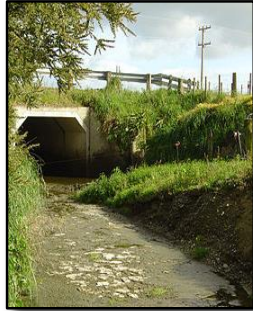


# STATEMENT OF QUALIFICATIONS



## TRANSPORTATION SERVICES



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## TRANSPORTATION SERVICES



Providence's transportation group possesses significant experience in the planning, engineering design, and construction phases of a multitude of transportation and transportation-related projects. We have assembled a staff of highly motivated transportation professionals with the considerable expertise needed to provide our clients with high quality project services. While much of Providence's experience is rooted in providing professional services on numerous projects for the Louisiana Department of Transportation and Development (LA DOTD), various parish governments, municipalities,

and private industry in Louisiana, several key members of our Transportation Group have successfully completed projects for the Texas Department of Transportation, Florida Department of Transportation, Alabama Department of Transportation, North Carolina Department of Transportation, and other state and local agencies throughout the southeastern United States.

Providence is heavily involved in multimodal transportation projects that include roadways, ports, airports, rail, and waterways. We have cultivated positive working relationships with all relevant local, state and federal government agencies, coordinating closely with them on a variety of projects. Our transportation experts thoroughly understand FHWA, various state DOT rules, regulations, procedures and other applicable industry standards. They also have direct experience in all aspects of work necessary to prepare a solid foundation for successful transportation and development projects, no matter the scope or magnitude. A large portion of this experience lies in performing feasibility studies, conducting environmental assessments and impact studies, developing design plans, overseeing regulatory compliance, and providing construction administration. Moreover, Providence possesses a proven ability to efficiently manage and complete such multidisciplinary projects in a way that is cost-effective and timely.

Specific transportation services further include, but are not limited to:

- Airport Facilities
- Port, Harbor and Marina Facilities
- Bridge Improvements and Replacements
- Pedestrian and Bicycle Facilities
- Traffic Studies
- Feasibility Studies
- Multimodal Planning
- Project Management
- Public Outreach and Involvement
- Smart Growth
- Disaster Mitigation and Recovery
- Surveying and GIS Mapping
- Utilities Coordination
- Right-of-Way and Servitude Services
- Wetlands and Environmental Assessments
- Environmental Permitting
- NEPA Services
- Conceptual Design
- Highway Design
- Drainage and Wastewater Design
- Storm Water Management Facility Design
- Mitigation Services
- Grant Application and Administration
- Construction Administration
- Compliance Inspections and Monitoring
- Quality Assurance / Quality Control



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## TRANSPORTATION AIR QUALITY SERVICES

In the last few years, Providence has significantly expanded into transportation work centered on air quality. The addition of Mr. Madhusudhan Venugopal, PE to our team, and his exceptional leadership, has firmly grounded Providence's transportation expertise as it relates to air quality. Mr. Venugopal brings expertise in the following areas:

- MOVES Modeling
- Transportation and General Conformity Analyses
- Project-Level Analyses
- Emission Analyses for Alternative Transportation Scenarios and Policy
- Project Selection and Ranking for Transportation Projects
- Congestion Mitigation Air Quality Project Tracking and Reporting
- SIP Control Measures
- Greenhouse Gas (GHG) Reduction Strategies for Transportation
- Preparation of Grant Applications and Cost-Benefit Analyses
- Training on Emission Models and Procedures
- Mobile Source Emissions Quantification and Data Analyses
- Air Quality Analyses for NEPA Projects
- Permitting and Compliance Support
- Air Quality Rules, Regulations, and Policies

We look forward to further expanding our experience in the area of air quality services for the transportation sector.

In the pages that follow are more details on Providence services in this arena, including: Mr. Venugopal's expertise; representative projects that highlight the depth and breadth of our transportation experience; and professional references.

### Background

The Clean Air Act (CAA) requires that transportation planning be consistent with air quality goals in regions and metropolitan areas experiencing air quality problems. Population growth, stringent air quality standards, dwindling financial resources, changing policies, etc. have made meeting air quality goals challenging. State and local transportation officials have been challenged with finding ways to meet both environmental and transportation results while simultaneously addressing the new Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requirements. Providence has worked with federal, state and local agencies on National Environmental Policy Act (NEPA) environmental studies in different states and regions. Our team has extensive experience working on the development of transportation plans, conformity, emissions inventory, transportation control measures, state implementation plans (SIPs), and cost-effectiveness analyses. We understand that forecasting emission inventories is a key component for inclusion in an SIP. At Providence, we continually monitor ever-changing air quality issues and respond to our clients' unique policy and technical needs. Our ability to incorporate knowledge of conformity and planning regulations, uncertainties, and expertise in devising tools improves overall project development and the management process.

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## Transportation Conformity

Transportation conformity is required by the Clean Air Act's section 176(c) (42 U.S.C. 7506(c)) to ensure federal funding and approval are given to highway and transit projects that are consistent with (i.e., "conform with") air quality goals established by a state's air quality SIP. On-road mobile emission inventories included in the SIP may impact future transportation planning in that they are used as motor vehicle emission budgets (MVEBs) or "budgets" for transportation conformity purposes. At Providence, our air quality staff understands that in order to implement multi-million dollar transportation projects in a nonattainment/maintenance area, a region must demonstrate conformity to MVEBs in the SIP.

## U.S. EPA On-Road Modeling (MOVES, MOBILE6, etc.)

The U.S. EPA updates inventory development tools regularly. The most recent release of a new and improved on-road emissions model came with the Motor Vehicle Emission Simulator (MOVES2010b). Metropolitan planning organizations (MPOs) and state agencies use such emissions models in order to comply with various federal and state requirements. Providence's air quality staff has extensive experience working with EPA models and understands their technical processes. We also understand the importance of utilizing local data sources to develop inputs to accurately estimate emissions inventories for SIPs and conformities.

## Emission Analyses for Alternative Scenarios and Policies

Alternative scenarios are developed to evaluate the impact of changes on vehicle travel, capital needs, and mobile source emissions, as well as their impact on transportation facilities and system performance. Providence air quality staff has performed numerous alternative scenarios assessing emission impacts due to changes in population, employment, policies, and programs. These analyses are important for nonattainment, near-nonattainment and maintenance regions to effectively plan for transportation and air quality investments.

## Project Selection and Ranking

As part of the Intermodal Surface Transportation Efficiency Act (ISTEA), the U.S. Congress authorized the Congestion Mitigation and Air Quality (CMAQ) improvement program, along with \$6 billion for the program to support surface transportation projects and related efforts that improve air quality and relieve congestion. The SAFETEA-LU and current Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) expanded the focus of eligible CMAQ project types, placing more priority on diesel engine retrofits as well as cost-effective emission reduction and congestion mitigation projects that provide further air quality benefits.

## Congestion Mitigation and Air Quality (CMAQ) Project Tracking and Reporting

As part of the CMAQ program, each state's department of transportation must track and submit the status and emission benefits for projects funded with CMAQ dollars. Traditionally, MPOs fund and track the projects in their region and report to their state's DOT, who submits all CMAQ projects funded in the state to the

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FHWA. Providence air quality personnel have developed and managed a database to track the status of CMAQ-funded and other emission reduction projects.

The database includes project information, funding source, and emission benefits for each project. It also serves as a tool for viewing project information, estimating emission benefits, identifying the agency responsible for completion, updating the status of a project, and producing reports (FHWA reporting format).

### **State Implementation Plan (SIP) and Control Measures**

An SIP is developed for all nonattainment areas in order to demonstrate how the region will come into compliance with National Ambient Air Quality Standards (NAAQS). Developing base-case and future-case emission inventories for all sources is a key component of the SIP. The plan also includes in it a list of emission reduction control strategies that help the region to showcase attainment demonstration. Providence air quality personnel have many years of experience developing on-road mobile, non-road, airport, point and biogenic emission inventories for inclusion in SIPs. They are also cognizant that the on-road emission inventories will form motor vehicle emission budgets (MVEBs) for transportation conformity purposes. Our air quality specialists support various agencies in refining emission inventories by updating parameters and algorithms, and performing other detailed air quality studies and analyses critical to identifying new emission reduction strategies. These technical analyses help develop program and project benefit cost ratios that contribute to identifying and selecting the most effective programs and projects aimed at reducing emissions.

### **Project-Level Air Quality Analyses**

The National Environmental Policy Act (NEPA) requires agencies to include an assessment of the environmental effects of their proposed actions prior to making decisions. This is done by providing decision makers and other stakeholders with the information they need to more fully understand potential environmental impacts. A project's impact on air quality is one of the key components of NEPA analysis. Providence air quality staff possesses considerable experience and expertise in conducting project-level air quality analyses utilizing U.S. EPA-recommended dispersion and emissions inventory models.

### **Greenhouse Gas (GHG) Inventories, Reduction Goals and Strategies**

According to the U.S. EPA, the largest source of greenhouse gas emissions from human activities in the United States is the burning of fossil fuels for electricity, heat, and transportation. Providence air quality experts meet requisite GHG objectives by developing effective management tools. They also have many years of experience assessing potential impacts of climate change on long-range transportation plans that include projects and policies. Adaption strategies are then tailored to meet a region's specific needs and growth trends.

### **Preparation of Grant Applications, Cost-Benefit Analyses, Etc.**

Providence's air quality staff has considerable expertise in all of the complex and interrelated disciplines critical for developing applications for clients seeking state and federal grants.



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## Training on Emission Models and Procedures

Models like MOVES, EDMS and others are used to develop emission inventories for various state and federal requirements. There are numerous inputs that need to be developed in order to estimate emission inventories, for which the U.S. EPA recommends employing local inputs while developing inventories for SIP and conformity. At Providence, our air quality experts have many years of experience supporting and training agency personnel on these various models and procedures.



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## PROJECT EXPERIENCE

This section of our Statement of Qualifications focuses solely on the experience of Providence and our staff's ability to provide a variety of transportation services.

### AIR QUALITY CONFORMITY ANALYSIS

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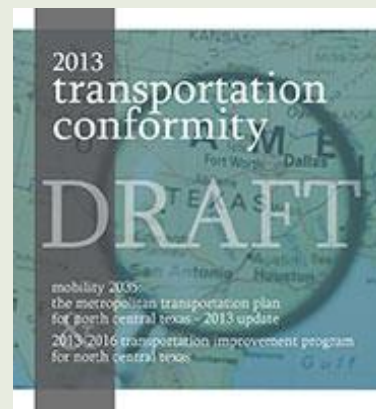
#### Technical Assistance

**Client:** North Central Texas Council of Governments (NCTCOG)

**Location:** Multiple Counties in North Central Texas

**Project Manager:** Madhusudhan Venugopal, PE

Technical assistance with air quality conformity analysis of proposed amendments to the mobility plan for North Central Texas. Work included development of MOVES input files, running the MOVES model, and verifying emission rates for all target counties, which included Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties. Further work entailed estimating emissions using the TTI emissions utility for the 2012/2013 conformity network, and communicating the results to NCTCOG staff. Finally, work involved creating appropriate MOVES input files such as those denoting age distribution of vehicles, and vehicle population, the VMT Mix process, etc. With this effort NCTCOG was able to successfully demonstrate conformity for Mobility 2035: The Metropolitan Transportation Plan for North Central Texas – 2013 Update and the 2013-2016 Transportation Improvement Program. This will enable projects and programs in the transportation plan to progress towards the implementation stage.



### REASONABLE FURTHER PROGRESS EMISSION INVENTORIES

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#### Technical Assistance

**Client:** North Central Texas Council of Governments (NCTCOG)

**Location:** Multiple Counties in North Central Texas

**Project Manager:** Madhusudhan Venugopal, PE

Providence is assisting the North Central Texas Council of Governments (NCTCOG) in producing Dallas-Fort Worth (DFW) nonattainment area average summer weekday Reasonable Further Progress (RFP) on-road mobile emissions inventories, control strategy reduction, and contingency plan reduction estimates for 2011, 2017, 2018, and 2019. This analysis is in support of the development of the DFW RFP State Implementation Plan (SIP) planning effort for the 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS). For this project, a detailed travel demand model (TDM) based hourly link level analysis will be conducted to develop the emission inventories (EIs). Hourly emission rates will be developed using the Environmental Protection Agency's (EPA) latest Motor Vehicle Emission Simulator model (MOVES2010b) with the latest (readily) available data, methods, and procedures.

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## EMISSION RATE LOOK-UP TABLE FOR TXDOT DISTRICTS

### Technical Assistance

**Client:** Hicks and Associates (Prime)

**Location:** Multiple Regions in Texas

**Project Manager:** Madhusudhan Venugopal, PE

Providence is assisting TxDOT for developing MOVES2010b air emission rate look-up tables (ERLT) for MSATs and carbon monoxide (CO) for six Texas metropolitan geographic areas. The project will also include the methodology and assumptions for preparing the tables which can be used by TxDOT and contractors preparing Environmental Reports and Environmental Review Documents for transportation projects. The assumptions used to develop the proposed ERLT are consistent with FHWA and EPA MSAT and CO guidance.

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## AIR QUALITY ANALYSIS FOR FM 565 IN MONT BELVIEU

### Technical Assistance

**Client:** Morris P Hebert (Prime)

**Location:** Houston, TX

**Project Manager:** Madhusudhan Venugopal, PE

The project consists of 0.26 miles of new alignment construction of a two lane FM Road with an additional left turn lane at the intersection of SH 146. Construction includes 10-inch concrete pavement, one-inch asphalt bond breaker, six-inch cement stabilized base course, and six-inches of lime treated subgrade. Also included are ditch grading along FM 565, cross culvert and limited storm sewer work near SH 146, addition of a right turn lane and a traffic signal at the intersection with SH 146. Providence is performing air quality analyses compliant with the current version of the State's Air Quality Guidelines, which will include air quality assessment, quantitative MSATs and CO analysis.

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## AIR QUALITY ANALYSIS FOR US 62/180 (MONTANA AVENUE)

### Technical Assistance

**Client:** Pape Dawson (Prime)

**Location:** EL Paso, TX

**Project Manager:** Madhusudhan Venugopal, PE

The goal of this project is to provide environmental services for preparing an environmental document for the proposed US 62/180 (Montana Avenue) from 0.5 mile West of Global Reach to 0.5 mile East of FM 659 (Zaragoza Road), a distance of approximately 7.6 miles and associated public involvement activities. Providence is performing air quality analyses compliant with the current version of the State's Air Quality Guidelines, which will include air quality assessment, quantitative MSATs and project-level PM<sub>10</sub> analysis.



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## I-49 INNER CITY CONNECTOR

### Stage 0 Feasibility Study and Environmental Inventory

**Client:** North Louisiana Council of Governments (NLCOG)

**Location:** Shreveport, Caddo Parish, LA

**Principal:** Karen Holden, PE

Stage 0 feasibility study and environmental inventory for a connector segment of the I-49 corridor running from Winnipeg, Manitoba, Canada to New Orleans, LA. The connector is designed to intersect Shreveport, LA through the urban area adjacent to the center of downtown with an approximate 3.6-mile long highway segment connecting the existing I-49 / I-20 interchange to the proposed I-49 / I-220 interchange. Work entailed project management, purpose and need statement, environmental impact studies, feasibility study, alternatives development and analysis, management of traffic studies, agency coordination, permit identification, cost-benefit analyses, and an environmental inventory with documentation. Public outreach was a critical component. A variety of outreach tools were used to get information to community stakeholders, and receive feedback on the project, including signage, flyers, surveys, community meetings and website.



***Project completed four months ahead of schedule.***

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## I-49 INNER CITY CONNECTOR

### Stage 1 Environmental Assessment

**Client:** North Louisiana Council of Governments (NLCOG)

**Location:** Shreveport, Caddo Parish, LA

**Project Manager:** Robert Williams, PE

Preparation of a NEPA environmental assessment with interchange reports. Project entails conducting all necessary engineering and environmental investigation necessary to obtain environmental clearance on construction of an approximately 3.5-mile connector to link the existing I-49 to the future I-49 North. Other tasks include managing sub-consultants for traffic, outreach, and cultural resources, as well as preparation of interchange modification and justification reports for existing and proposed interchanges. Performed project scoping and met all NEPA, LA DOTD and FHWA requirements, regulations and guidelines, along with project funding. Specific work included project management, purpose and need statement, environmental assessment, NEPA documentation, development



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of land and grade alternatives, agency and coordination meetings, mitigation planning, in addition to coordination with stakeholders and Steering Committee. As with the Stage 0 phase, public outreach is critical.

## **I-10 CORRIDOR STUDY (LA 415 TO ESSEN LANE)**

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### **Stage 0 Feasibility Study and Environmental Inventory**

**Client:** Louisiana Department of Transportation and Development (LA DOTD)

**Location:** Baton Rouge, East Baton Rouge Parish, LA

**Project Manager:** Robert Williams, PE

Preparation of a Stage 0 study to determine the feasibility of widening I-10 from the North Lobdell Highway (LA 415) exit to the Essen Lane exit just past the I-10 / I-12 split in order to improve capacity and traffic flow. Public outreach and stakeholder input is critical for moving this project forward. If widening is found feasible, a Stage 1 Environmental Assessment / Environmental Impact Statement will follow.



Work included project management, work plan development, purpose and need statement, GIS mapping, topographic surveying, coordination of traffic modeling and analysis, development of design criteria, environmental impact studies, alternatives development and analyses, cost estimating, public outreach and involvement, along with final report preparation.

## **LA 406 / WOODLAND HIGHWAY WIDENING (LA 23 TO LA 407)**

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### **Stage 1 Environmental Assessment**

**Client:** New Orleans Regional Planning Commission (NORPC)

**Location:** Plaquemines and Orleans Parishes, LA

**Principal:** Karen Holden, PE



Preparation of a Stage 1 environmental assessment (EA) and related documents to further findings of the Stage 0 feasibility study on the Woodland Highway (LA 406) Corridor completed in April 2004. Project involves assisting with all necessary engineering and environmental investigations necessary to obtain environmental clearance for the widening project between Belle Chasse Highway (LA 23) and English Turn Parkway (LA 407) in Belle Chasse, LA.

Specific work entailed a topographic survey, solicitation of views, GIS-based evaluations, wetlands delineation and data report, Phase I environmental site assessment, environmental impact studies and NEPA documentation, noise and air quality studies, along with public outreach and involvement support, as well as preparation of the final EA.

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## LA 28 EAST WIDENING (LA 3128 TO LA 1207)

### Stage 1 Environmental Assessment

**Client:** Louisiana Department of Transportation and Development (LA DOTD)

**Location:** Rapides Parish, LA

**Project Manager:** Adam Davis, PE

Stage 1 environmental assessment to implement proposed improvements to LA 28 East, starting from the western intersection with LA 3128 (Libuse) to its eastern intersection with LA 1207 (Holloway). Includes an assessment of potential engineering and environmental issues identified via a line and grade study and environmental study in compliance with NEPA, LA DOTD, FHWA and other applicable rules, regulations and laws. The scope of work involves project management, development of a work plan, conceptual design, purpose and need statement, topographic and right-of-way surveying, oversight of traffic analysis, environmental impact studies, NEPA documentation, environmental study, mitigation plan development, environmental justice, agency coordination, noise and air quality studies, cost estimates, cultural resources survey, wetlands analyses and findings report, biological survey and assessment, threatened and endangered species survey, Phase I environmental site assessment, permit identification, alternatives analyses, in addition to public outreach and involvement.

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## I-20 CHOUDRANT SERVICE ROAD

### Stage 1 Environmental Assessment & Line and Grade Study

**Client:** Louisiana Department of Transportation and Development (LA DOTD)

**Location:** Choudrant, Lincoln Parish, LA

**Principal:** A. Rich Major, PE

Stage 1: Part II, Line and Grade Study, and Stage 1: Part III, Environmental Evaluation / Environmental Assessment (EA) for refinement of a new service road from Pipes Road to LA 820. EA was prepared in accordance with FHWA Technical Advisory and LA DOTD guidelines. Scope of work involved project management in assisting LA DOTD with environmental assessment, evaluation and NEPA documentation, oversight of line and grade study, preparation of purpose and need statement, analysis of alternatives (including no-build), surveying of environmental impacts of all alternatives (human and natural), and assessment of biological habitat with threatened and endangered species study. Other work included a wetlands report, noise and air quality studies, cultural resources investigation, environmental justice, and agency coordination. Public outreach and involvement included a meeting and hearing, along with the availability of transcripts.



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## PECUE LANE / I-10 INTERCHANGE

### Stage 1 Environmental Assessment

**Client:** City of Baton Rouge / Parish of East Baton Rouge  
**Location:** Baton Rouge, East Baton Rouge Parish, LA  
**Principal:** Karen Holden, PE



Stage 1 Environmental Assessment (EA) and related services necessary to gauge public support, meet NEPA compliance, and obtain an environmental decision. The City/Parish, as part of its Green Light Plan Transportation and Street Improvements Program, proposed to convert the existing two-lane Pecue Lane overpass and I-10 into a new interchange, with Pecue Lane having multiple through lanes. The new interchange would provide entrance and exit ramp access to both eastbound and westbound lanes of I-10. Elevations and widths of the new Pecue Lane/I-10 interchange would require widening the existing Pecue Lane to the south towards the Kansas City Southern Railroad, and to the north towards Airline Highway (US 61). This also required the existing Pecue Lane and I-10 bridges over Wards Creek to be replaced or modified. In addition, Reiger Road would need to be extended to Pecue Lane and get a new intersection there as part of the final design.

Scope of work involved project management, purpose and need statement, GIS and mapping, noise and air quality studies, determination of permits needed, environmental checklist, wetlands findings, environmental justice, a threatened and endangered species survey, along with public outreach and stakeholder meetings. The public outreach effort required heavy involvement in the preparation of materials, presentation of conceptual design alternatives, and the collection of public opinion on future route alternatives. Prepared in accordance with all FHWA Technical Advisory and LA DOTD laws, rules policies and regulations. EA includes summary of mitigation and permit sheet, as well as the use of GIS and remote sensing resources for data assimilation, analysis and mapping.

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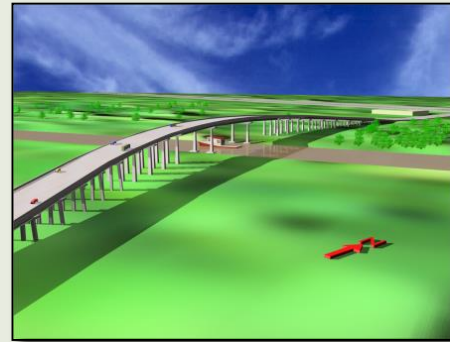
## LA 1 / I-10 CONNECTOR

### Stage 0 Feasibility Study and Stage 1 Environmental Assessment

**Client:** Louisiana Department of Transportation and Development (LA DOTD)  
**Location:** West Baton Rouge Parish, LA  
**Principal:** Karen Holden, PE

Studied and refined previously identified alternative alignments connecting LA Highway 1 (LA 1) and I-10, developing additional alternatives on new alignments to accommodate increased vehicular capacity across the Intracoastal Waterway, thereby relieving traffic on LA 1. Preparation of the Stage 0 environmental inventory was completed prior to initiating Stage 1. The project included project

management, purpose and need statement, agency coordination, management of traffic studies, topographic surveying, line and grade studies, alternatives analyses, and environmental inventories to determine project feasibility. Other work involved NEPA compliance documentation and public outreach. The overall collection and development of information was also used to determine if a new/revised interchange could be justified. Public and agency coordination were vital and ongoing throughout the duration of the project.



Hurricane Katrina interrupted the scheduled kickoff meeting for this project and it was anticipated that the whole project would be significantly delayed. However, this project demonstrates Providence's ability to manage and complete large-scale projects within budget, on time (despite delays beyond our control), and with high-quality deliverables.

## VALHI BOULEVARD EXTENSION – EQUITY BOULEVARD TO SAVANNE ROAD Roadway Design and Construction Administration

**Client:** Terrebonne Parish Consolidated Government (TPCG)

**Location:** Terrebonne Parish, LA

**Project Manager:** Clay Breaud

Design and construction oversight of a two-lane reinforced Portland cement roadway above limestone base course together with granular sub-base, grass median, open ditch drainage, cross-drains, traffic signage, and related items. Installation of drainage culverts was included. Alignment of roadway was revised to utilize a power line right-of-way crossing Savanne Road, thereby avoiding conflicts and obstructions in developed areas. The drainage system was designed to avoid pipeline conflicts, with flexible concrete protection mats placed over the pipelines at ditch locations.



Work further involved project management, civil engineering, wetlands determination, topographic surveying, permitting, right-of-way and servitude acquisitions, plans and specifications, bid documentation, construction administration and quality assurance / quality control.

***Project completed approximately one year ahead of schedule and under budget.***

## WESTSIDE BOULEVARD EXTENSION (WEST MAIN AVE TO MARTIN LUTHER KING BLVD) Roadway Design and Construction Administration

**Client:** Terrebonne Parish Consolidated Government (TPCG)

**Location:** Terrebonne Parish, LA

**Project Manager:** Clay Breaud



Design and construction oversight of a new four-lane Portland cement connector roadway above limestone base course together with granular sub-base, curbs, subsurface drainage, gravity sewers, sewer force main, building demolition, utility adjustments, jack-and-bore 40-inch diameter steel casing for a 24-inch collection line, directionally drilled 18-inch diameter sewer force main with air release valves, and other related requirements. Total length of roadway was approximately 2,900 linear feet. Project further included subsurface drainage and sewer service for

potential future development, along with a bicycle path adjacent to the new roadway to spur future bicycle/pedestrian access facilities. Scope of work involved project management, engineering design, surveying, permitting, servitude/right-of-way acquisitions, utilities coordination, bidding assistance, construction administration, and quality assurance / quality control.

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## SR 44 COLUMBIA, MISSISSIPPI

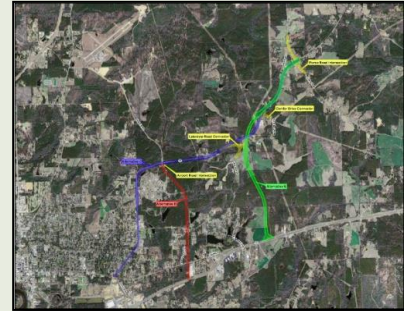
### Stage 1 Environmental Assessment

**Client:** Mississippi Department of Transportation (MDOT)

**Location:** Marion County, MS

**Principal:** Karen Holden, PE

Development of corridor feasibility alternatives for improvement and/or relocation of alignments and intersections of SR 44 in Columbia, from Pierce Road to Highway 198. Work entailed project management, purpose and need statement, environmental studies, Phase I environmental site assessment, oversight of line and grade, data collection and analyses, agency coordination, biological and relocation field work, alternatives analyses, and a noise study. Public outreach and agency coordination were important throughout the project.



PROVIDENCE

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## REFERENCES

### **Houston-Galveston Area Council (H-GAC)**

Miles Arena, Disaster Recovery Coordinator  
(832) 681-2586

### **City of Dallas, Office of Environmental Quality**

Nicole Cooper, Environmental Coordinator  
(214) 670-6646

### **City of Houston**

James Rhubottom, Environmental Health Division, Houston Department of Human Health and Services  
(832) 393-5650

### **North Central Texas Council of Governments (NCTCOG)**

Chris Klaus, Senior Program Manager  
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### **Louisiana Department of Transportation and Development (LA DOTD)**

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(225) 242-4501

### **North Louisiana Council of Governments (NLCOG)**

Kent Rogers, Executive Director  
(318) 841-5950

