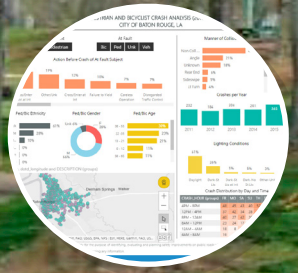


ARCADIS

CONTRACT NOS. 4400023689 AND 4400023690

February 22, 2022

IDIQ CONTRACTS FOR SAFETY STUDIES STATEWIDE

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Tuesday, February 22, 2022

Louisiana Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802-4438

Arcadis U.S., Inc.
10352 Plaza Americana Drive
Baton Rouge, Louisiana 70816
Phone: 225 292 1004
Fax: 225 218 9677
www.arcadis.com

Subject: **Contract Nos. 4400023689 and 4400023690**
IDIQ Contracts for Safety Studies, Statewide

Dear Project Evaluation Team,

Arcadis and its teaming partners have provided dedicated and dependable support to the Louisiana Department of Transportation and Development (LADOTD) through the delivery of **Safety Studies and Design Projects for more than 20 years**. Collectively, our team has **completed over 50 Stage 0 Safety and Feasibility Studies in Louisiana** of all scales and complexity. These studies included pedestrian and bicycle improvements, safety and mobility improvements for roadways and intersections, Road Safety Assessments (RSAs), and safety effectiveness evaluations. Additionally, our team has **completed design plans for over 30 Low-Cost Safety Improvement Projects throughout the state**. This experience has allowed us to develop strong working relationships with LADOTD staff and Local Public Agencies (LPAs) throughout the state, with projects covering all 9 Districts (02, 03, 04, 05, 07, 08, 58, 61, and 62) and over 20 Parishes.

OUR TEAM

Our project delivery team has been selected for the individual strengths each partner can provide and complimentary team synergy developed working together on previous projects. **Buchart Horn** brings a depth of LADOTD experience including planning, environmental, and roadway design. **Digital Engineering** has been under contract with LADOTD Safety Programs for 15 years including Safety Routes to Schools, Safe Routes to Public Places and Local Road Safety Programs. Digital Engineering has worked with over 32 LPAs and has performed on 83 task orders with LADOTD / LPAs for safety feasibility and design services that have been completed or are ongoing. Under **Grey Engineering**, Ms. April Renard brings over 12 years of experience with LADOTD, where she served as a Highway Safety Manager, led Complete Streets policy implementation activities, and developed guidance for developing data-driven safety considerations through LADOTD's project delivery process.

OUR APPROACH

Our team's approach and methodology, as detailed in Section 18 of our enclosed proposal, is **focused on project-specific scoping** to deliver precisely what each unique project requires in a timely and efficient manner. We will achieve this goal through open communication that is integral to understanding LADOTD's expectations and ensuring that they are consistently met through regular touchpoints.

As a cornerstone to our approach, the Arcadis Team offers a deep bench of experienced professionals that provide **redundancy in all aspects of this IDIQ contract**. In addition to the team members presented in this proposal, the Arcadis Team includes a range of experienced local and regional resources that can be utilized to **deliver multiple task orders simultaneously under this IDIQ**, while meeting project schedules and effectively managing overall team workload.

OUR EXPERIENCE

Subject Matter	Team Expertise
Safety and Traffic Engineering	• Highest past performance ratings for LADOTD safety and traffic **(4.6/5)** projects. • Highly experienced with Highway Safety Manual (HSM) methodologies and network screening tools. • Intimately familiar with LADOTD's Traffic Engineering Process and Report (TEPR).
Planning and Environmental	• Extensive experience preparing Stage 0 Studies **(past performance rating – 4.5/5)** to inform decision making and NEPA documents for environmental clearance. • Understanding of how transportation projects affect the natural and built environment and how to avoid/minimize impacts through innovative design. • Understanding of regulatory agency's primary concerns and "hot-button" issues.
Roadway and Low-Cost Safety Design	• Experience with delivery of over 30 low-cost safety design projects. • Coordinated with over 32 LPAs to provide context sensitive design solutions. • Local professionals with access to technical experts across the country having completed design for all state DOTs in the southeast. • In-depth experience with LADOTD roadway **(past performance rating – 3.8/5)** design guidelines and manuals, and multimodal facility design and best practices.

OUR STRENGTHS

At Arcadis, we are **dedicated to innovative solutions** that make our client's jobs easier and facilitates successful project delivery, with access to industry leading expertise and technologies that make this a reality. Our innovative project delivery tools that will be made accessible to LADOTD include **data dashboards** that simplify analysis of complex data sets through intuitive visualization, saving time traditionally spent wading through hard to read spreadsheets. Our experienced and dedicated project management team, led by Ari Deitch, are knowledgeable with these tools and will bring a laser sharp focus on scope, schedule, and budget to ensure projects are delivered on-time for the agreed upon fee.

OUR MOTIVATION

Improving quality of life is our motivation and is at the forefront of every project we deliver. For Stage 0 Safety Studies and Design Projects, that means only progressing **safe, cost-effective, and constructable alternatives** that promote mobility and sustainability for the environment and communities they serve. We look forward to the opportunity to continue partnering with LADOTD to improve the safety, service, and reliability of Louisiana's transportation system. Thank you for your time and consideration.

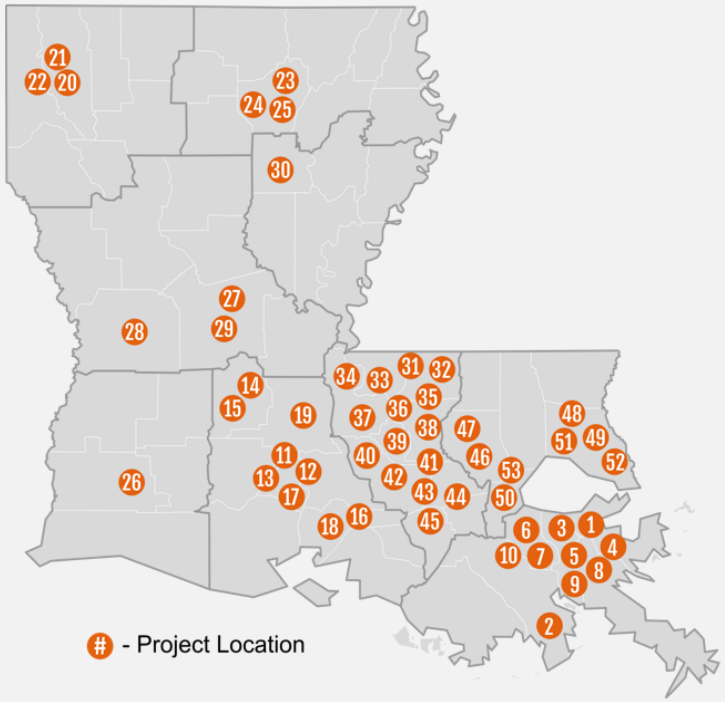
Sincerely,
Arcadis

Akhil Chauhan PE, PTOE, PTP, PMP
Senior Vice President, Transportation Services

Ari Deitch, PE, PTOE, PTP, RSP
Project Manager, Senior Transportation Engineer

Sections 1-11

The Arcadis Team has completed over 50 Safety and Feasibility Studies in Louisiana in Districts 02, 03, 04, 05, 08, 58, 61, and 62



1. New Orleans Pedestrian Safety Feasibility Study
2. LA 3235 Corridor Stage 0 Safety Feasibility Study
3. I-10 Hard Shoulder Running (HSR) Feasibility Study
4. Florida Avenue Expressway Feasibility Study
5. I-10 from I-610 to Twin Spans Feasibility Study
6. LA 52 Widening (Paul Maillard Rd) Feasibility Study
7. Widening of US 61 Feasibility Study
8. I-310/US 90 Intersection Feasibility Study
9. Transportation Surveillance Planning Study
10. US 61 Safety Improvements Stage 0 Feasibility Study
11. Evangeline Thwy / Johnston St Intersection Study
12. Johnston St / Ambassador Caffery Intersection Study
13. I-49 Interchange Stage 0 Safety Feasibility Study
14. US 167 Feasibility Study, Elsie Street to Gilbert Dr
15. US 167 Feasibility Study, Enola Street to Ross Rd
16. LA 182 Sidewalk and Handicap Ramp Improvements
17. I-10 at Ambassador Caffery Feasibility Study
18. US 90 to I-49 Rail Crossing Feasibility Study
19. East Vine St (US 190) Feasibility Study
20. LA 3105 Corridor & Safety Feasibility Study
21. LA 157 Corridor & Safety Feasibility Study
22. LA 3132 Inner Loop Extension Feasibility Study
23. LA 594 Millhaven Stage 0 Safety Feasibility Study
24. US 165 Corridor and Safety Feasibility Study
25. I-20 Frontage Development Study
26. LA 12 Sabine River Bridge Feasibility Study
27. US 71 Corridor Safety Feasibility Studies (Phases 1-3)
28. LA 117 from LA 8 to LA 118 Feasibility Study
29. St. Tammany Intersection Safety Imp Study
30. Duty Ferry Crossing Replacement Feasibility Study
31. Baton Rouge Ped / Bike Road Safety Assessments
32. I-12 Hard Shoulder Running (HSR) Feasibility Study
33. Burbank Access Management Study
34. Highland-Burbank Connector
35. US 61 Access Management & Safety Improvements
36. I-10 Ascension Parish Interchange Improvements
37. LA 429 Connector Feasibility Study
38. I-49 at US 190 & LA 31 Feasibility Study
39. Parker Rd /Route 929 Roundabout Feasibility Study
40. I-10 at LA 73 (LA 74 to LA 621) Feasibility Study
41. LA 19 Widening Feasibility Study
42. LA 64 and McHugh Rd Roundabout Feasibility Study
43. LA 44 Pavement Preservation Feasibility Study
44. Ford St Extension Study
45. Picardy-Perkins Connector Study
46. Joe Sevario / Roddy Rd Roundabouts Safety Study
47. LA 44 Roundabouts Stage 0 Safety Feasibility Study
48. I-12/Airport Rd Interchange / Congestion Mgmt Study
49. EB I-10 Pedestrian Bridge Feasibility Study
50. LA 28 Feasibility Study and Environmental Inventory
51. US 190 and LA 25 Intersection Feasibility Study
52. LA 21 at US 190B Feasibility Study
53. I-10 Reserve Canal to I-55 Feasibility Study

DOTD FORM: 24-102

(Revised June 1, 2021)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

1. Contract title as shown in the advertisement	IDIQ CONTRACTS FOR SAFETY STUDIES STATEWIDE
2. Contract number(s) as shown in the advertisement	CONTRACT NOS. 4400023689 AND 4400023690
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	ARCADIS ARCADIS U.S., INC.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0002808 DUNS 057690414
6. Prime consultant mailing address	10352 Plaza Americana Drive Baton Rouge, LA 70816
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	10352 Plaza Americana Drive Baton Rouge, LA 70816
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Ari Deitch, PE, PTOE, PTP, RSP Senior Transportation Engineer P. 225 244 6643| E. ari.deitch@arcadis.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Akhil Chauhan, PE, PTOE, PTP, PMP Senior Vice President P. 225 368 6563 | E. akhil.chauhan@arcadis.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	 _____ Akhil Chauhan, PE, PTOE, PTP, PMP Date: February 22, 2022
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): Firm(s)' %:

Sections 12-14

The Arcadis Team has completed Construction Plans for over 30 Low-Cost Safety Improvement Projects in Louisiana in Districts 02, 03, 07, 61, and 62.

1. Lockport Sidewalk Improvements
2. New Orleans Pedestrian Crosswalk Improvements
3. Gretna Sidewalks & Safety Improvements
4. Gretna Downtown Intersection Improvements
5. New Orleans SRTS Sidewalk Improvements
6. North Kenner Pedestrian Safety Improvements
7. Kenner Signing & Striping Improvements
8. Audubon Ave & Ardoyne Dr Mini Roundabout
9. Peltier Park Sidewalk Improvements
10. Raceland & Bayou Blue Sidewalks
11. Acadia Parish Pavement Marking Improvements
12. Acadia Parish Street Signing Improvements
13. New Iberia Sidewalk Improvements
14. US 190 at LA 88 Roundabouts & Safety Improvements
15. Eunice East Elementary Sidewalk Improvements
16. Franklin School Sidewalk Improvements
17. Town of Kinder – 13th Street Sidewalk Improvements
18. Town of Vinton – Vinton Street Sign Replacements
19. Napoleonville Safe Routes to Schools Improvements
20. City of Central Rumble Strips & Safety Improvements
21. Zachary Taylor & Marconi Dr Sidewalks Improvements
22. Pearl River Pavement Marking Improvements
23. Independence Street Sign Replacements
24. Tangipahoa Parish Railroad Safety Improvements
25. Bogalusa Pavement Marking Improvements
26. Livingston Parish Railroad Safety Improvements
27. St. John the Baptist Parish Sidewalks – Phase I
28. St. John the Baptist Parish Sidewalks – Phase 2
29. St. Tammany Parish Signing & Striping
30. Covington Sidewalks & Safety Improvements
31. City of Slidell Pavement Markings
32. St. Tammany Guard Rail Improvements

Design Plans were completed, and Construction Documents were provided for LADOTD Safe Routes to Schools and Local Road Safety Program and Safety Design IDIQs

12. Past Performance Evaluation Discipline Table:

As indicated in the advertisement, insert the completed table here. The percentages for the prime and sub-consultants must total 100% for **each past performance evaluation discipline**, as well as the overall total percent of the contract.

The past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other. The crosswalk from the old categories to the new categories can be found at the link below: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/General%20Information/CPPR%20Crosswalk%20to%20New%20Evaluation%20Disciplines.pdf. (same link as in the advertisement)

Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 19 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.

Evaluation Discipline(s)	% of Overall Contract	Arcadis	Buchart Horn	Digital Engineering	Grey Engineering ❖
Traffic*	55%	75%	10%	10%	5%
Planning	25%	45%	40%	10%	5%
Road	20%	15%	25%	60%	0%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.					
Percent of Contract	100%	56%	20%	20%	4%

**Traffic Evaluation Discipline involves both Safety (40%) and Traffic (15%) services.*

❖ *DBE Certification Anticipated Soon*

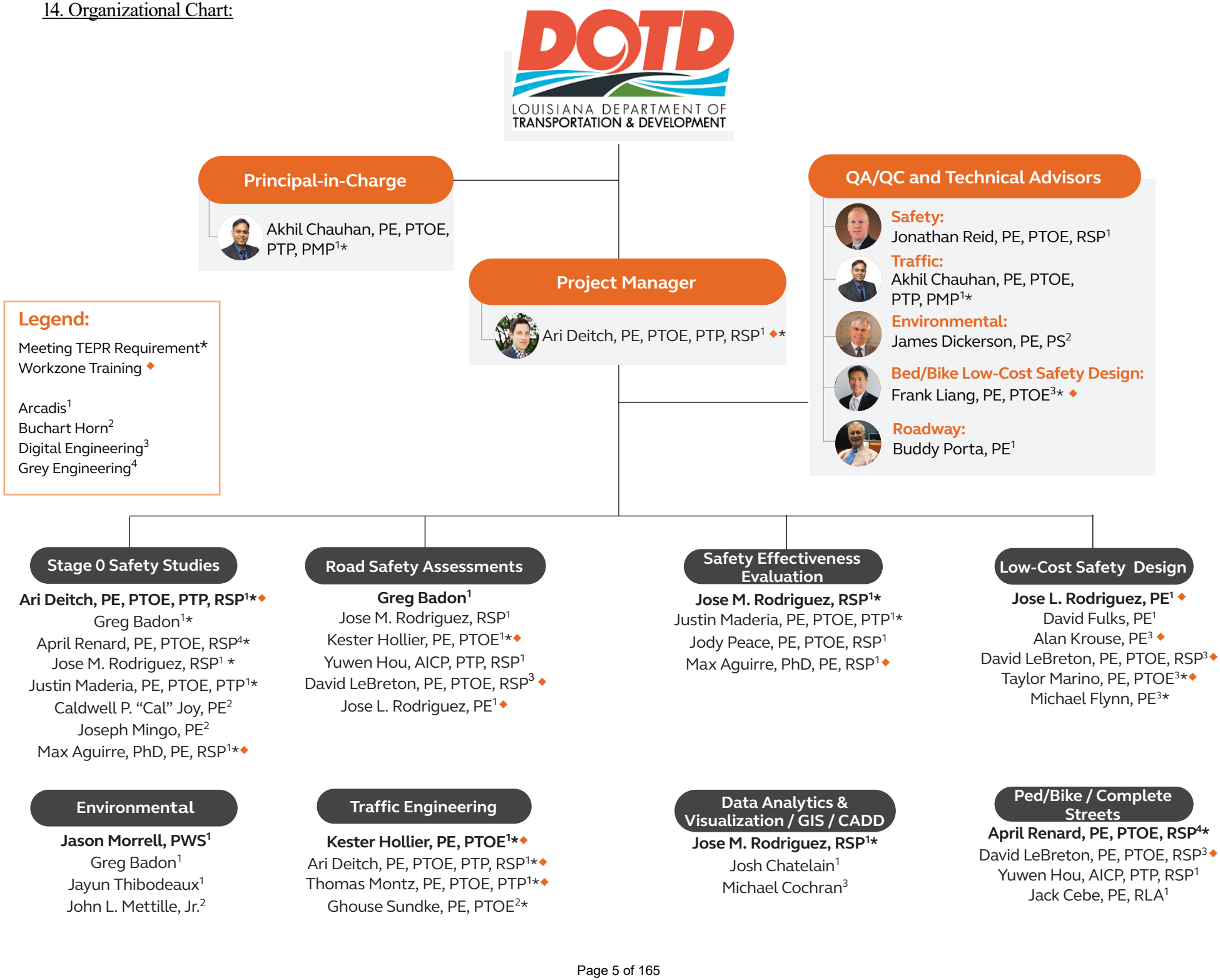
13. Firm Size:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
ARCADIS	Principal	2	4
	Supervisor Engineer	4	8
	Supervisor Engineer-Other	2	3
	Engineer	3	9
	Engineer-Other	1	1
	Engineering Aide	1	2
	Planner	2	4
	Environmental Professional	3	3
	GIS Analyst	2	3
	Professional	2	2
	Engineer Intern	2	2
BUCHART HORN ENGINEERS · ARCHITECTS · PLANNERS	Principal	2	3
	Supervisor Engineer	3	4
	Engineer	2	3
	Engineer-Other	1	5
	Engineer Intern	1	1
	Planner	1	1
digital engineering DIGITAL ENGINEERING & IMAGING, INC.	Principal	2	5
	Supervisor-Engineer	1	5
	Engineer	2	3
	Supervisor - Other	0	3
	Engineer Intern	0	2
	CADD Technician	1	3
Grey Engineering, LLC	Principal	1	1

(Add rows as needed)

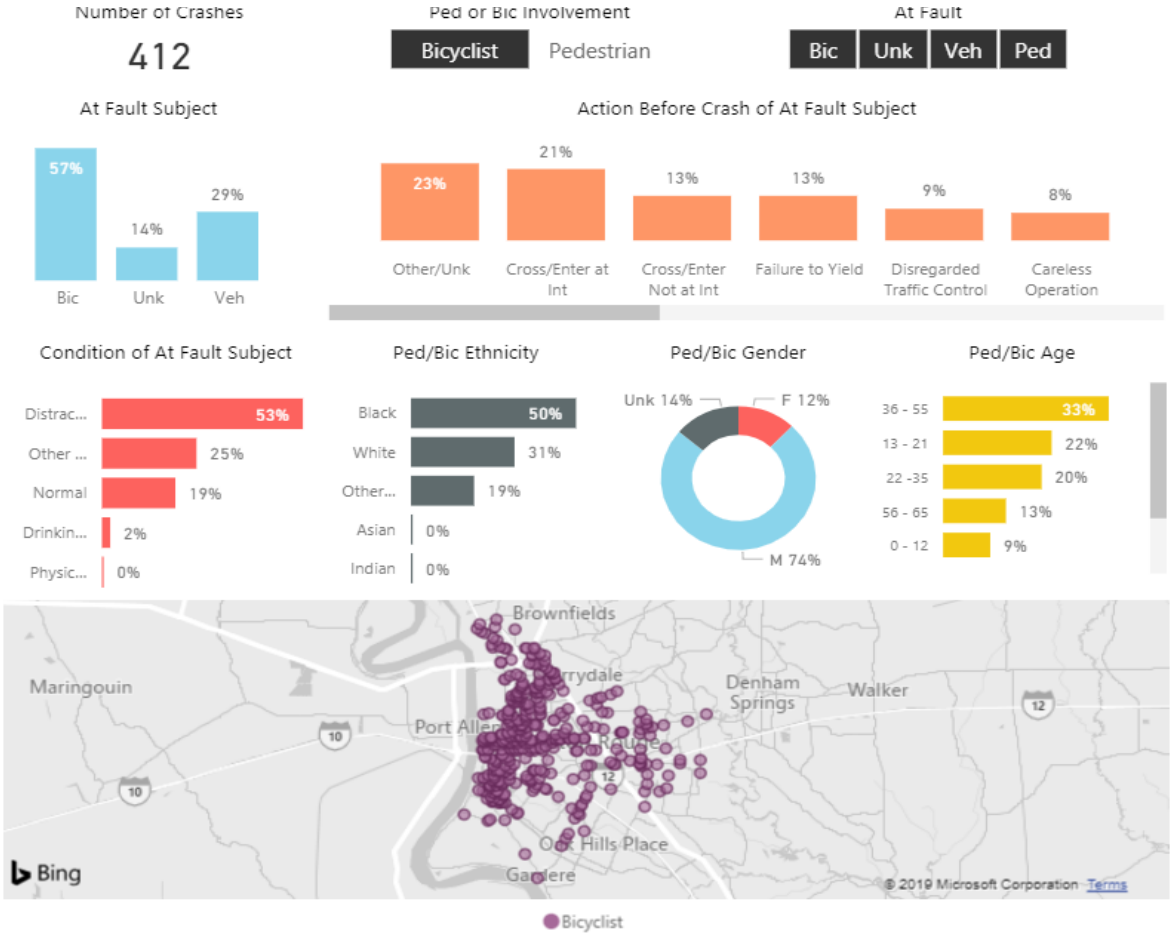
14. Organizational Chart:

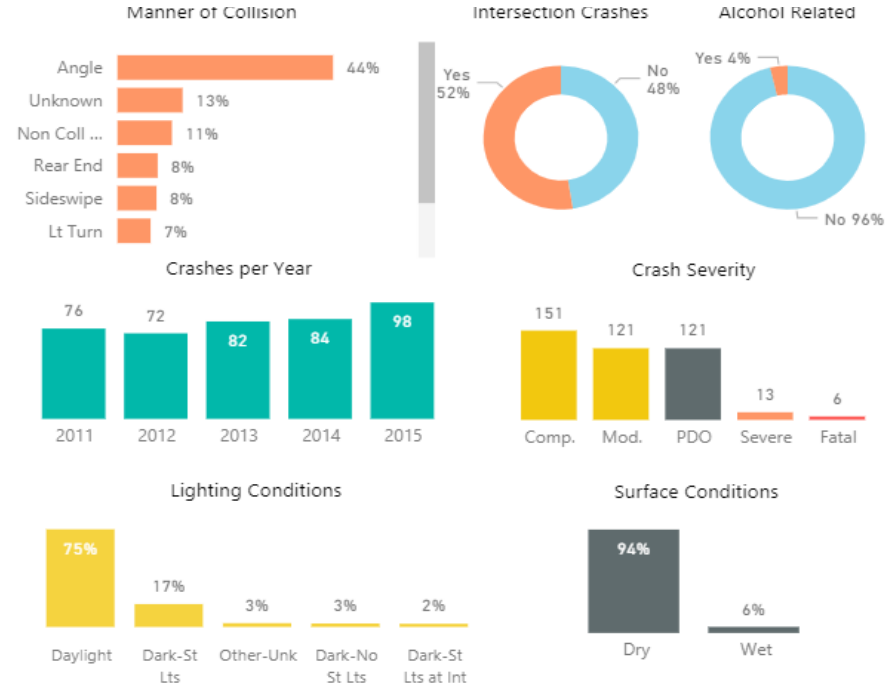


Sections 15-16

ARCADIS HAS DEVELOPED CUSTOMIZED INTERACTIVE DASHBOARDS FOR CRASH AND SAFETY ANALYSIS TO IDENTIFY SAFETY TRENDS AND ISSUES

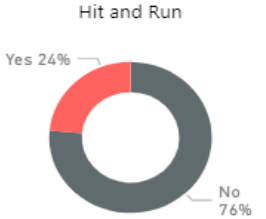
Pedestrian and Bicyclist Crash Analysis (2011-2015) City of Baton Rouge, LA





Crash Distribution by Day and Time

CRASH_HOUR (groups)	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1. 0:00 - 4:00	1	1			4	1	1
2. 4:00 - 8:00	5	4	5	4	5	2	1
3. 8:00 - 12:00	12	13	6	9	12	9	2
4. 12:00 - 16:00	22	18	10	18	17	13	14
5. 16:00 - 20:00	27	22	21	23	25	15	19
6. 20:00 - 24:00	8	4	6	9	10	8	6



15. Minimum Personnel Requirements:

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR *(Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)*	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	Akhil Chauhan, PE, PTOE, PTP, PMP *(>20 years' experience)*	ARCADIS	PE	LA	PE. 33703/ 09/30/2022
2	Kester Hollier, PE, PTOE *(>17 years' experience)*	ARCADIS	PE	LA	PE. 34304/ 03/31/2023
3	David Fulks, PE *(>26 years' experience)*	ARCADIS	PE	LA	PE. 30151/ 09/30/2022
	Jose L. Rodriguez, PE *(>24 years' experience)*	ARCADIS	PE	LA	PE. 30492/ 03/31/2023
4	Ari Deitch, PE, PTOE, PTP, RSP *(>10 years' experience)*	ARCADIS	PE, PTOE	LA, US	PE. 41842/ 3/31/2022 PTOE: 4346/ 11/2023
	Thomas Montz, PE, PTOE, PTP *(>17 years' experience)*	ARCADIS	PE, PTOE	LA, US	PE. 39128/ 09/30/2022 PTOE: 4093/ 07/2022
	Ghouse Sundke, PE, PTOE *(>15 years' experience)*	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	PE, PTOE	LA, US	PE. 39678 09/30/2023 PTOE: 3146/ 03/2023
	David LeBreton, PE, PTOE, PTP, RSP *(>14 years' experience)*	digital engineering	PE, PTOE	LA, US	PE. 37176 09/30/2022 PTOE: 3333/ 11/2024

(Add rows as needed)

MPR Nos. 1 through 4 may be met by the same person.

MPR No. 4 may be satisfied through the use of a sub-consultant(s).

16. Staff Experience:

PERSONNEL RESUMES

CONTRACT LEADERSHIP

Firm employed by	ARCADIS		
Name	Akhil Chauhan, PE, PTOE, PTP, PMP	Years of relevant experience with this employer	14
Title	Principal Engineer	Years of relevant experience with other employer(s)	6
Degree(s) / Years / Specialization		MS / 2003 / Transportation Engineering, Massachusetts Institute of Technology BS / 2001 / Civil Engineering, Indian Institute of Technology	
Active registration number / state / expiration date		PE.033703 / LA / Exp. 09/2022; PTOE #2544 / USA / Exp. 11/2023; PTP #246 / USA / Exp. 12/2024; PMP #1444676 / PA / Exp. 08/2023	
Year registered	2008	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Principal In Charge, QAQC and Technical Advisory (Traffic)	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Chauhan is a principal traffic engineer with more than 20 years of applied research and industry experience in the fields of highway safety, traffic engineering, traffic modeling and simulation, transportation planning, demand modeling/forecasting, intersection/corridor analysis, safety studies, NEPA studies, and access management. Akhil has successfully led, managed, and mentored numerous projects and personnel related to transportation modeling, simulation, and planning for public agency clients located across the nation including several state Departments of Transportation. He is proficient in the use of many macro-, meso-, and microscopic traffic simulation software programs such as HCS, Vistro, Synchro, SIDRA, Vissim, MITSIM, Dynameq, DynaMIT, TransCAD, Visum, and OREMS. **Mr. Chauhan meets MPR #1 and has completed the LADOTD Traffic Engineering Process and Report Training.**
12/13 – 06/15	**LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA.** *Project Manager and Principal Engineer*. Responsible for the preparation of a formal ***corridor safety study*** that analyzed alternatives and ***enhanced safety and mobility*** on LA 3235. Main tasks included ***traffic data collection***, warrant studies, ***traffic analysis***, ***safety analysis***, development of ***conceptual layouts***, and ***public outreach***. Intersections found to warrant signalization were also modeled in unconventional designs including RCUT, MUT, and Continuous T-intersections. Safety performance of alternatives was estimated using ***Highways Safety Manual predictive methods***. Preliminary ***cost estimates*** and conceptual layout drawings were also produced. ***Stage 0 checklists*** were complete as part of study documentation.
04/16 – 09/18	**New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA.** *Principal Engineer & Technical Advisor*. Preparation of ***pedestrian safety study*** for 20 intersections with high occurrence of pedestrian safety issues - especially between motorized and non-motorized travel modes. Scope of services include ***data collection*** (for both vehicles and pedestrians), analysis of existing traffic conditions, ***historical crash data evaluation***, investigation of safety deficiencies at each intersection, ***recommendation of safety improvements*** such as traffic signal improvements, intersection striping improvements, signing improvements, lighting improvements, sidewalk/crosswalk improvements, curb extensions, traffic calming, ADA compliance including curb ramps, and parking modifications, analysis of alternatives and ***conceptual layout development***, ***cost estimates***, and ***Stage 0 checklists***.
12/13 – 05/15	**Joe Sevario / Roddy Road Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA.** *Project Manager and Principal Engineer*. Evaluation of roundabouts at 10 stop-controlled intersections along Joe Sevario / Roddy Road, from US 61 to LA 42, a length of approximately 7.2 miles. Main tasks include ***traffic data collection***, ***crash analysis***, ***capacity analysis***, ***safety analysis***, review of existing pipelines and other municipal utilities, ***alternatives analysis***, ***design development***, and ***cost estimates***.

02/18 – 06/21	Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA. *Principal Engineer.* Responsible for contract management and technical advisory for the project, which involved the development of a Pedestrian and Bicycle Safety Action Plan (PBSAP). Arcadis ***developed screening criteria*** based on crash data and socioeconomic data to identify high priority locations with a history of pedestrian and/or bicycle crashes, and performed ***Road Safety Assessments (RSAs)*** at 10 priority locations to identify safety deficiencies and ***develop safety countermeasures*** to ***improve safety for pedestrians and bicyclists***.
04/16 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. *Principal Engineer.* Responsible for contract management and technical advisory of project tasks. Arcadis researched best practices around the country to develop potential alternatives. ***Highway Safety Manual methods*** were applied to ***quantify the safety performance of proposed alternatives***. Traffic analysis was performed using a ***calibrated microsimulation model*** to evaluate the operational performance of HSR and HOV lane alternatives. ***Conceptual drawings*** and ***construction cost estimates*** were developed to evaluate the feasibility of proposed alternatives.
02/15 – 08/17	US 71 Corridor - Phase II Stage 0 Feasibility Study, LADOTD; Rapides Parish, LA. *Principal Engineer*. Responsible for overseeing the preparation of a ***traffic and safety study*** for the purpose of enhancing mobility and safety on US 71 in Alexandria, LA. Main tasks included ***traffic data collection***, warrant studies, ***traffic analysis***, ***safety data analysis***, and development of ***conceptual layouts***. Arcadis developed alternatives to address identified needs on US 71 using a ***data driven, tiered analysis approach***. Alternatives were developed in ***close coordination with District 08 staff*** to better understand project needs and incorporate context sensitive solutions.
02/17 – 02/18	I-49 Interchange Stage 0 Safety Feasibility Study, LADOTD, Lafayette Parish, LA. *Principal Engineer.* Responsible for contract management and technical advisory for project tasks including ***data collection and analysis***, ***traffic and safety analysis***, and ***conceptual design drawings***. Purpose of the project was to identify ***feasible improvement alternatives*** to address historical safety issues along the I-49 corridor and at 3 interchanges. Participated with meetings with LADOTD HQ and District 03 team members to understand project needs and develop context sensitive solutions.
04/16 – Ongoing	Pete's Highway Interchange Alternatives and Environmental Assessment, LADOTD, Denham Springs, LA. *Principal Engineer.* Responsible for contract management and deliverables for the project which included ***traffic and safety analysis, alternative screening and analysis, preliminary raodway and bridge design, line and grade***, Interchange Modification Report***, and Environmental Assessment***. Purpose of the project is to ***improving operations and safety*** along Range Avenue at the I-12 interchange and along I-12. Design alternatives included two split diamond interchange options with roundabout, partial cloverleafs, and collector distributor road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16), and a diverging diamond interchange alternative at Range Avenue.
11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA. *Principal Engineer:* Responsible for technical advisory and QAQC of all ***traffic engineering*** tasks including development of permanent signing plans, Interchange Modification Reports, and Transportation Management Plans for the widening of Interstate-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. One critical component of the project is maintaining traffic during the construction of new bridge structures. Multiple scenarios are being evaluated using a ***calibrated mesoscopic model*** to determine the impacts during construction and mitigations that will be necessary to minimize delay.

Firm employed by	ARCADIS		
Name	Ari Deitch, PE, PTOE, PTP, RSP	Years of relevant experience with this employer	8
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		BS / 2012 / Biological Engineering, Louisiana State University	
Active registration number / state / expiration date		PE.0041842 / LA / Exp. 03/2022; PTOE #4346 / USA / Exp. 11/2023 PTP #690 / USA / Exp. 07/2022; RSP #37 / USA / Exp. 12/2024;	
Year registered	2018	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Project Manager, Stage 0 Safety Studies, Traffic Engineering	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Deitch is a Transportation Engineer and Project Manager specializing in traffic safety, traffic engineering and design, transportation management, and conceptual roadway design. Mr. Deitch has experience managing and working on a wide range of transportation projects for LADOTD, and other DOTs and municipalities across the country, pertaining to safety studies, access management, pedestrian and bicycle improvements, completed streets, Stage 0 feasibility studies, traffic studies, transportation management plans, NEPA studies, signal design, and signing and marking design. He has experience with Highway Safety Manual methods and is proficient in IHSDM, Synchro, Vistro, VISSIM, SIDRA, and MicroStation software. **Mr. Deitch meets MPR #4 and has completed the LADOTD Traffic Engineering Process and Report Training.**
04/21 - Ongoing	**Louisiana Strategic Highway Safety Plan Update, LADOTD, Statewide, LA.** *Project Manager.* Responsible for managing project tasks and deliverables that Arcadis is responsible for and ensuring QAQC protocols are performed. Arcadis is performing all ***crash data analysis*** tasks for the ***SHSP update***, including a ***statistical analysis of existing emphasis areas*** and evaluating potential modifications to emphasis areas.
04/16 – 09/18	**New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA.** *Assistant Project Manager.* Responsible for assessing existing and future safety deficiencies related to pedestrian and bicycle modes and ***selecting safety countermeasures for 20 high-risk locations***. Developed ***design drawings*** for proposed short-term and long-term improvement phases and conducted ***benefit-cost analysis*** to inform project prioritization. Conducted safety analysis using ***Highway Safety Manual predictive methods***. Organized and lead project stakeholder meetings to review alternatives, obtain feedback, and develop ***context sensitive solutions***. Completed ***Stage 0 documentation*** including ***Preliminary Scope and Budget and Environmental Checklists*** for all 20 intersections.
02/15 – 09/18	**US 71 Corridor - Phase II and III Traffic and Safety Corridor Study, LADOTD; Rapides Parish, LA.** *Project Manager and Traffic Engineer.* Responsible for overseeing and managing project tasks including ***traffic data collection***, warrant studies, ***traffic analysis***, ***crash analysis***, ***alternative and countermeasure development***, ***predictive safety analysis***, and ***conceptual drawings***.
02/18 – 06/21	**Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA.** *Traffic Engineer.* Responsible for ***assessing existing and future safety deficiencies*** related to pedestrian and bicycle modes at identified high-risk intersections and segments in East Baton Rouge Parish. Assisted with the development of screening criteria to identify high priority locations with a history of pedestrian and/or bicycle crashes. Participated in ***Road Safety Assessments (RSAs)*** at 10 priority locations to identify and evaluate safety deficiencies and ***develop safety countermeasures*** to ***improve safety for pedestrians and bicyclists***.

Prime consultant firm name**: Arcadis**

08/14 – 06/15	LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA. *Traffic Engineer*. Responsible for review of existing ***crash data*** and ***traffic operations analysis***, development of ***safety countermeasures***, conceptual drawings, ***signal warrant analysis and timing plans***. and ***Stage 0 documentation***. Purpose of the project was to develop ***access management strategies*** and roadway improvements that will maintain and improve mobility, improve safety, support existing and future development along the LA 3235 corridor. Safety performance of alternatives was estimated using ***Highways Safety Manual predictive methods***.
04/16 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. *Traffic Engineer.* Conducted ***traffic analysis*** using a calibrated microsimulation model to evaluate the operational performance of HSR and HOV lane alternatives. Developed ***conceptual drawings*** and ***construction cost estimates*** to evaluate the ***feasibility*** of proposed alternatives.
02/17 – 02/18	I-49 Interchange Stage 0 Safety Feasibility Study, LADOTD, Lafayette Parish, LA. *Traffic Engineer.* Responsible for ***data collection and analysis***, ***traffic and safety analysis***, and ***conceptual design drawings***. Purpose of the project was to identify ***feasible improvement alternatives*** to address historical safety issues along the I-49 corridor and at 3 interchanges. Participated with meetings with LADOTD HQ and District 03 team members to understand project needs and develop context sensitive solutions.
01/19 – 05/20	US 90 Ramps at LA 88 Roundabouts, Iberia Parish, Louisiana. *Transportation Engineer.* Assisted with permanent signing and striping components of ***roadway safety design plans*** to accommodate the construction of proposed roundabouts.
08/19 – 02/20	US 61 Access Management and Corridor Improvements, LADOTD, East Baton Rouge Parish, LA. *Technical support and QAQC.* Project purpose was to evaluate the effectiveness of proposed ***access management improvements*** along US 61 and identify ***feasible alternatives*** to maximize operational and safety benefits. Evaluated the need for pedestrian and bicycle accommodations based on historical crash data and adjacent land use. Assisted with the development of ***construction cost estimates*** and ***benefit-cost analysis*** to compare the effectiveness of proposed alternatives.
04/16 – Ongoing	Pete's Highway Interchange Alternatives and Environmental Assessment, LADOTD, Denham Springs, LA. *Traffic Engineer.* Responsible for ***traffic analysis*** of proposed alternatives using VISSIM software. Played a key role in the development of preliminary ***roadway design drawings***, incorporation LADOTD's ***Complete Streets Policy***, and implementing ***enhanced pedestrian safety measures*** such as high visibility crosswalks. Work involves completing an ***Environmental Assessment*** and providing traffic engineering services related to ***improving operations and safety*** along Range Avenue at the I-12 interchange. Conducted ***signal warrant analysis*** and developed ***optimized timing plans*** for proposed improvements.
02/15 – 11/17	Intersection Feasibility Study - Evangeline Thwy, Johnston St, & Louisiana Ave, LADOTD, Lafayette Parish, LA. *Traffic Engineer:* Responsible for ***review of existing crash data, traffic operations analysis,*** and ***development of design alternatives***. Objective is to develop alternatives for the intersection of Evangeline Thruway (US 167/90) and Johnston Street (US 167) / Louisiana Avenue (LA 94) that will ***improve safety and mobility***. Evangeline Thruway consists of two one-way roadways with three lanes in each direction. Three alternatives for each intersection at Johnston Street / Louisiana Avenue were developed based on the results traffic and safety analysis.
11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA. *Traffic Engineer:* Responsible for wide range of ***traffic engineering*** tasks including development of ***permanent signing plans***, Interchange Modification Reports, and Transportation Management Plans for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment.

PERSONNEL RESUMES

SAFETY AND TRAFFIC ENGINEERS

Firm employed by	ARCADIS		
Name	Jose M. Rodriguez, RSP	Years of relevant experience with this employer	5
Title	Safety Analyst	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		MS / 2014 / Civil Engineering, LSU BS / 2006 / Civil Engineering, Julio Garavito Colombian Engineering School	
Active registration number / state / expiration date		RSP # 12 / USA / Exp. 05/2022	
Year registered	2019	Discipline	Road Safety Professional
Contract role(s) / brief description of responsibilities.		Stage 0 Safety Studies, Road Safety Assessments, Safety Effectiveness Evaluation, Data Visualization	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Rodriguez specializes in transportation safety and has experience on a wide range of projects including Stage 0 feasibility studies, Road Safety Assessments, pedestrian and bicycle improvements, and systemic safety evaluation projects. Mr. Rodriguez has extensive experience in crash analysis and the application of Highway Safety Manual Methods including Crash Modification Factors and Safety Performance Functions for local and nonlocal conditions. Mr. Rodriguez develops dynamic web dashboards using Power BI to visualize and organize data analysis results. Mr. Rodriguez has performed safety effectiveness evaluations to develop state-specific SPFs for LADOTD, and is currently assisting LADOTD with the 2022 Strategic Highway Safety Plan Update. Mr. Rodriguez has completed LADOTD Traffic Engineering Process and Report Training.
04/14 - 03/16	Highway Safety Manual (HSM) Safety Performance Functions (SPFs) and Louisiana Specific SPFs, LADOTD, Statewide, LA. *Safety Analyst.* Responsible to ***calibrate the HSM SPFs*** based on the HSM recommendations and ***Statewide crash data*** and develop the ***Louisiana Specific SPFs*** using ***statistical analyses*** and procedures recommended by the HSM.
04/21 - Ongoing	Louisiana Strategic Highway Safety Plan Update, LADOTD, Statewide, LA. *Safety Analyst.* Responsible to conduct all ***crash data analysis*** tasks for the ***SHSP update***, including a ***statistical analysis of existing emphasis areas*** and evaluating potential modifications to emphasis areas.
03/17 – 09/18	New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA. *Safety Analyst*. ***Historical crash analysis*** and safety analyses performed for 20 high priority intersections utilizing the ***Highway Safety Manual (HSM) 2010 guidelines*** and ***Crash Modification Factors (CMFs)*** from other sources. Analyses include developing build alternatives that address safety and operational issues at each intersection for all road users and developing ***Stage 0 Checklists and Documentation.***
03/17 – 08/17	US 71 Corridor - Phase II Stage 0 Feasibility Study, LADOTD; Rapides Parish, LA. *Safety Analyst.* Responsible for ***historical crash analysis*** to identify trends and safety issues. Assisted with the ***development of build alternatives*** to address safety issues and performed ***HSM predictive safety analysis*** to estimate the potential reduction in crashes for each alternative. Assisted with the completion of ***Stage 0 Checklists and Documentation***.
05/18 – 06/21	Baton Rouge Pedestrian Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA. *Safety Analyst.* Supported the development and delivery of a ***Pedestrian and Bicycle Safety Action Plan*** for the City of Baton Rouge. Responsibilities include completing a ***review of crash data***, identification of priority locations, and creation of ***targeted safety countermeasures*** based on roadway type. He was responsible for reviewing the crash data in both ***(Geographic Information Systems) GIS and PowerBI*** to determine areas to focus on 10 locations with the most need for pedestrian/bicycle safety improvement. The second phase of the project included conducting ***Road Safety Audits (RSA's)*** at the 10 priority locations to ***identify safety issues and develop feasible alternatives to improve pedestrian and bicycle safety***.

03/17 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. *Safety Analyst.* Reviewed and summarized the current best practices and safety research information on hard shoulder running experience in the U.S and Europe. Research included shoulder / median width and impacts to safety, desirable lengths for effective hard shoulder running, and ***CMFs to predict impacts to safety*** by reducing lane and / or shoulder widths. Produced a high-level technical memorandum that will ***identify and evaluate feasible alternatives*** of utilizing existing I-12 shoulders, researching the best practices, analyzing the safety and operational benefits, and determining the likely costs. Evaluated safety based on ***crash analysis, the HSM predictive methods and the ISATe tool*** for Freeways. Estimated ***costs and benefits of operational and safety analysis*** for proposed alternatives.
03/17 – 02/18	I-49 Interchange Stage 0 Safety Feasibility Study, LADOTD, Lafayette Parish, LA. *Safety Analyst.* Responsible for the ***collection and evaluation of historical crash data***, ***screening and selection of available safety improvement strategies*** that typically include alternative intersection configuration, roundabouts, corridor geometry and lane configuration, and driver awareness improvements. Safety analysis using ***HSM Predictive Method and IHSDM***.
03/17 – Ongoing	Pete's Highway Interchange Alternatives and Environmental Assessment, LADOTD, Denham Springs, LA. *Traffic and Safety Analyst.* Responsible for methodology development and overview of traffic analyses for a high-priority project. Work involves completing an EA and providing traffic engineering services related to ***improving operations and safety*** along Range Avenue at the I-12 interchange. Design alternatives included two split diamond interchange options with roundabout. partial cloverleafs, and collector-distributor road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16); and a diverging diamond interchange alternative at Range Avenue. ***Performed HSM predictive safety analysis*** to determine the ***safety benefits of proposed improvements***.
2019 – Ongoing	District 8 Systemic Safety Project, Pedestrians, Ohio Department of Transportation and Development, Columbus, Ohio. *Safety Analysts.* Responsible for the ***review of data, including crash, roadway inventory, and demographics***. The project required the ***development of a PowerBI dashboard*** and use of ***GIS analytics to review the crash data*** to determine metrics that were over-represented to locate areas where crashes are occurring, and areas where crashes may not be occurring, but have similar environmental characteristics (i.e., speed limit, lane width, driver or pedestrian age, presence of zero vehicle households, etc.), as where crashes are happening. This will allow the project team to not only develop engineering treatments, but also target areas for enhanced education and enforcement.
08/18 – Ongoing	Local Road Systemic Safety Task Order Contract, ODOT, Statewide. *Safety Analyst.* Assisted with four concurrent task orders to perform ***data driven systemic safety analysis*** for ODOT's current SHP initiative to promote regional safety through systemic safety analysis. Each task order includes data collection / conflation / QA/QC, database management, data evaluation, ***examining crash history***, developing crash trees, identifying focus facilities, ***identifying risk factors***, identifying segments of the network that may be at risk for crashes, ***identifying and prioritizing safety improvements***, and developing online web applications to clearly convey results to stakeholders using ESRI ArcMap and Microsoft PowerBI.

Firm employed by	Grey Engineering, LLC		
Name	April Renard, PE, PTOE, RSP2I	Years of relevant experience with this employer	<1
Title	Principal & Owner	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization		BS / 2006 / Civil Engineering	
Active registration number / state / expiration date		PE.0035660 / LA / Exp. 09/30/22; RSP #357 / 12/2022; PTOE #3905 / 07/2024	
Year registered	2010	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Stage 0 Safety Studies, Ped/Bike/Complete Streets	

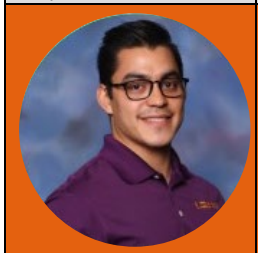
Experience dates	Experience and qualifications relevant to the proposed contract
	Ms. Renard's involvement with NCHRP projects, TRB committees, AASHTO's Committee on Safety, and AASHTO's Task Force for the second edition of the Highway Safety Manual enhanced her knowledge base to improve policies and procedures at the LADOTD. She led the development of a Data-Driven Safety Analysis Implementation Plan in a collaborative effort with FHWA and a Complete Streets Implementation Plan. Through collaboration, careful intention and sustained effort, she helped transform safety decision-making into an objective, data-driven process aiming to save lives and minimize injuries. **Ms. Renard has completed LADOTD Traffic Engineering Process and Report Training.**
10/20 – 09/21	**City of Baton Rouge & Parish of East Baton Rouge MOVEBR Capacity Program Complete Streets Lead**: *Subject Matter Expert* on ***Complete Streets*** by reviewing all design studies, project design reports, and preliminary plans to ensure pedestrians, bicyclist, and transit users of all ages and abilities are provided ***reasonable and appropriate multi-modal facilities*** given a project's context. Ms. Renard also led the development of standard street cross sections that were adopted into the MOVEBR Design Guidelines to improve walkability, bikability, ADA compliance, transit accommodations, calm traffic, mitigate stormwater runoff impacts, and improve water quality. She also produced and hosted a MOVEBR Design Guidelines workshop.
10/20 – Ongoing	**City of Baton Rouge & Parish of East Baton Rouge MOVEBR US 61/Scenic Highway Enhancement Project (LA 408/Harding Boulevard to Swan Avenue):** *Project Lead* for the Scenic Highway Survey and Preliminary Design, developing existing plan and profile sheets, determining ***feasible typical sections and intersection geometry*** given constrained Right-of-Way and limited budget. Her work involves coordinating with various stakeholders within the community, the MOVEBR Program Management Team, and LADOTD representatives while producing technical concepts to address the purpose and need of the project. Concepts include ***ADA compliant sidewalks***, bike lanes, traffic calming countermeasures, transit stop improvements, and green infrastructure (e.g. biofiltration swales and curb extensions).
07/19 – 10/20	**City of Baton Rouge & Parish of East Baton Rouge MOVEBR Project Manager | CSRS, Inc.:** *Project Manager.* In the early phases of MOVEBR, created the data-driven prioritization scheme of MOVEBR projects and led the collection and processing of the data to produce the first tier of prioritized projects. Developed the MOVEBR federal funding strategy matrix for pursuing federal funds for eligible projects. After the overall program strategy was developed, ***served as a Project Manager for 6 MOVEBR Capacity Program projects*** (Midway, Constantin/Dijon, Old Hammond Highway Segment 1, Old Hammond Highway Segment 2, Harding at I-110 Interchange, Ardenwood-Lobdell Connector), which included coordinating all aspects of project delivery (e.g. traffic analysis, environmental permitting, state and federal agency requirements, design, Right-of-Way acquisition, utility coordination) for reducing project delivery time (schedules are managed in Primavera P6).
07/19 – 10/20	**Jefferson Parish Belle Terre Streetscape Improvements, La Place, Louisiana:** *Project Engineer*. Produced ***design concepts*** to improve walkability, bikability, and stormwater run-off mitigation.

09/14 – 07/19	LADOTD Highway Safety Manager: Ms. Renard was responsible for the ***development and implementation of Louisiana's Strategic Highway Safety Plan*** in coordination with the Federal Highway Administration. She provided direction to staff on the State's safety data analysis processes for identifying potential Highway Safety Improvement Program projects (23 U.S.C. 148). Ms. Renard provided guidance across disciplines on ***data-driven safety considerations*** within LADOTD's project delivery process and led the Complete Streets Policy implementation activities for Louisiana. Other projects included the management of the East Baton Rouge Parish Bicycle and Pedestrian Masterplan contract, oversight of the Local Road Safety Program in coordination with the Louisiana Local Technical Assistance Program (LTAP) Office, and the creation and administration of the first-of-its-kind Safe Routes to Public Places Program. While a LADOTD employee, Ms. Renard represented the State on the AASHTO Task Force for the Second Edition of the Highway Safety Manual and served as an expert witness concerning protected safety data.
02/10 – 09/14	LADOTD Highway Safety Engineer: Managed consultant contracts for ***feasibility studies***, developed a ***Road Safety Assessment report template and process***, developed safety study guidelines for Transportation Management Plans, served on the State's Work Zone Task Force, conducted training and provided technical assistance for highway safety analytical tools, and conducted high-profile engineering studies (e.g. Statewide Cable Median Barrier Study, LA 10 Task Force study)
10/07 – 02/10	LADOTD Traffic Engineer Intern: Served in LADOTD's Traffic Engineering Section, developed updated pavement marking standards for the state, produced ***traffic simulation models***, reviewed ***pavement marking and signing plans***, designed interstate guide signing projects, assisted in revising traffic impact study policies and trained Districts on new the policy, and reviewed consultant submittals of traffic engineering studies.
05/06 – 10/07	ABMB (now Stantec) Traffic Engineer Intern: First job included producing Interchange Justification Reports, Traffic Impact Studies, and simulation models. She conducted a ***Statewide Feasibility Study for Continuous Flow Intersections (CFI)*** for the Arkansas Highway Transportation Department, developed traffic signal inventories, and reviewed traffic signal plans for a variety of private development projects (e.g. Blue Cross Blue Shield, Woman's Hospital, L'Auberge, Walmart, Mall of LA)

Firm employed by	ARCADIS		
Name	Jody Peace, PE, PTOE, RSP	Years of relevant experience with this employer	14
Title	Certified Project Manager III	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		MS / 2008 / Civil Engineering, Georgia Institute of Technology BS / 2007 / Civil Engineering, Georgia Institute of Technology	
Active registration number / state / expiration date		PE.036665 / GA / Exp. 12/2022; PTOE #4029 / USA / Exp. 3/2024; RSP #224 / USA / Exp. 12/2024	
Year registered	2011	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Road Safety Assessments, Safety Effectiveness Evaluation	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Peace is a Traffic & Safety Engineer with experience in transportation safety engineering and planning. Mr. Peace's current responsibilities include travel demand modeling, traffic simulation, current and future traffic analysis, traffic and corridor studies, crash and safety analysis, and air quality analysis. He has experience in conducting Road Safety Assessments and applying Highway Safety Manual Methods to quantify the effectiveness of safety improvements and countermeasures. Mr. Peace has presented on a variety of transportation topics to student and professional groups.
10/11 – 04/12	**Traffic and Crash Analysis: Canal Blvd Bus / Streetcar Terminal Environmental Assessment, New Orleans Regional Transit Authority; Orleans Parish, LA.** *Lead Traffic Modeler.* Lead modeler responsible for the development and analysis of the extension of a streetcar line in New Orleans. Responsibilities included overseeing the development of Synchro and VISSIM models, summarizing model results and developing 3D visualizations for use in the public involvement process, and ***conducting crash and safety analysis***.
07/07 – 04/15	**Revive 285 Top End, Georgia DOT, Metro Atlanta, GA.** *Lead Traffic Engineer.* Responsible for modeling and analyzing approximately 98 centerline miles and 100 intersections across the northern portion of I-285 in Atlanta. Model development tasks included calculating subarea demand from the regional transportation model, interpolating 15-minute travel demand from the peak period model, weighing impacts due to proposed transit changes, working with designers to create model geometry, model calibration, model output analysis, alternatives comparison, and simulation development.
05/19 – 10/21	**SR 6 Corridor Study, Paulding County DOT, Hiram, GA.** *Project Manager.* Lead the traffic analysis for a long-range corridor study for a major US highway in Metro Atlanta. Scope of work included operational analysis and conducting ***Road Safety Assessments*** by leading a ***multi-disciplinary safety walkthrough*** of the corridor. Safety walkthrough included a team review of the historic crash data and in-field review of high crash intersections to identify potential causes and ***quantifying the effectivness of potential mitigations***.
3/18 – Ongoing	**Safety On-Call, Districts 3 and 6, Georgia DOT, Western Georgia.** *Project Coordinator*. Assisted the project team in coordinating ***safety improvements*** with adjacent projects and participated as needed in ***Road Safety Assessments***. Overall project scope included the ***identification, prioritization, and development of projects at high crash intersections*** and corridors in Districts 3 and 6 for Georgia GDOT.

Firm employed by	ARCADIS		
Name	Max Aguirre, PhD, PE, RSP	Years of relevant experience with this employer	2.3
Title	Transportation Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization		PhD / 2018 / Engineering Science, LSU MS / 2015 / Construction Management, LSU; BS / 2013 / Civil Engineering, LSU	
Active registration number / state / expiration date		Professional Engineer – NC / PE.052016 / 2022; RSP #636 / USA / Exp. 8/2024	
Year registered	2021	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Stage 0 Safety Studies, Safety Effectiveness Evaluation	

Experience dates	Experience and qualifications relevant to the proposed contract
	Dr. Aguirre is a Professional Engineer in the state of North Carolina and a Road Safety Professional. Over the course of his academic career, Dr. Aguirre has served as a Graduate Research Assistant and participated in multiple field-related organizations. Dr. Aguirre has experience working on projects for Louisiana Department of Transportation and Development (LADOTD) pertaining to traffic and safety studies, feasibility studies, pedestrian and bicycle improvements, permanent signing design, signal design, and NEPA studies. He is also familiar with the Highway Capacity Manual, Highway Safety Manual, MUTCD, and AASHTO "Green Book". Dr. Aguirre is also knowledgeable in the application of several software programs including IHSDM, SYNCHRO, GuidSIGN, HCS and MicroStation software. **Dr. Aguirre has completed LADOTD Traffic Engineering Process and Report Training.**
09/19 – 06/21	**Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA.** *Traffic Engineer.* Assisted with the *assessment of existing and future safety deficiencies* related to pedestrian and bicycle modes at identified high-risk intersections and segments in East Baton Rouge Parish. Assisted with the development of *screening criteria* to identify high priority locations with a history of pedestrian and/or bicycle crashes. Assisted in the development of *Road Safety Assessments (RSAs)* at 10 priority locations to identify and evaluate safety deficiencies and *develop safety countermeasures* to *improve safety for pedestrians and bicyclists*.
09/19 – Ongoing	**Interchange Feasibility – I-49 (Ricohoc to Berwick) Supplemental Environmental Impact Assessment, LADOTD, St. Mary Parish, LA.** *Traffic Engineer*. Assist in project tasks involving planning and evaluation of different *interchange alternatives* and their *geometric design, socio-economic impacts, mobility impacts, and environmental impacts*.
10/19 – 07/21	**I-10 New Orleans to Slidell Hard Shoulder Running Feasibility Study, LADOTD, Orleans Parish, LA.** Traffic *Engineer*. Purpose of the project was to evaluate the *feasibility* of implementing HSR lanes along I-10 to alleviate existing bottlenecks and congestion along critical segments of the corridor. Assisted in the development of *conceptual drawings* and *typical sections* for proposed Hard Shoulder Running (HSR) alternatives on I-10 between New Orleans and Slidell.
08/19 – 02/20	**US 61 Access Management and Corridor Improvements (Airline Hwy) Feasibility Study, LADOTD, East Baton Rouge Parish, LA.** *Traffic Engineer.* Project purpose was to evaluate the effectiveness of proposed *access management improvements* along US 61 and identify *feasible alternatives* to maximize operational and safety benefits. Evaluated the need for pedestrian and bicycle accommodations based on historical crash data and adjacent land use. Assisted in conducting *traffic analysis* and the development of *benefit-cost analysis* to compare the effectiveness of the proposed alternatives.
11/20 – Ongoing	**I-10 CMAR, LADOTD, East Baton Rouge Parish, LA.** *Traffic Engineer.* Assisting in *traffic engineering* tasks including development of permanent signing plans, Interchange Modification Reports, and Transportation Management Plans for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. Assisted in the development of *existing condition safety analysis* including tasks such as *crash data analysis, collision diagrams, and crash report documentation*.

Firm employed by	digital engineering		
Name	David G. LeBreton, PE, PTOE, PTP, RSP	Years of relevant experience with this employer	14
Title	Vice President, Principal	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2007 / Civil Engineering	
Active registration number / state / expiration date		PE.0037176 / LA / Exp. 09/30/22; PTOE #3333/ USA / Exp. 11/2024; PTP #661 / USA / Exp. 3/2023; RSP #314 / USA / 07/2022	
Year registered	2012	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Road Safety Assessments, Low-Cost Safety Design, Ped/Bike/Complete Streets	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. LeBreton offers 14 years of experiences with safety studies and design, traffic analysis, traffic operations, roadway and drainage design, and construction phase services. David has performed studies, design, and/or construction engineering and inspection on 48 LADOTD/LPA Projects through the Safe Routes to School (SRTS), Safe Routes to Public Places (SRTPPP), and Local Road Safety Programs (LRSP) throughout the state, in both rural and urban areas. David completed training including LADOTD SIDRA Intersection and Roundabout Analysis Update Workshop; RPC/LDOTD Designing Streets for Pedestrian and Bicycles Workshop. He is proficient with AASHTO's Guide for the Development of Bicycle Facilities, MUTCD, ADA and LADOTD requirements. Mr. LeBreton Meets MPR No. 4.
11/17 – Ongoing	New Orleans DPW SRTS Sidewalk Project, LADOTD, New Orleans, LA. *Project Manager* for this ***pedestrian enhancement, sidewalk, signing and pavemnet marking, and road safety project.*** Responsible for the overall project management, QA/QC, budgeting, and scheduling for this contract. The scope of this projectconsists of the development of a ***feasibility study and engineering plans*** and non-standard specifications for the installation of 5' concrete sidewalks, 10' wide multi-use paths, road diet bike lanes, HAWK Pedestrian Hybrid Beacon, solar powered school zone flashing beacon, ADA compliant curb ramps and pedestrian crosswalks, and pedestrian countdown signal heads withaccessible pedestrian pushbuttons.
04/12 – 04/19	Gretna Sidewalks and Safety Improvements, LADOTD, Gretna, LA. *Engineer of Record/Project Manager* for this ***pedestrian enhancement, sidewalk, and road safety improvement project***. He was responsible for overall project management, QA/QC, budgeting, and scheduling for development of a ***feasibility study and engineering plans*** and non-standard specifications for the installation and/or relocation of concrete sidewalks and crosswalks to allow for continuous pedestrian access to a number of schools within the City of Gretna.
06/16 – 10/18	Audubon Avenue and Ardoyne Drive Mini Roundabout, LADOTD, Thibodaux, LA. *Engineer of Record/Project Manager* for this Local Road Safety Program ***road safety improvement project***. The ***feasibility study***, ***design of the improvements*** (sidewalks, ADA accessible curb ramps, cross walks, and signage and striping, etc.), geometric layout, quantity takeoffs, ***plan preparation,*** development of technical specifications (TS), development of the QA/QCand constructability and biddability forms were performed under David's direct supervision. The scope of this project involved the installation of a new mini-roundabout at the intersection of Audubon Avenue and Ardoyne Drive.

01/20 – 06/20	LA 39: W Judge Perez Drive Vehicular, Pedestrian, and Bicycle Safety Enhancements, Stage 0 Feasibility Study, St. Bernard Parish, LA. *Senior Project Manager and QA/QC Manager* on feasibility study for NORPC to identify alternatives along the W Judge PerezDrive (LA 39) corridor between Rowley Boulevard and Pakenham Drive to *improve safety* for all users with emphasis on *non- motorized traffic safety.* He was responsible for the oversight of planning and engineering of the site investigations, data collections, preliminary drawing layouts, cost estimating, Stage 0 Environmental and Budget Checklist, and final report.
09/17 – 12/21	LADOTD H.013082: Bootlegger Road Shared Use Path, St. Tammany Parish, LA. *QA/QC Manager* for ***Stage 0 Feasibility Study,*** project design, budgeting, and cost estimating for this contract involving alternatives of a 6' wide sidewalk on the north side of Bootlegger Road or a 10' wide shared use path on the south side of the road. This sidewalk will ***safely connect neighborhoods to the existing park and school*** and is part of a phasing plan that will ultimately connect LA1077 to Ochsner Boulevard. Ultimately the north sidewalk was chosen as the feasibility study determinedthe south option not constructible within the project budget.
10/17 – 06/18	Stage 0 Feasibility Study- Selected Corridors Hammond, LA. *QAQC Manager* for a Feasibility Study for the selected corridors that focused on ***accessibility and connectivity improvements*** such as sidewalk replacements, addressing non-compliant ADA handicapped curbs and ramps, bike lane markings, and sharedlane markings. Conceptual Plans, Cost Estimates, Stage 0 Environmental and Budget Checklists were performed as part of the ultimate Study. These improvements were part of the City of Hammond's Bicycle/Pedestrian Master Plan.
06/11 – 03/14	Thibodaux Traffic Study, LADOTD SP No. 737-29-0107, Thibodaux, LA. *Project Engineer* for this ***traffic study*** including twenty-four-hour traffic counts that were taken along all roadways in the study area as well as peak hour AM and PM turning movement counts that were also taken at the Canal and 7th Street intersection inThibodeaux. David also performed field assessments to document parking patterns and to help determine a solution for downtown Thibodaux's on street parking problems.
08/09 – 07/12	Loyola Drive Right Turn Lane at I-10, LADOTD SP No. 700-26-0295, Kenner, LA. *Project Engineer* for the design of an exclusive right turn lane onto I-10 westbound by widening Loyola Drive. The projectinvolved the relocation of a median U-turn, a ***signal warrant analysis*** at Loyola Drive and I-10, and the preparation of Categorical Exclusion paperwork.
04/13 – 04/16	Retainer Contract for Statewide Traffic Counts, LADOTD Contract No. 4400003368, Districts 03, 07 and 08. *Project Manager* providing ***traffic and transportation analyses*** at proposed sites throughout the State of Louisiana for a 3-yearperiod. Types of counts to be provided include: 7 day, 24-Hour Counts (non-interstate); 7-day, 24-Hour Counts (interstate) (4 or6 lanes); 24-Hour Traffic Counts; 48-Hour Traffic Counts; Turning Movement Counts (Peak Hour Counts); Turning Movement Counts (Non-Peak Hour Counts); 15 Minute Counts with Demand Volumes Included (Peak/Non-Peak Hour Counts); Speed Studies; ***Warrant Analysis.***

Firm employed by	ARCADIS			
Name	Justin Maderia, PE, PTOE, PTP		Years of relevant experience with this employer	15
Title	Traffic and Safety Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		MS / 2005 / Civil Engineering; BS / 2004 / Civil Engineering		
Active registration number / state / expiration date		PE.0038492 / LA / 03/31/2022; PTOE #3455 / USA / 07/01/2024; PTP #604 / 07/01/2023		
Year registered	2013	Discipline	Civil Engineer	
Contract role(s) / brief description of responsibilities		Stage 0 Safety Studies, Safety Effectiveness Evaluation		

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Maderia's experience in transportation engineering includes a range of services, such as project engineer responsible for safety studies, feasibility studies, traffic flow/demand modeling, spot speed studies, micro-simulation modeling, and traffic noise modeling. His experience with safety studies includes crash review and analysis, development of safety improvements and countermeasures, and application of Highway Safety Manual (HSM) methodologies to evaluate the effectiveness of safety improvements. He has also served as the project engineer responsible for the design of highway projects. Specific design experience includes maintenance of traffic design, traffic control plan design, roadway geometry, horizontal and vertical alignment design. His software program experience includes IHSDM, AutoCAD, MicroStation, Geopak, AutoTurn, SignCAD, GIS, TNM, CORSIM, VISSIM, HCS and all Microsoft Office Applications. **Mr. Maderia has completed LADOTD Traffic Engineering Process and Report Training.**
04/21-Ongoing	**Louisiana Strategic Highway Safety Plan Update, LADOTD, Statewide, LA.** *Safety Engineer.* Responsible for QAQC of *crash data analysis* tasks for the *SHSP update*, including *statistical analysis of existing emphasis areas* and evaluating modifications to emphasis areas.
01/14 – 02/17	**US 71 Corridor - Phase 1 Stage 0 Feasibility Study, LADOTD, Rapides Parish, Louisiana.** *Safety Engineer*. Responsible for independent review of traffic and *safety analysis*, VISSIM animations, and final *Stage 0 documentation*. Purpose of the project was to identify operational and safety needs and *determine the safety effectiveness of alternative concepts* that incorporated innovative intersections, roundabouts, frontage road improvements, and signal timing improvements.
03/16 – 07/18	**I-12 Hard Shoulder Running Feasibility Study, LADOTD, East Baton Rouge and Livingston Parishes, LA.** *Safety Engineer*. Evaluated safety based on *crash analysis, the HSM predictive methods and the ISATe tool* for Freeways. *Estimated costs and safety benefits* to evaluate the feasibility of proposed alternatives. Analyzed speed data and volume data and developed figures for various hard shoulder running locations.
02/15 – 08/17	**Intersection Feasibility Study, Evangeline Thruway, Johnston St, & Louisiana Ave., LADOTD, Lafayette Parish, Louisiana**. *Safety Engineer.* Responsible for the operational and *safety analysis of project alternatives* including existing, no-build, and build conditions. A calibrated VISSIM model was developed and used to analyze the various scenarios. Build alternatives included CFI, RCUT, and MUT concepts. The primary objective of the study is to *identify reasonable alternatives that address the purpose and need* and conduct a *benefit/cost analysis* to the *operational and safety effectiveness of alternatives*.
09/17-Ongoing	**Safety Study Task Order Contracts, ODOT, Statewide, Ohio.** *Lead Engineer.* Responsible for completing *site specific safety studies* on a task order basis. Each safety study includes a site visit, existing conditions inventory, preparing existing conditions plans, collecting traffic counts, forecasting traffic volumes, *reviewing 3 year crash history*, *completing ODOT's CAM Tool*, capacity analysis, *CMF Clearinghouse to test counter-measures*, schematic diagrams, cost estimating, completing ODOT's ECAT, *writing a safety study technical report*, applying for safety funding from ODOT, and presenting the project to ODOT's Office of Program Management for the chance to be awarded safety funding.

Firm employed by	ARCADIS		
Name	Kester Hollier, PE, PTOE	Years of relevant experience with this employer	1
Title	Senior Traffic Engineer	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization		BS / 2004 / Civil Engineering, Louisiana Tech University	
Active registration number / state / expiration date		PE.034304 / LA / Exp. 03/2023; PTOE #3928 / USA / Exp. 11/2024	
Year registered	2009	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Traffic Engineering	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Hollier possesses a wide breadth of experience in the field of transportation engineering including feasibility studies, traffic engineering, signal timing and design, roadway design, complete street improvement projects, roadway safety analysis and design, and construction management and inspection. Working on a wide variety of projects from the planning and conceptual phases to the design and construction phases, has given him the experience to help identify the needs and requirements for projects. This experience allows him to understand stakeholders ranging from local public agencies to state DOTs and helps provide expertise in achieving successful solutions for a variety of projects. **Mr. Hollier meets MPR #2 and has completed LADOTD Traffic Engineering Process and Report Training.**
05/14 – 08/20	**Causeway Blvd. at Earhart Expwy. Interchange, LADOTD, Jefferson Parish, LA.** *Traffic/Civil Engineer*. Responsible for the design of traffic control and construction sequencing, ***pavement marking layout***, quantity analysis, ***cost estimates***, and quality control for a new interchange at LA 3139 (Earhart Expwy.) and LA 3046 (Causeway Blvd.) in Jefferson Parish, LA. Provided review for the ***interchange traffic sign*** and ***traffic signal timings and design.*** Identified all necessary ***design waivers and design exceptions*** required for LADOTD approval. Provided ***geometric layout design***, ***typical section design*** and review, and joint layout design for several interchange ramps and underpasses.
09/12 – 02/16	**Stage 0 Feasibility Study and Stage 1 EA for Replacing Belle Chasse Tunnel and Bridge, LADOTD, Plaquemines Parish, LA.** *Traffic Engineer*. Responsible for the ***feasibility study*** and ***traffic analysis*** along LA 23 (Belle Chasse Highway) between LA 428 (Behrman Highway) and LA 406 (Woodland Highway) for multiple 6-lane bridge alternatives that will be proposed to replace the existing Belle Chasse Tunnel and lift bridge over the Intercoastal Waterway. These alternatives included 3%, 4%, and 5% bridge grades that modified roadway geometry and intersection location. Responsible for the review of the roadway portion and costs for the ***Line and Grade Study*** along with the review of the construction sequencing and traffic maintenance of the constructability review.
11/20 – Ongoing	**I-10 CMAR, LADOTD, East Baton Rouge Parish, LA.** *Project Manager.* Responsible for traffic engineering tasks including development of ***permanent signing plans, traffic signal plans, interchange modification reports, and transportation managemnet plans*** for the widening of I-10 from LA 415 to Essen Lane and improvements to interchanges along this segment. Extensive ***historical crash and safety analysis*** is being performed in support of the IMR and TMP. One critical component of the project is maintaining traffic during the construction of new bridge structures. Multiple scenarios are being evaluated using a calibrated mesoscopic model to determine the impacts during construction and mitigations that will be necessary to ***minimize delay***.

06/13– 04/14	US 190 Stage 0 Feasibility Study, LADOTD, St. Tammany, LA. *Traffic Engineer*. Responsible for ***roundabout geometric design*** and ***pedestrian and bike path design*** along the US 190 corridor in the City of Slidell and St. Tammany Parish to ***improve safety for motorized and non-motorized roadway users.***
11/17 – 07/20	LA 466 (5th Street) Improvements Traffic Study, City of Gretna, Jefferson Parish, LA. *Project Manager / Traffic Engineer*. Responsible for the ***traffic study and impacts*** for the proposed ***complete streets improvements*** along the LA 466 corridor between LA 23 and Richard St. in Gretna, Louisiana. Tasks included ***data collection*** along the corridor and at designated intersections, ***safety and crash analysis*** along the corridor, trip generation/land use and performing existing traffic analysis and future traffic analysis for proposed final alternative. The traffic study was prepared to follow the Louisiana Department of Transportation and Development's ***Traffic Engineering Process and Report Guidelines***. The project also included a stand alone ***pedestrian study*** along the corridor at designated intersection and the design of ***accessible pedestrian signals*** at signalized intersections.
12/17 – 11/19	Causeway Boulevard Widening Traffic Study, Jefferson Parish, LA. *Project Manager / Traffic Engineer*. Responsible for the ***traffic and safety study*** for the proposed widening of Causeway Boulevard between Metairie Rd. and West Esplanade Blvd. in Jefferson Parish, LA. Tasks included ***data collection***, traffic volume redistribution, left-turn placement and turn bay storage length, and existing traffic analysis and future traffic analysis of a ***preferred alternative***.
10/18 – 01/19	LA 22 Traffic Circulation and Corridor Analysis, NORPC, St. Tammany Parish, LA. *Traffic Engineer*. Responsible for the development of ***three future alternatives*** along Northshore Boulevard between I-12 and US 190 in Slidell, LA. Managed the ***data collection*** process and peak period observations to determine existing traffic patterns as well as the ***safety analysis*** along the corridor. Developed three alternatives that used a combination of ***traffic signal retiming***, J-turns, and roundabouts to provide better ***access management*** along Northshore Boulevard as well as improve traffic flow in the corridor for current and proposed future conditions with consideration given to proposed future developments using trip generation and land use analysis.
01/10 – 04/11, 07/13 – 01/14	Stumberg Lane Extension, City of Baton Rouge Green Light Plan, East Baton Rouge Parish, LA. *Traffic Engineer*. Responsible for the ***design of new traffic signals*** at US 61 (Airline Highway) and LA 73 (Jefferson Highway) for the extension of Stumberg Lane in Baton Rouge, LA. Also, responsible for the ***design and layout*** of the fiber optic interconnect along the proposed extension.
05/09 – 07/13	LA 23 Widening (Lapalco Blvd. – Engineers Rd.), LADOTD, Jefferson and Plaquemines Parishes, LA. *Traffic/Civil Engineer*. Responsible for the ***road design and geometrics*** for the widening of LA 23 in Jefferson and Plaquemines Parishes between Lapalco Blvd. (LA 428) and Engineers Rd. (LA 3017). Developed ***traffic analysis*** for the ***traffic signal timing*** and required turn bay lengths at intersections. Developed ***traffic signing plans***, ***pavement marking layouts*** and temporary traffic control plans.
10/10 – 7/15	Barriere Road Feasibility Study/Traffic Study, US Department of Defense, Plaquemines Parish, LA. *Civil/Traffic Engineer*. Responsible for the geometric layout and design of the ***realignment alternatives*** of Barriere Rd. between LA 23 to the US Naval Air Station. ***Developed and reviewed traffic analysis*** for arrival and departure patterns for the South US Naval Air Station entrance gates.

Firm employed by	ARCADIS		
Name	Thomas Montz, PE, PTOE, PTP	Years of relevant experience with this employer	9
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		MS / 2011 / Civil Engineering, Louisiana State University BS / 2009 / Civil Engineering, Louisiana State University	
Active registration number / state / expiration date		PE.0039128 / LA / Exp. 09/2022; PTOE 4093 / USA / 07/2022; PTP 599 / USA / 03/2023;	
Year registered	2014	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Traffic Engineering	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Montz is a Project Manager and Senior Transportation Engineer specializing in transportation planning / feasibility, modeling, safety, and design. He has over 12 years of experience leading a multitude of planning and engineering projects including Stage 0 feasibility studies, safety studies, NEPA studies, traffic signal timing and design, and transportation management during construction. He specializes in traffic analysis and operations including signal timing, signal design, ITS design, HCM analysis, and microsimulation analysis. **Mr. Montz meets MPR #4 and has completed Traffic Engineering Process and Report Training.**
12/13 – 06/15	**LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA.** *Traffic Engineer.* Responsible for traffic and safety analysis as part of the ***Stage 0 feasibility study*** to develop improvement alternatives with the goal of enhancing mobility and safety on LA 3235. Main tasks included ***traffic data collection***, ***signal warrant studies***, ***traffic analysis***, ***safety analysis***, development of ***conceptual layouts***, and ***public outreach***. Intersections found to warrant signalization were also modeled in unconventional designs including U-turns, J-turns, and RCUTs. Purpose of the project was to address historical safety issues along the corridor resulting from high speeds and conflict points. Assisted with the completion of ***Stage 0 documentation*** including ***Preliminary Scope and Budget and Environmental Checklists***.
04/19 – 12/19	**US 90 Traffic Signal Timing Upgrades/LADOTD, Lafayette Parish, LA.** *Technical Lead* of project tasks involving traffic data collection and analysis, signal inventory, peak period determination and observations, ***warrant analysis***, travel time runs, ***traffic signal timing analysis*** using Synchro 10 software, and development of updated TSI forms following latest LADOTD standards
02/15 – 08/17	**US 71 Corridor - Phase II Stage 0 Feasibility Study, LADOTD; Rapides Parish, LA.** *Project Manager.* Responsible for the preparation of a corridor ***feasibility study*** for the purpose of enhancing mobility and safety on US 71 in Alexandria, LA. Main tasks included ***traffic data collection***, ***signal warrant studies***, ***traffic analysis***, ***safety data analysis***, alternative development, and public / stakeholder involvement. Completed ***Stage 0 documentation*** including ***Preliminary Scope and Budget and Environmental Checklists***.
04/16 – 09/18	**New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA.** *Traffic Engineer.* Responsible for ***traffic data collection***, ***volume development***, ***traffic analysis***, and ***alternative screening***. Purpose of the project was to identify ***safety improvement alternatives*** at 20 high-priority intersections in New Orleans with a history of pedestrian and bicycle safety issues. Assisted with the development of safety countermeasures for short-term and long-term alternatives. Assisted with the completion of ***Stage 0 documentation*** including ***Preliminary Scope and Budget and Environmental Checklists***.

04/16 – 10/19	I-12 Hard Shoulder Running Feasibility Study and Preliminary Design, LADOTD, East Baton Rouge and Livingston Parishes, LA. *Traffic Engineer.* Conducted ***traffic analysis*** using a calibrated microsimulation model to evaluate the operational performance of HSR and HOV lane alternatives along I-12 between the I-10/I-12 split and Walker, LA. Developed a range of alternatives and made recommendations based on the alternatives that produced the greatest operational benefits and relieved major bottlenecks. Presented results to LADOTD project team and administration to inform the decision-making process and subsequent project stages.
02/18 – 06/21	Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments LADOTD, East Baton Rouge Parish, LA. *Traffic Engineer.* Responsible for ***assessing existing and future safety deficiencies*** related to pedestrian and bicycle modes at identified high-risk intersections and segments in East Baton Rouge Parish. Assisted with the development of ***screening criteria*** to ***identify high priority locations*** with a history of pedestrian and/or bicycle crashes.
12/13 – 05/15	Joe Sevario / Roddy Road Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA. *Traffic Engineer*. Evaluation of roundabouts at 10 stop-controlled intersections along Joe Sevario / Roddy Road, from US 61 to LA 42, a length of approximately 7.2 miles. Main tasks included ***traffic data collection***, ***traffic signal warrants***, ***crash analysis***, ***capacity analysis***, ***safety analysis***, review of existing pipelines and other municipal *utilities, alternatives analysis, design development, and cost estimates.*
11/12 – 4/13	LA 594 (Millhaven Rd.) Stage 0 Feasibility Study and Preliminary Design, I-20 Economic Development Corporation, Ouachita Parish, LA. *Traffic Engineer.* Responsible for ***traffic data collection and traffic and safety analysis tasks***. The project proposed roadway improvements to maintain operations and safety along Millhaven Road while accommodating projected increases in traffic demand and commercial development.
04/16 – Ongoing	Pete's Highway Interchange Alternatives and Environmental Assessment, LADOTD, Denham Springs, LA. *Traffic Engineer.* Responsible for assisting with ***traffic signal timing analysis tasks*** including volume development / projections, origin-destination study, VISSIM model development and calibration, and noise analysis. Work involves completing an Environmental Assessment and providing traffic engineering services related to improving operations and safety along Range Avenue at the I-12 interchange.
04/13 – Ongoing	US 11 Environmental Assessment, LADOTD, St. Tammany Parish, LA. *Traffic Engineer.* Responsible for ***crash analysis***, operating speed tabulations, ***intersection and corridor analysis***, ***alternative development***, and noise modeling for the proposed widening of US 11 between US 190 (Gause Blvd) and I-12 in Slidell, LA. The proposed improvements include replacing a bridge crossing the Norfolk Southern Railroad. This project includes analyzing several ***innovative alternatives*** for the proposed corridor, including "superstreets" and J-turn concepts.
11/20 – Ongoing	I-10 CMAR, LADOTD, East Baton Rouge Parish, LA / H.001400. *Traffic Engineer.* Responsible for construction phasing modeling and evaluation to determine the impacts of various ***construction phasing scenarios and mitigation*** that will be required to ***minimize travel delays during construction***. Construction phasing scenarios are being modeled using a ***calibrated mesoscopic model*** developed by Arcadis, which can estimate the effects of construction activities on the broader roadway network. Model results are being used to inform the Transportation Management Plan for the project.

Firm employed by	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS		
Name	Ghouse Sundke M., PE, PTOE	Years of relevant experience with this employer	15
Title	Project Civil Engineer	Years of relevant experience with other employer(s)	<1
Degree(s) / Years / Specialization		MS / 2005 / Civil Engineering, University of Kentucky BS / 2003 / Civil Engineering, Osmania University, India	
Active registration number / state / expiration date		PE.0039678 / LA / Exp. 09/2023; PTOE 3146 Exp. 03/2023	
Year registered	2011	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Traffic Engineering	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Sundke has more than 15 years of experience in transportation planning, traffic engineering and highway design. He performs traffic engineering services for Stage 0 feasibility studies, traffic studies, traffic signal design, signal timing, traffic modeling and simulation, safety analysis, roadway planning and design and maintenance of traffic control plans for Buchart Horn's southern region offices. **Mr. Sundke meets MPR No. 4 and has completed LADOTD Traffic Engineering Process and Report Training.**
03/16 – 10/16	**Stage 0 Safety Feasibility Study for LA 182 Sidewalk and Handicap Ramp Improvements, LADOTD, New Iberia, LA.** *Project Engineer*. BH conducted a ***Stage 0 Feasibility and Planning Study*** to evaluate the feasibility of the rehabilitation and construction of approximately 1.8 miles of continuous sidewalks and handicap curb ramps along LA 182 in Iberia Parish, LA.
12/08 – 02/09	**LA 28 Stage 0 Safety Feasibility Study and Environmental Inventory, LADOTD, Rapides Parish, LA.** *Lead Designer*. BH performed a ***Stage 0 Feasibility and Planning Study and Environmental Inventory*** to widen approximately 6.5 miles of LA 28 to four lanes from the end of the existing four-lane section at LA 1025 (Libuse) to LA 1207 (Holloway). Responsible for t***raffic analysis, signal timing optimization, and preparation of traffic report***.
04/10 – 06/12	**US 72 Traffic Signalization Study and Optimization, MS Department of Transportation, Corinth, MS.** *Project Manager*. BH provided ***development and implementation of coordinated traffic signal timing plans*** for eight signals in Corinth, MS.
01/16 – 03/16	**Impact and Warrant Study for Fieldstone Farms Development, Precision Engineering Corporation, Oxford, MS.** *Project Manager*. BH analyzed the traffic impacts to the existing roadway and intersections because of a development. Conducted ***Signal Warrant Analysis*** to determine if a traffic signal was warranted was included. Responsible for ***preparing traffic impact study report***.
05/13 – 03/15	**Market Boulevard Traffic Signal, Town of Collierville, TN.** Field surveys, traffic counts, ***signal design and timing plans***, and construction document preparation to ***install a coordinated, eight-phase traffic signal*** at the intersection of Civic Center Drive and Market Boulevard.
06/13 – 05/14	**Traffic Calming / Safety Feasibility Study, City of Memphis, TN.** *Project Manager*. BH conducted traffic studies to determine the potential effectiveness of installing ***traffic calming devices and speed humps*** at 71 sites throughout Memphis. Typical activities included speed and volume studies, ***data collection and traffic studies***, and device placement and petition packages. Responsible for analyzing eligibility of traffic calming devices and subsequently ***designed devices for eligible streets***.
08/07 – 12/08	**LA 59/I-12 Interchange Improvements, St. Tammany Parish, Mandeville, LA.** *Project Engineer*. BH provided preliminary plans, final plans, geotechnical services, ***traffic analysis, signal design, and environmental services*** for improvements to the intersection of LA 59 at I-12 in an expedited fashion to quality as a shovel-ready project for the ARRA Program. Transportation Designer responsible for traffic signal design, signal timing optimization, signal plan preparation, and quantities take off.

PERSONNEL RESUMES

ROADWAY AND LOW-COST SAFETY DESIGN ENGINEERS

Firm employed by	digital engineering		
Name	Alan Krouse, PE	Years of relevant experience with this employer	1
Title	Senior Project Manager	Years of relevant experience with other employer(s)	43
Degree(s) / Years / Specialization		BS / 1977 / Civil Engineering	
Active registration number / state / expiration date		PE.0019391 / LA / Exp. 09/2023	
Year registered	1981	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Low-Cost Safety Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Krouse is a Senior Project Manager responsible for management of complex infrastructure projects, and QAQC. His 44 years of experience spans a career working for both the public sector and private consulting companies. As a Coordinating Squad Leader in Road Design for the Louisiana Department of Transportation and Development (LADOTD), Alan managed projects in excess of $100 million that required the coordination of 20 design consultants in major metropolitan areas. Following his tenure at LADOTD, Alan entered the professional engineering consultant industry where he continued designing and managing transportation projects for LADOTD and other public agencies. Alan's experience includes Stage 0 Feasibility Studies, Safety Studies, design of safety improvements, Environmental Inventories, along with major highway improvement design. Alan currently serves on the Louisiana Complete Streets Advisory Council.
11/18 – 03/20	**LADOTD H.013322.1: LA 3040 Corridor Improvements Study, Houma, LA.** *Project Manager* for this *road safety project*. Responsible for contract negotiations, QA/QC and report documents which include traffic, environmental and alternate development. Study to identify safety and/or operational issues along 2.5 miles ofMartin Luther King Boulevard (LA 3040) in Houma in order to evaluate reasonable alternatives to address any deficiencies discovered and develop low-cost safety improvements.
03/16 – 09/16	**LADOTD H.012295: Feasibility and Planning Study for LA 182 Sidewalk and Handicap Ramp Improvements, New Iberia, LA.** *Project Manager* for this *pedestrian enhancement and sidewalk project*. Responsible for coordination of pedestrian counts, field observations, preparation of Stage 0 Study including development of alternates necessary to evaluate the feasibility of the rehabilitation and construction of approximately 1.8 miles of continuous sidewalks and handicap curb ramps.
06/15 – 04/19	**LADOTD H.0112243.1: I-49 at US 190 and LA 31 Feasibility and Planning Study and Tier Analysis, Opelousas, LA.** *Project Manager* for this *road safety project*. Responsible for scope development, contract negotiations and QA/QC for a feasibility and planning study to evaluate alternatives to improve traffic operations and safety along several abnormal sectionsof the project at the I-49 interchanges with US 190 and LA 31. High level alternatives were evaluated, incorporating considerations for required ROW, environmental and social impact, and project cost.
06/14 – 12/19	**LADOTD H.010204.5: US 425 Roundabout Design, Retainer Contract for Highway Safety, Sigma Consulting Group, Inc./LADOTD, Rayville, LA.** *Project Manager* for this *signing and pavement marking and road safety project*. Responsible for contractual obligations, quality assurance of design submittals, construction phasing, quantity calculations, cost estimates, and geometric reviews for the design of a new six-leg, multi-lane roundabout at the intersection of US 425 and Grimshaw Street and Christian Drive including the relocation of an existing frontage road, truck access turnout and stormwater systems design.

06/13 – 07/14	US 61 Improvements Stage 0 Study (LA 50 to Jefferson Parish Line), New Orleans Regional Planning Commission, St. Charles Parish, LA. *Project Manager* for this *road safety project*. Responsible for reviewing line and grade and environmental and budgetary checklists, as well as quality assurance of Stage 0 document to evaluate two conceptual alternatives along the corridor: capacity improvements to the existing intersection such as widening, turning lanes, and traffic signal timing; and safety improvements such as access management and complete streets, medians divided with J-turns, and special consideration ofheavy truck movements due to land use. Alan also assisted in drainage, geometric, typical section design, and calculated project quantities.
12/13 – 12/14	Highland-Burbank Connector Design-Study, City of Baton Rouge/Parish of East Baton Rouge, LA. *Project Manager* for this road design project that included *sidewalk and road safety elements*. Responsible for contract and feenegotiations, preparing all correspondence to client, conducting project meetings and monitoring the budget and schedule of this design study, including the preparation of preliminary (30%) design plans as necessary to identify two alternatives for a new three-lane curb and gutter roadway with sidewalks on both sides, connecting Highland Road and Burbank Drive, includinga new bridge crossing at Bayou Fountain.
04/19 – 05/20	LADOTD H.013817.1 – LA 117 Feasibility and Planning Study and Environmental Inventory, Leesville, LA. *Project Manager* responsible for a *Stage 0 feasibility study* for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study evaluated the impacts of correcting deficient vertical and horizontal geometry along the corridor, widening for the addition of shoulders, and adding passing lanes and turn lanes at strategic locations along the corridor.
01/19 – 05/20	LADOTD H.012311: LA 429 Connector Stage 0 Feasibility Study, Ascension Parish, LA. *Project Manager* for the preparation of a Stage 0 feasibility study to evaluate alignments for a limited-access corridor (LA 429)near I-10, between LA 30, LA 73, and US 61. Two alternatives for the widening and reconstruction of LA 429 were evaluated. The scope consisted of stakeholder and public meetings, site visits and data collection, phasing of *alternative development* for the corridor, scope and budget checklists, and an opinion of probable cost to prepare the Stage 0 Report.
05/13 – 03/16	LADOTD H.005720 – Florida Avenue Expressway Stage 0 Feasibility Study and Environmental Inventory, New Orleans, LA. *Project Manager* responsible for reviewing design and reports for the proposed changes to the new interchange, roadways, and bridge over the intercoastal waterway including a new bridge across the Inner Harbor Navigational Canal and the upgrade and extension of Florida Avenue from Elysian Fields Avenue to Paris Road.
05/20 – 05/21	Port of Gulfport Access Project Environmental Assessment, Gulfport, MS. *Project Manager* responsible for coordination of the project team performing the EA which consists of a new 160-foot bridgeover US Highway 90, pavement rehabilitation on 30th Avenue from US 90 north for approximately 4600 feet, upgraded signalization, access management improvements, and implementation of Intelligent Transportation Systems. His responsibilities include facilitating project meetings and coordination of information with the design team. Alan is also responsible for managing the tasks performed by the project team which includes surveying, conceptual design, bridge aesthetics, *traffic engineering analysis*, noise and vibration study, air quality and emissions study, right of way impacts, attending public meetings and preparation of the *NEPA report*.

Firm employed by	ARCADIS		
Name	Jose L. Rodriguez, PE	Years of relevant experience with this employer	1
Title	Senior Civil Engineer	Years of relevant experience with other employer(s)	24
Degree(s) / Years / Specialization		BS / 1992 / Civil Engineering, University of New Orleans	
Active registration number / state / expiration date		PE.0030492 / LA / Exp. 03/2023	
Year registered	2003	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Low-Cost Safety Design - Roadway Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Rodriguez has more than 25 years of experience with roles of progressive responsibility as a civil engineer performing roadway design, bridge design, project management, hydraulic analysis, utility coordination, construction supervision, estimating, and project implementation for various clients in the states of Louisiana, Texas, Georgia, and North Carolina. Worked in close relationship with the Louisiana Department of Transportation, City of New Orleans Department of Public Works, New Orleans Sewer and Water Board, Plaquemines Parish, Jefferson Parish, St. Bernard Parish, U.S. Army Corps of Engineers, New Orleans Regional Planning Commission, Marathon Petroleum Co., Yuhuang Chemicals, and others. Extensive experience in Inroads, Autodesk Civil 3d, Leap Bridge for Concrete Bridge Design, and Excel Spread Sheets. Served on the American Concrete Institute (ACI) Louisiana Board, becoming president of the Louisiana Chapter in 2010. **Mr. Rodriguez meets Minimum Personnel Requirement #3.**
05/12 – 12/15	**Earhart Boulevard Causeway Interchange, LADOTD, New Orleans, LA.** *Project Designer.* Responsible for the ***geometric design and roadway plan preparation*** for the Earhart Boulevard-Causeway Interchange. The Earhart Boulevard-Causeway Interchange purpose was to assist in traffic congestion relief for the east-west flow in traffic for the New Orleans Metro Area. It consisted of the development of roadway and bridge ramps for the creation of an elevated signal-controlled interchange. The estimated construction cost for this project was approximately fifty-nine million dollars. Responsible for the ***development of all horizontal and vertical alignments*** for this project as well as roadway plan preparation, developing all ***roadway cross sections***, drainage design, utility conflict resolution and ***cost estimating*** for the project. Bentley InRoads was used for the development of the roadway plans for this project.
02/10 – 06/11	**I-10 from Veterans to Clearview, LADOTD, Metairie, LA.** *Project Designer.* Responsible for ***roadway plan preparation*** for widening 1.2 miles of I-10 from three lanes to five lanes in each direction. The project also included bridge work to accommodate the new roadway widening. Jose was also responsible for the alignment and design of concrete sound walls along the corridor. He helped implement an innovative two-sided concrete stamp process for the noise wall precast concrete panels.
07/09 – 07/15	**Peters Road Expansion, Phases I, II and III, LADOTD, Plaquemines, LA.** *Project Designer.* Responsible for the ***geometric design, plan preparation and wetland delineation*** of Peters Road Phases I, II and III. The projects consisted of a new roadway, elevated crossing over the Intracoastal Waterway, approach roadways in Jefferson and Plaquemines Parishes to tie Peters Road to Louisiana 23 near Barrier Road. The projects were prepared in coordination with Plaquemines Parish, DOTD, and the U.S. Army Corps of Engineers.
01/08 – 05/08	**Stage 0 Feasibility Study I-12 to Bush Corridor Study Phase III, LADOTD, St. Tammany Parish (STP), LA.** *Project Designer.* Responsible for ***evaluating environmental issues and developing design alternatives*** in accordance with the ***National Environmental Policy Act (NEPA)*** for transportation improvements.

02/07 – 10/09	John James Audubon Bridge Approach (Design-Build [DB]), LADOTD, New Roads, LA. *Project Designer.* Responsible for the ***geometric horizontal and vertical alignment for five approach bridges*** to the John James Audubon Cable Stay Bridge. The longest cable-stayed bridge in the Western Hemisphere consisting of 1,583' main span. Jose was also in charge of the quality control for all bridge approaches and the design of all precast concrete girders for the project.
10/17 – 03/18	Traffic Turn Lanes on Highway LA 3127, Yuhuang Chemical Inc., St. James, LA. *Quality Control (QC).* Review for the ***design of two turn lanes*** into the Yuhuang Chemical Methanol plant in St. James Louisiana. During construction, Jose provided the owner with construction design services for the duration of the construction phase.
1/06 – 09/09	New Orleans Submerged Roadway Program Management, LADOTD / New Orleans Regional Planning Commission, New Orleans, LA. *Project Designer and Quality Control Reviewer.* For this multi-million dollar program management team for the DOTD and the Federal Highway Administration (FHWA), helped ***develop design guidelines and processes for the standardization of engineering work*** for the repair of damaged roadways by Hurricane Katrina in the City of New Orleans and other parishes. He was responsible for conducting quality control reviews on roadway plans prepared by other engineering firms for compliance with DOTD and FHWA design standards.
12/15 – 01/16	Magnolia Ridge Levee Project, City of New Orleans, St. Charles Parish, LA. *Quality Control (QC).* QC review and ***plan preparation*** for the Magnolia Ridge Levee project for St. Charles Parish.
06/04 – 01/11	Causeway Boulevard Interchange Improvements Phases I and II, LADOTD, Metairie, LA. *Project Designer.* This project which consisted of widening Causeway Boulevard elevated structure at Veterans Boulevard and the construction of new at-grade and elevated ramps to provide better accesses, ***improve safety and ease congestion at this heavily traveled interchange***. Responsible for evaluating existing girders, the ***design of new precast concrete girders*** and the ***roadway plan preparation*** for this project. Also, responsible for evaluating and design of new sewer and water lines for the project as well as coordinating the removal and replacement of all utilities affected by the new roadways and/or structure foundations.
1/20 – 5/20	NC73 Highway Widening, North Carolina DOT, Mecklenburg County, North Carolina. *Project Engineer.* Responsible for the Temporary Traffic Control Plan preparation for the widening of NC 73. A principal arterial roadway, NC 73 Highway, was widened from a two-lane undivided roadway into a four-lane divided highway with a 30-foot wide median. The project presented many challenges for the Temporary Traffic Management Plan's preparation due to the high traffic volumes on NC 73, time restrictions for lane closures, and all NASCAR events at Charlotte Motor Speedway for the duration of the project. To ***mitigate traffic disruption and enhance roadway safety***, assisted in preparing the Transportation Operation Plans and sequence of construction for the project. ***All design work was performed following NCDOT and the latest MUTCD standards***.
3/2019 – 5/20	Eastern Federal Lands Highway Division (EFLHD), Puerto Rico. *Assessment Roadway Lead.* Responsible for the review, report preparation, and coordination for the repairs of over 70 roadway sites damaged by Hurricane Maria. Provided technical assistance to local engineering firms to ensure the project stayed within the client's guidance and strict schedules.
04/18 – 9/20	Texas High-Speed Rail, Texas Central Railway, Dallas to Houston, Texas. *Project Designer.* Assisted with establishing flood elevations for the alignment of over 240 miles of rail tracts. Also responsible for the realignment of at-grade roadways impacted by the High-Speed rail.

Firm employed by	ARCADIS		
Name	David Fulks, PE	Years of relevant experience with this employer	14
Title	Roadway Design Engineer	Years of relevant experience with other employer(s)	12
Degree(s) / Years / Specialization		MS / 2019 / Engineering Management, The George Washington University BS / 1997 / Civil Engineering, Portland State University	
Active registration number / state / expiration date		PE.030151 / LA / Exp. 09/30/2022	
Year registered	2002	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Low-Cost Safety Design - Roadway Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Fulks has more than 26 years of experience in the design of roadways and pedestrian facilities, land developments, flood protection systems, and airports. His experience encompasses analysis and design of geometric and pavement design of highways, streets, sidewalks, restrictive intersections, roundabouts, and interchanges; site hydrology and hydraulics; and traffic impact analysis. His responsibilities have included preparing engineering designs, reports, plans, and specifications preparing and managing project schedules and cost estimates and providing construction administration. **Mr. Fulks meets Minimum Personnel Requirement #3.**
05/14 – 05/15	**Joe Sevario / Roddy Road Roundabouts Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA.** *Task Manager and Lead Engineer*. ***Geometric and roadway design*** and ***cost estimates*** for the replacement of ten existing stop-controlled intersections with single-lane roundabouts.
07/15 – 06/17	**Safety Design Retainer - US 190B at Jefferson Ave Roundabout Design, LADOTD, St. Tammany Parish, LA**. *Roadway Engineer.* ***Geometric and roadway design***, ***preliminary plans preparation***, and ***cost estimate*** for replacing an existing four-way signalized intersection with a single-lane elliptical roundabout.
12/13 – 06/15	**LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA**. *Lead Roadway Geometrics and Cost Engineer*. Designed ***geometric layout*** of safety improvements including ***access management***, ***restrictive intersections***, and added turn lanes. Developed ***construction cost estimates*** for proposed improvements to assess ***feasibility*** of proposed alternatives.
11/12 – 04/13	**LA 594 Millhaven Road Feasibility Study and Preliminary Design, I-20 Economic Development Corporation, Ouachita Parish, LA.** *Roadway Designer.* Roadway intersection and roundabout improvement alternatives for a ***LADOTD Stage 0 Study***. Two roundabouts were evaluated in compliance with LADOTD EDSM V.1.1.5 (Analysis) and EDSM V.1.1.6 (Design). Performed ***geometric and roadway design*** of intersection and roadway alternatives and developed ***construction cost estimates***.
11/14 – 10/15	**LA 44 and Loosemore Road Roundabout, LADOTD, Ascension Parish, LA.** *Deputy Project Manager and Lead Engineer.* ***Geometric and roadway design***, ***preliminary subsurface utility investigation***, and ***cost estimates*** for the replacement of an existing two-way stop-controlled intersection with either a single-lane roundabout or two single-lane roundabouts and right-in/right-out control at the existing intersection.
01/14 – 03/17	**Pete's Highway Interchange Alternative and Environmental Assessment, LADOTD, Livingston Parish, LA.** *Lead Roadway / Bridge Geometrics and Cost Engineer.* High-priority project completing an environmental assessment and traffic engineering services related to improving congestion and operations along Range Avenue in the vicinity of the I-12 interchange. Design alternatives included two split diamond interchange options with roundabout, partial clover leaves, and collector-distributor road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16) and a diverging diamond

	interchange alternative at Range Avenue. Developed ***roadway geometry, line and grade***, construction sequencing strategies, and ***construction cost estimate***.
04/13 – 07/14	US 11 Environmental Assessment, Bridge Replacement, and Roadway Improvements, LADOTD, St. Tammany Parish, LA. *Lead Engineer.* ***Geometry and roadway design***, ***line and grade study*** development, and ***cost estimates*** for the replacement of an historic railroad overpass bridge and upgrading an existing two-lane rural highway to a four-lane divided highway with access control. Early coordination with Norfolk Southern Railroad.
09/09 – 03/12	I-20 – Garrett Road Connector Interchange Improvements, LADOTD, Ouachita Parish, LA. *Lead Engineer.* ***Geometry and roadway design*** of the new KCS Railroad overpass and connector between Kansas Lane and Garrett Road, including interstate interchange modifications to include two-lane roundabouts at ramp intersections, and three two-lane roundabouts along the corridor outside of the interchange. ***Improvements to the pedestrian and bicycle facilities*** were included in accordance with the ***LADOTD Complete Streets Policy***. The compact project area required a detailed layout to confirm feasibility.
08/11 – 09/13	Chef Menteur Bridge and Approaches Replacement EA and Line and Grade Study, LADOTD, Orleans Parish, LA. *Lead Roadway/Bridge Geometrics and Cost Engineer.* Responsible for preparing the proposed ***geometric configurations of a bridge replacement at Chef Menteur Pass***. Investigated four alignments as well as both low-level moveable and high-level fixed span bridge configurations. Performed detailed ***geometric layouts*** of both the mainline highway, bridge, and adjacent collector roadways to ***mitigate impacts to environmentally sensitive resources*** and local residential, commercial, and historical interests.
09/12 – 09/13	US 165 Connector and Ouachita River Bridge EIS, LADOTD, Ouachita Parish, LA. *Roadway Design Engineer.* Responsible for preparing ***roadway and bridge general plan designs***, ***line and grade*** report development, and ***cost estimates*** for a new five-mile elevated highway through Chauvin Swamp north of Monroe, LA. An in-town corridor was also developed which entailed upgrading Louisville Avenue and Hudson Lane in Monroe, the Lea Joyner Bridge over the Ouachita River, and Stella Street in West Monroe to function as a one-way couplet. ***Early coordination with Delta Southern Railroad*** was included.
06/00 – 12/00	Hesper and Helios Avenue Street Rehabilitation, Jefferson Parish Engineering Department, Harvey, LA. *Roadway Engineer.* Completed inspections and rehabilitation recommendations for eight blocks of local streets. Rehabilitation required demolition and replacement of concrete road panels, milling and overlay of asphalt surfaces, and installation of drainage inlets and subsurface drainage, as well as replacement of damaged and under-performing subsurface drainage. Performed inspections, ***collaborated with Parish representatives and utility companies***, identified appropriate rehabilitation measures, and ***produced plans*** illustrating the rehabilitation recommendations.
2/09 – 4/10	US 90 – WBV 73 Western Tie-In Crossing Lake Cataouatche Area, United States Army Corps of Engineers (USACE) – New Orleans District, Jefferson Parish & St. Charles Parish, LA. *Deputy Project Manager and Lead Roadway / Drainage Engineer.* Development of ***preliminary and final design*** P&S for a 2,540-foot PPC girder / column bent bridge, highway approaches, and frontage roadways.

Firm employed by	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS		
Name	Caldwell P. "Cal" Joy, PE	Years of relevant experience with this employer	<1
Title	Senior Transportation Engineer	Years of relevant experience with other employer(s)	8
Degree(s) / Years / Specialization		Bachelor of Science / 2012 / Civil Engineering/University of Alabama	
Active registration number / state / expiration date		PE.0043830 / LA / Exp. 03/31/2022	
Year registered	2019	Discipline	Professional Engineer
Contract role(s) / brief description of responsibilities.		Stage 0 Safety Studies - Roadway Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Joy has eight years of experience in the field of civil engineering. Design projects he has worked on include Stage 0 feasibility studies, NEPA Studies, roadway rehabilitation, new construction, widening, design of pedestrian and bicycle improvements, signal design, standard intersection, and roundabout design for state highways and local roads. He is primarily responsible for design plan preparation and detailing, typical section development, design quantity calculations, and cost estimation, which require extensive use of MicroStation and InRoads.
03/21 – 03/21	LA 3040 Stage 0 Safety Feasibility Study, LADOTD, Houma, LA. *Project Manager*. Responsible for coordinating with all agencies and stakeholders for the development of alternatives and document preparation. BH performed a study to identify safety and/or operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to ***evaluate reasonable alternatives to address any deficiencies discovered***.
02/21 – 03/21	US 84 Improvements, LADOTD, Winnfield, LA. *Project Manager*. Responsible for coordinating with all agencies and stakeholders for the development of alternatives and document preparation. BH performed ***environmental assessments*** on the west and east side of Winnfield, including ***line and grade studies*** for several alternatives, ***environmental impacts***, and ***traffic and bridge studies***.
02/17 – 02/20	Safe Routes to Schools/Local Road Safety Program – Endom Bridge, LADOTD, Monroe LA. *Project Engineer*. Responsible for ***plan preparation, typical sections, geometric details***, drainage, and traffic control plans. Plan preparation for the realignment of an intersection in West Monroe at Coleman Avenue and South Riverfront Street with an emphasis on ***sight distance*** and ***pedestrian safety***. Work included preparation of ***preliminary and final plans***, ***environmental services***, ***line and grade***, drainage design, ***sidewalks***, signing and striping.
12/17 – 06/18	Safe Routes to Schools/Local Road Safety Program - City of Vidalia, LADOTD, Vidalia LA. *Project Engineer*. Responsible for ***plan preparation, typical sections, geometric details***, drainage, and traffic control plans. Plan preparation for the city of Vidalia with emphasis on ***preparing the report and presentation for their city council meeting and a public meeting***. This report included ***traffic, safety, and pedestrian improvements*** on two streets and five intersections.
05/20 – 01/21	Safe Routes to Schools/Local Road Safety Program – PEC Sullivan Rd (Hooper) LA3034, LADOTD, Central LA. *Project Engineer*. Responsible for ***plan preparation, typical sections, geometric details,*** design, drainage, and traffic control plans. Plan preparation for a ***roundabout design*** at the intersection of Sullivan Road and Hooper Road, converting a four-legged signal-controlled intersection into a multilane roundabout with four legs and two lanes in each direction. Work included preparation of ***preliminary plans, line and grade, geometric details, graphical grades, and typical sections***.

Firm employed by	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS		
Name	Joseph F. Mingo, PE	Years of relevant experience with this employer	7
Title	Civil Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		Bachelor of Science/2014/Civil Engineering/Louisiana State University	
Active registration number / state / expiration date		PE.0043700 / LA / Exp. 03/31/2022	
Year registered	2019	Discipline	Professional Engineer
Contract role(s) / brief description of responsibilities.		Stage 0 Safety Studies – Roadway Design	

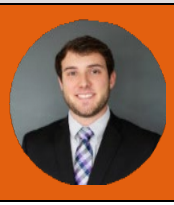
Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Mingo has more than seven years of experience working on projects related to road design. He has worked on Stage 0 feasibility studies, safety studies, NEPA studies, roadway rehabilitation, widening, roundabout, and lighting design projects. His primary responsibilities include design development, design plan preparation and detailing, design quantity calculations, and cost estimation. These duties require extensive knowledge and use of MicroStation and InRoads design software.
02/16 – 02/17	**Stage 0 Feasibility and Planning Study for LA 182 Sidewalk and Handicap Ramp Improvements, New Iberia, LA.** *Project Designer*. BH conducted a ***Stage 0 Feasibility and Planning Study*** to evaluate the feasibility of the rehabilitation and construction of approximately 1.8 miles of continuous sidewalks and handicap curb ramps along LA 182 in Iberia Parish, LA. Responsible for scoping, ***alternative development, environmental documentation, report preparation, and cost estimation***.
11/18 – 03/21	**LA 3040 Stage 0 Safety Feasibility Study, Houma, LA.** *Project Designer.* BH performed a ***feasibility study*** to ***identify safety and/or operational issues*** along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA and evaluate ***reasonable alternatives to address any deficiencies*** discovered. Responsible for performing peak period observations in the field and ***safety analysis using CATScan***.
06/19 – 02/21	**US 167 Stage 0 Feasibility and Planning Study, Elsie Street to Gilbert Drive, Ville Platte, LA.** *Project Engineer*. BH prepared a ***Stage 0 Feasibility and Planning Study*** to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. ***Environmental impacts and cost estimates*** were prepared. Responsible for performing ***preliminary roadway design*** and ***safety analysis using CATscan***.
03/19 – 06/20	**LA 117 from LA 8 to LA 118 Stage 0 Feasibility and Planning Study and Environmental Inventory, Leesville, LA.** *Project Designer*. Responsible for assisting with ***concept development and project exhibits***. BH performed a ***Stage 0 Feasibility and Planning Study*** for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study compared correcting vertical and horizontal geometry and adding passing lanes and turn lanes at strategic locations. ***Environmental impacts and cost estimates*** were prepared.
07/15 – 04/19	**I-49 at US 190 and LA 31 Stage 0 Feasibility and Planning Study and Tier Analysis, Baton Rouge, LA.** *Project Designer*. BH conducted a ***Stage 0 Feasibility and Planning Study*** to evaluate alternatives to improve traffic operations and safety at the I-49 interchanges with US 190 and LA 31 in St. Landry Parish. Responsible for conducting a ***crash data analysis*** using the Number-Rate Method to determine overrepresentation of crash types, identifying segments and intersections with abnormal crash rates, ***designing alternative concepts*** in accordance with ***LADOTD minimum design guidelines***, determining the ***environmental and social impacts*** of the alternatives using the ***Environmental and Preliminary Scope and Budget Checklists*** from LADOTD, and estimating ***construction costs*** using historical bid item data.

Firm employed by	digital engineering		
Name	Taylor Marino, P.E., PTOE	Years of relevant experience with this employer	5
Title	Project Engineer	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 2015 / Civil Engineering	
Active registration number / state / expiration date		PE.0044447 / LA / Exp. 09/22; PTOE #5026; ATSSA Traffic Control Flagger / Exp. 06/22; Supervisor / Exp. 06/22; LADOTD Traffic Engineering Analysis Process and Report Module 1, 2, 3	
Year registered	2020	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Low-Cost Safety Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Marino is a Transportation Engineer performing roadway design, traffic impact analysis and traffic signal design. His experience includes scoping, cost estimation and construction scheduling. To date, Taylor has provided project engineering for studies, design, and/or construction engineering and inspection on 27 LADOTD/LPA Projects through the Safe Routes to School (SRTS), Safe Routes to Public Places (SRTPPP), and Local Road Safety Programs (LRSP) throughout the state, in both rural and urban areas. He is proficient with AASHTO, MUTCD and LADOTD requirements. **Mr. Marino has completed LADOTD Traffic Engineering Process and Report Training.**
11/17 - Ongoing	**LADOTD H.009308: New Orleans DPW SRTS Sidewalk Project, New Orleans, LA**. *Project Engineer* for this *pedestrian enhancement, sidewalk, signing, and pavement marking, and road safety improvement project*. He was responsible for assisting with the feasibility report, design, cost estimation, and scheduling for this contract involving the development of a feasibility study and engineering plans and non-standard specifications for the installation of 5' concrete sidewalks, 10' wide multi-use paths, road diet bike lanes, HAWK Pedestrian Hybrid Beacon, solar powered school zoneflashing beacon, ADA compliant curb ramps and pedestrian crosswalks, and pedestrian countdown signal heads with accessible pedestrian pushbuttons.
03/17 – 04/17	**LADOTD H.012479: Audubon Avenue and Ardoyne Drive Mini Roundabout, Thibodaux, LA**. *Engineer Intern* for this road safety improvement project involving *feasibility study*, design of the improvements, geometric layout, cost estimating, plan preparation, development of technical specifications (TS), development of constructability and biddability forms. The scope of this project involved the installation of a new mini-roundabout at the intersection of Audubon Avenue and Ardoyne Drive.
09/17 – 12/21	**LADOTD H.013082: Local Road Safety Program - Bootlegger Road Shared Use Path, St. Tammany Parish, LA.** *Project Engineer* for *Stage 0 Feasibility Study*, project design, *cost estimating*, and scheduling for this contract involving alternatives of a 6' wide sidewalk on the north side of Bootlegger Road or a 10' wide shared use path on the south side of the road. This sidewalk will connect neighborhoods to the existing park and school and is part of a phasing plan that will ultimately connect LA1077 to Ochsner Boulevard. Ultimately the north sidewalk was chosen as the feasibility study determined the south option not constructible within the project budget. The feasibility study phase is complete, and design is in the final design planstages.
09/17 – Ongoing	**LADOTD H.013082: Safe Routes to Public Places Program, Gretna Downtown Intersection Improvements, City of Gretna, LA** *Project Engineer* for project design, budgeting, and scheduling for this contract involving the replacement of existing sidewalk with new *sidewalks and ADA compliant handicapped curbed ramps* on 4th St. (from Huey P. Long Ave. to Dolhonde) and Huey P. Long Ave. (from 4th St. to 5th St.). The project will also include bulb outs at some the intersections to improve parking and decrease pedestrian walking lengths. All work will be in accordance with AASHTO, MUTCD, ADA, and LADOTD requirements.

01/17 – 03/19	LADOTD H.009282: Safe Routes to School Program, Covington Sidewalks & Other Safety Improvements, Covington, LA. *Project Engineer* for project design, cost estimation, and CE&I for this contract involving the addition of *ADA compliant sidewalk*from Pine View Middle School to N. Columbia St. to provide *safe access for pedestrians* to school. The project will require closing in existing ditches when the sidewalk will be placed and upgrading existing ramps and sidewalk to ADA compliance. All work was performed in accordance with MUTCD and LADOTD requirements.
03/18 - Ongoing	LADOTD H.012236: Local Road Safety Program, Pedestrian Crosswalk Enhancements (PH 2), New Orleans, LA. *Project Engineer* for this contract involving scoping and design of 51 total intersections within the Central Business District and French Quarter in downtown New Orleans that involves *improvements needed to the existing pedestrian safety*. Improvementswill include the installation of pedestrian traffic control signal indicators, pedestrian push buttons, pavement markings for crosswalks, signage, handicapped curb ramps, and repair or improvements to concrete curbs. He is in charge of project design, budgeting, and scheduling.

Firm employed by	digital engineering		
Name	Michael Flynn, PE	Years of relevant experience with this employer	4
Title	Project Engineer	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization		BS / 2016 / Civil Engineering	
Active registration number / state / expiration date		PE.0044902 / LA / Exp. 03/23 LADOTD Traffic Engineering Analysis Process and Report Module 1, 2, 3	
Year registered	2020	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.		Low-Cost Safety Design	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Flynn serves as a Project Engineer in DE's Kenner office for both transportation and storm water projects that help to maintain or improve infrastructure in South Louisiana. Prior to joining DE, Michael served as an Engineer Intern at LADOTD where he performed inspections, completed field tests, managed scheduling, and developed price estimates and quantities for transportation projects such as roadway rehabilitation or new roadway construction. **Mr. Flynn has completed LADOTD Traffic Engineering Process and Report Training.**
09/18 - Ongoing	**LADOTD H.009308: New Orleans DPW SRTS Sidewalk Project, New Orleans, LA.** *Project Engineer* for this *pedestrian enhancement, sidewalk, signing and pavement marking, and road safety project*. He is responsible for site visits to determine where existing sidewalks and handicap ramps in the project area are suitable for ADA standards, and where sidewalks and handicap ramps must be replaced or added to comply with ADA standards. During the design phase, duties include the development of engineering plans and typical sections for or the installation of 5' concrete sidewalks, 10' wide multi-use paths, road diet bike lanes, HAWK Pedestrian Hybrid Beacon, solar powered school zone flashingbeacon, ADA compliant curb ramps and pedestrian crosswalks, and pedestrian countdown signal heads with accessible pedestrian pushbuttons.
09/17 – Ongoing	**LADOTD H.013094: Broad Street-Read Boulevard Pedestrian Intersection Enhancements, New Orleans, LA.** *Project Engineer* Stage 0 Feasibility Study and is currently in design for this *Safe Route to Public Places* project that seeks to increase the number of pedestrians who walk or ride bikes in the City of New Orleans.
01/20 – 06/20	**LA 39: W Judge Perez Drive Vehicular, Pedestrian and Bicycle Safety Enhancements, Stage 0 Feasibility Study, St. Bernard Parish, LA.** *Project Engineer* on feasibility study for NORPC to identify alternatives along the W. Judge Perez Drive (LA 39) corridor betweenRowley Boulevard and Pakenham Drive to *improve safety* for all users with emphasis on *non-motorized traffic safety*. Responsible for the oversight of planning and engineering of the site investigations, data collections, preliminary drawinglayouts, cost estimating, and final report.
05/19 – Ongoing	**LADOTD H.011949: RWD Signing Plaquemines Parish, Plaquemines Parish, LA.** *Project Engineer* for this *LRSP signing and pavement marking* project to implement *low-cost safety improvements* on local roads. Responsible for working with the LADOTD and Plaquemines Parish to develop a scoping report, cost takeoffs, and costestimating for the project. During the scoping and design phase, he utilized the CRASH3 database to analyze crash data to determine which roads had *traffic safety issues* that could best be alleviated by *low-cost safety improvements*.

PERSONNEL RESUMES

ENVIRONMENTAL PLANNER / SPECIALISTS

Firm employed by	ARCADIS		
Name	Greg Badon	Years of relevant experience with this employer	9
Title	Transportation and Environmental Planner	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		BS / 2008 / Natural Resource Management, Louisiana State University	
Active registration number / state / expiration date		NHI 142005 NEPA and the Transportation Decision making Process; Traffic Engineering Analysis Process & Report Training; USACE 1987 Manual Wetland Delineation Training; NHI Course 142073 Applying Section 4(f). Putting Policy into Practice;	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities.		Stage 0 Studies, Road Safety Assessments, Environmental	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Badon has an extensive background managing, conducting and/or reviewing all components and technical studies required by NEPA. His training and experience in highway traffic noise, wetlands, NEPA, and the TERP, provides a solid understanding of the overall project process. He has been responsible for Stage 0, EIS, EA, CE document preparation, environmental permitting, highway-traffic noise analysis, socioeconomic impacts, existing conditions documentation, wetland delineations / biological resource surveys, property-owner research, and addressing public comments through agency coordination, public outreach, and involvement. By having the experience to know what is required and expected under NEPA, he can effectively support and manage projects as they move through planning / feasibility and the NEPA process. **Mr. Badon has completed Traffic Engineering Process and Report Training.**
03/17 – 06/21	**Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA.** *Project Manager.* Responsible for the development and delivery of a Pedestrian and Bicycle Safety Action Plan for the City of Baton Rouge. Responsibilities include completing ***a review of crash data, identification of priority locations, and creation of targeted countermeasures*** based on roadway type. Led the second phase of the project which included conducting ***Road Safety Assessments (RSAs)*** at 10 priority locations identified in the PBSAP. RSAs focused on ***identifying safety issues*** at the intersections and ***developing feasible alternatives*** to improve pedestrian and bicycle safety.
12/13 – 08/17	**LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA**. *Project Scientist*. Responsible for ***Stage 0 Preliminary Scope and Budget and Environmental Checklists***, purpose and need, environmental inventory and public outreach. Following the ***LADOTD Stage 0 Manual of Practice***, all environmental resources within the study area were reviewed for potential impacts. Required right-of-way was determined and geometric layouts and cost estimates were generated.
05/13 – 05/15	**Joe Sevario/Roddy Road Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA.** *Project Scientist*. Responsible for ***Stage 0 Preliminary Scope and Budget and Environmental Checklists***, purpose and need, environmental inventory and public outreach. Following the ***LADOTD Stage 0 Manual of Practice,*** all environmental resources within the study area were reviewed for potential impacts. Required right-of-way was determined and cost estimates were generated.
04/16 – 09/18	**New Orleans Pedestrian Stage 0 Safety Feasibility Study, LADOTD, Orleans Parish, LA.** *Project Scientist.* Project involved assessing safety deficiencies at 20 high priority intersections in New Orleans with a history of pedestrian and bicycle crashes and fatalities. Responsible for completing ***Stage 0 Environmental Checklists*** for all 20 intersections to support the implementation of proposed safety countermeasures.

11/12 – 04/13	LA 594 (Millhaven Rd.) Stage 0 Feasibility Study and Preliminary Design, I-20 Economic Development Corporation, Ouachita Parish, LA. *Project Scientist.* Responsible for ***Stage 0 Preliminary Scope and Budget and Environmental Checklists***, purpose and need development, and environmental inventory. Following the ***LADOTD Stage 0 Manual of Practice***, all environmental resources within the study area were reviewed for potential impacts. Required right-of-way was determined and cost estimates were generated.
02/15 – 08/17	US 71 Corridor - Phase II Stage 0 Feasibility Study, LADOTD; Rapides Parish, LA. *Project Scientist*. Responsible completion of ***Stage 0 Environmental Checklists*** and facilitating ***public and stakeholder involvement*** activities.
04/13 – Ongoing	US 11 Environmental Assessment, LADOTD, St. Tammany Parish, LA. *Project Manager and Project Scientist.* Mr. Badon was responsible for ***public/stakeholder outreach***, agency coordination, technical workshop preparation, ***environmental document preparation***, noise modeling and traffic count field work, Phase I ESA fieldwork, wetland delineation, threatened and endangered species survey, stream assessments, document/records research, and technical report preparation.
01/14 – Ongoing	Pete's Highway Interchange Alternative and Environmental Assessment, LADOTD, Livingston Parish, LA. *Project Manager*. Known regionally as one of the most congested interchanges on I-12, Range Road (LA 3002) has been the bane of commuters for years. Responsible for ***public outreach and coordination, LADOTD Environmental Checklist***, acquisition of property owner info and technical report documentation.
03/17 – Ongoing	I-49 South (Ricohoc to Berwick) Supplemental Environmental Impact Statement (SEIS), LADOTD, St. Mary Parish, LA. *Project Manager.* Following the December 2006 Record of Decision (ROD), LADOTD determined that the estimated cost for this segment of I-49 exceeded available resources for the corridor. Efficiencies would need to be developed to upgrade the existing US 90 to Interstate I-49 by constructing a safe corridor while minimizing impacts to businesses, residents, wetlands, and farmlands flanking the corridor. Responsible for project schedule, budget, ***agency coordination*** and project updates. Also responsible for ***public / stakeholder outreach & oversight***, existing conditions documentation, field work, purpose and need development, and completion of ***LADOTD's Environmental Checklist***.
02/16 – Ongoing	Florida Avenue EA, LADOTD, Orleans and St. Bernard Parishes, LA. *Project Manager and Public Information Officer.* Responsible for ***public / stakeholder outreach oversight, and agency coordination***. Coordinated an effort for extensive public meeting notifications and outreach. Oversaw the distribution of door-hangers, radio announcements, advertisements in community papers, press releases, and venue setup. Developed the layout for the open-house public meeting and the looping presentation. Oversaw development of public meeting boards, comment cards, and sign-in sheets. Presented project plans to city council, homeowner organizations, neighborhood associations, and federal agencies as well as the local planning commission. Responded to questions received from the public and summarized meeting attendance and turnout in a public meeting summary document.

Firm employed by	ARCADIS				
Name	Jason Morrell, PWS		Years of relevant experience with this employer	7	
Title	Senior Environmental Planner / Ecologist		Years of relevant experience with other employer(s)	13	
Degree(s) / Years / Specialization			BS / 1999 / Agriculture, University of Georgia		
Active registration number / state / expiration date			Professional Wetland Scientist – #2319 / USA / Exp. 04/2023 NHI Course No. 142005, NEPA and Transportation Decision Making		
Year registered	2013	Discipline	Wetland Science		
Contract role(s) / brief description of responsibilities.			Environmental		

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Morrell has more than 20 years of experience in ecology and environmental planning, including over 16 years of consulting experience. Prior to joining Arcadis, he served as a NEPA Planner and Ecologist with the Georgia Department of Transportation (GDOT) evaluating environmental effects and completing permitting and environmental documentation for transportation projects. His area of expertise includes wetland delineation, biological assessment, and environmental permitting, with a focus on Clean Water Act Section 404 permitting and Section 7 Endangered Species Act (ESA) consultation. He is experienced working with the Federal Highway Administration (FHWA), US Army Corps of Engineers (USACE), US Fish & Wildlife Service (USFWS), and state resource agencies. Since 2011, Mr. Morrell has focused primarily on Transportation Ecology and is an active member of the Transportation Research Board Committee on Environmental Analysis and Ecology.
04/16 – Ongoing	**Pete's Highway Interchange Alternative and Environmental Assessment, LADOTD, Livingston Parish, LA.** *Ecologist*. Led a ***wetland delineation and protected species habitat assessment*** along Range Road in the vicinity of the I-12 interchange for the proposed interchange improvement project. Provided technical review of a Biological Resources and Wetland Findings Report, including required exhibits, in support of the ***NEPA Environmental Assessment***.
10/15 – 04/18	**North Bayou Black Drive/Hanson Canal Bridge (OSBP) – LADOTD, Terrebonne Parish, LA**. *Ecologist*. Completed a technical review of the ***Biological Resources and Wetland Findings Report***, including required exhibits, prepared for the replacement this off-system highway bridge. Findings from the wetland delineation report were used for a USACE Jurisdictional Determination and Section 404 permit application.
07/16 – 03/18	**Bayou Sara Streambank Restoration, West Feliciana Parish Department of Public Works, West Feliciana Parish, LA**. *Ecologist*. Project involved stabilizing the streambank along approximately 3,600 feet along Bayou Sara, where severe erosion is impacting the Town of St. Francisville's Wastewater Treatment Facility, pond levees, and the Parish's only access road (Ferdinand Street) to the Mississippi River. Completed a ***wetland delineation and protected species habitat assessment*** within the area proposed for bank stabilization, as well as adjacent staging and access areas. Provided technical review of a ***Biological Resources and Wetland Findings Report***, including required exhibits, and NWP 13 PCN, including permit sketches for bank stabilization for which ***USACE authorization was successfully obtained***.
09/2019 – Ongoing	**Environmental Support Services IDIQ Contract, GDOT, Statewide, GA.** *Project Manager and Ecology Lead*. Responsible for management of embedded (support services) ecology and ***NEPA*** staff managing environmental studies on behalf of GDOT, including review of consultant documents. Design and develop ecology initiatives for the GDOT Office of Environmental

	Services (OES) including guidebooks and toolkits to update the ***Environmental Procedures Manual***, training materials for contractor prequalification, applications to streamline National Marine Fisheries Service Section 7 ESA and Essential Fish Habitat consultations, and other research initiatives.
07/14 – 07/19	Statewide Ecology Services IDIQ Contract GDOT, Statewide, GA. *Deputy Project Manager*. Responsible for managing embedded ecologists assigned management of ecology studies, permitting, and biological assessment for GDOT projects. Negotiated a menu of services task order for on-call ***environmental studies*** providing the client the flexibility to complete tasks quickly to meet project delivery schedules. Managed preparation and provided technical review of supporting ***NEPA documentation*** for federally funded ***infrastructure development and improvement projects***. Developed ecology toolkits, guidance documents, and templates for GDOT use and publication in collaboration with regulatory agencies and GDOT staff. Managed a research project evaluating the effectiveness of migratory bird mitigation measures on transportation projects and provided recommendations to GDOT for best management practices.
12/15 – 11/18	Reisor Subdivision Bridge Replacements, Union Pacific Railroad, Natchitoches Parish, Louisiana and Caddo Parish, LA/Harrison County, TX. *Lead Ecologist.* Responsible for ***wetland delineation and protected species habitat assessments*** for replacement of two structurally deficient railroad bridges on the Union Pacific Reisor Subdivision line. Completed ***wetland findings report***, including required exhibits, and calculated impacts to streams and wetlands for bridge replacements. Coordinated with design for impact avoidance and minimization and provided technical review of a Nationwide Permit (NWP) 14 Pre-Construction Notification (PCN), including permit sketches, submitted to the USACE Fort Worth District for the Caddo Parish, LA/Harrison County, TX bridge.
11/15 – 12/16	SR 234 at Chickasawhatchee Creek Bridge Replacement GDOT, Calhoun and Dougherty Counties, GA. *Lead Ecologist*. Responsible for ecology reporting, Section 404 permitting, and Section 7 Endangered Species Act (ESA) consultation for replacement of a load-limited, structurally deficient bridge over Chickasawhatchee Creek 8 miles north of Leary, GA. Prepared a Biological Assessment for the federally listed mussel species and designated critical habitat including development of special provisions to be included in contract documents for species protection. Based on this Biological Assessment, USFWS issued a Biological Opinion concurring with the recommended biological determination to support project ***NEPA documentation***. Successfully obtained an Individual Section 404 Permit for stream and wetland impacts associated with bridge replacement and roadway approach improvements.
01/14 – 04/14	I-285 at Riverside Drive, GDOT, Fulton County, GA. *Lead Ecologist*. Led ***ecology surveys and reporting*** for the proposed conversion of signalized intersections at I-285 eastbound and westbound ramp termini and Riverside Drive to single lane roundabouts. Responsibilities included ***wetland delineation and protected species habitat assessment***. Completed technical review of findings report, including required exhibits, and agency coordination to support ***NEPA documentation*** for the federally funded project.

Firm employed by	ARCADIS		
Name	Jayun Thibodeaux	Years of relevant experience with this employer	2
Title	Environmental Planner / Ecologist	Years of relevant experience with other employer(s)	3
Degree(s) / Years / Specialization		BS / 2017 / Environmental Management Systems, Louisiana State University	
Active registration number / state / expiration date		Relevant Training: Basic Wetland Delineation training by WTI (2018)	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities.		Environmental	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Thibodeaux is an Ecologist in the Arcadis Baton Rouge, Louisiana office with over three years of experience in environmental consulting. He holds a Bachelor of Science in Environmental Management Systems from Louisiana State University. He has supported various sectors including transportation, industrial, commercial, energy, and government. He has experience conducting environmental surveys including waters of the US (WOTUS) delineations and threatened and endangered species surveys throughout Louisiana, Arkansas, Texas, Mississippi, and Alabama. Mr. Thibodeaux has served as the technical lead and project manager for projects requiring permit coordination with the US Army Corps of Engineers (USACE), Louisiana Department of Natural Resources (LDNR), Office of Coastal Management (OCM), the Louisiana Department of Environmental Quality (LDEQ), as well as National Environmental Policy Act (NEPA) reviews for federal agencies.
04/20 – Ongoing	LA 82 Improvement, Sabine Pass LNG, LP, Cameron Parish, LA. *Ecologist*. Assisted in preparation of ***environmental resource reports and data analysis*** for submittal to the Federal Energy Regulatory Commission (FERC) for approval under the Natural Gas Act (NGA). Prepared ecology report, a Section 404 permit application, Section 7 Endangered Species Act documentation, and created figures utilizing GIS for the LA 82 improvements and modifications to the liquefied natural gas (LNG) facility entrance.
02/19 – 04/19	Holton Harris Road Bridge, Monroe & Corie, Inc., LP, Over Lake Vernon in Vernon Parish, LA. *Ecologist.* Conducted a ***WOTUS delineation*** for the replacement of an 80-foot long by 18-foot-wide timber bridge on Holton Harris Road, crossing Vernon Lake located south of the City of Anacoco, Louisiana. Responsible for ***preparing a preliminary environmental finding report*** and submitting a Nationwide Permit 14 Pre-Construction Notification.
05/20 – Ongoing	Louisiana Coastal Use Permit Submittal – COP Stratco, Terrebonne Parish, LA. *Technical Lead*. Responsible for developing and preparing ***guidance documents, resource reports, and identifying potential impacts*** for a joint permit application with the LDNR, OCM, and the USACE New Orleans District. The project involves the removal of several structures including abandoned oil wells, flowlines, and a barge that served as a well pad located in the Louisiana Coastal Zone. Reviewed available data to identify potential impacts to oyster leases, pre-existing pipelines/crossings, and prop washing zones. Created figures utilizing geographic information systems (GIS) software to illustrate project location(s), path, access, and oyster leases in accordance with LDNR and OCM's guidelines.

Firm employed by	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS		
Name	John L. Mettille, Jr.	Years of relevant experience with this employer	4
Title	Senior Environmental Manager	Years of relevant experience with other employer(s)	40
Degree(s) / Years / Specialization		MA / 1977 / Transportation and Urban Geography, Kansas State University BS / 1975 / Geography and Political Science, University of Wisconsin-La Crosse	
Active registration number / state / expiration date		N/A	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities.		Environmental	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Mettille is a Senior Environmental Manager for BH's Southern Transportation Operations. He began his career in 1977 with the Kentucky Transportation Cabinet's (KYTC's) Division of Environmental Analysis, where he served for more than 28 years in several positions including Chief Environmental Program Administrator. Mr. Mettille served as the Lead Preparer and Reviewer for KYTC environmental documents and socioeconomic assessments throughout much of his career there. He also served as the KYTC's NEPA and Section 106 process technical expert. He is very knowledgeable of the Section 106 process through his experience in managing KYTC's archaeological and historic program and his private sector project experience. Through his presentation and project experiences, he is well known in the NEPA, CIA, CSS, and Section 106 communities throughout the southeastern US and nationwide.
03/18 – 10/18	Houma-Thibodaux to I-10 Corridor Environmental Impact Statement (EIS), LADOTD, Southeastern LA. *Environmental QA/QC Manager*. Preparation of an ***Environmental Impact Statement (EIS)*** for a new 35-mile controlled access highway providing north/south system linkage between the Houma-Thibodaux areas and I-10. Responsible for providing ***technical oversight*** on the preparation of an EIS for a new 35-mile controlled access highway providing north/south system linkage between the Houma-Thibodaux areas and I-10.
2011 – 2015	Houma-Thibodaux to LA 3127 Connection EIS, LADOTD, Southeastern LA. *Technical Lead and Project Manager.* Conducted a ***tolling feasibility study and traffic analysis*** as part of the ***NEPA process***. Performed QA/QC on projects components developed by others.
2007 – 2008	Houma-Thibodaux to the Sunshine Bridge EIS, LADOTD, Southeastern LA. *Lead Author and Project Manager*. This study ***evaluated the feasibility, potential impacts, and applicability*** of an east-west corridor extending from the Houma-Thibodaux area to the Sunshine Bridge (LA 70). This study addressed the concerns and issues raised by several public resource and regulatory agencies through the ***development of the EIS*** for the Houma-Thibodaux to LA 3127 Connection Project.
2008 – 2009	State Route 9 Improvements from Blue Springs to Guntown Environmental Assessment (EA), Mississippi DOT. *Environmental QA/QC Manager.* Responsible for technical review of ***purpose and need and document*** and c***ompliance with NEPA/FHWA regulations and guidelines***. The project was an ***environmental assessment*** for improvements to SR 9 in Lee and Union Counties, Mississippi, intended to provide a four-lane divided highway on new location. ***Environmental streamlining approaches were used in order to complete the project under an accelerated schedule*** due to a new planned automobile manufacturing plant. Provided technical assistance on the Section 106 consultation due to the project's effects upon a historic dairy farm.

PERSONNEL RESUMES

TRANSPORTATION PLANNERS

Firm employed by	ARCADIS		
Name	Yuwen Hou, AICP, RSP	Years of relevant experience with this employer	5
Title	Planner	Years of relevant experience with other employer(s)	4
Degree(s) / Years / Specialization		MS / 2005 / Civil Engineering, The University of Tennessee BS / 2004 / Civil Engineering, University of Akron Main Campus	
Active registration number / state / expiration date		AICP #029180 / USA / EXP 12/2022; PTP #640 / USA / EXP 08/2024; RSP #658 / USA / 08/2024	
Year registered	2016	Discipline	Planner
Contract role(s) / brief description of responsibilities.		Road Safety Assessments, Ped/Bike/Complete Streets	

Experience dates	Experience and qualifications relevant to the proposed contract
	Ms. Hou is an AICP Certified Planner with more than seven years of experience in feasibility studies, Road Safety Assessments, bicycle & pedestrian planning, safety planning and transportation planning on the local level. She is the Project Lead for the Alexandria/Pineville Bicycle and Pedestrian Plan (APBPP) and the Regional Strategic Highway Safety Plan. She works as a liaison between the Louisiana Department of Transportation and Development (LADOTD) and local government to conduct safety analysis, priority emphasis areas and implement proven safety countermeasures from engineering and behavior perspectives. She has presented the APBPP in local, state and national conferences. Her master thesis' topic is bike share station selection through a combination of GIS and community survey. She was awarded the AICP Outstanding Graduate of Year Award in 2013.
05/18 – 06/21	**Baton Rouge Pedestrian Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA.** *Associate Project Manager*. Responsible for the development and delivery of a ***Pedestrian and Bicycle Safety Action Plan*** for the City of Baton Rouge. Responsibilities included completing a review of crash data, identification of priority locations, and creation of targeted countermeasures based on roadway type. Assisted with the second phase of the project which included conducting ***Road Safety Assessments (RSAs)*** at 10 priority locations identified in the PBSAP. RSAs focused on identifying safety issues at the intersections and ***developing feasible alternatives*** to improve pedestrian and bicycle safety and employ LADOTD's ***Complete Streets Policy***.
03/17 – 03/20	**East Baton Rouge Parish Pedestrian and Bicycle Master Plan, LADOTD, East Baton Rouge Parish, LA.** *Associate Project Manager*. Responsible for the development and coordination of a ***bicycle and pedestrian facility master plan.*** Responsibilities during the master plan creation included evaluating ***existing conditions, analyzing crash/incident data***, receiving input from ***stakeholders***, hosting ***public forums*** to receive feedback, and listing priority.
03/17 – Ongoing	**Bicycle & Pedestrian Safety & Healthy Community Education Program, LADOTD, Rapides Parish, LA.** *Project Lead*. ***Developing the first Bicycle and Pedestrian Master Plan*** for the Alexandria/Pineville Metro Area in Central Louisiana, with highlights in ***GIS spatial analysis and the bicycle and pedestrian suitability index model***. Compiled census data and crash data to form ***recommendations for improvements***. Formed a Bicycle and Pedestrian Advisory Committee and conducted ***public outreach*** through on-line survey and ***public meetings***. Listed projects, prioritized improvements, projected costs, and associated funding sources. Designed infographics and illustrated maps.
04/16 – 09/18	**New Orleans Pedestrian Stage 0 Feasibility Study, LADOTD, Orleans Parish, LA.** *Planner.* Project involved assessing safety deficiencies at 20 high priority intersections in New Orleans with a history of pedestrian and bicycle crashes and fatalities. Responsible for completing ***Stage 0 Scope and Budget Checklists*** and ***Stoge 0 Documentation*** for all 20 intersections to support the implementation of proposed safety countermeasures.

Firm employed by	ARCADIS		
Name	Jack Cebe, PE, RLA	Years of relevant experience with this employer	4
Title	Safe & Sustainable Transportation Project Manager	Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization		MBA / Business Administration / 2019 / Georgia Institute of Technology MS / 2017 / Civil and Environmental Engineering / Georgia Institute of Technology BA / 2011 / Landscape Architecture / Clemson University	
Active registration number / state / expiration date		PE 047895 / GA / Exp. 12/2022; PE 39300 / SC / Exp. 06/2022; PE 052926 / NC / Exp. 12/2022; RLA LA001821 / GA / Exp. 12/2022;	
Year registered	LA 2015, PE 2021	Discipline	Civil, Transportation
Contract role(s) / brief description of responsibilities.		Ped/Bike/Complete Streets	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Cebe has nine years of combined experience in the transportation field and has worked in transportation planning, landscape architecture, and engineering at different points throughout his career. His has experience in transportation planning and feasibility, roadway design, bicycle and pedestrian facility planning and design, landscape architecture, ADA-accessible design, geospatial analysis, statistical analysis, policy development, and community engagement. One of his greatest strengths is being able to incorporate many perspectives and stakeholder desires into his planning and design work. He has been able to blend his experience in both landscape architecture and civil engineering to create street and public space solutions that are inviting for non-motorized users, supportive of adjacent businesses and their needs, accessible for users with sight or mobility limitations, and are implementable.
06/18 – Ongoing	**Renew Atlanta DeKalb Avenue Corridor Improvement Project, City of Atlanta, Georgia.** *Deputy Project Manager and Bike/Ped Key Team Lead.* Responsible on a two-stage effort to ***improve pedestrian and bicycle facilities*** on DeKalb Avenue in Atlanta.
08/19 – Ongoing	**Howell Mill Bike/Ped Improvements Corridor Study, Upper Westside CID, Atlanta, Georgia.** *Deputy Project Manager and Bike/Ped Key Team Lead*. Responsible for a study to improve conditions for bicycling and walking along Howell Mill Road in Atlanta. Concepts will include ***innovative bicycle infrastructure concepts*** as well as off-street alignments along low-volume roadways.
06/12 – 06/13	**Chicago Streets for Cycling, Chicago, Illinois.** *Planner.* Led the production of environmental survey and project development report documents for innovative bikeway projects to be installed around the city of Chicago in 2014. Assisted with existing conditions studies and analysis to ***develop project solutions*** that best ***address constraints along selected corridors***.
07/13 – 10/13	**Paul Maillard Road, Louisiana Delta Community, Luling, Louisiana.** *Planner.* Developed ***concept complete streets improvements*** for a rural roadway in a Louisiana Delta Community. Improvements will create a multi-modal main street through the addition of street trees, landscaping, pedestrian-scaled streetlights, sidewalks, a bicycle and pedestrian side path, curb and gutter, and parking.
04/14 – 05/15	**Bike and Pedestrian Connectivity Master Plan, City of Evansville, Evansville, Indiana.** *Assistant Project Manager.* Responsible for the development of Evansville's ***first bicycle and pedestrian master plan***. Led the development of tasks such as bicycle and pedestrian network recommendations, policy recommendations and components of ***public outreach***.
01/13 – 06/14	**Bikes Belong Green Lane Project ADA Design, Bikes Belong Green Lane Cities, Multiple Locations.** *Planner.* Worked with the Bikes Belong Green Lanes cities (Austin, Texas; Chicago, Illinois; Memphis, Tennessee; Portland, Oregon; San Francisco, California; and Washington, D.C.) to develop a set of ***guidelines that address ADA issues*** surrounding transit stops and handicapped parking at cycle tracks. Produced three-dimensional graphic cutsheets to explain the guidelines.

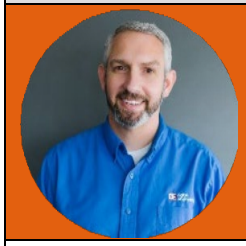
PERSONNEL RESUMES

GIS AND CADD SUPPORT STAFF

Firm employed by	ARCADIS		
Name	Joshua Chatelain	Years of relevant experience with this employer	11
Title	Senior Digital Data Analyst	Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization		BS / 2002 / Geography, University of New Orleans	
Active registration number / state / expiration date		N/A	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities.		GIS / Data Analytics	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Chatelain has more than 20 years of experience using Geographic Information Systems (GIS) for planning and analysis in the transportation engineering field. He is experienced in performing infrastructure mapping and assessment, transportation planning and analysis, data acquisition, field survey oversight, and providing GIS support for ITS projects. Experience with ESRI ArcGIS application stack and data driven applications include: ArcMap, ArcCatalog, ArcInfo, ESRI Roads and Highways, Event Editor, ArcGIS Data Reviewer, ArcGIS Workflow Manager, ArcGIS Pro, ArcGIS 3D Analyst, ArcGIS Spatial Analyst, ArcGIS Geostatistical Analyst, ArcGIS Network Analyst, Production Mapping, ArcPad, ArcGIS Collector, ArcGIS Model Builder, ArcGIS Online, ArcGIS Enterprise, ArcGIS Web App Builder, AutoCAD, Enterprise Databases, ArcSDE, Python, ArcGIS Server, and SQL Server Management Studio.
06/18 – 10/19	I-10 Queue Warning Systems Engineering Analysis, LADOTD, Baton Rouge, Louisiana/H.013482.1. *Probe Data and GIS Analyst*. Developed the first of its kind ITS Systems Engineering Analysis involving the evaluation of a Queue Warning system on I-10 eastbound from LA 77 to I-110. The analysis required processing and ***evaluation of traffic probe data as well as LADOTD's crash data using GIS and electronic dashboarding tools*** to identify existing traffic conditions.
01/14 – 01/18	Retainer Contract for an Enterprise LRS System Development Louisiana Department of Transportation & Development, Statewide, Louisiana. *GIS Analyst*. Responsible for the implementation of an ***Enterprise Linear Referencing System (LRS) using ESRI Roads & Highways***. Participated in discovery meetings, development of existing conditions report, development of initial R&H database model and implementation of a Statewide Enterprise LRS. Local point of contact and associate project manager for the retainer contract.
02/13 – 07/14	Enterprise LRS Business Process Review and Database Design Arizona Department of Transportation, Phoenix, Arizona. *GIS Analyst*. Worked as part of the project team to design and implement an ***Enterprise Linear Referencing System (LRS) using the ESRI Roads and Highways platform (RNH)***. Evaluated the needs of the LRS system within ADOT. Tested tool sets, geoprocessing functions, models, datasets, schemes, and other elements within RNH to identify practical methods of migration to RNH from ADOT's current system. Modified, modeled, processed, and prepared datasets for migration into RNH.
01/10 – 01/11	City-Parish Enterprise LRS System Development, City of Baton Rouge/Parish of East Baton Rouge, Baton Rouge, Louisiana. *GIS Analyst*. Responsible for the implementation of an ***Enterprise Linear Referencing System using Geomedia and Oracle Spatial***. Conducted business requirements and needs assessment, design, build, and implementation of a parish wide LRS.

Firm employed by	digital engineering		
Name	Michael Cochran	Years of relevant experience with this employer	4
Title	CAD Technician	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization		AS/2003/Drafting and Design Technology	
Active registration number / state / expiration date		NA	
Year registered	NA	Discipline	NA
Contract role(s) / brief description of responsibilities.		Data Analytics & Visualization / GIS / CADD	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Cochran has over 16 years of experience in preparing plans and specifications for projects ranging from roadway design to flood protection, utilities, and structural projects throughout coastal Louisiana. Mickey has provided design support for 28 LADOTD/LPA Projects through the Safe Routes to School (SRTS), Safe Routes to Public Places (SRTPPP), and Local Road Safety Programs (LRSP) throughout the state, in both rural and urban areas. Mickey is proficient with AutoCAD, AutoCAD Civil 3D, Architectural Desktop (AutoCAD), Revit Structural (3D Modeling) and Sketchup.
11/19 – 12/21	**LADOTD H.013082: Bootlegger Road Shared Use Path, St. Tammany Parish, LA**. *CAD Technician* for *Stage 0 Feasibility Study* and project design for this contract involving alternatives of a 6' wide sidewalk on the north side of Bootlegger Road or a 10' wide shared use path on the south side of the road. This sidewalk will *safely connect neighborhoods to the existing park and school* and is part of a phasing plan that will ultimately connect LA1077 to Ochsner Boulevard. Ultimately the north sidewalk was chosen as the feasibility study determined the south option not constructible within the project budget. The feasibility study phase is complete, and design is in the final design plan stages. He is responsible for drafting all plan sheets including the typical sections, design, plan, and profile, detailing and cross sections.
06/16 – 10/18	**LADOTD H.012479: Audubon Avenue and Ardoyne Drive Mini Roundabout, Thibodaux, LA.** *CAD Technician* for this *road safety improvement* project involving *feasibility study*, design of the improvements, geometric layout, cost estimating, plan preparation, development of technical specifications (TS), development of constructability and biddability forms. The scope of this project involved the installation of a new mini-roundabout at the intersection of AudubonAvenue and Ardoyne Drive.
12/16 – 10/18	**LADOTD H.006524: Gretna Sidewalks and Safety Improvements, Gretna, LA.** *CAD Technician* for this *pedestrian enhancement, sidewalk, and road safety improvement project* to design to repair the existing pedestrian sidewalks and crosswalks in the vicinity of St. Anthony Elementary School, McDonogh #26 Elementary School, William Hart Elementary School, and Shirley Johnson/Gretna Park Elementary Schools. He was responsible for the plan layout and detailing of sidewalks/handicapped ramps alongside each school.
01/19 - ongoing	**LADOTD H.013090: Downtown Pedestrian Improvements, Gretna, LA.** *CAD Technician* for design of *safety improvements* and repairs to the existing pedestrian sidewalks and crosswalks along 4th St.from Dolhonde St. thru Huey P. Long Ave. and along Huey P. Long Ave. from 4th St. thru 5th St. He was responsible for plan layouts and detailing of sidewalks/handicapped ramps along these routes.

PERSONNEL RESUMES

QA/QC AND TECHNICAL ADVISORY TEAM

Firm employed by	ARCADIS		
Name	Jonathan Reid, PE, PTOE, RSP	Years of relevant experience with this employer	6
Title	Certified Project Manager III	Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization		MS / 1999 / Civil Engineering, North Carolina State University, 1999 BS / 1994 / Civil Engineering, Lawrence Technological Institute, 1994	
Active registration number / state / expiration date		PE #032806 / GA, PE #027930 / NC PTOE #1588 / USA / Exp. 03/2023 RSP #104 / USA / Exp. 12/2024	
Year registered	2008	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.			QA/QC and Technical Advisor (Safety)

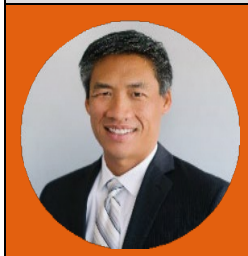
Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Reid has more than 20 years of experience. His background includes traffic modeling, intersection design, managed-lane facilities planning, feasibility studies, safety studies and design, Road Safety Assessments, corridor studies, roundabout design, toll roads, transit projects, sports/entertainment facility planning, highway signing/marking, traffic impact analysis, signal warrants and design, and traffic calming studies. He has managed traffic operations and planning projects for state, federal and municipal clients and developers in the U.S. and abroad.
01/18 – 05/18	**US 61 Corridor Feasibility Study (Airline Hwy), LADOTD, East Baton Rouge Parish, Louisiana.** *Technical Advisor*. Responsible for supervisory and oversight for this *feasibility study*. The purpose of the study is to assess traffic operations and potential safety improvements for this urban, 4-lane divided highway. Scope of services included traffic data collection and analyses, *safety data analyses*, future traffic projections considering corridor growth rates, assessment of *access management improvements* (implementing "Superstreet" concept), and evaluation of concept using HCM and *HSM methodologies*.
06/15 – Ongoing	**Safety Project Identification & Evaluation Phase I, Georgia Department of Transportation, Statewide, Georgia.** *Traffic Engineer.* Support role in the development of *feasibility studies* including the development and validation of high-level concepts intersection operational improvements and concept development for 50+ projects identified by GDOT's Office of Traffic Operations. Concept studies involved *developing feasible and affordable concepts* for projects ranging from simple intersection operational improvements to interchange modifications and non-traditional designs such as continuous flow intersections and roundabouts. Each project had desired stipulations such as no right-of-way acquisition, validation of roundabouts, *development of best benefit / cost alternatives*, *construction cost* limits, etc. The goal is to identify projects which could be released for construction under an *abbreviated construction plan process* and utilize GDOT maintenance crews to construct. Processes and standards were developed for the analysis and reporting of these projects that will ultimately assist GDOT in evaluating the feasibility and scope of a project and the State's best return on investment.
03/17 – Ongoing	**I-49 South (Ricohoc to Berwick) Supplemental Environmental Impact Statement (SEIS), LADOTD, St. Mary Parish, LA.** *Technical Advisor.* Assisted with the development of *Tier 1 Analysis* to identify a range of *feasible alternatives* and determine the impacts with respect to traffic operations, *safety,* and cost.

05/16 – Ongoing	**Traffic Safety Design Services, Region B, (Districts 3 & 6), GDOT, Georgia.** *Project Manager* of three-year, $12M project to provide *safety analysis* and *design service* support for GDOT Districts 3 and 6. Responsibilities are to advance safety projects through preliminary traffic engineering and Concept Report phases and complete *preliminary and final design*. Typical safety projects include *Road Safety Audits*, evaluation & recommendation of *safety countermeasures*, and project initiation and *plan preparation* for safety improvement projects. Projects have included intersection conversion to a roundabout, DDI or other safer intersection forms. As part of this project, developed Intersection Control Evaluation (ICE) tool to automate the evaluation and recommendation for the safest and most *cost-effective intersection control type improvements*.
07/18 – Ongoing	**Feasibility Studies Limited Services Contract for NCDOT.** *Project Manager*. Responsible for managing team in providing array of services including *traffic data collection* and forecasting, *alternative development* and analysis, project scoping, *concept development layout and design*, *environmental*, hydraulic, utility, and structural reviews, *cost estimating* and project programming and prioritization. Also performing express design services to expedite project delivery.
10/14 – 03/15	**SR 141/State Bridge Road Innovative Intersection, City of Johns Creek, Georgia.** *Project Manager.* Developed and modeled *innovative intersection concepts* to improve one of the worst intersections in North Fulton County. Provided *concept design* for both a dual-median U-turn (thru intersection) and median U-turn / Continuous Flow Hybrid alternatives. VISSM simulation model results showed a 75% reduction in travel delay and a 25% increase in intersection capacity without any substantial right-of-way requirements. Concept is awaiting funding.
07/07 – 10/08	**I-75 NW Corridor Draft Environmental Impact Study, GDOT, Cobb and Cherokee Counties, Georgia.** *Lead Task Manager.* Traffic analysis and IMR/IJR development to support EIS document for $834 million managed lane corridor to improve 26 miles on I-75 and I-575. Supervised the traffic forecasting using ARC 20-county model projections, *traffic analysis* of study area roadway and intersections (using Synchro / VISSIM), and evaluation of impacts and proposed *mitigation measures*. Managed development of the *largest IMR/IJR project ever undertaken in the state*, which included microsimulation analysis of all new and modified managed-lane and general-purpose interchanges in the corridor. The IMR/JR was *approved months ahead of schedule* because FHWA had no comments to address from the first submittal package.
09/09 – 03/11	**Roswell Historic Gateway Transportation Improvement Project City of Roswell, Roswell, Georgia.** *Project Manager.* Study to perform *public involvement*, *traffic analysis*, *design concept*, *environmental study* and EA document preparation, and preparation of *preliminary plans* to improve Atlanta Street between SR 120 and the Chattahoochee River (1.5 miles) by removing a current reversible lane system. Study included innovative solutions to solve controversial project needs, including multi-lane roundabouts, non-traditional interchange concepts and *context sensitive design* to minimize impact to adjacent National Park Service and historic properties while enhancing business development opportunities in this important historic corridor. Project received the *2012 Georgia Partnership for Transportation Quality award for Best Context Sensitive Design and Public Participation.*
01/19 – 03/20	**NCDOT Congestion Management /Innovative Intersection Guide project.** *Lead Author* in development of the Quadrant Roadway Intersection Informational Guide published by FHWA through a partnership with NCDOT. Guide is the 5th in a series on innovative intersection designs and highlight national experience with this emerging new intersection form, designed to *reduce congestion at bottleneck intersections*. There have been four Quadrant Roadways built in the US, and the Guide draws on experience and operational analysis of this new intersection form to encourage other DOT's to implement where appropriate.

Firm employed by	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS		
Name	James Q. Dickerson III, PE, PS	Years of relevant experience with this employer	14
Title	Principal in Charge	Years of relevant experience with other employer(s)	33
Degree(s) / Years / Specialization		BS / 1974 / Civil Engineering, University of Mississippi	
Active registration number / state / expiration date		PE.0038922 / LA / 09/2022; PE. 07586 / MS / 12/2021; PLS. 02132 / MS / 12/2021	
Year registered	2014 / 1979 / 1984 Discipline	Civil / Professional Surveyor	
Contract role(s) / brief description of responsibilities.		QAQC and Technical Advisor (Environmental)	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Dickerson has more than 47 years of professional transportation engineering experience. He served as District Engineer for the Mississippi Department of Transportation's District Two, where he was responsible for coordinating the planning, designing, construction, and maintenance of the intermodal transportation network in the 17 counties of northwest Mississippi. His areas of expertise include project management, quality assurance, constructability review, and construction engineering and inspection. He has experience on a wide range of projects, with significant experience conducting Stage 0 Feasibility Studies throughout the state.
10/18 – 03/21	LA 3040 Stage 0 Safety Feasibility Study, LADOTD, Houma, LA. *Principal-in-Charge*. BH performed a study to identify safety and/or operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to ***evaluate reasonable alternatives to address any deficiencies discovered***. Responsible for assisting the Project Manager, monitoring the budget and schedule, and quality control oversight.
06/19 – 02/21	US 167 Stage 0 Feasibility and Planning Study, Enola Street to Ross Road, LADOTD, Ville Platte, LA. *Principal-in-Charge*. BH is preparing a ***Stage 0 Feasibility and Planning Study*** of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles. ***Environmental impacts and cost estimates*** will be prepared. Responsible for assisting the Project Manager, monitoring the budget and schedule, and quality control oversight.
06/19 – 02/21	US 167 Stage 0 Feasibility and Planning Study, Elsie Street to Gilbert Drive, LADOTD, Ville Platte, LA. *Principal-in-Charge*. BH is preparing a ***Stage 0 Feasibility and Planning Study*** to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. ***Environmental impacts and cost estimates*** will be prepared. Responsible for assisting the Project Manager, monitoring the budget and schedule, and quality control oversight.
03/19 – 11/20	LA 429 Connector Stage 0 Feasibility and Planning Study, LADOTD, Ascension Parish, LA. *Principal-in-Charge*. BH prepared a ***Stage 0 Feasibility and Planning Study*** to ***evaluate alignments*** for a limited-access corridor (LA 429) in the vicinity of I-10, between LA 30, LA 73, and US 61 in Ascension Parish, LA. The scope consists of stakeholder and public meetings, site visits and ***data collection***, phasing of ***alternative development*** for the corridor, ***Stage 0 scope and budget checklists***, and an ***opinion of probable cost*** to prepare the ***Stage 0 Report***.
03/14 – 08/17	I-10 at LA 73 (LA 74 to LA 621) Stage 0 Feasibility and Planning Study and Tier Analysis, LADOTD, Prairieville, LA. *Principal-in-Charge*. BH performed a ***Stage 0 Feasibility and Planning Study*** and ***environmental inventory*** for LADOTD, documented in accordance with ***NEPA requirements***, to ***evaluate conceptual alternatives*** and no-build for the LA 73 corridor to improve traffic operations. Responsible for assisting the Project Manager, monitoring the budget and schedule, and QC oversight.

Firm employed by	digital engineering		
Name	Frank Liang, P.E., PTOE	Years of relevant experience with this employer	26
Title	Vice President, Principal	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		BS / 1994 / Civil Engineering	
Active registration number / state / expiration date		PE.0028549 / LA / Exp. 03/31/22; PTOE #3362 / USA / Exp. 11/2024; ATSSA Traffic Control Flagger / Exp. 11/2025; Supervisor / Exp. 11/2025;	
Year registered	1999	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities.			QAQC and Technical Advisor (Ped/Bike/Low-Cost Safety Design)

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Liang oversees the Transportation Division at Digital Engineering. His experience includes transportation engineering, construction management, civil engineering, and project management for the LADOTD, the Regional Planning Commission, and local government agencies. Frank has been involved with SRTS/SRTPPP and LRSP Programs – which evolved into LADOTD Safety Design IDIQ – since the inception of the program nearly 15 years ago. He has served as lead engineer for traffic and transportation analysis, safety studies and improvements of pedestrian and bicycle routes in accordance with ASSHTO, MUTCD and LADOTD requirements. As Chief Engineer, he oversees the design, schedule, and progress of all projects within the company. **Mr. Yang has completed the LADOTD Traffic Engineering Process and Report Training.**
04/12 – 09/15	**Pedestrian Crosswalk Enhancements Phase I, LADOTD, New Orleans, LA.** *Principal in Charge/Project Manager* of this Local Road Safety Program ***pedestrian enhancement, signing and pavement marking, and road safety project.*** His duties included the development of the feasibility report, coordinating with New Orleans Department of Public Works Traffic Engineering Department on the determination of existing facilities, and assisting in the development and review of the engineering plans for constructability. The scope of this project involved the development of a ***feasibility study***, developing engineering plans, and providing construction engineering and inspection services for the ***pedestrian safety enhancements*** of 44 intersections within the Central Business District of downtown New Orleans through theinstallation of LED countdown pedestrian signal heads, installation of roadway striping for crosswalks, and installation of ADA compliant handicap sidewalks and curb ramps.
06/17 – Ongoing	**Pedestrian Crosswalk Enhancements Phase II, LADOTD, New Orleans, LA.** *Principal in Charge* for this ***pedestrian enhancement, signing and pavement marking, and road safety improvement project.*** Scope includes new LED pedestrian countdown signals with accessibility features as appropriate at 50 intersections, new rectangular rapid flashing beacons (rrfbs) with advance stop bars at six pedestrian crossings, new high visibility crosswalks andcurb ramps, ancillary facilities (wiring, pedestals, etc.) for pedestrian signals and beacons, and new roadway signage.
02/17 – 11/18	**City of Kenner Signs and Striping, LADOTD, Kenner, LA.** *Principal in Charge* for this Local Road Safety Program ***signing and pavement marking project.*** His duties included assisting in the development of the feasibility report and assisting in the ***development and review of the engineering plans*** for constructability. The scope of this project consisted of the development of a feasibility study, developing engineering plans, andproviding construction engineering and inspection services (CE&I) for the replacement of 11 miles of roadway signage and striping (including crosswalks) along a number of local roadways the City of Kenner to ***improve safety*** along these corridors.

10/18 – 04/19	Stage 0 Feasibility Study- Selected Corridors, LADOTD, Hammond, LA. *Principal in Charge* for a feasibility study for the selected corridors of West Church Street, Corbin Road, Mooney Avenue, Coleman Avenue, and JW Davis Road that focused on ***accessibility and connectivity improvements*** such as sidewalk replacements, addressing non-compliant ADA handicapped curbs and ramps, bike lane markings, and shared lane markings.These improvements were part of the City of Hammond's Bicycle/Pedestrian Master Plan. ***Conceptual Plans, Cost Estimates, Stage 0 Environmental and Budget Checklists*** were performed as part of the ultimate Study.
05/20 – 05/21	Port of Gulfport Access Project Environmental Assessment, Gulfport, MS. *Principal in Charge* responsible for overall management and coordination of the project team performing the ***traffic evaluation***and preliminary ***roadway geometric design*** required for the NEPA report. Frank reviewed the projected ***traffic volumes, traffic analysis*** and traffic signal timing performed for the US 90 and 30th Avenue intersection. He also manages the preliminary geometric design for the proposed roadway improvements along the entire project corridor. In addition to vehicular requirements, ***pedestrian and bicycle requirements*** were also considered along the project corridor. Frank coordinates with various agencies (MDOT, GRPC, City of Gulfport, etc.) and attend public meetings throughout the development of these proposed improvements for the NEPA report.
04/16 – 10/19	Marconi Drive Shared Use Path, LADOTD, New Orleans, LA. *Principal in Charge* for the Stage 0 Feasibility Study and design for this ***pedestrian enhancement*** project. His duties included the attendance of site visits, development of the ***feasibility study***, coordination with landscape architects, and review of the engineering plans of the proposed improvements for constructability. The feasibility phase considered alternates of a path down Zachary Taylor Drive from Marconi Drive to Pan American Stadium or a path along Marconi Drive from Harrison Avenue to Zachary Taylor Drive. Due to constructability reasons and costs, the latter was chosen. The final scope of work involves the addition of a 3,300-foot-long by 10-foot-wide multiuse path along Marconi Drive from Harrison Avenue to Zachary Taylor Drive.This connection provides a ***safe connection for leisure bicyclists and pedestrians*** along Marconi Drive.

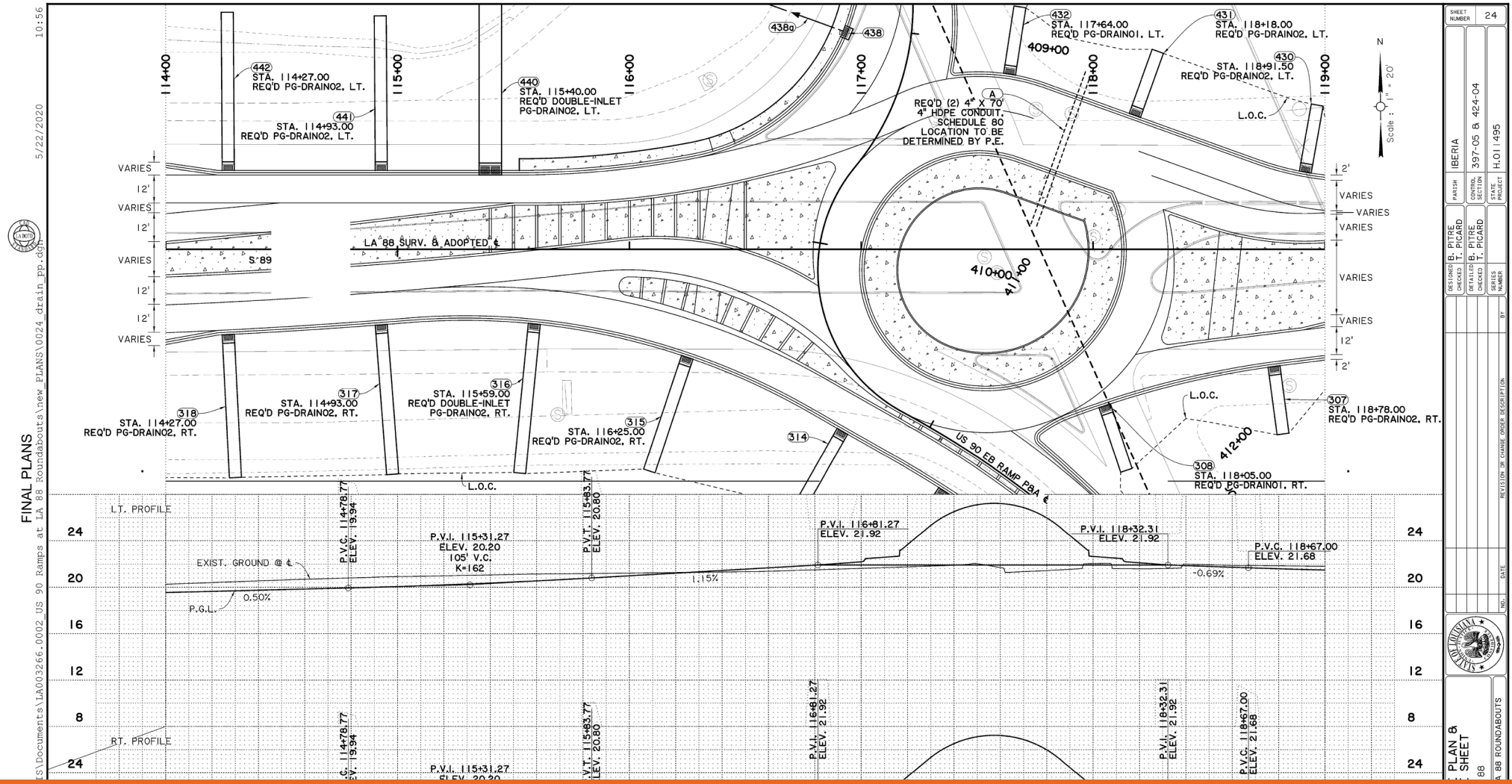
Firm employed by	ARCADIS		
Name	Lloyd "Buddy" Porta, Jr., PE	Years of relevant experience with this employer	10
Title	Principal Engineer	Years of relevant experience with other employer(s)	37
Degree(s) / Years / Specialization		BS / 1973 / Civil Engineering, Louisiana State University	
Active registration number / state / expiration date		PE.016425 / LA / Exp. 09/2023	
Year registered	1977	Discipline	Civil Engineer, Environmental Engineer
Contract role(s) / brief description of responsibilities.		QAQC and Technical Advisor (Roadway Design)	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Porta brings more than 47 years of experience in the transportation field. During his 37-year career at LADOTD, he practiced highway design for 11 years with 8 of those years in responsible charge of a design squad. He spent the next 21 years of his career in project/program management. He managed the Off-System Bridge Replacement Program and the Urban System Program. In 2001 he was tasked with being the LADOTD TIMED Program Manager. This $5 billion program was developed to multi-lane over 500 miles of state highways as well as construct 3 new bridges, 2 of these bridges across the Mississippi River. He spent the last 5 years of his career at LADOTD as the State Road Design Engineer Administrator.
07/15 – 05/19	**Safety Design Retainer - US 190B at Jefferson Ave. Roundabouts, LADOTD, Covington, Louisiana.** *QA / QC Reviewer.* Supported the construction of a new roundabout in Covington as a ***quality assurance/quality control reviewer for roadway plans***. Plans reviewed included the ***construction of sidewalk for use by pedestrians***.
04/12 – 01/14	**US 11 Norfolk Southern Railroad Overpass Replacement Environmental Assessment and Line and Grade Study, LADOTD, Slidell, Louisiana.** Responsible for ***LADOTD design guideline compliance***. Replacement and widening of the US 11 roadway overpass of the Norfolk Southern Railroad. The project included evaluating partial and full-access intersection options and bridge alignment and type alternatives for the heavily skewed and long steel span bridge in this urban area of Slidell, Louisiana. Key issues included the bridge's imminent historic status, commercial parking impacts and adapting to the Norfolk Southern right-of-way and travel pattern changes following the construction.
01/14 – Ongoing	**Pete's Highway EA and Alternatives, LADOTD, Livingston Parish, Louisiana.** Responsible for ***QAQC of roadway plans, line and grade, and LADOTD design guideline compliance***. High-priority project completing an EA and traffic engineering services related to improving congestion and operations along Range Avenue in the vicinity of the I-12. Alternatives included two split diamond interchange options with roundabout, partial clover leafs, and c-d road components at both Range Avenue and the next existing, eastern overpass at Pete's Highway (LA 16); and a diverging diamond interchange alternative at Range Avenue.
10/16 – 02/18	**North Bayou Black Drive Bridge Off-System Highway Bridge Replacement Program, LADOTD, Terrebonne Parish, Louisiana.** Reviewed plans for the ***replacement of an off-system highway bridge***. Detailed designed effort included field surveying, right of way adjustments, crash barrier selection, hydraulic analysis, ***preliminary and final plan preparation*** and quantity estimation.
09/12 – Ongoing	**US 165 Connector and Ouachita River Bridge - Environmental Impact Statement, Line and Grade and Toll Study, LADOTD, Monroe, Louisiana.** Responsible for ***QAQC of roadway plans, line and grade, and LADOTD design guideline compliance***. Three alternatives were developed and evaluated along with various tolling scenarios. All alternatives traverse substantial tracts of wooded wetlands associated with Chauvin Swamp near the Russell Sage Wildlife Management Area.

04/12 – 01/14	LA 434 Corridor Stage 1 Environmental Assessment, New Orleans Regional Planning Commission, Lacombe, Louisiana. Responsible for ***LADOTD design guideline compliance***. EA for the widening and improvements of LA 434 between LA 36 and the anticipated new junction with LA 3241 near LaCombe, Louisiana in St. Tammany Parish. The project involved stream permit application coordination.
10/90 – 10/01 10/05 – 10/10	Urban System Program MPOs & Urbanized Areas, Statewide, Louisiana. Responsible for the selection of the consultants, coordinating with the Metropolitan Planning Officials (MPOs) and the cities/parishes officials, ***coordinating with the LADOTD Planning Section***, ***developing the scope of services and fee*** for the projects, ***reviewing the construction plans*** and providing comments to the consultants and cities / parishes, and approving all invoices. Mr. Porta was responsible for developing the Urban Systems Program Seminar, which provided information on the processes and procedures used in the program. He served as project manager for signal projects in St. Bernard and Orleans Parishes.
09/01 – 05/06	Transportation Infrastructure Model for Economic Development (TIMED) Program, LADOTD, Statewide, Louisiana. LA*DOTD TIMED Program Manager.* Worked and coordinated on a daily basis with the TIMED Program Manager (LTM) to develop training, procedures, policies, and guidelines for the program. This $5 billion program was developed to ***multilane over 500 miles of state highways as well as construct three new bridges;*** two of these bridges across the Mississippi River. The program manager was required to monitor the progress of the program and had full invoice approval of the consultant's monthly invoice. This position was a member of the TIMED Program Executive Committee and reported to the Secretary of the LADOTD. This program was mandated in the Louisiana Constitution. There were 16 projects that were recognized throughout the state. Bonds were sold to finance and, therefore, accelerate the program. Over 500 miles of state roadways were multilaned and three new bridge projects were designed.
05/06 – 07/10	Road Design Engineer Administrator, LADOTD, Statewide, Louisiana. Responsible for transitioning the focus of his section from project management back to ***roadway design*** as desired by the Chief Engineer. To support this mandate, brought in training from the FHWA Resource Center in Atlanta, GA to assist the development of a young group. Coordinated the training and provided through the Louisiana Transportation Training Education Center. Developed a Legal Seminar to address the lack of experience in Road Design and other LADOTD sections in depositions and representing the Department in court with the assistance of the Attorney General's Office. This seminar was presented in several cities in Louisiana to LADOTD employees. Responsible for the ***development of design criteria for Offset Left Turn Lanes and design guidelines for the replacement of bridges on state routes***.
06/84 – 10/90 10/05 – 10/10	Off-System Bridge Program, LADOTD, Stateside, Louisiana. ***Replaced / rehabilitated existing bridges*** located on nonfederal routes in the cities and/or parishes in Louisiana. Provided the project and program management. Responsible for the selection of the qualifying sites, the distribution of the federal funds to the participating parishes, the selection of the design consultant, the coordination with the parishes and the consultants, the ***development of the scope of services and fee*** for each project, the ***technical review of the topographic surveys and construction plans*** and providing comments to the consultants and parishes, and the approval of all invoices.

Section 17

LA 88 AT US 90 ROUNDABOUT AND SAFETY IMPROVEMENTS
DESIGNED UNDER ARCADIS' LADOTD SAFETY DESIGN IDIQ.



17. Firm Experience

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**New Orleans Pedestrian Stage 0 Safety Feasibility Study**	Firm responsibility (prime or sub?)	Prime
Project number	H.012312.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Orleans Parish, LA	Owner's Project Manager	Adriane McRae
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1950, adriane.mcrae@la.gov		
Services commenced by this firm (mm/yy)	04/16	Total consultant contract cost ($1,000's)	$320
Services completed by this firm (mm/yy)	09/18	Cost of consultant services provided by this firm ($1,000's)	$307

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: LADOTD in partnership with the New Orleans Regional Planning Commission (NORPC) tasked Arcadis with completing a ***pedestrian safety feasibility study*** of 20 intersections located in Orleans Parish. NORPC identified the candidate intersections through a detailed Pedestrian Safety Action Plan (PSAP) investigation.

Firm Members Involved: Ari Deitch, Akhil Chauhan, Jose M. Rodriguez, Thomas Montz, Yuwen Hou, Greg Badon

Stage 0 Safety Study and Documentation: The Arcadis team conducted the studies in accordance with ***DOTD's Stage 0: Manual of Standard Practice,*** and DOTD's Traffic Signal Manual. Stage 0 documentation, including ***Preliminary Scope and Budget and Environmental Checklists, were completed for all 20 intersections.***

Needs Assessment: Arcadis evaluated 3 years of crash data to ***identify crash trends, overrepresented crashes, High PSI Locations,*** etc. Site visits were performed to document the user experience from a ped/bike perspective, assess the condition of existing infrastructure, and identify safety concerns.

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- Historical Crash Analysis
- Highway Safety Manual Analysis
- Warrant Analysis
- Alternative Development
- Preliminary Design Drawings
- Construction Cost Estimates
- Stakeholder/Agency Coord.
- Stage 0 Checklists

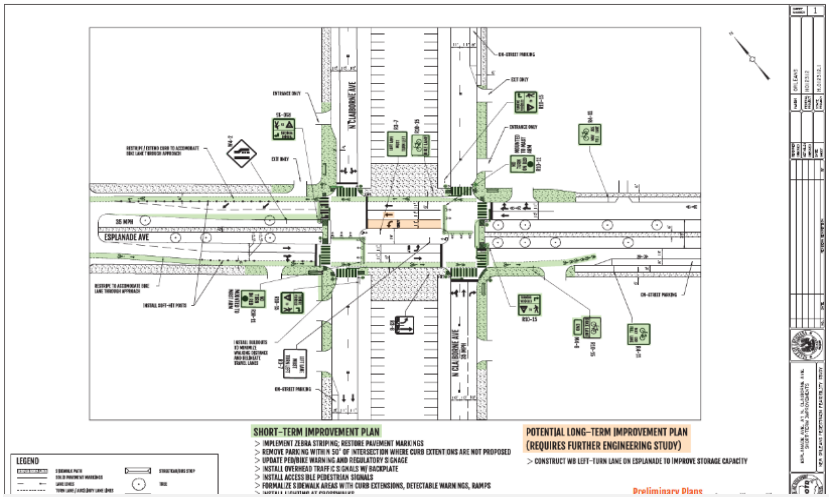


Figure: Design of short-term (green) and long-term (orange) implementable solutions for high-priority project intersection

Alternative Development & Preliminary Design Plans: Improvements focused on pedestrian and bicycle safety and included signal improvements, striping & signing improvements, lighting improvements, sidewalk/crosswalk improvements, curb extensions, traffic calming, ADA compliant curb ramps, and parking modifications. Improvements were segmented into short-term and long-term alternatives based on the cost and time needed to implement. ***Complete streets*** and ***context sensitive solutions*** were an important aspect of alternative development due to the historic nature of the area. ***Preliminary design plans, cost estimates, and benefit-costs were developed*** for each intersection to determine the feasibility of implementing the proposed alternatives and to inform project prioritization.

Figure: High visibility crosswalk and pedestrian refuge installed at I-10 Service Road and Read Boulevard

Stakeholder Engagement: A critical component of the project was the need to ***engage a wide range of project stakeholders*** from the NORPC, City of New Orleans, LADOTD, and District 02. Arcadis ***conducted routine workshop sessions*** to review proposed improvements and ensure that all team members were in agreement.

Firm name	ARCADIS			Past Performance Evaluation Discipline(s)*	Planning, Traffic
Project name	**Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments**			Firm responsibility (prime or sub?)	Prime
Project number	H.013029.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	East Baton Rouge Parish, LA			Owner's Project Manager	Jessica DeVille
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1844, jessica.deville@la.gov				
Services commenced by this firm (mm/yy)	03/18	Total consultant contract cost ($1,000's)			$438
Services completed by this firm (mm/yy)	06/21	Cost of consultant services provided by this firm ($1,000's)			$550

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The City of Baton Rouge has been identified as a focus city for pedestrian and bicycle safety improvements. Arcadis is responsible for a two-phase project, which included 1) developing strategic safety action plan to provide a basis for data-driven implementation of safety measures and 2) identifying prioritized list of locations and/or corridors, conducting ***Road Safety Assessments (RSAs)*** to ***identify safety issues and countermeasures***, and providing a high-level ***feasibility evaluation***.

Firm Members Involved: Akhil Chauhan, Greg Badon, Thomas Montz, Ari Deitch, Jose M. Rodriguez, Yuwen Hou, Garret Keller, Max Aguirre

Relevant Services

- Stage 0 Feasibility Studies
- Data Collection
- Historical Crash Analysis
- Safety Countermeasures
- Ped/Bike Improvements
- Stakeholder / Agency Coordination
- Road Safety Assessments
- Construction Cost Estimates
- Predictive Safety Analysis

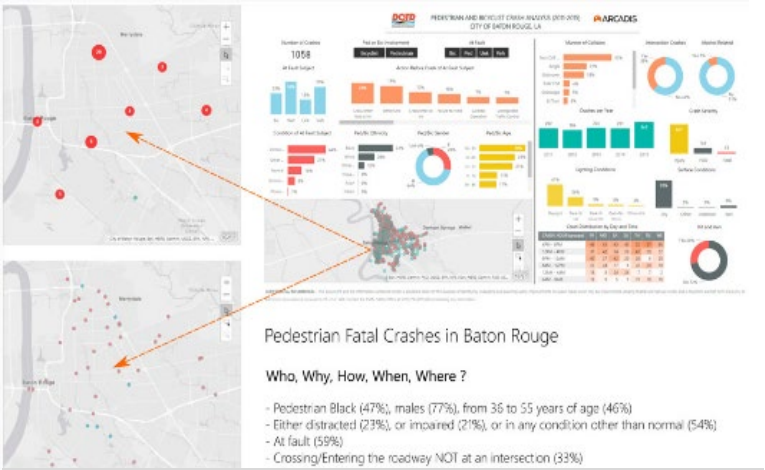


Figure: Dashboard of identified safety priority areas

Phase 1 – Pedestrian and Bicycle Safety Action Plan: Crash data, roadway geometry, and crash reports were collected, cleaned, and reviewed to identify pedestrian and bicycle safety deficiencies. An ***interactive, dynamic dashboard*** summarizing the information was created, and access to the dashboard was granted to the project team. A ***data-driven, three-tier screening process*** was used to ***identify safety priority areas*** and target locations where safety countermeasures and strategies will have the most effect. The PBSAP proposed a list of engineering and non-engineering countermeasures to address potential safety concerns.

Phase 2 – Road Safety Assessments: Conducted for the 10 priority locations with project stakeholders which included LADOTD HQ and District staff, City of Baton Rouge, CATS, BRPD, LSU, and FHWA. RSAs were conducted in accordance with the latest state and federal policy guidance and focused on ***identifying safety issues related to pedestrian and bicycle modes*** and ***identified feasible countermeasures*** to mitigate safety issues. Countermeasures were grouped into short-term, mid-term, and long-term alternatives based on the cost and time needed to implement. Arcadis conducted ***construction cost estimates*** and ***predictive safety analyses*** as part of the overall feasibility assessment for selected countermeasures.

Figure: Photo taken during RSA showing condition of sidewalk and curb ramps

Stakeholder Involvement: The Arcadis team developed a detailed stakeholder matrix, which identified stakeholders based on various levels of involvement: a technical advisory committee, stakeholders, and focused outreach.

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**LA 3235 Stage 0 Safety Feasibility Study**	Firm responsibility (prime or sub?)	Prime
Project number	H.010688.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Lafourche Parish, LA	Owner's Project Manager	April Renard
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1919, april.renard@la.gov		
Services commenced by this firm (mm/yy)	10/13	Total consultant contract cost ($1,000's)	$473
Services completed by this firm (mm/yy)	03/15	Cost of consultant services provided by this firm ($1,000's)	$315

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The Arcadis team performed a formal corridor/intersection and ***Stage 0 Feasibility Study*** evaluation to ***enhance mobility and safety*** on the LA 3235 corridor.

Firm Members Involved: Akhil Chauhan, Greg Badon, Thomas Montz, Ari Deitch, David Fulks

LA 3235 is a high-speed corridor with heavy truck traffic, clustered commercial and residential land use, full access median openings, and a history of high crash severity. Several fatalities have occurred on the facility during the 3-year analysis period. The goal of the study was to ***identify safety countermeasures*** that seek to address safety deficiencies and improve the overall safety and mobility of the corridor.

Stage 0 Safety Feasibility Study: Arcadis conducted a Stage 0 feasibility study to evaluate the viability of ***safety improvement alternatives and countermeasures***. The study involved traffic data collection and analysis, historical crash analysis, predictive safety methods, alternative development, cost estimates, public and stakeholder meetings, and ***Stage 0 checklists***. Arcadis employed advanced ***Highway Safety Manual methodologies*** to evaluate the ***effectiveness of proposed alternatives*** in addressing crashes.

Relevant Services

- Stage 0 Feasibility Study / Checklists
- Historical Crash Analysis
- Traffic and Signal Warrant Analysis
- Innovative Intersections
- Safety Countermeasures
- Geometric Design / Layouts
- ROW and Environmental Impacts Assessment
- Construction Cost Estimate
- Public / Stakeholder Involvement

Alternative Development / Evaluation: Alternatives focused on the use of ***access management*** and ***innovative intersections*** to ***reduce conflict points*** and speed differentials that are contributing to crashes. Design features were ***developed in accordance with LADOTD minimum guidelines*** such as EDSM VI.3.1.6, "Installation of New Traffic Signals," IV.2.1.4, "Median Openings on Divided Multi-Lane Roadways," and DOTD's "Access Connections Policy." ***Preliminary design drawings*** were developed to evaluate feasibility of alternatives and identify potential right-of-way and ***environmental impacts***. Safety benefits were estimated by conducting a predictive safety analysis using ***Safety Performance Functions and Crash Modification Factors***.

Figure: Proposed Access Management and Intersection Improvements to Reduce Conflict Points on LA 3235

Construction Cost Estimates: Construction cost estimates were generated for alternatives using LADOTD historical bid information and cost estimating tools. These estimates identified both ***construction and engineering costs as required in Stage 0 checklists***.

Figure: Implemented Continuous Green-T Intersection concept at LA 3235 and LA 3162.

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**US 71 Corridor – Phase II Stage 0 Feasibility Study**	Firm responsibility (prime or sub?)	Prime
Project number	H.010824.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Rapides Parish, LA	Owner's Project Manager	Jody Colvin
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 242 4635, jody.colvin@la.gov		
Services commenced by this firm (mm/yy)	02/15	Total consultant contract cost ($1,000's)	$228
Services completed by this firm (mm/yy)	08/17	Cost of consultant services provided by this firm ($1,000's)	$210

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: Arcadis was tasked by LADOTD to conduct a ***Stage 0 Feasibility Study*** to determine reasonable alternatives that ***address historical safety issues at the Alexandria traffic circle*** at the intersection of US 71 (MacArthur Drive) and US 165 (Masonic Drive) in Alexandria, Louisiana.

Firm Members Involved: Akhil Chauhan, Greg Badon, Thomas Montz, Ari Deitch, Jose M. Rodriguez, Justin Maderia

Relevant Services

- Stage 0 Feasibility Study
- Highway Safety Manual Analysis
- Data Collection
- Historical Crash Analysis
- Volume Development
- Alternative Development / Screening
- Preliminary Design Drawings
- Construction Cost Estimate
- Benefit-Cost Analysis
- Public / Stakeholder Involvement
- Environmental Checklist

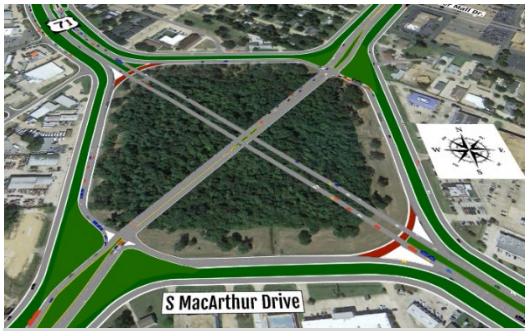


Figure: VISSIM Animation of Grade Separated Intersection Concept

Data Collection and Needs Assessment: A wide range of data was collected for the purpose of the study. Most importantly, ***Arcadis conducted an in-depth review of historical crash data and performed field visits to identify safety issues and areas of concern.***

Alternative Development / Screening: Based on identified safety and operational needs and future volume projections, Arcadis conducted an initial ***Tier 1 Alternatives Screening***. Arcadis identified reasonable alternatives for analysis, which included Median U-turn (MUT) intersection, Continuous Flow Intersection (CFI), and grade separated intersection concepts that would ***reduce conflict points***. Calibrated VISSIM models and ***preliminary design drawings*** were developed. Arcadis also evaluated ***phased implementation scenarios*** for the grade separated intersection concept to ***reduce initial upfront costs***. Throughout the study, ***Arcadis met regularly with LADOTD HQ and District 08 project team members to understand key issues and develop context sensitive solutions.***

Quantify Project Benefits: Project benefits were evaluated through microsimulation model results and ***predictive safety analysis***. Expected crashes were estimated using appropriate ***Crash Modification Factors***. Travel time savings and crash reductions were monetized using FHWA recommended values. ***Construction cost estimates*** were performed using LADOTD Bid Estimating Tools. A ***benefit-cost ratio was calculated for each alternative*** and was included in Stage 0 documentation.

Stage 0 Documentation: Arcadis completed the ***Stage 0 Preliminary Scope and Budge Checklist*** and ***Environmental Checklist*** as part of the Stage 0 documentation. Additionally, a traffic report and public meeting summary were completed.

Site-Specific Predictive Safety Analysis Results – Build Alternative Comparison

Alternative Description -- Crash severity level	Total Crashes/yr	Fatal and Injury (FI) Crashes/yr	Property Damage Only (PDO) Crashes/yr
Existing Conditions*	234.33	44.00	190.33
Alternative 1: Interchange - Phase 1	22.30	6.32	15.95
Alternative 1: Interchange - Phase 2	27.53	10.03	17.48
Alternative 2: Partial Median U-Turn Intersection	12.35	3.22	9.13
Alternative 3: Continuous Flow Intersection	11.69	3.41	8.28

*Not comparable to Alternatives 1, 2, or 3

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**I-49 Interchange Stage 0 Safety Feasibility Study**	Firm responsibility (prime or sub?)	Prime
Project number	H.012687.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Lafayettte Parish, LA	Owner's Project Manager	Adriane McRae
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1950, adriane.mcrae@la.gov		
Services commenced by this firm (mm/yy)	11/16	Total consultant contract cost ($1,000's)	$242
Services completed by this firm (mm/yy)	09/17	Cost of consultant services provided by this firm ($1,000's)	$212

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: Arcadis' role was to perform a ***Stage 0 Feasibility Study*** to identify ***short-term and long-term safety improvements*** to address identified needs at the interchange of I-49 at Veterans Boulevard, I-49 at W. Gloria Switch Road, and I-49 at W. Pont Des Mouton Road in Lafayette Parish, LA.

Firm Members Involved: Ari Deitch, Akhil Chauhan, Jose M. Rodriguez

Data Collection and Analysis: Crash data was obtained for years 2013 to 2015 to evaluate the safety performance of the study area. ***Arcadis developed crash summaries, calculated crash rates, determined overrepresented crashes, and evaluated the distribution of crash frequency, type, and severity.*** The analysis revealed a high number of angle crashes occurring at interchange ramp intersections. Additionally, Arcadis ***performed a traffic operations analysis*** of existing and future conditions to identify areas of congestions that may contribute to crashes. Primary needs identified were to increase capacity, improve safety, manage frontage road access, and accommodate future growth.

Alternative Development / Screening: Safety countermeasures were identified for each interchange and were grouped into short-term and long-term alternatives. A special focus was given to short-term improvements that were ***low cost and could be implemented quickly*** to address safety issues. Short-term improvements at the Veterans Drive interchange included RCUT intersections at adjacent frontage roads to ***reduce conflict points*** and address historical safety issues. ***Preliminary drawings*** and ***construction cost estimates*** were developed for reasonable alternatives. ***Complete streets improvements*** were also incorporated into both short-term and long-term alternatives including ***sidewalk and crosswalk improvements.***

Relevant Services

- Stage 0 Safety Feasibility Study
- Data Collection
- Historical Crash Analysis
- Traffic and Warrant Analysis
- Safety Countermeasures
- Low-Cost Solutions
- Preliminary Design Drawings
- Construction Cost Estimates
- Stakeholder/Agency Coordination

Figure: Proposed short-term safety improvements at Veterans Drive Interchange.

Figure: Implemented low-cost improvement to remove channelized right turn lane @ Gloria Switch Rd

Agency / Stakeholder Coordination: Arcadis ***worked with the District 03 DTOE during the study*** to better understand project needs, ensure that improvements are ***context sensitive***, and ***minimize review times***. Additionally, Arcadis presented the results of the study to the local MPO technical committee and worked with the LADOTD PM to identify funding sources for short-term improvements. ***Arcadis received a rating of 4.6/5.0 and positive feedback on our performance from the LADOTD Project Manager .***

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**Joe Sevario/Roddy Rd Stage 0 Safety Feasibility Study**	Firm responsibility (prime or sub?)	Prime
Project number	H.010795.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Ascension Parish, LA	Owner's Project Manager	April Renard
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1919, april.renard@la.gov		
Services commenced by this firm (mm/yy)	05/14	Total consultant contract cost ($1,000's)	$369
Services completed by this firm (mm/yy)	05/15	Cost of consultant services provided by this firm ($1,000's)	$193

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The Arcadis team performed a ***Stage 0 Feasibility Study*** for the purpose of evaluating the feasibility of roundabouts at intersections along Joe Sevario / Roddy Road between US 61 and LA 42.

Firm Members Involved: Akhil Chauhan, Greg Badon, Thomas Montz, David Fulks, Sridhar Basetty, Buddy Porta

The focus of the study was to develop geometric layouts of reasonable alternatives to enhance the study intersections and to identify the environmental impacts associated with those alternatives. A ***purpose and need*** was developed and right-of-way, significant trees, wetlands, hazardous sites, USTs, cultural resources, and water wells impacts were identified. Arcadis developed recommendations for roundabouts as intersection controls. The study was ***conducted in accordance with DOTD's Stage 0: Manual of Standard Practice*** and "EDSM No: VI.1.1.5: Roundabout Study and Approval", and ***Stage 0 Scope and Budget and Environmental Checklists*** were completed.

Traffic Analysis and Alternative Screening: The ***traffic data*** along the Joe Sevario/Roddy Road corridor was studied to determine its existing operating conditions. A ***warrant analysis*** at all study sites was conducted to determine if signalization is warranted. Intersections found to warrant signalization were modeled to evaluate the operational benefits of intersection improvements (un-signalized channelized turns, J-turns etc.). In addition, all study intersections were modeled as roundabouts to determine the adequacy of the roundabout intersection treatment.

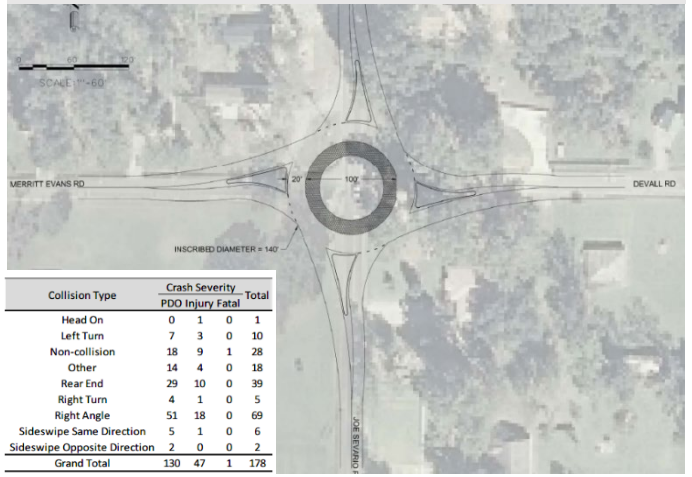
Safety Assessments: A ***comprehensive safety assessment was conducted*** to provide a quantitative estimate of the expected safety performance of each alternative. The crash data analysis included ***determining the predominant crash patterns, locations***, ***overrepresented crashes***, etc. The expected safety performance was estimated for each potential alternative using the predictive methods that are described in the ***Highway Safety Manual (HSM)***.

Design Development and Impact Assessment: Arcadis developed ***preliminary geometric layouts*** and ***cost estimates*** for the identified potential improvements. The estimates included costs associated with engineering, environmental, construction, right-of- way acquisition/ relocation, utility relocation, and contingencies. Arcadis conducted a site visit of the project area to investigate the presence of infrastructure that may be impacted by the project. This investigation included the identification of potential construction obstacles, location of existing utilities (public and private), location of existing right-of-way markers, and mapping of existing drainageways and drainage patterns. A ***benefit-cost analysis for each alternative was provided***. The benefit-cost ratio provided the safety and operational improvements to the corridor over the estimated construction cost.

Relevant Services

- Stage 0 Safety Feasibility Study
- Data Collection
- Traffic and Safety Analysis
- Alternative Development / Screening
- Highway Safety Manual
- Preliminary Design Plans
- Preliminary Cost Estimates
- Environmental Impacts / Checklists
- ROW Impacts

Figure: Geometric Layout of Proposed Roundabout at Devall Rd



Collision Type	Crash Severity PDO	Injury	Fatal	Total
Head On	0	1	0	1
Left Turn	7	3	0	10
Non-collision	18	9	1	28
Other	14	4	0	18
Rear End	29	10	0	39
Right Turn	4	1	0	5
Right Angle	51	18	0	69
Sideswipe Same Direction	5	1	0	6
Sideswipe Opposite Direction	2	0	0	2
Grand Total	130	47	1	178

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Traffic
Project name	**Louisiana Strategic Highway Safety Plan Update**	Firm responsibility (prime or sub?)	Sub
Project number	H.972419.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Statewide, LA	Owner's Project Manager	Autumn Goodfellow-Thompson
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, autumn.goodfellow-thompson@la.gov		
Services commenced by this firm (mm/yy)	04/21	Total consultant contract cost ($1,000's)	$500
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$130

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: Arcadis is responsible for all data analysis tasks for the Louisiana Strategic Highway Safety Plan Update.

Firm Members Involved: Jose Rodriguez, Ari Deitch, Justin Maderia

Relevant Services

- Crash Data Review and Analysis
- Statistical Analysis Methods
- Safety Effectiveness Evaluation
- Interactive Data Dashboards
- Literature Review / Best Practices
- Strategic Highway Safety Plan
- Stakeholder / Agency

Fatalities + Serious Injuries

Person Count	EAs	EAs %
10,711	10,490	97.9%

Emphasis Areas	PersonCount	CF%
Lane Departure	5,963	55.7%
Intersection	3,359	31.4%
Roadway Departure New	3,273	30.6%
Distracted or Inattentive New	3,161	29.5%
Young Driver	2,941	27.5%
Drug Involved	2,737	25.6%
Alcohol Related New	2,681	25.0%
No Restraint	2,482	23.2%
Older Driver	1,637	15.3%
Pedestrian	1,523	14.2%
Motorcycle	1,201	11.2%
CMV	1,008	9.4%
Lane Departure/Head-On	812	7.6%
Pedalcycle	372	3.5%
Off-Road Vehicle	171	1.6%
Work Zone	99	0.9%
Train	39	0.4%
Total	**10,490**	**97.9%**

Figure: Power BI Dashboard Showing Emphasis Area Analysis Results

Crash Data Review and Data Definitions – Arcadis ***obtained and analyzed 10 years of crash*** data (2011-2020) from the Center for Analytics Research and Transportation Safety (CARTS). Arcadis performed a preliminary analysis to verify that crash data is suitable for emphasis areas (EAs) analysis. Arcadis ***coordinated closely with LADOTD, CARTS, and project stakeholders*** to develop a crash data definitions memorandum to document the definitions that will be used in the SHSP update.

Existing Emphasis Areas Analysis – Arcadis conducted traditional ***statistical crash analysis*** to evaluate trends within the existing emphasis areas and determined the ***effectiveness of safety improvement strategies***. Results were presented in ***interactive dashboards developed using Microsoft Power BI***. Several project meetings were conducted with LADOTD and project stakeholders to review results and discuss potential alternatives to EAs and analysis methodologies.

Alternative Emphasis Areas Analysis – Arcadis performed a ***literature review of best practices*** and SHSPs that have been developed for other states to identify a range of potential EAs analysis alternatives. Arcadis is currently performing preliminary analysis of EAs alternatives and reviewing results alongside project stakeholders to determine if alternative methodologies should be incorporated in the SHSP update. ***Correlation Cluster Analysis*** was performed to determine the interdependency of emphasis areas and contributing factors.

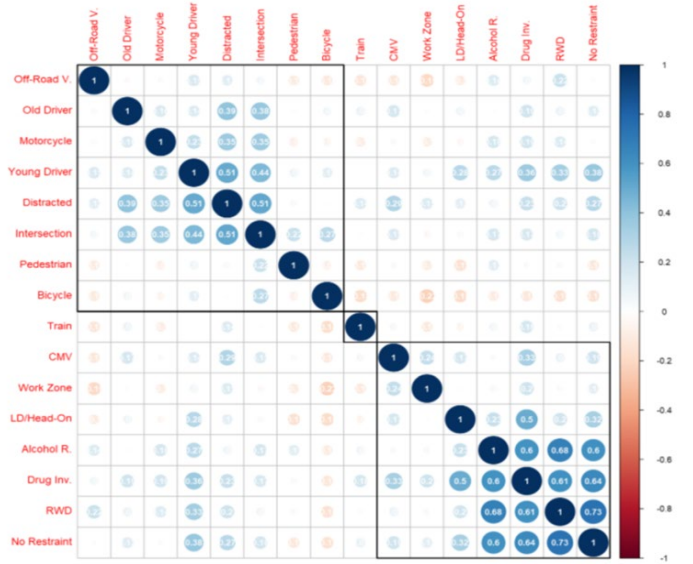


Figure: Correlation Cluster Analysis of Contributing Factors for Fatal and Serious Injury Crashes

Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS			Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env.
Project name	**LA 19 Widening (LA 64 to Sunset Boulevard) Stage 0 Feasibility and Safety Study**			Firm responsibility (prime or sub?)	Prime
Project number	SP No. 4400004012/Task Order No. H.011695.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	Baton Rouge, LA			Owner's Project Manager	Dilton Anderson
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 379 1807, dilton.anderson@la.gov				
Services commenced by this firm (mm/yy)	08/15	Total consultant contract cost ($1,000's)			$155
Services completed by this firm (mm/yy)	03/17	Cost of consultant services provided by this firm ($1,000's)			$94

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firms Role: As a Task Order under Contract SP No. 4400004012, Buchart Horn conducted a comprehensive ***Stage 0 Corridor Feasibility Study*** to evaluate 1.41 miles of LA 19 (Zachary-Slaughter Highway) from LA 64 (Main Street) to Sunset Boulevard in Zachary, Louisiana. Due to existing safety issues and congestion, this project was identified to ***increase capacity and improve safety*** along the corridor. The project is needed to accommodate existing and future traffic demand, ***improve the level of service*** of the roadway, and ***reduce crashes***.

Firm Members Involved: James Q. Dickerson III, Joseph F. Mingo

Safety Study and Design Development: Design of ***safety improvement concepts*** were developed incorporating ***access management strategies*** to reduce vehicle conflict points and widening to increase capacity and the operational efficiency of the road. Project tasks included project initiation ***meeting with key stakeholders***, background information collection and existing conditions assessment, project research and determination of baseline conditions, ***crash analysis*** and ***Highway Safety Manual predictive methodology***, developing and ***evaluating proposed build alternatives***, ***traffic study*** (including turning movement counts and seven-day, 24-hour machine counts), ***opinion of probable cost***, ***environmental/social impact analysis***, ***safety effectiveness evaluation*** of proposed improvements, and preparing a ***Stage 0 Feasibility Report***.

Relevant Services

- Stage 0 Corridor Study
- Access Management
- HSM Predictive Methods
- Data Collection
- NEPA Requirements
- Alternative Development
- Geometric Design
- ROW Impact Assessment
- Traffic and Safety Analysis
- Construction Cost Estimate
- Stage 0 Checklists
- Stage 0 Documentation

Proposed Access Management Improvements on LA 19 in Zachary, Louisiana

Stage 0 Documentation: Analysis results and information collected as a part of this study were documented in the ***Stage 0 Feasibility Report*** a manner consistent with ***National Environmental Policy Act*** requirements and all applicable ***LADOTD EDSMs and Design Guidelines***. An additional cost estimate was developed at the request of the client for the widening of LA 19 from LA 64 to Montegudo Boulevard. The cost estimate was included in the Final Stage 0 as an Appendix.

Firm name	BUCHART HORN ENGINEERS · ARCHITECTS · PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**LA 3040 Corridor Improvement Safety Feasibility Study and RSAs**	Firm responsibility (prime or sub?)	Prime
Project number	H.013322.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Houma, LA	Owner's Project Manager	Dan Magri
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, PO Box 94245, Baton Rouge, LA 70804, 225.379.1232, dan.magri@la.gov		
Services commenced by this firm (mm/yy)	07/17	Total consultant contract cost ($1,000's)	$304
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$279

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: BH performed a study to ***identify safety and/or operational issues*** along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to ***evaluate reasonable alternatives*** to address any deficiencies discovered.

Firm Members Involved: James Q. Dickerson III, **Joseph F. Mingo, Cal Joy**

Safety Feasibility Study Scope: The study limits extended from the intersection of LA 3040 at West Main Street (LA 24) to the intersection of LA 3040 at South Hollywood Road. The study includes ***road safety assessments***, traffic analysis, ***alternative analysis and design***, ***preliminary scope and budget checklist***, ***environmental documentation and checklist***, and an ***Opinion of Probable Cost***, as well as public and state and local official meetings.

Context Sensitive Solutions: The project corridor has a history of safety issues related to a high number of access points and conflicts along the corridor. Low-cost access management improvements have been attempted previously but offer room for improvement. BH is providing our extensive Stage 0 experience to solve these safety issues and supply our client with the ***best alternative that addresses the context and needs of the community***.

Relevant Services

- Stage 0 Safety Feasibility Study
- Data Collection
- Historical Crash Analysis
- HSM Predictive Methods
- Road Safety Assessments
- Alternative Development
- Geometric Layouts
- Env & ROW Impact Assessment
- Construction Cost Estimates
- Stage 0 Checklists
- Stage 0 Documentation

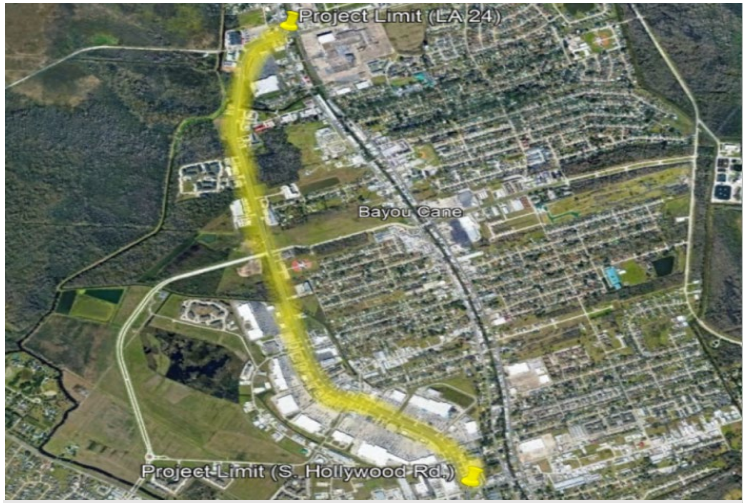


Figure: LA 3040 Safety Study Project Limits

Figure: Existing Conditions on LA 3040 Showing High Density of Access Points

Firm name	BUCHART HORN ENGINEERS · ARCHITECTS · PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**Safety Study for US 61 (Airline Highway) from Cardinal Drive to Bert Street**	Firm responsibility (prime or sub?)	Prime
Project number	H.014305.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	LaPlace, LA	Owner's Project Manager	Trey Jesclard
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, PO Box 94245, Baton Rouge, LA 70804, 225.379.1232, Trey.Jesclard@la.gov		
Services commenced by this firm (mm/yy)	05/21	Total consultant contract cost ($1,000's)	$160
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$122

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: BH performed a study to identify safety issues along approximately two miles of Airline Highway (US 61) in Laplace, LA and ***evaluate reasonable alternatives*** to address the issue(s).

Firm Members Involved: James Q. Dickerson, Joseph F. Mingo, Cal Joy

Safety Feasibility Study Scope: The approximate intersection termini are Bert Street and Cardinal Drive. The study includes ***historical crash analysis, traffic analysis***, safety analysis using ***Highway Safety Manual*** methods, ***alternative analysis and design***, ***preliminary scope and budget checklist***, ***environmental documentation and checklist***, and an ***opinion of probable cost***, as well as public and state and local official meetings.

Context Sensitive Solutions: This corridor has a lot an excess driveways and high volumes during the AM and PM peaks; as well as, an accident prone two-way left-turn lane. BH is providing our extensive Stage 0 experience to solve these safety issues and supply our client with the ***best alternative that addresses the context and needs of the community***.

Relevant Services

- Stage 0 Safety Feasibility Study
- Data Collection
- Historical Crash Analysis
- Highway Safety Manual Methods
- Alternative Development
- Geometric Layouts
- Env & ROW Impact Assessment
- Construction Cost Estimates
- Stage 0 Checklists
- Stage 0 Documentation

Figure: US 61 Safety Study Limits

Figure: Existing Conditions on US 61 Showing Median Treatments

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**LA 594 (Millhaven Road) Stage 0 Feasibility Study and Preliminary Design**	Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	I-20 Economic Development Corporation
Project location	Ouachita Parish, LA	Owner's Project Manager	Dr. Dwight Vines
Owner's address, phone, email	400 Lea Joyner Expressway, Monroe, LA 71201, 318 329 2250, dwight.vines@la.gov		
Services commenced by this firm (mm/yy)	10/12	Total consultant contract cost ($1,000's)	$148
Services completed by this firm (mm/yy)	04/13	Cost of consultant services provided by this firm ($1,000's)	$148

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: Arcadis was contracted by the I-20 Economic Development Corporation to conduct an ***LADOTD Stage 0 Feasibility Study*** to improve LA 549 (Millhaven Road) between Garrett Road and Russel Sage Road in Monroe, Louisiana.

Firm Members Involved: Akhil Chauhan, Greg Badon, Thomas Montz, Garret Keller, Buddy Porta

The Millhaven corridor is expected to experience significant growth in the future due to several planned commercial developments. The purpose of the feasibility study was to estimate the impacts of these developments and identify improvement alternatives that would accommodate the expected increase in demand. The Arcadis team coordinated closely with LADOTD, the I-20 Economic Development Corporation and the Northeast Louisiana Council of Governments (NLCOG) in the development and evaluation of alternatives.

Initial Data Gathering: Researched the funding history, existing conceptual geometric layouts, transportation plan of the area and other important issues. ***Gathered field information for developing an understanding of physical, engineering, and environmental features of the site.***

Relevant Services

- Stage 0 Safety Feasibility Study
- Stage 0 Checklists
- Traffic and Safety Analysis
- Preliminary Design Drawings
- Cost Estimate
- Roundabout Design
- ROW Impact Assessment
- Stakeholder and Agency Coordination
- Environmental Checklists

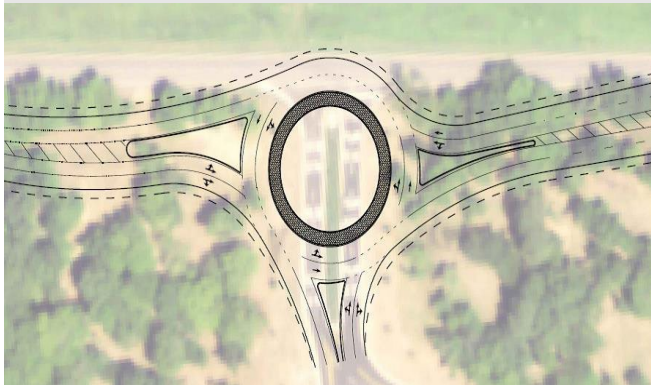
Traffic & Safety Study: The traffic study scope of work included the following tasks:

- ***Data Collection*** - Collected ***traffic counts*** and speed data for each intersection approach. Obtained historical traffic data from LADOTD and NLCOG; existing Traffic Signal Inventory forms from LADOTD to determine the operation of existing traffic signals.
- ***Traffic Safety*** - Obtained crash data from LADOTD for most recent three-year period. ***Identified crash types and estimated crash rates.***
- ***Intersection and Corridor Analysis*** - For each existing and future scenario, ***performed intersection and roadway segment capacity analysis*** using Synchro, SIDRA, and HCS. Evaluated ***roundabouts*** in compliance with LADOTD EDSM V.1.1.5 (Analysis) and EDSM V.1.1.6 (Design).

Preliminary Roadway Design and Cost Estimates: ***Reviewed and prepared LADOTD design criteria*** for the functional roadway classification such as design speed, lane widths, minimum horizontal curvature, maximum side slopes, horizontal and vertical clearances, and maximum roadway grade. ***Prepared roadway plans*** and ***typical sections*** for each proposed concept and developed ***construction cost estimates***.

Environmental Documentation: Researched all potential environmental constraints that influence early determinations of the project's feasibility, timing and cost to both the natural and human environment. Used LADOTD's ***Stage 0 Preliminary Scope and Budget & Environmental Checklists*** to document results of preliminary environmental review.

Roundabout Concept at Delta Community College Dwy



Firm name	BUCHART HORN ENGINEERS · ARCHITECTS · PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**US 84 Improvements and Environmental Assessment**	Firm responsibility (prime or sub?)	Prime
Project number	H.009153.2	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Winnfield, LA	Owner's Project Manager	Catherine Mastine
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70804, 225.379.1232, catherine.mastin@la.gov		
Services commenced by this firm (mm/yy)	04/13	Total consultant contract cost ($1,000's)	$965
Services completed by this firm (mm/yy)	07/21	Cost of consultant services provided by this firm ($1,000's)	$541

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: BH was tasked with the preparation of an ***Environmental Assessment*** in accordance with ***National Environmental Protection Agency (NEPA)*** and Federal Highway Administration (FHWA) regulations and guidelines for the proposed widening of US 84 in the Winnfield, LA area.

Firm Members Involved: James Q. Dickerson III, John Mettille, Joseph F. Mingo, Cal Joy

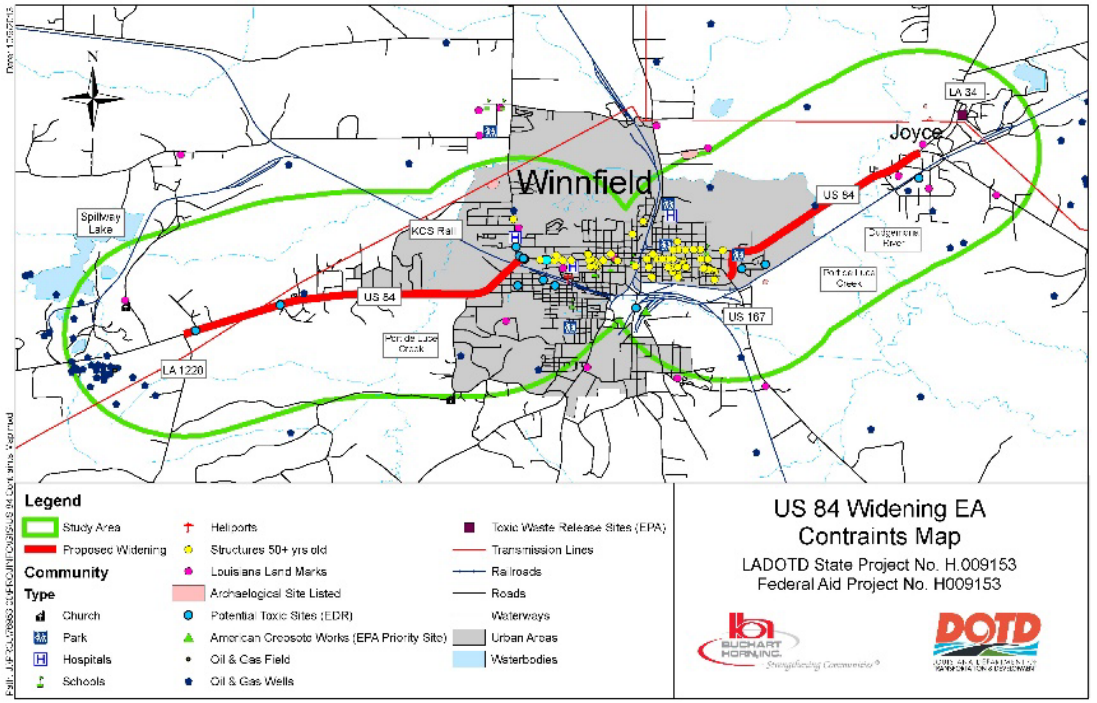
Tasks performed by BH to complete the environmental document include, but are not limited to:

- ***Line and grade study***
- Evaluation of archeological, cultural, social, economic, and environmental consequences
- Traffic study and modeling
- ***Safety Analysis***
- Engineer's opinion of cost
- Public outreach
- Corridor preservation
- Cultural Resources
- Section 404
- Wetlands mitigation

Public outreach, stakeholders, and agencies meetings were held by BH in order to obtain comments on the proposed build alternatives. A combination of nine build alternatives were developed with ***safety improvements*** such as roundabouts, ***access management***, and widening.

Relevant Services

- Environmental Assessment
- Traffic and Safety Analysis
- Roadway Design
- Cost and Impact Assessment
- Alternative Development / Analysis
- Public Involvement
- Agency Coordination



Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Road, Env, Traffic
Project name	**LA 117 Stage 0 Feasibility Study and Environmental Inventory**	Firm responsibility (prime or sub?)	Prime
Project number	H.013817.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Leesville, LA	Owner's Project Manager	Hong Zhang, PE, PTOE
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 379 1421, Hong.Zhang@la.gov		
Services commenced by this firm (mm/yy)	03/19	Total consultant contract cost ($1,000's)	$239
Services completed by this firm (mm/yy)	06/20	Cost of consultant services provided by this firm ($1,000's)	$211

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: As a Task Order under Contract SP No. 4400005873, Buchart Horn performed a ***Stage 0 Feasibility Study*** for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study compared correcting vertical and horizontal geometry along with adding shoulders to adding passing lanes and turn lanes at strategic locations to improve safety. ***Environmental impacts*** and ***cost estimates*** were prepared.

Firm Members Involved: James Q. Dickerson III, Joseph F. Mingo

Project Tasks: The Feasibility and Planning Study and Environmental Inventory project consisted of ***data collection*** for ***alternative analysis***, ***safety analysis*** for two project alternatives with a ***site meeting***. The final alternative analysis was revised for alternatives based on ***geometric layout analysis***.

Stage 0 Documentation: Buchart Horn compiled all results and findings identified from the alternatives analysis, completed the ***Environmental Checklist, Preliminary Scope and Budget Checklist, and Opinion of Probable Cost***, and summarized them to include in the ***Stage 0 Feasibility Report***.

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- Environmental Inventory
- Safety Analysis
- Alternative Development
- Geometric Layouts / Analysis
- Construction Cost Estimates
- Stage 0 Checklists
- Stage 0 Documentation

Existing Conditions of LA 117 Showing Narrow Shoulders and Example of Horizontal and Vertical Geometry

Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Road, Env, Traffic
Project name	**US 167 Stage 0 Feasibility and Planning Study, Elsie Street to Gilbert Drive**	Firm responsibility (prime or sub?)	Prime
Project number	H.013459	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Ville Platte, LA	Owner's Project Manager	Hong Zhang, PE, PTOE
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 371 1421, Hong.Zhang@la.gov		
Services commenced by this firm (mm/yy)	06/19	Total consultant contract cost ($1,000's)	$135
Services completed by this firm (mm/yy)	02/21	Cost of consultant services provided by this firm ($1,000's)	$135

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm Members Involved: James Q. Dickerson, III, PE, PS, Karren S. Atchison, **Joseph F. Mingo, PE**

Project Background: As a Task Order under Contract SP No. 4400005873, Buchart Horn prepared a ***Stage 0 Feasibility Study*** to evaluate the ***addition of a third lane to US 167*** from Elsie Street south to a point past Gilbert Drive in St. Landry Parish that will provide a smooth transition back to US 167.

Project Scope: The Stage 0 Feasibility Study will consist of ***site investigation and environmental inventory, safety analysis, alternative analysis, and geometric layout***. Environmental impacts and ***cost estimates*** will be prepared for Stage 0 documentation.

Stage 0 Documentation: The Feasibility Study shall compile all the results and findings identified from the alternative analysis, complete the ***Environmental Checklist, Preliminary Scope and Budget Checklist, and Opinion of Probable Cost*** to include in the ***Stage 0 Feasibility Report***.

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- Environmental Inventory
- Alternative Development
- Safety Analysis
- Geometric Layouts / Analysis
- Construction Cost Estimates
- Stage 0 Checklists
- Stage 0 Documentation

Proposed US 167 Roadway Widening Alternative Concept Drawing

Existing Conditions at US 167 and LA 749

Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Road, Env, Traffic
Project name	**US 167 Stage 0 Feasibility and Planning Study, Enola Street to Ross Road**	Firm responsibility (prime or sub?)	Prime
Project number	H.013460	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Ville Platte, LA	Owner's Project Manager	Hong Zhang, PE, PTOE
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 371 1421, Hong.Zhang@la.gov		
Services commenced by this firm (mm/yy)	06/19	Total consultant contract cost ($1,000's)	$121
Services completed by this firm (mm/yy)	02/21	Cost of consultant services provided by this firm ($1,000's)	$121

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Team Members Involved: James Q. Dickerson, III, PE, PS, Karren S. Atchison, **Joseph F. Mingo, PE**

Project Background: As a Task Order under Contract SP No. 4400005873, Buchart Hor prepared a ***Stage 0 Feasibility Study*** of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles.

Project Scope: Project tasks included ***site investigation, safety analysis, alternative analysis and geometric layouts***. The study compared connecting existing property owners to the new roadway with driveways and modifiying the intersection of old roadways. The study ***evaluated two reasonable alternatives*** to address the alignment of US 167 from Enola Street (near LA 748) to Ross Road.

Stage 0 Documentation: Buchart Horn compiled all results and findings identified from the alternative analyses, completed the ***Environmental Checklist, Preliminary Scope and Budget Checklist, and Opinion of Probable Cost*** to include in the ***Stage 0 Feasibility Report***.

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- Environmental Inventory
- Alternative Development
- Safety Analysis
- Geometric Layouts / Analysis
- Construction Cost Estimates
- Stage 0 Checklists
- Stage 0 Documentation

Existing Conditions at US 167 and LA 748

Proposed US 167 Realignment Alternative

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**I-12 Hard Shoulder Running (HSR) Feasibility Study and Preliminary Design**	Firm responsibility (prime or sub?)	Prime
Project number	H.012357.1	Owner's name	Louisiana Department of Transportation and Development
Project location	East Baton Rouge and Livingston Parishes, LA	Owner's Project Manager	Adriane McRae
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225 379 1950, adriane.mcrae@la.gov		
Services commenced by this firm (mm/yy)	03/16	Total consultant contract cost ($1,000's)	$102
Services completed by this firm (mm/yy)	10/19	Cost of consultant services provided by this firm ($1,000's)	$102

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: LADOTD contracted Arcadis to conduct a ***feasibility study*** to evaluate the use of the hard shoulders on I-12 from its interchange with I-10 to its interchange with LA 447. Arcadis performed a thorough analysis of all aspects of the concepts and completed a ***comprehensive assessment of all feasible alternatives***. Project team members and key elements of the project are presented as follows.

Firm Members Involved: Akhil Chauhan, Thomas Montz, Ari Deitch, Jose M. Rodriguez

Relevant Services

- Stage 0 Feasibility Study
- Research & Applied Best Practices
- Historical Crash Analysis
- Traffic Analysis
- Predictive Safety Analysis
- Preliminary Roadway Design and Typical Sections
- Construction Cost Estimates
- Benefit-Cost Analysis
- Agency Coordination

Determination of Best Practices / Alternatives Development: Arcadis conducted extensive research of ***best practices around the world***, which helped ***establish the safety effectiveness of hard shoulder running lanes*** and identified additional considerations to enhance safety. This also provided safety performance information related to trade-offs between lane width changes and addition of new capacity. An understanding of best practices was used to ***identify reasonable alternatives.***

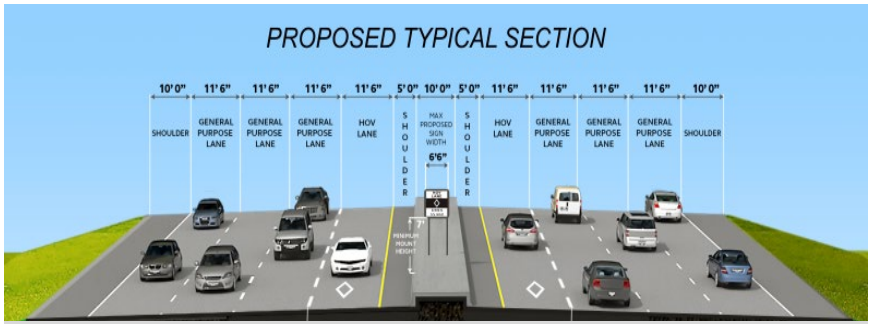


Figure: Proposed Typical Section of HSR/HOV Lanes on Interstate-12

Traffic and Safety Analysis: Alternatives were evaluated from an operational standpoint using a ***calibrated microsimulation model*** for the I-12 corridor. A vehicle occupancy study was performed to estimate the number of vehicles that would be eligible to use the HSR lane under an High Occupancy Vehicle (HOV) scenario. This information was used to develop traffic models and evaluate the impacts of HOV scenarios. Arcadis performed ***existing and future year safety analysis*** using the most recent three years of approved crash data from the LADOTD crash database to identify ***historical high crash locations and over represented crashes***. The crash data analysis included review of individual crash records to determine crash types, frequencies, and crash rates. ***Predictive safety analysis*** was performed to evaluate the safety performance of proposed alternatives and how crash trends may be affected by modifications such as reduced lane widths and additional travel lanes.

Preliminary Roadway Design – ***Conceptual roadway plans and typical sections*** were developed to determine if the existing roadway infrastructure could accomodate the proposed HSR / HOV lanes on I-12. Implementing HSR / HOV lanes on existing bridges and coordination with proposed improvements for nearby projects posed the greatest challenges with determining feasibility. Arcadis met with District 61 staff to discuss coordination with ongoing projects and understand project challenges and design constraints. ***Construction cost estimates benefit-cost ratios*** were developed for alternatives using LADOTD Bid Estimating Tools, and included costs for bridge / roadway widening, overlay, restriping, and permanent signing.

Stage 0 Documentation: Results of the study were developed into a ***feasibility report*** that included recommendations on alternatives as well as ***implementation strategies that could significantly reduce construction costs***. Final study results were presented to the LADOTD project team and administration.

Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road, Env
Project name	**I-10 at LA 73 (LA 74 to LA 621) Stage 0 Feasibility and Planning Study and Tiered Analysis**	Firm responsibility (prime or sub?)	Prime
Project number	SP No. 4400005873/Task Order No. H.011160.1.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Prairieville Geismar, LA	Owner's Project Manager	Hong Zhang, PE, PTOE
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 379 1421, Hong.Zhang@la.gov		
Services commenced by this firm (mm/yy)	08/17	Total consultant contract cost ($1,000's)	$194
Services completed by this firm (mm/yy)	10/18	Cost of consultant services provided by this firm ($1,000's)	$194

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: As a Task Order under SP No. 4400005873, Buchart Horn performed a ***Stage 0 Feasibility Study*** with ***Tiered Alternative Analysis*** for I-10 at LA 73 in Prairieville, Louisiana. The project area also included the corridor of LA 73 (LA 74 to LA 621), along with several additional connector routes and realignments, in conjunction with the interchange. The project area in Ascension Parish has experienced significant congestion and safety issues due to substantial changes in population, land use developments, and a lack of access management. The study evaluated widening and interchange alternatives, along with several additional connectors to ***improve traffic and safety operations*** in the project area.

Firm Members Involved: James Q. Dickerson III, John Mettille, Joseph F. Mingo

Tiered Alternative Analysis: The Tier 1 Analysis on interchange alternatives was completed to identify several high level alternatives. The alternatives were nominally evaluated ***for safety/traffic operations, required ROW, environmental/social impacts, and cost***. The interchange alternatives were screened, taken into the Tier 2 Analysis, incorporated into the greater study area, and a more ***detailed traffic and safety analysis*** was performed. A ***crash data analysis*** and a relative comparison of safety using the ***Highway Safety Manual predictive methodology*** was conducted using the IHSDM, and predicted crashes for each alternative were provided and summarized by roadway segments, intersections, ramps, and total project.

LA 73 at I-10 – Proposed Interchange Improvement Alternative

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- NEPA Requirements
- HSM Predictive Methods
- Tiered Alternative Analysis
- Roadway Design
- ROW Impact Assessment
- Construction Cost Estimates
- Traffic and Safety Analysis
- Stage 0 Documentation

Concept Design Development: The alternatives were ***designed***, incorporating all readily available information such as light detection and ranging, GIS base maps, utility information, aerial imagery, as-built plans, etc.

Stage 0 Documentation: Analysis results and information collected as a part of this study are documented in a manner consistent with the requirements of ***NEPA, FHWA's Policy on Changes in Access to the Interstate System***, and all applicable ***LADOTD Guidelines and EDSMs***. Stage 0 documentation including ***Preliminary Scope and Budget and Environmental Checklists*** was provided.

Firm name	BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS			Past Performance Evaluation Discipline(s)*	Planning, Road, Env
Project name	**LA 429 Connector Stage 0 Feasibility Study**			Firm responsibility (prime or sub?)	Prime
Project number	H.012311.1	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	Ascension Parish, LA			Owner's Project Manager	Hong Zhang, PE, PTOE
Owner's address, phone, email	1201 Capitol Access Road, Room 605Z, Baton Rouge, LA 70804.9245, 225 379 1421, Hong.Zhang@la.gov				
Services commenced by this firm (mm/yy)	03/19	Total consultant contract cost ($1,000's)			$361
Services completed by this firm (mm/yy)	11/20	Cost of consultant services provided by this firm ($1,000's)			$361

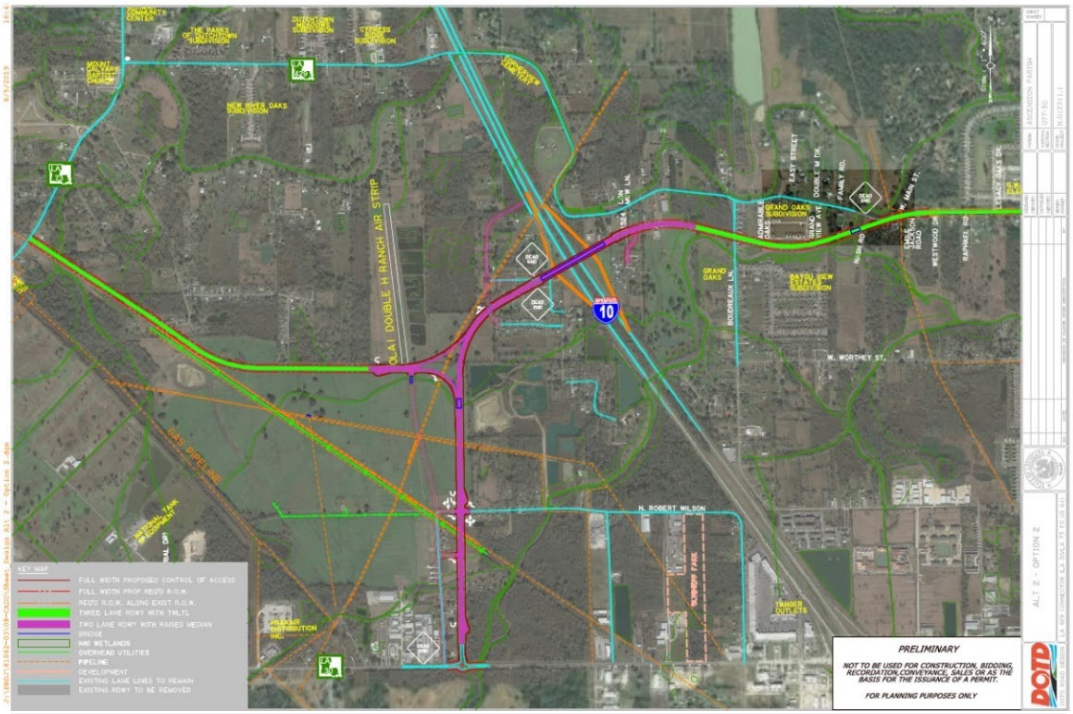
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: As a Task Order under Contract SP No. 4400005873, Buchart Horn prepared a ***Stage 0 Feasibility Study*** to evaluate ***alignment alternatives*** for a limited-access corridor (LA 429) in the vicinity of I-10, between LA 30, LA 73, and US 61 in Ascension Parish, LA. The purpose of the new LA 429 connector road is to create another route for motorists to travel from LA 30 to US 61, decreasing travel time along existing corridors.

Firm Members Involved: James Q. Dickerson III, John Mettille, Joseph F. Mingo

Relevant Services

- Stage 0 Feasibility Study
- Data Collection
- Environmental Inventory
- Alternative Development
- Geometric Layouts / Analysis
- ROW Impact Assessment
- Construction Cost Estimates
- Public and Stakeholders Meetings
- Stage 0 Checklists
- Stage 0 Documentation



Proposed LA 429 Alignment and Interchange Location Alternative

Project Goals: The study goal and objective was to ***evaluate limited access corridor alignment alternatives*** located in the vicinity of I-10, between LA 30, LA 73 and US 61 in Ascension Parish, LA.

Project Scope: The project consisted of preparing a ***Stage 0 Feasibility Study & Environmental Inventory*** for the LADOTD. The scope consists of stakeholders and public meetings, ***site visits & data collection, phasing of alternative development*** for the corridor, ***Preliminary Scope and Budget and Environmental Checklists***, and ***Opinion of Probable Cost*** to prepare the ***Stage 0 Report***. Several alternatives for the widening and reconstruction of LA 429 were be evaluated.

Firm name	ARCADIS	Past Performance Evaluation Discipline(s)*	Road, Traffic
Project name	**Safety Design IDIQ - US 90 Ramps at LA 88 Roundabouts**	Firm responsibility (prime or sub?)	Sub
Project number	H.011495	Owner's name	Louisiana Department of Transportation and Development
Project location	New Iberia Parish, LA	Owner's Project Manager	Brent Domingue
Owner's address, phone, email	428 Hugh Wallis Rd, Lafayette, LA 70508 / T: 337 262 6210 / E: christopher.domingue@la.gov		
Services commenced by this firm (mm/yy)	11/16	Total consultant contract cost ($1,000's)	$549
Services completed by this firm (mm/yy)	05/20	Cost of consultant services provided by this firm ($1,000's)	$504

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm members involved: David Fulks, Garret Keller, Buddy Porta, Ari Deitch

Arcadis was tasked to prepare *preliminary and final roadway plans* to install two single lane roundabouts at the US 90 ramp intersection with LA 88 in Iberia Parish. The project also included modifying the LA 88/Service Road intersections to restricted crossing U-turn (RCUT) intersections. The *installation of the roundabouts is aimed at promoting mobility and safety along the corridor.*

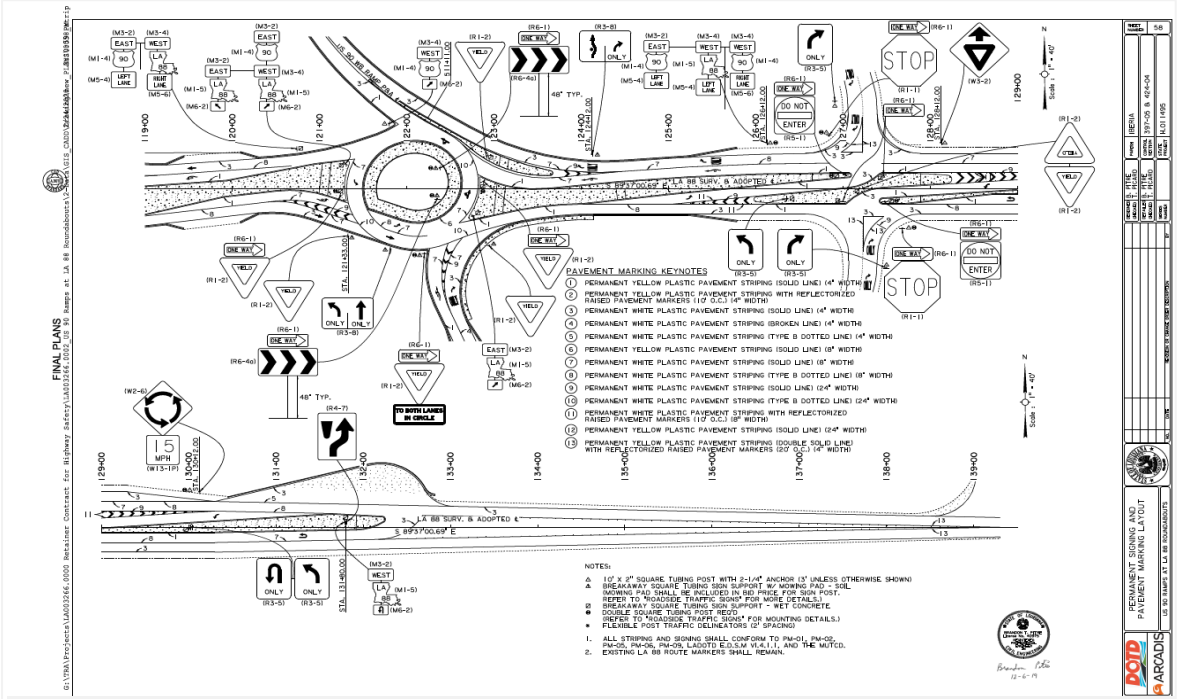
Relevant Services

- Preliminary and Final Design Plans
- Alternative Intersection Design
- Construction Cost Estimates
- Safety Design
- Agency Coordination

Preliminary and Final Design Plans: Arcadis performed all engineering services for this task order to develop a full set of preliminary and final construction plans, including InRoads modeling of the roundabouts, as a pass-through from Aucoin & Associates under their safety design retainer contract. The *design was prepared in accordance with* the *LADOTD Design Guidelines, Roadway Design Procedures and Details Manual and all applicable DOTD EDSMs, AASHTO and FHWA guidelines*. The roundabouts were designed to accommodate a WB-67 design vehicle. Restricted crossing U-turn (RCUT) intersections were designed for the adjacent service roads to enhance safety and adhere to LADOTD's control of access policy. Both the roundabouts and RCUT intersections *provide significant reductions in conflict points and expected number of crashes*.

Construction Cost Estimates: Arcadis prepared engineer's construction cost estimates for the project.

Best Practice: The project team held several design review meetings throughout preliminary plan and final plan development to more c*losely coordinate with LADOTD District 03 and headquarters personnel* prior to proceeding into subsequent design phases. The goal of this team coordination was to ensure all project team members agreed with proposed geometry prior to spending significant time proceeding into the subsequent design phases.



Roundabout design and signing plan at interchange ramps to enhance safety and operations

Firm name	BUCHART HORN ENGINEERS · ARCHITECTS · PLANNERS	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**LA 931 and Roddy Road Roundabout**	Firm responsibility (prime or sub?)	Prime
Project number	MA-18-10	Owner's name	Ascension Parish
Project location	Gonzales, LA	Owner's Project Manager	Kenny Matassa
Owner's address, phone, email	PO Box 2392, Gonzales, LA 70707, 225.450.1012, kmatassa@apgov.us		
Services commenced by this firm (mm/yy)	07/17	Total consultant contract cost ($1,000's)	$629
Services completed by this firm (mm/yy)	02/22	Cost of consultant services provided by this firm ($1,000's)	$500

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

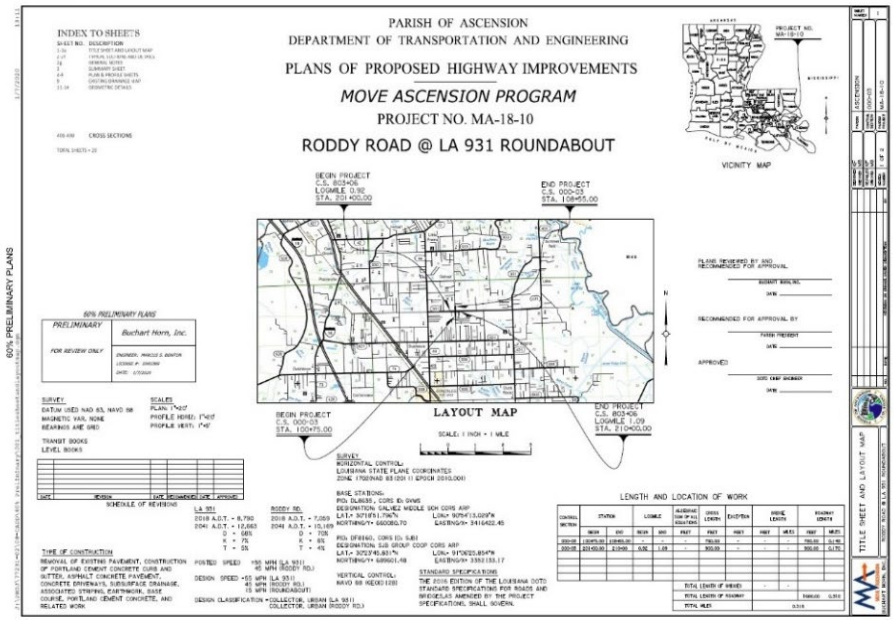
Firm's Role: BH was selected by Ascension Parish to provide ***Road Design & Traffic Engineering services*** for a period of five years (2017-2022) under the MoveAscension program. One of the projects assigned under this program was the intersection improvements and roundabout study/design for the intersection of LA 931 and Roddy Road. This intersection historically involved ***high frequency and high severity crashes***.

Firm Members Involved: James Q. Dickerson III, Joseph F. Mingo, Cal Joy

LADOTD TEPR Compliant Traffic and Safety Study: Although Roddy Road is a Parish roadway, the fact that it intersects with a State Route triggered the need for LADOTD review and approval. BH ***successfully implemented the Traffic Engineering Process and Report*** in the study and design and received approval from LADOTD for a project permit at this location. BH prepared a ***roundabout report*** (***crash analysis***, cost-benefit analysis, traffic analysis, speed study, safety analysis) prior to initiating design services.

Relevant Services

- Roadway Design
- LADOTD Minimum Design Guidelines
- TEPR Compliant Study
- Roundabout Report and Design
- Historical Crash Analysis
- Construction Cost Estimate
- Traffic and Safety Study
- Agency Coordination



Roadway Design Services: BH provided ***design services for a new single-lane asphalt roundabout*** at the intersection of LA 931 and Roddy Road in Gonzales, LA., electrical lighting design, subsurface drainage, permit application, ***preliminary and final design plans***, specifications, special provisions, construction estimates, and engineering calculations. The design complies with state and federal guidelines.

Firm name	digital engineering	Past Performance Evaluation Discipline(s)*	Planning, Road
Project name	**Local Road Safety Program – Plaquemines Parish Signing and Striping Improvements and Design Plans**	Firm responsibility (prime or sub?)	Prime
Project number	H.011949	Owner's name	New Orleans Regional Planning Commission
Project location	Plaquemines Parish, LA	Owner's Project Manager	Laura Riggs, P.E
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143; laura.riggs@la.gov		
Services commenced by this firm (mm/yy)	08/19	Total consultant contract cost ($1,000's)	$71
Services completed by this firm (mm/yy)	05/21	Cost of consultant services provided by this firm ($1,000's)	$71

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE was selected by the LADOTD to develop the ***Stage 0 feasibility study*** and ***design plans*** for a project in Plaquemines Parish under the Local Road Safety Program (LRSP). This project seeks to ***provide safe roadway and roadside conditions*** for the public in an effort to ***reduce vehicular crashes***. During the Feasibility Phase, DE met with the LPA and LRSP Project Manager to review the project goals, conduct a site visit, and prepare a project report that included a detailed project scope, cost estimates for engineering and construction, and a time schedule for project completion.

Relevant Services

- Low-Cost Safety Design
- Signing and Marking Design
- Final Design Plans
- Historical Crash Analysis
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stage 0 Documentation

Key Personnel: Frank Liang, David LeBreton, Michael Flynn, Michael Cochran

DE completed the ***feasibility study and the final design phase for the installation of additional signage and striping in high frequency crash areas*** throughout the Parish. As part of the feasibility study, the LADOTD Crash3 program was utilized by DE to ***review the Parish's crash history***, types of crashes, and locations. To determine what roads qualified for funding, the crash data from the last five years needed to be analyzed. Utilizing the crash data allowed problem areas to present themselves and enabled DE to focus on those areas to get the ***most value out of the funding for Plaquemines Parish and LADOTD***. Crash data determined where the worst roads were in the Parish, and these roads were the focus of the ***low-cost safety improvements and countermeasures***.

Examples of low-cost safety improvements included in this project are the

- Installation of additional signage in curves;
- Installation of raised reflectorized pavement markers;
- Edge line striping;
- Centerline striping;
- Installation of edge line and centerline rumble strips;
- ***School zone flashing beacon*** was installed near Belle Chasse High School.

Firm name	digital engineering	Past Performance Evaluation Discipline(s)*	Planning, Road
Project name	**Local Road Safety Program - St. Tammany Guardrail Stage 0 Feasibility Study and Design Plans**	Firm responsibility (prime or sub?)	Prime
Project number	H.012474	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	St. Tammany Parish, LA	Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143, laura.riggs@la.gov		
Services commenced by this firm (mm/yy)	03/17	Total consultant contract cost ($1,000's)	$85
Services completed by this firm (mm/yy)	11/18	Cost of consultant services provided by this firm ($1,000's)	$85

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The goal of this project was to ***provide safe roadside conditions*** for the public in an effort to protect errant drivers from striking roadside obstacles.

Key Personnel: Frank Liang, David LeBreton, Michael Cochran

Stage 0 Feasibility Study: During the Feasibility Phase, DE met with the LPA and LRSP Project Manager to review the project goals, conduct a site visit to observe each of the locations, and prepare a project report that included a detailed project scope, ***cost estimates for engineering and construction***, and a time schedule for project completion.

Project Design: During design phase, DE developed plans to ***remove non-compliant guardrails and dangerous guardrail end treatments at eight (8) bridge locations*** throughout St. Tammany Parish and replaced with those which comply with the newest guardrail and end treatments conforming to LADOTD Standards and requirements outlined in AASHTO's Manual for Assessing Safety Hardware (MASH).

Relevant Services

- Low-Cost Safety Design
- Roadside Design Best Practice
- Guardrail Design
- Final Design Plans
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stage 0 Documentation

Figure: Installation of LADOTD compliant guardrails

The final design plans were developed without a survey and the eight sites were field measured to place the design information into letter sized plans. This format allowed the design plans to be included in the construction proposal for ***efficient bidding purposes***. DE assisted during letting and also provided Construction Engineering and Inspection (CE&I) services as well as ensured compliance with the contractor's contractual DBE and EEO requirements.

Best Practice: DE coordinated with LADOTD (District 62 Design and Bridge Design) and St. Tammany Parish (LPA) representatives in ***addressing embankments and other roadside obstructions*** which are found to be particularly dangerous for motorists.

Sites were reshaped or otherwise improved to protect drivers from striking the obstacle in the event that control of the vehicle is lost. There were areas beyond the shoulder that needed to be reconstructed to allow for the proper installation of guardrail. These roadside improvements will better allow for recovering of errant vehicles and ***reduce the risk of rollover accidents and head-on impacts*** with obstructions when control cannot be reclaimed.

Firm name	digital engineering	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**Safe Routes to School Program: New Orleans DPW Sidewalk Project and Multi-Modal Safety Improvements**	Firm responsibility (prime or sub?)	Prime
Project number	H.009308	Owner's name	New Orleans Regional Planning Commission
Project location	New Orleans, LA	Owner's Project Manager	Laura Riggs, P.E
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143; laura.riggs@la.gov		
Services commenced by this firm (mm/yy)	11/17	Total consultant contract cost ($1,000's)	$192
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm ($1,000's)	$192

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The goal of this project is to ***implement pedestrian and bicycle safety improvements*** along corridors and intersections to increase the number of students who walk and bike to five (5) schools throughout Orleans Parish: Einstein Charter Elementary, Einstein Charter Middle, Success Preparatory Academy, Audubon Charter School, and E.P. Harney Spirit of Excellence Academy Charter School.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Flynn, Michael Cochran

Stage 0 Feasibility Study and Design: During the Feasibility Phase, DE met with the LPA and SRTS/SRTPPP Project Manager to review the project goals, conduct a site visit to observe each of the locations, and prepare a project report that included a detailed project scope, ***cost estimates for engineering and construction***, and a time schedule for project completion. The typical scope for all five sites included removal and ***replacement of over 5,000 square yards of concrete sidewalks, 82 (each) handicapped curb ramps, and over 5100 linear feet of high visibility crosswalk striping and stop bars*** at intersections. Outside of the typical scope, the project included a number of safety features at the sites:

Relevant Services

- Low-Cost Safety Design
- Pedestrian and Bicycle Safety Improvements
- HAWK Signal Design
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stage 0 Documentation

- In line with the City of New Orleans' Bicycle Master Plan, a 10' wide ***multi-use path*** spanning over 3,600 linear feet is being placed in the median along Michoud Boulevard adjacent to the Einstein Elementary and Middle School Sites
- Audubon Charter and E.P. Harney will receive ***Flashing Beacons to increase awareness of pedestrians in their school zones***
- Success Preparatory and E.P. Harney will receive ***pedestrian signal heads (w/ APS)*** retrofitted onto existing signals at key intersections adjacent to the school sites, with Success Preparatory' s area also ***implementing a Pedestrian Hybrid Beacon Assembly (HAWK)*** near the Lafitte Greenway, a highly traveled and key pedestrian/bicycle corridor
- Lastly, the scope in the Success Preparatory area required a road diet on Bienville Street from N. Carrolton Street to Jefferson Davis Parkway to implement a ***buffered bicycle lane and striped parking area***. The corridor received bicycle lane pavement markings, legends, and flex posts to increase safety for bicycle users along this corridor

Agency Coordination: All ***installation of pedestrian crosswalks and countdown signals*** required approval from the District Traffic Operations Engineer in accordance with LADOTD policies and procedures. All work is being performed accordance with LADOTD standards and requirements and the latest edition of the MUTCD. ***Key components to the project are communication and collaboration as LADOTD (HQ & District), the LPA, five schools, and the CNO Bicycle Committee are all involved in this project***.

Firm name	digital engineering			Past Performance Evaluation Discipline(s)*	Planning
Project name	**Stage 0 Feasibility Study: Selected Corridors in Covington, LA**			Firm responsibility (prime or sub?)	Prime
Project number	NA	Owner's name	New Orleans Regional Planning Commission		
Project location	Covington, LA			Owner's Project Manager	Jeff Roesel
Owner's address, phone, email	10 Veterans Memorial Boulevard, New Orleans, LA 70124: 504.468.6621, jroesel@norpc.org				
Services commenced by this firm (mm/yy)	10/18	Total consultant contract cost ($1,000's)			$45
Services completed by this firm (mm/yy)	04/19	Cost of consultant services provided by this firm ($1,000's)			$35.5

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE provided engineering services for the ***Stage 0 Feasibility Study*** to identify safety improvements along selected corridors in Covington, LA, with a ***focus on pedestrian and bicycle modes***.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino

Project Background: LADOTD recently developed parish safety profiles that are preliminary data packages that help to focus efforts at the local level through the SHSP Regional Safety Coalition, as coordinated through the Metropolitan Planning Organizations throughout the state. The Local Road Safety Program (LRSP) team envisions the Metropolitan Planning Organizations to help facilitate local road safety plan development that starts with the parish safety profiles, stakeholder outreach and coordination, and subsequent project application submittals. This proposed process will provide sustainability in terms of institutionalizing safety in the planning process and consistency in Local Public Agency involvement

Relevant Services

- Stage 0 Feasibility Study
- Pedestrian and Bicycle Improvements
- Access Management
- Complete Streets
- Geometric Layouts
- Construction Cost Estimates
- Stakeholder/Agency Coord.
- Stage 0 Documentation

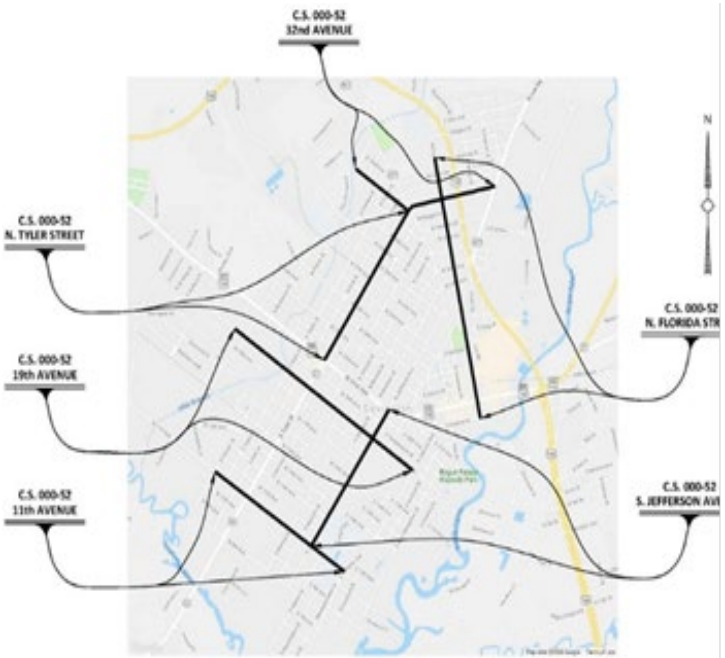


Figure: Map of Selected Corridors in Covington, LA where safety improvements are proposed

Project Scope: The purpose of this study was to identify improvements along the six (6) corridors to enhance safety and operational efficiency for all users of the roadways with a focus on bike and pedestrian access. DE, as prime consultant, ***provided conceptual design and cost estimates for geometric, signage/striping, and other proposed physical improvements consistent with the latest NORPC/ LADOTD Access Management and Complete Streets policies***. The study included the following corridors:

1. 32nd Avenue
2. N. Tyler Street
3. 19th Avenue
4. 11th Avenue
5. N. Florida Street
6. S. Jefferson Avenue

Stage 0 Documentation: The final Study product was a Stage 0 Feasibility Study which included the above and also the ***LADOTD Preliminary Scope and Budget Checklist and LADOTD Stage 0 Environmental Checklist***.

Figure: N. Tyler Street Existing Condition

Firm name	digital engineering			Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**Stage 0 Feasibility Study and Design - Audubon Ave Roundabout**			Firm responsibility (prime or sub?)	Prime
Project number	H.012479	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	Thibodaux, LA			Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143; laura.riggs@la.gov				
Services commenced by this firm (mm/yy)	06/16	Total consultant contract cost ($1,000's)			$85
Services completed by this firm (mm/yy)	10/18	Cost of consultant services provided by this firm ($1,000's)			$71

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE provided engineering services for the ***Stage 0 Feasibility Study and design of a new mini-roundabout*** at the intersection of Audubon Avenue and Ardoyne Drive in Thibodaux on Nicholls State University's campus. The goal of the installation of this mini-roundabout was to ***improve safety*** by eliminating the existing 4-legged approach's unconventional 3-way stop controlled intersection and ***reduce speeding and congestion at this intersection***.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Cochran

Stage 0 Feasibility Study: During the Feasibility Phase, DE met with the LPA and LRSP Project Manager to review the project goals, conduct a site visit, and prepare a project report that included a detailed project scope, cost estimates for engineering and construction, and a time schedule for project completion. ***Traffic and Accident Data was also investigated as part of this Study***.

Relevant Services

- Stage 0 Feasibility Study
- Low-Cost Safety Design
- Traffic and Safety Analysis
- Geometric Layouts
- Pedestrian and Bicycle Design
- Construction Cost Estimates
- Stakeholder/Agency Coord.
- Stage 0 Documentation

Figure: Completed Mini-Roundabout, the first in the state of Louisiana

Project Design Scope: From the Stage 0 Feasibility Report, the design project scope was determined to provide for the design of a 15-foot-wide travel lane roundabout circle and a 50-foot diameter island in the center of the roundabout. The median island included a traversable curb and apron to ***allow heavy vehicles to maneuver through the roundabout intersection***. The design also included entry curves and exit curves from all four directions at the intersection, with incorporation of splitter islands. ***Because of the amount of daily pedestrians, the campus has, crosswalks were incorporated as they were essential for this intersection.*** These crosswalks were placed at each leg along with the installation of ADA compliant handicapped curb ramps, and the installation of pertinent roadway signage and striping. All work was conducted in accordance with LADOTD standards and requirements and the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

Stakeholder Engagement: This project required ***extensive outreach and coordination with the City of Thibodaux*** and especially with Nicholls State University since Ardoyne Drive was owned by this entity. Ultimately, this project was bid and construction was completed in October 2018.

Firm name	digital engineering			Past Performance Evaluation Discipline(s)*	Planning, Traffic
Project name	**LA 39: West Judge Perez Drive Vehicular, Pedestrian, and Bicycle Safety Enhancements**			Firm responsibility (prime or sub?)	Prime
Project number	NA	Owner's name	New Orleans Regional Planning Commission		
Project location	St. Bernard Parish, LA			Owner's Project Manager	Jeff Roesel
Owner's address, phone, email	10 Veterans Memorial Boulevard, New Orleans, LA 70124, 504.468.6621, jroesel@norpc.org				
Services commenced by this firm (mm/yy)	01/20	Total consultant contract cost ($1,000's)			$50
Services completed by this firm (mm/yy)	06/20	Cost of consultant services provided by this firm ($1,000's)			$39

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The purpose of this project was to conduct a ***Stage 0 Feasibility Study*** for ***improved walking, bicycling***, and potential ***transit stop improvements***, as well as potential ***motor vehicle safety related improvements*** in the vicinity of Rowley Boulevard to Pakenham Drive on the north and south sides of W. Judge Perez drive (LA 39) (approx. 1.65 miles). The need for the study is a supplement to an emphasis area identified in the 2017 St. Bernard Parish Bikeway and Pedestrian Plan adopted by St. Bernard Parish Council on June 20, 2017.

Key Personnel: Frank Liang, David LeBreton, Michael Flynn, Michael Cochran

Relevant Services

- Stage 0 Feasibility Study
- Low-Cost Safety Design
- Pedestrian and Bicycle Safety Improvements
- Traffic Data Collection
- Conceptual Design Drawings
- Stakeholder/Agency Coord.
- Construction Cost Estimates
- Stage 0 Documentation

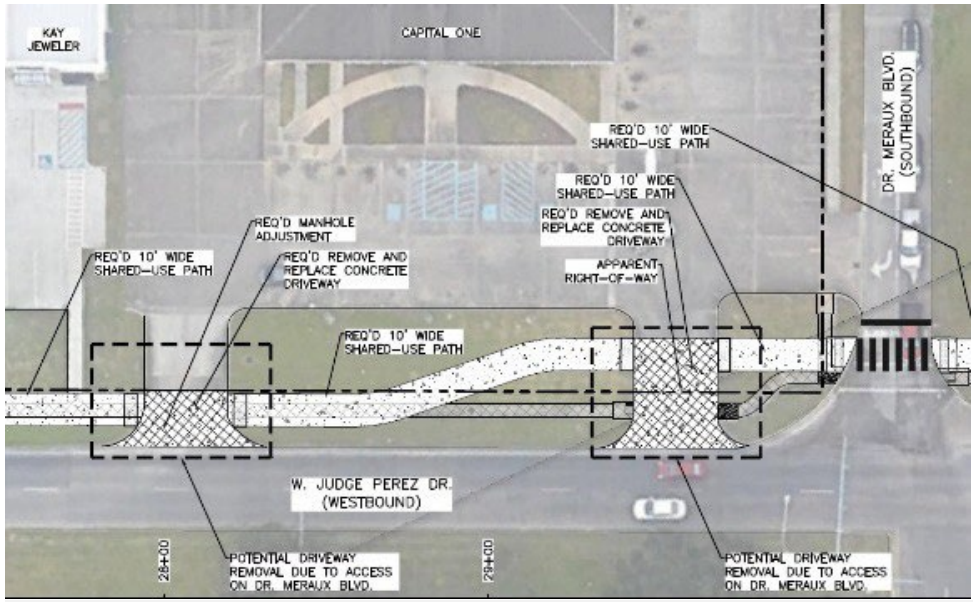


Figure: Proposed multi-modal safety improvements on W. Judge Perez Dr. in St. Bernard Parish

Best Practice: DE developed a project schedule and timeline that included four ***project management committee meetings*** throughout the project duration.

Data Collection: Project scope of work included a ***comprehensive site investigation and data collection effort*** at study area intersections and potential conflict points along the corridor. ***Pedestrian and bicycle screenline counts*** were taken at Rowley Boulevard, Dr. Meraux Boulevard, and Pakenham Drive along the corridor for three days during the a.m. and p.m. peak hours. ***Parking lot inventory and capacity counts were collected along the corridor to review efficiency and driveway needs.*** Information such as Right-of-Way (ROW) maps, Average Daily Traffic (ADT) counts, land uses, and existing network conditions were also collected. Navigating through the tight ROW's along the corridor was a challenge for this project as it has limited concrete walk locations.

Alternative Development: At the conclusion of this site investigation/data collection effort, DE provided planning, and recommendations (alternatives) for review and consideration which include a ***multi-use path*** on the north side of the corridor or ***sidewalks*** on both sides of the corridor. These alternatives were placed on plan sheets with stationing and a legend for review.

Stage 0 Documentation - DE compiled all this information along with ***cost estimates*** and the ***LADOTD Preliminary Scope and Budget Checklist and LADOTD Stage 0 Environmental Checklist*** into a "Draft Report" and ultimately a Final Stage 0 Feasibility Study for review and approval by the NORPC.

Firm name	digital engineering			Past Performance Evaluation Discipline(s)*	Planning, Road
Project name	**Stage 0 Feasibility Study and Design – Broad Street & Read Blvd Pedestrian Intersection Improvements**			Firm responsibility (prime or sub?)	Prime
Project number	H.013094	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	New Orleans, LA			Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143, laura.riggs@la.gov				
Services commenced by this firm (mm/yy)	09/17	Total consultant contract cost ($1,000's)			$255
Services completed by this firm (mm/yy)	02/18	Cost of consultant services provided by this firm ($1,000's)			$255

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE provided a ***Stage 0 Feasibility Study*** and ***design plans*** for this project that seeks to increase the number of pedestrians who walk or ride bikes in the City of New Orleans. The two project locations include a 3/4-mile portion of the Broad Street corridor from Tulane Avenue to Lafitte Greenway Bike Path and a 1/4-mile length of roadway along Read Boulevard that exists under Interstate 10 from the north service road to the south service road.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Flynn Michael Cochran

Read Boulevard Improvements: The project scope for the Read Boulevard section of the project includes the removal of existing concrete walks and ***replacing with shared-use paths along Read Boulevard*** from the North I-10 Service Road to the South I-10 Service Road. ***ADA curb ramps*** will be added at all intersections and on/off ramp crosswalks. Appropriate crosswalk striping will be removed and replaced to be at all crossings along this stretch of the project. ***LED pedestrian countdown signal heads*** will be added to the existing I-10 Service Road locations. During the Feasibility phase, extensive outreach was required on the Broad Street portion of the project as it is a major business corridor and includes some portions in New Orleans' historical district.

Relevant Services

- Low-Cost Safety Design
- Pedestrian Safety Improvements
- HAWK Signal Design
- Context Sensitive Solutions
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates

Broad Street Improvements: The project scope for the Broad Street section of this project includes removal and ***replacement of existing concrete walks***, drives and pavement, ***LED pedestrian countdown signal heads*** at signalized intersections (w/ APS), and the ***installation of two High-Intensity Activated crosswalk (HAWK) signals*** at the intersection of Broad and the Lafitte Greenway.

Figure: Map of designed pedestrian improvements on Broad Street including sidewalks, pedestrian signals, and HAWK signals.

Firm name	digital engineering	Past Performance Evaluation Discipline(s)*	Planning, Road
Project name	**Safe Routes to Schools - Gretna Sidewalks and Safety Improvements – Stage 0 Feasibility Study and Design Plans**	Firm responsibility (prime or sub?)	Prime
Project number	H.006524	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	Gretna, LA	Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143, laura.riggs@la.gov		
Services commenced by this firm (mm/yy)	04/12	Total consultant contract cost ($1,000's)	$133
Services completed by this firm (mm/yy)	04/19	Cost of consultant services provided by this firm ($1,000's)	$133

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE conducted a ***Stage 0 Feasibility Study*** and developed ***design plans*** for improvements in the vicinity of St. Anthony Elementary School, McDonogh #26 Elementary School, William Hart Elementary School, and Shirley Johnson/Gretna Park Elementary Schools in Gretna.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Cochran

Relevant Services

- Low-Cost Safety Design
- ADA Design
- Signing and Marking Design
- Final Design Plans
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stage 0 Documentation
- Engineering Support Services

Figures: Implemented new sidewalk, crosswalk, ADA ramps and pedestrian enhancements

Stage 0 Feasibility Study: During the ***Feasibility Study Phase***, DE met with the SRTS, SRTPP, and LPA Project Manager to review the project goals, conduct a site visit to observe each of the locations, and prepare a project report that included a detailed project scope, cost estimates for engineering and construction, and a time schedule for project completion.

Design Plans: The scope of the design included the ***removal and replacement of concrete sidewalks***, ***crosswalk striping***, and handicapped curb ramps to allow for ***safe pedestrian access*** to these schools. The installation or replacement of relevant ***signage*** and ***school zone flashing beacons*** were also part of the project's scope of work.

Due to the limited right of way available beyond the curb at the intersections, the majority of the project could not fit typical PED-01 handicapped ***curb ramps*** and meet ***ADA compliance***. Therefore DE had to ***special design nine different types of ramps*** to retrofit to the existing conditions. This required additional multiple field measurements to ensure the ramps could be constructed and compliant.

Engineering Support Services: DE also provided construction engineering and inspection services during construction in accordance with the LADOTD Construction Contract Administration Manual and in Site Manager and the project is now complete and successfully closed out. Other services included (but were not limited to) the following: scheduling and holding the pre-construction and construction progress meetings, addressing RFI's, reviewing and approving all project work diaries, coordinating utility adjustments, ensuring all sampling and tests are performed in accordance with the project's sampling plan, reviewing/negotiating and implementing plan changes, and preparing the final estimate package.

Firm name	digital engineering	Past Performance Evaluation Discipline(s)*	Planning, Traffic, Road
Project name	**Stage 0 Feasibility Study and Design Plans - St. Tammany Signs and Striping**	Firm responsibility (prime or sub?)	Prime
Project number	H.009460	Owner's name	Louisiana Department of Transportation and Development (LADOTD)
Project location	St. Tammany Parish, LA	Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143, laura.riggs@la.gov		
Services commenced by this firm (mm/yy)	05/17	Total consultant contract cost ($1,000's)	$107
Services completed by this firm (mm/yy)	12/18	Cost of consultant services provided by this firm ($1,000's)	$107

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: The goal of this project was to provide ***safe roadway and roadside conditions*** for the public in an effort to protect drivers from accidents by ***improving existing signage and striping*** and/or installing ***new roadside signage, pavement striping, and raised pavement markers*** at numerous locations in St. Tammany Parish. These locations had existing traffic control devices that were not in compliance with the Manual of Uniform Traffic Control Devices (MUTCD) such as insufficient signage, improper signage height, and deteriorated and/or missing pavement striping and markers.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Cochran

Stage 0 Feasibility Study: During the ***Feasibility Study Phase***, DE met with the LPA and LRSP Project Manager to review the project goals, conduct a site visit to observe each of the locations, and prepare a project report that included a detailed project scope, cost estimates for engineering and construction, and a time schedule for project completion. For 45 horizontal curves, DE evaluated the posted advisory speed by utilizing a Rieker digital ball bank indicator to collect data. Upon completion of the ***ball bank evaluation***, it was determined that the advisory speed needed to be lowered

Relevant Services

- Low-Cost Safety Design
- Signing and Marking Design
- Ball Bank Study
- Final Design Plans
- Stakeholder/Agency Coord.
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stage 0 Documentation

Figure: Implemented New Signage, Stripping and Pavement Markers for Curves

Design Plans: DE then designed and developed plans to provide ***new double yellow striping*** and ***raised reflectorized pavement markers***, ***outer lane edge striping***, ***advisory speed plaques***, and ***directional advisory signage*** at all curve locations. The final design plans were developed without a survey and the sites were field measured to place the design information into letter sized plans. This format allowed the design plans to be included in the construction proposal for efficient bidding purposes. DE also provided technical assistance in the letting and construction phases of this project.

Project Results: In total, an estimated ***35 miles of pavement striping*** and an estimated ***650 new signs*** were installed over 23 locations in this project. Intersections also received upgrades such as new signage forewarning of stops as well as new stop bars, new stop signs with advisory plaques to indicate cross traffic movements, new pavement markings indicating lane usage and delineation, and lane edge stripes. ***All new signs and striping are in accordance with LADOTD and the MUTCD requirements.***

Firm name	digital engineering			Past Performance Evaluation Discipline(s)*	Planning, Road
Project name	**Stage 0 Feasibility Study and Design – Bootlegger Road Sidewalks**			Firm responsibility (prime or sub?)	Prime
Project number	H.013082	Owner's name	Louisiana Department of Transportation and Development (LADOTD)		
Project location	St. Tammany Parish, LA			Owner's Project Manager	Laura Riggs, P.E.
Owner's address, phone, email	PO Box 94245, Baton Rouge, LA 90804; 225.379.1143, laura.riggs@la.gov				
Services commenced by this firm (mm/yy)	09/17	Total consultant contract cost ($1,000's)			$89
Services completed by this firm (mm/yy)	09/21	Cost of consultant services provided by this firm ($1,000's)			$89

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Firm's Role: DE provided engineering services for the ***Stage 0 Feasibility Study and design*** of sidewalks along Bootlegger Road to ***enhance pedestrian mobility and safety.*** This project seeks to decrease the number of pedestrian and automobile accidents on Bootlegger Road (formerly LA 1085) in St. Tammany Parish.

Key Personnel: Frank Liang, David LeBreton, Taylor Marino, Michael Cochran

Relevant Services

- Low-Cost Safety Design
- Pedestrian and Bicycle Improvements
- Stage 0 Feasibility Study
- Construction Cost Estimates
- Stakeholder/Agency Coord.
- Stage 0 Documentation

Figure: Proposed Sidewalk Location

Stage 0 Feasibility Study:
The Stage 0 Feasibility Study reviewed the alternatives of a 6-foot-wide sidewalk on the north side of Bootlegger Road or a 10' wide shared use path on the south side of the road. This sidewalk/path will ***connect neighborhoods to the existing park and school,*** and is part of a phasing plan that will ultimately connect LA1077 to Ochsner Boulevard.

Ultimately, the north sidewalk was chosen as the feasibility study determined the south option not constructible within the project budget due to drainage constraints and Right-of-Way issues.

Project Design:
The design project includes a 4,660 foot long by 6-foot-wide concrete sidewalk constructed on the north side of Bootlegger Road near Turnpike Road (LA 1077) to an existing entrance into the Del Sol neighborhood. ***Five asphalt turnouts/driveways exist along this route were removed and replaced to meet ADA requirements.***

Handicapped curb ramps were placed at the Bootlegger Road crossing near Coquille. This concrete walk was placed within the existing Right-of-Way. The sidewalk was placed along the edge of the existing drainage swale with an embankment toe where possible, and portions of the project required the closing in of the existing ditch along the roadway and replacing with 15" to 18" subsurface drainage pipe.

Section 18

OUR APPROACH IS BASED ON COMPREHENSIVE EXPERIENCE OF OUR LOCAL AND HIGHLY-QUALIFIED MULTI-DISCIPLINARY PEOPLE PERFORMING TO HIGHEST QUALITY STANDARDS ON DOTD SAFETY STUDY AND DESIGN PROJECTS FOR MORE THAN 20 YEARS – PEOPLE PERFORMING ON PROJECTS (P3).

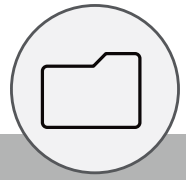
People

546 Combined Years of Staff Experience

Performance

Top Performance ratings:

Stage 0/Feasibility: **4.5/5**
Traffic (Safety & Traffic): **4.6/5**
Roadway: **3.8/5**



Projects

More than **50** Stage 0 Feasibility and Safety Studies

Over **30** low-cost safety design projects in the last 20 years

18. Approach and Methodology:

THE ARCADIS TEAM

The successful completion of task orders under this IDIQ contract will require an experienced, multidisciplinary team that is familiar with LADOTD safety study applications and Highway Safety Manual methods and is experienced in designing a range of low-cost safety improvements. ***The Arcadis Team has completed over 50 safety and feasibility studies for a wide range of projects across the state*** including pedestrian and bicycle improvements for roads and intersections, Road Safety Assessments (RSAs), and safety effectiveness evaluations. ***Our Team has completed designs for over 30 low-cost safety improvement projects across the state.***

Our past project experience has provided us the opportunity to develop working relationships with LADOTD, stakeholders, and Local Public Agencies (LPAs) in all 9 Districts (02, 03, 04, 05, 07, 08, 58, 61, and 62). This experience enables us to apply our understanding of local needs to develop context sensitive solutions through safety feasibility study and design projects.

Ari Deitch will be the Project Manager for the Arcadis Team and will be supported by our multidisciplinary consultant team to provide high quality deliverables on schedule. The Arcadis Team includes expert subconsultants: ***Buchart Horn*** will provide support for roadway, planning, and environmental; ***Digital Engineering*** for low-cost safety design, and ***Grey Engineering*** for safety and planning.

The Arcadis Team's deep bench of experienced professionals provides redundancies in all aspects of this contract. In addition to the team members presented in this proposal, the Arcadis Team includes additional local and regional resources that can be utilized to ***deliver multiple task orders simultaneously under this IDIQ*** while meeting project schedules and managing overall team workload.

PROJECT SCOPING

A comprehensive, clearly defined scope of work is imperative to the successful and timely completion of task orders. Upon receipt of a task order and initial scope, the Arcadis Project Manager (PM) will request a meeting with LADOTD, District staff, LPA, and other project stakeholders to discuss the project and gain a firm understanding of project background and goals. We will conduct preliminary desktop reviews of existing conditions to provide recommendations on specific data and scope elements. This helps to obtain a mutual understanding of tasks and deliverables and minimizes the potential for supplemental agreements down the road.

KICK-OFF, PROGRESS, AND MILESTONE MEETINGS

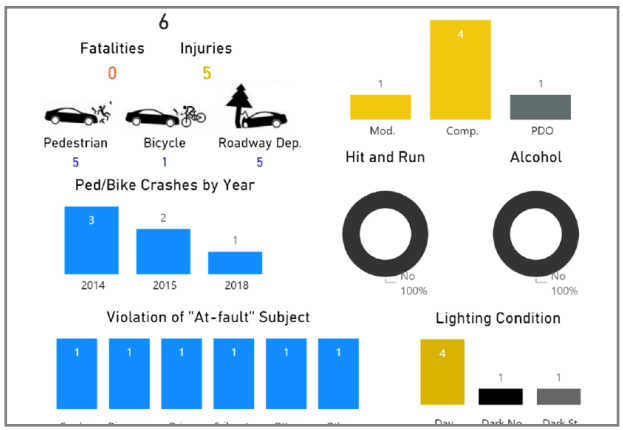
Upon receipt of Notice to Proceed, Arcadis will request a kick-off meeting with the LADOTD PM, District, LPA, and stakeholders to review project purpose and need, scope, methodologies, communication protocols, schedule, and immediate data needs. Arcadis will schedule monthly or bi-weekly meetings with the LADOTD PM to provide updates on the progress of task orders. Milestone meetings will be held following the submittal of key deliverables to discuss LADOTD comments and at critical decision points of the study. Our philosophy is that ***frequent communication is essential to meeting and exceeding our clients expectations and delivering projects on schedule.***

STAGE 0 FEASIBILITY STUDIES

Stage 0 studies conducted under this IDIQ will focus on identifying and addressing roadway safety issues for all transportation modes. Understanding the project background is a critical first step to defining the purpose and need of the project.

Data Gathering - Arcadis will gather engineering data necessary to conduct the study including crash and volume data, as-builts, utility information, land-use, previous studies, design criteria, etc. Site visits will also be conducted to validate engineering data and observe safety and operational conditions.

Safety Needs Assessment - Existing and no-build conditions will be evaluated to further define project needs and establish baseline measures of effectiveness (MOEs) for potential alternatives. Historical crash analysis will be a primary component in identifying safety needs. The project team will compile and analyze crash data from the latest three-to-five LADOTD-approved years. ***The Arcadis Team is highly experienced with Highway Safety Manual (HSM) methodologies and network screening tools*** such as CAT Scan to identify historical crash patterns and Level of Safety Service (LOSS). Arcadis develops custom, interactive safety dashboards to quickly process safety data and provide meaningful statistics in a graphical format, which can be used to highlight conditions that need to be improved for a given location.



Depending on the needs of the project, traffic analysis may be necessary to assess existing and future operational conditions. Arcadis' approach to traffic engineering embraces the ideas and philosophies enumerated in the Traffic Engineering Process and Report (TEPR). Our team is experienced with Highway Capacity Manual methodologies and analysis tools (Synchro, HCS, SIDRA) as well as advanced micro simulation (VISSIM) to model complex operational conditions.

Identify / Evaluate Reasonable Alternatives - The ***development and analysis of alternatives will be conducted using a tiered, data-driven approach.*** Tier 1 will involve a high-level evaluation of a wide range of alternatives that aim to address identified safety needs. Screening criteria for Tier 1 analysis will be developed in coordination with LADOTD based on the specific challenges of the project, with input from traffic, safety, design, environmental, and planning disciplines. The Tier 1 analysis will utilize high-level analysis tools such as CAP-X and ICE to evaluate the operational and safety performance of potential alternatives. Alternatives that best address project needs while minimizing impacts will be selected for Tier 2.

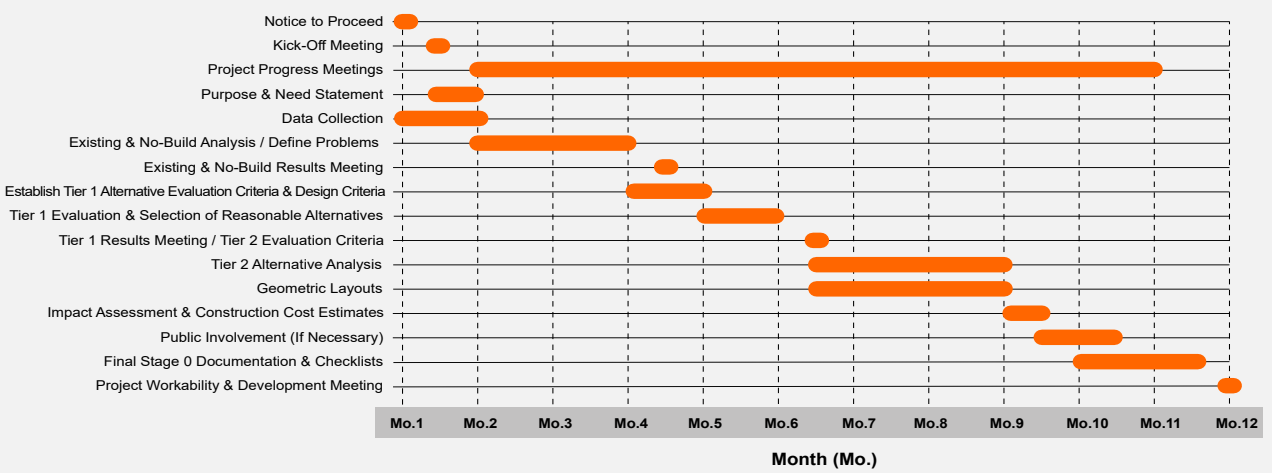
Tier 2 Analysis will involve a more in-depth evaluation and comparison of selected alternatives and will typically include the following:

- quantification of safety and operational benefits;
- geometric layouts of alternatives;
- identification of ROW and utility impacts; and
- high-level construction cost estimates.

The safety performance of proposed alternatives will be quantified using applicable ***HSM Predictive Methods or Crash Modification Factors (CMFs).***

Geometric layouts will be developed for proposed alternatives based on approved design criteria and will contain enough detail to provide a rational method for evaluating and comparing the technical design characteristics, environmental, and monetary aspects of each alternative. Complete streets, multi-modal, and context sensitive solutions will also be considered in alternative development as determined necessary through the feasibility study and stakeholder coordination. ***The Arcadis Team's primary goal is to offer alternatives that meet the project purpose and need while providing cost-effective context sensitive solutions that minimize impacts to environmental resources.***

Stage 0: Safety Feasibility Study - Sample Task Order Schedule



Stage 0 Documentation - The project purpose and need statement, study methodology, list of alternatives considered, and results from the alternatives analysis and TEPR compliant study will be documented in a Stage 0 Feasibility Report. The report will provide the basis and background for the responses recorded on the ***Preliminary Scope and Budget Checklist and Environmental Checklist, compliant with DOTD's Stage 0 Manual.***

ROAD SAFETY ASSESSMENTS

Road Safety Assessments (RSAs) will be conducted by a ***multi-disciplinary / multi-agency team*** to report potential road safety issues and identify opportunities for safety improvements. Road safety issues could be anything that a member of the RSA team perceives as a safety concern during the field review.

Data Gathering - An initial desktop review of the RSA location and available data will be conducted to understand why the location was selected and to identify potential issues that should be investigated in the field. This should also include an analysis of historical crash data if one has not been completed previously.

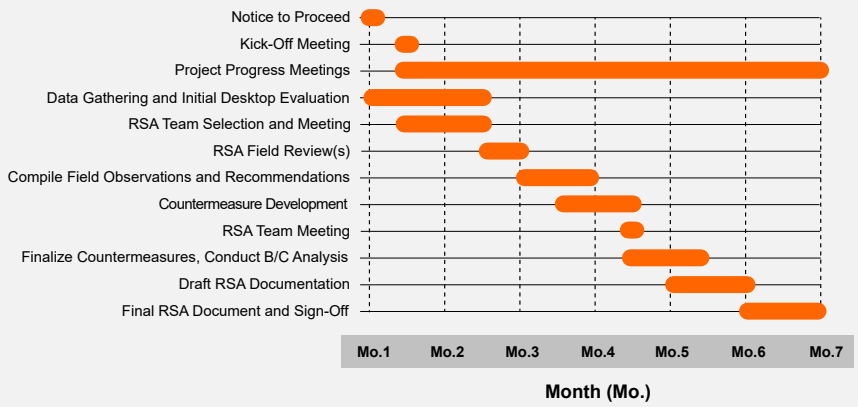
Identify RSA Team - Arcadis will work with LADOTD to select a multi-disciplinary RSA team, which typically includes LADOTD HQ and District staff,

LPA, FHWA, and local police. Additional stakeholders such as transit agencies should also be included as appropriate. A meeting will be conducted with the RSA team to review the project site, background information, and guidance material, and to coordinate the RSA field review.

Field Reviews - RSA field reviews will be conducted in a manner that ensures all potential safety issues can be observed and documented. For example, if crash data shows a high occurrence of crashes during night-time hours, part of the field review should be performed at night when similar conditions can be observed. Similarly, it may be appropriate to document the experience of multiple transportation modes at the site. Walking or biking though the site may provide insights into potential safety issues that are not as apparent when driving through the site or observing from a distance.

Identified Needs and Potential Countermeasures - Following completion of the RSA field review(s), Arcadis will compile all observations and recommendations made by the RSA team. The Arcadis Team will develop a preliminary list of alternative countermeasures that aim to address identified safety issues, including previously planned improvements. The summary of observations and preliminary list of alternatives will be presented to the RSA team to obtain feedback and ensure a mutual understanding of issues and potential strategies. ***Arcadis will work closely with the RSA team to develop***

Road Safety Assessment - Sample Task Order Schedule



implementable context sensitive solutions that are consistent with state and local standards and policies. Countermeasures are typically segmented into short-term and long-term plans to fast-track implementation of low-cost improvements that provide significant benefits. Improvements that are more costly or require further study are typically grouped into long-term plans. In addition to engineering solutions, countermeasures may include education and enforcement approaches to improving safety. Once the RSA team agrees with documented issues and solutions, Arcadis will quantify project benefits and costs associated with proposed countermeasures.

RSA Documentation - RSA findings and recommendations will be documented in a comprehensive report with written acknowledgement from key project stakeholders and roadway owners.

DESIGN OF LOW-COST SAFETY IMPROVEMENTS

We envision that low-cost safety projects will typically include improvements that require little to no right-of-way such as sidewalks, ADA curb treatments, signing and striping, pedestrian and bicycle improvements / enhancements, traffic signal upgrades, guard rail, road diets, restrictive intersections, access management, surface treatments, horizontal and vertical curvature improvements, etc. Based on the nature of the project, varying degrees of survey may be needed, with some projects requiring partial or no survey. During project scoping, the Arcadis Team will coordinate with LADOTD to identify the level of survey that is needed based on the unique needs of each project. It is assumed that all survey services will be provided by others under this IDIQ.

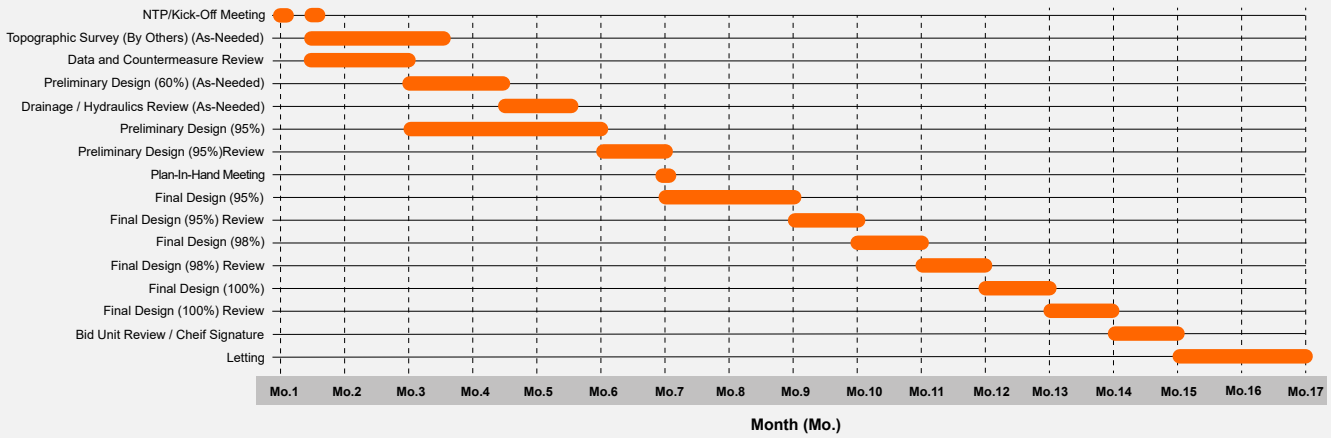
Context Sensitive Design - Arcadis will review project background information and coordinate with LADOTD, LPAs, and local stakeholders to develop ***context sensitive solutions that provide seamless integration with the local community.*** Prior to initiating design tasks, Arcadis will review proposed improvements and identify opportunities to implement additional safety countermeasures that are effective (based on crash modification factors or safety performance functions) while staying within the available project budget.

Design Guidelines - Design plans will be developed in accordance with the latest design guidelines and policies applicable to this IDIQ as referenced in the RFP. Additionally, the following design guidelines may be utilized:

- ADA Standards for Accessible Design;
- AASHTO Guide for the Development of Bicycle Facilities;
- National Association of City Transportation Officials Design Guide; and
- Guide for Planning, Design, and Operation of Pedestrian Facilities.

Design Schedule - Low-cost design projects will typically follow a condensed number of design milestone submittals: 95% Preliminary Plans, 95% Final Plans, 98% Final Plans, and 100% Final Plans. For projects that require

Low-Cost Safety Design - Sample Task Order Schedule



the implementation of subsurface drainage to accommodate roadside improvements such as sidewalks or multi-use paths, a 60% Preliminary Plan submittal will be provided with hydraulics calculations for review. ***The condensed number of milestone submittals will require that initial submittals are more detailed to ensure an efficient and timely completion of project design.***

SAFETY EFFECTIVENESS EVALUATION

Safety effectiveness evaluations seek to determine how a countermeasure or set of countermeasures impacts the safety performance of a roadway. ***The Arcadis Team's approach to conducting safety effectiveness evaluations and "before and after" studies utilizes analysis methods defined in the Highway Safety Manual, best practices around the country, and our experienced team to provide valid and meaningful results.***

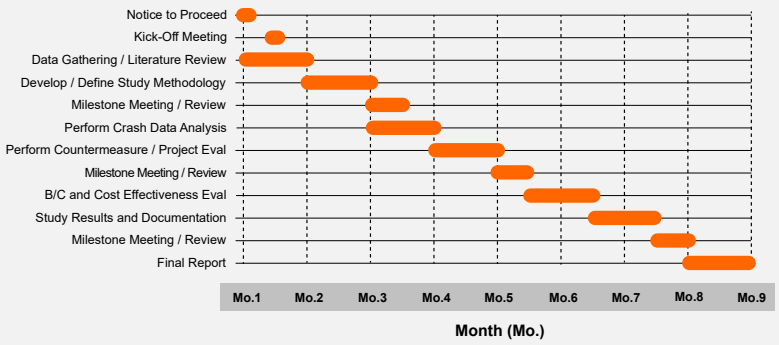
Crash Data Gathering and Preparation - Our team is intimately familiar with LADOTD crash data and definitions through our long history of delivering safety projects for LADOTD, including our current involvement in the 2022 Strategic Highway Safety Plan Update. Arcadis will coordinate with LADOTD and the Center for Analytics and Research in Transportation (CARTS) to obtain all crash data that is needed and ensure that appropriate data format and attributes are in place to support the analysis methodology. Ideally, at least 6 years of crash data (3 years before project implementation and 3 years after) will be obtained to conduct the "before and after" studies. Additional data requirements will include traffic volume data, project duration and cost, monetized state specific values of crash severities, and literature review of best practices.

Establish Study Methodology - Prior to initiating detailed analysis tasks, Arcadis will work closely with LADOTD and stakeholders to define the methodology that will be used in the analysis, which will be documented in a technical memorandum that will be approved by LADOTD and stakeholders.

Effectiveness Evaluation - Initially, a crash data analysis will be performed for all locations for all crashes and/or specific crash types and then summarized in ***interactive data dashboards.*** Subsequently, to evaluate the effectiveness of the countermeasures (or set of countermeasures), an ***"Empirical Bayes Before and After"*** analysis will be performed to estimate the change in crashes (before vs. after) by severity using the previously gathered data.

Lastly, a benefit cost and cost effectiveness analysis will be performed using the results of the before and after analysis, monetized value of crashes by severity, and project implementation cost. The benefit cost analysis will show if the monetized safety benefits outweigh the cost of project implementation. The cost effectiveness analysis will estimate the expected reduction in crashes for every dollar spent on implementing specific project(s) and/or countermeasure(s). All results will be documented in a final technical report.

Safety Effectiveness Evaluation - Sample Task Order Schedule



Sections 19-23

BENEFIT COST ANALYSIS RESULTS FOR BATON ROUGE PEDESTRIAN AND BICYCLE ROAD SAFETY ASSESSMENTS.

RSA 1: Highland Road at S. Stadium Drive

Site Visit Date/Time
October 21, 2020/AM

Benefit Cost Analysis of Proposed Recommendations and Countermeasures

Louisiana State Unit Cost per Crash

Severity	Cost
Fatal	$1,710,561
Severe Injury	$489,446
Moderate Injury	$173,578
Complaint Injury	$58,636
PDO	$24,982

Inflation	Years of Service
4%	10 years

Notes:

1. Calculations were based on the estimated crash reduction and the Louisiana Department of Transportation and Development (LADOTD) cost of crashes by severity provided on the LADOTD Highway Safety Section's website: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Pages/Highway_Safety_Analysis Toolbox.aspx

2. Calculations were based on a 10-year life of service and 4% inflation.

3. Construction cost estimates should be considered "planning-level" and do not include the cost of maintenance, engineering studies, or enforcement activities.

4. Crash reductions and safety benefits for this RSA were calculated at the intersection level only.

Short-Term Recommendations and Countermeasures

Recommendations and Countermeasures	Safety Benefits per Year	Safety Benefits (10 Years)	Cost
•Remove obstructions from pedestrian landing areas (e.g., trash cans, newspaper stands).	-	-	-
•Restore striping and implement striping enhancements such as sharrow symbol on mainline and side-street approaches.	-	-	$28,000
•Prohibit ROR movements to address conflicts with bicyclists, pedestrians, and cars.	$12,250	$99,361	$2,000
•Implement actuated pedestrian phases for mainline approaches.	-	-	$28,000
•Add an ADA-compliant bus stop south of intersection for wheelchair access with ramps.	-	-	$9,000
•Recommend that CATS provide dedicated supports for bus stop signage.	-	-	-

Mid-Term Recommendations and Countermeasures

Recommendations and Countermeasures	Safety Benefits per Year	Safety Benefits (10 Years)	Cost
•Install/improve lighting for crosswalks on all approaches.	$12,250	$99,361	$49,000
•Expand and restore landing areas and provide directional ADA-compliant curb ramps, provide directional ADA-compliant curb ramps and detectable warnings.	-	-	$69,000
•Relocate signal pole.	-	-	$27,000
•Adjust storm drain covers to match grade of roadway in vicinity of intersection.	-	-	$27,000

19. Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where a) the consultant selection was made by DOTD, and b) a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
Arcadis	Road	H.011328.2	I-49 South (Ricohoc to Berwick)	$354,111
Arcadis	ITS	H.013868.5	ITS Program Management and Operations (2021)	$249,152
		H.013868.6 (A)	ITS Routine Maintenance Engineering and Inspection (ME&I) (2021)	$140,517
		H.013868.6 (B)	ITS Responsive/Emergency Maintenance Engineering and Inspection (ME&I) (2021)	$58,158
		N/A	PO No. 2000588785 Scott Tower Cable and Grounding Repair, PO No. 2000604740 US61@Coursey/Bluebonnet CCTV Upgrade, PO No. 2000609725 I-10 @ Louisiana Ave CCTV & Elec Repair, PO No. 2000610683 I-110 @ US61 Mini-Split AC Install, PO No. 2000620009 LA 3040 @ Hollywood Rd Elec Serv. Install	$24,500
		H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	$274,030
Arcadis	CE&I/OV	H.011220.6-1	I-10 CBD2 Carrollton-Lafitte Ave and Supplement No. 1	$120,747
		H.012876.6	US 90Z (I-10 Magnolia Street) Supplement No. 1	$39,725
		H.013710.6	I-10: US 61 to Laplace ITS Deployment	$546,289
		H.012901.6, H.010634.6	US90Z (Magnolia St. – Bodenger Blvd.) US 90Z (Bodenger Blvd. – Stumpf Blvd.)	$339,654
Arcadis	Bridge	H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	$1,301,644
Arcadis	Traffic	H.004100.5	I-10: LA 415 to Essen Lane on I-10 and I-12	$707,912
		H.011328.2	I-49 South (Ricohoc to Berwick)	$176,056
		H.003370	I-220/I-20 Interchange IMP & BAFP Access Design Build	$15,000
		H.005121	LA 1/LA 415 Connector	$111,349
		H.972419.1	SHSP Update and Regional SHSP Marketing/Advertising Support	$43,378
		H.012018.6	Adaptive Traffic Signal Design and Implementation	$12,608
		H.014305.1	US 61: Cardinal Drive to Bert Street	$25,330
		H.013322.1	LA 3040 Feasibility Study	$80,000
Arcadis	Environmental	H.009932	US 80 Widening: Vancil Road to Well Road Environmental Assessment	$5,343
		H.002397.2	LA 16 (Pete's Hwy) Interstate 12 Interchange Route	$20,109
		H.011328.2	I-49 South (Ricohoc to Berwick)	$830,877
		4400019338	Rural Bridge Replacement Initiative Phase II – Multiple State Project Numbers – Districts 02, 03, 07, 61, and 62	$532,942

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
Buchart Horn	Environmental	H005257, FAP 9902(518)	Houma-Thibodaux to I-10 Corridor Environmental Impact Statement	$3,284
Buchart Horn		H.009153.2, FAP H009153	US 84 Improvements	$3,000
Buchart Horn	Other	H.010319.5	I-110 Reconstruction from North Street-Plank Road	$66,358
Buchart Horn	CE&I/OV	H.012422.6	I-110 at Terrace Avenue Ramp Modification CA Services	$3,686
Buchart Horn		H.012874.6	I-55 at LA 22 Interchange New Lighting CA Services	$31,993
Buchart Horn	Traffic (Safety)	H.013322	LA 3040 Corridor Improvements Study	$96,346
Buchart Horn		H.041305.1	US 61: Cardinal Drive to Bert Street	$70,000
Buchart Horn	Other	H.010616.5	New I-20 Overpass over LA 544 Lighting	$58,546
Buchart Horn		H.014302.5	US 165 Roadway Lighting	$148,460
Buchart Horn		H.010319.5	I-110 Lighting from North Street to Plank Road	$52,538

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
Digital Engineering	Road	H.013090.5-1	Gretna Downtown Intersection Improvements, Gretna, LA	$14,733
Digital Engineering		H.013094.5	Broad Street-Read Boulevard Pedestrian Improvements, New Orleans, LA	$1,405
Digital Engineering		H.011196.5	Lake Charles SRTS Project - Barbe Elementary, Lake Charles, LA	$88,650
Digital Engineering		H.013083.5	Jefferson Island Sidewalks, Iberia Parish, LA	$77,575
Digital Engineering		H.013789.5	Curve Signing & Striping, Evangeline Parish, LA	$40,680
Digital Engineering		H.013772.5	Curve Signing & Striping, Acadia Parish, LA	$53,495

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
Grey Engineering	N/A	N/A	N/A	N/A

(Add rows as needed)

20. Certifications/Licenses:

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

20. Certifications/Licenses:

STAFF CERTIFICATION CHART SUMMARY	
Names	**Relevant Certification**
ARCADIS STAFF	
Akhil Chauhan, PE, PTOE, PTP, PMP	Professional Engineer – LA / PE.33703 / 09-30-2022 Professional Traffic Operations Engineer – #2544 / Exp. 11/2023 Professional Transportation Planner – #246 / Exp. 12/2021 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 LADOTD – Using Statistics in Highway Safety FHWA-NHI-380071 – Interactive Highway Safety Design Model FHWA-NHI-380075 – New Approaches to Highway Safety Analysis FHWA-NHI-380106 – Highway Safety Manual Online Overview FHWA-NHI-133078 – Access Management Location and Design Louisiana's Complete Steets Peer Exchange Louisiana's Local Road Safety Peer Exchange SIDRA Intersection Roundabout Analysis Workshop Roundabout Design Workshop
Kester Hollier, PE, PTOE	Professional Engineer – LA / PE.34304 / 03-31-2023 Professional Traffic Operations Engineer – #3928 / Exp. 11/2024 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 ATSSA Traffic Control Technician – LA State Specific ATSSA Traffic Control Supervisor Refresher – LA State Specific
David Fulks, PE	Professional Engineer – LA / PE. 30151 / 09-30-2022 Highway Safety Manual Workshop Certificate
Jose L. Rodriguez, PE	Professional Engineer – LA / PE.30492 / 03-31-2023 ATSSA Traffic Control Supervisor Refresher – LA State Specific
Ari Deitch, PE, PTOE, PTP, RSP	Professional Engineer – LA / PE.41842 / 03-31-2022 Road Safety Professional – #37 / Exp.12/2024 Professional Traffic Operations Engineer – #4346 / Exp. 11/2023 Professional Transportation Planner – #690 / Exp. 07/2022 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 LA Transportation Research Center – Highway Safety Manual Workshop FHWA-NHI-133121 – Traffic Signal Design and Operation ATSSA Traffic Control Technician – LA State Specific ATSSA Traffic Control Supervisor – LA State Specific
Thomas Montz, PE, PTOE, PTP	Professional Engineer – LA / PE.39128 / 09-30-2022 Professional Traffic Operations Engineer – #4093 / 07/2022 Professional Transportation Planner – #599 / Exp. 12/2024 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 FHWA-NTI-133078 – Access Management, Location and Design FHWA-NHI Course No. 380032A – Roadside Safety Design FHWA-NHI 380100 – Using IHSDM Highway Capacity Analysis Designing Streets for Pedestrians & Bicyclists Highway Safety Manual Workshop State and Local Road Crash Analysis Workshop SIDRA Intersection Roundabout Analysis Workshop Roundabout Design Workshop ATSSA Traffic Control Technician – LA State Specific ATSSA Traffic Control Supervisor – LA State Specific

Greg Badon	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3 FHWA-NHI-142073 – Putting Policy Into Practice FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process
Jason Morrell, PWS	Professional Wetland Scientist - #2319 / Exp. 04/2023 FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process FHWA-NHI-142047 Water Quality Management of Highway Runoff
Jose M. Rodriguez, RSP	Road Safety Professional – #160 / 05/2022 CMF Certificate – Seeing the Value: Using CMFs to Calculate the benefits of Safety Improvements
Justin M. Maderia, PE, PTOE, PTP	Professional Traffic Operations Engineer – #3455 / 07/2024 Professional Transportation Planner – #604 / Exp. 07/2023 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Max Aguirre, PhD, PE, RSP	Road Safety Professional – #636 / Exp. 08/2024
Yuwen Hou, AICP, PTP, RSP	Road Safety Professional - #658 / Exp. 08/2024 American Institute of Certified Planners – #029180 / Exp.12/2022 Professional Transportation Planner - #640 / 08/2024 Association of Pedestrian and Bicycle professionals – Designing Pedestrian Facilities for Accessibility Regional Crash Data Workshop Road Safety 365: A Safety Workshop for Local Governments Roadside Safety Assessment Train the Trainer Workshop Louisiana's Complete Streets Peer Exchange State and Local Road Crash Analysis Workshop Local Road Safety Peer Exchange
Jody Peace, PE, PTOE, RSP	Road Safety Professional – #224 / 12/2024 Professional Traffic Operations Engineer – #4029 / 12/2024 FHWA-NHI-380100 Using IHSDM
Buchart Horn Staff	
Ghouse Sundke, PE, PTOE	Professional Engineer – LA / PE.39678 / 09-30-2023 Professional Traffic Operations Engineer – #3146 / 03/2023 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Digital Staff	
David LeBreton, PE, PTOE, PTP, RSP	Professional Engineer – LA / PE.32367 / 09-30-2022 Road Safety Professional – 314 / Exp. 07/2022 Professional Transportation Planner – #661 / Exp. 03/2019 Professional Traffic Operations Engineer – #4093 / 11/2024
Frank Liang, PE, PTOE	Professional Traffic Operations Engineer – #3362 / 11/2024 ATSSA Traffic Control Supervisor Refresher – LA State Specific Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Taylor Marino, PE, PTOE	Professional Traffic Operations Engineer – #5026 / 4/2024 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Michael Flynn, PE	Traffic Engineering Analysis Process & Report Modules 1, 2, & 3
Grey Engineering	
April Renard, PE, PTOE, RSP	Road Safety Professional – 357 / Exp. 12/2022 Road Safety Professional Infrastructure– 23 / Exp. 12/2022 Professional Traffic Operations Engineer – #3905 / 07/2024 Traffic Engineering Analysis Process & Report Modules 1, 2, & 3

Transportation Professional Certification Board Inc.

certifies that

Akhilendra Singh Chauhan

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Unless withdrawn by the Certification Board this certificate number 2544 issued in Washington, D.C. is subject to the provisions for renewal

November 24, 2008

Steven D. Hofener
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER

Executive Director

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Akhilendra Singh Chauhan

License/Certificate Type - Number	Expiration Date
PE.0033703	09/30/2022

Status: Active

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Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Project Management Institute

THIS IS TO CERTIFY THAT

Akhilendra S Chauhan

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND SKILLS TO LEAD AND DIRECT PROJECT TEAMS AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE.

Beth Parleton · Chair, Board of Directors

Mark A. Langley · President and Chief Executive Officer

PROJECT MANAGEMENT INSTITUTE CORPORATE SEAL 1969 PENNSYLVANIA

PMP® Number **1444676**

PMP® Original Grant Date **16 August 2011**

PMP® Expiration Date **15 August 2014**

PMI Project Management Institute

Transportation Professional Certification Board Inc.

certifies that

Akhilendra Singh Chauhan

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRANSPORTATION PLANNER

Unless withdrawn by the Certification Board, this certificate number 246 issued in Washington, D.C. is subject to the provisions for renewal

December 1, 2009

Steven D. Hofener
Chair

PTP
PROFESSIONAL TRANSPORTATION PLANNER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Executive Director

Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Akhil Chauhan

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: September 10, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Akhil Chauhan

has participated in

FHWA - NHI Course No. 380071 -
Interactive Highway Safety Design Model (IHSDM)

hosted by

Louisiana Department of Transportation and Development

Date: May 9-10, 2012 ***Hours of Instruction:*** 12

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Akhilendra Chauhan

has participated in

NHI Course No. 380075 –
New Approaches to Highway Safety Analysis

hosted by

LA DOTD/LTRC

Date: October 9-11, 2012 ***Hours of Instruction:*** 18

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Akhil Chauhan

has participated in

FHWA - NHI Course No. 133078
Access Management, Location and Design (3 day)

hosted by

LA DOTD/LTRC

Date: January 6-8, 2015 ***Hours of Instruction:*** 18

Location: Baton Rouge, LA

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Akhil Chauhan

has participated in

NHI Course No. FHWA-NHI-380106

Highway Safety Manual Online Overview

hosted by

National Highway Institute

Location: *Web-Based Course* ***Hours of Instruction:*** *12 hours*

Date: *7/18/2012*

Richard J. Barnaby, Director
National Highway Institute

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Akhil Chauhan

HAS SATISFACTORILY COMPLETED 7 PROFESSIONAL DEVELOPMENT HOURS IN:

Louisiana's Complete Streets Peer Exchange

Mark B. Walsh
Director of Louisiana LTAP Center

January 19-20, 2016
Date

Baton Rouge, Louisiana
Location

Certificate of Attendance

USING STATISTICS IN HIGHWAY SAFETY

PRESENTED BY

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TO CERTIFY THAT

Akhil Chauhan

HAS SATISFACTORILY COMPLETED 6 HOURS OF TRAINING

Dr. Helmut Schneider
Director
Highway Safety Research Group

CERTIFICATE OF PARTICIPATION

IS GIVEN TO

Akhil Chauhan

for having participated in Louisiana's Local Road Safety Peer Exchange

on September 10-11, 2015 in Baton Rouge, Louisiana

DORTHA F. CUMMINS
Director, Louisiana Center for Transportation Safety

NE ROUNDABOUTS

CERTIFICATE OF COURSE COMPLETION

This certifies that ***Akhilendra Chauhan*** has completed

SIDRA INTERSECTION 6
ROUNDABOUT ANALYSIS WORKSHOP

Hours of Instruction: 13

Location: Baton Rouge, Louisiana
Date: September 12th & 13th, 2013

Howard McCulloch

Howard McCulloch, NE ROUNDABOUTS

NE ROUNDABOUTS

CERTIFICATE OF COURSE COMPLETION

This certifies that ***Akhil Chauhan*** has completed

ROUNDABOUT DESIGN WORKSHOP

Hours of Instruction: 13

Location: Baton Rouge, Louisiana
Date: September 10th & 11th, 2013

Howard McCulloch

Howard McCulloch, P.E., NE ROUNDABOUTS

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018 , the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Kester Berk Hollier

License/Certificate Type - Number	Expiration Date
PE.0034304	03/31/2023

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Transportation Professional Certification Board Inc.

certifies that

Kester Berk Hollier

has met all of the requirements established by the Certification Board
to use the title of

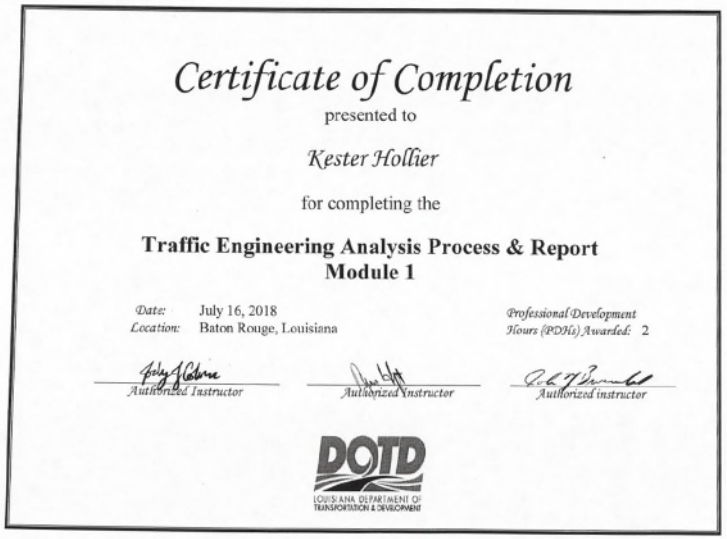
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 3928 issued in Washington, D.C., U.S.A.
November 18, 2015

Kenneth W Askew
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Executive Director



Certificate of Completion

presented to

Kester Hollier

for completing the

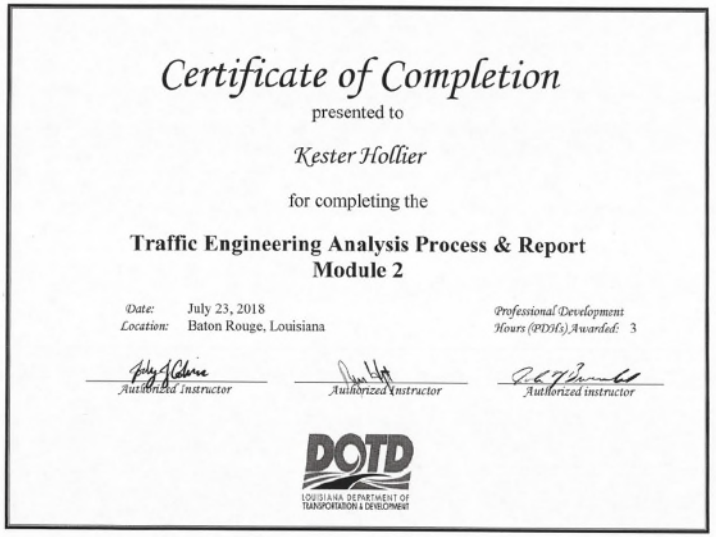
Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Kester Hollier

for completing the

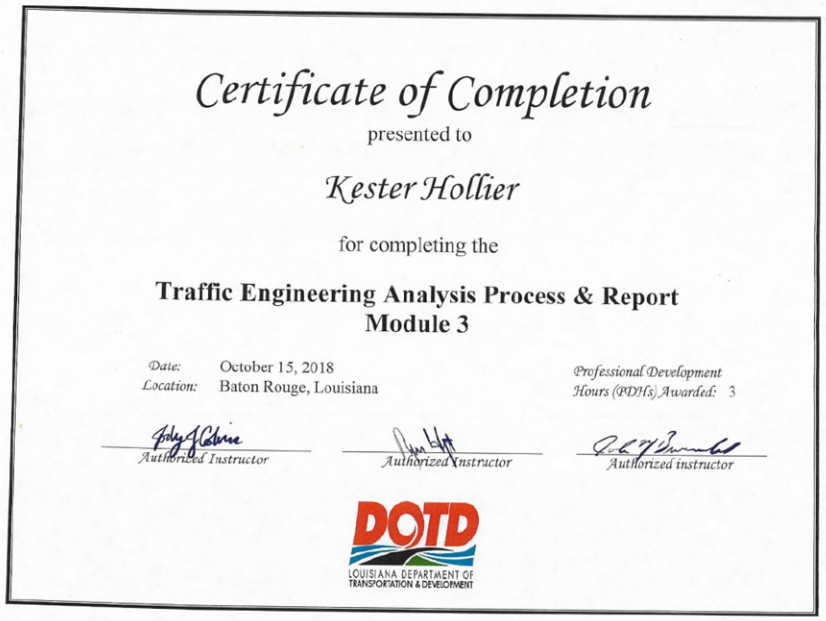
Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Kester Hollier

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Kester B Hollier

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

9/13/2019 to 9/13/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Shingler
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Kester Hollier

has attended

Traffic Control Technician-LA State Specific

Training Course

12/11/2013
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Donna M. Clark
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

Cut Here

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. David Lorie Fulks II

License/Certificate Type - Number	Expiration Date
PE.0030151	09/30/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DOTD

DESTINATION ZERO DEATHS

This certificate of training is presented to

DAVID FULKS

In Recognition of Attending

Highway Safety Manual Workshop

Baton Rouge, Louisiana

18.0 Professional Development Hours

Elizabeth Wemple, PE
Eric Tang, PE
Instructor

June 1-3, 2011
Date

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018 , the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Jose Luis Rodriguez

License/Certificate Type - Number	Expiration Date
PE.0030492	03/31/2023

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

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PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Jose L Rodriguez

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

11/1/2019 to 11/1/2019
Date

Vice President of Member Services

New Orleans, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

ATSSA American Traffic Safety Services Association ATSSA.com

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 12/06/2018 , the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ari J. Deitch

License/Certificate Type - Number	Expiration Date
PE.0041842	03/31/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
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Certificate of Professional Development Hours

presented to

Ari Deitch

for attending the

Highway Safety Manual Workshop

12 PDHs

on

May 2-3, 2013 Baton Rouge, Louisiana

Authorized By

Research, Technology Transfer, Education and Training

Transportation Professional Certification Board, Inc.

certifies that

Ari Jacob Deitch

has met all of the requirements established by the Certification Board to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 37 issued in Washington, DC, USA

12/21/2018

Diane W. Morabito
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ari Deitch

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certification Board, Inc.

certifies that

Ariel Jacob Deitch

has met all of the requirements established by the Certification Board
to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 4346 issued in Washington, DC, USA

11/20/17

Michael K. Park
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Jeffrey F. Paniati
Executive Director

The American Traffic Safety Services Association

Hereby recognizes that

Ari Deitch

has attended

Traffic Control Technician-LA State Specific

Training Course

12/4/2018 to 12/4/2018
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Schuyler
Training & Products Dept. Director

Ryn A. Wentz
President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Ari Deitch

has attended

Traffic Control Supervisor-LA State Specific

Training Course

12/5/2018 to 12/6/2018
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Schuyler
Training & Products Dept. Director

Ryn A. Wentz
President, CEO

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE

Certificate of Training

ARI DEITCH

has participated in

FHWA-NHI-133121 Traffic Signal Design and Operation

hosted by

LA DOTD/LTRC

Date: *August 16-17, 2017*

Hours of Instruction: 11

Location: *Baton Rouge, LA*

Instructor

Instructor

Local Coordinator

Valerie Briggs, Director
National Highway Institute

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Thomas Jude Montz Jr.

License/Certificate Type - Number	Expiration Date
PE.0039128	09/30/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

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Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Transportation Professional Certification Board, Inc.

certifies that

Thomas Jude Montz, Jr.

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 4093 issued in Washington, DC, USA
7/18/2016

PTOE
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Kenneth W. Ackeret
Chair

Jeffrey F. Paniati
Executive Director

Transportation Professional Certification Board, Inc.

certifies that

Thomas Jude Montz, Jr.

has met all of the requirements established by the Certification Board to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 599 issued in Washington, DC, USA

3/15/17

Michael K. Park
Chair

PTP
PROFESSIONAL
TRANSPORTATION
PLANNER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Thomas Montz

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: December 3, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Thomas Montz

has attended

Traffic Control Technician-LA State Specific

Training Course

7/10/2019 to 7/10/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Shrugley
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

The American Traffic Safety Services Association

Hereby recognizes that

Thomas Montz

has attended

Traffic Control Supervisor-LA State Specific

Training Course

7/11/2019 to 7/12/2019
Date

New Orleans, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Jessica Shrugley
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

Training Certificate

PRESENTED TO

Thomas Montz

for successful completion of a webinar presentation on

Traffic Controller (Naztec TS1 & TS2) and Streetwise Training Course

September 5, 2013

8 PDH's

Michael Trueblood, PE, PTOE
Facilitator

Trafficware UNIVERSITY

LAPELS Continuing Professional Development Provider - CPD.0000281

McTrans
Moving Technology

This certifies that

Thomas Montz

Attended and successfully completed the following training

Highway Capacity Analysis

Conducted in Baton Rouge, LA on May 23-24, 2012

12 PDHs

Bill Sampson, Instructor
University of Florida

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

NHI NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

Certificate of Training

Thomas Montz

has participated in

NHI Course No. 133078 –
Access Management, Location and Design

hosted by

LA DOTD/LTRC

Date: **February 5-7, 2013**

Location: **Baton Rouge, LA**

Hours of Instruction: **18**

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

Certificate of Completion

Thomas Montz

Has completed the professional development workshop

Designing Streets for Pedestrians & Bicyclists
April 17-19, 2013

Course instructors for this workshop were Michael Ronkin and Michael Moule, PE, PTOE.

This course counts towards 21 professional development hours (PDH) according to the standards of the American Planning Association, Louisiana Professional Engineering and Land Surveying Board or the American Society of Landscape Architects.

This course was offered as part of the Regional Planning Commission Pedestrian and Bicycle Program, sponsored by the Louisiana Department of Transportation and Development

Michael Moule, PE, PTOE

Michael Ronkin

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

Thomas Montz

has participated in

FHWA - NHI Course No. 380032A
Roadside Safety Design (3 day)

hosted by

LA DOTD/LTRC

Date: November 18-20, 2014 *Hours of Instruction:* 18

Location: Baton Rouge, LA

Instructor

Allison H. Landry
Local Coordinator

Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DOTD

DESTINATION ZERO DEATHS

This certificate of training is presented to

THOMAS MONTZ

In Recognition of Attending

Highway Safety Manual Workshop

Baton Rouge, Louisiana

Elizabeth Wemple, PE
Eric Tang, PE
Instructor

18.0 Professional Development Hours

June 1-3, 2011
Date

LOUISIANA TRANSPORTATION RESEARCH CENTER

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

DESTINATION ZERO DEATHS

Certificate of Training

PRESENTED BY

Louisiana Transportation Research Center

TO CERTIFY THAT

Thomas Montz

HAS SATISFACTORILY COMPLETED 6 PROFESSIONAL DEVELOPMENT HOURS IN:

State & Local Road Crash Analysis Workshop

Director-LTAP

March 11, 2015
Date

Baton Rouge, Louisiana
Location

U.S. Department Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

Thomas Montz

has participated in

FHWA-NHI-380100 Using IHSDM

hosted by
National Highway Institute

Location: Blended WCT
Date: June 12, 2012

Hours of Instruction: 12 hours
CEU: 1.2

Richard J. Barnaby, Director
National Highway Institute

NE ROUNDABOUTS

CERTIFICATE OF COURSE COMPLETION

This certifies that ***Thomas Montz*** has completed

ROUNDABOUT DESIGN WORKSHOP

Hours of Instruction: 13

Location: Baton Rouge, Louisiana
Date: September 10th & 11th, 2013

Howard McCulloch

Howard McCulloch, P.E., NE ROUNDABOUTS

NE ROUNDABOUTS

CERTIFICATE OF COURSE COMPLETION

This certifies that ***Thomas Montz*** has completed

SIDRA INTERSECTION 6
ROUNDABOUT ANALYSIS WORKSHOP

Hours of Instruction: 13

Location: Baton Rouge, Louisiana
Date: September 12th & 13th, 2013

Howard McCulloch

Howard McCulloch, NE ROUNDABOUTS

Wetland Training Institute

This certifies that

Gregory Badon

has completed training based in part on the U.S. Army Corps of Engineers Wetland Delineation Manual Technical Report Y-87-1 (1987 Manual), as provided for in the training materials developed in conjunction with Section 307(e) of the Water Resources Development Act of 1990 for the Wetland Delineator Certification Program

Given at Covington, Louisiana

On September 17-21, 20 12

Course Coordinator

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

GREGORY BADON

has participated in

FHWA-NHI-142073

Applying Section 4(f): Putting Policy into Practice

hosted by

LA DOTD/LTRC

Date: *September 26-27, 2017*

Location: *Baton Rouge, LA*

Hours of Instruction: 14

Darcy Skinner
Instructor

Allison H. Landry
Local Coordinator

Deborah Sue Smith
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

NATIONAL HIGHWAY INSTITUTE

Certificate of Training

GREGORY BADON

has participated in

FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process

hosted by

LA DOTD/LTRC

Date: *September 5-7, 2017*

Location: *Baton Rouge, LA*

Hours of Instruction: 18

Vicky M Bailey
Instructor

Allison H. Landry
Local Coordinator

Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

Certificate of Completion

presented to

Gregory Badon

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Gregory Badon

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Gregory Badon

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: January 30, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Society of Wetland Scientists
Professional Certification Program, Inc

renews the designation

Professional Wetland Scientist

For

Jason E. Morrell

In recognition of all the professional requirements approved by the Society of Wetland Scientists Certification Renewal Program, and verified by the Society's Certification Renewal Review Panel.
Professional Wetland ScientistNumber 2319 issued on 4/1/2013 and recertified on 2/10/2018.
Due to recertify again by 4/1/2023.

Ben LePage, PWS
President

Pat Frost, PWS
Certification Renewal Chair

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE

JASON MORRELL

has participated in

FHWA-NHI-142005 NEPA and the Transportation Decisionmaking Process

hosted by

LA DOTD/LTRC

Date: *December 3-5, 2018*

Location: *Baton Rouge, LA*

Hours of Instruction: 18

Rod Vaughn
Instructor

Allison H. Landry
Local Coordinator

Dawn Schilling
Instructor

Valerie Briggs
Valerie Briggs, Director
National Highway Institute

U.S. Department
Of Transportation
Federal Highway Administration

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellence

National Highway Institute

Certificate of Training

Jason Morrell

has participated in

FHWA-NHI-142047 Water Quality Management of Highway Runoff

hosted by

Georgia Department of Transportation

Date: *October 25-26, 2011*

Hours of Instruction: *12 hours*

Location: *Atlanta, GA*

Instructor

Instructor

Local Coordinator

Richard Barnaby, Director
National Highway Institute

INSTITUTE FOR WETLAND & ENVIRONMENTAL EDUCATION & RESEARCH, INC.

CERTIFICATE OF TRAINING

This certifies that

JASON MORRELL

has completed wetland delineation training in the use of the

CORPS WETLAND DELINEATION MANUAL

Note: This training has been based in part on the U.S. Army Corps of Engineers Wetlands Manual, Technical Report Y-87-1 (1987 Manual), as provided for in the training materials developed in conjunction with Section 307(e) of the Water Resources Development Act of 1990 for the Wetland Delineator Certification Program.

Barbara J. Tiner, President

September 2002
Date

P.O. Box 288, Leverett, MA 01054 (413) 548-8866 www.wetlanded.com

WATERSHED HYDROLOGY
CONSULTANTS

Watershed Hydrology Consultants LLC

Assessing and Advancing Watershed Management

Certificate of Training

This certifies that

Jason Morrell

has successfully completed the

Training Course on the Identification of Intermittent and Perennial Streams

May 21-23, 2012
Atlanta, Georgia

Classroom instruction and field instruction and practice were provided on: (1) The science of stream networks; hydrologic functions of streams and riparian zones; stream maps; and the geomorphologic, hydrologic, and biologic characteristics of headwaters streams; and (2) North Carolina Division of Water Quality, *Methodology for Identification of Intermittent and Perennial Streams and Their Origins, Version 4.11, 2010.*

Instruction provided by: Watershed Hydrology Consultants LLC, 1114 Upper Reach Drive, Wilmington, NC 28409; James D. Gregory; Principal/Senior Scientist and Lead Instructor

James D. Gregory

James D. Gregory, Ph.D., CPSS, PWS
Course Director

Transportation Professional Certification Board, Inc.

certifies that

Jose Manuel Rodriguez

has met all of the requirements established by the Certification Board to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 160 issued in Washington, DC, USA

12/21/2018

Diane L. Morabito
Diane Morabito
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Certificate of Attendance

Jose M Rodriguez

has participated in the online webinar

Seeing the Value: Using CMFs to Calculate the Benefits of Safety Improvements

conducted by:

CRASH MODIFICATION FACTORS CLEARINGHOUSE

Date: **Dec. 6, 2016**

Hours of instruction: **1.5**

Daniel Carter, CMF Clearinghouse manager

Training Coordinator / Instructor

Transportation Professional Certification Board Inc.

certifies that

Justin M. Madecia

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 3455 issued in Washington, D.C., U.S.A.

July 22, 2013

Timothy P. Harpst
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Executive Director

Transportation Professional Certification Board, Inc.

certifies that

Justin M. Maderia

has met all of the requirements established by the Certification Board
to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 604 issued in Washington, DC, USA

7/19/17

Michael K. Park
Chair

PTP
PROFESSIONAL
TRANSPORTATION
PLANNER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

Justin Maderia

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Justin Maderia

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Justin Maderia

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: January 30, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certification Board, Inc.

certifies that

Max Aguirre

has met all of the requirements established by the Certification Board
to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 636 issued in Washington, DC, USA

8/3/2021

Deborah L Snyder

Deborah Snyder
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Yuwen Hou

This certificate hereby qualifies

Yuwen Hou, AICP

as a member with all the benefits of a Certified Planner and a commitment to the AICP Code of Ethics and Professional Conduct

Certified Planner Number: 029180

James M. Drinan, JD
Executive Director

Valerie J. Hubbard, FAICP
President

The American Planning Association's Professional Institute
American Institute of Certified Planners
Making Great Communities Happen

Transportation Professional Certification Board, Inc.

certifies that

Yuwen Hou

has met all of the requirements established by the Certification Board to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 670 issued in Washington, DC, USA

8/19/15

Michael K. Park
Chair

Jeffrey T. Bennett
Executive Director

Certificate of Completion

THE ASSOCIATION OF PEDESTRIAN AND BICYCLE PROFESSIONALS

presents this certificate to

Yuwen Hou

in recognition of attendance at the course

Designing Pedestrian Facilities for Accessibility

An educational program developed by the Association of Pedestrian and Bicycle Professionals in conjunction with the United States Access Board to provide an overview of the Americans with Disabilities Act guidelines and policies for the public rights-of-way.

Hosted by the New Orleans Regional Planning Commission on July 24 & 25, 2014
10.5 hours of continuing education credits earned

Michael Moule, PE, PTOE
APBP Instructor

Dan Jatres
New Orleans Regional Planning Commission

Transportation Professional Certification Board, Inc.

certifies that

Yuwen Hou

has met all of the requirements established by the Certification Board
to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 658 issued in Washington, DC, USA

8/3/2021

Deborah L Snyder

Deborah Snyder
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Yuwen Hou

HAS SATISFACTORILY COMPLETED 3 PROFESSIONAL DEVELOPMENT HOURS IN:

Regional Crash Data Workshop

Director of Louisiana LTAP Center

November 30th, 2016
Date

Alexandria, Louisiana
Location

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Yuwen Hou

HAS SATISFACTORILY COMPLETED 6 PROFESSIONAL DEVELOPMENT HOURS IN:

Road Safety 365: A Safety Workshop for Local Governments

Director of Louisiana LTAP Center

September 29th, 2016
Date

Alexandria, Louisiana
Location

Certificate of Training

PRESENTED BY

Louisiana Transportation Research Center

TO CERTIFY THAT

Yuwen Hou

HAS SATISFACTORILY COMPLETED 6 PROFESSIONAL DEVELOPMENT HOURS IN:

State & Local Road Crash Analysis Workshop

Director-LTAP

March 11, 2015
Date

Baton Rouge, Louisiana
Location

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Yuwen Hou

HAS SATISFACTORILY COMPLETED 7 PROFESSIONAL DEVELOPMENT HOURS IN:

Louisiana's Complete Streets Peer Exchange

Director of Louisiana LTAP Center

January 19-20, 2016
Date

Baton Rouge, Louisiana
Location

Certificate of Attendance

presented to

Yuwen Hou

for attending the

Roadside Safety Assessment Train-the-Trainer Workshop

20 Professional Development Hours

February 23-25, 2016

Baton Rouge, Louisiana

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certification Board Inc.
1627 Eye Street, NW • Suite 600 • Washington, DC 20006 USA • Tel: 202-785-0060 • Fax: 202-785-0609 • www.tpcb.org

March 29, 2016

Jody Carter Peace
Arcadis
4810 Batiste Ln.
Acworth, GA USA 30101

Jody Carter Peace,

It is my real pleasure to transmit the enclosed notice that you have passed the examination to be certified as a *Professional Traffic Operations Engineer* ™. Congratulations!

The Certification Board previously determined you met all other requirements for certification. If there is no balance due on the attached invoice you may now use the title Professional Traffic Operations Engineer ™ and/or the initials PTOE™ in the conduct of your professional practice. If payment is outstanding, you must pay the balance due and only then are you a PTOE™.

While you wait for your certificate, your PTOE certification number is: **4029** A certificate will reach you within 120 days. If you wish your name to appear on the certificate any differently from how it is shown here, please contact Ann O'Neill **immediately** at aoneill@tpcb.org or by fax at 202-785-0609.

Jody Carter Peace

Your initial certification fee covers a three-year period and will expire March 29, 2019. During that period you must keep at least one governmentally issued professional engineering license valid and must report to the Certification Board at this letterhead address should your professional engineering license in any jurisdiction, your membership in any professional engineering society or your employment or engagement as a professional engineer be suspended or terminated for unethical or illegal actions. Any of the above could cause your certification to be revoked, subject to an established appeal procedure.

At the end of the three-year period, your certification will be renewed without examination if you demonstrate you have met the continuing professional development and education activities required. The specific components of the required continuing professional development are described in the enclosed attachment. Begin earning and keeping track of your professional development units so when it is time to renew in 2019, the PDH's will be easily accessible. ITE has developed a web-based Professional Competency Record Keeping System to assist you in keeping such a log. www.ite.org/pdrks/default.asp

Let me again congratulate you on obtaining this certification. We hope you will display your certificate with justified pride and carry out your professional activities in a manner to bring added luster to the title and practice of Professional Traffic Operations Engineer. Should you have questions now or in the future, please do not hesitate to contact me or the staff at the address above.

Sincerely,

Kenneth W. Ackeret, P.E., PTOE
Chair, Transportation Professional Certification Board Inc.

Attachments

U.S. Department
Of Transportation
Federal Highway Administration

National Highway Institute

Certificate of Training

NATIONAL HIGHWAY INSTITUTE
Training Solutions for Transportation Excellenc

Jody Peace

has participated in

FHWA-NHI-380100 Using IHSDM

hosted by

National Highway Institute

***Location**: Blended WCT*

Date: June 12, 2012

***Hours of Instruction:** 12 hours*
CEU:** **1.2

Richard J. Barnaby, Director
National Highway Institute

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/17/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ghouse Sundke Mohammed

License/Certificate Type - Number	Expiration Date
PE.0039678	09/30/2023

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Transportation Professional Certification Board Inc.

certifies that

Ghouse Sundke Mohammed

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 3146 issued in Washington, D.C., U.S.A.

March 24, 2014

Timothy P. Harpst
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Executive Director

Certificate of Completion

presented to

Ghouse Sundke

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ghouse Sundke

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ghouse Sundke

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 29, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 2/15/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. David Gerard LeBreton Jr.

License/Certificate Type - Number	Expiration Date
PE.0037176	09/30/2022

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

Transportation Professional Certification Board, Inc.

certifies that

David Gerard LeBreton Jr.

has met all of the requirements established by the Certification Board
to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 314 issued in Washington, DC, USA

07/17/2019

Diane W. Morabito
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Transportation Professional Certification Board Inc.

certifies that

David Gerard LeBreton, Jr.

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 3333 issued in Washington, D.C., U.S.A.
November 26, 2012

Steven D. Hofener
Chair

PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.

Executive Director

Transportation Professional Certification Board, Inc.

certifies that

David Gerard LeBreton Jr.

has met all of the requirements established by the Certification Board
to use the title of

Professional Transportation Planner

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 661 issued in Washington, DC, USA

03/27/2019

Diane M. Morabito
Diane Morabito
Chair

PTP
PROFESSIONAL TRANSPORTATION PLANNER

Jeffrey F. Paniati
Executive Director

Transportation Professional Certification Board Inc.

certifies that

Frank T. Liang

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 3362 issued in Washington, D.C. U.S.A.
November 26, 2012

Steven O. Hofener
Chair

PTOE
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Executive Director

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Frank Liang
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

10/8/2021 to 10/8/2025
Training Valid Through

New Orleans, LA
Location

Director of Training

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

ATSSA American Traffic Safety Services Association ATSSA.com

Certificate of Completion

presented to

Frank Liang

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: October 7, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Frank Liang

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: October 7, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Frank Liang

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 8, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certification Board, Inc.

certifies that

Taylor Christopher Marino

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 5026 issued in Washington, DC, USA

4/5/2021

Deborah L Snyder

Deborah Snyder
Chair

PTOE PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

Taylor Marino

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: October 7, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Taylor Marino

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: October 7, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Taylor Marino

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 8, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Michael Flynn

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Michael Flynn

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: January 29, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Michael Flynn

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: January 30, 2020
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT


Transportation Professional Certification Board Inc.
certifies that
April C. Renard
has met all of the requirements established by the Certification Board
to use the title of
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER
unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 3905 issued in Washington, D.C., U.S.A.
July 21, 2015
Chair
PTOE
PROFESSIONAL
TRAFFIC
OPERATIONS
ENGINEER
TRANSPORTATION PROFESSIONAL CERTIFICATION BOARD INC.
Executive Director

Transportation Professional Certification Board, Inc.

certifies that

April Renard

has met all of the requirements established by the Certification Board
to use the title of

Road Safety Professional

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 357 issued in Washington, DC, USA
12/09/2019

Diane W. Morabito
Chair

RSP ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Transportation Professional Certification Board, Inc.

certifies that

April C. Renard

has met all of the requirements established by the Certification Board to use the title of

Road Safety Professional Infrastructure

unless withdrawn by the Certification Board and subject to the provisions for renewal.

Certificate number 23 issued in Washington, DC, USA

12/09/2019

Diane W. Morabito
Chair

ROAD SAFETY PROFESSIONAL

Jeffrey F. Paniati
Executive Director

Certificate of Completion

presented to

April Renard

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July1, 2019
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

April Renard

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July1, 2019
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

April Renard

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: July 2, 2019
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

21. QA/QC Plan and/or Work Plan:

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.

22: Sub-consultant information

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
BUCHART HORN ENGINEERS • ARCHITECTS • PLANNERS	18163 East Petroleum Drive, Suite A Baton Rouge, LA 70809-6104	James Q. Dickerson, III, PE, PS jdickerson@bucharthorn.com	1 800 274 2224
digital engineering DIGITAL ENGINEERING & IMAGING, INC.	527 West Esplanade Avenue Suite 200 Kenner, LA 70065	Alan Krouse, PE akrouse@deii.net	504 468 6129
Grey Engineering, LLC	7146 Landmor Drive Greenwell Springs, LA 70739	April Renard, PE, PTOE, RSP april@greyeng.com	225 773 6272

(Add rows as needed)

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank.

Arcadis
10352 Plaza Americana Drive
Baton Rouge, LA 70816
T 225 292 1004
www.arcadis.com

www.arcadis.com

Arcadis

Arcadis North America

@ARCADIS_US