Wyoming Department of Revenue

Geographic Information Systems
"GIS" Committee

Conversion Standard
to

Wyoming Assessor Geographic Information System (GIS) Conversion Standards

Overview

The CCI RealWare product offers a high level of integration between CAMA and GIS. This integration allows the user to interchangeably use tabular data and maps to research and display information.

The full integration of GIS into the RealWare product does not take an extensive data conversion plan. In fact, one of the more appealing aspects of this integration will be the county's ability to maintain their GIS program independently, while still providing the much needed spatial data integration.

CCI's new GIS product, which is called GeoWare, is an ESRI based solution which is developed in the web-based ArcIMS architecture. Initially, GeoWare is being installed as an Intranet-based solution. This means that all of the maps and the integrated data are accessible only in house, based off of the security you setup for your individual users.

Data Conversion

As an ESRI-based map display and querying solution, there are several GIS file formats that will work with the application. The following formats will operate correctly:

- Shapefiles
- Coverages
- Geodatabase
- Spatial Database Engine (SDE)

Both CCI and DOR recognize that there are several brand name GIS software applications in use in Wyoming. The most notable software package, other than the ESRI brand, is MapInfo. MapInfo users may also take advantage of the GIS/CAMA integration by simply converting the appropriate GIS data to a Shapefile. Granted, this approach will require the county to convert their parcel maps and other GIS based drawings to Shapefiles as they are modified. However, this approach can most always be done quickly without additional associated costs.

Data Layers

GeoWare requires, at a minimum, a parcel layer to operate correctly. However, many different layers of information can be included on the map, which includes aerial and satellite imagery. The following list shows the type of data that can be included in GeoWare. These datasets are listed in order of importance for GeoWare:

- Parcel Layer
- Public Land Survey System (PLSS) (i.e., township/range, sections, etc.)
- Tax Entities and Districts
- Governmental Lots & Tracks
- Roads (i.e., Federal, State, County road networks, etc.)

- Hydrological Features (i.e., lakes, rivers, streams, floodplains, etc.)
- Contour Lines
- Aerial Photography
- Satellite Imagery
- Scanned Maps (i.e., DRG's, GLO, right-of-way maps, etc.)

Please note, the GeoWare environment can operate with all or portion of the datasets shown here. Again, the primary file required is the parcel layer. For those counties where the parcel layer is incomplete, connectivity will still function correctly wherever data exists in both the RealWare product and in the GIS file itself.

Data Connectivity
Data connectivity between RealWare and GeoWare is straight forward. In the RealWare product, the Assessor will need to identify what GIS files are to be used and where they are stored. In the case of the parcel layer, the Assessor will be required to select the unique field (most likely your GeoPIDN) in the GIS parcel layer that will connect to RealWare. Finally, the Assessor will need to identify the format in which the GIS GeoPIDN is stored. In short, the GeoPIDN must be the same as the RealWare Parcel number. This process will match up the data formatting between the RealWare and the GIS file and will allow connectivity through a global option setting. Please note, the AA Committee has decided that all Account Numbers will be stored without punctuation (i.e, dashes, periods, etc.). For those counties that choose to retain the punctuation within the parcel information, they will be required to adjust the global option setting to match their existing GIS dataset.

It is highly recommended that the GIS data used in the RealWare/GeoWare integration is a copy of the original production data. This will ensure that your local GIS technicians are able to work with the data with no restrictions. Granted, this will require the data to be refreshed occasionally to ensure the RealWare users have access to the most current spatial information.

Conclusion
GeoWare is a map viewing/selection tool that bridges the gap between GIS spatial data, and RealWare CAMA data. The seamless integration between these two features means that your office will have one point for data entry, which will contribute to improved data accuracy, and a reduction in processing time.

The GIS implementation has been designed to offer as few obstacles as possible for the County. Existing GIS programs will be able to continue fairly unimpeded, while now being able to offer spatial data access to a wider selection of users.