

Transportation and Traffic Engineering

GAI Consultants applies practical engineering and years of field experience to providing context-sensitive solutions for urban and rural traffic challenges. Blending professional training with proven engineering skills, our transportation professionals address a broad range of traffic engineering projects from routine designs to comprehensive transportation impact studies.

Using advanced data collection techniques and modeling software means the best possible solutions for clients, owners, and communities.

GAI's traffic engineers keep abreast of the latest developments in transportation engineering through continuing education and by participating in technical seminars. We regularly research technological advancements in the transportation industry so GAI can continue to deliver the best possible solutions to our clients.

Utilizing a design-thinking approach to traffic engineering, GAI's transportation professionals are able to get a better view of each client's perspective and better understand and define their individual needs. We have advanced data collection techniques and modeling software so our engineers can accurately define current traffic flows and formulate precise future volume predictions. With recommendations and design concepts based on extensive engineering and construction experience, our design-specific, best-practice traffic solutions fit all modes of transportation.

GAI's skilled engineers and planners make a valuable partner for transportation study projects. We collaborate with the client and other project stakeholders through meetings and feedback gathering sessions. Our advanced presentation techniques include computer modeling and graphic displays that build public and private consensus by visually conveying scenarios for complex roadway systems and land-use concepts.



Service Profile



“Proven abilities in public outreach” means GAI informs as well as educates. Balancing project need and benefits with cost and local impact, we help clients reach out to community leaders and their constituents with a strategy that achieves that balance and accomplishes positive end results. With this type of community support, projects are more likely to move forward and achieve the project goal.

GAI’s seasoned traffic engineers pay close attention to constructability issues, and are dedicated to applying new technologies that improve the mobility of the traveling public. We work with both public and private transportation clients to improve the vast transportation networks that connect our nation.

Transportation and Traffic Engineering Services

- Traffic impact studies
- Parking studies
- Corridor accident and safety studies
- Transit route studies
- Roundabout analysis and justification studies
- Data collection programs
- Signal warrant analyses and permitting
- Traffic signalization and timing design
- Signal interconnection design
- Highway signing and lighting design
- Traffic sign inventories
- Traffic control during construction
- Maintenance and protection of traffic
- Pavement marking plans
- Opinions of probable construction costs

GAI Services Summary

- Airport Planning and Design
- Bridge and Structure Inspection and Design
- Coal Combustion Residuals Management
- Construction Inspection and Management
- Cultural Resources Management
- Economic Analyses and Strategies
- Electric Transmission Design and Siting
- Environmental Engineering
- Environmental Studies, Species Studies, Permitting
- Gas Pipeline Surveying and Mapping
- Geographic Information Systems (GIS)
- Geotechnical Engineering and Geology
- Impoundment and Landfill Permitting and Design
- Land Development Engineering
- Landscape Architecture and Design
- Master Planning and Urban Design
- Mechanical, Electrical, Structural Engineering
- Natural Gas FERC Certification and Permitting
- Nuclear Energy Engineering Support
- Right of Way and Appraisal Support
- Land Surveying and Mapping
- Transportation Planning and Design
- Utility Management Consulting
- Water, Stormwater, Wastewater Management

The scope of professional services that are provided by or offered out of each GAI office including, but not limited to, engineering and surveying services, is governed by the professional and business licensing requirements of each individual State or jurisdiction in which the GAI office is located and whether GAI has the requisite professional and business licenses for that State or jurisdiction. Nothing on GAI’s Web Site or marketing materials is intended to be interpreted or construed as offering to perform professional licensed services where prohibited unless the licensing requirements have been met. Engineering services are not offered out of GAI’s Northern Kentucky (Florence) office location. Surveying services are not offered out of GAI’s Illinois location or by our New York subsidiary.

