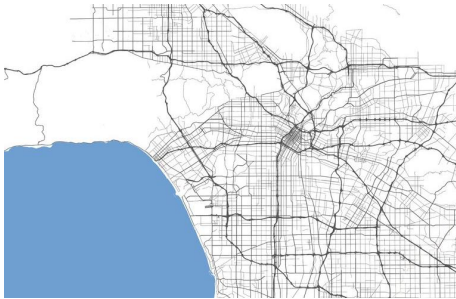


GIS Mapping

Applus+ currently uses geographic information systems (GIS) to map and track all field assets related to the petroleum industry. Assets include pipelines, fittings, gauge settings, lease information, tank farms, cogen plants and sensitive receptors. Applus+ utilises industry-standard ESRI software to maintain and edit collected data. This data can be made available via the InSite application, transferred directly to the client or served as a hybrid solution. Field collections are performed by trained and certified GPS Technicians with Trimble GEO units with accuracy down to 1 foot. We have been performing this service since 2007, and we have become a reference for our GIS work.



The Applus+ solution

Applus+ offers its clients a significant advantage, in terms of GIS, when it comes to data provision. We can provide customised web solutions, offer integration into InSite and assist with linking GIS data to other databases to expand its usefulness. In terms of added value, we would point to our geographic footprint, our in-house GPS certification process and our strength in terms of data management / customised solutions. In-house GIS staff work closely with GPS technicians to ensure the quality of the field-collection work. Applus+ has established GIS processes and workflows which allow a relatively small team to collect and manage a large amount of data. We have also worked with ESRI's latest JavaScript offering, which enables a 3D view of GIS data within the web browser.

Target customers

GIS has many business applications. The majority of our GIS work consists of documenting existing assets. We also perform GIS mapping to track and document construction projects, routing / easement and optimisation of pipeline routes. It also has many uses in the field of environmental regulation and compliance. Going forward, we

aim to take on more DOT pipeline / road construction projects.

Key customer benefits

Benefits of GIS mapping to client companies include:

- An understanding of existing assets
- Enhanced planning of new construction for pipeline routes, roads, tunnels and proximity to sensitive receptors
- Linking of GIS data to external databases, which can provide greater insight into the relationships between separate aspects of a business
- Accessing GIS data on a secure, hosted platform within the browser
- Cost savings from greater efficiency
- More effective decision making
- Enhanced communication
- The ability for large companies to manage assets geographically