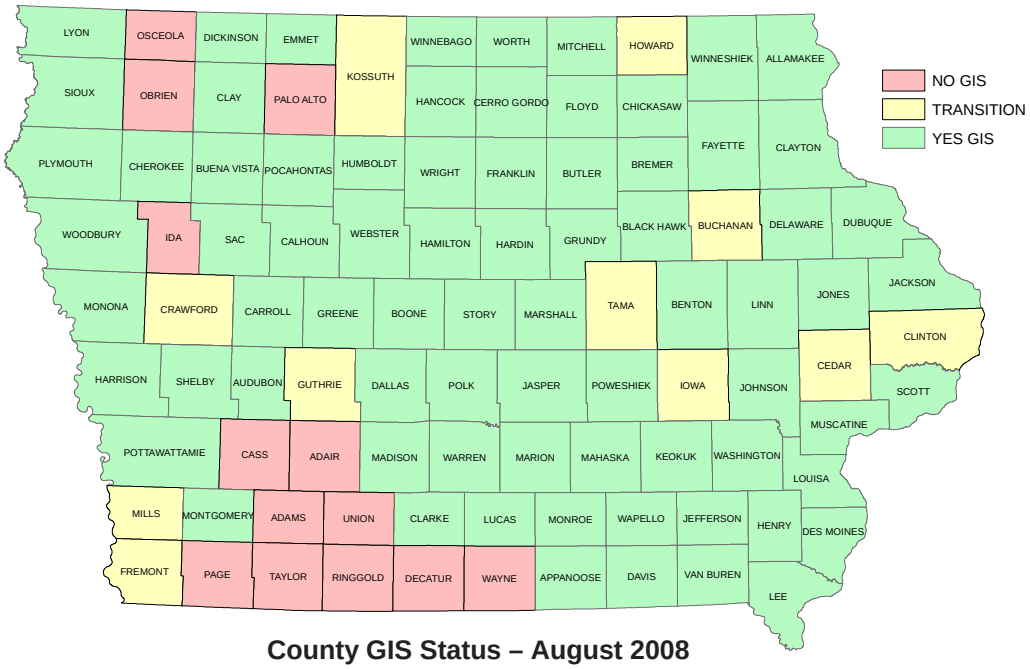
Fact sheet No. 5
August 28, 2008

# Iowa Geospatial Infrastructure

## Counties in Iowa without a GIS Program




**County GIS Status – August 2008**

GIS is being used in about 76 out of 99 of Iowa's county governments. This spans the entire range of usage, from digital parcels maintained by an outside contractor to in-house staff of 3 or 4 GIS professionals maintaining databases and providing support to several county departments. Potentially all of these counties have GIS data that would be included in the Iowa Geospatial Infrastructure, and would be eligible for benefits available from the IGI County GIS Service Bureau.

About thirteen counties in Iowa do not have any GIS program at all, while another ten are taking steps to either acquire GIS or transition from partial to full GIS capabilities. As part of the Iowa Geospatial Infrastructure ROI study, the Iowa Geographic Information Council (IGIC) hired Pete Buckingham Consulting, Inc. to determine the status of GIS in these counties and figure out the barriers and opportunities to GIS implementation through interviews with the assessor, auditor and county engineer. Common concerns expressed included funding, technical assistance and training. While some counties interviewed didn't know too much about the benefits of GIS, others were excited and ready to start.

The Iowa Geospatial Infrastructure (IGI) is a community of GIS data providers, service bureaus, and technology that delivers basic GIS data layers to the all users, including the public. One of the main goals of the IGI to create a seamless statewide coverage of GIS data that includes high-resolution aerial imagery, ownership boundaries, rivers, contours, roads and building footprints. Much of this data resides in the 76 counties with GIS programs, but any plan for statewide data must address the remaining counties that do not have GIS or have limited capabilities. In exchange for access to county data, the state-funded IGI will provide benefits back to county data providers through technical assistance, training and coordination services that will reduce operating costs and spread benefits to other departments. The same services will be made available to counties without GIS, or just starting out, to better leverage their existing resources, help find new resources, and make GIS affordable so it can be used for the benefit of all county departments and constituents.

## BENEFITS TO COUNTIES PARTICIPATING IN IGI

*Cost avoidance for a web mapping server - $10,000/yr.*

*Cost avoidance for joint aerial ortho-photography acquisitions – data costs - $20,000/yr.*

*Cost avoidance for contracting, managing contracts and data management for aerial ortho-photography projects - $10,000/yr.*

*Using IGI elevation contours (from lidar) for surveying and design in county road department - $10,000 to $90,000/yr.*

*Reduction in time spent answering questions, finding data, finding locations – varies by department from 5 hours/yr to 500 hours/yr, ~ $10,000/yr total*

## STRATEGIC BENEFITS OF IGI

Johnson County Assessor: *"…would like to have easy access to parcel information from adjacent counties so I could check values of adjacent properties. I do not go to the trouble to do this with current capabilities. Many counties don't have a good web presence. A universal interface would be helpful. Real estate, insurance, bankers, appraisers experience the data in a chopped-up fashion currently. I see the greatest benefit for statewide parcel data being to the private sector."*

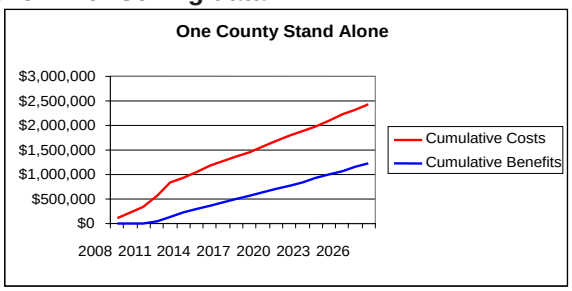
Black Hawk County Public Health Dept.: *"…many of our projects are multi-county but we don't have map data for adjacent counties. The county does inspections of 1800 restaurants in 9 counties but we only have maps for Black Hawk."*

# How IGI Can Help

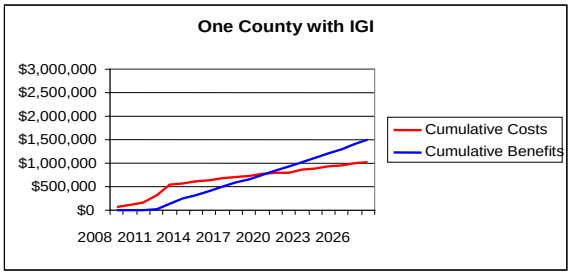
The Iowa Geospatial Infrastructure will provide assistance to counties without a GIS program in exchange to access to county GIS data. The IGI County GIS Service Bureau will have four staff persons that can assist counties in getting their program launched, and provide ongoing support. The job of the county IGI program manager is to work with entities within a county to define GIS needs, look for funding and develop a business plan to get started. This person will also help set up regional GIS efforts, including joint data acquisition projects (new orthophotos, parcel conversion) and sharing resources such as staff (GIS coordinator and technicians), equipment ( servers, GPS units, plotters) and databases. The ortho coordinator will assist new and existing county GIS programs with writing contracts, finding vendors, setting up quality control efforts and distributing imagery products, all of which can save money through joint efforts. A web application programmer will advise new and existing GIS programs on options for setting up web mapping services, as well as make available basic applications on a centralized server using county-provided framework data. A GIS training specialist will provide basic classes in using and maintaining GIS data and equipment, and develop training materials for other county departments to take advantage of GIS in their everyday jobs.

# IGI Costs and Benefits

**Typical start-up costs for county GIS programs go from $250,000 on up. This can include new control monuments, high-resolution orthophotos, parcel conversion from paper to digital, GIS hardware and software. Yearly maintenance adds $50,000-$100,000 per year. In our IGI Return on Investment study, we found that if the GIS is only used for parcel maintenance and tax assessment, the county will not break even on its investment, even with selling data.**




**By participating in a regional GIS effort organized by IGI staff, a county can eventually break even by reducing costs through sharing staff and equipment with others and increasing benefits through wide-spread use of GIS within many county departments.**




**Appanoose County GIS assessment:** *"…has an existing GIS with a staff person and are accumulating GIS data layers. They are limited by not hosting information on a server and are not promoting GIS usage among their offices. Groundwork is in place and there is room for growth for a successful GIS.*

**Cass County GIS assessment:** *"…GIS could have gone through in 1999 but the cost was too great. Since then it has stalled and not progressed. They are positive in regards to GIS happening, and believe it will happen when they locate the funding."*

**Lucas County GIS assessment:** *"…expressed it would be "heaven" if IGI found a way to host their GIS data and serve it on the web."*

The full IGI report can be downloaded from http://www.iowagic.org/

IOWA geographic information council

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