



## Juneau County Land Information

A short overview of

# Geographic Information Systems

**Geographic Information Systems** is a system of computer software, hardware, data, and personnel to help manipulate analyze and present information that is tied to a spatial location.

(Source: [www.gis.com](http://www.gis.com), October 2003)

A simple way of thinking of it is a smart map which helps you to answer real world questions.

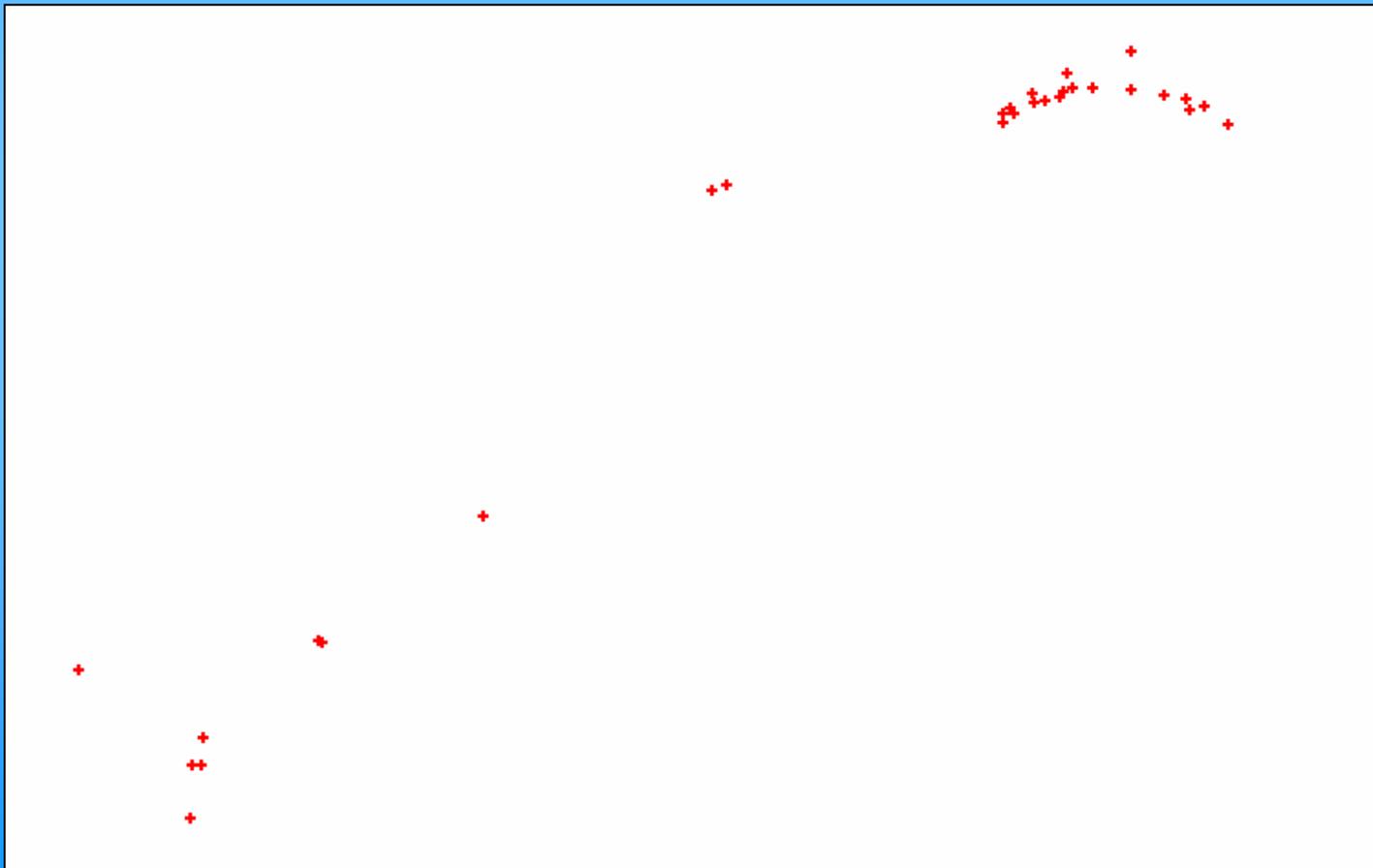
# Types of GIS Layers

**Raster-** A raster layer is made up of many squares. Each of these squares represents the information contained within its boarder. In this case the information represented is color. As you see on the right when you look closely at a raster layers you can see the squares.



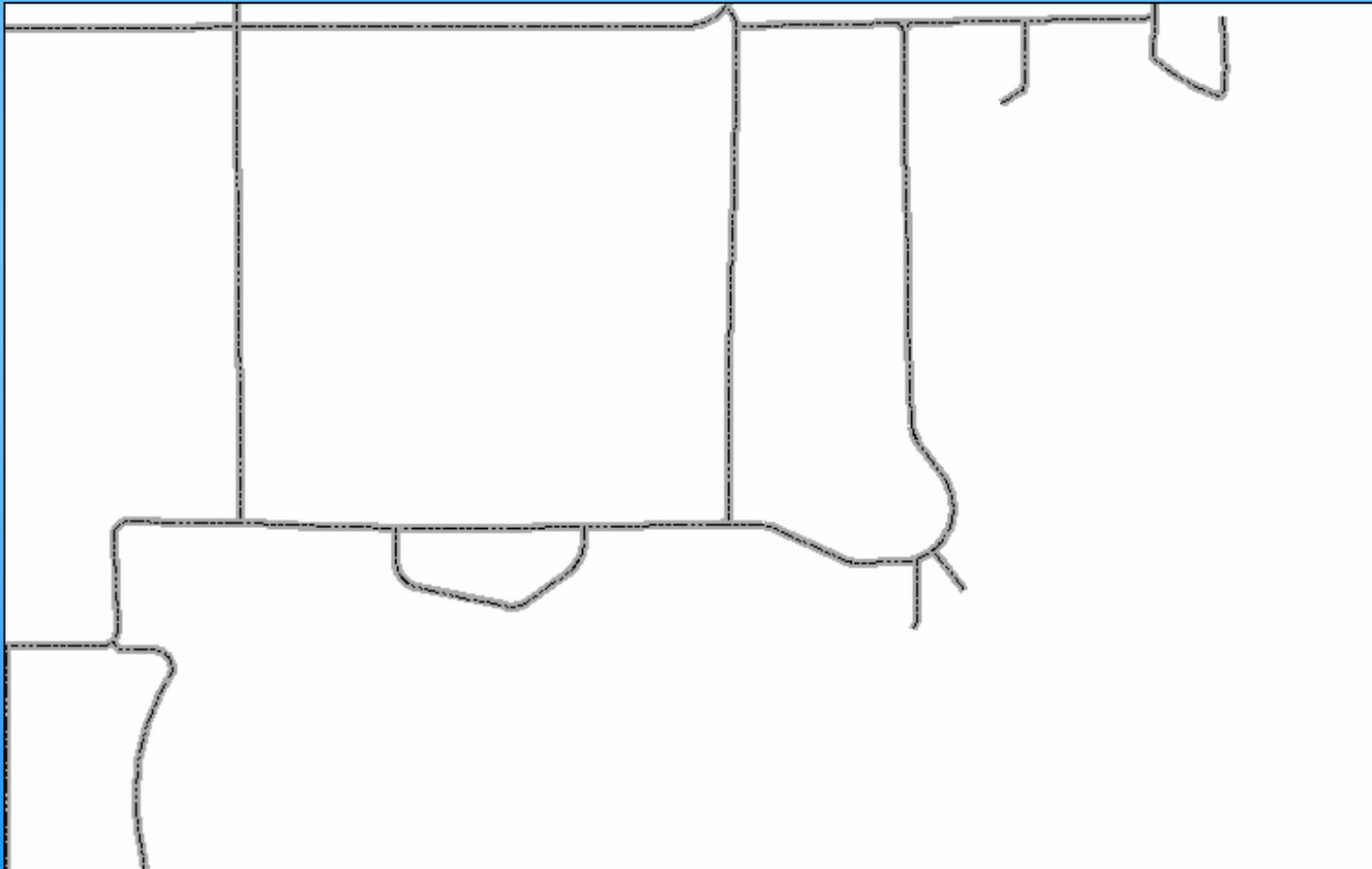
# Types of GIS Layers

**Point-** A point layer is made up of symbols which represents a specific geographic location. Point layers can represent many types of features. This point layer for example represents building locations. Other point layers might represent school, traffic light, store, city or town hall locations.

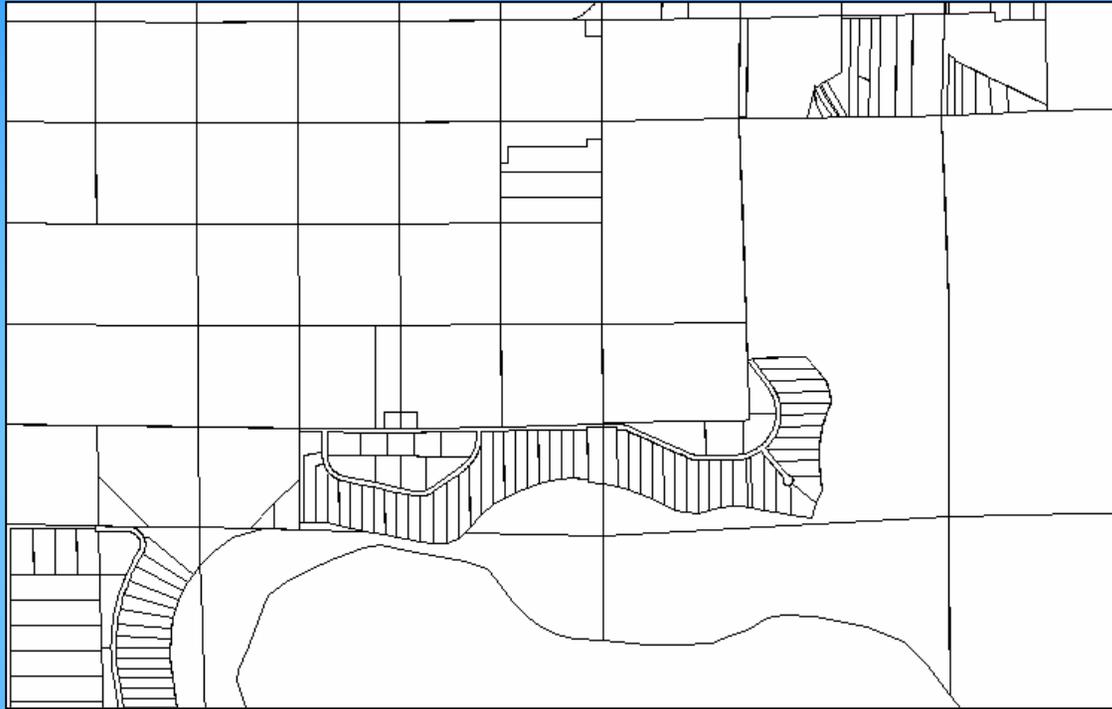


# Types of GIS Layers

**Line-** A line layer is made up of linear symbols which represents a geographic linear feature. This line layer for example represents road center lines. Other line layers might represent stream centerlines, flood plain boundaries, recreational trails, or electric lines.

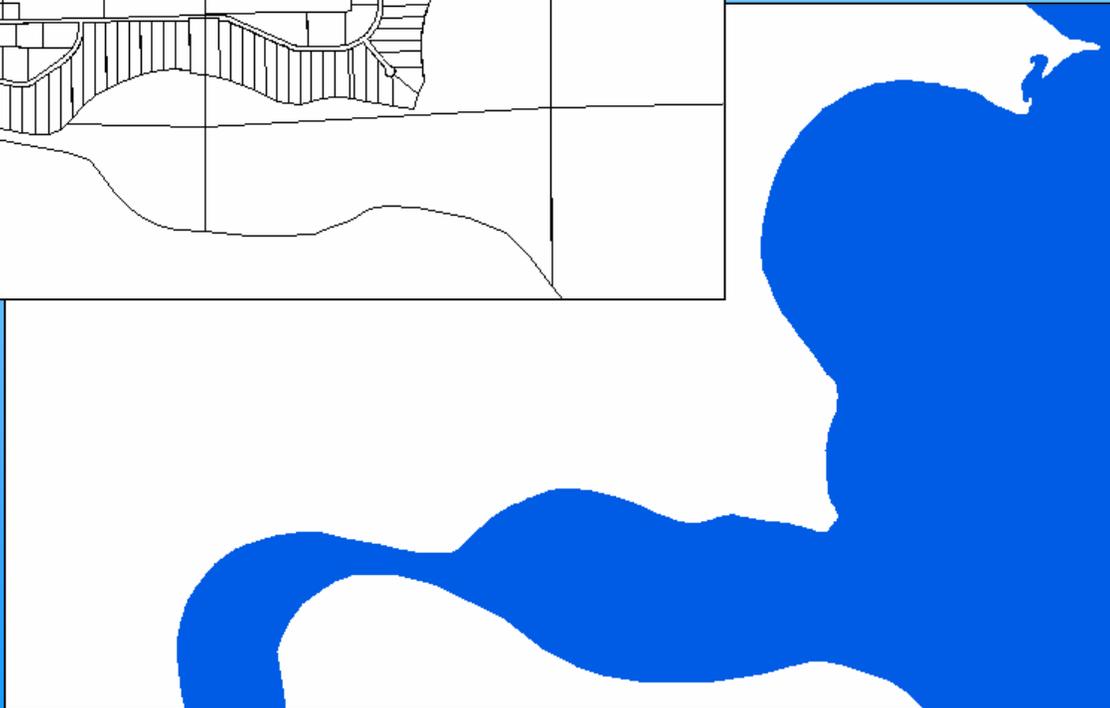


# Types of GIS Layers



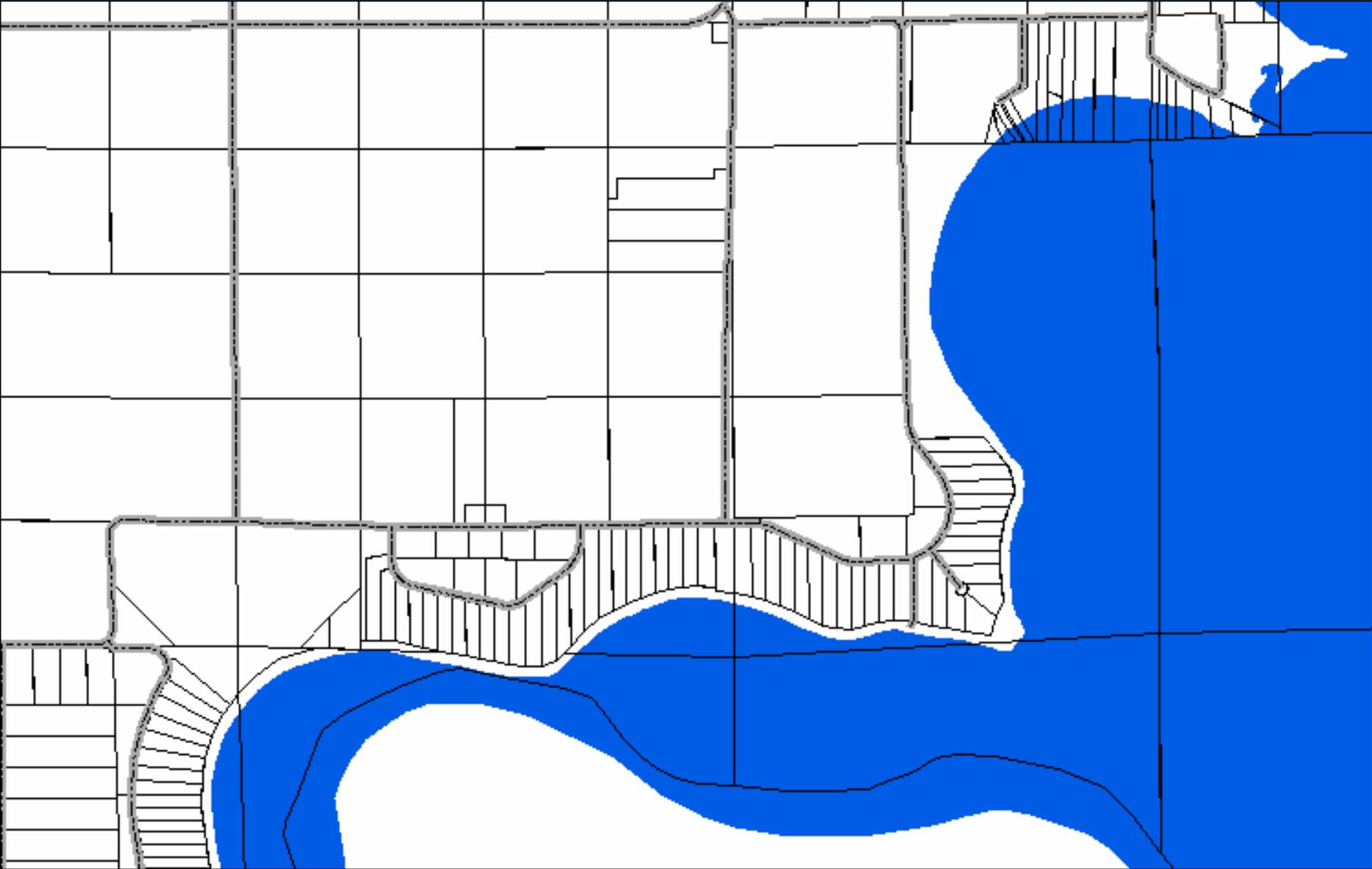
**Polygon-** A polygon layer is made up of a polygon which represent a geographic features which have area. The layer at the upper left represents land parcels and the layer at the bottom represents water. Other polygon layers might represent

voting wards, flood plains, municipalities, wetland areas or forested areas.



There are many ways to view this geographic information.

You can view some layers.  
(WATER, LAND PARCELS AND ROAD CENTERLINES)



# You can view all layers.

(WATER, LAND PARCELS, ROAD CENTERLINES, AERIAL PHOTO, AND BUILDING LOCATIONS )

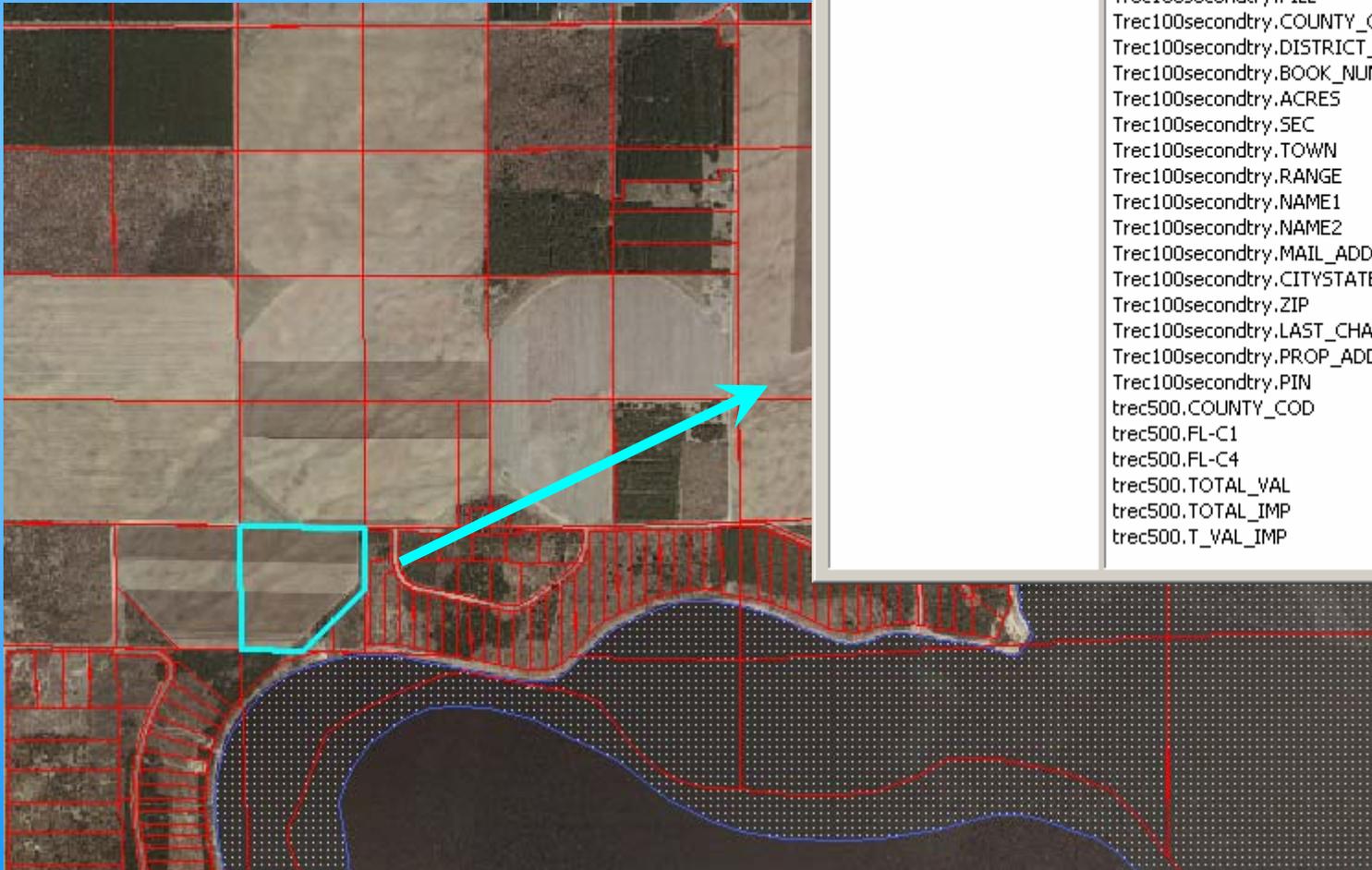


And you can change the way they look.



GIS can be used as a smart map largely because the spatial features are linked to databases.

Each spatial feature is tied to a record in the database



**Identify Results**

Layers: <Top-most layer>

Location: (489785.700827 293404.674831)

Field	Value
armenia1 polygon	
290021210	
polygon:ARMENIA1-ID	933
Trec100secondtry.FILL	7629002
Trec100secondtry.COUNTY_COD	29
Trec100secondtry.DISTRICT_A	TAR
Trec100secondtry.BOOK_NUM	01
Trec100secondtry.ACRES	0035.000
Trec100secondtry.SEC	25
Trec100secondtry.TOWN	020
Trec100secondtry.RANGE	004
Trec100secondtry.NAME1	WISCONSIN
Trec100secondtry.NAME2	INC
Trec100secondtry.MAIL_ADD	1810 RIVE
Trec100secondtry.CITYSTATE	WISCONSIN
Trec100secondtry.ZIP	54494
Trec100secondtry.LAST_CHANG	010303
Trec100secondtry.PROP_ADDRE	
Trec100secondtry.PIN	290021210
trec500.COUNTY_COD	29
trec500.FL-C1	
trec500.FL-C4	
trec500.TOTAL_VAL	5700
trec500.TOTAL_IMP	0
trec500.T_VAL_IMP	5700



## Juneau County Land Information

### **Spatial Data**

**Data currently on hand** – AutoCAD parcel maps (11 townships), DTM (Digital Terrain Model), DEM (Digital Elevation Model), 2003 color orthophotography, 1999 black and white orthophotography, 1978 black and white hard copy photos, and 1938 black and white hard copy photos.

**GIS layers currently being developed and refined** – Parcels, and Roads Centerlines

**GIS layers we would like to develop or obtain** - Campground locations, Congressional Districts, Quarry/Mines locations, Recreational Areas, Sanitary Districts, Soils, State Legislative Districts, Town Halls, Transportation routes for hazards Chemicals, Wayside Locations, Zip codes, Zoning, etc.



## Juneau County Land Information

If any of you have questions concerning the nature of GIS, what geographic data we have, or how we are using GIS in Juneau County we would be more than happy to talk with you.

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