



infoGeographics

Leveraging GIS at Traverse City Light & Power

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Traverse City Light & Power

Who are we?

- We are a local, community owned, municipal electric company with over 100 years of service
- We pride ourselves on being a responsive and community-friendly utility with a level of programs and services that enhance our quality of life and make Traverse City a better place to live
- We are committed to investing in a wide variety of community-related projects that range from environmental programs to education

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History of GIS at TCLP

- GIS started at TCL&P with a 4x6 card file system
- The card file system was enhanced with the addition of map books that the crews took into their trucks
- In the early 2000's there was a digital movement within GIS, and the Esri platform was selected
- Since then, we have been hard at work moving to an entirely digital infrastructure
- In the last two years, we have launched ArcGIS for Server, ArcGIS Online, Portal/Web AppBuilder for ArcGIS and Collector for ArcGIS.
- Operations were also moved to a nightly update architecture so maps are published in near real-time.

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Goals for GIS at TCLP

- GIS to replace legacy maps (card catalog/map books in trucks, etc.)
- Near-live look at the electrical system GIS data via smart devices/tablets using web services
- Data analytics using integrated GIS as well as near-live models in MilSoft WindMil
- Seamless work order integration to drive daily operations
- Long Term: GIS will be at the heart of operations for TCL&P, creating tremendous efficiencies across the board (storm management, real-time field maps, work prioritization, etc.)

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GIS/Related Technology & Infrastructure

- SQL Server – backend database
- ArcGIS Desktop – editing
- ArcGIS Enterprise (Server)/Portal/Web AppBuilder – publishing
- Geocortex Essentials – data movement/workflows
- Safe Software FME Esri Edition – data movement
- Collector for ArcGIS – field work
- Novotx Elements – work order/asset management
- MilSoft – engineering/modeling analysis and outage management (OMS)

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Recent/Notable GIS Related Projects

- Enterprise Geodatabase Enhancements/Workflows with Versioning
 - Improved workflows for enterprise geodatabase maintenance (reconcile/posting/state 0 compression/etc.)
 - Geodatabase schema changes (fields/feature classes/domains-values/editor tracking, etc.)
- Overall improvements to electric transmission data in GIS
 - Mass improvements to GIS data (geography/attributes/content)
 - Development of missing data (infrastructure/substations)
- Integration of FME
 - To integrate disparate data (AS400, SQL, other)
 - Evaluation of meters billing database vs GIS meters

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Recent/Notable GIS Related Projects

- Integration of Pole Inspections in GIS
 - To integrate historic pole inspections data
 - Will make future pole inspections more efficient and intuitive using web services
 - Enable feature based photo attachments, etc.
- Integration of Meters location/data in GIS
 - Honing meter locations and attribute data to clean up and sync meters billing with GIS
 - AMI will verify and solidify meters geography/attributes
- Conversion of GIS to MilSoft
 - Modeling and reconciling GIS data for migration into WindMil for modeling
- Collector for ArcGIS
 - To support efficient field checks/[features photo attachments](#)

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Recent/Notable GIS Related Projects

- Work Orders now Digital
 - Using creative workflows to make GIS easier to use for staff and become the driver of work order generation
- Novotx Work Orders and GIS Data Integration
 - Novotx Elements (w/Geocortex Essentials) configured with the GIS (above) for digital work order management and inventory tracking
- Real-Time Update Architecture
- In Progress - Integration of Attribute Assistant for data maintenance efficiencies
- GPS – TBD

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Demonstration of Integrated GIS



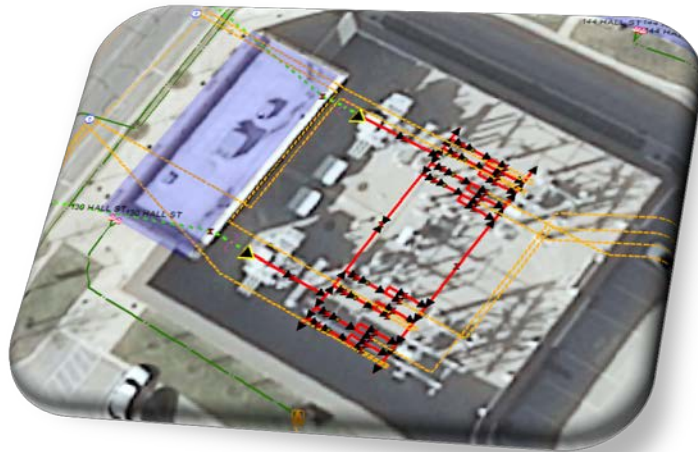
Work Order/GIS Field Maps Integration

- ArcGIS Desktop
- ArcGIS Portal/WebApp Builder
- Novotx w/GeoCortex Essentials

Collector for ArcGIS

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Questions?





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