Vegetation management and tree trimming is increasingly important in the electric transmission and distribution industries. Vegetation management is the process of trimming, cleaning, and/or spraying trees, shrubbery, and other types of vegetation under and around facilities to prevent service interference and damage to your network. New standards from the North American Electric Reliability Council (NERC) require utilities to eliminate all power outages caused by vegetation interference with power lines. Failing to meet these requirements can cost utilities up to $1 million per occurrence per day. According to Energy Dimensions, this has forced utilities to increase their expenditures on measuring, monitoring, and dealing with vegetation threats.

Improper vegetation clearance on transmission lines was a factor in the August 2003 blackout, where 50 million people across the Northeast U.S. and Southeast Canada lost power. In addition, fires in California in 2007 were blamed on power lines making contact with electrical equipment or vegetation. According to the NERC’s Standard FAC-003-1, the purpose of the Transmission Vegetation Management Program is “to improve the reliability of electric transmission systems by preventing outages from vegetation located on transmission rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between transmission lines and vegetation on and along transmission ROW, and reporting vegetation-related outages of the transmission systems to the respective Regional Reliability Organizations (RRO) and the NERC.”

Intergraph’s Vegetation Management and Inspection application can support your utility’s workflows for managing vegetation – from facility inspections to capturing work done in the field.

STREAMLINE VEGETATION WORKFLOWS

As part of Intergraph’s Field Automation solution, our Vegetation Management and Inspection application improves the efficiency and management of all vegetation workflows. Our application can help you save significant time and money with an integrated geospatial system that automates field operations, reducing manual labor required for paperwork and data entry.

Our field automation software gives you the ability to “location enable” assessment, inventory, production, and inspection workflows, improving productivity by as much as 50 percent. Intergraph’s solutions are open and based on industry standards, making it easy to incorporate geospatial data with other corporate information systems.

ONE MOBILE APPLICATION IN THE FIELD

The NERC mandates are forcing utilities of all sizes to increase their expenditures on monitoring vegetation risks to their power lines and other infrastructure. While utilities generally have some form of procedures in place to address vegetation management, they are often paper-based and require many manual procedures to capture enough information to help in the decision-making process. Utilities also approach vegetation management from different angles. Some use the traditional workflow of assessment inspection, work, and post-trim inspection. Other utilities trim different circuits every few years, while some perform vegetation surveys with treatment recommendations.

Intergraph’s Vegetation Management helps utilities make the transition from paper to a mobile-based process. You can automate workflows for assessment inspections, production work, post-trim inspections, surveys, and work planning. This also increases data quality for better analysis and reporting capabilities. You can configure the application for multi-purpose inspections, including facility conditions, maintenance, and map corrections.
Leveraging your existing data, Intergraph’s Vegetation Management takes your enterprise geographic information system (GIS) into the field within a single-user environment. You can mobilize information to make it readily available across the enterprise, making it simple to update reports from the field instead of filling in paper documents at the office. Our application is data-model and industry independent. With configurable field workflows, you can easily implement it to meet your specific requirements.

**KEY BENEFITS**

- Satisfy regulatory mandates
- Transition from paper to mobile
- Mobilize and automate workflows
  - Assessment inspections
  - Production work
  - Post-trim inspections
  - Surveys
  - Work planning
- Capture data at point of conception
- Improve productivity/efficiency
- Increase quality of data
- Support analysis and decision-making

**SUMMARY**

For the utilities and communications industry, Intergraph provides comprehensive infrastructure management, advanced distribution management, outage management, mobile workforce, and field force management solutions to ensure the efficient operation of distribution and transmission networks. Our geospatially powered business applications help utilities and communications companies to geospatially design, manage, operate, and secure their distribution and transmission network infrastructure and data. One of the tools we offer is our Vegetation Management application.

Vegetation management is now one of the largest maintenance functions of electric utilities, costing billions annually. Intergraph’s Vegetation Management and Inspection application is a powerful tool that can help your utility improve productivity, efficiency, reliability, and customer service. Our skilled professionals offer deep application and industry knowledge based on hundreds of utility and communications customers worldwide, and can design and deliver a complete solution to meet your unique needs.