June 18, 2020

Kenneth Yarrow
Transportation Planning Manager
Gulf Regional Planning Commission
1635-G Popps Ferry Road
Biloxi, MS 39531

Re: Response to Traffic Studies RFQ

Dear Mr. Yarrow,

Thompson Engineering, along with Alliance Transportation Group (ATG), is pleased to submit our statement of qualifications in response to the request for qualifications for traffic studies by the Gulf Regional Planning Commission (GRPC) issued by email on May 28, 2020. This package will explain our qualifications to perform traffic studies which recommend mitigation measures when existing transportation problems are evident in an area, such as high occurrences of crashes, increases in traffic volume or complex road geometrics causing issues.

We understand the Commission will build a list from these submittals to select from for future traffic studies. Further we understand the Commission will also select from submittals and work on a scope and contract for a study immediately after the submission deadline. Our team commits to work with GRPC to develop project scopes which are responsive to project needs and meet traffic engineering requirements.

Team Introduction

Established in 1953, **Thompson Engineering, Inc. (Thompson)** is a multi-disciplined planning, design, and construction services firm providing engineering design, environmental consulting, construction management, construction inspection and materials testing. Our 300+ personnel offer seamless, responsive, and cost-effective engineering and architectural services.

Thompson has maintained a presence on the Mississippi Gulf Coast almost continuously since the early 1980's. Our commitment to provide quality engineering services in Mississippi is evidenced by our branch offices in Moss Point and Jackson. Engineering services required for this work will be managed by Jackson County residents assigned to our office in Moss Point, Mississippi, with support services provided by our company's resources, as required to meet the needs of this project. We can provide the local knowledge, experience and commitment to deliver a quality project, on time and on budget.

Our organizational structure allows project managers to access talents wherever necessary to meet project objectives. We are a task-driven organization – we meet project schedules and

deliver a quality product. Our work ethic challenges us to operate at maximum capacity. We believe that quality centered in honesty, integrity, and respect will lead to mutual success.

Alliance Transportation Group (ATG) is a full-service engineering and planning consulting services firm founded on strong beliefs of serving the community, developing sustainable relationships, and sharing success. We deliver our services on-time and with consistent high value and attention! ATG is headquartered in Austin, Texas with branch offices in Dallas, San Antonio, Houston, and Lake Charles, Louisiana. Today, our firm employs more than 100 professional engineers, traffic operations engineers, certified planners, economists, computer technicians, public involvement specialists, and support staff. Our staff has established strong professional relationships with numerous departments and divisions within DOT's, Federal Transit Administration (FTA), Federal Highway Administration (FHWA) and counties, cities, and metropolitan planning organizations throughout the country. ATG staff have an in-depth understanding of federal, state, and local programs, policies, and regulations.

Statement of Firm Registration

Thompson Engineering is licensed to conduct business in the State of Mississippi with the Secretary of State Offices as a Profit Corporation (Business ID #707408) in good standing since 1991. Thompson also holds Certificates of Authority for Engineering (License No. 104) and Surveying (License No. 142) through the State of Mississippi Board of Licensure.

ATG is licensed to conduct business in the State of Mississippi with the Secretary of State Offices as a Profit Corporation (Business ID #895142) in good standing since 2006. ATG also holds a Certificate of Authority for Engineering (License No. 1708) through the State of Mississippi Board of Licensure. Information for both businesses appear in Appendix A.

Statement of Professional Standing

Neither Thompson Engineering or ATG have any lawsuits or controversies pending on their projects. Both are operating on a sound financial basis.

Statement of Professional Experience

Thompson Engineering is a multi-disciplined engineering design, environmental consulting, construction management, construction inspection and materials testing firm. Our services are conducted under the direction of registered Professional Engineers, Architects, Scientists, Geologists, and Land Surveyors. Thompson offers a wide range of capabilities including: transportation design; Stage 0 (feasibility studies), environmental roadway assessments/impact studies, civil engineering; construction management; construction materials testing; construction inspection; environmental consulting; geotechnical engineering; hydraulics / hydrology; marine design; program management; project controls / scheduling / estimating; roofing and waterproofing; structural engineering; surveying; and water / wastewater design.

Our Mississippi experience dates back to the late 1960's with the site development for Chevron and the Port of Pascagoula. In the 1970's we were engaged in the development of the Port of Gulfport and the expansion / upgrade of airfield and runways at Keesler AFB. In the 1980's we assisted the U.S. Navy with the development of the Naval Homeport Pascagoula and the historic renovation of the Harrison County Federal Courthouse. With the development of the casino industry in the 1990's, Thompson provided engineering and construction materials testing to numerous Mississippi casinos, including the Beau Rivage. We have experience with the City of Biloxi, providing architectural and engineering services for the Emergency Operations Center and engineering services for roadway improvements and infrastructure repairs through the FEMA-funded Restore Biloxi program. We also have provided the Harrison County Utility Authority engineering design, permitting, geotechnical engineering, construction management, and construction engineering inspection for the S-19B South Woolmarket transmission mains and pump stations in Biloxi.

Transportation Design Services - Thompson Engineering's transportation group has completed hundreds of projects throughout the southeastern states of Mississippi, Alabama, Louisiana, Tennessee, South Carolina, and Georgia. Our projects range from interstates and state highways; to bridges, retaining walls and culverts; to pedestrian and bike lanes for federal, state, and local officials. Our personnel specialize in roadway design; landscape architecture, geotechnical engineering, structural engineering, environmental permitting, construction engineering inspection, and storm water compliance. Our experience includes:

- Transportation Planning
- Feasibility Studies & Alternative Analysis
- NEPA Documents (CE, EA, EIS)
- Right-of-Way Plans
- Land Surveying
- Geotechnical Exploration and Lab Testing
- Traffic Signal Design and Maintenance
- Traffic Modelling
- Bridge and Structural Design
- Geometric Design of Roadways
- Signage and Pavement Marking Plans
- Scheduling and Cost Estimates
- Maintenance of Traffic
- Construction Engineering Inspection (CEI)
- Materials Testing (Field and Laboratory
- Stormwater Management & Inspection
- Rest Stops and Visitor Centers

ATG team members working with the Gulf Regional Planning Commission (GRPC) will include individuals with ***extensive experience completing all tasks required of traffic/transportation engineering and planning activities***. These tasks include signal warrant studies, traffic signal timing, roundabout analysis and design, complete streets, access management, pedestrian and bicycle systems, major thoroughfare development, traffic calming, traffic projections and estimates, and traffic impact analyses in addition to comprehensive community outreach (virtual and in-person). Several example projects have been documented in Appendix B as well as within the resumes of key project staff assigned to this project.

ATG's traffic engineering team is a full-service, one-stop shop for transportation analysis and design. ATG has completed ***more than 1,700 traffic engineering projects*** over the history of our

firm's existence. We use an integrated simulation and evaluation approach to solve traffic-related problems and deficiencies in the transportation network. We understand the relationship between land usage, development, and the roadway system. Depending on a client's needs, our designs consider vehicular movements, freight movements, public transit, parking, pedestrian travel, and bicycling. We provide multiple solutions with benefits and costs of each, as well as plans, specifications, and estimates for implementation. We are well versed in taking solutions through regulatory, schematic, design approval, and construction, as needed, to support overall project development. Our engineering services include analysis and design services for:

- Roadway Design
- Sidewalk and Pedestrian Facilities Design
- Traffic Signal Design
- Permitting Review
- Schematic Development
- Maintenance of Traffic Plans
- Drainage Analysis and Design
- Safety Reviews
- Traffic Operations (using PTV Vissim and Visum; Trafficware Synchro, and SimTraffic)
- Crash Analysis and Correction
- Parking and Circulation Studies
- School Zone Layout
- Speed Zoning
- Pavement Markings and Signage Plans

Detailed project descriptions demonstrating our team's experience is located in Appendix B.

Key Project Staff

All work performed out of this contract will be managed out of Thompson Engineering's office in Jackson County and ATG's Lake Charles office.

Thompson Engineering's Project Manager (Adam Jackson) is based in Jackson County, while ATG's project manager (Ed Elam) is based in the Metro New Orleans area. GRPC staff has worked collaboratively with Adam for over 5 years and with Ed for more than 20 years. Both are familiar to GRPC staff from their work on GRPC projects for Jackson County and would be available for regular project meetings and site visits with GRPC staff and representatives of local government.

Combined, our key staff has more than 40 years of Metropolitan Planning Organization (MPO) and other relevant engineering experience in both the public and private sectors. They will be supported by a diverse team of planners and engineers who will be responsible for evaluating and approving all analyses. Resumes for these key personnel appear in Appendix C.

Key Personnel	Years of Experience	Project Role	Highest Degree	Certification
Adam C. Jackson, PE *(Civil Engineer)*	7 years of project engineering and transportation planning experience, including 3 corridor studies for Jackson County, MS and GRPC	Project Manager	BS, Civil Engineering	PE, Mississippi (NO. 29742) LPA Project Certified with MDOT

Key Personnel	Years of Experience	Project Role	Highest Degree	Certification
Matthew C. Rogers, PE *(Senior Civil Engineer)*	15 years of project engineering and transportation planning experience for projects in three states, including 3 corridor studies for Jackson County, MS and GRPC	Project Engineer	BS, Civil Engineering	PE, Mississippi (NO. 21469) LPA Project Certified with MDOT
Abdulai Abdul-Majeed, P.E., PTOE *(Transportation Engineer)*	9 years of experience in roadway design, traffic operations, signal design, intelligent transportation systems (ITS), corridor studies, traffic impact studies, and interchange feasibility studies.	Project Engineer	MS, Civil Engineering	PE, Mississippi (NO. 28400) PTOE #4320
Edwin (Ed) E. Elam, III, AICP, PTP *(Senior Project Manager)*	30 years of transportation planning experience; completed more than 50 traffic corridor studies in four states including private clients, GRPC, and local governments in Mississippi	Principal Transportation Planner	Master of Urban and Regional Planning	AICP #10672 PTP #446 LPA Project Certified with MDOT
Trey Gamble, P.E., PTOE *(Senior Transportation Engineer)*	29 years of traffic engineering and transportation planning experience; leads work on Traffic Impact Analyses (TIA) for ATG	Traffic Engineer	MS, Civil Engineering	PE, Mississippi (NO. 17635) PTOE #4101
Anna "Gaby" Tassin, P.E., PTOE, PTP *(Assistant Director, Traffic Engineering)*	13 years of experience in transportation engineering and planning; experience with HCM Method, VISSIM, and SYNCHRO models	Traffic Engineer	BS, Civil Engineering	PE, Louisiana (NO. 36365) PTOE #3128 PTP #459

Professional References

Thompson Engineering has an excellent reputation with respect to work quality, compliance with schedules, and cost controls. With over 67 years of commitments to clients and communities, past performance is best demonstrated by successful projects and satisfied clients. Thompson submits the following names of individuals that have direct knowledge of the firm's capabilities to perform the required tasks associated with this RFQ.

Jackson County Board of Supervisors	Mississippi Department of Transportation	Jackson County Road Department
Brian Fulton, P.E. County Administrator 2915 Canty Street, Suite H Pascagoula, MS 39568 228.769.3088 brian_fulton@co.jackson.ms.us	**David Seyfarth, P.E., P.L.S.** Special Projects Engineer 16499-B Highway 49 Saucier, MS 39574 228.832.0682 dseyfarth@mdot.ms.gov	**Wendy Broussard, P.E.** 8500 Jim Ramsay Road Vancleave, MS 39565 228.826.2547 wendy_broussard@co.jackson.ms.us

ATG has served many clients and we are proud of our record of positive relationships with clients, enjoyed both during and after completion of project engagements. The references below can speak to our recent experience on like-kind projects. Additionally, they can attest to our history of delivering high-quality project management/deliverables, communication, experience, and expertise.

North Louisiana Council of Governments (NLCOG)	City of Sulphur, LA	Metroplan
J. Kent Rogers Executive Director 625 Texas Street Suite 200 Shreveport, LA 71101 318.841.5950 kent.rogers@nlcog.org	**Stacey Dowden** Director, Department of Public Works PO Box 1309 Sulphur, LA 70664 337.527.4500 sdowden@sulphur.org	**Casey Covington** Deputy Director/CARTS Study Director 501 West Markham, Suite B Little Rock, AR 72201 501.372.3300 covington@metroplan.org

We value the opportunity to work with GRPC on this project. In closing, both Thompson Engineering and ATG have reviewed our ongoing project work schedules and other business obligations. We confirm our availability to complete all tasks requested by GRPC and look forward to your response to this submittal.

Should you have any questions, or need any additional information, please contact us anytime.

Sincerely,

Thompson Engineering

Matthew C. Rogers, P.E.
Senior Engineer

Adam C. Jackson, P.E.
Project Engineer

Enclosures:

Appendix A: Thompson and ATG Business Registration, State of Mississippi Board of Licensure
Appendix B: Thompson and ATG Project Examples
Appendix C: Thompson and ATG Long-Form Resumes, Project Team Members

cc: Paul Gavin, Executive Director, GRPC (via email)
Jeff Loftus, Community Planning Manager, GRPC (via email)

APPENDIX A: LICENSURE

Michael Watson
SECRETARY OF STATE

This is not an official certificate of good standing.

Name History

Name	Name Type
Thompson Engineering, Inc.	Legal
Thompson Engineering, Inc. of Alabama	Alias
thompson engineering testing, inc.	Previous Legal
Thompson Engineering Testing, Inc.	Previous Legal
Thompson Engineering, Inc.	Previous Legal
TCO, INC.	Previous Legal

Business Information

Business Type:	Profit Corporation
Business ID:	707408
Status:	Good Standing
Effective Date:	12/11/1991
State of Incorporation:	AL
Principal Office Address:	2970 Cottage Hill Road, Suite 190 Mobile, AL 36606

Registered Agent

Name

Justin Hardee
Thompson Engineering, Inc., 5913 Grierson Street
Moss Point, MS 39563

Officers & Directors

Name	Title
John H Baker III PO Box 9637 Mobile, AL 36691	Director, President, Chairman, Chief Executive Officer
Chad R Brown PO Box 9637 Mobile, AL 36691	Director, Secretary
Michael Manning PO Box 9637 Mobile, AL 36691	Director
Suzanne Holston 2970 Cottage Hill Road, Suite 190	Chief Financial Officer

Mobile, AL 36606

Mark Dison
PO Box 9637
Mobile, AL 36691

Director

Firm Details

Firm Name: Thompson Engineering, Inc.

Address: 2970 Cottage Hill Road
Suite 190
Mobile AL 36606

County: Mobile

Phone: 251-666-2443

License Type: Certificate of Authority (Engineering)

License Number: 104

Expires on: 12/31/2020

Designated Licensee: Mr.Robert Wayne Moseley (PE-6436)

License Type: Certificate of Authority (Surveying)

License Number: 142

Expires on: 12/31/2020

Designated Licensee: Mr.Gerald Anthony Smith (PS-2942)

Michael Watson
SECRETARY OF STATE

This is not an official certificate of good standing.

Name History

Name	Name Type
Alliance Transportation Group, Inc.	Legal

Business Information

Business Type:	Profit Corporation
Business ID:	895142
Status:	Good Standing
Effective Date:	07/07/2006
State of Incorporation:	DE
Principal Office Address:	

Registered Agent

Name

CORPORATION SERVICE COMPANY
7716 Old Canton Rd, Suite C
Madison, MS 39110

Officers & Directors

Name	Title
J. Michael Heath 11701 Stonehollow Dr., Ste. 100 Austin, MS 78758	President
J.D. Allen 748 Bayou Pines East, Suite C Lake Charles, LA 70601	Director, Vice President
Daniel D. Rios 11701 Stonehollow Dr., Ste. 100 Austin, TX 78758	Director, Secretary
Gayle L. Heath 11701 Stonehollow Dr., Ste.	Director, Other, Chief Executive Officer

100
Austin, TX 78758

Firm Details

Firm Name: Alliance Transportation Group, Inc

Address: 11701 Stonehollow Dr
Suite 100
Austin TX 78758

County: Travis

Phone: 512-821-2081

License Type: Certificate of Authority (Engineering)

License Number: 1708

Expires on: 12/31/2020

Designated Licensee: Mr.Arthur (Trey) Forrest Gamble III (PE-17635)

APPENDIX B:
PROJECT EXAMPLES

Miscellaneous

Traffic Impact Studies

Belle La Vie Development, Traffic Impact Study, Biloxi, MS

Performed traffic impact study for 1500 acre planned unit development. Analysis included 12 roadways and 16 intersections. The area was entered into modeling software to determine the impact of the development on the surrounding traffic network.

Jacobs Investments, Traffic Impact Study, Diamondhead, MS

Performed a traffic impact study for proposed new casino complex. Analysis included interstate ramps and adjacent surface streets. Coordination with the MS Dept of Transportation and local public agencies was required.

Rangeline Road Properties, Mobile, AL

Performed a traffic impact study for a proposed 80 acres commercial development along Tillman's Corner . Study required coordination with the AL Dept. of Transportation as well as FHWA in regard to modifications to the layout of the interstate off-ramps.

Treasure Bay Casino and Resort

Thompson Engineering was selected to perform a traffic impact study in the vicinity of the resort on US 90 in Biloxi as the result of the resort's decision to relocate their casino and construct a 1200 space parking garage. This would dictate the relocation of the ingress/egress points from the resort's property to US 90. In order to obtain driveway permits form the Mississippi Department of Transportation (MDOT), a traffic impact study was required by MDOT to determine the affect of the resort and the existing traffic signal system on US 90

New Jerusalem Church, Jackson, MS

Performed Traffic Impact Study for new church complex including sanctuary, administration building, and daycare facility.

Relevant Tasks

Traffic Impact Studies

Mississippi Department of Transportation

MS583 Roadway Widening Study

Owner
Mississippi Department of Transportation
P. O. Box 1850
Jackson, MS 39215-1850

Contact
Daniel Helms, P.E.
601.359.1454

Location
Lincoln County, Mississippi

Contract Value
$140,231

Thompson Engineering was asked to study the section of MS 583 from US 84 south to Hunters Road SE to what would be required to bring the current 20 foot wide roadway up to current MDOT design standards. This road was acquired by MDOT from Lincoln County in the 1960's without any established right –of-way (ROW) limits. Because of the little known information on the width of ROW, the Thompson team did in-depth research in order to provide MDOT all available information on the roadway and its history. Using deeds and researching the legislative order where MDOT took over maintenance of this roadway as well as many others in the state with no established ROW limits, it was determined that if no ROW limits were listed that the ROW would be set at 60 feet. This ROW width was then surveyed so that the existing conditions could be determined for the roadway. The existing typical section was widened to two 12 foot lanes with 2 foot paved shoulders. From this, the Thompson team determined all areas that did not meet current design standards for both horizontal and vertical design. A new alignment was run using current design standards so that MDOT could determine how much of the roadway section would require the purchase of additional ROW and how much would be needed. All this information was compiled into a report showing all sections where improvements were needed and where additional ROW would be needed in order for these improvements to take place.

Relevant Tasks

Survey | Roadway Design

City of Biloxi

Roadway Improvements

Owner
City of Biloxi
P.O. Box 429
Biloxi, MS 39533

Contact
Damon Torricelli, P.E.
228.435.6265

Location
Biloxi, Mississippi

Construction Cost
Bent Oaks Subdivision - $4 million
Phase 1 - $400,000

Thompson Engineering was tasked by the City of Biloxi to investigate the failure of the existing concrete roads in the Bent Oaks Subdivision. Geotechnical borings were taken to determine if the underlying soils were suitable to support the loadings occurring on the roadways. The results of this investigation showed that the underlying souls were acceptable, but that the thickness of the concrete pavement varied from 2.5 inches in thickness to 8 inches in thickness.

Thompson was then tasked with re-designing the roads based upon the information gathered in the geotechnical phase of the project. The project area was then surveyed and design began on replacement of the existing pavement for Phase 1. This portion of the project combines funding from the City of Biloxi and Harrison County, requiring coordination between the City and County. Phase 1 of the final design consisted of removal of the existing pavement, undercutting in limited areas where soils were found to be unsuitable, replacement of drainage structures (as needed), placement of under drains in strategic locations, placement of 6-inches crushed stone base course, and placement of a new concrete pavement.

Relevant Tasks

Surveying | Geotechnical | Civil Design | Drainage Design | Roadway Design

City of Biloxi

Biloxi Infrastructure Division Street

Owner
City of Biloxi
P. O. Box 429
Biloxi, Mississippi 39533

Contact
Damon Torricelli, PE
228.435.6265

Location
Biloxi, Mississippi

Construction Cost
$18,200,000

Thompson Engineering was selected by the City of Biloxi to provide surveying, geotechnical, and design services for the Division Street Phase of the Biloxi Infrastructure Restoration Program. The program is federally funded to provide repairs and/or replace infrastructure that was damaged as a result of Hurricane Katrina's storm surge. The Division Street Phase of the program consists of approximately 20,000 L.F. of affected roadways with an estimated construction cost of $18.2 Million.

The objectives of Thompson Engineering's design, as tasked by the City of Biloxi, were to provide design services for the following:

- Removal and replacement of approximately 28,000 L.F. of drainage pipes ranging in size from 18" to 48" in diameter, 6'x3', 8'x3' and 8'x4' box culverts (including all catch basins).
- Removal and replacement of approximately 20,000 L.F. of sanitary sewer gravity mains (8", 10", 12", 16" and 24") and approximately 90 manholes.
- Removal and replacement of approximately 24,000 L.F. of 8", 12" and 16" water main, including valves and hydrant assemblies.
- Removal and replacement of water and sewer service connections from the right-of-way to the new utility mains.
- Removal and replacement of approximately 78,000 sq. yd. of flexible pavement including curb and gutter.
- Refurbishment of one existing lift station.

Relevant Tasks

Surveying | Geotechnical Engineering | Civil Engineering | Drainage Design | Roadway Design
Water/Wastewater Design

Owner
City of Mobile
205 Government Street
Mobile, Alabama 36633t

City of Mobile
ATRIP Project
Broad Street Rehabilitation

Contact
Nick Amberger
251.208.7398

Location
Mobile, Alabama

Contract Value
$245,000

Construction Cost
$3,065,059

In support of the expansion planned for the Brookley Aeroplex, the State of Alabama and the City of Mobile funded the improvement to Broad Street which services the industrial site operated by the Mobile Airport Authority. The funding was made available through Alabama Transportation Rehabilitation and Improvement Program (ATRIP). The purpose of this program is to rehabilitate and improve transportation infrastructure through the accelerated delivery of project funding. The program's goal is to address critical needs projects across the state in an effort to rehabilitate and improve the in-place facilities and in some cases provide new facilities at locations throughout the state. The program's focus is on essential needs relating to roads and bridges. The projects include federal and state funding with local matching funds.

With the planned expansion and new construction of the Airbus Manufacturing Facility, the Brookley Aeroplex, and Broad Street in particular, will experience a significant increase in truck traffic and employee traffic as an access point at the intersection of U.S. Interstate 10. The design and construction will consists of the removal and reconstruction of an existing concrete roadway. The scope also includes ADA sidewalk improvements, drainage improvements, new traffic markings, ADEM permitting and contract administration.

Construction included the complete removal of the existing concrete pavement, undercut of the existing subgrade, removal and replacement of existing storm drainage inlets and pipes, and installation of new crushed aggregate base and asphalt binder and wearing courses.

Relevant Tasks

Geotechnical Investigation | Drilling | Civil Design Services | Roadway Design Services | Surveying | Permitting | Construction Materials Testing | Contract Administration |

City of Sulphur | City-Wide Traffic Signal and Mobility Analysis			
ATG Role	Subconsultant	**Project Location**	Sulphur, LA
Project Owner	City of Sulphur	**Owner Point of Contact**	Stacey Dowden
Owner Address	P.O. Box 1309 Sulphur, LA 70664	**Phone Number**	337.527.4500
		Email Address	sdowden@sulphur.org

ATG evaluated the traffic operations at 36 signalized and unsignalized intersections, along various corridors within the City of Sulphur. The traffic analysis included site distance analysis; peak period data collection and analysis; travel time and delay; crash analysis using the Highway Safety Manual; highway capacity manual analysis; operational analysis; and warrant analyses.

Outcomes included recommendations for system improvements; including new signal timing; signal interconnects and signal equipment upgrades; and construction cost estimates. The project required coordination with LADOTD.

Over the past seven years, ATG has developed signal design plans and signal timing plans to implement all the recommendations including:

- Signal design and construction management for the intersection of Tamarack Street with Ruth Street.
- Signal design and construction management for the intersections of Huntington Street with Cypress Street and Ruth Street with Darbonne Street.
- Signal design and construction management at two intersections on Maplewood Drive: Maplewood Drive with Hazel Street and with Post Oak Road.
- Signal design and construction management of warning flasher for the Eastside Fire Station at the intersection of Maplewood Drive at Crystal Lane.
- Signal design and construction management at three intersections on Cypress Street: Cypress Street with Kent Drive, with Maple Street, and with Loretto Avenue.

City of Temple | Pedestrian Signal Design and Traffic Signal Design			
ATG Role	Prime	**Project Location**	Temple, TX
Project Owner	City of Temple	**Owner Point of Contact**	Michael Phillips Kenny Henderson
Owner Address	3210 E. Avenue H, Building A Temple, TX 76501	**Phone Number**	254.298.5660/5663
		Email Address	mphillips@templetx.gov khenderson@templetx.gov

ATG provided the City of Temple with a pedestrian signal design for the southern crossing at West Adams Avenue and Kegley Road in Temple. This project consisted of simple PS&E showing pedestrian infrastructure improvements at the intersection. ATG previously provided pedestrian infrastructure plans for the north and west crossings in 2016. These plans added the south crossing to the intersection.

ATG designed traffic signal plans for the intersection of Adams Avenue (FM 2305) and Pea Ridge Road within the City of Temple. This intersection is a four-leg intersection located in the western portion of the city. ATG collected all "as-built" or design drawings and documented the existing conditions in the intersection. Based on the location of the utilities in the area, ATG designed the intersection layout to minimize interference with overhead electric facilities. Due to the horizontal alignment of Adams Avenue, ATG included in the design a supplemental head for westbound traffic. ATG staff developed full construction plan sheets showing the traffic signal indications and poles, traffic control signs, and material quantities. ATG also prepared the bid items and specifications for this signal installation.

Sasol | Traffic Impact Analysis (TIA)			
ATG Role	Subconsultant	**Project Location**	Westlake, LA
Project Owner	Sasol North America	**Owner Point of Contact**	John LaBove (Fluor Enterprises)
Owner Address	One Fluor Daniel Drive Sugar Land, TX 77478	**Phone Number**	281.263.1000
		Email Address	John.LaBove@fluor.com

Fluor Enterprises hired ATG to provide data collection services and prepare a traffic impact analysis (TIA) in connection with the Sasol North America's Lake Charles Chemical Project (LCCP) and Gas-to-Liquids (GTL) complex project.

Data collection services for the main site included AM and PM turning movement counts for 15 intersection in the vicinity of the proposed facility; 24-hour bi-directional traffic counts for 11 locations near the proposed facility; and an inventory study of roadways and intersections.

ATG evaluated the impacts of traffic associated with the heavy haul route from the eastern terminus of Sulphur Avenue to the plant entrance on Houston River Road. This included the locations of traffic control devices and issues associated with the intersections along the route. ATG developed a traffic control plan for detouring local traffic during heavy haul activity and provided recommendations for improvements to the roadway network along the heavy haul route to accommodate the anticipated use. Additionally, ATG was granted the following supplemental work orders:

- Railroad crossing evaluation
- Satellite parking facilities analysis and full construction with off-site parking
- Ramp up analysis and western corridor analysis

The TIA for the main site included evaluating existing conditions and developing projected background traffic. The TIA determined impacts associated with the proposed facilities and identified geometric and/or operational improvements needed to accommodate the site-generated traffic, including probable cost estimates for the suggested improvements. As part of this TIA, ATG assessed the impact of three alternate off-site parking scenarios to reduce the number of vehicles accessing the site. ATG also reviewed the traffic impacts associated with eight borrow pit sites based on collected data and identified geometric and/or operational improvements necessary to accommodate the traffic associated with the borrow pit operations.

In collaboration with the LADOTD District Traffic Operations Engineer, it was determined that construction of additional geometric roadway capacity was not practical. A sensitivity analysis was performed to determine the number of workers permissible at the site without triggering extensive roadway improvements. Demand management techniques were also identified which would be needed to avoid geometric roadway improvements. These demand management strategies included carpooling, off-site parking lots, and shift offsets. On-site observations were performed at the gates to the chemical plant to identify operational issues and recommended practical improvements which could be implemented to decrease delay. These improvements included recommendations for better delineated lane designations, flagger operations, and the utilization of existing space to separate vehicles entering the site from opposing directions. As a maintenance mitigation during construction, the engineers under Trey's direction also implemented a program of periodic signal timing optimizations in the LADOTD corridors to maximize the operational capacity through the intersections. Counts were monitored over a three-year period and timing plans were updated to maintain progression through the corridors and minimize delays.

Cheniere Energy | Lighthouse Road at LA 82 Intersection Analysis (LADOTD)			
ATG Role	Prime	**Project Location**	Cameron, LA
Project Owner	Cheniere Energy	**Owner Point of Contact**	David White, P.E.
Owner Address	9243 Gulf Beach Highway Cameron, LA 70631	**Phone Number**	337.569.7539 (direct) 918.527.9741 (mobile)
		Email Address	David.white@cheniere.com

The primary focus of this study was to review existing and future intersection improvements based on a projected increase in the Cheniere operations at this location. The study focused on intersection improvements including the addition of left turn lanes, right turn lanes, traffic signalization, and conversion of the intersection to a modern roundabout.

Lighthouse Road serves as an entry into the Cheniere Energy's Sabine Pass LNG terminal. The Sabine Pass LNG terminal is located on more than 1,000 acres of land along the Sabine Pass River on the border between Texas and Louisiana, in Cameron Parish. The study included an evaluation of existing 24-hour turning movements on a typical weekday, estimation of the queue lengths, and determination of intersection improvements. An analysis for year 2023 was performed based on volume projections from input on the LNG terminal expansion and general growth in the area.

As part of the alternative analysis, the existing and future conditions were evaluated using the Highway Capacity Software for the evaluation of the traditional improvements such as left turn lanes and right turn lanes. Measures of effectiveness included level or service, delay, and queue length. The modern roundabout was evaluated using SIDRA and level of service as a measure of effectiveness. A traffic signal warrant analysis was performed using the warrants outlined in the Manual on Uniform Traffic Control Devices (MUTCD). A safety analysis was performed by evaluating crash rates, and crash types at the existing intersection. The Highway Safety Manual methodology for predicted crash frequency was applied to establish a reduction in crashes for each intersection alternative considered. The analysis resulted in a preferred alternative included a left turn lane westbound and a right turn lane eastbound on LA 82 at Lighthouse Road. A schematic of the proposed improvements was prepared which included storage lengths, an evaluation of intersection sight distance, and right-of-way needs. A probable cost of construction was prepared and included in the final report.

City of Lake Charles | Prien Lake Road Stage 0 Traffic Study			
ATG Role	Prime	**Project Location**	Lake Charles, LA
Project Owner	City of Lake Charles	**Owner Point of Contact**	Mister Edwards
Owner Address	P.O. Box 3706 Lake Charles, LA 70602	**Phone Number**	337.491.1308
		Email Address	medwards@cityoflc.us

ATG prepared a Stage 0 Feasibility Study and Environmental Inventory for Prien Lake Road/Ihles Road in Calcasieu Parish, Louisiana.

The corridor study included an evaluation of existing conditions (2014) and future conditions (2034) as estimated using the IMCAL Travel Demand Model. The study encompassed the analyses and application of the accompanying design standards and construction costs for improvements spanning the length of the corridor (approximately 0.6 miles) considering the anticipated future traffic growth.

City of Pearland | Traffic/Transportation Planning On-Call			
ATG Role	Prime	**Project Location**	Pearland, TX
Project Owner	City of Pearland	**Owner Point of Contact**	Robert Upton, PE
Owner Address	3519 Liberty Drive Pearland, TX 77581	**Phone Number**	281.652.1641
		Email Address	rupton@pearlandtx.gov

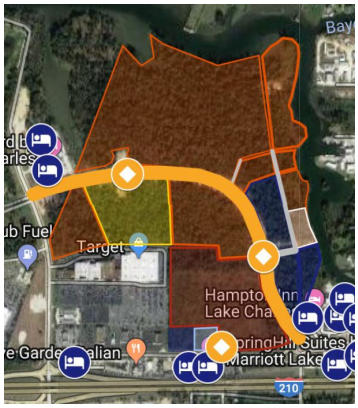
ATG conducted traffic engineering/planning services as part of an on-call services contract. Project tasks have included improvements for alternative corridor, intersection geometry, and pedestrian safety/ pedestrian access; roadway access management, capacity analysis; intersection analysis; traffic calming; and citywide crash data evaluations. ATG was responsible for reviewing traffic engineering submittals including traffic impact analysis (TIAs), signal plans, construction plans, traffic control plans, Intelligent Transportation System (ITS) design, traffic signal designs, intersection and corridor studies, safety studies, and traffic signal timing.

To aid in smart growth within Pearland, ATG developed or made recent revisions to the city traffic impact guidelines, access management guidelines, school zone guidelines, mid-block crossing criteria, as well as, provided recommendations for improvement of the City's Thoroughfare Plan. Additionally, ATG aided in the presentation and education of new access management and traffic engineering procedures and recommendations to elected officials, City staff, and the public through presentations at public workshops or at city council.

ATG was assigned traffic engineering considerations including potential and existing "bus cut-outs" evaluations for geometric design with respect to right-of way, traffic queues, intersection spacing, driveway spacing, parking, ADA compliance, bike access, and pavement design. ATG was also responsible for evaluating opportunities for CATS to properly implement transit prioritization and interconnected signalization systems using Intelligent Transportation Systems (ITS).

ATG was responsible for conducting field observations; developing concepts and providing site analyses; assisting with traffic engineering and geometrics; and developing preliminary site designs. Once these tasks were performed, ATG prepared permit construction plans and developed cost estimates and construction schedules.

Contraband Pointe Traffic Impact Analysis (TIA)			
ATG Role	Prime	**Project Location**	Lake Charles, LA
Project Owner	Block 18 of Barbe Properties, LLC	**Owner Point of Contact**	Mary Kay Hopkins
Owner Address	120 Dr. Michael DeBakey Drive, Lake Charles, LA 70601	**Phone Number**	337.439.1079
		Email Address	mkh@mkh.com



ATG prepared a Traffic Impact Analysis (TIA) for the Contraband Pointe development, a proposed retail development located in Lake Charles. Contraband Pointe, located in a growing area of Lake Charles near the I-210 corridor, has 149 acres and more than 5,000 feet along Contraband Bayou. As shown on the figure to the left, the site is near two existing casinos, the Golden Nugget and the L'Auberge Hotel and Golfing Resort. ATG analyzed existing and future build-out conditions for three stages of development.

Due to the uncertainty of the third phase of the development, trip generation estimates were developed using the client's desired maximum pro-rata share cost.

This three stage TIA required significant reporting due to the project's location and number of study intersections.

ATG provided auto-import of traffic volumes from excel templates to Synchro and Vistro; auto-import of intersection descriptions in final reports using excel tables with data field populated to include typical intersection descriptions; smart table generation for pro-rata share percentages; and cost estimates to assist in the completion of the TIA.

Capital Area Transit System (CATS) | Transit Shelters and Facilities Design			
ATG Role	Subconsultant to SJB Group, LLC	**Project Location**	Baton Rouge, LA
Project Owner	Capital Area Transit Systems (CATS)	**Owner Point of Contact**	James W. Baker
Owner Address	2250 Florida Boulevard Baton Rouge, LA 70802	**Phone Number**	225.389.8926
		Email Address	jbaker@brcats.com

This project's intent was to research traffic data and pedestrian routes to properly layout or modify traffic signalization, striping use of "ped heads", and other traffic engineering considerations for seven bus rapid transit (BRT) stations along Plank Road and eight BRT stations along Florida Boulevard as defined in the projected BRT station locations. This was a two phased project - one for Plank Road and one for Florida Boulevard.

ATG was assigned traffic engineering considerations including potential and existing "bus cut-outs" evaluations for geometric design with respect to right-of way, traffic queues, intersection spacing, driveway spacing, parking, ADA compliance, bike access, and pavement design. ATG was also responsible for evaluating opportunities for CATS to properly implement transit prioritization and interconnected signalization systems using Intelligent Transportation Systems (ITS).

ATG was responsible for conducting field observations; developing concepts and providing site analyses; assisting with traffic engineering and geometrics; and developing preliminary site designs. Once these tasks were performed, ATG prepared permit construction plans and developed cost estimates and construction schedules.

LADOTD | Technical Assistance for State Safety Oversight (TASSO) On-Call Services			
ATG Role	Prime	**Project Location**	New Orleans, LA
Project Owner	LADOTD	**Owner Point of Contact**	Kevin Lawson
Owner Address	1201 Capital Access Baton Rouge, LA 70807	**Phone Number**	225.379.3032
		Email Address	Kevin.lawson@la.gov

The Louisiana Department of Transportation and Development (LADOTD) was tasked by the Federal Transit Administration (FTA) with overseeing and monitoring the implementation of safety procedures on the rail fixed-guideway public transportation system (streetcar system) run by the New Orleans Regional Transit Authority (NORTA).

LADOTD selected ATG to assist with designing, implementing, and maintaining a MAP-21 compliant State Safety Oversight (SSO) Program. This project was focused on developing an enhanced oversight program to ensure public safety on the streetcar system. The project was critical to securing federal funding streams in Louisiana. ATG assisted with the following technical services:

- Assisted LADOTD with implementing the 'Certification Work Plan (CWP)' submitted to FTA outlining the steps to develop a MAP-21 compliant SSO Program
- Developed a new SSO Program standard detailing the duties and powers of the LADOTD SSO program to oversee rail fixed-guideway public transportation systems in the state
- Provided new audit procedures to oversee implementation of enhanced safety systems
- In coordination with the LADOTD SSO, managed the paperwork flow between rail fixed-guideway operators and LADOTD regarding compliance with LADOTD State Standard
- Assisted in developing enhanced accident investigation procedures for rail related accidents.
- Assisted LADOTD in ensuring compliance of the certified MAP-21 SSO Program including, but not limited to track inspection activities, reviewing design plans for new service lines, conducting accident investigations, and conducting facility inspections.

APPENDIX C:
PROJECT TEAM MEMBERS

DATES OF SERVICE:
Total: 8 years

EDUCATION:
Mississippi State University, Bachelor of Science in Civil Engineering, 2012

REGISTRATIONS:
Professional Engineer (PE): MS & AL

PROFESSIONAL AFFLIATIONS:
American Society of Civil Engineers

ADDITIONAL SKILLS:
Traffic Modelling
Transportation Analysis
Roadway Design
Bridge Design
Drainage Design
Marine Infrastructure
Cost Estimating
Contract Documents

ADAM JACKSON, P.E.

THOMPSON ENGINEERING, INC. – PROJECT ENGINEER

Mr. Jackson has recently joined Thompson Engineering as a Project Engineer for the Civil Design group. He has 8 years of civil engineering experience in municipal/private design & construction projects. His responsibilities include project management, civil design, cost estimating, construction administration & inspection, marketing, and maintaining client relations. He engages in all phases of project development, starting with funding application, planning, design development, bidding, construction administration & inspection, and close out. His experience includes transportation planning, transportation design, drainage, infrastructure, industrial, marine, civil site, vertical construction, and construction inspection. He is also LPA Certified and has 5 years of experience in the LPA process.

PROJECT EXPERIENCE

STP-0030-00(037) LPA/107191-711000 – Ocean Springs Road Feasibility Study for Enhancements – Jackson County Board of Supervisors – Ocean Springs/Jackson County: Civil Engineer - Project engineer responsible for traffic and circulation review, review of peak-period traffic operations, identification of typical sections and roadway improvement options. Also estimate of property impacts, utility relocations (as applicable), and construction estimates.*

STP-7757-00(001) LPA/107517-711000 – Feasibility Study for McCann Road Extension – Jackson County Board of Supervisors – Jackson County: Civil Engineer - Project engineer responsible for traffic and circulation review, review of peak-period traffic operations, identification of typical sections and roadway improvement options. Also, completed the line and grade study, conceptual bridge design, and estimate of property impacts, utility relocations, and construction estimates.*

SP-0026-01(078) SR 19 Bridge Replacements – Mississippi Department of Transportation: Civil Engineer – This project consists of Phase A and Phase B roadway plans for the replacement of Bridges 52.0, 52.1, 52.3, 52.4, 52.5, and 57.6 on SR 19 in Neshoba County, Mississippi for the Mississippi Department of Transportation. This project will also realign the existing 2-lane roadway to allow for future expansion.*

STP-0030-00(039) LPA/107508-701000 – Yellow Jacket Road Sidewalks – Jackson County Board of Supervisors – St. Martin Mississippi: Civil Engineer – Designer & Drafter for the new proposed sidewalks from the Jackson County Soccer Complex to the St. Martin North Elementary School. The scope of work includes preparing plans and specifications for constructing the new sidewalk and a precast concrete pedestrian bridge. Responsibilities include all design associated with the project following the Local Public Agency (LPA) Project Development Manual (PDM). This consisted of the design and coordination with Jackson County, the LPA, and MDOT for the Field Review, Office Review, & PS&E Assembly.*

STP-9064-00(011) LPA/106889-701000 – Old Spanish Trail Widening - Hanshaw Road to Hamill Farm Road - Jackson County Board of Supervisors – Jackson County: Civil Engineer - Designer/Drafter for the resurfacing and addition of bicycle lanes along either side of Old Spanish Trail for the two-mile portion between Hamill Farm Road and Hanshaw Road. Project scope included design documents and bidding services.*

Jackson County Animal Shelter – Jackson County Board of Supervisors - Gautier, MS: Provide civil engineering design for a ±3,830 square foot facility located in Gautier, MS. Project scope included design documents and bidding services as well as construction management, construction administration and resident inspection services throughout the construction.*

**Designed while working at another firm*

DATES OF SERVICE:
Total: 15 years

EDUCATION:
University of Alabama, Bachelor of Science in Civil Engineering, 2005

REGISTRATIONS:
Professional Engineer (PE): AL, FL, MS, LA, TX

Remote Pilot Certification: FAA No. 4297699

PROFESSIONAL AFFLIATIONS:
American Society of Civil Engineers

University of Alabama National Alumni Association

ADDITIONAL SKILLS:
Traffic Modelling
Transportation Analysis
Roadway Design
Drainage Design
Cost Estimating
Contract Documents

MATTHEW ROGERS, P.E.

THOMPSON ENGINEERING, INC. – SENIOR ENGINEER

Mr. Rogers has recently joined Thompson Engineering as a Senior Engineer. He has over 15 years of engineering experience including traffic modelling, project management, civil/transportation design, cost estimating, and construction administration. His project clients range from local municipalities, such as Jackson County, to state agencies, like the Mississippi Department of Transportation. He is also LPA Certified and holds a remote pilot certification from the Federal Aviation Administration (FAA).

Prior to employment with Thompson Engineering, Mr. Rogers was the Vice President for the Gulf Coast Region at Burk-Kleinpeter, Inc. (BKI) where he was responsible for the oversight and management of all projects and business development for BKI's offices in Ocean Springs, Mobile, and Orange Beach.

PROJECT EXPERIENCE

McCann Road Feasibility Study – Jackson County, Mississippi*

Ocean Springs Road Feasibility Study – Ocean Springs, Mississippi*

Yellow Jacket Road Sidewalks – Jackson County, Mississippi*

Old Spanish Trail Widening (Hanshaw Rd to Hamill Farm Rd) – Ocean Springs, Mississippi*

Sediment Removal from Existing Back Bay of Biloxi Canals – Biloxi, Mississippi*

Small Craft Harbor Boat Launch Repair – Biloxi, Mississippi*

Point Cadet Marina Pier Addition – Biloxi, Mississippi*

Jackson County Adult Detention Center – Pascagoula, Mississippi*

Perdido Pass Parking and Site Improvements – Orange Beach, Alabama*

Boe Road – Irvington, Alabama*

Three Notch-Kroner Road – Theodore, Alabama*

Little Flower Avenue Roadway Repairs – Mobile, Alabama*

Theodore Dawes Road – Theodore, Alabama*

West Lake Road North – Mobile County, Alabama*

Snow Road North and South – Mobile, Alabama*

Stumberg Lane Extension – Baton Rouge, Louisiana*

Trammel Fresno Road – Fort Bend County, Texas*

**Designed while working at another firm*

ABDULAI ABDUL-MAJEED, P.E., PTOE

THOMPSON ENGINEERING, INC. – TRANSPORTATION ENGINEER

Mr. Abdul-Majeed has worked as a transportation practitioner in both the public and the private sectors for more than 9 years. Currently, Mr. Abdul-Majeed is a Project Engineer with Thompson engineering and he is the firm's roadway and traffic operation engineer for State DOT and City roadway design projects. His area of practice includes roadway design, traffic operations, signal design, intelligent transportation systems (ITS), corridor studies, traffic impact studies, and interchange feasibility studies.

DATES OF SERVICE:

Total: 9 years

EDUCATION:

University of Alabama, Master of Science in Civil Engineering, 2015

REGISTRATIONS:

Professional Engineer (PE): AL, LA, MS, NC, TX, Ghana

Professional Traffic Operations Engineer (PTOE) #4320

PROFESSIONAL AFFLIATIONS:

American Society of Civil Engineers (ASCE)

Institute of Transportation Engineers (ITE)

Ghana Institution of Engineers (GHIE)

ADDITIONAL SKILLS:

Roadway Design
Traffic Operations
Signal Design
Intelligent Transportation Systems
Corridor Studies
Traffic Impact Studies
Interchange Feasibility Studies

PROJECT EXPERIENCE

City of Mobile, Water Street Road Diet Project – Mobile, Alabama

TDOT, SR-63 from Campbell County Line to Hall Lane – Claiborne County, Tennessee

ALDOT, I-10/Texas Street to Wallace Tunnel Interchange Modifications – Mobile, Alabama

ALDOT, SR-158 (US-98) Roadway Design – Mobile County, Alabama

ALDOT, I-10 Mobile River Bridge and Bayway Project – Mobile and Baldwin Counties, Alabama

ALDOT, Zeigler Boulevard Widening – Mobile County, Alabama

ALDOT, US-31 Roadway Widening – Baldwin County, Alabama

MDOT, SR 583 Safety Improvements – Brookhaven, Mississippi

PUBLICATIONS

Alabama Department of Transport Roundabout Planning, Design, and Operations Manual, December 2015.

Abdulai Abdul Majeed, Samwel Oyier Zephaniah, Gaurav Mehta, Steven Jones, Field-Based Saturation Headway Model for Planning Level Applications, International Journal of Traffic and Transportation Engineering, Vol. 3 No. 5, 2014, pp. 207-215. doi: 10.5923/j.ijtte.20140305.01.

Dr. Jay K. Lindly , Dr. Steven Jones, Abdulai Abdul Majeed, Intercity Bus Service Study 2014. UTCA Report Number 14408

Majeed, A., Jones, S. Tefe, M., Appiah-Opoku, S. Potential Application of Indigenous Knowledge Within the Context Urban Transport Planning in Developing Countries. Development, Urban Space, and Human Rights in Africa. 2015 Africa Conference at the University of Texas at Austin, Austin, Texas, Apr. 3-5, 2015.

EDWIN (ED) E. ELAM, III, AICP, PTP

Senior Project Manager

Ed has more than 29 years of professional experience in the field of traffic analysis and transportation planning. His areas of expertise include traffic impact analysis, corridor studies, analysis of peak-hour traffic conditions, complete streets evaluations, warrant studies, traffic calming, and transit service planning.

Over the course of his career prior to joining ATG, Ed prepared or managed more than 50 traffic impact studies (TIS) or site circulation projects for public and private clients including casinos, hotels, schools, major parking facilities, mass event facilities, and university facilities. He has also managed or participated in more than 30 corridor studies including analysis of traffic operational improvements for Jackson County, MS/Gulf Regional Planning Commission (GRPC), New Orleans Regional Planning Commission (NORPC), and Louisiana Department of Transportation and Development (LADOTD). Projects completed include study locations in Jackson County, St. Charles Parish, St. Tammany Parish, St. John the Baptist Parish, and Jefferson Parish, as well as, for private development sites reviewed and approved by various planning commissions.

Years of Experience

Total: <1
With ATG: 29

Education

Master of Urban and Regional Planning (MURP), University of New Orleans, 1990

BA, Political Science/Public Administration, USC-Spartanburg, 1988

Registrations

American Institute of Certified Planners #10672, 1994

Professional Transportation Planner #446, 2013

Training

Local Public Agency (LPA) Process Training, MDOT, 2019

DOTD Traffic Engineering Process and Report, Modules 1-3, 2018

FHWA NHI-380096 Modern Roundabouts: Intersections Designed for Safety, 2017

SIDRA Intersection Workshop, 2017

Project Experience

Project Planner | Williamson County | Analysis of the MoKan Corridor | Austin, TX - Ed is part of a project team examining alternatives for a new corridor generally located between SH45 and University Boulevard in Williamson County. Ed is responsible for evaluating the potential for autonomous and connective vehicle technology in the corridor, as well as providing technical review and input into the evaluation corridor travel demand and transit alternatives in the corridor study area.

Project Manager | SporTran/City of Shreveport | Shreveport Planning Assistance | Shreveport, LA - Ed performed a benefit-cost analysis of the proposed Shreveport Healthcare and Development Corridor Improvements Project, a proposed bus rapid transit (BRT) corridor with traffic signal upgrades connecting two major healthcare facilities west of Downtown. Benefit-Cost analysis was prepared to requirements of

the US Department of Transportation to accompany a request for BUILD grant funds for project implementation.

Experience Prior to ATG

Project Planner | City of Gretna | Neighborhood Traffic Calming Program | Gretna, LA - Ed was responsible for development of a community-based program that evaluated and implemented neighborhood traffic calming. He led pilot projects in four neighborhoods of the City and evaluated outcomes associated with the implementation of recommendations in two neighborhoods near the Gretna City Park.

Project Planning Manager/Primary Planner | City of Gretna | LA 466/5th Street Improvements Traffic Analysis | Gretna, LA -Ed completed a traffic study and environmental review. He was responsible for meeting with clients and client representatives to explain work products, milestones reached, and assess changes in schedule. The project's purpose was to improve pedestrian, bicycle and ADA accomodations.

Project Planner | Jackson County | Feasibility Study for Roadway Enhancements to Ocean Springs Road | Ocean Springs, MS - Ed was responsible for completion of environmental checklist, report development, and Synchro traffic analysis for review of traffic operations for Ocean Springs Road. This road is a minor arterial connecting Bienville Boulevard (US 90) and MS Highway 57 in the City of Ocean Springs and Jackson County, MS.

Principal Planner | Jackson County, MS, Gulf Regional Planning Commission, Mississippi Department of Transportation | Beachview Drive Traffic Study, Old Spanish Trail to Lake Mars Avenue | Ocean Springs, MS – Ed was responsible for completion of environmental checklist, report development, and traffic analysis of potential pedestrian and cyclist improvements along Beachview Drive, a major collector in the Gulf Park Estates neighborhood east of Ocean Springs. Project funded through a local public agency planning grant administered by Jackson County on behalf of MDOT and GRPC in their role as the MS Gulf Coast MPO. Project included several community meetings along with an interactive survey to evaluate community support for various pedestrian improvements including sidewalks and crosswalks, a shared-use path or in-street bicycle accommodations on low volume neighborhood streets.

Project Planning Manager | New Orleans Regional Planning Commission (NORPC) | LA 22 Traffic Circulation and Corridor Analysis (CC Road to Dutch Road) | St. Tammany Parish, LA – Ed provided meeting facilitation, project management, and QA/QC review for the initial corridor study documents. The planning feasibility study incorporated data from an existing DOTD traffic study of the area. Reviews of the corridor took place to determine accident hot spots (using DOTD data), accident causes and concentrations. Evaluation of improvements identified in the corridor by DOTD took place to confirm recommendations would alleviate the cause of accidents in the corridor and improve overall traffic flow. Project included a LA 22 corridor management committee representing DOTD, RPC, and St. Tammany Parish.

TREY GAMBLE, P.E., PTOE

Senior Transportation Engineer

Trey is a senior engineering professional with 29 years of experience in traffic engineering and transportation planning. Trey leads ATG's traffic impact analysis team and uses travel demand models (TDMs), simulation models, and dynamic traffic assignment models to evaluate the impacts of large-scale site plans and subarea development patterns on adjacent transportation facilities, intersections, and the surrounding transportation system, including pedestrian access and mobility. Trey is an acknowledged authority in land use and transportation interaction, providing workshops and training to policymakers and staff on the benefits and impacts of decisions on urban form, development density, and mix of land uses.

Years of Experience

Total: 29
With ATG: 22

Education

MS, Civil Engineering, Texas A&M University, 1997

BS, Civil Engineering, Texas A&M University, 1991

Registrations

Professional Engineer:

TX (#89285, 2002)

CO (#44061, 2010)

KY (#26842, 2009)

LA (#38295, 2013)

Mississippi (#17635, 2006)

AL (#38553, 2019)

TN (#110951, 2007)

PTOE #4101

Certifications

LADOTD Traffic Engineering Analysis Process and Reporting Modules Certification

ATSSA Traffic Control Technician (TCT) – LA State Specific Certification

ATSSA Traffic Control Supervisor (TCS) – LA State Specific Certification

Project Experience

Engineer-of-Record | Sasol North America | Chemical Plant Traffic Impact Analysis (Subarea Study) | Westlake, LA - This traffic impact analysis (subarea study) included five phases of analysis, more than 29 study intersections (including three major LADOTD state corridors), three off-site parking lots, and mitigation to accommodate more than 6,000 workers to the site daily.

As Engineer-of-Record, Trey was the primary point of contact with the client and jurisdictional agencies and directed the team of engineers analyzing existing and future Level-of-Service (LOS) for all study intersections and site driveways to determine the need for any roadway or signal timing improvements to meet LADOTD requirements. This entailed creating a network of all study intersections and their respective existing geometries and signal timings in Synchro®; determining peak hour site trips and their route through the study intersections to travel to and from the site; and then deriving total future background plus site volumes at all study intersections to model future year conditions. Based on these anticipated conditions, alternatives were analyzed and improvements such as signal timing modifications, addition of left or right-turn bays, additional lanes of capacity, and other improvements were recommended to meet LOS requirements. Once required improvements were determined, an engineer's estimate of probable cost was developed

using current average LADOTD bid tabulations. The improvements, their expected impact, and their estimated cost were documented in a report for the LADOTD.

In collaboration with the LADOTD District Traffic Operations Engineer, it was determined that construction of additional geometric roadway capacity was not practical. A sensitivity analysis was performed to determine the number of workers permissible at the site without triggering extensive roadway improvements. Demand management techniques were also identified which would be needed to avoid geometric roadway improvements. These demand management strategies included carpooling, off-site parking lots, and shift offsets. On-site observations were performed at the gates to the chemical plant to identify operational issues and recommend practical improvements that could be implemented to decrease delay. These improvements included recommendations for better delineated lane designations, flagger operations, and the utilization of existing space to separate vehicles entering the site from opposing directions. As a maintenance mitigation during construction, Trey's team of engineers implemented a program of periodic signal timing optimizations in the LADOTD corridors to maximize the operational capacity through the intersections. Counts were monitored over a three-year period and timing plans were updated to maintain progression through the corridors and minimize delays.

Project Manager/ Engineer-of-Record | City of Sulphur | City-Wide Traffic Signal and Mobility Analysis | Sulphur, LA - As part of an ongoing contract with the City of Sulphur to upgrade signal infrastructure, Trey supervises staff in preparing signal warrant studies and construction plans for traffic signal modifications at signalized intersections. These modifications include full plan sets for new mast-arm signals, pedestrian signals, and crosswalk markings. Trey is also responsible for providing the cost estimation; bid items; specifications; bidding services; construction-based services in the form of shop drawing review and responding to contractor questions; project administration; and project oversight and inspection.

Engineer-of-Record | Axiall Corporation | Traffic Scenarios | Sulphur and Westlake, LA - ATG was retained by Axiall Corporation (Axiall) during the expansion of their chemical facility located in Calcasieu Parish, Louisiana, between the cities of Sulphur and Westlake. Axiall expected construction to be completed by the first quarter of 2018, to have a peak of 2,500 workers, and a maximum of 900 employees bussed from nearby worker housing facilities. Trey led the ATG team which prepared and analyzed multiple scenarios that included peak traffic volumes, shift hours, population growth, construction phases, traffic routes, and worker camps. Preliminary analysis of these proposed scenarios showed that they would require extensive and unrealistic improvements at the study intersections.

As a result of the preliminary analysis, ATG performed a sensitivity analysis related to the utilization of the primary site driveway; peak hour distribution of site traffic; and proportion of workers split into each shift. All sensitivity analysis options were analyzed individually as well as in combination with one another to assess the optimal set of assumptions for Axiall site traffic. ATG prepared a technical memorandum presenting the optimal combination of various driveway/route utilizations, peak hour site traffic distributions, and shift splits anticipated to require minimal improvements to the study intersections and associated developer cost yet yield enough impacts. In addition to the optimal peak hour site traffic

distributions, a capacity-based site traffic distribution was calculated and analyzed to provide a more anticipated arrival rate of site traffic. Trey was the engineer-of-record for the signal designs and timing plans prepared for two of the critical intersections on the primary access route to the site.

Deputy Project Manager | TxDOT | Livingston Signal Timing | Livingston, TX - Trey was responsible for QA/QC, technical oversight, direction, and timing plan review as ATG performed traffic signal studies in TxDOT's Lufkin District as part of Work Authorization #1 for the Master On-Call Contract with Walter P. Moore. Services include signal timing optimization and implementation for 10 intersections along US 190 in Livingston.

ATG documented existing conditions and performed capacity analysis to determine Level-of-Service (LOS) of the existing signal timing plans. Signal optimization was then performed in Synchro using existing volumes to develop new signal timing plans for typical weekday morning, mid-day, and afternoon peaks. In addition, ATG implemented signal timing in the field including on-site offset and timing adjustments.

GABY TASSIN, P.E., PTOE, PTP

Assistant Director of Traffic Engineering

Gaby has more than 14 years of experience in the field of traffic and transportation planning. She is a highly skilled, motivated, and results-oriented engineer with project management and leadership skills that has managed staff and completed projects on time and on budget while working under pressure in a deadline driven environment. Maintaining a reputation for integrity, perseverance and organization, she consults with all levels of public agencies and corporate organizations, continuously pursues opportunities to learn and accelerate professional growth, quickly master's new roles and responsibilities and has successfully planned and coordinated technical sessions and meetings with more than 100 attendees.

Gaby has performed numerous regional mobility studies which included gathering of raw data, quality control and assurance of raw data, performing travel time runs, calculating 85th percentile, 50th percentile and pace speeds, developing cumulative frequency curves, summarizing and analyzing crash reports, performing driveway inventories, developing VISSIM and Synchro models as well as developing calibration parameters, measures of effectiveness (queue, delay and travel time analyses) and reports of findings and recommendations. Well versed in advanced modeling techniques, she has assisted in numerous innovative intersection designs including Roundabouts and Superstreets. She also has experience in innovative geometric designs and developing signal timing, phasing, and progression.

Years of Experience

Total: 14
With ATG: 3

Education

BS, Civil Engineering, Tulane University, 2006

BS, Physics, Loyola, 2006

Registrations

Professional Engineer (P.E.):

TX (#115166, 2013)
LA (#36365, 2011)

Professional Traffic Operations Engineer #3128, 2011

Professional Transportation Planner #459, 2014

Awards

Recipient of the Institute of Transportation Engineers (ITE) Young Member of the Year Award (2019)

Recipient of the Women in Transportation Seminar (WTS) Innovative Transportation Solutions Award (2016)

Project Experience

Project Manager | TxDOT Houston District | Traffic Engineering On-Call | Houston, TX - Gaby is performing this work under a contract that primarily focuses on providing traffic analysis and design for recommendations which improve intersection operations and safety. These improvements include signing and pavement marking upgrades, left turns, right turns, illumination, flashing beacons, and installation of traffic control devices (signal designs) based on the warrants as defined in the TMUTCD. The signal designs include signing and pavement marking layouts, traffic signal mast arm placement, vehicular detection, pedestrian curb ramps, LED pedestrian signals (with accessible push buttons), LED signal heads, traffic signal controller, battery backup unit (BBU), and service source identification and location. A layout of the

existing intersection, including pavement markings, signs, and existing utilities, is prepared using Microstation. These features are field verified during the field inspection in which digital photography of the intersection is collected. The proposed signal sheets are developed in Microstation and include wiring diagrams, interconnect type, poles, cabinet, proposed and removal of signs and pavement marking, power supply, detection, lane markings, pedestrian signals, and traffic signal controller location.

Project Manager | City of El Lago | Mobility Study | El Lago, TX - Gaby performed a mobility study for the City of El Lago which evaluated the City's transportation network, current deficiencies, and established traffic calming measures to provide short, mid- and long-term solutions. Traffic calming measures were recommended to increase safety and compliment the community's culture. Additionally, the importance of having the three "E's": engineering, education, and enforcement was included. Some engineering measures recommended for traffic calming included lane narrowing techniques; vertical deflections such as speed humps and speed tables; horizontal shifts to make meandering vehicle paths to encourage slower speeds; and street closures. Possible enforcement measures included increased police presence, pedestrian decoy operations, progressive ticketing practices, and mass media campaigns. Recommended education techniques included emphasizing new pedestrian infrastructure, public awareness campaigns, and targeted campaigns. These various traffic calming measures ranged in effectiveness and costs, unique to the community's needs.

Traffic Engineering Task Lead | Louisiana Department of Transportation & Development (LADOTD) | Downtown Baton Rouge Signal Project | Baton Rouge, LA - Gaby addressed bicyclist/pedestrian sign/pavement markings needs as per the AASHTO Guide for the Development of Bicycle Facilities, MUTCD, and LADOTD's Complete Street Policies for a project which included more than 50 signalized intersections in an urban grid network. The project also included removal and placement of proposed signing, striping, and channelization. Gaby developed a phased design and construction plan by prioritizing corridors (including permanent and temporary pavement markings and delineation elements on plan sheets) and by assigning four different teams to work concurrently to complete the work in an accelerated schedule.

Traffic Engineering/VISSIM Task Lead | TxDOT | US-281 – Basse/Jones Maltsberger Innovative Intersections | San Antonio, TX - Gaby was the traffic engineering/VISSIM task lead for an alternative intersection process which consisted of both conventional and alternative design options at the intersections of US-281 at Basse Road and Jones Maltsberger Road. Each proposed solution was evaluated by weighing environmental, right-of-way, operational, drainage, cost, and constructability constraints and impacts. The alternatives were ranked in order of quickly implementable and low-cost improvements to high cost, long term solutions. The solutions were presented to TxDOT and the City of San Antonio to identify the preferred alternative to move forward into the full schematic and environmental clearance processes.

Traffic Analysis Lead | LA 1088 Corridor Study | Mandeville, LA - Gaby evaluated the 3.5-mile corridor in Mandeville and developed three alternatives that improved traffic mobility, traffic operations, safety, and added to the beautification of the corridor. Her analyses included evaluating existing conditions, U-turns,

superstreets, roundabouts, bike lanes, and shared use paths. Gaby developed VISSIM models to show existing conditions and recommended improvements at key locations along the corridor. These VISSIM models were used as visual aids during meetings with elected officials and public outreach meetings.

VISSIM Modeling and Analysis Task Lead | US 165 Corridor Study | Pineville, LA - To improve safety and mobility, Gaby developed five alternatives for geometric improvements along two miles of US 165 (Monroe Highway) and two miles of US 165 Bus (Military Highway) in Pineville. Gaby developed a short- and long-term transportation plan for each of the two-mile-long corridors. Some improvements recommended for the corridors included converting stop-controlled intersections to roundabouts and superstreets; converting full access driveways to right in, right out driveways; upgrading signal equipment; updating signal timings; and adding capacity to each direction of the corridor mainlines. The short- and long-term plans were determined by comparing different measures of effectiveness (delay, travel time, average speed, corridor throughput, and cost) and by obtaining the input of local elected officials and public agency staff.