

TUSCOLA COUNTY PLANNING COMMISSION NEWS LETTER

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GIS IS COMING TO TUSCOLA COUNTY: by Raymundo Cortez

What is it?

This is probably the most asked question posed to those in the Geographic Information Systems (GIS) field and is probably the hardest to answer in a concise and clear manner. GIS incorporates spacial data (geographical features) with tabular (attribute) data in order to map, analyze, and assess real-world problems. The key word to this technology is Geography – this means that some portion of the data is referenced to locations on the earth. Coupled with this data is attribute data. Attribute data usually is additional information about each of the geographical features. An example of this would be schools. The actual location of the schools is the spatial data. Additional data such as the school name, level of education taught, student capacity would make up the attribute data. It is the partnership of these two data types that enables GIS to be such an effective problem solving tool through spatial analysis.

What will it do for me?

There are numerous ways in which this technology can be used. The most common ones are:

- Planning of locations and management of assets
- The computerization of plat maps
- Urban & regional planning
- The assessment and eventual development of infrastructure
- Studies of the demographics of an area and its population
- Analysis with regards to engineering
- An Impact assessment of the environment
- Investigations of the earth's surface that is scientific in nature
- Archeological uses
- Criminology matters

Some of the common instances where you will find the GIS in use include:

Emergency response teams normally use GIS when they want to collect logistics regarding how they will move in times of natural disasters.

Pinpointing potential wetlands that need to be protected from the harmful effects brought about by pollution.

Companies also take advantage of the GIS to choose a strategic market location that has not yet been saturated by other competitors in the particular niche industry.

Management personnel use this system to locate areas that may suffer from catastrophes because of the infrastructure that is in place.

The potential spread of diseases & other pandemic situations are usually limited by the use of GIS since the patterns of their occurrence can be predicted in sufficient time to react.

The full implementation of the GIS system will not happen overnight, but the process has begun and will be coming to you in the near future.