

November 15, 2013

Missouri Department of Transportation
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Kansas City, MO 64108
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Re: **Missouri's Local Program On-Call Services
Traffic Engineering and TEAP**

Dear Selection Committee Members,

Thank you for the opportunity to express our desire to serve Missouri's Local Program with on-call traffic engineering services. The TranSystems team is intimately familiar with traffic-related engineering, including studies, traffic modeling, implementing signal timing from traffic models and fine-tuning signal timing in the field. We have performed these services for MoDOT and various municipalities in the past. We are excited to provide our expertise for your traffic engineering needs and look forward to working with you.

Firm Experience

TranSystems is comprised of nearly 1,000 professionals in 38 offices throughout the US – professionals who are committed to providing clients in all modes of transportation architecture, engineering, planning, real estate, security and management consulting services. **Our staff includes 15 Professional Traffic Operations Engineers (PTOE), five of which are located in our Kansas City office.** In addition, we have 6 LPA certified project managers in our Kansas City office.

Throughout the past 47 years, TranSystems has addressed various traffic issues with DOT's, multiple cities and counties. Some of the relevant services we can provide are briefly described below.

Missouri Traffic Engineering Assistance Program

TranSystems has provided traffic engineering services in various MoDOT districts at random times since 1991 and continuously since 2011. Our assignments within Missouri have included school area studies, signing inventories and MUTCD compliance review, speed limit zones, intersection and corridor analyses, traffic signal warrant studies and more.

TEAP at Work

School Area Studies

Roughly one-third of our TEAP studies over the last several years have addressed the highly sensitive subject of traffic control within school areas. It is not uncommon for conditions around schools to be highly congested during peak times and the safety of the schoolchildren as well as motorists is an important consideration to local agencies and school personnel alike. Typical concerns include school signing and markings, school speed zones, traffic circulation and parking and school pedestrian walking routes.

Intersection Operations

A seemingly never-ending emphasis for your local partners requesting TEAP studies is the intersection; whether the issues are safety, capacity, control or simply the smooth flow of traffic. Our analyses have even compared improvement alternatives on the basis of the project benefits versus its costs to assist your local partners in making sound financial decisions.

Traffic Studies

Small traffic planning and engineering studies are the core of TranSystems' traffic engineering team's expertise. These components include intersection capacity improvements, safety studies and traffic calming. Typical projects include school zone studies, intersection analyses, sign inventories and speed limit analyses.

"The fact that such a comprehensive study could be completed in such a short timeframe is remarkable."

-Larry Mangan, PE

City of Wellington, Kansas

Traffic Control Device Inventories

TranSystems has provided a number of comprehensive traffic control device inventories for numerous cities and counties. The bulk of our studies have included inventories for signing, pavement markings, school area traffic controls, traffic signals and roadway features.

Traffic Signal Design

TranSystems has designed more than 100 traffic signals during the past five years. Our staff has been designing signals for more than 30 years and is intimately familiar with local design requirements and processes. In addition, we have extensive signal system design, analysis and timing experience. TranSystems has designed numerous traffic signal projects throughout both Missouri and Kansas.

Street Lighting Design

TranSystems owns and uses a wide variety of lighting and electrical analysis software. Our staff has more than 30 years of experience in designing lighting systems for vehicular and pedestrian uses, for private developers as well as municipal and state agencies.

Pavement Marking and Signing

TranSystems provides pavement marking and signing design services for municipal and state roadway improvement projects. In addition, our traffic engineering team has performed many stand-alone pavement marking and signing design and review projects. Our team has experience and familiarity with city, state and Manual on Uniform Traffic Control Devices (MUTCD) requirements.

Road Safety Audits for the Kansas DOT

TranSystems conducted statewide Road Safety Audits (RSA) on the state highway system in 14 counties. The RSA process included an office review of safety conditions and historical data; a field review that consisted of driving each route and recording traffic characteristics

such as control devices, markings, speed limits and sight distances and a report to document the study findings as well as recommendations for safety enhancements.

Past Performance

TranSystems has extensive experience, both locally and nationally, completing on-call service contracts for transportation agencies. Through these on-call contracts, we have had the opportunity to provide a variety of design and engineering services ranging from design and construction inspection to fast-track emergency services. This experience has also provided TranSystems with a high level of familiarity with the sudden nature of an on-call project. With our large, flexible design and construction staff, TranSystems can accommodate any project for MoDOT.

“TranSystems’ professionalism, quality of data, data analysis, data presentation and prompt and courteous service will be the benchmark city staff will measure all other traffic studies in the future.”
 -Keith Price
 City of Bel Aire, Kansas

The biggest testament to our talented personnel and the quality of our work lies with our clients from previous projects. We encourage you to contact them, as we are certain they will confirm our ability to meet project schedules on-time and within budget while assisting them in achieving their project goals.

Qualifications of Personnel

James Stanek, PE, PTOE, 27 years of experience – Jim leads the traffic engineering and planning team at TranSystems and has been involved in the Missouri and Kansas TEAP programs for 25 years. He has extensive experience dealing with MUTCD compliance and safety matters and has completed 14 Road Safety Audits and he executed a rural road corridor safety pilot project for KDOT and Saline County, Kan. His responsibilities include traffic engineering design and analysis, with specific involvement on signalization projects, signing and pavement marking design, work zone traffic control and intersection geometric design. Most recently, Jim was involved in the final design of the I-35 and Route 291 interchange in Liberty. He also provided value engineering services to MoDOT Kansas City district for the I-435 and I-70 interchange improvements.

Michael Wahlstedt, PE, PTOE, 25 years of experience – Mike has an extensive background as project manager and project engineer with a wide range of transportation-related projects, including

both operations (traffic signal design, traffic signal systems, ITS, traffic control, signing and pavement marking design, safety studies, traffic calming, etc.) and planning (corridor studies, traffic impact studies, simulation modeling, traffic impact fee analysis, etc.). Mike led TranSystems’ extensive analysis of the I-70 and Woods Chapel Road diverging-diamond interchange concept for review by MoDOT and FHWA. He has designed traffic signals for 8 state departments of transportation, including MoDOT.

Jeff Wilke, PE, PTOE, 12 years of experience – Jeff has 12 years of traffic engineering experience and is typically involved with a variety of traffic engineering assignments. He rejoined TranSystems in 2011 after spending five years at the city of Lee’s Summit, where he served as a project manager for design and construction projects, as well as many other street lighting and traffic signal projects. In addition, he initiated safety analysis programs to improve the city’s highest crash locations and school areas. These programs identified long-term and future improvements that included signing, pavement marking, traffic signal and geometric modifications. Jeff recently wrapped up TEAP projects for the cities of Grandview and Belton, Mo.

Jeff McKerrow, PE, PTOE, 17 years of experience – Jeff rejoined TranSystems in 2007 after spending three years at the City of Lee’s Summit, serving as the City Traffic Engineer and Acting City Engineer. He now serves as Director of Operations for TranSystems’ Midwest region while still providing project management/ engineering on a variety of transportation and traffic engineering projects. Jeff oversaw the development of design concepts and cost estimates for the US 71/Route 291 interchange in Harrisonville and served as the traffic engineer for Access Richmond, a master transportation plan for the City of Richmond.

Kevin Manning, PE, PTOE, 7 years of experience –Kevin joined TranSystems in 2012 after 6 years as a traffic engineer with MoDOT’s Kansas City District. Kevin specializes in the modeling, design and timing of traffic signal systems, as well as design for signing, pavement marking, ITS, lighting, traffic control and construction sequencing. He is also experienced in crash analysis and mitigation. Most recently, Kevin is working on the I-29 and Tiffany Springs Parkway Interchange. He also served as the lead traffic engineer for the 20th Street Overpass project in Joplin.

Name	Experience Years of Experience	Signal Corridor Analysis and Timing	Cross Coordination	MUTCD Compliance Analysis	Intersection/Corridor LOS Evaluations	Data Collection	Origin and Destination Studies	School Zone Studies	Warrant Studies	Safety Studies	Speed Limits	Impact Studies	Access Management	Corridor Studies
Tom Swenson, PE, PTOE	35	●	●	●	●	●	●	●	●	●	●	●	●	●
Jim Stanek, PE, PTOE	27	●	●	●	●	●	●	●	●	●	●	●	●	●
Mike Wahlstedt, PE, PTOE	25	●	●	●	●	●	●	●	●	●	●	●	●	●
Slade Engstrom, PE, PTOE	14	●	●	●	●	●	●	●	●	●	●	●	●	●
Jeff Wilke, PE, PTOE	12	●	●	●	●	●	●	●	●	●	●	●	●	●
Kevin Manning, PE, PTOE	7	●	●	●	●	●	●	●	●	●	●	●	●	●
Josh Thiede, PE	8	●	●	●	●	●	●	●	●	●	●	●	●	●
Michael Hare, EI	2	●	●	●	●	●	●	●	●	●	●	●	●	●



Familiarity

We have provided services directly to MoDOT on 87 projects and indirectly on more than 15 projects. By continually working on projects with federal funding, our staff stays current on federal project requirements. When a change in the federal requirements occurs, a senior staff member is assigned to research the change and summarize their findings. We then spread the word internally through emails, newsletter articles and our Practice Communities made up of like-minded professionals.

In addition to our federal knowledge, TranSystems is also familiar with state and regional requirements. Our local staff includes Kevin Manning, a former Kansas City District traffic engineer. Kevin offers our staff valuable insight and knowledge on MoDOT's policies, procedures and general preferences. Combined with our previous MoDOT experience, this means TranSystems' staff will have little to no learning curve while working on your projects.

Accessibility

TranSystems will be very accessible to the local community. Once notified of their need and the desire to contract with us our office in Kansas City can mobilize staff the next day for scoping purposes. We can meet with the local community in their office or in the field at the site to review the situation and help scope the project. MoDOT would be welcome to attend this meeting.

We will provide you with contact information, including mobile numbers, for our project manager(s) and principal. All members of our key staff use smart phones and most also have tablets so we are available to you almost 24/7. Our Information Network is top-notch and is the result of years of investment and on going maintenance and upgrades. In the last five-plus years, we have had no data lost and have had no periods of unscheduled downtime due to network issues in the last two years.

During the life of the project we will communicate with the local community and MoDOT on a regular basis. We will determine what method the local community prefers for communication. We have learned from previous MoDOT and LPA experience that some PMs prefer email, some phone calls and some face to face meetings. We adapt our style of communication for each assignment. We have found that when working with local communities we must take care to explain the LPA process and how it sets the project schedule. We have also learned that the local communities need to see graphics to help them understand the project design. We have become very efficient at preparing these type of graphics.

Commitment to Diversity

TranSystems is committed to a diverse internal workforce. We broadly advertise open positions as well as posting them on our website. We recruit new staff members from universities and technical colleges that historically have had a large minority and female enrollment. Minority and female employees are encouraged to participate in our internal mentoring and development programs. We have witnessed a steady increase in the number of female and minority employees for the last three years. Since 2008, TranSystems has produced a 10 percent increase in female employees and a 108 percent increase in minority employees.

In addition to having a diverse internal workforce, we build diverse teams. TranSystems was recently notified by the US DOT that the provisions of our Mentor-Protégé agreement with Landworks Studio, LLC in Olathe, Kan. have been accepted!

Approach to On-Call Services

With extensive expertise managing general engineering (on-call) task-order based contracts for numerous agencies and municipalities, including state departments of Transportation, the TranSystems team brings lessons learned and management systems that will be responsive to your needs. Given the size of our firm and our Kansas City and St. Louis office locations, we can respond quickly to any project. To be successful, the consultant team must have the ability to effectively supplement your in-house staff; react to emerging conditions in a timely manner; and partner with you in a collaborative manner to provide timely, cost-effective solutions.

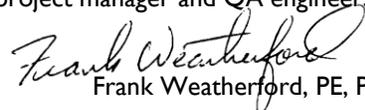
Once notified that we have been selected for an On-Call assignment we will take the following steps. First, we will discuss the project with the local community briefly by phone. Second, we will meet internally to assemble the correct key staff to execute the project and select the best Project Manager to lead the assignment. Third, we will schedule a meeting to discuss the scope of the project. This could be as soon as the next day if needed. This scoping meeting can be in the local community's office or in the field at the project site if preferred. MoDOT will be invited to this meeting.

Next we will prepare our detailed proposal, schedule, and fee and work with the local community and MoDOT to get an agreement in place. Once under contract we will establish our detailed work plan to deliver the project on schedule. Our communication with the local community and MoDOT will be on going, but adapted to the style the local PM prefers. We will update all parties on a regular basis on any interval desired and as milestones are reached.

Our goal is to make each assignment go smoothly. We employ several ex-MoDOT staff who understand what is needed so that we can deliver it the first time and reach the stated goal.

Quality Assurance Program

TranSystems has a well-established process to manage our projects. We develop a project work flow plan, a design schedule and design task budgets before we start work and monitor each on a weekly basis. We will also prepare a project-specific quality assurance plan. Our philosophy is to check all calculations and deliverables close to the source. First, each employee checks their work. Then, prior to the information being used by another party, the task leader will check the work. Third, the project manager and QA engineers will review the information and how it corresponds with other aspects of the project.


Frank Weatherford, PE, Principal

TranSystems' Qualifications

Presented to
Missouri's Local Program

TranSystems is a full service transportation consultant headquartered in Kansas City, Mo. with offices across the nation, including St. Louis, Mo. TranSystems realizes that cities, counties and other local entities have special requirements and unique funding challenges. We specialize in tailoring our expertise and providing personalized services to suit your specific needs while exceeding your expectations; large or small. We invite you to contact the references provided and are confident they will give TranSystems high marks for quality, timeliness, practical ideas and responsiveness.

You will find TranSystems' staff to be highly-qualified in each of the categories we are submitting qualifications. Our approach stresses an efficient work force that treats your resources like our own. This adds up to a solution that is practical and engineering services that are delivered quickly and economically.

Experience Transportation

TranSystems believes no industry impacts the quality of everyday life, and the success of business, more than transportation. The way we see it, bridges, highways, ships, warehouses, hangars, and ports are more than concrete and steel. We envision them as a living entity; a vast circulatory system designed not only to be utilized, but also to inspire and energize the people it serves.

No other transportation company masters the smallest details, and envisions the big picture, better than TranSystems. Our ability to identify and execute solutions across strategic, design, technical, and operational issues is unmatched. When it comes to moving people and products from here to there, safely and securely, we do it best.

TranSystems is comprised of nearly 1,000 professionals in 38 offices throughout the US. Professionals who are committed to providing clients in all modes of transportation architecture, engineering, planning, real estate, security, and management consulting services.



EXPERIENCE | Transportation

List of Services

TranSystems offers the spectrum of consulting services across all the modes, providing a full range of architectural, engineering and planning services; management and supply chain consulting services; transportation security consulting services; and transportation real estate consulting services. We have identified and gathered an array of best-of-class talent in key areas under one roof with one thought in mind: what skills – singly and in combination – are of most value to our clients?

Planning Services

- Capital Programming
- Energy Efficiency
- Freight Mobility
- Site and Facility Master Planning
- Urban, Regional and Community Planning**

Preliminary and Final Design Services

- Surveying**
- Highway and Street Design**
- Bridge Design and Inspection**
- Site Assessment, Development and Design
- Architecture
- Civil / Structural**
- Mechanical, Electrical, Plumbing
- Feasibility and Impact Studies
- Bicycle/Pedestrian Trails and Sidewalks**
- Landscape

Routing Analysis

Signaling, Optimization & Lighting Traffic

Utility Planning and Relocation

Environmental Services

- Assessments
- Categorical Exclusions
- Impact Statements
- Noise and Air Quality Analysis**
- Permitting and Document Preparation
- Socioeconomic Analysis Studies
- Construction Services**
- Administration
- Arbitration and Mediation
- Inspection and Materials Testing**
- Management
- Surveying, Staking and As-Built

Other Specialty Services

- ITS (Intelligent Transportation Systems)
- GIS Administration
- Public Involvement
- Safety Training
- Satellite Mapping
- Software Consulting
- Transportation Policy Consulting
- Transportation Research

Security Services

- Security Program Design and Development
- Operational and System Auditing
- Assessments and Planning
- Emergency Preparedness and Recovery
- Facility Security Design
- Strategic Master Security Planning

Diverse Workforce

TranSystems is committed to a diverse internal workforce. We broadly advertise open positions as well as posting them on our website. We recruit new staff members from universities and technical colleges that have historically had a large minority and female enrollment. Minority and female employees are encouraged to participate in our internal mentoring and development programs. We have witnessed a steady increase in the number of female and minority employees for the last five years. In fact, since 2008, TranSystems has produced a 10 percent increase in female employees and a 108 percent increase in minority employees.

In addition to having a diverse internal workforce, we build diverse teams. TranSystems' regularly teams with disadvantaged/minority/woman-owned business enterprises on projects, but our commitment to diversity goes beyond projects.

The US DOT started a Mentor-Protégé Pilot Program to enhance the capabilities of disadvantaged and small businesses to compete in the transportation industry. TranSystems has been negotiating a Mentor-Protégé agreement with Landworks Studio, LLC in Olathe, Kan., and we were recently notified by the US DOT that the provisions of the agreement have been accepted!



U.S. Department of Transportation
Office of Small and Disadvantaged Business Utilization

“We can see this program blossoming into agreements with other select protégé firms across the country. At one time, we needed the same kind of mentoring, so it is only right that we pass it forward.”

Quality Assurance

TranSystems has a well-established process to manage our projects. We develop a project work flow plan, a design schedule and design task budgets before we start work and monitor each on a weekly basis. We communicate with staff and subconsultants, informing them of what we need and when we need it. If appropriate, we make adjustments to the individual pieces, yet maintain the overall schedule and budget.

Project management for each project must be unique. We adapt our style of communication to what works for you and your preferred method to receive information. Whether we use email, or written weekly updates, we have prepared a wide range of tools to communicate with you and will tailor our methods to what works best for you.

TranSystems Qualifications

Key Personnel

Requested On-Call Services	Firm Years	Local Key Personnel	Key Staff Years of Experience	Key Staff Credentials
Environmental Services <ul style="list-style-type: none"> Noise Special Studies 	10	Linda Clark, PE Eric Viera	30 years 12 years	Noise Training Diverse Experience
Bridge Design <ul style="list-style-type: none"> Bridge Design Hydraulics 	47	Matt Johnson, PE, SE Allen Smith, PE, SE Erich Schmitz, PE	16 years 23 years 9 years	Structural License Structural License Pursuing PhD
General Services <ul style="list-style-type: none"> Civil Structural Architecture 	45	Mitch Lambeth, PE, PLS, LEED AP Marcia Bolton, PE Mike Pollard, AIA, LEED AP	30 years 18 years 33 years	LEED Certified Diverse Background LEED Certified
Traffic Engineering <ul style="list-style-type: none"> Traffic Studies Signals Traffic Modeling 	47	James Stanek, PE, PTOE Kevin Manning, PE, PTOE Jeff Wilke, PE, PTOE Mike Wahlstedt, PE, PTOE	27 years 7 years 12 years 25 years	All are registered Professional Traffic Operations Engineers
Traffic Structures	45	Jeff Reeder, PE Lindsay Madsen, PE Marcia Bolton, PE	32 years 13 years 18 years	Federal Experience NBIS Team Leader Diverse Experience
Surveying	20	Jeff Wright, PLS, EIT Mitch Lambeth, PE, PLS, LEED AP	15 years 30 years	Both hold civil engineering degrees
Construction Materials Testing and Inspection	25	Roger Post, PE Michael Thomas Kent Higgins, PE, CPESC Justin Gabel Scott Sharp	25 years 34 years 31 years 9 years 11 years	Management Expert 32 years at MoDOT Range of Certification Extensive Experience Diverse Experience
Roadway Design <ul style="list-style-type: none"> Roadway Trails H&H Roundabouts Lighting 3D Visualization Value Engineering Planning 	30	Nathan Pera, PE & Justin Adams, PE John Zimmermann, PE Erich Schmitz, PE Todd Thalmann, PE Greg Nelson, PE Andy Valente (Orlando) Robert Miller, PE Sara Clark, PE	15 yrs/ea 23 years 9 years 29 years 31 years 24 years 31 years 13 years	Experience Diversity Trail Expert Published Author 100+ Roundabouts 50+ Lighting Projects Extensive Experience Veteran Engineer Diversity in Projects

TranSystems Recent Experience

I-635 and Horizons Parkway Interchange, Riverside, Mo.

TranSystems provided utility master planning and the transportation infrastructure planning and design for this 1,000-acre development in Riverside, Mo. The project included storm sewer, sanitary sewer, and waterline master planning as well as an interstate interchange, street expansion and improvement, railway overpass, intersection signalization, a roundabout and new four-lane divided roadway. The \$42 million project required coordination with state and federal agencies for environmental and roadway design issues. Bridge design included four bridges on I-635 as well as a new long-span bridge over the BNSF Railroad. **References:** Kathleen Rose, City of Riverside Mayor, (816) 741-3993 and Shelie Daniel, MoDOT KC, District (816) 645-6090

I-29 and Tiffany Springs Parkway Interchange Improvement, Kansas City, Mo.

Working cooperatively with the KCI TIF Advisory Commission, MoDOT, Kansas City, Mo. and Platte County, TranSystems prepared seven alternatives and lead the group to a locally preferred alternative and completed an AJR to solve the traffic problems. We also developed a cost share concept on how the construction cost could be shared by three of the project stakeholders. TranSystems was retained by MD Management to prepare design plans, specifications and estimates for these innovative and cost-effective improvements, and to assist with the bidding of the project. The project includes converting a diamond interchange into a DDI, a ramp relocation and the relocation of water mains. Valued at \$12 million, the complex project is scheduled for completion by the end of the 2014 construction season and will manage traffic through the corridor during construction. Final plans were turned in ahead of MoDOT's schedule. **Reference:** Randy Johnson, MoDOT KC District, (816) 607-2265

Route 41 over the Lamine River, Cooper County, Mo.

TranSystems is wrapping up design services for this bridge replacement project located approximately 1.5 miles north of I-70. The bridge is being replaced with a NU-type pre-stressed concrete girder bridge. TranSystems services include the preparation of signed and sealed bridge plans, specials provisions and estimates. **Reference:** Stacy McMillan, MoDOT Bridge Engineer, (573) 526-0250

Route 92 over Route 45 and BNSF Railroad, Platte County, Mo.

TranSystems is currently providing construction inspection services and materials testing for the replacement of Route 92 over Route 45 and the BNSF Railroad. This project requires TranSystems' staff to "mirror" MoDOT's internal construction management culture and administrative processes, including extensive experience with SiteManager. In addition, our experience and capacity to successfully interact with BNSF also plays an important role in the project. Construction is expected to be complete in spring 2014. **Reference:** Perry Allen, MoDOT KC District, (816) 622-0510

KCATA Bus Wash Facility Replacement, Kansas City, Mo.

Under our existing IDIQ contract for A/E services with the Kansas City Area Transportation Authority, TranSystems designed and implemented the replacement of the existing dual-lane, automated bus wash facility at KCATA's headquarters. The scope of services also included reconfiguration of the existing open-air fueling facility west of the maintenance building and implementation of current BMPs for the processing and/or reuse of waste water from the wash operations. Additional scope included assistance in the development of a temporary fueling arrangement for buses on site and upgrades to the existing vacuum system for cleaning interiors of buses. **Reference:** Dick Jarrold, KCATA, (816) 346-0356

For more information, please contact:

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TranSystems Offers

- ▶ **Positive Past Record of Performance**
- ▶ **Qualified Staff located in Kansas City and St. Louis**
- ▶ **Efficient Approach + Practical Design = Savings**
- ▶ **Missouri-based Firm with more than 150 Local Employees**
- ▶ **Six LPA Certified Project Managers**