Reduce Wildfire Risk with LiDAR

Vegetation Management Prevents Wildfires

Following the vast number of California fires this year, a spotlight is being directed at disaster preparedness programs. And while it is vital that disaster preparedness is in place, **disaster avoidance can prove more effective** both in terms of cost and reputation management.

Informatica and its partner, Pacific Data Integrators (PDI), believe that quality asset data hygiene should be at the core of any disaster solution.

Highly-regulated, asset-intensive industries like utilities drive most of their investment decisions from the capacity and health of capital assets such as substations, transformers, smart meters, power lines, pipes and so on.

Limited by their regulator-sanctioned cost-plus revenue model, **maintenance is a key lever to profitable and safe operations**. Therefore, it is imperative for utility companies to understand the condition of their assets, where they are located, and who they affect, all while analyzing the costs and benefits.

Grid Health 360 Solution

Leveraging their vast experience in the utility industry, PDI chose Informatica software to create their **"Grid Health 360" solution**. This solution allows operators to reconcile transformer, meter profile, and pulse information to facilitate improved load and demand planning. It also allows customers to assess the smart meter vendor performance and the spread of behind-the-meter generation and storage capacity.

To bring this full circle, Grid Health 360 integrates topographical and weather data in conjunction with fly-over LiDAR and other imagery, and overlays it with grid component information to assess vegetation encroachment. Overgrowth can cause "tree arcing," which is the **leading cause of outages** for utilities, sparking up to 4,000 wildfires annually.

In order to inspect 200,000 miles of transmission lines and another 5.5 million distribution lines, utilities are forced to dedicate a majority of their $5.4 billion annual maintenance spend to this issue.

By utilizing our solution's risk-based deployment of vegetation management rather than the coarser, interval-based strategy that is currently in use by most operators, we estimate our customers will be able to **save $700 per brushmile**.
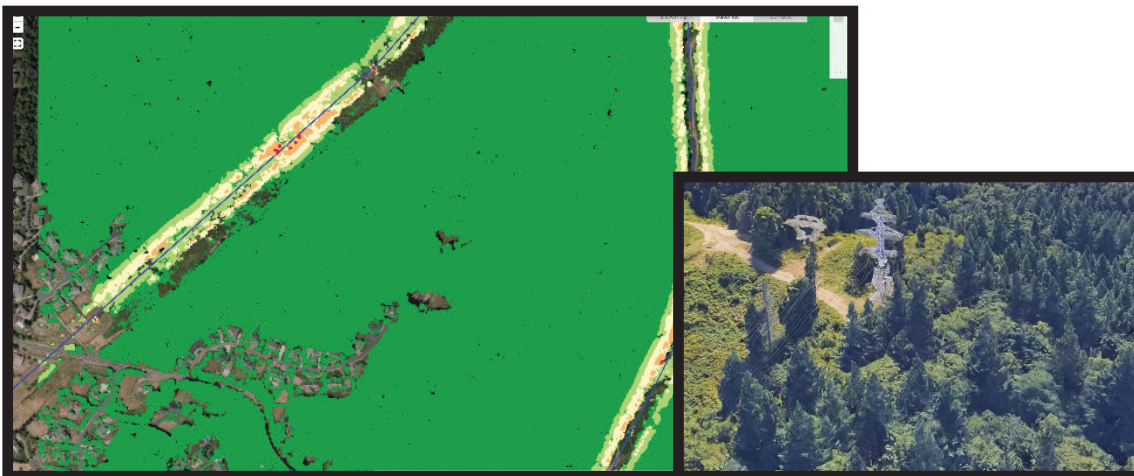
The risk of arcing is interpolated from Lidar data. 3D viewing provides context and verification.