



GeoAccurizing®

... putting your GIS data in the right place

GeoAccurizing® is a system that combines ground surveying and geospatial processing technologies to analytically improve the positional accuracy and consistency of GIS databases

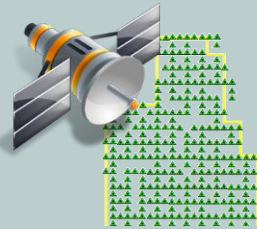


Misaligned GIS data, including property lines, building roof outlines, outdated survey points and background photography...



... are analytically co-registered to accurate ground survey control points

In an age of Internet data “mashups”, the accurate alignment of heterogeneous mapping data layers is vital. Typically, the most fundamental mapping layer for governmental agencies is the location of real estate parcels: the *property base-map layer*. Roads, utility lines and many other infrastructure assets in turn are often positionally-referenced to this layer. Moreover, the actual impacts of hazardous phenomena such as flooding zones can be known only if affected property parcels are accurately located. While GIS technology can quickly display and analyze numerous complex relationships among multiple mapping layers, GeoAccurizing® is the process that authoritatively provides the accurate positioning of those layers.



Global Navigation Satellite System (GNSS) surveying data establish an accurate framework of control points

Tabular measurement data from source documents are georeferenced to the GNSS control points, creating a network of topologically-related mapping sectors



$$x = \frac{x_L \cdot \bar{P}_L + x_R \cdot \bar{P}_R}{\bar{P}_L + \bar{P}_R}$$

$$y = \frac{y_L \cdot \bar{P}_L + y_R \cdot \bar{P}_R}{\bar{P}_L + \bar{P}_R}$$

Original data layers are transformed piecewise-fashion into the network, thereby limiting error propagation to each mapping sector