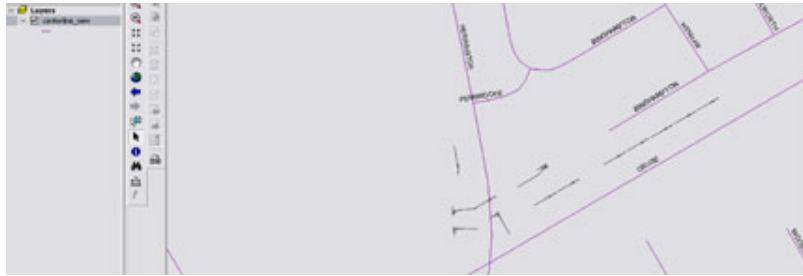


Collision Diagramming & Reporting Extension

Location: Lawrenceville,
Ga.

Client: Gwinnett County,
Ga.

Completion Date: 2004



PROJECT SUMMARY

Burns & McDonnell developed a custom ArcMap collision diagramming and reporting extension for Gwinnett County. The extension will benefit the County by adding a geographic information system (GIS) component to traffic analysis. The tool gave the county a better representation of accidents by combining spatial data and accident data stored in Oracle. The county's previous method of performing collision diagramming was outdated and dramatically benefited from advances in today's GIS technology. Incorporating automated procedures for mapping intersection and mid-block accident data allowed Gwinnett County Department of Transportation (DOT) staff a more efficient method of analyzing traffic accident patterns and allowed the DOT staff to expand future capabilities to increase GIS use.

The solution not only provided the ability to produce standard collision diagrams and reports, but it also operated on the county's GIS platform, allowing staff to navigate locations via a map, view aerial photography, edit data, query by geographic attributes, identify geographic features, and more.

To achieve the county's goals, the Burns & McDonnell team customized the GIS interface to enable staff to plot non-spatial accident locations stored in Oracle onto a geographically correct map. By combining the existing technology of ArcGIS and the new tools in the extension, the county has a collision diagramming and reporting tool. But more importantly, it has the ability to expand traffic analysis to address the safety concerns of citizens.

MORE INFORMATION

Technical paper: [Collision Diagramming Program Using ArcMAP/GIS](#)

TechBrief: [GIS-Based Software Enables Accurate Traffic Accident Analysis](#)

BenchMark: [Streetwise - Traffic Analysis for the Real World](#)

SERVICES PROVIDED

- Application design
- Application development
- Geodatabase design
- Training

Engineering, Architecture, Construction, Environmental and Consulting Solutions