



GIS BASEMAP LAYERS

## Dakota County GIS Data Sharing Policy Change

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### GIS Data Licensing Changes

Dakota County has licensed GIS data for a fee since the 1990's. Over the years, many land developers and real estate companies found the data to be very useful and cost-effective. However, the license was too restrictive for some customers. For others, the fees were too high, forcing them to find other sources or simply do without the data. The world has changed since the 1990's and Dakota County has now changed its GIS data policies, making all public GIS data available at no cost and without licensing.

Dakota County has produced and maintained GIS data since the 1980's. GIS data is generally defined as coordinate locations of features represented as points, lines, and areas with additional descriptive information called attributes. Classifications of features form "layers" which can be combined in various ways for maps and analysis. Basemap data are GIS layers representing property ownership and physical characteristics of the County, including features such as roads, buildings, decks, patios, sidewalks, lakes, and rivers, but also topography, represented as elevation contours. Historically, this has been collected through a process of interpreting

aerial photography, which itself is also a useful basemap layer.

As basemap data layers were being developed, Dakota County adopted policies governing its distribution to private interests. The policies established a copyright on the data and required a license for its use. The license restricted redistribution and development of derivatives. Licensing fees were established, based on recovering a portion of the cost of developing the data, as allowed by the Minnesota Government Data Practices Act, MN Statute 13, Chapter 13.03. These policies helped offset very large initial costs in acquiring the data and the supporting systems and technology. Similar policies were developed by many other counties and cities in Minnesota, and the nation.

### Resolution Passes

In March, 2014, the Dakota County Board of Commissioners passed a resolution to change these policies by eliminating all license restrictions on geospatial data and removing all fees based on recovering data development costs. All GIS data formerly licensed for a fee is now simply available for download on the County website, and elsewhere, subject to accepting a simple

disclaimer. Other counties are pursuing similar policies. This is a significant change in the evolution of GIS.

### Careful Research

This change was driven by careful research, in collaboration among the seven Twin Cities metropolitan counties under MetroGIS. The seven GIS Managers from those counties and the MetroGIS Coordinator worked together to develop a comprehensive body of documentation, which was presented to the MetroGIS Policy Board in April, 2013. This was refined over the summer, culminating in a recommendation that was subsequently adopted by the Policy Board. This resulted in a letter to all MetroGIS government stakeholder organizations, including the seven metro counties directly, recommending that they move towards more free and open GIS data distribution policies.

### Benefits

The benefits of free and open data are multi-faceted, related to a wide array of changes surrounding GIS, primarily due to changes in technology and public expectations. Providing free and open data:

- Represents transparent government
- Provides unrestricted access to public Geospatial data that is a byproduct of government business processes
- Creates staff efficiencies
- Eliminates costs of administering licensing, fees, and custom data packaging
- Fosters entrepreneurship
- Enables businesses, individuals, and nonprofits to leverage geospatial analysis to support strategic planning and decision-making in the community
- Provides authoritative data
- Ensures current and correct data is consistently available
- Meets increasing demand
- Recognizes increasing public capabilities and desire to use geospatial data
- Enables innovation
- Allows data to be used in new and creative ways, without needing to justify cost overheads caused by fees and licenses

## Collaboration Paves the Way

Revenue generated from GIS data fees have been used by Dakota County to help offset the costs of maintaining the GIS basemap data. In the early days of GIS, this revenue helped offset high initial costs of developing these data. However, over time, the revenue decreased, for a variety of reasons. Since then, maintenance costs have decreased through technology efficiencies and increased collaboration among government agencies including cities, neighboring counties, the Metro Council, and the State. Another by-product of collaboration is the diminished ability to claim sole ownership of the data, and therefore a copyright. Additionally, use of these layers (and GIS in general) has dramatically increased, providing a much higher return on investment than in years past.

All of this leads to the recognition that GIS needs to be viewed differently than it was 30 years ago. The value of GIS data is a product of the number of people that are able to use it, which has indirect benefit to the community in a variety of ways. Maximizing

this benefit can only be accomplished by continuing to expand its use by making it broadly available, without restriction. While county and city government benefit by developing GIS applications that directly support government business processes, the data has much more potential benefit to the community at large. That potential is best realized by leveraging the general public to perform their own analysis and develop their own applications, leading to a more informed community, and better decisions overall.

More information on this topic, including the full research document referenced above, a single page fact sheet, sample official resolution, and more, can be found on the MetroGIS Free and Open Data website: [http://www.metrogis.org/teams/workgroups/free\\_open\\_data/index.shtml](http://www.metrogis.org/teams/workgroups/free_open_data/index.shtml). Follow other links on that page for more background information on MetroGIS.