

November 15, 2013

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



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Kansas City, MO 64108
Tel 816 329 8600
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Re: **Missouri's Local Program On-Call Services
Roadway Design**

Dear Selection Committee Members,

Thank you for this opportunity to submit our proposal to Missouri's Local Program to provide services for the on-call roadway design service contracts. Our roadway design teams are purposely assembled with a wide range of technical expertise that matches the needs of transportation departments. Our teams in our St. Louis and Kansas City offices are very familiar with MoDOT standards and procedures having completed numerous roadway projects throughout the state for MoDOT, municipalities and private entities. **In addition, we have 6 LPA certified project managers in our Kansas City office.**

Firm Experience

Headquartered in Kansas City, Mo. since 1966, 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. TranSystems has provided roadway design services for more than 45 years. Our team has worked extensively with MoDOT and countless local communities to develop highway projects from environmental assessment to construction management. We have a complete understanding of the steps needed to complete the planning, design and construction which is vital to the project schedule and budget.

We have experience to provide a high level of roadway design from concept to construction management. Listed below are a few of our roadway projects.

- ▶ **North Brighton, Hwy 210 to Parvin Road in Kansas City** – Design and construction management of roadway improvements including, improve vertical sight distance; upgrade curb, gutters, lighting, and sidewalks; and add retaining walls and a partially enclosed stormwater sewer system.
- ▶ **I-29 & Barry Road, Kansas City** – Provided all phases of project design and construction management for interchange and roadway improvements.
- ▶ **Route 9 Widening, Riverside** – Design of improvements to widen Route 9 and signalize the intersection with Horizons Parkway. Using practical design concepts, TranSystems saved more than \$1 million.
- ▶ **Mill Street, Bowles Drive, Route H and Kansas Avenue, Liberty** – Design of the reconstruction to realign and widen for intersection improvements. Prepared plans for grading, paving, drainage, signalization and street lighting.
- ▶ **5th Street Improvements, Lee's Summit** – reconstruction of 2,820 linear ft. of Fifth Street to improve traffic flow and safety and relocate utilities.
- ▶ **Route 150 Trail (Thunderbird Road), Kansas City** – Design of 10-foot-wide trail that follows Route 150 for one-half mile in southern Kansas City. The trail is on MoDOT right-of-way, federal land, and crosses under a Kansas City Southern Railways double-track bridge. Due to the steep terrain, 9,400 square feet of retaining wall was included to maintain ADA grades on the trail.

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 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 our clients.



Qualifications of Personnel

Key Staff	Area of Expertise	Qualifications
Nathan Pera, PE 15 years of experience	Roadway	Nathan is an experienced project engineer specializing in street and highway design, interchange geometric design, hydrologic and hydraulic analysis, and stormwater drainage system design. He has experience on a variety of urban and rural road projects for a number of local, state and federal agencies.
Justin Adams, PE 15 years of experience	Roadway	Justin specializes in highway and roadway engineering design. Prior to joining TranSystems, he was involved in highway design, consultant plan reviews and construction inspection work MoDOT.
John Zimmermann, PE 23 years of experience	Trails	John is focused on incorporating both vehicular and alternative transportation when designing roadway improvements. He was the project manager and lead writer on the Missouri Livable Streets Design Guidelines.
Erich Schmitz, PE 9 years of experience	H&H	Erich is a water resource engineer, pursuing his PhD in civil engineering. He has performed hydrologic, hydraulic, and scour analyses at more than 800 locations across the country,
Todd Thalmann, PE 29 years of experience	Roundabouts	Todd brings 20 years of complex project management. Todd is an expert roundabout designer having been responsible for more than 100 roundabout projects. He also has extensive experience with MoDOT interchanges.
Greg Nelson, PE 31 years of experience	Lighting	Greg is a roadway design engineer with special expertise in lighting design for roadways and bridges. He has worked on more than 50 lighting projects.
Andrew Valente 24 years of experience	3D Visualization	Andy is experienced in 3D modeling, rendering and animation. His areas of expertise include: conceptual and full design computer modeling, image and photo manipulation, and full audio/video project development.
Mike Wahlstedt, PE, PTOE 25 years of experience	Traffic Models	Mike is a veteran traffic specialist with experience in both operations and planning. He has worked on more than 500 projects involving traffic issues.
Robert Miller, PE 31 years of experience	Value Engineering	Bob led the completion of roadway plans for numerous local, state and federal agencies. Designs include various types of transportation projects including intersection/interchange modifications, roadway rehabilitation and pavement maintenance, rural and urban freeway design and design-build.
Sara Clark, PE 13 years of experience	Planning	Sara is an experienced project manager whose management expertise enables her to deliver projects within budget and accelerated schedules to meet client expectations. She has successfully managed nearly \$5 million in projects over the last five years.

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 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

TranSystems' Former MoDOT Staff

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

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.

We are very familiar with the process necessary to achieve quality final design plans. There are eight major activities that, depending on the project, may need to be addressed: community engagement, surveying, traffic, environmental, geotechnical, hydrology, utility, and design. These activities will occur throughout the conceptual, preliminary, right-of-way, and final design plan phases of a project.

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.

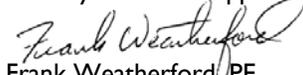
Next we will prepare our detailed proposal, schedule, and fee and work with the local community and MoDOT to get an agreement in place. Once under contract we will establish our detailed work plan to deliver the project on schedule. Our communication with the local community and MoDOT will be on going, 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

October 11, 2013

TranSystems' Consultant
Review following ROW Plan
Sets for Lee's Summit Road

Problem Solving

"OUTSTANDING!!!"

Consistently looking forward
on issues; identified issues
AND potential options to
resolve."

- George Binger
City of Lee's Summit, Mo.

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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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**