

Municipal GIS Database Development Seabrook, Texas

The City of Seabrook, like many other municipalities across the nation, realized the advantages of having a GIS to warehouse the mass quantities of civic data. Geographic Information Systems have the unique ability to tie information together in a common system that can be shared not only throughout each city department, but also readily distributed to businesses and private citizens who rely on these data.

CobbFendley processed CAD data gathered from the City of Seabrook to generate the various utility regions throughout the city. The CAD utility data was scaled, geo-referenced, imported into ArcGIS, and overlaid onto high-resolution aerial imagery. By employing the aerial imagery, the data was digitized and placed more geographically accurate into the GIS. Prior to the integration into GIS, the utility infrastructure data existed only in a CAD file, limiting its functionality.

Different municipal utilities infrastructures, namely sanitary and water utilities, were implemented into the GIS database. All utility infrastructure data was imported into a geodatabase feature dataset to include:

- Pipes, valves, manholes, meters
- A petroleum pipeline layer (Texas Railroad Commission)
- FEMA flood plain zones
- Elevation contours

To transmit the vast quantities of GIS data layers to the citizens and municipal officials, CobbFendley set up a GIS website for the City of Seabrook. The website controls access of information by password protection, preventing any sensitive data from getting into the wrong hands.

Project Size:

22 square miles

Completion Date:

Ongoing

