

November 15, 2013

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

Re: **Missouri's Local Program On-Call Services  
Trails and Sidewalks Design**



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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 trails and sidewalks design service contracts. Trails have historically been considered a recreational facility. Today, trails are an important component of any community's transportation system. Trails help alleviate vehicle congestion, offer economical and environmentally sound transportation alternatives, demonstrate responsible land stewardship through land reuse, connect neighborhoods and promote healthy communities.

### **Firm Experience**

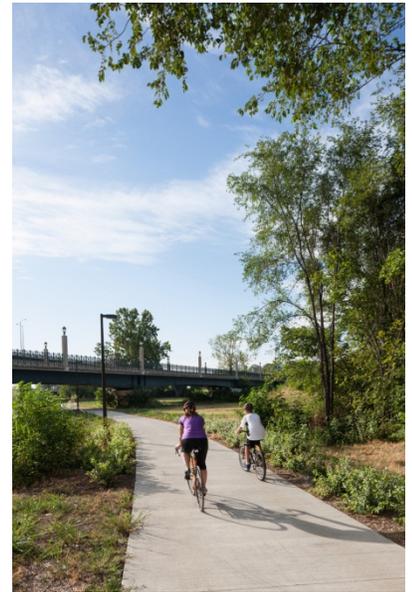
Whether it's a grueling off-road bike trail, a paved pedestrian path through the park, or a bike route on an existing roadway, we understand the challenges presented by trails – accessibility, safety, maintenance and feasibility among them. At TranSystems, we have the experience and expertise to develop innovative, environmentally responsible and cost-effective solutions for any park, trail, greenway, and bicycle facility.

TranSystems has extensive experience in alternative transportation design. Our teams in our St. Louis and Kansas City offices are very familiar with MoDOT standards and procedures having completed numerous projects throughout the state for MoDOT and municipalities. ***In addition, we have 6 LPA certified project managers in our Kansas City office.***

The following projects will give you a brief overview of our St. Louis and Kansas City personnel's experience with park, trail, greenway and bicycle facilities projects. These summaries will also give you an insight into our experience coordinating with local governments, districts and public agencies.

### **Heritage Trail Segment 4F - Kansas City, Mo.**

TranSystems conducted an alignment study for segment 4F of the 18-mile long multi-use Kansas City Heritage Trail. This segment is a critical link in the trail network that ties together the portions in Kansas City, Kan. and the Kansas City, Mo. West Bottoms with downtown Kansas City. Our study involved analyzing several routes, narrowing the selection to two feasible alignments, estimating the cost of each and recommending a preferred route.



### **Missouri Riverfront Trail - Platte County, Mo.**

TranSystems is providing trail and structural design services for the Missouri Riverfront Trail for Platte County Parks & Recreation Department. The trail follows the north bank of the Missouri River in Riverside and Parkville for approximately three miles. Coordination with the other agencies is critical on this trail, which parallels the BNSF Railroad, Missouri Route 9, and the USACE-L 385 Levee. The trail will include underpasses at I-635 and US 69 and a 100-ft. long pedestrian bridge over Burlington Creek. This segment of trail is an important portion of the Metro Green Trail System and the Northland Trails Vision Plan.

### **Indian Creek and Blue River Trails - Kansas City, Mo.**

After master planning 3.5 miles of multi-use trails across south Kansas City, TranSystems provided engineering services for two segments: the \$1,100,000, 1.8-mile, concrete Indian Creek Trail, including 175 ft. and 135 ft. pre-manufactured river bridges and crossings under the Union Pacific Railroad and two roadways; and the \$600,000, 1.2-mile aggregate Blue River Trail, including two crossings under UPRR bridges and one under I-435. The first was constructed in 2007; the second in 2008.



### **Twin Lakes to Vanderveen Bikeway Facility, Columbia, Mo.**

TranSystems was asked to design the off-street trail portions of the Twin Lakes to Vanderveen corridor, an eight-mile segment on the west side of town. This segment begins at Twin Lakes Park, near the connection to the Katy Trail, and heads north through neighborhoods, commercial areas, across major roadways, Cosmopolitan Park, and includes a bridge concept over I-70. Our services also included the planning of the on-street segments connecting the off-street segments. This included facilities crossing MoDOT routes, large business campuses and commercial zones.



### **Oil Creek Greenway Trail, Belton, Mo.**

Initiating an ambitious trail master plan, Belton hired TranSystems to prepare construction documents for the one-mile Oil Creek Greenway Trail.

### **Adrian's Island Riverfront Connection Trail, Jefferson City, Mo.**

Provided design of this 0.2-mile trail connection under five Union Pacific Railroad tracks. With tight space constraints, ADA guidelines were difficult to meet, but through a series of resting areas, the trail was able to meet the guidelines.

### Legacy Park - Lee's Summit, Mo.

TranSystems was responsible for civil and structural engineering, stormwater detention and environmental permitting services as part of schematic and final design of Legacy Park in eastern Lee's Summit. Situated on approximately 700 acres, Legacy Park is a central, city-wide facility for athletics and community events. Ultimately, the park will include more than 50 athletic fields, a community center, 20-acre lake, four miles of hiking/biking trails, an amphitheater and park amenities. Development of the facilities is being phased over 10 years. Services provided by the firm included grading and storm drainage design; environmental permitting for the dam and lake; design of roadways, parking lots and sanitary sewers; structural design of the buildings; and construction management for the parkway.

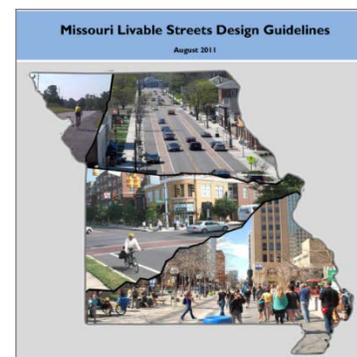
### Past Performance

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

**John Zimmermann, PE, LEED Green Associate, 22 years of experience** – John's varied experience and his dedication to the project makes him valuable on any design or planning project, from trails to roadways to highways. His passion for sustainable, practical solutions and his willingness to try new things will add a unique dimension to your project. John is TranSystems' alternative transportation leader and in his 22 years of experience, has planned more than 380 miles of trails and 66 miles of on-street bike facilities, as well as designed 4 miles of on-street bike facilities and 35 miles of trails. John also leads our national sustainable transportation efforts. He is focused on incorporating both vehicular and alternative transportation when designing roadway improvements and he understands the impacts to active transportation and accessibility. John served as the project manager and lead writer for the development of the Missouri Livable Streets Design Guidelines Manual.



**Erick Parke, PE, LEED® Green Associate, 14 years of experience** – Erick is a project engineer on TranSystems' roadway team with experience in street and highway design as well as trail design. With expertise in both roadway and trail design, Erick has developed a unique ability in bringing the two together to develop holistic designs that serve both vehicular and alternative traffic.

**Frank Weatherford, PE, 30 years of experience** – Frank specializes in state DOT and municipal transportation engineering, innovative financing, public involvement and program management. Projects to Frank's credit include design of interstate highways and urban roadways, alignment studies, culvert and bridge hydraulics, utility relocations, channel relocations and public outreach.

### 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.

### 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

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.

Handwritten signature of Frank Weatherford in black ink.

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:*

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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**