

RAPID MOBILE MAPPING SERVICE

Rapid mobile mapping provides fast, high precision data and dynamic imaging for any linear mapping project. This technology supports the pursuit of safety by improving the outcomes and accuracy of desktop studies and reducing the need of onsite visits. Like Google Street View, our 360° views enable users to visualise features as if they were actually there. The added benefit is that the user can measure and extract XYZ data as required thus allowing mapping directly from the user's computer. This system is an efficient way of 'walking through' a site from the safety of the user's desktop computer and a safe method of visualising hazardous sites.

Mobile Mapping overcomes the challenges of mapping linear features to a high level of precision. Vehicle positions are obtained using three redundant technologies: a dual frequency GNSS receiver establishes a geospatial position; an Inertial Measurement Unit (IMU) tracks vehicle position; and external wheel encoders obtain odometer information. These three technologies work together to sustain a precise 3D position for the vehicle even in locations where satellite signals can be blocked by obstructions such as buildings, bridges, or tree lines. LiDAR sensors combined with vehicle positions provide corridor 3D feature XYZ positions. Integration of 360° spherical images with the Street level LiDAR data imparts both quantitative and qualitative aspects to the data set.

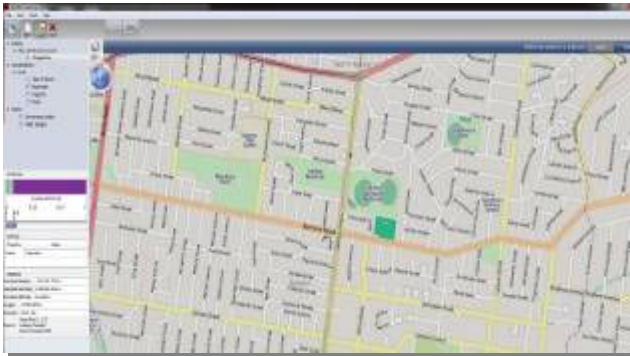


MAPPING IN PROGRESS



IP-S2 SYSTEM

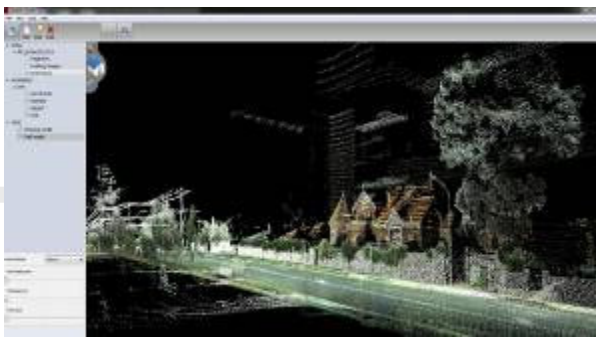
Street level mapping exhibits many benefits over other techniques. For example, whilst aerial photogrammetric and LiDAR surveys offer economic value across large areas of land, they cannot adequately map a streetscape. Traditional ground based surveys can accurately survey a streetscape but are relatively slow, can be unsafe and are relatively expensive. Street level mapping is a technology that fits somewhere between aerial/LiDAR photogrammetric techniques and conventional field surveys; in terms of cost and speed of data collection. Street level mapping from a moving vehicle allows for complete 3D virtual spraying of spatial positions at 75,000 XYZ points (or more) per second about the vehicle. Street level photogrammetric images integrated with a closer viewpoint to the actual objects being mapped allows for better identification, definition, and precision of mapped features.



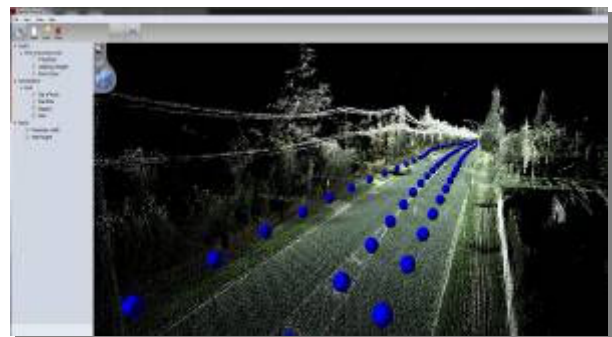
MAPPING OVERLAYED ON STREET DIRECTORY



SPATIAL POSITIONING



STREETSCAPE POINT CLOUDS



This system is suitable for, but not limited to:

- Accident investigation and road safety improvements
- As-built feature mapping
- Asset/street furniture mapping / management: roads, railways, utilities, councils
- Beach and foreshore mapping
- Bicycle Network mapping
- Bridge and sign clearance surveys
- City streetscape mapping – 3D Street-level View
- Clearance surveys for heavy equipment haulage, trains, trams and light rail
- Disaster response mapping and planning
- Environmental and Vegetation mapping and management
- Flood level mapping and damage assessment: historical snapshots
- Footpath mapping
- Golf course mapping
- Hazardous sites and landfill mapping
- Hydrological DTM mapping
- Infrastructure mapping: road and rail formations
- Landscape Design
- Military Applications
- Mine and civil earthwork topographic mapping
- Monthly progress claims mapping
- Open space/reserve mapping
- Planning roadway expansions / widening
- Power-line clearance surveys
- Planning Consents
- Property Development
- Public lighting inventories
- Public transport infrastructure mapping
- Right of way encroachments
- Road condition surveys, geometry, sign inventories, line marking and maintenance
- Tourism mapping and visual data capture
- Topographic and feature mapping
- Town Planning
- Traffic related asset mapping
- Waterway embankment mapping



**RAIL FORMATION & INFRASTRUCTURE
POINT CLOUD**



ROADWAY SIGN HEIGHT MEASUREMENT



ROADWAY LANE WIDTH MEASUREMENTS



PROPERTY MEASUREMENTS

Contact Global Infrastructure Surveys for more information:

Telephone: 07 5520 3304

Mobile: 0431 452 982

www.globalsurveys.com.au