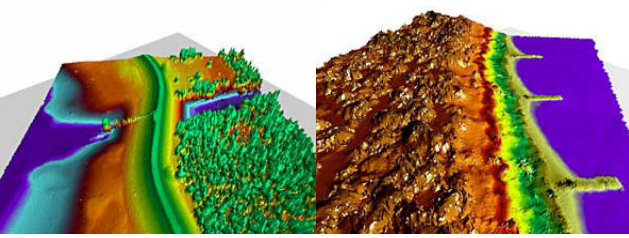


# KESTREL CORRIDOR LiDAR MAPPING



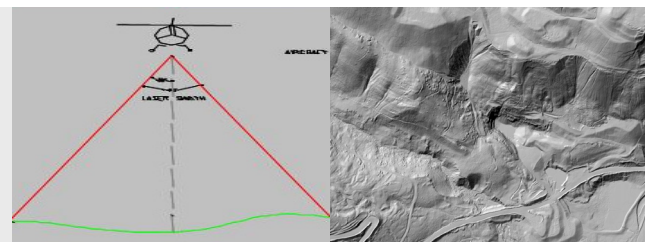
## OVERVIEW

- ▶ With the introduction of the Kestrel LiDAR System, specifically designed for cost effective corridor mapping, collection of LiDAR data for linear features (roads, electrical transmission lines, pipelines, rivers) and small areas has never been more available.
- ▶ Locally based equipment facilitates quick response, minimized mobilization fees, and enables rapid turn-around providing information quickly for important decision making.
- ▶ Enables LiDAR technology to be applied cost effectively to small, corridor projects providing government agencies, surveyors, GIS Professionals and engineering managers the ability to leverage this effective mapping technology.

Project deliverables include a Digital Surface Model (DSM), Digital Terrain Model (DTM), and LiDAR intensity image and can be provided in any standard GIS/CAD compatible or organization-specific formats, including ASCII mass point files, TIN models, and contours. The delivery includes an accuracy verification/quality assurance inspection report and with metadata.

Optional professional services from Credent also include extraction of feature data, design and creation of Geographic Information Systems (GIS), and web-services including hosting of geospatial databases for our clients.

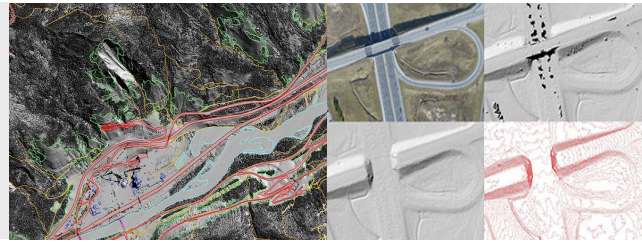
## Kestrel LiDAR Capabilities



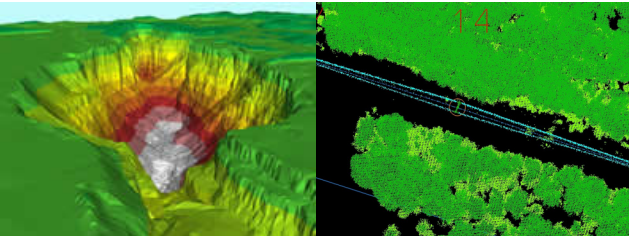
*LiDAR offers advantages over conventional means of land survey that include:*

- ▶ Capable of collecting millions of elevation points per hour - much faster than traditional methods
- ▶ All digital: no intermediate steps to generate digital XYZ
- ▶ Rapid turnaround: capable of rapid data processing without compromising accuracy
- ▶ Dense data: typical spot center spacing ranges from 1.0 to 1.5 points per square meter
- ▶ Accurate: elevation +/- 15 - 45 cm (rms) depending on landcover and terrain
- ▶ Locally based helicopter collections: easy to mobilize and demobilize
- ▶ Non-Intrusive method of survey (airborne) capable of accessing remote areas

## The Business Benefits



- ▶ LiDAR can accelerate project schedules; some by 30 percent
- ▶ LiDAR requires less ground control than aerial photography
- ▶ LiDAR can be used when high accuracy and quick turn around are required
- ▶ When compared to conventional photogrammetric compilation, the use of LIDAR produces material savings in both time and money



## Kestrel LiDAR Applications

Kestrel LiDAR can be used in the following applications:

<b>Transportation Corridors</b>	Applications including highway route selection and supporting engineering design and construction
<b>Power Lines</b>	Tower Locations and Route Planning, Catenary Models, Ground, Buildings and Vegetation Clearance
<b>Pipelines</b>	Optimal Route Planning, front-end engineering and design, development and updating of alignment sheets, Disaster Assessment / Hazard Mitigation
<b>Mine Sites</b>	Pit, tailings and volume surveys, quantitative change detection enabling accurate material removal estimates

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### About Credent Technology (Asia) Pte Ltd

Established since 1982, Credent serves government and private enterprise clients in a range of geo spatial industries throughout Southeast Asia. Among customers includes every one of the national survey and mapping agencies, defense mapping agencies, most national land information systems (LIS) and telecommunications companies and water utilities. Credent also supports natural resource mapping, cadastral mapping and civil engineering, utility asset mapping, urban mapping and urban visualization.