

#### **OVERVIEW**

In the dynamic world of field services, where efficiency and precision are paramount, GPS Centerline Mapping and Geographic Information System (GIS) play a pivotal role. These technologies have revolutionized the way organizations manage and navigate their field and mapping operations, providing a streamlined approach to mapping, data analysis, and decision-making. At ENTRUST, our sectors EN Field Services and EN Data Solutions collaborate to make high-quality centerline mapping an integral part of your project.

# UNDERSTANDING CENTERLINE MAPPING

At the heart of field services lies the concept of GPS Centerline Mapping, a method that involves creating a digital representation of linear and point features such aspipelines, meters, poles, lights, utility networks and much more. The centerline survey serves as a reference point, capturing the essence of the feature's spatial characteristics. This approach allows field service professionals to map and manage complex infrastructures with ease.

In EN Field Services, our highly qualified team of GPS Technicians and line locators have decades of experience and expert knowledge of related to Centerline Mapping and locting of standard and complex projects. The majority of ENTRUST's Technicians and Locators have direct operating experience, many of whom have spent over 20 years working around underground and above ground utilities.

In EN Data Solutions, our dedicated team of GIS-Geospatial experts offer top of line mapping and data analytics services. Using the latest and most advanced technologies, we provide a full portfolio of geospatial solutions to aid clients in digitally locating, identifying, analyzing, and interactively connecting the data relating to assets. Our experts use a variety of processes and tools to collect, transform, analyze, and report various data formats for use in design, engineering, integrity management, and other applications.

## BENEFITS OF CENTERLINE MAPPING IN FIELD SERVICES

Accurate Asset Management: GPS Centerline Mapping enables precise location and management of assets. Whether it's a utility line or a transportation route, having an accurate digital representation allows for better planning, maintenance, managing and monitoring.







**Efficient Navigation:** Field service technicians often operate in diverse and challenging environments. GPS Centerline Mapping facilitates efficient asset management by providing clear and accurate location, reducing travel time and increasing overall operational efficiency.

Real-time Updates: The dynamic nature of field services demands real-time data updates. GPS Centerline Mapping allows for instant modifications to the digital representation, ensuring that field professionals always have the most current information at their fingertips.

### THE ROLE OF GIS DATA IN FIELD SERVICES

GIS data complements GPS Centerline Mapping by adding layers of information and analysis capabilities. Geographic Information Systems leverage spatial data to provide valuable insights into the relationships between different elements in the field.

**Data Integration:** GIS data integration allows organizations to combine diverse sets of information, such as topography, land use, and environmental factors, with the centerline map. This holistic approach enhances decision-making by considering a broader range of variables.

**Spatial Analysis:** GIS enables spatial analysis, allowing field service professionals to identify patterns, trends, and anomalies within the data. This capability aids in predictive maintenance, resource allocation, and optimizing field operations.

**Enhanced Decision-Making:** Informed decision-making is critical in field services. GIS data provides a visual and analytical framework, empowering organizations to make strategic decisions based on a comprehensive understanding of the spatial context.

**Enhanced Mapping:** by utilizing the GPS Centerline data, operators are able to accurately update their existing maps to more accurately show what is happening in their system. This can be updating an existing GIS environment with new location data or taking data from other mapping sources and create a new mapping environment.

### **OPTIMIZING OUR FIELD SERVICES**

Consider a utility company managing an extensive network of assets. Through GPS Centerline Mapping, the company creates a digital representation of its pipeline infrastructure. GIS data layers are then integrated to include information on constrcution data, operating parameters, asset specific details and much more.

By analyzing this combined dataset, the operator can identify high-risk areas prone to pipeline corrosion, plan maintenance schedules based on usage patterns, and even optimize emergency response strategies. This integrated approach enhances overall operational efficiency, reduces downtime, and ensures the delivery of reliable and safe services.

### CONCLUSION

GPS Centerline Mapping and GIS data have become indispensable tools in the field services sector. The marriage of precise linear representations with rich spatial data empowers organizations to navigate complexities, optimize operations, and make informed decisions. As technology continues to advance, the synergy between GPS Centerline Mapping and GIS will undoubtedly play a crucial role in shaping the future of field services.

If you're looking to optimize your utility project, ENTRUST Solutions Group has the experts to help you execute it on time and within budget.