## **Highway and Roadway Engineering**

GAI Consultant's respected highway engineers and designers deliver award-winning projects to both public and private clients, and local, state, and federal agencies. We are committed to providing comprehensive transportation services in all phases of project development and for all project applications—from feasibility review through construction completion. The breadth of experience and service that GAI offers transportation clients maximizes value, minimizes environmental impacts, and expedites schedules.

Highway engineering that pays close attention to practicality and constructability means results that are in the best interest of clients and owners.

GAI, an industry leader in highway design, works on projects of all sizes—ranging from complex systems interchanges to trails and sidewalks. Our professionals are focused on delivering quality projects and understand not only the value of safe engineering, but also the specific needs of each project. Our design concepts are focused on harmonizing with the surroundings and limiting impacts to communities and businesses.

GAI's renowned team of engineering and design professionals recognize the importance of logically assembling a project with consideration for how it will be built. We collaborate with stakeholders and work alongside the client to develop comprehensive and constructible designs.

The transportation engineers at GAI keep abreast of the latest developments in transportation engineering by researching technological advancements, participating in technical seminars, and engaging in professional societies. Weaving economical concepts and cost-reducing measures into each design, GAI produces results that are in a project's best interest.





**Transforming ideas into reality**, **since 1958**, GAI Consultants is an engineering, planning, and environmental consulting firm providing customized solutions and local expertise to worldwide clients in the energy, transportation, development, government, and industrial markets.

## Service Profile



GAI's reputation for quality is based on our ability to draw specific skills from a full-spectrum of in-house engineering disciplines available throughout all phases of the project. Our designs are supported by in-house eminent domain and utility clearance specialists, and with public safety and safe construction sites a top priority, GAI's design concepts help maintain access to properties adjacent to project sites, and keep utility channels operational throughout construction.

## **Highway and Roadway Engineering Services**

- Project development
- Needs analyses and feasibility studies
- Environmental studies
- Corridor location studies
- Conceptual alignment studies
- Highway occupancy permits
- Highway and roadway design
- Limited-access highway design
- Bikeway and trail design
- Intersection design
- Busway and light rail corridor design

**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

GAI's transportation professionals have worked on many of our clients' most important projects, delivering on their promises to bring innovative, cost-effective solutions to constituents and users. Whether a \$10,000 sidewalk or \$200 million interchange, GAI is committed to providing unparalleled customer service and quality designs that can be built on time, on budget, and to the satisfaction of the community.

- Utility coordination and design
- Pavement design and pavement rehabilitation
- Traffic control, signing and signalization
- Streetscape design
- Right-of-way plans
- Construction cost estimates and scheduling
- Design-build delivery system
- Highway betterment
- Public and safety improvement
- Transportation system access management
- Roundabout design
- 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.