

PROJECT PROFILE: SOLANO COUNTY

Improved GIS Means Improved Efficiencies: GTG's Work for Solano County, CA

CHALLENGE:

Solano County needed a more robust, accessible, and accurate GIS to support its growing population and evolving operational needs. The county faced challenges with fragmented data systems, paper-based records, and inconsistent data quality that hindered efficient service delivery and decision-making.

SOLUTION:

GTG implemented a multi-faceted approach to transform Solano County's GIS infrastructure:

- **Comprehensive Needs Assessment:** GTG conducted an in-depth analysis of the county's workflows and data requirements across departments. This assessment identified gaps in data accessibility and outlined strategic steps for enhancing GIS functionality, including recommendations for data standardization, software updates, and targeted staff training.
- **Customized GIS Dashboard:** Based on assessment findings, GTG developed an intuitive dashboard that consolidates key datasets into a single interface. Featuring real-time data integration, interactive mapping, and analytics tools, this dashboard empowers county staff to monitor and manage resources more effectively, leading to faster and better-informed decisions about infrastructure and public services.
- **ArcGIS Hub Implementation:** GTG launched an ArcGIS Hub to foster greater community engagement and transparency. This accessible platform allows residents, businesses, and visitors to view and interact with public datasets on zoning, facilities, and local events, strengthening the relationship between Solano's government and its citizens.
- **Records Digitization:** Converting paper-based records into digital formats significantly improved data accuracy and accessibility. County departments now enjoy quick and secure access to historical records, supporting more efficient project planning, maintenance, and compliance efforts.
- **Quality Assurance and Control:** GTG implemented rigorous data validation procedures aligned with industry standards to ensure data reliability. These quality control efforts reduced errors in spatial data, improving decision-making reliability for county projects and daily operations.
- **Ongoing Data Maintenance:** For the past three years, GTG has focused on quality assurance and data completeness for Solano's critical layers:
 - **Parcel Data:** Conducted comprehensive reviews to ensure alignment with aerial imagery and tax assessor maps, intersected parcels with other county-maintained layers (zoning districts, general plan designations, fire districts), and incorporated new subdivisions from cities within the county.
 - **Address Points and Road Centerlines:** Maintained these layers according to Next Generation 911 (NG911) schema standards for the statewide emergency services transition. GTG worked with the County Registrar of Voters to ensure all addresses in the voter roll are represented in the dataset and maintained both internal and public locators.

Geographic Technologies Group (GTG) partnered with Solano County to revolutionize its Geographic Information System (GIS) capabilities. Through comprehensive needs assessment, implementation of specialized tools, and ongoing data maintenance, GTG has enhanced the county's ability to manage resources, improve decision-making, and engage with its community.

RESULTS:

GTG's partnership with Solano County has delivered significant improvements:

- Enhanced emergency response capabilities through NG911-compliant address and road data
- Improved decision-making through reliable, up-to-date spatial information
- Increased operational efficiency across county departments
- Greater transparency and community engagement through public-facing tools
- Streamlined workflows for county staff
- Better resource management and planning capabilities