



## Mass Rapid Transport Embraces Geospatial Technologies

A Metro Rail Company decided to go for latest Geospatial technologies to map the metro corridor for railway alignment. Apart from topographical maps, the organization was looking for a service which could churn raw data into meaningful information for effective decision making. They were seeking a swift solution that could provide highly accurate data essential for engineering, maintenance and construction. This required a shift from traditional technologies given their complexity to execute and less accuracy. The metro corridor extended for a length of 31 Km and width of 200 m.

An expert in enterprise GIS, Genesys was engaged since need assessment to acquire, process and deliver a 3-dimensional LiDAR dataset to enhance the processes involved in engineering services. The solution included:

- LiDAR for topographical survey
- 360° Panoramic Imagery for real visual reference of assets
- CitySCAPE viewer application
- City3D application for exact measurement of the assets

The City3D topographic profile data product built on LiDAR (Laser scanning) is a geo-referenced, time-stamped point cloud data representation of the physical features with object measuring capability. The point cloud data supports detailed planning, engineering and design functions. The features include measurements on-the-fly, viewer software to identify and label assets and features, export to industry-standard formats.

The CitySCAPE viewer application enables view, query and analyze geographic features with real world 360-degree Panoramic view in the background.

**Key benefits:**

- Improved project strategies by analyzing infringement
- Comprehensive transportation and asset planning at a low cost.
- Least human dependence in data acquisition.
- Better visual 'As-is' analysis of corridor assets that acts as evidential proof for maintenance and construction services.