



## COVER SHEET

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

Firm's Full Legal  
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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**

TREKK is committed to delivering transportation projects that positively impact Missouri. Every day, we leverage our entrepreneurial culture, technology and innovation to engineer solutions that support the growth and restoration of the communities we serve. We call this IMPROVING LIVES.

As a pre-qualified MoDOT consultant and approved firm on the current Local Public Agency (LPA) on-call list, TREKK's transportation team has been involved in numerous projects across Missouri as both a prime consultant and sub-consultant. We appreciate each opportunity to serve the local agency, MoDOT and the citizens of Missouri. Being selected as one of your Traffic Engineering & Traffic Engineering Assistance Program (TEAP) on-call providers would allow us to expand our opportunities to provide the first-priority customer service that you deserve.

### GENERAL EXPERIENCE OF FIRM

Since 2002, TREKK has served Missouri residents providing quality transportation design services focused on delivering commonsense, holistic solutions. We are a full-service firm offering roadway, structural, hydraulics, traffic, drainage, erosion control, utility coordination, permit assistance, construction engineering and inspection, and both traditional land survey and mobile LiDAR survey.

TREKK continues to make significant investments in our transportation team, growing to meet our clients' full-service consulting needs by adding expertise in roadway, structural and traffic design. We have also added recently retired MoDOT staff to bolster our experience and commitment to quality service.

TREKK's traffic engineers provide a variety of services, ranging from data collection to design. Our team also develops traffic safety studies and analyses that consider current and future conditions and effects on the traveling public. We have used FHWA's STEP (Safe Transportation for Every Pedestrian) guidance to help determine best practices for pedestrian safety, and MoDOT's SAFER tool to help ensure a safe system approach is considered in all phases of every project.

Using our traffic data collection equipment, Miovision Scout cameras, we can safely and accurately collect traffic data at intersections and along roadway segments. The video data collected by this camera technology equips us with the information needed to determine cost-effective and feasible solutions. This efficient technology also eliminates the need for manual traffic counts, keeping our staff safely out of the way of traffic, especially during peak periods. This data collection provides accurate and current traffic volumes that can then be used to conduct a safety analysis with feasible results.

Another important part of safety analyses are road safety audits, which include a field examination of

current conditions by an independent, multidisciplinary team. Including team members knowledgeable in design, construction, maintenance, planning and enforcement are key to identifying issues that may not be readily identified in data alone.

Once data is collected, our traffic engineers can assess corridor safety. We utilize existing crash reports to identify patterns and areas in need of safety improvements. We can then propose commonsense countermeasures to address safety concerns in these areas. Using the Highway Safety Manual (HSM) and the Interactive Highway Safety Design Manual (IHSDM) Software, we can calculate an expected number of crashes for each potential countermeasure. This helps our team demonstrate how the countermeasures compare in terms of a cost/benefit ratio so our clients can make informed decisions about project programming priorities that focus on maximizing user safety while considering the budget.

TREKK tailors this safety-focused approach to projects of various sizes and complexities. Our professional traffic engineers stay current with industry standards, software, design manuals and client requirements, providing relevant and accurate recommendations.

### FAMILIARITY/CAPABILITY

TREKK's team of more than 80 design professionals, including more than 15 LPA certified professionals, understands the requirements and expectations to deliver LPA projects. Thanks to the extensive experience among our project managers, TREKK can guide project teams through the project development process. Project teams collaborate effortlessly within TREKK, and with our clients, to deliver high-quality plans.

Our team of roadway, traffic, structural and hydraulic engineers have in-depth familiarity with LPA programs, design standards and specifications. Our team takes great pride in delivering safe and reliable engineering design services to Missouri residents.

### ACCESSIBILITY

Given our experience as a MoDOT LPA on-call partner, we understand that on-call requests typically require urgency and heightened responsiveness. Delivering multiple, small projects within the same year is second nature at TREKK. With offices in Kansas City, St. Louis, Columbia and Springfield, the TREKK team will be responsive and remain flexible to our clients' needs across the state.

TREKK uses a variety of tools and technologies to remain responsive to our clients, ranging from in-person meetings to using technology to remain in contact even from a distance. We use Microsoft Teams to conduct virtual meetings, as well as the chat feature for quick conversations among team members. Our team employs

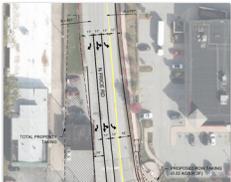
several tools to monitor project schedules, including Microsoft Project. TREKK is committed to meeting or exceeding your schedule demands as they arise.

### PAST PERFORMANCE

TREKK is proud of our past performance on LPA and MoDOT projects. Examples of our recent experience include:



**N Highway 67 & Patterson Road | City of Florissant, MO.** TREKK helped conceptually analyze, complete safety and traffic studies and apply for and obtain STP-S grant funding for this roadway improvement project. We conducted a traffic impact study, including analysis traffic volumes and crash data. TREKK is currently designing recommended improvements including lane widening, a two-way left turn lane, resurfacing, pedestrian facilities and the shifting of entrances. This project was federally funded through the LPA Program.



**Olive Intersections Improvements | City of Olivette, MO.** TREKK helped Olivette to conceptually analyze and apply for grant funding for improvements at two intersections. We conducted traffic counts, safety analysis and vehicle movements; prepared a traffic study to analyze the two intersections' level of service and delay; and provided conceptual design to identify safety concerns and possible improvements. TREKK is providing final design of the recommended improvements. This project is funded through MoDOT's Cost Share Program.



**Route 115 (Natural Bridge Road) Safety & Signals | MoDOT St. Louis District.** TREKK, under a MoDOT on-call contract, designed 14 traffic signals to replace existing signals on Route 115. The project included ITS and ADA improvements, utility coordination and pavement markings. We also completed a study and design of safety and maintenance improvements. This included review of the Road Safety Audit (RSA) completed by MoDOT and concepts to improve driver and pedestrian safety. The design included three roundabouts, five Rectangular Rapidly Flashing Beacons (RRFB) and corridor traffic calming strategies. This project was federally and state funded.



**North Hanley Road Study | MoDOT St. Louis District.** TREKK conducted a RSA and traffic and safety operational analysis and developed a concept study report for North Hanley Road, between Evans Avenue

north of I-70 to University Place Drive south of I-70. The project developed detailed recommendations to enhance pedestrian safety, including constructing roundabouts to improve traffic flow and pedestrian safety, installing RRFBs and adding a leading pedestrian phase to existing traffic signals. Extensive stakeholder engagement and outreach sessions were an integral part of the project. This project was federally state funded.



**39N Old Olive Complete Street | City of Creve Coeur, MO.** TREKK helped develop the Great Streets plan for Old Olive Street Road, aimed at transforming the corridor into a Complete Street with improved traffic flow and multi-modal connectivity. This mile-long reconstruction supports the 39N District's vision of a vibrant, livable community. TREKK analyzed existing mobility, safety, circulation and connectivity and designed roadway and multi-modal improvements and traffic signals. This locally funded project helped the city receive federal funding through the LPA Program for the remainder of design and construction.



**Olive and Lindbergh Interchange | St. Louis Economic Development Partnership.** TREKK wrote the funding application and designed safety and operational improvements for this regionally significant interchange.

Our services included roadway, drainage, signal and lighting design; signing and striping; green infrastructure improvements; and construction management. This project was federally funded through the LPA Program.



**63rd Street Corridor Study | Mid-America Regional Council/City of Kansas City, MO.** TREKK provided traffic engineering services for a corridor development study on 63rd Street in Kansas City. The study

analyzed the current conditions and patterns of all transportation modes, including public transit, automobiles, bicycles and pedestrians. TREKK was responsible for traffic data collection, existing capacity analysis, parking lot usage analysis, concept alternative development and anticipated capacity analysis of the proposed configurations. This project was federally funded.



**77th Street and Metcalf Avenue Traffic Signal | City of Overland Park, KS.** TREKK is improving the safety and operations for all modes of traffic at this busy intersection, which has experienced a high crash

rate and rate of severe crashes. The project includes

intersection improvements to provide left-turn lanes, signal design and improving pedestrian access with raised medians and sidewalk upgrades. This project is locally funded.



**St. Louis County Action Plan for Biking and Walking | St. Louis County Department of Transportation.** TREKK helped develop a county-wide action plan to provide a guide for improving walking and biking conditions in St. Louis County. We developed facility and safety improvement concept plans for 12 corridors equaling over 35 miles of right of way. This project was locally funded.

### QUALIFICATIONS OF PERSONNEL

TREKK has built a team of proven professionals with the capacity and capability to fully serve the LPA Program. Our design team of more than 80 professionals includes experienced practitioners and an innovative next generation of the profession. The design team is fully supported by our 10 in-house survey crews, which provide both traditional land survey and LiDAR services.



**Tawn Nugent, PE, DBIA\* | Associate Partner.**

Tawn leads TREKK's Transportation practice. She brings nearly 30 years of MoDOT experience on a variety of roadway and bridge projects. Tawn is especially passionate about projects that improve safety, connectivity and quality of life for all individuals.



**Spencer Osborn, PE, PTOE | Traffic Lead.**

Spencer brings creativity and an innovative approach to all our transportation projects, along with a personal passion for traffic engineering. His experience includes data collection, traffic impact studies, operational analysis, safety studies, pavement marking design, traffic control and signal and lighting design.



**Teresa Krenning, PE\* | Traffic Lead.**

Teresa has more than 35 years of experience in highway safety and traffic operations. Prior to joining TREKK, Teresa served as a Traffic Operations Engineer for MoDOT's St. Louis District where she oversaw signing, signals and safety asset operations. Her expertise in assessing safety concerns and implementing safety countermeasures is incorporated into all of TREKK's transportation projects.



**Erica Ridgway, PE\* | Traffic Lead.**

Erica brings more than 13 years of experience in transportation and traffic design and safety. Her projects have included roadway, streetscape, lighting and trail design; pedestrian facilities;

and ADA improvements. She is also experienced in signal design, including pedestrian facilities.



**Rijesh Karmacharya, PE, PTOE, RSPI\* | Traffic Engineer.**

Rijesh has a diverse background in transportation and traffic design, with an emphasis on analyzing safety solutions. His transportation experience includes roadway design, pedestrian facilities, bicycle facilities, ADA improvements, traffic signals and lighting design.



**Greg Wallace, PE, PTOE\* | Traffic Engineer.**

Greg has more than 16 years of transportation and traffic experience. His traffic design and analysis project experience includes traffic studies, traffic calming, corridor planning and signalization.



**Jason Shafer, PE | Traffic Engineer.**

Jason's traffic engineering experience includes signal, lighting, and signing and striping design and traffic control planning for numerous MoDOT roadway and bridge projects. His 19 years of experience include 11 years with MoDOT's Southwest District.



**Todd Martin | Traffic Engineer.**

Todd's five years of experience includes conducting traffic impact studies and traffic, operational and signal warrant analyses; intersection and traffic signal design; ITS; and traffic control planning. Todd began his career as a traffic engineer with MoDOT.



**Amy Nash | Traffic Engineer.**

Amy contributes more than 35 years of design experience on every TREKK project for MoDOT. She shares her technical knowledge and general MoDOT understanding she gained from her decades of working in the Kansas City District.



**Ethan Frostestad | Traffic Engineer.**

Ethan's experience includes traffic analysis, urban and rural roadway and intersection design, including roundabouts, interchanges, ADA compliance, safety improvements, pavement markings, signage and roadway rehabilitation projects.



**Mike Klasing, PLS | Survey Lead.**

Mike's 31 years of topographic, boundary, hydrographic and LiDAR surveying experience across multiple project types including roadway, bridge and sidewalk projects across all Districts.



**Phil Becker, PLS | LiDAR Manager.**

Phil brings 16 years of experience with both traditional survey and LiDAR acquisition, extraction and data management. He has worked on dozens of MoDOT and municipal projects, providing both traditional survey and LiDAR services.

\* Indicates an LPA-certified professional



# TRANSPORTATION SERVICES

CLEAN WATER. SAFE ROADS. RELIABLE INFRASTRUCTURE.



# IMPROVING SAFETY, CONVENIENCE AND ACCESSIBILITY FOR ALL USERS.

## **TRANSPORTATION**

TREKK's transportation team designs creative, cost-effective solutions that enhance safety and improve roadway capacity and access. We offer comprehensive roadway planning, design, utility coordination, public involvement, survey and construction inspection services on a wide range of projects.

Our award-winning transportation team has experience working on everything from intersection modifications to new interchanges. We approach transportation challenges with a holistic, commonsense mindset. TREKK has been involved in many innovative transportation solutions, including diverging diamond and diverge-about interchanges.

We have wide-ranging experience on design-build projects as both the owner's engineer and the contractor's partner. A thorough understanding of both sides of the process provides a valuable perspective on all types of projects.

Our transportation experience isn't just limited to roadways. TREKK also has experience with railroad, transit and aviation projects. We are well versed in the design of multi-modal facilities to promote safety and mobility for all users. We apply our training in ADA principles to design ADA-compliant, pedestrian accessible sidewalks, ramps and transitions. We bring these learned and experienced skills to every transportation design project we perform.

# COMPREHENSIVE TRANSPORTATION SERVICES



## ROADWAY

TREKK values our role in designing roadways that safely move people and goods. We bring experience with designing all types of facilities, from interstate highways to rural roadways to city streets. We know that private property and utilities are often impacted by roadway improvements. TREKK will evaluate those impacts holistically throughout the design stages.



## TRAFFIC

TREKK's team provides traffic analysis, study and design services that improve safety and reliability for all modes of transportation. Our traffic engineers leverage technology to understand the impacts of increased demand and changes in travel patterns. Our diverse expertise allows us to effectively design signage, pavement marking, traffic signals, ITS Systems and lighting plans to improve mobility.



## SAFETY

Assessing safety enhancements is a critical aspect of all projects. TREKK's team considers how the transportation system can be safer after improvements are completed and also during the construction period. We perform safety assessments of existing facilities, reviewing historical data to identify trends. Our engineers are experienced with the latest industry guidance to provide recommendations in determining improvements that give the most benefit.



## SURVEY AND UTILITIES

Survey data provides the foundation for any transportation project. Our crews have experience with the latest survey technologies to capture and deliver topographic data, including mobile, static and terrestrial LiDAR. Utility coordination is a value-added service that provides the assurance and accuracy of subsurface utility location prior to survey and design. To provide efficiency, TREKK's survey, utility and design teams offer seamless coordination.



## STRUCTURAL

We understand the significance structures have on transportation project budgets and bring creativity to maximize their value and minimize overall project costs. TREKK offers broad structural design experience, including short- and long-span vehicular, pedestrian and bikeway bridges, bridge widenings, bridge rehabilitations, retaining walls and box culverts.



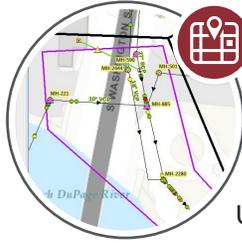
## CONSTRUCTION

TREKK's construction inspectors provide the peace of mind that your project is being constructed as designed. Our certified inspectors have experience on all types of projects. By taking a proactive approach, we can help clients avoid schedule delays and costly budget overruns. We value being our clients' advocate, building relationships with the community, and keeping everyone apprised of construction activities.



## MULTIMODAL

Bike and pedestrian facilities provide an alternate means of transportation, improved fitness and quality of place. In the right location they enhance communities and promote economic development. Connecting all modes of travel—roads, sidewalks, railroads, transit and ports—creates a unified system for moving goods and people. TREKK's staff provides detailed designs that reflect the bigger picture of making all modes function together efficiently.



## GIS AND ASSET MANAGEMENT

Limited resources can force transportation agencies to make difficult budget choices. Understanding the location and condition of assets is a critical step to establish priorities. TREKK's team starts with the end user in mind and customizes the organization and retrieval of data to match the client's needs. This allows the client to build smart systems, which maximize the coordination and function of all types of infrastructure.

# HOW TREKK CAN HELP

- Access management
- ADA compliance
- Aviation, rail and transit
- Bicycle and pedestrian facility design
- Bridge and retaining wall design
- Complete streets design
- Construction inspection
- Corridor and planning studies
- Design-build experience
- Grant writing and funding assistance
- Intelligent Transportation Systems
- Intersection geometric improvements
- Lighting design
- Park and trail design
- Pavement marking and signing
- Pavement rehabilitation
- Roadway and interstate highway design
- Storm sewer design and analysis
- Traffic and safety analysis
- Traffic calming
- Traffic impact studies
- Traffic signal design and progression
- Smart cities/systems
- Survey and utility coordination



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SAFE ROADS.  
RELIABLE INFRASTRUCTURE.

