Geospatial Engineering – GIS Services

Overview
A Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographically-defined data and metadata. The GIS system provides a valuable tool to interactively connect an array of data to allow efficient presentation and evaluation processes. GIS technologies utilize digital information, for which various data input and migration methods are applied. EN Engineering incorporates a variety of processes to efficiently input new data, or migrate existing data, into GIS Systems. Our staff has tremendous experience with the technologies and concepts that allow us to provide optimal solutions related to data integration, data analysis, mapping, and all facets of GIS application for the pipeline and utility industries.

Platforms Supported
• esri®
• GE Smallworld
• Safe Software-FME
• BlueSky GIS
• AutoCAD®
• Stoner SynerGEE
• MicroStation

EN Engineering supports a wide array of GIS, mapping, and CAD platforms. We operate the latest versions of software platforms. We also have significant expertise in older legacy software versions and are well-versed in incorporating all vintages to migrate clients to current “state-of-the-art” software versions.

Typical Data Sources
Data collection and input
• Aerial imagery
• LIDAR & 3D laser scanning
• Field data collection
• Conventional survey
• GPS collection
• Existing maps, drawings and other documents

Data migration (GIS to CAD; CAD to GIS)
• Electronic maps and drawings
• Existing databases
• Legacy GIS systems
Markets

• Natural Gas Distribution, Transmission, and Storage
• Liquid Petroleum & Product Distribution, Transmission, and Storage
• Electrical Power Transmission & Distribution
• Telecommunications
• Any utilities and infrastructure
• All geographic reference data applications
• Enterprise system interface
• Data collection and input
• Data and document management services
• Development standards
• Digital Elevation Model (DEM) manipulation
• Facility spill analysis
• Geocoding & georeferencing
• HCA analysis
• Integrity management
• Location maps
• Maintenance and work planning

Typical Products

• Database design & system configuration
• Database maintenance & implementation
• System rollout and support
• Audit support
• Data conversion and migration
• Enterprise system interface
• Disaster planning and preparedness
• Business modeling & “What if?” scenarios
• As-built drawing & model development
• Automatic pipeline alignment sheet generation
• Fleet routing optimization
• Map and alignment sheet generation
• Subsurface Utility Engineering (S.U.E.) Level B
• Mapping services
• Pipeline and utility routing and design
• Pipeline regulatory compliance
• Right-of-way, easement, and wetland delineation
• Risk assessment
• Rubber sheeting and conflation
• System and hydraulic modeling