Business Problem

Utilities need to safely and reliably manage their networks while simultaneously keeping costs under control. Managing vegetation and monitoring assets is a big part of keeping the lights on, however visual inspections are time consuming, costly and not always accurate. Utility companies are already using geospatial data to monitor the condition of power poles and power lines, however, not all geospatial data is equal. Precise information is necessary to not only identify problems before they occur, but get a complete view of your Transmission and Distribution (T&D) infrastructure to enable system-wide management.

Geiger-Mode Lidar

Harris Geospatial now offers wide area coverage Geiger-mode LiDAR at unsurpassed resolutions compared to conventional LiDAR systems. Data from this system are more precise and uniform, which provides greater detail to extract pole and wire assets down to distribution level detail. Since data are collected as wide area coverages, other critical information can be obtained in contrast to typical ROW-only collection approaches. This unique technology creates point clouds that support derivative products for a variety of utility applications and subsequent analytics across all parts of the organization.
APPLICATIONS OF GEIGER-MODE LIDAR

Map Infrastructure
Map an entire network at point densities up to 100 points per square meter to get an accurate view of your T&D infrastructure.

Manage Encroachments
Identify vegetation and man-made risks to your network and efficiently direct work crews over broad and sometimes inaccessible areas.

Locate Assets
Precisely map poles, wires and other assets to as-built conditions.

Effective Remediation
Upload data into new or existing databases/GIS to get a clear picture of surrounding infrastructure such as, under wire crossings, roads, water features, slope, and other elements.

BASELINE MAPPING

System-wide asset management
Map an entire network at highest point densities to extract intricate detail of your assets providing an accurate view of your T&D infrastructure.

- Share information across the enterprise
- Anticipate costs to plan budgets
- Anticipate and guide regulations
- Develop and guide best practices/regulations
- Prioritize hardware repairs/improvements
- More effectively manage inspections/repairs/improvements

Emergency Planning
Develop predictive analytics for a more robust system and identify potential weaknesses in the network to improve response time and recovery from events more quickly. Potential weaknesses that can be identified include:

- Vegetation encroachment
- Flood hazard analysis
- Age of infrastructure
- Impact of network outage local/national impact

Emergency Response
Create a baseline map of the entire network that can be used to evaluate changes in assets over time or after an impactful event. Post event, a baseline map lets you quickly:

- Develop immediate remediation plans
- Redesign/rebuild/harden network assets
- Re-baseline of network assets

About Harris Corporation
Harris Corporation is a leading technology innovator, solving customers’ toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. Learn more at harris.com.

STAY CONNECTED

HarrisGeospatial.com/LiDAR
Email: geospatialinfo@harris.com