IGIC GIS Interviews Report
Northern Iowa

Legend
Interviewed Counties Northern Iowa
Counties

GIS Report Prepared by Pete Buckingham Consulting, Inc 2008

GIS Interview Report
Northern Iowa
For: The Iowa Geographic Information Council

Prepared by: Pete Buckingham Consulting, Inc.
2008

The following reports were created with data collected in phone interviews with officials in each county, answering questions regarding GIS, aerial photography, documentation and other relevant information. Interview questions were created in conjunction with IGIC board members and PB Consulting, Inc.

Purpose: The purpose of this project was to collect accurate information in regards to GIS data availability in each county as requested by IGIC and to assess their technical and data situations, while determining basic needs to assist their progression in Geographic Information Systems.

Explanation of Ratings: For the purposes of this report, a ratings system was developed, in which counties use and interest in GIS technology were evaluated. This scale is 1-5 with 1 being lower functioning and 5 being advanced users.
1. Very little interest or use for GIS
2. Interested in GIS, or have GIS but not using it
3. Have GIS, parcel data linked to real estate and basic tasks beyond maintenance
4. High end use of GIS, layer creation and full time GIS staff member
5. Highest End GIS Users in State, larger, highly functioning GIS Staff

Key Findings:

Total Counties Interviewed: 14
Counties without GIS: 10
Counties with GIS: 4
Counties with GIS contracts: 4
Oldest Orthophotography Reported in Use:
O'Brien County reported that they currently have no aerials.
Osceola County reported 1978 aerial map books in use.
Ida County also uses aerial books thought to be older than 1980, after theft of their 1988 flight books.
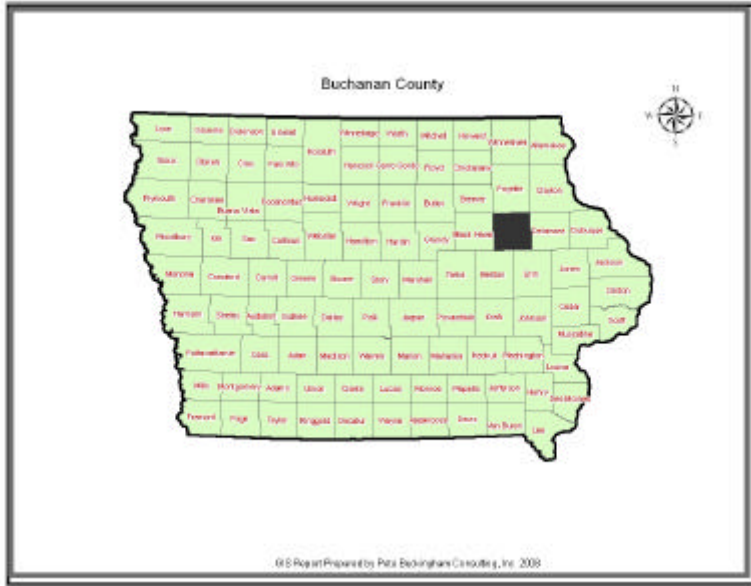
PB Consulting, Inc has determined based off of information expressed in interviews, that of the counties without existing GIS or contracts, Clinton and Palo Alto are the most likely to be next to acquire the technology. Palo Alto County was cleared to seek vendors, while the City of Clinton already has existing GIS, and the county has monumentation and updated orthophotography.

Of the counties interviewed, with existing GIS or under contract, four (4) reported having at least one (1) person dedicated to GIS at least part time. Clayton County reported persons in three (3) offices with at least part to half time GIS duties. Three (3) counties expressed concerns that GIS positions may not be funded after GIS was delivered.

PB Consulting, Inc found during this interview that two (2) of the four (4) counties (Buchanan and Hancock) with existing GIS had little or no interest in putting their parcel information online. Hancock County went further to explain that they would not sell their parcel data, would not put it online and felt their tax payer benefited by people having to physically come to their courthouse to retrieve records.

Four (4) counties without GIS reported regular use of the IGIC-ISU Ortho Web server to view or download digital aerials. All other counties without existing GIS or orthophotography or relying on outdated aerials were emailed links to the IGIC Ortho web server and NRGIS library websites.

PB Consulting Inc's recommendation is that IGIC explore allocating E911 data for basic GIS use in these counties. Phase II compliance for E911 requires essential GIS layers such as intelligent road centerline files, townships, corporate boundaries, fire districts and in some cases, GPS information on driveways. This data likely exists in many counties who don't believe they have any GIS data available, and has already been funded by their tax payers.

Buchanan County Iowa

County Num: 10
County Seat: Independence
Parcels: 20,000
Splits per Year: 100-300
GIS (Y/N) Y

GIS Rating (1-5) 2
Progressive in GIS 1= least-5= most.

Technical Contact: Ray McDonald
IT (319)334-5989
Engineer: Brian Keierleber
(319) 334-6031
Assessor:Brad Harms
(319)334-2706
Auditor:Cindy Witt
(319)334-4109

Aerial Photography/ Monumentation:
ASI installed 61 GPS monuments in 2002 and 2 HARN points were used. Orthophotography was flown in spring 2002, 1:400 county wide and 1:100 urban flights, however resolution is unknown.

Parcels:
Buchanan County has approximately 20,000 parcels with splits varying from year to year in an estimated range of 100-300 splits per year. Parcels are maintained by Sidwell off site. The PIN is based off of a twp-range-sec-block-pin system.
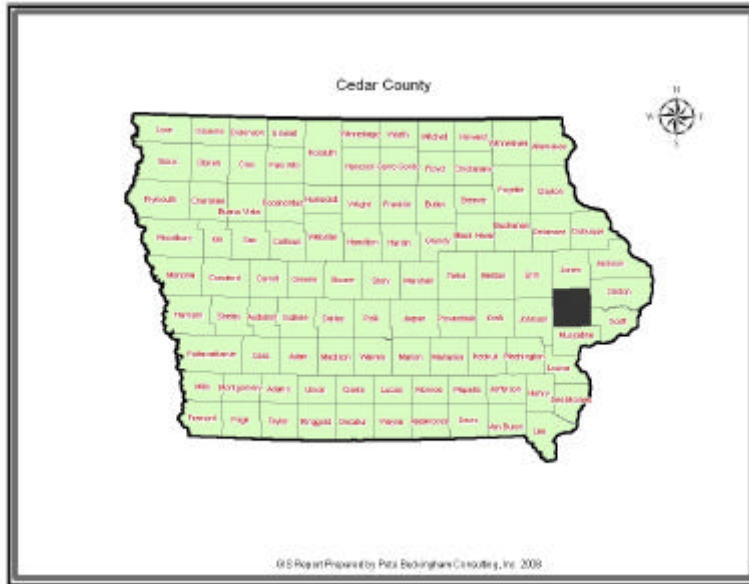
Office Reports:
Assessor Brad Harms inherited the GIS system that was implemented by a previous assessor. Brad indicated that his experience was in assessment and not technology and that he might not be the biggest proponent of GIS. Brad indicated that a website had been constructed, but was deemed unreasonable to have hosted.

Engineer Brian Keierleber indicated that he was somewhat familiar with GIS uses but isn't doing much of anything with it. He felt there was interested in GIS, but existing staff, technical abilities in the county and lack of training and funding were huge concerns and obstacles to advancement.

IT director, Ray McDonald expressed some frustration with the GIS. He indicated the lack of training was an obstacle in the county. He indicated that there were some problems between Buchanan county and the vendor which appeared to be relating to communication issues and misunderstanding of expectations of the delivered product. Ray indicated the centerline has no attribute information, that the county wanted to maintain tight control over the data and wasn't receptive to putting their data out on the web.

County Suggestions: Across the board, indications of lack of coordination and training funding were the major obstacles.

Cedar County Iowa

County Num: 16
County Seat: Tipton
Parcels: 19,000
Splits per Year: 100
GIS (Y/N) Y(contracted-Midland)

GIS Rating (1-5) 2
Progressive in GIS 1=least-5=most

Technical Contact:

Engineer: Robert Fangmann
       (563) 886-6102
Assessor: Dan Lett
      (563)886-6413
Auditor: Cari Gritton
      (53)886-3168

Aerial Photography/ Monumentation:

Aerial photography currently exists in paper form from a 1990 flight containing 1:100 and 1:400 scale pages. Cedar County has a contract for April 2008 1:200, 6" color flights county wide. Dan Corbin, Inc is completing GPS monument network of 3x3mi grid. The engineer expressed willingness to share monumentation if no liability for county and per Board of Supervisors approval.
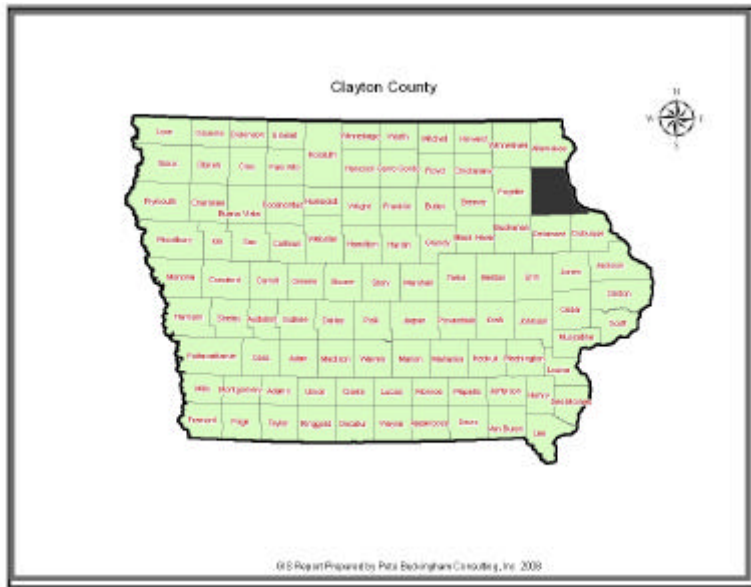
Parcels:

Parcels are split by hand in the assessor's office and sent to Sidwell for digital splits. Cedar County has approximately 19,000 parcels with an average of 100 spits per year. PIN s are 10 digits following the 01-01-100-001 format.

Office Reports:

Assessor, Dan Lett came to the county from Vanguard 2 ½ years ago. At time, county didn't have Internet or email access. Since Dan's arrival, they have added a deputy assessor, added Internet and email, have signed contracts for Orthophotography and a GIS contract with Midland GIS due in 2009. Dan reported very little opposition to GIS. While he is not a "computer guy" sees the value in GIS. In the mean time, some offices have been relying on information and aerials available online, on sites such as IGIC's.

Engineer, Robert Fangmann is very excited about GIS and has lobbied for it for years. GPS monuments are installed for spring flight. His office relies on and uses the 2002 CIR aerials they download and use in *AutoCad* and their office is a heavy user of CAD. He was concerned about the Board of Supervisors not allocating funds for a GIS Coordinator. Technical assistance and training opportunities were where he felt they could be helped the most by IGIC. While Cedar County wanted autonomy regarding the first aerial flight, they are open to a regional project in the future.

County Suggestions: Technical Support and Training.

Clayton County Iowa:
County Num: 22
County Seat: Elkader
Parcels: 28,000
Splits per Year: 200+
GIS (Y/N) Y

GIS Rating (1-5) 3
Progressive in GIS 1=least-5=most

Technical Contact:
Eli Garms, Jen Garms, Andy Loen

Engineer: Rafe Koopman
          (563)245-1782
Assessor: Larry Hauser
          (563)245-1782
Auditor: Dennis Freitag
          (563)245-1106

Aerial Photography/ Monumentation:

Clayton County has digital orthophotography flown in 2002. The flight included 1:400 county wide 2' and 1:100 urban scales. GPS monuments were installed by ASI in a 3x3mi grid in 2001. They have acquired a grant to acquire Pictometry oblique photography in 2008.
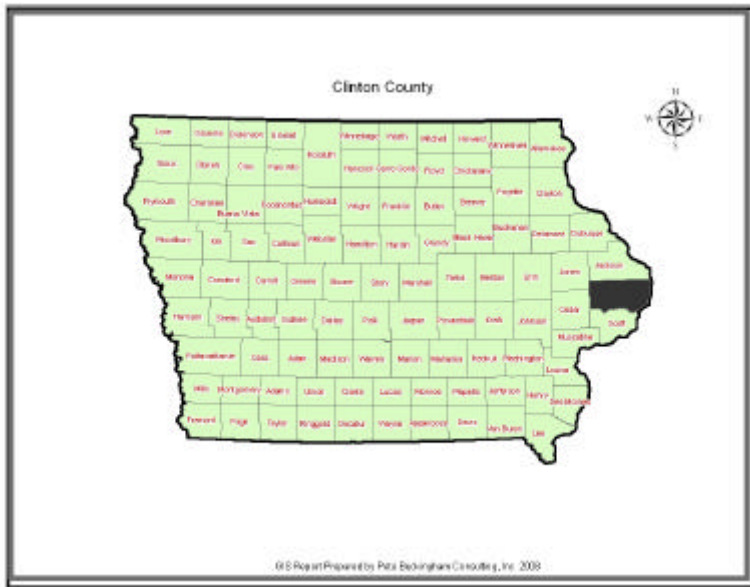
Parcels:

Clayton County has approximately 28,000 parcels and splits around 200 parcels per year. Parcel maintenance is done in the assessor's office using Sidwell Parcel Builder. PIN s are based off of the 10 digit Sidwell system, but are different due to special legal descriptions due to some Spanish Land Grant areas.

Office Reports:

Assessor, Larry Hauser indicated that Clayton County has had a GIS system since 2002. They have part time GIS persons in the assessor, auditor and engineer's offices. He was comfortable with the level of GIS ability and production in the county. His biggest concerns related to funding and continued maintenance of the project on a high level.

Engineer, Raef Koopman was very familiar with GIS and has Eli Garms on staff. Eli does GIS work for his office as well as E911. Raef wasn't positive as to the number of monuments in the county in their 3x3mi grid, but indicated he would be willing to share what he has for the LiDAR project. The concern he expressed related to lack of regulation and state standards for coordinate systems used in GIS and surveying. He felt that with people using different coordinate systems it caused confusion and potential conflict in map accuracy.

County Suggestions:

Clinton County

Clinton County Iowa:
County Num: 23
County Seat: Clinton
Parcels: 22,200(county)
          12,500(city)
Splits per Year: 150
GIS (Y/N) N(city of Clinton has GIS)

GIS Rating (1-5) 2
Progressive in GIS 1=least-5=most

Technical Contact: Rolly Ehm

Engineer:Todd Kinney
        (563)244-0564
Assessor: Roland Ehm
        (563)244-0569
Auditor: Charlie Sheridan

Aerial Photography/ Monumentation:

Clinton County obtained digital 6" resolution orthophotography from Sanborn in 2006. GPS monuments were placed in 2006 in a 6x6mi grid, with additional points in the city of Clinton. The county has significant elevation changes and wanted tight control for the orthophotography.
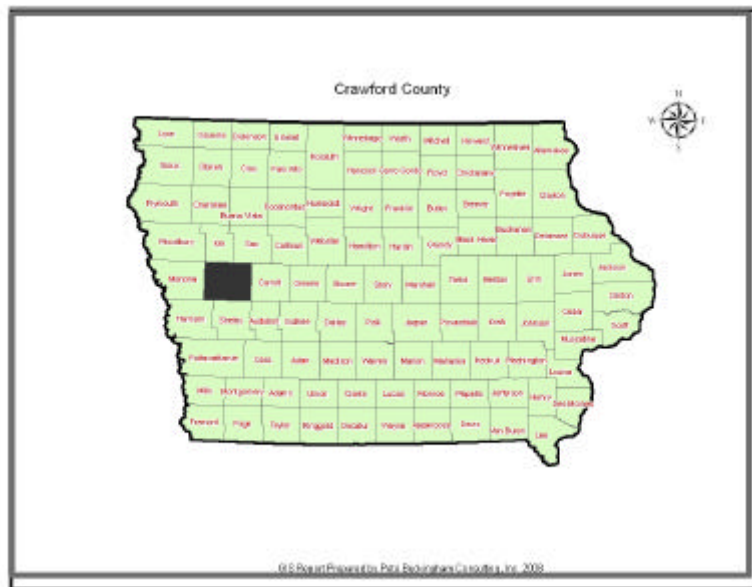
Parcels:

The City of Clinton has 12,500 parcels currently in GIS. Clinton County does not, but has their 22,200 parcels maintained in digital form (*Microstation*) via Sidwell through the assessor's office. Paper copies of splits are maintained in offices. The county uses a unique 10 digit PIN, that is alphabetic for townships with numbers designating the parcel.

Office Reports:

Assessor, Rolly Ehm reported that plats are maintained in *Microstation* by Sidwell at this time. The parcels had been 5-8 years behind and between that and reappraisals their funds have been tapped. He expressed interest and wants GIS, and has begun putting funds aside for GIS. They have new 6" Orthos from 2006 that should be an excellent base. They indicated a willingness to share the GPS monument grid information per BOS approval. Based on existing digital mapping and aerial photography, Clinton County appears closer to having GIS than they believe.

Engineer information via Engineer Assistant, Angie expressed interest in GIS from their office. They have relied on the 2002CIR as well as the IGIC/ISU website for information aerials. This office stays up to date with technology as shown by *Autocad 2008*. They have some "IIW" based projects for road centerlines and ROW. They had a vendor created project based on IIW data created for asset management to collect sign, bridge and culvert information. The engineer's office was more positive about sharing the GPS monument data, especially for the LiDAR project.

County Suggestions:

Crawford County

Crawford County Iowa
County Num: 24
County Seat: Dennison
Parcels: 22,000 (13,000 AG)
Splits per Year: 100
GIS (Y/N) Y(Contracted: Sidwell
ag parcels only)

GIS Rating (1-5) 2
Progressive in GIS 1=least-5=most

Technical Contact: Duane Zenk
Assessor: Duane Zenk
(712)263-3447
Engineer: Paul Assman
(712)263-2449
Auditor: Cecilia Fineran
(712)263-3045

Aerial Photography/ Monumentation:
Crawford County has existing Orthos (date ?) for urban areas with 6" resolution. A high flight 1:400 scale county wide flight is contracted for 2008. Existing monumentation was 1 per township, with 8 additional monuments being added for this spring for a total of 28. They are willing to share the network for use in LiDAR. Assessor and Engineer's office both rely on the 2002CIR for county wide aerials.

Parcels:
Crawford County has approximately 22,000 total parcels, with 13,000 Ag parcels. The Auditor's office maintains paper map splits, which are scanned by Sidwell. The PIN system is an in house number comprise of a mixture of alphabetic township designations, districts and parcel numbers.
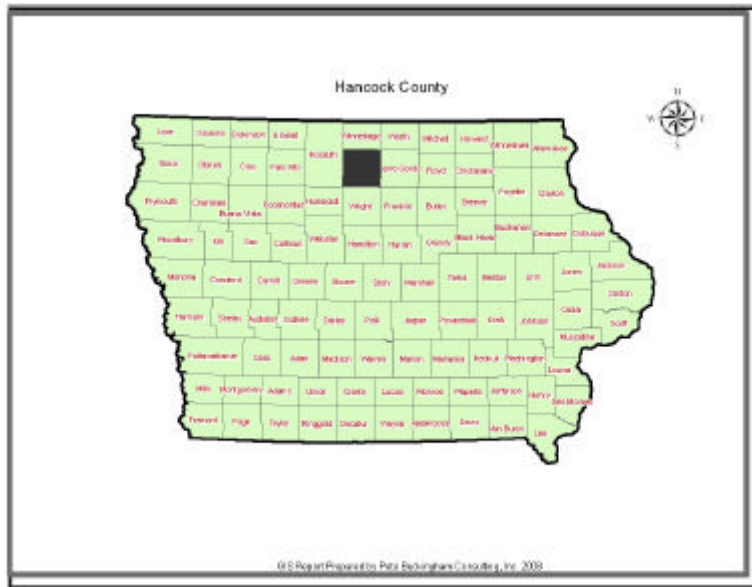
Office Reports:
Engineer, Paul Assman was very straight forward in his opinions. He loves GIS technology and its capabilities, but doesn't see how its workable or affordable, and has concerns about maintaining it. He knows the assessor is contracting some GIS work, but doesn't see how the project will benefit his office. He would like to see a document showing return on investment, and feels IGIC could be helpful by providing Funding(grants), tech support and affordable training.

Assessor, Duane Zenk is working towards acquiring GIS. He reported that he has contracted Sidwell to map the 13,000 Ag parcels only, which will be used in conjunction with their new soil survey through the ag-land assessment program he is buying. Previous 6" 1:100 flights were supplemented by free aerials from online (2002CIR and NAIP), and the contractor is adding eight (8) monuments and flying a high altitude flight of the county for mapping purposes. Duane hopes to continue to build on his project and add non-ag parcels in the future.

County Suggestions:
Engineer: Documentation of Return on Investment, Funding, Technical Support and Cheap Training.

Hancock County

Hancock County Iowa

County Num: 41
County Seat: Garner/Forest City
Parcels: 16,000
Splits per Year: 125
GIS (Y/N) Y (converting vendors)

GIS Rating (1-5) 2.25
Progressive in GIS 1=least-5=most

Technical Contact: Michelle Isman

Assessor: Marianne Welsch
       (641)923-2269
Engineer: J William Waddingham
       (641)923-2243
Auditor: Deb Bellinghausen
       (641) 923-3163

Aerial Photography/ Monumentation:

Hancock County has digital orthophotography flown in 2006. The scales are 1:400 rural and 1:100 but I wasn't able to determine the resolution. The county plans new flights each 5 years, with the next scheduled flight in 2011. GPS monumentation was set "within the last 10 years" (6x6?) and prior to the 2006 flight was updated to 3x3mi grid. They indicated a willingness to share monumentation for the LiDAR project subject to Board of Supervisors approval.

Parcels:

The 16,000 parcels are maintained in the Auditor's office using ESRI and vendor software. The GIS is being converted to a different vendor at this time. The current PIN system was developed in the county. The parcels are linked to vendor data for in house use only.
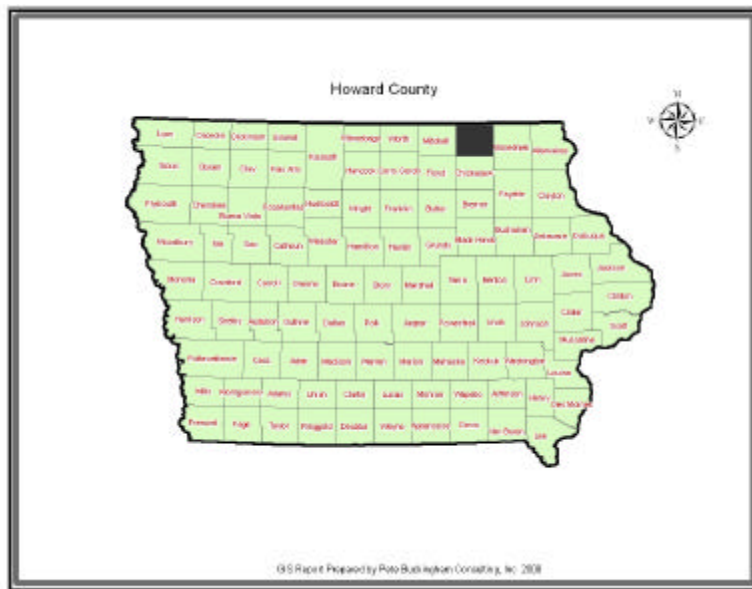
Office Reports:

Assessor, Marianne Welsch indicated the orthos were from 2006, they were changing vendors at this time, and referred me to the Auditor.

Auditor, Debra Belllinghausen reported that her Deputy, Michelle Isman was spending about ¾ of her time on Parcel maintenance. They had GIS from a 2000 contract, but are changing vendors for the FARMS program. They worked with Cerro Gordo and Kossuth Counties on the latest orthophotography flight in 2006, and would consider it again. Debra indicated that they were perfectly happy using GIS for parcels and didn't need any of the other products or services.

Comment of Note:
They have no interest in putting the GIS on-line and will not sell their GIS data. They feel that it is better for their tax payers if users of their information have to physically come to their county to get data, particularly out of town users.

County Suggestions:

Howard County

Howard County Iowa
County Num: 45
County Seat: Cresco
Parcels: 13,000
Splits per Year: 25-50
GIS (Y/N) Y (contracted)

GIS Rating (1-5) 2
Progressive in GIS 1=least-5=most

Technical Contact:
Jeff Freidhof-Asst Engineer

Assessor: Thomas Mullen
            (563)547-3409
Auditor: Adolph "Mick" Gamez
            (563)547-2880
Engineer: Thomas Schoellen
            (563)547-2620

Aerial Photography/ Monumentation:
Howard County has digital Orthophotography. The entire county was flown in 2002 with 2' 1:400 scale imagery provided. 1:100 6" imagery was taken in the spring of 2006 but no plans are in the works for additional updates at this time. GPS monumentation exists in a 6x6mi grid, and additional GPS locations of other section corners have been collected. They would be willing to share the data for use in the LiDAR project as well as inclusion on the DNR website.
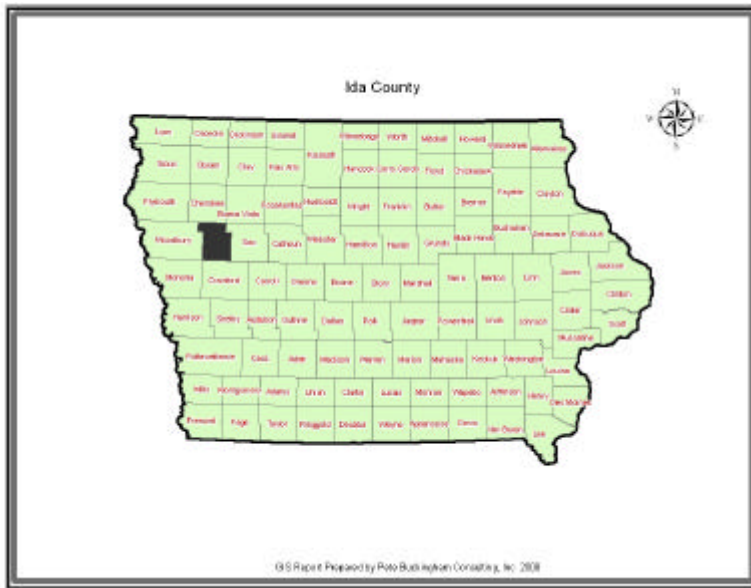
Parcels:
Howard County has approximately 13,000 parcels and has 25-50 splits each year. Parcels are currently maintained by a vendor but its undecided where maintenance will be done when the GIS is delivered. Arc Editor resides in the Assessor's office, so that may be the location. Jeff Freidhof related that more emphasis was made on section lines and accuracy than in typical project.

Office Reports:
Assistance Engineer, Jeff Freidhof is also the current GIS person in Howard County. He reported that the GIS is under the control of the GIS committee which consists of the Engineer, Assessor, Auditor, himself and the Board of Supervisors. Jeff asked while discussing this interview, if the reports would be made available to everyone - to participating counties? Parcels are currently maintained by Sidwell, and while the Assessor's office has ArcEditor, its not certain if they will do parcel maintenance in the future. Howard county Engineer's office has use of a survey grade GPS, and has collected section corners for use in this project. According to Jeff, their contract also allows and includes scans and links in the GIS of subdivision plats as well as corner certificates. Jeff indicated that the major concerns they had related to continued funding for their project, training and technical assistance.

County Suggestions:
Technical assistance and training are the areas in which they feel they could benefit outside of funding of a coordinator.

Ida County Iowa

County Num: 47
County Seat: Ida Grove
Parcels:11.368
Splits per Year: 25
GIS (Y/N) N

GIS Rating (1-5) 1
Progressive in GIS 1=least-5=most

Technical Contact:
Assessor
Marva Bennigsdorf (712)364-3622
Engineer
Ed Tice (712)364-2920
Auditor:
Lorna Steenbock (712)364-2920

Aerial Photography/ Monumentation:

Ida County reports their Aerial photography situation as a problem. The Assessor and Auditor rely on copies of older paper maps because their books were stolen in the 1980's. The engineer's office reported that their aerials in house may be older than 1980, but no date of flight was given. Patrick in the Engineer's office said that Ida County Secondary Roads relies on free aerials from the Internet, and mentioned that they use Google earth as well as others. He indicated that they weren't very effective for their work. Ida County does not currently have a control network.
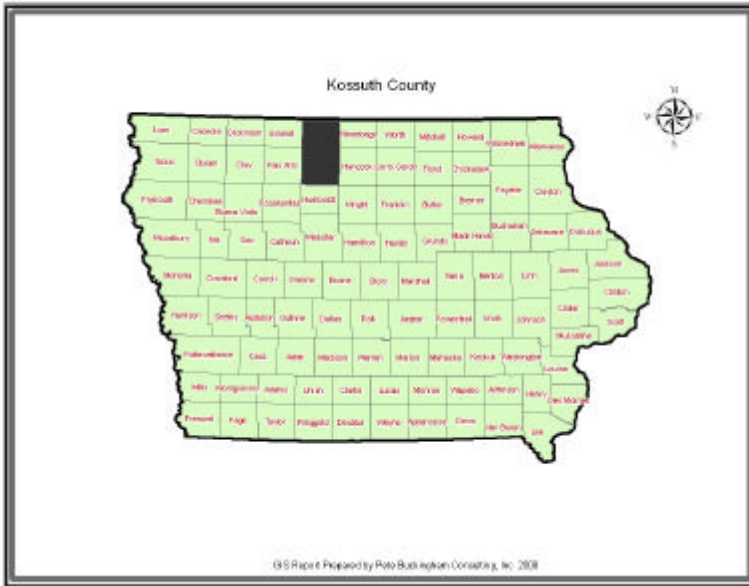
Parcels:

Ida Counties 11,368 parcels are maintained by the Assessor who reported their current paper maps and accuracy as "bad". She said that Ida County had only 12 townships, and is one of the smaller counties in the state. She indicated that she and her secretary had to "get by" with what they had.

Office Reports:

Assessor Marva Bennigsdorf reported that she is very interested in GIS and has attempted to gain support and funding, but the board has chosen not to support it to date. Ida is a small county spatially, with only 12 townships. She had collected funds for GIS/orthophotography for 2 years but the Board of Supervisors took that money to use for other budget needs. She indicated that the aerials her office uses are older than 1980 but wasn't sure of the date. The originals were stolen and these are copies of an older flight. She has one employee in her office and describes the existing maps and plats as "bad". While 25 parcel splits per year is typical this year has been busier due to an ethanol plant. They are technologically behind due to funding and don't have assessor data on www.Iowaassessors.com.

Engineer Ed Price, referred me to his assistant, Patrick, who reported that he knows about GIS/GPS but doesn't see how they could afford or justify expense of GIS/GPS. They use Google Earth and other free online aerials as needed. They do have *Autocad 3D* civil design but rely mostly on DOT standard designs.
County Suggestions:

Kossuth County

GIS Report Prepared by Pete Buckingham Consulting, Inc. 2008

Kossuth County Iowa

County Num: 55
County Seat: Algona
Parcels: 25,000
Splits per Year: 200
GIS (Y/N) Y(contracted)

GIS Rating (1-5) 2
Progressive in GIS 1=least-5=most

Technical Contact: Doug Miller
Assessor:
Donald Patton (515)295-3857
Auditor:
Joann Bormann (515) 295-2718
Engineer:
Richard Schiek (515)295-3320

Aerial Photography/ Monumentation:

While some offices are using 1988 paper maps, Kossuth County acquired orthophotography in 2005. They have digital B/W 1:100 and 1:400 with 2' and 6" pixels respectively. Kossuth County is larger than many with 16 townships, but has 3x3mi GPS monument control with between 150-175 control points in the county. Doug Miller of the Engineer's office indicated they would be able to share their monuments for the LiDAR project.
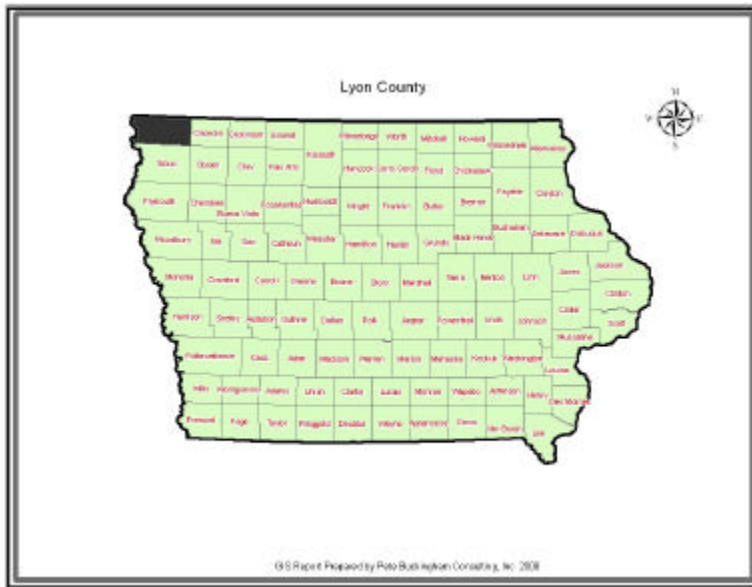
Parcels:

Kossuth County's 25,000 parcels are maintained by Sidwell via contract. They feel the county has decent accuracy on the existing maps, but it should be improved with the parcel conversion to GIS. The Auditor and Assessor offices both rely on paper tax map books.

Office Reports:

Assessor Donald Patton is aware of GIS, reported the county's aerial flight in 2006 but that they still use 1988 paper maps in his office. They are contracted with Sidwell for parcel conversion. Kossuth is a very large county geographically. Donald indicated the county intended to hire a full time GIS coordinator later, after the project was delivered.

Assistant Engineer Doug Miller is also the county network administrator. He is the technical contact for the county. Doug said Kossuth County has a very extensive 3x3 mile GPS grid. They rely on the DOT centerline file for now. PB Consulting emailed a link to the NRGIS website so they could acquire and work with some GIS data prior to parcel delivery. Doug mentioned documentation to support them regarding Return on Investment for GIS. The Engineer will be retiring soon, and Doug may fill that position, making a GIS person more needed. They do use *Autocad Civil 3D* for basic designs of culverts, bridges and road profiles. They have acquired GPS equipment and hope to begin collection of points soon.

County Suggestions: Technical support, Training and a regional User group.

Lyon County Iowa

County Num: 60
County Seat: Rock Rapids
Parcels: 10,000
Splits per Year: 150
GIS (Y/N) Y

GIS Rating (1-5) 2.5
Progressive in GIS 1=least-5=most

Technical Contact:
Connie (Auditor's office)
Assessor:
Fred Christians (712)472-3592
Auditor:
Wayne Grooters (712)472-3713
Engineer:
Jeffrey Williams (712)472-8230

Aerial Photography/ Monumentation:

Lyon County has digital orthophotography from 1999 in 1:100 and 1:400 flights. They will be acquiring Pictometry oblique photography in Spring 2008. They do not currently have any existing GPS monument network.
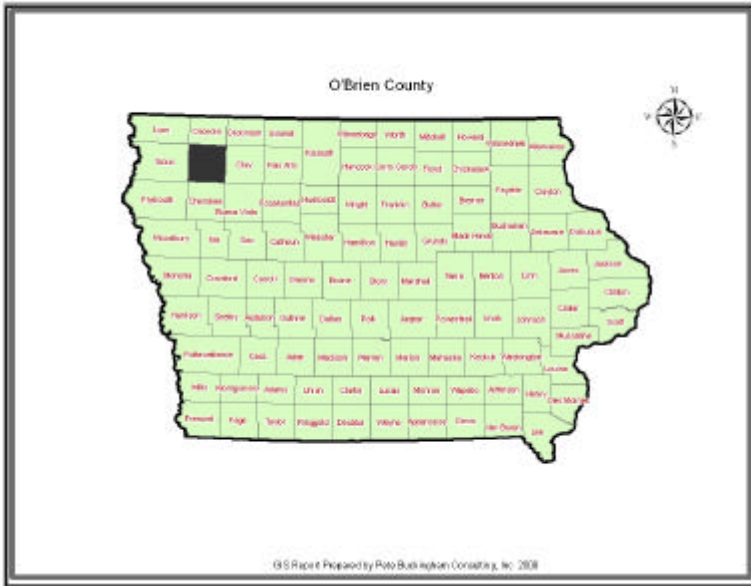
Parcels:

Lyon County's 10,000 parcels are maintained in the Auditor's office by Connie in a digital Schneider Corp GIS. They feel the accuracy is fine, and they have implemented the Schneider PIN system. Their parcels are linked to databases in the GIS.

Office Reports:

Assessor Fred Christians referred me to Connie in the Auditor's office for all GIS questions.

Auditor's office GIS Technician, Connie is the plat clerk and does all parcel maintenance as well as some GIS functions and queries. Lyon County acquired a Schneider Corp GIS in 1999/2000. They anticipate a 2 day consultation and training with the vendor this June. They do NOT have the Beacon GIS website, but they do have GIS with some additional layers from those delivered. Lyon County is scheduled to acquire Pictometry oblique photography in Spring 2008.

Engineer, Jeff Williams informed me that Lyon County has no GPS monumentation, which leads to concerns over accuracy of the orthophotography as well as parcels constructed on them. He indicated that the existing orthophotography does not line up with parcels. He has a self taught GIS person in his office, Kyle, who has created a few additional GIS layers and is working on a sign inventory. The don't have the money and Jeff doesn't know that he feels regular orthophotography is an essential component for his office and he is not contributing for the oblique photography this spring. PB Consulting emailed Kyle and Jeff with links to the NRGIS library and IGIC Ortho websites.

O'Brien County Iowa

County Num: 71
County Seat: Primghar
Parcels: 18,000
Splits per Year: 100
GIS (Y/N) N

GIS Rating (1-5) 1
Progressive in GIS 1=least-5=most

Technical Contact: Lowell Dykstra

Assessor:
Lowell Dykstra (712)957-3205
Auditor:
Barb Rohwer (712)957-0425
Engineer:
Steve Struble (712)957-3425

Aerial Photography/ Monumentation:

O'Brien County officials reported no existing aerial photography. There are none in the Auditor's office and the only maps in the Assessor's office are 1970's era soil maps. They reported that on occasion they have used websites, possibly including the IGIC Ortho website when they need to view an aerial.

Parcels:

The 18,000 parcels are maintained by hand on paper maps in the Auditor's office, while the splits are kept in Vanguard software in the Assessor's office. Parcel numbering for rural parcels are 10-digit geographically based, but town numbers are not and are 15 digits.
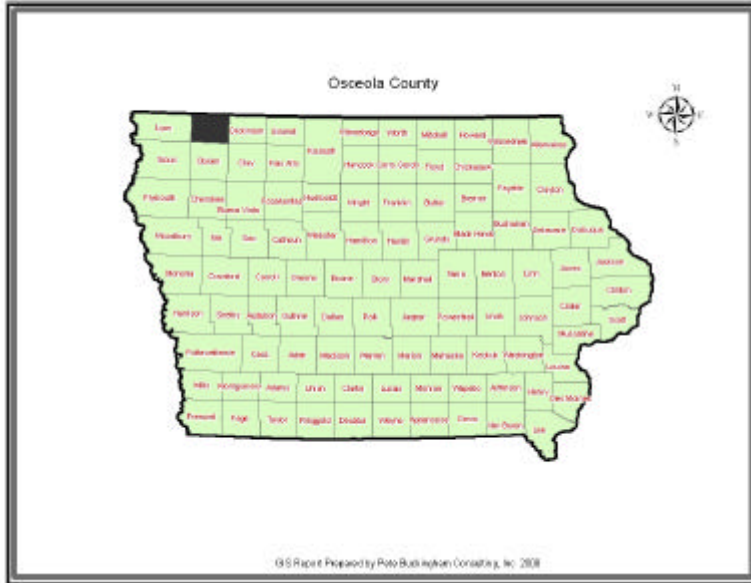
Office Reports:

Assessor's office reports were courtesy of the deputy, Lori. She reported that they have no GIS, no aerial photography in their office or the Auditors. Lowell Dykstra is interested in GIS and has put some money aside for it, but it is considered too expensive to justify now. After discussion, I emailed links to the NRGIS and IGIC Ortho server websites for their use until something better is available.

The Engineer's assistance spoke with me briefly, and indicated they had no monumentation, no orthophotography, and didn't report anything regarding CAD, design, or usage.

County Suggestions:

None made at this time.

Osceola County

GIS Report Prepared by Pete Buckingham Consulting, Inc. 2008

Osceola County Iowa
County Num: 72
County Seat: Sibley
Parcels: 11,000
Splits per Year: 50
GIS (Y/N) N

GIS Rating (1-5) 1
Progressive in GIS 1=least-5=most

Technical Contact: Barb Echter
Assessor:
Sharon Wolter (712)754-3438
Auditor:
Barb Echter (712)754-2241
Engineer:
Tom Snyder (712)754-2303

Aerial Photography/ Monumentation:
Osceola County uses aerial photography from 1986 in paper book form. They have rural areas at 1:400 and urban 1:100. The Engineer's office uses map sheets of 1978 vintage for their aerial needs. Osceola County has no monumentation at this time.

Parcels:
Osceola County's 11,000 parcels are maintained in the assessor's office where splits are drawn by hand into J&E books from 1986, and PINS are also assigned.
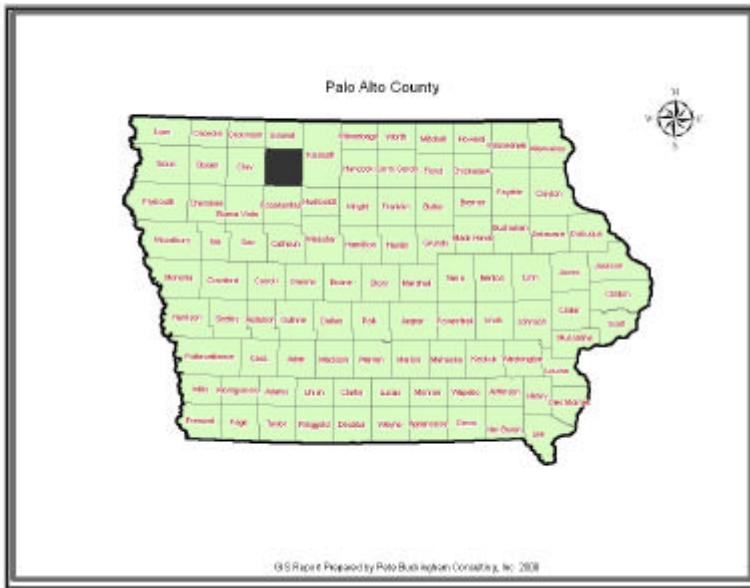
Office Reports:
Assessor, Sharon Wolter expressed interest in GIS, but indicated that nothing is happening, due to a lack of funding. She felt that pressure from outside of their organization would be required to gain the support to implement GIS. Sharon Felt that internal leadership was the biggest obstacle at this time. Sharon felt that leadership and GIS education from someone from the outside, who wasn't selling them a product would be beneficial. PB consulting emailed links to the IGIC Ortho web server for use in her office.

Engineer's assistant Bob Frey spoke about GIS opinions in their office. He indicated that they had seen presentations and know the basics of GIS. Bob said that he and the engineer were likely inclined to leave the technology challenges to be taken on by younger people that replaced them after retirement. They do have *AutoCad*, but aren't doing much with it at this time. PB Consulting emailed links to the IGIC Ortho web server and NRGIS library site for their use

County Suggestions:
Funding and external leadership from a non-GIS vendor.

Palo Alto County

GIS Report Prepared by Peter Buchkoplan Consulting, Inc. 2008

Palo Alto County Iowa

County Num: 74
County Seat: Emmetsburg
Parcels: 15,500
Splits per Year: 50-100
GIS (Y/N) N (cleared to seek vendor)

GIS Rating (1-5) 1.5
Progressive in GIS 1=least-5=most

Technical Contact: John Wright
Assessor:
Lois Naig (712)852-3823
Auditor:
Gary Leonard (712)852-2924
Engineer:
Joel Fantz (712)852-3001

Aerial Photography/ Monumentation:

Palo Alto County currently relies on paper maps from a 1989 flight. In 2006 they implemented a 3x3mile GPS monument network with the assistance of Dan Corbin and Gary Brown. They indicated that the monument project was a joint effort with Kossuth County and that they will be willing to share the documentation for the LiDAR project.

Parcels:

Palo Alto County's 15,500 parcels are maintained in the Auditor's office on grid paper maps. The PIN system for rural is based off of the tax district, section, quarter section and quarter/quarter. Urban parcels are based off of the tax district, block and lot.
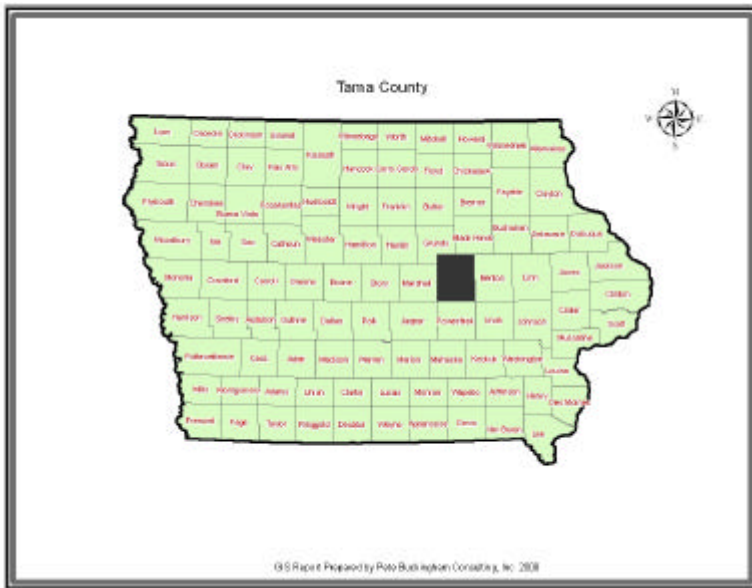
Office Reports:

Assessor, Lois Naig indicated that Palo Alto County does not have GIS or good existing mapping to go with the 1988 aerial pages used in her office. Lois has been saving for new aerials and GIS and was recently cleared to seek a GIS vendor. She believes the Assessor, Auditor, Engineer, and city of Emmetsberg will be likely contributors on the project. Funding has been her biggest hurdle. She is very interested in acquiring GIS but feels she needs help with GIS in general, and more so "where to start".

Engineer's assistant John Wright spoke about their knowledge concerning GIS. He indicated that they currently have no digital orthophotography and rely heavily on the IGIC-ISU website. They had Dan Corbin and Gary Brown do a joint monumentation project with Kossuth County with a 3x3 mile grid, in 2005-2006. Palo Alto County Engineer's office has acquired a survey grade GPS unit but haven't had much chance to use it yet. They have *Autocad Civil 3D* and do basic culvert, bridge and road design. They feel internal leadership and funding have been the biggest obstacles to date.

County Suggestions:

Training from group like IGIC on GIS at events such as Iowa Engineer's conference.

Tama County

GIS Report Prepared by Pete Buckingham Consulting, Inc. 2008

Tama County Iowa

County Num: 86
County Seat: Toledo
Parcels: 23,000
Splits per Year: 200
GIS (Y/N) Y (contracted)

GIS Rating (1-5) 1.5
Progressive in GIS 1=least-5=most

Technical Contact: Jerry Whitt
Assessor:
Jerry Whitt (641) 484-3545
Auditor:
Laura Kopsa (641)484-2740
Engineer:
Lyle Brehm (641)484-3341

Aerial Photography/ Monumentation:

Tama County acquired new orthophotography in 2007. Some offices are currently using an older flight, but the age and attributes were unknown. A GPS monumentation network was created in a 3x3mile grid and they are willing to share it for the LiDAR project.

Parcels:

Tama County's 23,000 parcels are currently maintained in the Assessor's office in paper Sidwell books, but when the GIS is delivered, will be transferred to the Auditor's office. 2 PIN and MAPID numbers are maintained, but the assessor plans to reduce it to 1 geographic PIN.

Office Reports:

Engineer's assistant, Dwight spoke about GIS in their office. He indicated they were aware of GIS but didn't think they had the funding to acquire it. Dwight did inform me that the county does have a 3x3mile monument grid, but that they use older Sidwell aerial books. The Engineer does have digital aerials on his PC, however Dwight wasn't sure of the vintage. He did relate that the Meskwaki settlement did have GIS.

Assessor, Jerry Whitt started recently and indicated that he has a lot to learn about GIS. The previous assessor had contracted 2007 orthophotography and GIS with Sidwell. Once GIS is delivered, Jerry planned on transferring it to the Auditor's office, where an existing staff person would take over the role of GIS. Jerry knows he will have a farmland assessment program, but doesn't know much about it at this point in time. He expressed that training and technical assistance would be helpful for Tama County.

County Suggestions:

Training and Technical Assistance.