

# Gujarat Gas improves decision-making with Esri's web-GIS system



**Client:**  
Gujarat Gas Limited

**Website:**  
gujaratgas.com

**Industry:**  
Gas Utilities

**Location:**  
Ahmedabad

## Organization Profile

GGL is a leading private sector natural gas transmission and distribution company serving more than 10,00,000 (CNG & PNG users) across the state.

## Solution

ArcGIS for Utilities

## Highlights

Esri India helped GGL by:

- Deploying easy-to-use ArcGIS software
- Enabling prompt decision making
- Improving business planning
- Enabling intelligent data representation

## Project Summary

Gujarat Gas Ltd. (GGL) is a leading natural gas provider serving more than 10,00,000 customers (including CNG and PNG users) across 14 geographical areas. The company oversees the gas pipeline network, asset management and field operations to reach out to every natural gas user in targeted geographical areas. The manual management of millions of gas pipelines was proving to be a big challenge for the GGL team.

As GIS applications provide data specifications through an intuitive map interface, Esri India proposed a web-based ArcGIS application to GGL. The aim was to enable the company to access network information in real time. The solution helped GGL to streamline field operations and expedite decision making.

Esri's ArcGIS application supported GGL's business operations with well-ordered and on-time network planning, compliance and maintenance. As a result, GGL was able to efficiently manage gas workflows to handle everyday business operations.

## Challenges

GGL wanted to enhance the gas distribution planning in real time decision making. The company needed a technically-advanced solution that will enable it to:

- Undertake emergency resource planning to accelerate its response to a gas leak
- Immediately execute a customer evacuation plan
- Identify affected customers quickly
- Undertake incident management involving the repair and maintenance of existing assets
- Improve gas distribution services over the expanded geographical areas
- Speed up gas distribution operations across the state through instant decision making
- Increase the number of satisfied customers

*Enterprise GIS was the first implementation in the Indian Gas utility segment. Esri India worked dedicatedly to acquaint us with best GIS practices. The company's professional and quick response enabled us to complete the project within deadlines. The ArcGIS system was integrated with the ERP solution for better business planning and outage management. It also supported field force requirements and prepared the organization for the next level - mobile GIS.*

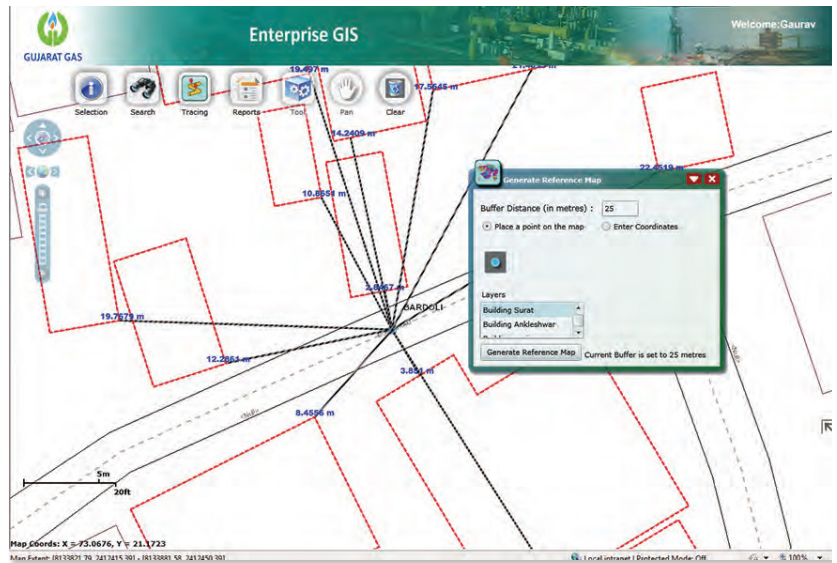
**Shijo Joseph**  
Head of Information Technology

- Access a Customer Information System to improve profiling, visualize customer demographics and develop better business insights

**Solution**

Esri India introduced an enterprise level web-GIS system to manage assets, distribute natural gas in different customer locations and make better decisions for emergency resource planning and incident management. The application enabled GGL to perform geo-spatial queries and create reports on them. It helped GGL to rapidly deliver essential workflows and improve data sharing capabilities using a centralized database.

GGL’s decision makers were able to process network-enabled GIS and non-GIS data for asset management and instant problem solving. They followed the best web-GIS practices to accomplish accurate decision-making.



**Benefits**

Esri ArcGIS provided GGL with a ready-to-deploy mapping application that offered it map-based insights. The solution enabled GGL to undertake network planning, compliance and maintenance of the natural gas pipeline network. ArcGIS for gas utilities enabled GGL to:

- Improve gas transmission and distribution using powerful tools and intuitive digital maps
- Display all Internet data on a single interface
- Identify affected people and areas during a gas pipeline explosion or other emergencies
- Perform instant customer tracking
- Rapidly mobilize and respond promptly to emergencies
- Access high resolution imagery for periodic site surveys
- Maintain a better pipeline route plan
- Track valuable assets
- Generate detailed reports for better asset management

