



Mobile LiDAR Survey For Highways & Railways

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The Technology

Road Surveying Can Be Executed At Vehicle Speed And Precise Georeferenced Cartography Of Railways, Non-Intrusive Preventative Maintenance Is Made Easy Whilst Reducing Surveying Time And Balancing Staff Requirements

Mobile LiDAR surveying facilitates the collection of spatially correct data on a large scale. Rather than survey individual buildings or areas, mobile mapping systems can be deployed to map entire cities or hundreds (even thousands) of kilometers of transportation corridors.

Mobile LiDAR technology presents multiple benefits to transportation agencies, including safety, efficiency, accuracy, technical, and cost. It can simultaneously acquire imagery and scan data.

Mobile LiDAR Systems can provide survey/engineering quality data faster than static scanning. Airborne systems generally do not provide survey/engineering quality data. Mobile LiDAR systems have been utilized along navigable corridors for a variety of applications including earthwork quantities, slope stability, infrastructure analysis and inventory, pavement analysis, urban modelling, and railways.





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16 Years of Experience in Surveying & Mapping of Roads, Railway, Smart City, SEZ & Industrial Land, Airports, Ports, Irrigation Projects, Pipeline and Cable Routes with latest technology. We are specialized in LiDAR Survey from 2016

Applications

Mobile LiDAR Uses Laser Scanners In Combination With GNSS Receivers, IMU And a DMI. It Acquires Accurate And Precise Spatial Data With Six To Eight Cameras On Any Vehicle.

Area of Application

- Railway - Design, Maintenance, Asset Management & Monitoring
- Roads & Highways - Design, Maintenance, Asset Management & Construction
- Smart Cities - Design, Planning & Construction
- Oil and Gas Pipeline Network, Utility Services i.e., OFC, Cables & Etc





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For Green Field & Bypasses

Aerial (Drone) based LIDAR or Photogrammetry can survey areas which are difficult or impossible to drive car or walk. Forest, cliffs, valleys with inaccessible steep slopes, etc.

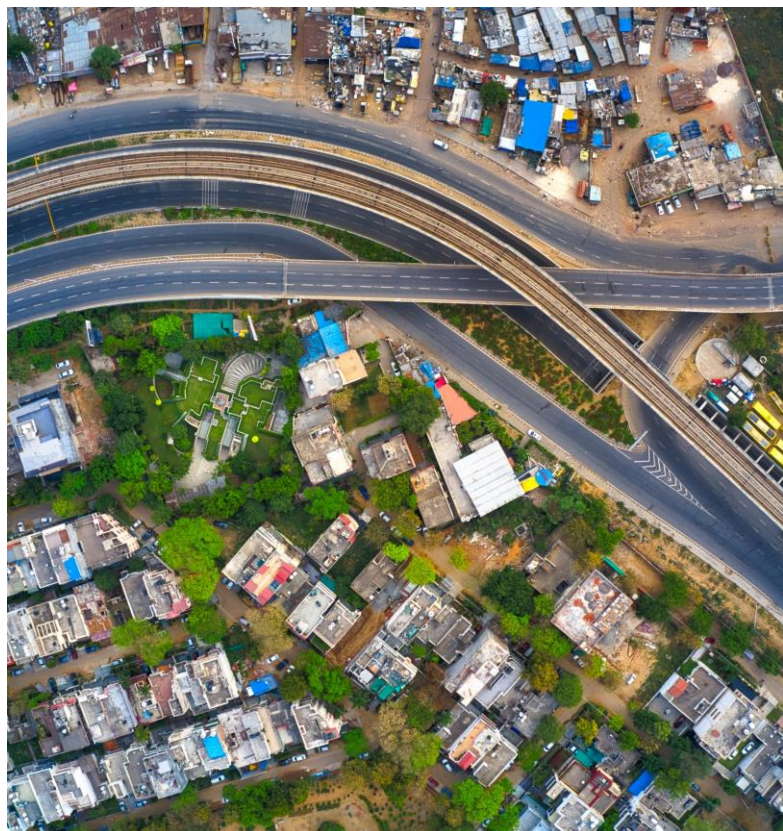
Land with dense vegetation where light pulses can still penetrate between branches and leaves, lidar yields high vertical accuracy. But when it comes to the broader surveying needs in the construction, mining, and various industries, photogrammetry is the more affordable solution.

For Green Field Alignments, bypasses, re-alignments, the drone based LIDAR or Drone based Photogrammetry are used. It cover the land with high-dense point cloud data and giving a ortho mosaic image to study the project area.

Spatial resolution, accuracy and Greater point cloud density can be achieved with drone mounted LiDAR than manned aircraft as the drones are able to fly lower and slower. One of the major advantages of UAV LiDAR over photogrammetry is LiDAR's ability to penetrate vegetation to reach the ground below.

How photogrammetry differs from lidar?

Lidar is a direct measurement, physically hitting a feature with light and measuring the reflection. Drone photogrammetry uses images captured by a camera to reconstruct the terrain in an accurate 3D model using image overlap and sufficient ground control.





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Project Experience

180 Million INR Value Of Survey & Mapping Projects are completed in 2.5 years of time, i.e., Total 9000 Kms of Mobile LiDAR and 2000 Kms of Drone Survey in combination with ETS & DGPS

By using mobile LiDAR, we have completed more than 9000 kilometers of Highways, Smart cities and Railway Line. We undertake projects all over India and abroad

Few Important Clients:



L&T



KIIFB



Helica, Italy



Louis Berger



AECOM



EGIS India

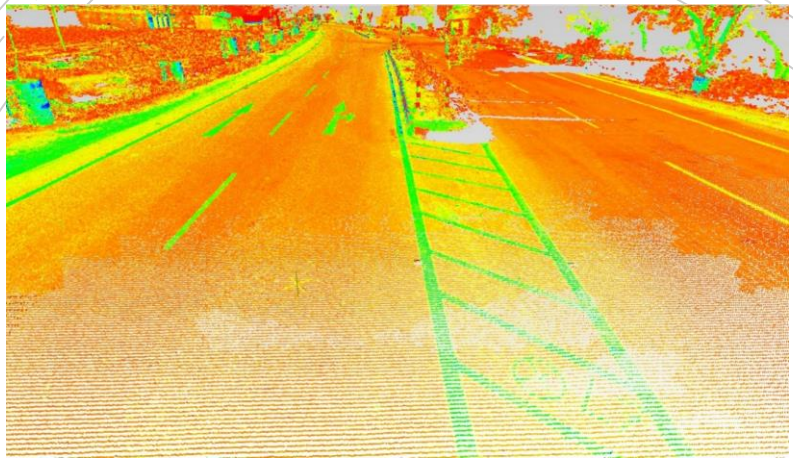
Few Recent Projects Completed:

- Ballarsha to Nagpur Railway Tracks Double Run LiDAR Survey – Total 410 Kms
- 1800 Kms of NHAI-TOT Asset Mapping Survey Projects (in the state of J&K, Punjab, Rajasthan, Haryana, MP, Maharashtra, AP & TamilNadu)
- 1000 Kms of Kerala State Highway Projects
- 3000 Kms of LiDAR Data Processing, Several Road Projects in Italy
- Roads, Streets and open area Survey at Addu City, Maldives
- Trichy City ABD Area, Tamilnadu





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Contact Us

“Bringing The Land Profile To Your Desktop Using Latest Technologies And Provide A Quality Service, Which Fulfills Your Requirements”



We are seeking opportunities to help our customers and partners around the world for surveying, mapping, data processing and related services. Please feel free to call us or write to us

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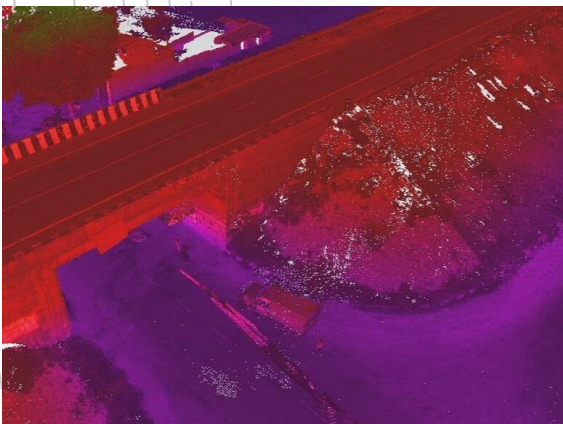
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Multi Sensor Mobile Survey Platform for any vehicle, Leica Pegasus: Two

High Dense Scan Data + 360° Spherical Images + Survey Grade Accuracy:

Horizontal: 0.020 m RMS

Vertical: 0.015 m RMS (without control points, at open sky conditions)

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[Click Here for Complete Datasheet](#)

Pegasus: Two combines high accuracy LiDAR and high resolution photogrammetry – a belt & braces approach giving two ways of extracting the data

The most accurate system on the market for Survey Grade Accuracy

