



**Missouri's
Local
Program**
*for community
development*

COVER SHEET

(This must accompany your firm's letter of interest and does not count in the page limit)

Firm's Full Legal
Name:

Alfred Benesch & Company

Firm Contact Name:

Jim Jussel, PE, PTOE

Contact Email
Address:

jjussel@benesch.com

Firm's Mailing Address:

4435 Main Street, Suite 1150

Kansas City, MO 64111

Work Category:

- Roadway Design
- Trails & Sidewalks
- Construction Inspection
- Traffic Engineering & TEAP
- Structures
- Environmental
- Historic Preservation
- Multimodal Planning / Systems and Facilities Design
- Transportation Planning – **NEW CATEGORY**



Traffic Engineering & TEAP - MoDOT LPA 2026-2029

December 12, 2025

Ashley Buechter, PE
Local Program Administrator
MODOT – Local Program
105 West Capitol Avenue
P.O. Box 270
Jefferson City, Missouri 65102

Benesch is pleased to submit our qualifications to support Local Public Agencies across Missouri with Traffic Engineering and TEAP services under the 2026 to 2029 LPA On-Call program. Our team has a long history of partnering with Missouri communities to deliver practical, data-driven solutions that improve safety, mobility and local traffic operations. We understand that LPAs depend on this program for responsive support, clear recommendations and federally compliant traffic engineering that fits local conditions, budgets and timelines. Benesch brings the technical depth, field experience and familiarity with federal and state requirements needed to help LPAs complete studies, implement improvements and advance projects with confidence.

GENERAL EXPERIENCE OF FIRM

Traffic Studies: Traffic data forms the foundation of any study, and Benesch provides complete turnkey data collection services that support LPA needs. We use Miovision cameras for turning-movement counts and maintain in-house equipment including JAMAR tube counters, Blackcat radar counters, turning-movement boards and hand-held radar guns. We also collect vehicle queue data to calibrate analyses and identify unmet demand that may not be reflected in standard counts.

Highway Capacity Software (HCS): Benesch uses HCS for signal warrant evaluations and capacity analysis of signalized intersections, unsignalized locations, roundabouts, freeway weaving and interchange ramps.

Synchro and SimTraffic: These tools allow us to evaluate corridors with both signalized and unsignalized intersections. Our team calibrates models using field-measured queues to ensure the analysis reflects actual traffic performance and supports accurate recommendations for LPAs.

SIDRA: We use SIDRA to evaluate roundabout alternatives, determine lane requirements and assess unique geometries. When a roundabout or multiple intersections need to be assessed within a corridor, our team incorporates VISSIM to capture system-level interaction.

VISSIM: VISSIM supports detailed operational analysis of corridors with multiple intersections, roundabouts or constrained conditions. It shows how vehicles interact at conflict points and helps identify queuing, delay and operational concerns relevant to TEAP studies and LPA operational reviews.

Traffic Impact Studies: Benesch prepares Traffic Impact Studies for municipalities, counties and MPOs throughout the Midwest and regularly supports Missouri communities. Our staff also provides peer review services for local agencies and develops local guidelines to support consistent and defensible review processes.

Traffic Signals: Our team has completed temporary and permanent signal designs in Missouri and multiple surrounding states. In Missouri, our most recent work includes signal design associated with the Diverging Diamond Interchange at I-70 and Oak Grove, which included both temporary and permanent signal layouts.

Geometric Improvements: Benesch transportation engineers deliver intersection improvements ranging from turn-lane additions to roundabouts and interchange modifications. This experience directly supports the full range of Traffic Engineering and TEAP services for LPAs, including feasibility reviews, safety evaluations, operational analysis and design-level recommendations.

FAMILIARITY/CAPABILITY

Benesch has provided traffic engineering services throughout the Midwest and for Missouri LPAs, combining technical expertise with practical experience to deliver innovative, sustainable and cost-effective solutions. Our traffic team has completed traffic studies for high-profile transportation projects using simulation tools such as Synchro/SimTraffic and VISSIM. These tools help us understand traffic operations more accurately and develop recommendations that meet the needs of each project.

ACCESSIBILITY

Our team is ready and able to get to work immediately. Benesch will seek the practical solution for your projects, with attention to schedule and budget. We value schedule management, communication and innovation.

PAST PERFORMANCE

From previous Consultant Performance Evaluation Forms, the most frequent comment, regardless of project manager/liaison, compliments Benesch for meeting commitments, being responsive and for keeping our clients well informed throughout the project. Our goal is for you to consider our team an extension of your staff. **Below are a few recent projects that showcase our team's expertise related to Construction Inspection.**



K-7 & EISENHOWER ROAD, CITIES OF LANSING & LEAVENWORTH, KS: The Cities of Lansing and Leavenworth, Kansas contracted with Benesch to conduct an intersection study to evaluate the existing geometrics, traffic signal phasing/timing and safety analysis. The design year volumes included the addition of a proposed Quik Trip convenience store located in the northwest corner of the intersection. The study identified geometric modifications and signal phase changes to improve the overall traffic operation and address the critical movements that were identified through the crash data analysis. The intersection has recently been selected for state funds to improve the geometrics and a new traffic signal. Benesch completed the design of the geometrics and traffic signal modifications, which are currently under construction. The traffic signal design included Operation Green Light Standards.



OAK GROVE DIVERGING DIAMOND INTERCHANGE, MISSOURI DOT: Benesch designed the retrofit of a diverging diamond interchange (DDI) at Interstate 70 & Route F/H. The project also included the design of bridge rehabilitation, traffic signals, traffic control, pavement marking and signage, ITS, interconnect design and street lighting design. One challenge presented by this project is the need to maintain traffic throughout construction. Benesch designed staging to balance accessibility of the location while minimizing construction time and cost. The traffic control plans included utilizing a temporary DDI prior to constructing the final geometrics. The project included traffic signal, street lighting and fiber interconnect design.



FRONT STREET CORRIDOR IMPROVEMENTS, CITY OF KANSAS CITY, MO: Front Street, from I-35 to Universal Avenue, is a highly industrialized route lacking both vehicle and pedestrian capacity. The first phase of the project addresses the intersection at Chouteau Trafficway and reconstructs a four-lane section east to Universal Avenue. Included in the project scope are traffic analysis, geometric revisions and signals at the intersection at Chouteau Trafficway. Additional capacity will be achieved at the intersection with dual left-turn lanes at all four approaches. Curb and gutter, new storm sewer drainage, sidewalk and a trail will be added as well as new street lighting and mountable medians to address heavy truck traffic.



US-24 ROUNDABOUTS AT K-113, KANSAS DOT: The City of Manhattan, Riley County and KDOT identified the need for geometric improvements along US-24 at the K-113 intersection due to a history of severe crashes driven by limited sight distance, high speeds and increased traffic from local growth. To address these safety concerns, Benesch completed the K-113 corridor study, which identified a new roundabout at the US-24 and K-113 intersection as the preferred improvement. Benesch was then engaged to design the roundabout, providing a full scope of services including survey, traffic analysis, traffic control, permitting, lighting, utilities, drainage and box extensions/replacements. The project required proactive coordination with the City, County, KSU, Fort Riley and local businesses. Benesch also delivered 3D modeling and public engagement support, contributing to the long-term implementation of the 2019 Seth Child Road Corridor Management Plan.



8TH AVENUE CORRIDOR STUDY AND CONCEPTS, CITY OF TOPEKA, KS: Benesch led the 8th Avenue Corridor Study for the City of Topeka, evaluating needed repairs, lane configurations and traffic operations along SE 8th Avenue from SW Topeka Boulevard to SE Madison Street. The study confirmed the corridor could shift from five lanes to three while maintaining acceptable operations and provided a pavement marking plan with options for bike lanes and restriping. Benesch's work supported a successful KDOT Cost Share Grant and advanced into design, including pavement repairs, new ADA sidewalk ramps and traffic signal modifications. The team also delivered updated signal timings to improve traffic flow and used innovative tools such as StreetLight data and drone-based bridge deck assessments to efficiently document conditions and guide design decisions.

QUALIFICATIONS OF PERSONNEL

Our experienced team is tailored to the needs of MoDOT and Missouri LPAs. Every member on our team has extensive experience on similar projects and has the capacity to devote the needed time and effort to ensure this project is completed successfully.



JIM JUSSSEL, PE, PTOE – PROJECT MANAGER: Jim's project experience includes traffic impact studies, pedestrian safety studies, traffic signal design, roundabout analysis and design, roadway design, street lighting and intersection geometric improvements. His experience also includes integrating traffic calming measures in traffic design and creating pavement marking and signing plans. Jim currently supports KDOT Traffic Control unit provide designs and reviews of traffic management plans. Jim serves as the Traffic Group Manager overseeing a team that provides traffic simulations, impact studies, traffic control, pavement marking and signage design, for State DOTs and local entities throughout the region.



MICHAEL ROMERO, PE – TRAFFIC ENGINEER: Michael specializes in traffic engineering with experience in signing, striping, traffic control and construction phasing for transportation projects. His work includes mid-block crossings, bicycle lanes, roadway reconfigurations and school-area safety improvements. He manages operational challenges such as maintaining emergency access, coordinating closures and improving circulation on constrained corridors. His civil engineering background and project leadership support clear, efficient, well-coordinated delivery.



KARINA SCHELLER, EIT – TRAFFIC DESIGNER: Karina brings four years of experience in traffic engineering and design. She specializes in corridor, roadway and intersection projects, developing sidewalk, traffic signal, traffic control and pavement marking/signage plans. She has performed capacity analysis, intersection safety studies, pedestrian safety evaluations and analyses of roundabouts and diverging diamonds. She is proficient in tools including Synchro/SimTraffic, SignCAD, Highway Capacity Software, Streetlight Data, AutoCAD, MicroStation, GeoPak and Open Roads Designer.



GRACE HUERTTER, EIT – TRAFFIC DESIGNER: Grace brings a three-year background in traffic engineering, having performed traffic impact studies, pedestrian crossing evaluations and interchange studies. Her expertise includes creating signing, pavement marking, traffic control and detour plans for roadway and highway projects. Proficient in tools like Synchro/SimTraffic, Highway Capacity Software, OpenRoads Designer, Civil3D and SignCAD, Grace has contributed to projects for State DOTs and local entities, underscoring her adaptability and commitment to community-focused work.



JOHN MOSCHOVICH, PE, PTOE – TRAFFIC ENGINEER: John has both design and field experience on a variety of our high-profile projects. His project experience includes traffic impact studies, pedestrian safety studies, traffic signal design, roadway design, street lighting and intersection geometric improvements. His experience also includes analyzing current and future needs to provide the best design with best level of service.



MARTHA MOORE, PE, PTOE – TRAFFIC ENGINEER: Martha's 36 years of experience span all aspects of multimodal transportation planning and traffic engineering, including corridor analysis and concept design, safety studies, operations studies, traffic signal design, signing and pavement marking design, transportation modeling and traffic impact and capacity analysis. She has led numerous corridor planning and implementation studies for DOTs serving users of all ages and abilities and has successfully conducted many public meetings.



SARAH CYRS, PE, PTOE – TRAFFIC ENGINEER: Sarah is a project engineer with experience in planning, design and construction, giving her a strong understanding of multimodal traffic and roadway needs. She specializes in Phase I work, including traffic analysis, intersection design, pedestrian and bicycle facilities and public involvement. Proficient in Synchro, Sidra, VISSIM, Vistro, MicroStation and OpenRoads Designer, she communicates project concepts through graphics and public materials. Her work includes corridor studies, multimodal improvements, safety evaluations and stakeholder engagement.



DAN CARPENTER, PE, PTOE – TRAFFIC ENGINEER: Dan brings experience in safety, multimodal planning and traffic operations. He has led Vision Zero, SS4A and Safe Routes to School programs, managed traffic engineering and maintenance divisions and supported CIP project delivery and public outreach. His technical background includes roadway design, traffic signal design, safety studies and development review for municipal and state clients. Dan combines leadership, policy coordination and hands-on engineering to deliver practical, community-focused transportation solutions.

Thank you! Thank you for your consideration. We appreciate the opportunity to support Missouri LPAs with Traffic Engineering and TEAP services. Our team is ready to assist with safety reviews, operational analyses and traffic engineering needs across the state. Please contact us with any questions.

Robert R. Krewson, PE
Sr. Vice President

Jim Jussel, PE, PTOE
Project Manager



WORKFORCE DIVERSITY

Benesch continues our commitment to identify ways to increase inclusivity and opportunity through hiring and retention programs. At Benesch we believe that promoting inclusion within our staff isn't just the smart thing to do from a business perspective—it's the right thing to do. Every person should enjoy the opportunity to come to work, add value and feel valued for their contributions.

Benesch has taken intentional steps to attract diverse candidates and create inclusive environments so employees can become embedded in the organization.

Some of those include:

- Intentional recruitment and organizational support.
- Meaningful leadership and employee training.
- Employee Resource Groups
 - Benesch Pride, for LGBTQ+ identified employees and allies
 - Benesch Cultural Alliance, for minority/culturally diverse employees
 - Benesch Strong Divers-ability, for employees impacted by disabilities
 - Women of Benesch, which connects women across the company

ROADWAY

Hundreds of highway and minor roadway miles have been designed by Benesch engineers. We routinely work with state DOTs and their FHWA counterparts to rehabilitate, modify or create new roadways and bridges that effectively connect people and places. Our transportation projects traverse farm lands, urban cities and everything in between.

We provide much more than geometric solutions, however. You can consider Benesch a one-stop shop for all civil infrastructure needs. Within our team, we have staff experts in areas such as MOT, drainage, traffic engineering, electrical engineering, surveying and geotechnical.

Quality is our top priority. We deliver plans that are quality-checked for constructability, enabling clients to use a low-bid system to their advantage. In addition, we go the extra mile to ensure minimal change orders and field issues during construction. **Our areas of expertise include:**

- Highway and Toll Roads
- Interchanges
- Utility Coordination
- Horizontal and Vertical Alignment
- Drainage
- Maintenance of Traffic
- Agency Coordination/Permitting
- Surveying
- Roundabout Design
- Traffic Signals
- Sidewalk/Trails
- Lighting Design

GRANT ASSISTANCE

For decades, our team of experts has successfully completed grant applications for a wide variety of projects with values totaling in the millions. Our expertise has helped clients stretch their budgets with creative funding strategies that combine and maximize potential available dollars. We bring you an experienced team well-versed in all facets of grant applications and ready to assist with your next project.

VALUE ENGINEERING

Value Engineering (VE) is one of Benesch's core services, and we have a rich history of project success in this area. Benesch began practicing VE in 1979. In 1989, we were the first consulting engineering firm to receive the SAVE International Excellence in Value Engineering Award, which recognized ten years of outstanding contributions to the practice of VE.

Over the last 30 years, Benesch has been able to positively impact our clients' projects by saving millions of dollars, sharpening project schedules and developing innovative ways to manage life-cycle costs, all through the application of VE principles.



TRAFFIC ENGINEERING

The Benesch team combines traffic engineering expertise with real world experience to develop innovative, practical, sustainable and cost-effective solutions. Our team is committed to staying at the forefront of the latest traffic engineering technologies. We use advanced tools like Miovision traffic cameras and sophisticated in-house simulation software such as Synchro, SimTraffic, Vissim and HCS. These tools enable us to better understand design implications and meet project needs. Benesch engineers strive to develop practical, sustainable solutions. Tackling traffic issues from the “demand side” to encourage multi-modal and environmentally friendly solutions is just as important as looking at traditional “supply side” solutions that involve physical improvements. **Our areas of expertise include:**

- ITS Management and Design
- Electrical Engineering
- Noise Studies
- Traffic Impact Studies
- Origin and Destination Studies
- New and Modernized Signal Design
- Highway Operational Analysis
- Travel Demand Modeling
- Safety Studies
- Structures
- Access Management Studies
- Gap Analysis
- Traffic Signal Coordination and Timing (SCAT)
- Signal Timings
- Intersection Analyses
- Corridor Progression Analysis
- Level of Service Analysis
- Traffic Data Collection
- Maintenance of Traffic Plans

GENERAL CIVIL & STRUCTURAL ENGINEERING SERVICES

Benesch prides itself on providing a wide array of civil engineering services, quality based engineered solutions and client satisfaction. Our expertise lies in most all areas of civil and structural engineering including geotechnical engineering, environmental assessments, sustainable design and value engineering. Our responsiveness to short term, long term and emergency needs is well known among our clients. In addition, our clients will tell you that the attention to detail in our engineering documents sets the standard for quality.

The Benesch team resume includes a variety of civil/structural studies and designs for many clients across the United States. Our experience in municipal engineering provides a solid knowledge base that will be a valuable resource. Additionally, our work with numerous small and large scale commercial developments is particularly important. Many of our projects have involved public involvement and environmental permitting efforts that required specialists within Benesch. Further, managing and improving infrastructure facilities requires knowledge not only of pertinent design standards but also sustainability. Our engineers are well versed in designs that accommodate all types of users including complying with the Americans with Disabilities Act and the pursuit of LEED certified projects.

STRUCTURAL

From road stream crossings to high-profile arch bridges, the structural team at Benesch has designed thousands of bridge structures ranging from 35 to 2,000 feet. Our engineers are proficient in the study and design of continuous complex structures, including plate girder, tied arch, segmental box girder, continuous/cantilever truss and cable stay bridges. In addition, we specialize in high order finite element analysis associated with various forms of nonlinear and buckling behavior. We are relentless in the pursuit of industry advancements, and pride ourselves on implementing innovative solutions. **Our areas of expertise include:**

- Simple, Typical and Complex Bridges
- Major River Crossings
- Railroad Bridges
- Pedestrian Bridges
- Inspections and Ratings
- Bridge Retrofit and Rehabilitation
- Retaining Walls
- Culverts
- Seismic Analysis
- Bridge Modeling
- Structural Survey
- Value Engineering

CONSTRUCTION MANAGEMENT

Benesch provides construction services for roadway, bridge, aviation, railroad and building projects. Our construction staff has years of experience overseeing contractors, coordinating subconsultants, testing materials and executing complex staging plans. We continuously monitor all phases of a project's development, from data collection and field surveys through contract documents and construction observation.

Through hundreds of DOT and LPA federal aid projects, we have the experience and background to work successfully with the FHWA, MoDOT Construction staff and Local Public Agencies. We are a full-service provider that brings a proven approach, based on efficient operations and utilizing versatile, knowledgeable, experienced staff who understand the work being performed and the construction engineering services required to satisfy project oversight requirements.

We have experts on staff who are able to provide assistance should major changes or unanticipated situations arise. Besides construction, our staff includes designers and scientists ready to provide support. Their proximity and accessibility allows for rapid response and accurate advice. This ultimately leads to successful projects, prevents surprises, and helps avoid lengthy delays. **Our areas of expertise include:**

- Construction Observation
- Design-Build
- Shoring Tower Design
- Schedule Management
- Earthwork Quantities
- Temporary Earth Retention Systems
- Cost Management
- Pavement Quantities
- Demolition Plans
- Structural Engineering
- Value Engineering



MECHANICAL / ELECTRICAL / PLUMBING

Benesch offers a full spectrum of MEP services to our clients. Professionals in our Kansas City office provide design, consulting and sustainable solutions for mechanical, electrical and plumbing systems. Our services include design drawing preparation, specifications, and cost estimates. We bring a strong foundation of industrial and commercial engineering experience, including both new construction and the renovation of existing facilities. Over the past twenty years we have completed projects in wastewater treatment plants, hospitals, schools, military facilities, vehicle maintenance buildings, telecommunication facilities, correctional institutions and various commercial buildings.

Mechanical Practice Areas:

- Heating, Ventilating and Air Conditioning Systems
- Exhaust Systems
- Chilled and Heating Water Systems
- Facility Assessment & Energy Audits
- Life Cycle Cost Analysis
- Industrial Ventilations
- Energy Recovery
- Temperature Controls
- Solar Thermal Systems
- Direct Digital Control (DDC) Systems

Electrical Practice Areas:

- Power Distribution
- System Analysis, Assessment and Planning
- Interior and Exterior Lighting Design and Controls
- Energy Code and LEED Compliance
- Fire Alarm Systems and Emergency Power Systems
- Paging, Public Address, and Sound Systems
- Uninterruptible Power Supply
- Programmable Logic Controls
- Facility System Controls and SCADA Systems

Plumbing Practice Areas:

- Facility Plumbing Systems Design
- Process Systems Piping
- Site Utilities and Yard Piping Systems
- Distribution Systems
- Storm Water Systems



STORMWATER MANAGEMENT

We develop stormwater solutions that provide value while respecting the environment. Our engineers and professional staff provide clients with a host of services including stormwater design and modeling; comprehensive planning and management services; and Low Impact Development (LID) expertise. Whether on a watershed-wide or site-specific project, Benesch has the unique ability to balance function, cost and aesthetics while ensuring compliance to all local and regulatory requirements.

Using advanced software and analytical tools, our staff combines technology with expert engineering knowledge to ensure our designs offer value-based solutions to meet our client's project needs. Whether that be for building sites or roadways and infrastructure, Benesch's team of planners, hydrologists and civil and hydraulic engineers are prepared to assist with your flooding, water quality, regulatory issues or any other stormwater need. **Our areas of expertise include:**

- AAL / BRE Analysis
- Alternatives Analysis
- CIP Development
- Closed System Modeling
- Dams
- Environmental Permitting
- FEMA Mapping
- H&H Modeling
- Levees
- Master Planning
- MS4 Water Quality
- Stormwater Management
- Stormwater Design

GEOTECHNICAL

Our geotechnical engineers, geologists, and scientists specialize in identifying solutions that mitigate construction challenges and make good business sense. Our goal is to balance initial construction capital costs and the ongoing operating costs over the life of the proposed structure or transportation system. Benesch's proactive approach to construction material design can reduce or eliminate unforeseen construction delays and overall construction costs. We promote optimum service life for the structure or transportation system once it is in operation. Benesch has the capability to service any project location.

Our materials testing laboratory is certified by the American Association of State Highway and Transportation Officials (AASHTO). Our technicians are experienced in the laboratory test procedures necessary to evaluate the pertinent engineering properties of foundation materials for design and certified in concrete, asphalt, aggregate and soils testing by NICET, ACI and several state DOTs for materials testing during construction.

ENVIRONMENTAL

At Benesch, we bring substantial local, regional and national environmental consulting experience and strategic insights to our clients. Our environmental specialists provide due diligence services; Brownfields and property development assessment; hazardous building materials consulting to include asbestos, lead based paint, IAQ; regulatory compliance; and permitting.

As complex environmental issues can have major impacts on project budgets and schedules, Benesch develops innovative and cost-effective solutions to environmental risk management challenges. We assist our clients by finding solutions that offer a balance between environmental stewardship and results-based business practices.

Our areas of expertise include:

- Compliance and Due Diligence
- Investigations and Remediations
- NEPA Services
- Natural Resources
- Facilities
- Brownfields / Hazardous Materials
- Noise Analysis
- Public Involvement
- Threatened and Endangered Species
- Wetlands