The Gonzalez staff is comprised of design engineers, construction managers, and inspectors, including several former Department of Transportation employees. Our seasoned transportation team provides competitive solutions to challenging transportation projects through an analytical, innovative, and buildable approach.

Traffic Studies/Traffic Control
Our traffic engineering abilities include traffic impact assessment, trip generation and travel demand forecasting, intersection and highway capacity analysis, intersection analysis, signalization analysis on arterial and network systems as well as isolated intersections, signal warrants, pavement marking and signage plans, plans for temporary traffic control during construction, pedestrian flow studies, and parking layouts.

Intersection Design Studies
Gonzalez provides design studies and complete design plans for intersections both signalized and unsignalized. Our designs include signals, ADA ramps, bus stops, and roundabouts.

Interstate Signing
Our team has the ability to design all interstate signing including signing sheets, signing details, quantities, temporary signing details, and traffic staging signing.

Geometric Design
Our team can design horizontal and vertical control for roadway designs including intersection design (grade separation, at grade), derive typical section templates, cross sections, and plan and profile drawings for roadway design. We can also provide geometric layout and design for trucking facilities including loading docks, staging and parking areas, gate complexes and spill containments.

Stormwater Design
Gonzalez has conducted comprehensive stormwater management and drainage analyses for public and private clients throughout the Midwest. Our experience includes open channel, culverts, retention/detention ponds, bridge hydraulic reports, conveyance systems, pumping stations, and storm sewers.

SWPPP
Our senior field personnel have extensive backgrounds performing erosion and sediment control inspection services on major infrastructure projects. Our experience includes incorporating erosion control measures, providing inspection services, recommending corrective action, and compliance oversight. Our designers develop SWPPP plans for contractors and agencies.
Gonzalez has provided comprehensive solutions for stormwater management, analysis, design, and construction for public and private clients throughout the Midwest.

Master Plans
Our team is experienced in developing master plans that focus both on entire watersheds, as well as specific problem areas within a particular neighborhood. We provide our clients with the appropriate level of detail to solve their stormwater issues both on a watershed basis and for isolated drainage problems. Our team utilizes a proven approach to identify, quantify, and resolve stormwater issues. This approach includes gathering data, obtaining input from stakeholders, developing cost effective solutions, prioritizing improvements, and investigating/developing funding sources to address the specific stormwater issue. Our ultimate goal is to provide our clients with a well-balanced and fiscally responsible plan to address their stormwater needs.

Modeling & Drainage Studies
Our staff has experience developing hydrologic and hydraulic models for existing and proposed conditions, and is able to calibrate models to observed historical conditions. We visually present proposed solutions utilizing GIS and CADD software. The following is a listing of various hydrologic and hydraulic software programs utilized:

- Civil 3D (Hydraflow)
- XPSWMM
- Pond Pack
- Culvert Master
- StormCAD
- HEC-RAS
- HEC-HMS
- Hydra, Microstation
- Geopak
- ESRI/ArcGIS

GIS Asset Mapping
Our comprehensive asset mapping services organize and consolidate geographically-referenced data into a unified format to provide improved asset utilization for our clients.

Permitting
Our team has extensive experience in obtaining state and federal regulatory permits including:

- U.S. Corps of Engineer Permits
- State Department of Natural Resource Permits
- NPDES Permits

Design
Our staff is comprised of experienced engineers that have a proven track record of developing cost effective and reliable solutions for storm sewer improvements including the development of Stormwater Pollution Prevention Plans, storm sewer design, stormwater pump station design, detention/retention design, and open channel flow solutions.

Construction Observation
Our top quality construction observation services are provided for SWPPP installation and maintenance, stormwater pumping facilities, stormwater collection systems, open channel construction improvements, and stream bank mitigation projects.
The Gonzalez staff is comprised of design engineers, construction managers and inspectors, including several former Department of Transportation employees. Our seasoned transportation team provides competitive solutions to challenging transportation projects through an analytical, innovative, and responsible approach.

Our certified technicians and Resident Engineers provide quality inspection services for bridges, interstates, and roadways for MoDOT, IDOT, ISHTA, CDOT, and various municipal and local governments. These inspection services include:

- Traffic Control
- Utility Coordination
- Quality Control/Quality Assurance
- Construction Layout
- Documentation
- Painting Inspection

**Relevant Inspection Projects**

- Evans Ave. Road Closure
- Route 157 Bridge
- Joliet Movable Bridges
- Route 15 Bridges
- I-64 over Metrolink
- Ladue Construction
- I-64 Pedestrian Bridge
- St. Cyr Road
- Walnut Trail
- Farmington, MO Sidewalks
- Eads Bridge Paint Inspection
- IL 157 Turn Lane
- Various/Various Paint—IDOT
- Waterloo Bypass
- Troy Interchange
- Bloomingdale Trail—CDOT
- Meacham Road
- I-90 C.U.R
- Venice Road
- O'Fallon Turnabout
- I-270 @ Pontoon Beach
- I-55 Rubberization
- Silver Lake Dam
- Highland Food Pantry
- Wood River Sewer Separation
- MSD Chimney Inspection
- Terminal RR Inspection
- O'Fallon Township Paving

**Municipal & Local Agencies**

- City of O'Fallon, IL
- City of Wood River, IL
- City of O'Fallon, MO
- City of Glen Carbon, IL
- Warrenton, MO
- Perryville, MO
- Metropolitan St. Louis Sewer District
- PWSD No. 2 of St. Charles County
- Village of Brooklyn, IL

The Gonzalez team maintains DOT certification and training in the following areas:

- Documentation of Contract Quantities
- ICORS
- Concrete Level 1,2,3
- HMA Level 1,2,3
- 3 and 5 Day Aggregate
- NACE Level 1/2/3 Paint Inspection

**18 DOT Trained Inspectors**

**7 Former DOT Employees**
Gonzalez provides expertise through the full range of project phases, from initial concept through post-construction monitoring. We honor the solid reputation and regard we have through the geotechnical community with our dedicated quality and dependability.

**Geotechnical Capabilities**

- Braced Excavations
- Civil/Site
- Cofferdam
- Deep Foundations
- Dewatering, Non-Hazardous
- Earthwork, Grading, & Structural Backfill
- Geological-Explore-Survey
- Geotechnical Investigations/Engineering
- Ground Improvements
- Industrial Installations
- Levees
- Shoring and Underpinning
- Slope Protection
- Site Development
- Storm Drainage
- Structural Geotechnical Reports (SGR)-Building, Bridges, & Towers
- Tunnel Design
- Geophysical Survey

**Relevant Project Experience**

- Muny Tributary Liberal Arts Bridge
- Interstate 64 Jefferson Avenue
- Elsah Hills Drive Bank Repair
- Glen Carbon Geotechnical Impact Analysis
- Belleville Shrine Substation
- Warrenton Wastewater System Improvements
- Route 157 over Schoenberger Creek
- Washington State Park Water Supply Building
- Ameren Substation

**Qualified Staff**

Marsia Geldert-Murphey, P.E. Recently joined Gonzalez Companies and is serving as the Director of Geotechnical & Environmental Service. Marsia has over 20 years of industry experience. Marsia’s experience includes conducting, directing and supervising geotechnical reports and NEPA document preparation, construction engineering and material testing, eminent domain proceedings, public involvement plans, and maintenance and upgrades of utility supply systems. She has served as quality assurance officer for numerous multidisciplinary project involving federal funds.