3x

Number of Counties Using Various Software Programs: 0 2 4 6 8 10 12 14 16 18 20 22 24