

November 15, 2013

Missouri Department of Transportation  
MaryAnn.Jacobs@modot.mo.gov



2400 Pershing Road, Suite 400  
Kansas City, MO 64108  
Tel 816 329 8600  
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Re: **Missouri's Local Program On-Call Services Structures**

Dear Selection Committee Members,

Over the years we have enjoyed serving the state of Missouri's cities and counties through our bridge design and related services. Each project brings new challenges and together with our clients, we solved them. We know we are a good fit for bridge design projects as our experience involves extensive work with the MoDOT Bridge Department and numerous municipalities.

**Firm Experience**

ENR's Top 25 in Bridges reveals TranSystems in the number 11 spot, securing the firm's practice area among the top of those ranked around the country. In Missouri, we have 13 bridge engineers and the staff needed to perform all the tasks noted in the RFQ. This depth of staff and experience means we can immediately take on any assignment and meet your deadlines. We have bridge design staff in Kansas City and St. Louis so we can easily reach the entire state.

Our recent bridge projects in Missouri include the following assignments:

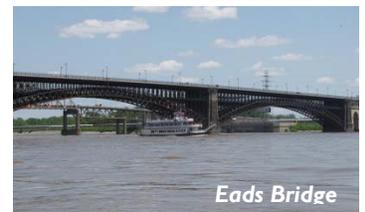
**Bailey Road Bridge over Union Pacific Railroad in Lee's Summit** – Design of bridge and roadway improvements for a two-span 331-ft.-long bridge with two vehicular lanes and a trail. The bridge barrier was enhanced with form liners. The substructure includes steel girders.

**Bannister Road over Little Blue River in Kansas City** – This new 170-ft. structure, designed by TranSystems, is a three-span precast, pre-stressed concrete girder bridge. The design includes monuments at each corner of the structure and at the bridge piers. An architectural handrail and fence protects the pedestrians from the vehicular traffic.



**Route 125 over the James River in Greene County** – A bridge replacement project in which we designed the preliminary and final plans.

**Thunderbird Road over Route 150 in Kansas City** – The bridge design was fast-tracked to meet the developer's schedule. Close coordination with MoDOT allowed the project to open ahead of schedule. The bridge is a two-span 146-ft.-long concrete girder with a variable width due to the tight geometry of the ramp.



**Eads Bridge over the Mississippi River in St. Louis** – The half-mile bridge with its stone piers and arching steel superstructure is currently being inspected and designed for rehabilitation.

**Route 150 over UPRR and Big Creek in Greenwood** – An 800-ft. long continuous composite steel plate girder bridge. The final plans were delivered two months ahead of schedule to meet MoDOT funding requirements.

**Route HH over I-29 in Platte County** – A precast box beam bridge that was accelerated to use ARRA funds.

**Zora and Main Street Interchange Improvements in Joplin** – Structural bridge design for new interchange that safely handles turning movements through a ramping system and eliminates the at-grade railroad crossing.

**12th Street Viaduct Rehabilitation in Kansas City** – A 1915 double-deck, reinforced concrete, 2,300-ft. historic viaduct that we evaluated and provided cost estimates, construction management, and inspections for it to be rehabilitated.

**Redecking of Three Bridges in Wildwood** – The redeckings included field surveys, designs and final specifications and cost estimates.

**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.

MoDOT has six projects currently in construction which were designed by TranSystems. We are not aware of a single issue with the

<b>Budget</b>	We have not asked for additional fees unless the client requested additional services.
<b>Quality</b>	We are not aware of any recent construction change orders due to our bridge plans.
<b>Schedule</b>	We have met every project schedule for bridge design.
<b>Estimates</b>	Our estimates are typically within 5% of the low bidder.

quality of our plans on these six projects. Additionally, MoDOT rated TranSystems performance on the kclCON project 5.0 out of 5.0 for the roadway design and 4.9 out of 5.0 on the bridge design. We are very proud of our track record of quality and we work very hard to provide a high quality product to MoDOT.

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 the clients below, 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.

- ▶ Ralph Davis, City of Kansas City, Mo., (816) 513-2740
- ▶ Fred Bakarich, St. Louis Metro, (314) 982-1400

### Qualifications of Personnel

Our efforts will be led by one of the following senior bridge engineers:



**Matt Johnson, PE, SE, Bridge Engineer**

**16 years of experience**

Matt leads our highway bridge team and has extensive experience in bridge design and inspections for Midwest DOTs. Since 2000, Matt has worked on more than 45 bridge design projects. He was involved in the bridge design for the Tiffany Springs Road and I-29 interchange as well as the Hurricane Deck Bridge replacement.



**Allen Smith, PE, SE, Bridge Engineer**

**23 years of experience**

Allen's latest assignment is the inspection and rehabilitation of the Eads Bridge over the Mississippi River. The design phase is wrapping up given it is an American Reinvestment and Recovery Act (ARRA) project. He also has extensive experience working on bridge design projects for the Illinois DOT.



**David Glastetter, PE, Bridge Engineer**

**18 years of experience**

David recently transferred to our St. Louis office and has designed many MoDOT bridges across the state. He worked on Route 125 over the James River for MoDOT and also led our bridge team for the kclCON project. He has extensive project management experience focused on roadways and bridges.



**Lindsay Madsen, PE, Bridge Engineer**

**14 years of experience**

Lindsay is a skilled bridge designer who has designed several bridge structures utilizing steel, prestressed and cast-in-place concrete. She has experience designing concrete box culverts, pedestrian bridges and multi-span vehicle bridges over streams, rivers, highways and railroads. She has designed projects for state departments, including Nebraska, Iowa, Illinois and Kansas.



**Jason Kemnitz, PE, Bridge Engineer**

**14 years of experience**

Jason is experienced in designing a variety of bridges including precast concrete, steel girders, box culverts and rehabilitations. His recent experience includes Thunderbird Road over Route 150 in Kansas City, Bailey Road over UPRR in Lee's Summit, Zora Street over Route 43 and KCS in Joplin and Route 125 over the James River in Green County.



**Erich Schmitz, PE, Water Resource Engineer**

**9 years of experience**

Erich is a water resource engineer, pursuing his PhD in civil engineering. He has been a consultant to state highway departments, performing hydrologic, hydraulic and scour analyses at more than 800 locations across the country. Erich served as QA/QC engineer for the scour calculations and development of long-term degradation estimates for the kclCON project.

Working with our group of senior bridge engineers will be one of our younger bridge engineers, as well as additional bridge team members if needed to complete the projects.

### Familiarity

TranSystems has completed more than 2,350 federally-funded projects. 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 order 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 five previous MoDOT employees from various districts and a range of disciplines who each offer our staff valuable insight and knowledge on

TranSystems' Former MoDOT Staff	
<b>Linda Clark, PE</b> <i>Kansas City District</i>	Asst. District Engineer
<b>Kevin Manning, PE, PTOE</b> <i>Kansas City District</i>	Traffic Engineer
<b>Justin Adams, PE</b> <i>Northwest District</i>	Highway Design Construction Inspection
<b>Barb Frost, PE</b> <i>St. Louis District</i>	Senior Transportation Planner ( <i>Environmental</i> )
<b>Michael Thomas</b> <i>Kansas City District</i>	District Construction Liaison

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.

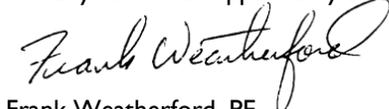
Next we will prepare our detailed proposal, schedule, and fee and work with the local community and MoDOT to get an agreement in place. Once under contract we will establish our detailed work plan to deliver the project on schedule. Our communication with the local community and MoDOT will be on going, 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. Lastly, we will conduct a constructability review with one of our senior bridge and highway construction managers.

Thank you for this opportunity to be of service to you.



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
<b>Environmental Services</b> <ul style="list-style-type: none"> <li>Noise</li> <li>Special Studies</li> </ul>	10	Linda Clark, PE Eric Viera	30 years 12 years	Noise Training Diverse Experience
<b>Bridge Design</b> <ul style="list-style-type: none"> <li>Bridge Design</li> <li>Hydraulics</li> </ul>	47	Matt Johnson, PE, SE Allen Smith, PE, SE Erich Schmitz, PE	16 years 23 years 9 years	Structural License Structural License Pursuing PhD
<b>General Services</b> <ul style="list-style-type: none"> <li>Civil</li> <li>Structural</li> <li>Architecture</li> </ul>	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
<b>Traffic Engineering</b> <ul style="list-style-type: none"> <li>Traffic Studies</li> <li>Signals</li> <li>Traffic Modeling</li> </ul>	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
<b>Traffic Structures</b>	45	Jeff Reeder, PE Lindsay Madsen, PE Marcia Bolton, PE	32 years 13 years 18 years	Federal Experience NBIS Team Leader Diverse Experience
<b>Surveying</b>	20	Jeff Wright, PLS, EIT Mitch Lambeth, PE, PLS, LEED AP	15 years 30 years	Both hold civil engineering degrees
<b>Construction Materials Testing and Inspection</b>	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
<b>Roadway Design</b> <ul style="list-style-type: none"> <li>Roadway</li> <li>Trails</li> <li>H&amp;H</li> <li>Roundabouts</li> <li>Lighting</li> <li>3D Visualization</li> <li>Value Engineering</li> <li>Planning</li> </ul>	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:*

Frank Weatherford  
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flweatherford@transystems.com

## 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**