

## TRANSIT CENTER LOCATION ANALYSIS

Lawrence-Douglas County Metropolitan Planning Organization

April 7, 2017







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Lawrence – Douglas County Metropolitan Planning Organization Attn: Jessica Mortinger, Senior Transportation Planner 6 E 6th Street Lawrence, Kansas 66044 imortinger@lawrenceks.org

## Re: Transit Center Location Analysis – RFP Number R1707

Dear Ms. Mortinger and Selection Committee Members:

TranSystems is pleased to submit this proposal for professional services to the Lawrence - Douglas County Metropolitan Planning Organization and the Lawrence Transit System to prepare the Transit Center Location Analysis. The TranSystems team possesses all of the unique qualifications to provide the depth of knowledge and experience unmatched by our competitors. Our team has had the pleasure of working on several relevant projects within the region including the OATS Transit Location and Feasibility Studies statewide in Missouri and the original Lawrence Transit Center Analysis. Our team has worked on numerous projects for the Lawrence Transit System, KCATA and formerly Johnson County Transit, and Kansas municipalities, so we have the necessary relationships to execute this assignment.

TranSystems is a recognized nationwide leader in the planning industry and we have a robust staff that is eager to apply this national expertise to recommend practical, focused improvements to this connectivity study. **Sarah Frost, AICP** will lead our team as an accomplished project manager. Sarah is the active *Vice Chair of the Regional Transit Alliance in the Kansas City* region and she is looking forward to bringing her expertise and passion to this study. TranSystems has also carefully selected additional firms to provide technical expertise for this Plan; **Transituity, LLC** for transit planning assistance and **Groundswell Consulting** for community involvement and local knowledge.

The TranSystems team and our partners offer familiarity and a national record of providing exemplary planning services. We believe we have a strong team and we are your best choice for this project based on the following distinct advantages:

- Unmatched Local Knowledge
- **Key Transit Planning Professionals**
- Passion for Transit in Lawrence, Kansas

We are excited to continue working with the Lawrence – Douglas County MPO. If you have questions, or would like additional information, please let me know at (816) 329-8710 or <a href="mailto:smfrost@transystems.com">smfrost@transystems.com</a>.

Sincerely,

Jeff Reeder, PE Principal-in-Charge Sarah Frost, AICP Project Manager

## PROJECT ORGANIZATION + APPROACH

## **Project Understanding**

The Lawrence-Douglas County MPO is seeking proposals for the evaluation of sites for a transit hub to serve the coordinated City of Lawrence Transit System and KU on Wheels System. This study refines previous evaluation efforts that layered transit propensity data to identify a higher density location of Lawrence where a transit hub would be most productive.

Previous studies also evaluated potential sites within the highest value area, including sites at 9th and Iowa, areas near Memorial Stadium, 21st and Stewart, and KU Lot 90. These sites were evaluated based on their environmental and usage constraints and were also vetted politically and with neighborhood officials. 21st and Stewart was taken to a vote of the City Commission and was not supported as the preferred site due to concerns related to traffic from the new Central Campus redevelopment and its impacts on the adjacent neighborhoods. Lot 90, positioned west of the Ambler Recreation Facility, was evaluated and received NEPA clearance as part of a TIGER application during the summer of 2016. This project was to include a parking structure with a transit facility on the first level. During the NEPA process, the University Place Neighborhood Association shared concerns about additional traffic within and adjacent to their neighborhood, a disruption of their view shed, and other perceptions of negative impactions related to a transit hub in their neighborhood. The City Commission provided a letter of support to the TIGER application, but has not supported the project since the TIGER funding was not awarded.

Previous discussions relating to the siting of a transit hub in Lawrence have been negatively impacted by the perception that a facility of this type would have a detrimental impact on surrounding land uses. If community consensus on a location is to be achieved, it is imperative to demonstrate that the chosen location will add value to the surrounding area. The TranSystems team knows how to accomplish this. Our team will do this by:

- Understanding the local context: KU is densifying and seeking a higher and better use out of their assets. A recommendation of a concrete pad on KU or KU Endowment property is not consistent with the approved plans for their property. Our innovative team will consider how the transit project can be built into KU's plans for density.
- Evaluating Opportunities for Public Private Partnerships: KU's work to redevelop the Central Campus as a master developed PPP is a model that is consistent with how many successful transit projects are being built. We will look beyond the transit use to see how adding retail, housing, office or educational uses can help the project pay for itself upfront and through its lifespan.
- Addressing Potential Traffic Impacts: One of the primary concerns associated with the development of a transit center facility is what the resulting traffic impacts might be. Potential sites will be evaluated on the basis of the traffic impacts that might result and what can be done respective to the site to mitigate or eliminate any traffic impacts.
- Addressing Safety and Security Concerns: Surrounding property owners will naturally have concerns about safety and security when a public facility, such as this, is being considered. Our approach to addressing Safety and security issues is to be proactive and identify any potential safety/security issues at the front end of the evaluation process and engage stakeholders in discussions aimed at easing or eliminating their concerns.



Maintaining Open, Thoughtful and Collaborative Communication with Stakeholders and the Public: This project requires nuanced communication. The impact of this study is huge. A vote on the future funding for the Lawrence Transit System is imminent. This may be the last opportunity Lawrence Transit has to communicate their mission and values to the public prior to that vote. Every consultant on the TranSystems team has extensive experience working on projects of high importance, such as this one. We can be trusted to be your voice with the public. Our goal with every interaction will be to listen without judgment, answer questions and manage expectations.

As we focus our work with a bias towards innovation and public consent, the TranSystems team understands that this project is, at its core, about making the system more efficient. Allowing transit users access to system connections in a centralized location, access to intercity bus, and potentially bikeshare, and opening up a world of mobility to Lawrence residents. We are excited to share our approach with you in the following sections.

## **Project Approach**

TranSystems' team will assist the Lawrence-Douglas County Metropolitan Planning Organization and the Lawrence Transit System in conducting a transit center location analysis. The project team will identify viable options within the preferred study area to assess their viability as a transit facility site. Options could include a transportation only structure, a transportation corridor, an adaptive reuse of an existing structure or a mixed-use new structure. The analysis and recommendations will be developed to address all of the requirements of FTA and KDOT, which will allow Lawrence Transit to pursue and secure funding to develop a new facility and proceed with project implementation.

The project team will identify criteria for the evaluation of the alternatives and eventually the selection of a preferred option. The criteria will include return on investment, public acceptance and cost and will address functional needs of the transit system that the RFP has outlined. The project will proceed sequentially through the study process to allow maximum input from stakeholders identified and to allow for a re-examination of the project's objectives as additional information is developed.

Our study team has experience with transportation operations and facilities planning and the requirements of the FTA and KDOT for federally-funded projects. TranSystems is well positioned to deliver the required services in a manner that accomplishes the objectives of the Lawrence Transit System. Our proven experience is well-documented in the areas of transportation planning, operations planning, environmental analysis, traffic engineering, facilities planning, and design and construction administration. This analysis will help select a preferred option of development of a new facility or augmentation of an existing property that will meet current and future needs.

#### Task I: Data Collection

We will conduct an initial review of the existing Lawrence Transit and KU on Wheels functions. We believe it is important to fully understand the system operations prior to embarking on any comparative analyses.

TranSystems will begin by building upon the initial body of work that has been developed over the past five years. The study will review the previous studies such as the 2013 Transit Hub Location Study and the 2016 TIGER application, which members of our team were directly involved as well as the 2016 Comprehensive Transit Operations study. We will also interview key personnel to gain a clear understanding of the needs of the Lawrence Transit System and its operations. We will also draw on our extensive experience and similar operations to identify innovation solutions that can be incorporated into a new facility. The programming tasks will also include



an assessment of the projected future facility needs. These future needs will be reflected in the program for the facility.

#### Task 2: Public and Stakeholder Engagement

Leveraging the lessons learned during work on comparable projects, our team would employ a timely public outreach and engagement approach that incorporates innovation, technology, and face-to-face engagement strategies. The TranSystems team will develop a robust public engagement plan engaging the L-DC MPO, Lawrence Transit, the City of Lawrence, KU on Wheels, KU Facilities, Planning and Development, the KU Endowment, the Public Transit Advisory Committee and other stakeholders identified through previous plans and discussions with the Study Management Team. We understand the importance of engaging a diverse group of the community in order to incorporate all voices and needs when determining a location for the Transit Center. The first stakeholder meeting will be held in early summer 2017 and will focus on collecting input on criteria that will be developed to ultimately determine the location and the characteristics of the transit center. This will allow the study team to fully understand the needs of the community and the various stakeholders. A second meeting that would be held first with engaged stakeholders and then with the public will focus on potential site locations based on feedback from a variety of methods which could include public surveys and stakeholder interviews. This meeting will be held in late summer 2017. Finally, the third public meeting will be held in November 2017 and the purpose of that meeting will be to present the final Transit Center Analysis results. This could be a series of meetings including a public meeting, stakeholder meeting or presentation to the City Commission. The study team will also coordinate with the Study Management Team to determine the appropriate timeline for engaging media in the process.

Interactive materials will be developed for the meetings that capture valuable feedback. These could include interactive maps, dot exercises showing preferences, or rating comfort levels using pictures of specific locations and site concepts. All materials will be organized and illustrated for ease of understanding. Similar attention will be spent collecting visual preferences. The design team use illustration capabilities to create scenes depicting various land use options, and site configurations.

To aide in the consent building process, time will be built into the scope for one-on-one meetings with neighborhood leaders, elected officials and others who should be briefed about all or specific alternatives prior to public meetings, Study Team Meetings or other public presentations. The focus of these meetings will be to identify concerns and to work together to develop reasonable design, operations or other strategies for mitigating those concerns.

#### Task 3: Site Goals and Characteristics

The TranSystems' team will work closely with the stakeholders identified in Task 2 to clearly outline and define the goals and characteristics of the site that will align with current service within the transit system. This step is very critical in ultimately determining the location and the characteristics of the transit center and therefore, it will be very important to fully engage as many stakeholders as possible during this task. It will be imperative to understand the goals of the major landowners in the study area such as the University of Kansas and the KU Endowment. This would inform the study team about density preferences, desire for Public/Private Partnerships, desire for potential bonding and ultimately the process for which these milestones might occur. This will assist the team in development conceptual layouts that would be tailored to the constraints and characteristics of potential sites.

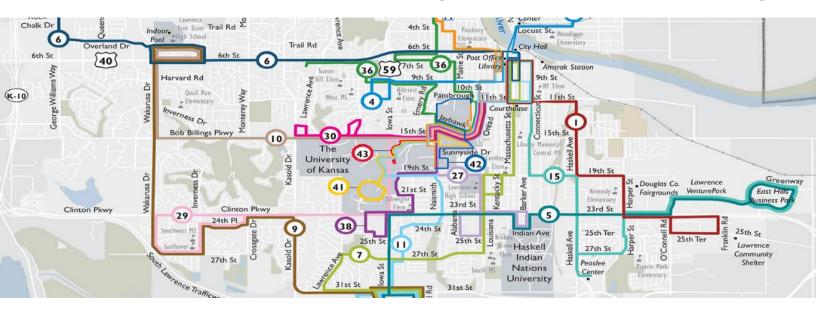


## Task 4: Identify Candidate Sites

This task will take the information developed in Task 3 and use the site selection criteria developed jointly through a facilitated process by the stakeholders identified to prepare an initial list of up to six (6) possible sites. The criteria for site selection will include the needs of Lawrence Transit and KU on Wheels staff and operations, and accessibility to the Transit System's primary service area with a primary focus of serving the University populations. These sites should not be limited to those that are currently on the real estate market or that are in public ownership, but there needs to be sensitively to any property that is in private ownership. We expect that the majority of these sites will be eliminated based on the initial evaluation.

The consultant will work closely with the Study Management Team and stakeholders in developing optimal input parameters to determine candidate sites through GIS-based evaluation. The study team includes a GIS expert, but ultimately the team will coordinate with the City of Lawrence to complete GIS tasks.

Lisa Koch has significant experience through her
Program Management work in Jackson County,
Missouri working with the Kansas City Area
Transportation Authority and Jackson County on
Transit Oriented Development and
Public/Private Partnership efforts. She will provide
strong leadership in guiding conversations on innovative
options and unique collaborative relationships.



#### Task 5: Analysis of Candidate Sites

The candidate sites will be evaluated based on criteria developed by stakeholders at the beginning of the project. We have conducted numerous facility site selection analyses and will draw from this experience to work with the stakeholders to provide evaluation methodology that best reflect the objectives of Lawrence Transit while meeting the requirements of KDOT and the FTA for an objective location study.

Mark Swope has extensive experience working with small to mid-size transit service agencies in evaluating and developing improvements to the services those agencies are responsible for providing.

Transit operations and the effect of the location on operating functions and operating costs are key considerations. TranSystems' transit operations experience will be used to evaluate the candidate sites from this important perspective. An example of an evaluation matrix used in previous studies conducted by TranSystems is included on the following page.

| Example Scoring of Alternatives |  |                        |                    |                |  |  |  |  |  |  |  |  |  |
|---------------------------------|--|------------------------|--------------------|----------------|--|--|--|--|--|--|--|--|--|
|                                 | Criteria                                   | Alternative Properties |                    |                |  |  |  |  |  |  |  |  |  |
|                                 | Site Development Costs                     | Highway 291 Site       | Locust Street Site | Highway 2 Site |  |  |  |  |  |  |  |  |  |
|                                 | Land Acquisition Costs                     |                        |                    |                |  |  |  |  |  |  |  |  |  |
| Land Costs                      | Building Development/Renovation/Demolition | $\overline{}$          |                    |                |  |  |  |  |  |  |  |  |  |
| Land                            | Civil/Site Development/Grading Land        |                        | -                  |                |  |  |  |  |  |  |  |  |  |
|                                 | Stormwater Management                      |                        |                    |                |  |  |  |  |  |  |  |  |  |
|                                 | Parcel Configuration                       |                        |                    |                |  |  |  |  |  |  |  |  |  |
| osts                            | Available Utilities                        |                        |                    |                |  |  |  |  |  |  |  |  |  |
| Utility Costs                   | Easements (Limits on Development)          | •                      | •                  | -              |  |  |  |  |  |  |  |  |  |
| Offsite<br>Access<br>Costs      | Roadway                                    |                        |                    |                |  |  |  |  |  |  |  |  |  |
| Acc Office                      | Intersection                               |                        |                    |                |  |  |  |  |  |  |  |  |  |
| Env.<br>Costs                   | Environmental Compatibility                | •                      | •                  | -              |  |  |  |  |  |  |  |  |  |
|                                 | Site Context                               |                        |                    |                |  |  |  |  |  |  |  |  |  |
| 16                              | Highways                                   | $\overline{\bullet}$   |                    |                |  |  |  |  |  |  |  |  |  |
| Proximity/<br>Access            | Fire Department                            | $\overline{\bullet}$   |                    |                |  |  |  |  |  |  |  |  |  |
| P.                              | Police Department                          | $\overline{\bullet}$   | •                  |                |  |  |  |  |  |  |  |  |  |
| Land<br>Use                     | Compatibility with Adjacent Land Uses      | •                      | •                  | •              |  |  |  |  |  |  |  |  |  |

## Task 6: Conceptual Site Plan

This will include various analyses to assist Lawrence Transit in making fundamental decisions regarding various design options, equipment and site design aspects. Design elements such as site size and location, structure size and type, arrangement of functional spaces, support facilities, utility needs, and structure size will be determined through an interactive process between the Study Management Team and the TranSystems design team. We will help determine and clearly identify space requirements for functional areas, the extent of site improvements, building size, equipment requirements, and most effective building arrangement for efficient flow. This task will consider short-term and long-range needs of the system in order to accommodate future growth.

Task 7: Conceptual Construction/Operations/Maintenance Costs

Based on the results from Task 6, the study team will prepare a preliminary estimate of the cost to develop a new facility (or possible renovation of an existing facility, if applicable) that meets the identified needs. This exercise will establish structure size and general layout, and parameters for sizing the site itself. This initial design will serve as input to the site selection, and serve as a basis for the preliminary cost estimate.

The purpose is to provide additional guidance to the consultant team and Lawrence Transit management during the site selection phase of the project.



An estimate of probable renovation and construction cost will be prepared based on the conceptual design. The level of detail will be consistent with the level of the design at this stage of the project. The cost estimates will be updated and refined at various steps of the project, as new information becomes available.

| Example: Estimate of Probable Cost                       |                  |  |  |  |  |  |  |
|--|------------------|--|--|--|--|--|--|
| Category   | Cost (thousands) |  |  |  |  |  |  |
| Site Demolition/Clearing                                 | \$75             |  |  |  |  |  |  |
| Site Development/Preparation                             | \$297            |  |  |  |  |  |  |
| Administration Building and Historic Renovation          | \$794            |  |  |  |  |  |  |
| Storage Building   | \$1,047          |  |  |  |  |  |  |
| Wash Building  | \$230            |  |  |  |  |  |  |
| Fueling Station  | \$275            |  |  |  |  |  |  |
| Maintenance Building Renovation and Expansion (Optional) | \$1,642          |  |  |  |  |  |  |
| Subtotal:  | \$4,359          |  |  |  |  |  |  |
| Contingency and Escalation (15%)                         | \$654            |  |  |  |  |  |  |
| Subtotal:  | \$5,013          |  |  |  |  |  |  |
| Professional Services (10%)                              | \$501            |  |  |  |  |  |  |
| Total:   | \$5,514          |  |  |  |  |  |  |

Task 8: Prepare Study Report and Documentation

Our team will prepare a final report synthesizing the previous tasks. A final public engagement effort will be executed in order to inform the stakeholders, agencies, Public Transit Advisory Committee and City Commission of the results of the Transit Center Location Analysis.



## **Project Schedule**

A preliminary schedule is outlined below with an approximate start date in June 2017. However, our team is available to begin work sooner should the selection process be accelerated. With an aggressive project schedule, our team will be able to provide recommendations derived from the planning process to inform other planning and budgeting initiatives.

| Project Tasks  | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|--|-----|-----|-----|------|-----|-----|-----|
| Task I: Existing Conditions and Data Collection                      |     |     |     |      |     |     |     |
| Task 2: Public and<br>Stakeholder Engagement                         |     |     |     |      |     |     |     |
| Task 3: Site Goals and Characteristics                               |     |     |     |      |     |     |     |
| <b>Task 4:</b> Identify Candidate Sites                              |     |     |     |      |     |     |     |
| <b>Task 5:</b> Analysis of Candidate Sites                           |     |     |     |      |     |     |     |
| Task 6: Conceptual Site Plan   |     |     |     |      |     |     |     |
| <b>Task 7:</b> Conceptual Construction/Operations/Maint enance Costs |     |     |     |      |     |     |     |
| Task 8: Prepare Study Report and Documentation                       |     |     |     |      |     |     |     |
| Public Engagement  | ·   |     |     |      |     |     |     |
| Stakeholder Advisory<br>Committee Meetings                           |     |     |     |      |     |     |     |
| Public Meetings  |     |     |     |      |     |     |     |
| Presentation to City<br>Commission                                   |     |     |     |      |     |     |     |

## **Ability to Complete Work**

We understand your need for a commitment of highly qualified staff. Jeff Reeder is our Principal-in-Charge on this project and is also the Quality Control Officer for TranSystems. He will work closely with TranSystems' Project Manager, Sarah Frost, to commit the resources essential to completing your tasks in a timely and professional manner. We have mindfully focused on resources that can make the Lawrence-Douglas County MPO and Lawrence Transit their top priority. The project schedules are such that time is essential on these projects. Key personnel have been chosen due to their expertise and availability to perform this project successfully.



## **TEAM QUALIFICATIONS + EXPERIENCE**

## **TRANSYSTEMS** Experience transportation.

The industry is moving away from the traditional focus solely on the automobile when it comes to planning corridors, recognizing the need for a plan that accounts for all users. Multimodal corridors are being developed around the country creating an opportunity for enhanced connectivity and increased longevity in system efficiency. This emphasis on integrating pedestrian and bicycle facilities with transit lines and existing automobile traffic is successful because it encourages livability and environmental sustainability in communities across the country. TranSystems has been involved since the beginning of this paradigm shift and continues to be a top provider of planning and engineering design for this unique infrastructure.

TranSystems specializes in integrated services. We have expertise in nine different markets, including transit, freight and passenger rail, and states and municipalities, all focused on creating a unique transportation experience. We have experts within each sector of the market helping to identify the best application of our services according to client need and best fit of the community. Our designs and planning services are focused on delivering a system in which the modes work together appropriately and receive equal treatment for the utmost in system effectiveness and efficiency.

## **TRANSITUITY**

Transituity, LLC is a newly formed transit and active transportation consulting firm located in Kansas City, Missouri and serving the greater Midwest. The firm was founded by Mark Swope and is built around Mark's 26 years of professional planning experience.

Transituity, LLC offers a full range of transit/active transportation planning, operations, and design services for public transportation projects. The firm brings extensive experience in transit route and system planning in small to medium sized urban areas, rural paratransit service design and operations, ridership forecasting, transit operations, bus rapid transit design and implementation, and corridor planning.

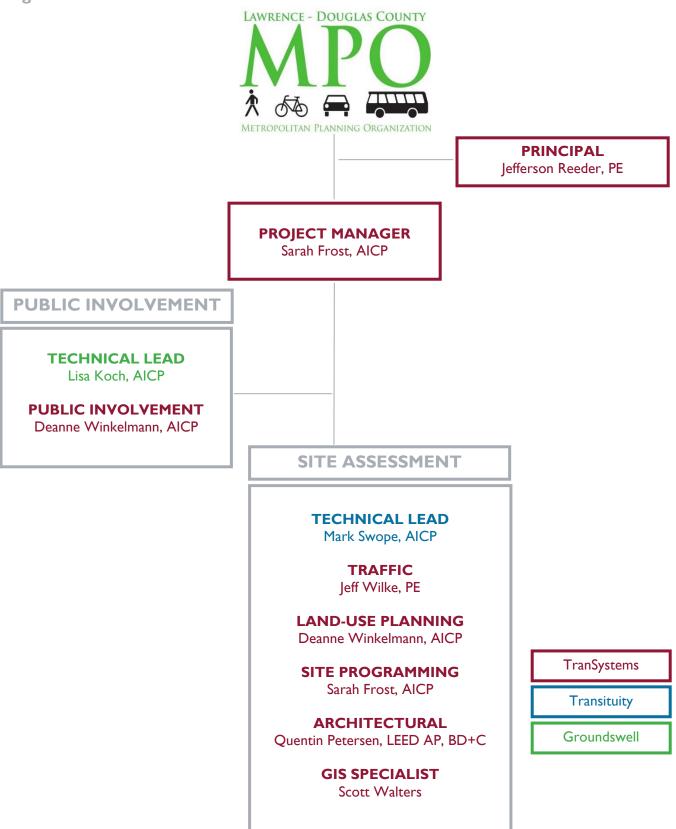
## **GROUNDSWELL CONSULTING**

Groundswell Consulting is a transportation planning and project development consulting firm. Groundswell Consulting serves public sector clients seeking to develop implementable, innovative and cost effective multimodal (highway, transit, bicycle/pedestrian, freight) projects. The cornerstone of Lisa Koch's style is communication and engagement, a performance and data-driven decision-making process, cost effective solutions and focusing on implementation from the outset.

Lisa spent five years at the Kansas Department of Transportation, first as a Project Coordinator in the Bureau of Traffic Engineering, where she developed projects with local communities from project inception through construction. She then became the Public Transit Manager in the Bureau of Transportation Planning, where she managed 200+ transit operations across the state of Kansas. Prior to starting her own consulting practice, Lisa spent five years at an international engineering consulting firm, where she specialized in large project development projects.



## **Organizational Chart**



## **JEFFERSON REEDER, PE**

**Principal** 

Jeff is a principal and senior vice president with the firm. His areas of concentration include facilities and buildings for states, municipalities and federal projects including transit facilities, barracks, command centers, and projects involving specialized structures. Jeff is a seasoned structural engineer who also serves as TranSystems' leader in vertical construction. His project experience includes planning, design and project management of a variety of building types and structural systems for private and public entities.

## OATS Regional Feasibility Study, Statewide, MO

OATS, Inc. is a private not-for-profit transportation service provider of personalized advance reservation and demand response transportation services. TranSystems conducted new facility and site location feasibility studies for their Northeast, West, and Southwest regions. Jeff served as the project manager in conducting the feasibility studies and overseeing the environmental analyses for the three transit regions. The studies recommended potential site locations and building programs sufficient to meet the funding requirements of the Federal Transit Administration and Missouri Department of Transportation.

## **Registrations**

Professional Engineer: ID, AZ, IN, MN, MO, MT, NJ, NV, OK, OR, KS, PA, TN, TX, WI

#### **Education**

B.S., Civil Engineering Vanderbilt University, 1979

M.S., Structural Engineering University of Texas, Austin, 1982

#### **Affiliations + Memberships**

American Concrete Institute American Institute of Steel Construction National Society of Professional Engineers Society of American Military Engineers

**Years of Experience** 36

Years with Firm 28

## Music City Central Transit Center, Nashville, TN

Project manager and structural and civil engineer of record for the design of this \$50 million downtown transit center located in the civic district in Nashville. Music City Central serves 14,000 riders a day while providing two municipal parking garages with a combined capacity of 450 cars, retail spaces, and a reconfigured public plaza in this vibrant, urban setting. The unique design of the transit center features stacked two-way horseshoe-shaped bus lanes that were chosen to minimize building footprint on a constricted site. The architectural design of the facility plays upon the musical heritage of Nashville while incorporating classical elements and massing that blends with and compliments the surrounding State office buildings.

#### OATS, Inc. Headquarters, Columbia, MO

Project manager representing the prime consultant for this \$2.4 million, 14,000-sq. ft. regional transit and headquarters facility for the largest paratransit agency in Missouri. Services included civil engineering, structural engineering and architectural services for the facility as well as planning justification, site evaluation, environmental analysis and site location recommendation. The four-acre facility, which opened in 2004, included a steel-framed main building housing administration, operations, maintenance facilities, vehicle wash building, fueling facility and an open-air steel canopy structure for buses.

## **SARAH FROST, AICP**

Project Manager

Sarah is a project manager and transportation planner with experience in transit facility planning, feasibility analysis and economic analysis. She is an experienced project manager with over 12 years of transportation planning and project management experience. She also has expertise in transit system analysis, land use planning, transportation community development projects and transportation master plans.

## OATS Regional Feasibility Study, Statewide, MO

OATS, Inc. is a private not-for-profit transportation service provider of personalized advance reservation and demand response transportation services. TranSystems conducted new facility and site location feasibility studies for their Northeast, West, and Southwest regions. Sarah served as the deputy project manager and the lead planner in conducting the feasibility studies and overseeing the environmental analyses for the three transit regions. The studies recommended potential site locations and building programs sufficient to meet the funding requirements of the Federal Transit Administration and Missouri Department of Transportation.

## JEFFTRAN Feasibility Study, Jefferson City, MO

Sarah was the project manager and lead planner for the TranSystems team, which performed a feasibility study for a potentially new transit facility that would combine JEFFTRAN's transit administration, operations and maintenance capabilities in one location. This study assisted JEFFTRAN in identifying a location for the new facility, which included a reconfiguration of their existing site.

#### Clarksville Transit Facility Feasibility Study, Clarksville, TN

Clarksville Transit System (CTS) was experiencing growth in its services that could potentially put pressure on its current administrative and operational functions. Sarah was the project manager and lead project planner working with CTS in conducting a facility needs analysis and developing programming requirements for their administrative and operational functions. This analysis determined if their current facilities could accommodate growth or if a new transit facility would better serve operational needs. The project addressed all of the requirements of the Tennessee Department of Transportation and FTA so that CTS is positioned to take the next steps and pursue funding to develop new facilities if a need is determined.

### **Registrations**

American Institute of Certified Planners (AICP), 2008

#### **Education**

M.U.P., Urban Planning, Environmental Land Use, University of Kansas, 2006

B.A., History University of Kansas, 2003

#### **Affiliations + Memberships**

American Planning Association – American Institute of Certified Planners

Kansas City Regional Transit Alliance Board of Directors, Vice Chair Kansas City, Kansas Chamber of Commerce – Board of Directors Institute of Transportation Engineers

## **Years of Experience**

## Years with Firm

## **QUENTIN BURKLAND PETERSEN, LEED AP BD+C**

Architect

Quentin has a variety of experience in the design of urban transportation and multifamily housing projects. He has worked on several successful rental car facilities and parking structures. His extensive work on the San Jose Consolidated Rental Car Facility included 3D modeling, drafting, coordination with subconsultants, management of shop drawings, construction administration, and field visits. He also managed the design and production of construction documents for a multi-level parking structure for the City of Gilbert.

## Kent State + PARTA Multimodal Center, Kent, OH

TranSystems was engaged by Kent State University, in cooperation with the Portage Area Regional Transit Authority (PARTA) and the City of Kent, to complete programming, site selection, and design for a new multimodal center in Kent, Ohio. Quentin is an architectural designer on the project, responsible for design and construction documentation.

## **Registrations**

LEED AP Building Design + Construction

#### **Education**

B.A., Architecture University of Miami, 2006

**Years of Experience** 

Years with Firm

#### Mesa BRT, Mesa, AZ

Quentin served as the architectural designer for the implementation of Bus Rapid Transit in Mesa, AZ. The project includes 24 stations and a transit center with extended transit amenities such as climate response, variable message boards, near level boarding, integration with local routes, sustainable design, queue jumper lanes, signal priority, coordination with park and ride lots, and integration of public art and ticket machines.

#### O'Hare Consolidated Rental Car Facility, Chicago, IL

Architect responsible for development of the building model and design documents for a new consolidated rental car facility for O'Hare Airport. The project involves a parking structure for rental cars and public, a customer service area, rental car maintenance facility, extension of the people mover into a new intermodal center, and associated support structures/areas. It incorporates extensive coordination with multiple transportation modes and integration of station design principles into the rental car and intermodal center concourses.

## San Jose International Airport Rental Car Facility, San Jose, CA

The new 6-level facility includes spaces for 3,000 rental vehicles, a 26,000 customer service area with 57 counter spaces for the rental car carriers. The attached processing facility is comprised of a staggered three-level structure that allows access from the parking building. The processing wing includes 63 fuel stalls, 12 vehicular wash stations and nine service bays for vehicular repairs and maintenance. The project was completed early and under budget. Quentine was responsible for the design of the garage and the stacked QTA facility, which was the first of its kind in the industry.

## **DEANNE WINKELMANN, AICP**

Land Use Planning

Deanne joined TranSystems in June 2014 after receiving a Master of Regional and Community Planning from Kansas State University. She previously held intern positions with two public agencies, a local municipality and a Metropolitan Planning Organization, graduating with nearly a year of experience. Deanne has experience with transportation and land use planning, particularly master plans or corridor studies that involve multiple modes of transportation including rail, transit, vehicular, bicycle, and pedestrian transportation. She also brings valuable skills in GIS analysis, communication and graphics, and public engagement strategies to support planning initiatives. Her interdisciplinary approach to planning and design issues creates a bridge between the community and technical spheres such as engineering, planning, and marketing.

## **Registrations**

American Institute of Certified Planners (AICP), 2016

#### **Education**

MRCP, Regional and Community Planning, Minor in Geography, Kansas State University, 2014

## **Years of Experience**

4

## **Years with Firm**

3

## Kansas State University North Campus Corridor, Manhattan, KS

Deanne served as the primary planner to support transportation, traffic engineering, and transit initiatives for the North Campus Corridor Master Plan. Deanne evaluated transit systems and financial information from multiple peer institutions to inform potential concepts for Kansas State University. After input from the campus community, TranSystems developed traffic engineering solutions and a transit concept that alleviated parking and traffic circulation concerns. Opinions of probable cost and implementation information were also documented in the final report.

### Music City Star Audit of Maintenance Operations, Nashville, TN

Deanne served as the primary planner to document the annual Audit of Maintenance Operations for a commuter rail service, Music City Star, in 2015. The audit served as third-party oversight to ensure the transit system operators is in compliance with Federal Railroad Administration (FRA) rules and regulations with respect to maintenance and inspections required for the passenger line and vehicle fleet. Deanne significantly updated the report template and documenting procedures to provide a high quality report that included recommendations to address issues and improve service operations.

#### Truman and Winner Road Intersection Study, Independence, MO

Deanne is serving as the project planner for transit planning and multimodal placemaking for an urban intersection poised for redevelopment. The intersection of Truman Road and Winner Road was assessed for potential improvements to bicycle and pedestrian circulation, transit access, and vehicular circulation. Because a local high school occupies one quadrant of the intersection, particular attention was given to the safety of students walking, biking, and commuting to class via bus, parent drop-off, or personal vehicles. Deanne developed multiple potential transportation concepts and is helping to advance a final land use and transportation concept for the intersection.

## **JEFFREY WILKE, PE, PTOE**

Senior Traffic Engineer

Jeff is a skilled traffic engineer with work experienced in both the public and private sector. As a traffic engineer with TranSystems, Jeff's assignments have included traffic impact studies, safety studies, and traffic engineering design. Jeff has also served on the board of the Kansas City Chapter of the Institute of Transportation Engineers (KCITE) for the past five years.

Jeff has prepared or assisted with all aspects of traffic impact studies from data collection through development of recommendations. Studies have ranged from suburban residential developments to urban event centers. The analyses included an evaluation of the impact of proposed developments and recommended capacity improvements to mitigate additional traffic generated. Jeff also has experience making presentations to elected officials and meeting with neighborhood groups.

### **Registrations**

Professional Engineer (Civil): KS, MO FL Professional Traffic Operations Engineer

#### **Education**

B.S., Civil Engineering Kansas State University, 2002

### **Affiliations & Memberships**

American Public Works Association Institute of Transportation Engineers

**Years of Experience** 16

Years with Firm

## Kansas State University North Campus Corridor, Manhattan, KS

Jeff served as the project manager and led the traffic engineering effort supporting the transit initiatives for the North Campus Corridor Master Plan. He prepared traffic engineering and parking solutions that interacted with transit concepts to alleviate parking and traffic circulation concerns. Opinions of probable cost and implementation information were also documented in the final report.

## Rosedale Master Plan and Traffic Study, Kansas City, KS

Jeff managed the transportation study portion of the project, which included assisting with stakeholder engagement, collection of traffic and pedestrian counts, development of traffic forecasts related to changes in travel patterns, modeling of the roadway network using Synchro/Sim Traffic, evaluation of alternatives to address traffic demands, evaluation of pedestrian and bicycle facilities, and evaluation of transit facilities. TranSystems assisted with the implementation plan including outlining the costs of recommended infrastructure and transportation improvements and create financing strategies for the implementation plan. TranSystems also assisted in prioritizing recommendations, creating a phasing plan, identifying partnerships and creating an incentive policy.

## Cerner Campus Traffic Impact Study, Kansas City, MO

Prepared a traffic impact study for the Cerner campus being proposed at I-435 and Bannister Road (the former Bannister Mall site). The campus will include nearly four million sq. ft. of office space for 15,000 employees. The campus also includes retail, hotel, and convention center land uses. As part of the traffic analysis, highway access was evaluated. Innovative concepts were proposed to allow site traffic to access the highway system, and minimize the impact on the existing interchanges.

## **SCOTT WALTERS**

GIS Technician

Scott has 10 years of experience as a rail designer, GIS technician, and field surveyor for a wide variety of industrial, commuter, and mainline rail projects. His responsibilities at TranSystems include drawing railroad track, entering, updating, and verifying track data, and verifying the accuracy of GIS track data. Design software experience includes MicroStation SelectSeries 2, Bentley GeoPak, and ArcGIS 9. Prior to joining TranSystems, Scott was a lead GIS responsible for the production of ArcGIS maps for several large and small projects, conducting research and analyses for community planning; and drafting architectural drawings using AutoCAD.

#### **Education**

B.A., Urban Planning and Design, University of Missouri-Kansas City, 2007

**Years of Experience** 10

Years with Firm

## UPRR East Portland Connection, East Portland, OR

Engineering Technician for design of a new connection track between the Brooklyn, Kenton, and Graham Lines to facilitate movement of freight through East Portland without causing congestion at grade crossings and the Port of Portland Terminals on the Kenton Line. The connection track required coordination with adjacent UPRR facilities construction, numerous utilities, including City of Portland force mains, force vaults, a major pump station. The connection track winds through a forest of Oregon DOT overpass piers for the busy I-5/I-84 interchange, which required significant collision protection and coordination with ODOT. Retaining walls and innovative atgrade protection slabs were used to construct the connection track in order to avoid City infrastructure within the constraints of the site.

## East Metro Rail Capacity and Engineering Improvements Study, Saint Paul, MN

Engineering technician for a rail capacity study and conceptual design for Ramsey County Regional Rail Authority that considers both freight rail growth and new passenger rail services. The study includes a detailed simulation of rail operations to analyze the capacity of the existing system and proposed infrastructure and operational improvements. A plan for systematic improvements to address the capacity constraints was developed and prioritized based on operational benefits and the cost of new facilities.

## BNSF Capacity Improvements, Phillips to MacDonald, Nebraska

Construction inspector on this 10-mile second main project for BNSF. Scope of construction included earthwork for the addition of the second main and a new access road the length of the new main line, improvements to atgrade crossings within city limits, the installation of new storm drainage structures under the track, and the construction of a new, 900' long railroad bridge over the Platte River. Scott was responsible for oversight of all construction activities being performed by the contractor, review of all project submittals, maintenance and review of the project schedule, verification and maintenance of monthly pay estimates, mitigation of potential changes, conducting weekly progress meetings, and maintenance of project documentation.

## LISA KOCH, AICP

Technical Lead

Lisa is the owner of Groundswell Consulting, a transportation planning and project development consulting firm. Groundswell Consulting serves public sector clients seeking to develop implementable, innovative and cost effective multimodal (highway, transit, bicycle/pedestrian, freight) projects. The cornerstone of Lisa's style is communication and engagement, a performance and data-driven decision-making process, cost effective solutions and focusing on implementation from the outset.

#### **Registrations**

American Institute of Certified Planners (AICP), 2007

#### **Education**

Masters of Urban Planning, University of Kansas, 2007

Urban Planning and Design, University of Kansas

Lisa spent five years at the Kansas Department of Transportation, first as a Project Coordinator in the Bureau of Traffic Engineering, where she developed projects with local communities from project inception through construction. She then became the Public Transit Manager in the Bureau of Transportation Planning, where she managed 200+ transit operations across the state of Kansas. Prior to starting her own consulting practice, Lisa spent five years at an international engineering consulting firm, where she specialized in large project development projects. She served as the Project Manager of the Jackson County Commuter Corridors Alternatives Analysis, a \$2.1 million pre-NEPA planning study, with MARC as the client. Her largest project was the Iliana Tier 2 Environmental Impact Statement, a \$40 million dollar planning study, where she served as the Deputy NEPA Lead, focusing on technical studies and design/NEPA coordination.

Lisa currently serves as the Program Manager of the Rock Island Rail Corridor for Jackson County, Missouri. Having developed this project from the planning phase in the Alternatives Analysis, she is now seeing the project through its rail corridor purchase and soon project design, construction and operations.

Lawrence Multimodal Center Project Development Project (Client: City of Lawrence and The University of Kansas, March 2016-July 2016): Groundswell Consulting, LLC is supporting the development of a concept for a Multimodal Facility on Lot 90 on the University of Kansas. This portion of project development includes concept development, the development of a TIGER grant, public engagement, traffic study and the completion of NEPA.

Flint Hills MPO Multimodal Integration Study (Client: Flint Hills Metropolitan Planning Organization, March 2015-ongoing): Lisa is supporting a study that will completely overhaul the transit network in Manhattan and identify capital improvements for both transit and bicycle infrastructure. This study will also look at strategies that integrate technology with these two modes.

Kansas City Area Transportation Authority Asset Management Gap Assessment, Kansas City, MO At her previous employer, Lisa served as the project manager for an Asset Management Gap Assessment conducted for the KCATA, which included an evaluation of rolling stock, fixed assets and IT systems.

City of Warrensburg Comprehensive Plan and Transit Preliminary Planning (Client: City of Warrensburg, Missouri, May 2016-ongoing): Lisa is conducting a preliminary assessment of transit opportunities for the Warrensburg as part of their comprehensive planning efforts. This will include transit in town, with the major generator being Central Missouri University, and transit out of town to the nearby Air Force base and the Central Missouri University campus in Lee's Summit, Missouri, 45 miles west of town.



## **MARK SWOPE, AICP**

Technical Lead

Mark is a Transit Planner with twenty-two years of transit planning experience. He recently formed a new firm, "Transituity, LLC", devoted to providing transit planning and active transportation consulting services throughout the Midwest. This was preceded by nine years with Olsson Associates, Inc., where he founded and led the firm's Transit and Active Transportation Planning Practice Group, and thirteen years with the Kansas City Area Transportation Authority, where he served as the Director of Planning and oversaw the creation of the regions first regional transit plan "Smart Moves" and the development of innovated services such as the "MAX" Bus Rapid Transit lines and "MetroFLEX" suburban oriented on-demand transit.

#### **Registrations**

American Institute of Certified Planners (AICP)

### **Education**

Masters in Urban Planning, Masters in Public Administration

**Years of Experience** 26

Mark has extensive experience working with small to mid-size transit service agencies in evaluating and developing improvements to the services those agencies are responsible for. A few examples are the City of Lawrence/University of Kansas Coordinated Transit Study, which involved the development of inter-agency coordination strategies between the city bus system and the University bus system, The St. Joseph Transit Comprehensive Operations Analysis, and the Wichita Transit Service Analysis and Community Outreach Project. Mark served as the Project Manager on all three of these efforts.

- Experience with management of complex projects
- Served as Practice Group Leader for an Engineering/Planning consulting firm.
- Served as a member of the Independence, Missouri City Council from 1994 to 1998 and a member of the City Planning Commission from 1992-1994.
- Co-chaired the Special Transportation Advisory Committee at the Mid-America Regional Council from 1999-2002.
- Headed the Joint MARC/KCATA/JOCO/WYCO effort to develop the Kansas City Regional Smart Moves Transit Plan from 2001-2003.
- Served as an appointed member of the Bi-State Cultural Commission responsible of the oversight of the renovation of the iconic Kansas City Union Station from 1996-1998.
- Completed the Massachusetts Institute of Technology Transit Planning and Operations course in Cambridge MA (1995).
- Experience working with various geographic information systems.
- Knowledge and understanding of Federal Transit Administration programs and regulations.





# **TranSystems**

OATS, Inc.
Dorothy Yeager, Executive Director
(573) 443-4516

## **OATS, INC. REGIONAL FACILITIES**

OATS is the largest provider of rural paratransit services in the state of Missouri, with a fleet of nearly 400 vehicles and operations in 87 counties. OATS retained TranSystems to provide planning and design services for the company's headquarters and mid-Missouri regional operations center in Columbia, Missouri, as well as new regional facilities located across the state.

For each facility, TranSystems conducted a feasibility study to determine the preferred location for the relocated facility and developed conceptual designs. This preliminary study also included a site location analysis, including identification of possible sites that met OATS' criteria for office space, vehicle storage, vehicle maintenance, and accessibility to the population being served, opportunity for expansion, and cost. TranSystems assisted OATS with planning justification required by the Missouri DOT and the Federal Transit Administration (FTA). As part of this, TranSystems conducted an environmental analysis to address the National Environmental Protection Act (NEPA) requirements.

## Headquarters/Operations Center, Columbia, MO

TranSystems served as the prime consultant for \$2.4 million, 14,000 square-foot regional transit and headquarters facility for the largest paratransit agency in Missouri. Services included civil engineering, structural engineering and architectural services for the facility as well as planning justification, site evaluation, environmental analysis and site location recommendation. The four-acre facility, which opened in 2004, includes a steel-framed main building housing administration, operations, maintenance facilities, vehicle wash building, fueling facility, and an open-air steel canopy structure for buses.

## Northwest Region Facility, St. Joseph, MO

OATS Northwest Region Facility, St. Joseph, Missouri. TranSystems conducted a feasibility study to determine the preferred location for the relocated facility and developed conceptual designs. This preliminary study also included a site location analysis. TranSystems assisted OATS with planning justification required by the MoDOT and the FTA. As part of this, TranSystems conducted an environmental analysis to address the NEPA requirements. A phase I environmental site assessment completed work in this phase. After the feasibility study was completed, TranSystems provided architectural, civil, and structural engineering design services for the implementation of the facility.





## East Region Facility, Bridgeton, MO

A phase I environmental site assessment completed work in the first phase. Based on the feasibility study, OATS purchased an existing facility (previously used as a rental car processing center). TranSystems provided architectural, civil, and structural engineering design services for the renovation/expansion of the facility that OATS purchased. The expanded facility features 6,000 sq. ft. of office space for OATS' east area administration and regional operations. The four-acre site also includes covered storage for 60 vehicles, a bus wash facility, a double-bay maintenance shop (existing), and parking for employees and visitors. TranSystems also provided construction administration services including review and processing of pay applications, on-site inspections, and processing of construction submittals through the project's completion.

## Southwest Region Facility, Springfield, MO

TranSystems conducted a feasibility study to determine the best location for OATS Transit's southwest regional headquarters and operating facility in Springfield, Missouri. Tasks included identification of possible sites that met OATS' criteria for office space, vehicle storage, vehicle maintenance, and accessibility to the population being served, opportunity for expansion, and cost. Once the preferred site was identified, a conceptual site layout was developed to insure the site would accommodate the required bus turning movements, employee parking, and ease of access to adjacent public roads. A cost estimate was developed for the preferred option and an official recommendation in the form of a feasibility study was submitted to OATS. The site selection process followed for this project met Federal acquisition requirements.

TranSystems, through a separate contract with OATS, was chosen to provide full design and construction administration services. TranSystems provided civil and structural engineering design for as well as leading construction administration efforts and compliance verification with respect to FTA regulations.





Metropolitan Transit Authority, TN
Paul Ballard, CEO

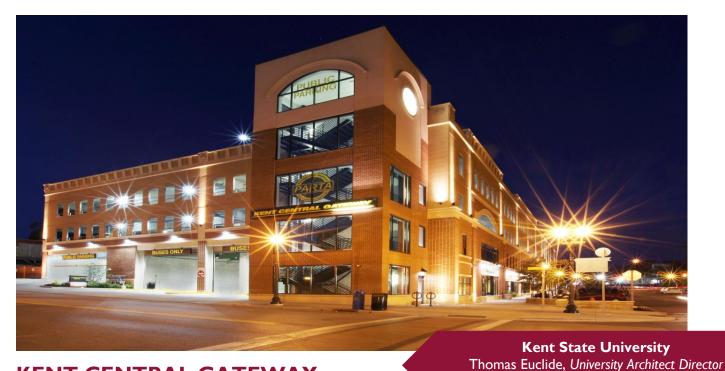
(615) 862-6262

## MUSIC CITY TRANSIT CENTER, NASHVILLE. TN

An innovative downtown transit center solution to replace a congested, inadequate on-street bus transfer area near the State Capitol. The vision encompassed a multi-function transit hub that would not only be the focal point of transit service in the metropolitan area, but also provide a public amenity to enhance the face and street life of downtown Nashville, aka, Music City USA. Perhaps the most ingenious feature of the new hub is the work of TranSystems' multi-disciplined engineers: stacked "horseshoe" bus lanes that access the public street system at two different levels. This two-way loop system makes the most of the available space and accommodates 24 busses (20 articulated and four standard busses). The team's rework of the underground garage and plaza structurally married the two with a cantilevered design to ensure integrity of existing supports. The scale and massing of the building, which preserves existing sight corridors to the Capitol, and specification of limestone and other finishes common to downtown Nashville, showcases TranSystems urban planning expertise.







## KENT CENTRAL GATEWAY KENT, OH

(330) 672-3880

The new Kent Central Gateway multimodal center consists of transit, parking, and auxiliary functions located between Depeyster, Haymaker Parkway, the Back of the Main Street Building, and along Erie Street. The 192' by 306' irregular-shaped Gateway encourages the use of transit, expands community access, benefits economic development for the City, and creates increased sustainability by utilizing more efficient modes of travel for the community.

The facility includes 10 covered bus bays, an air conditioned transit lounge, driver breakroom, restrooms, separate bus driveways, ticket booths, 364 public parking spaces with an at-grade pedestrian connection, an office for the Porta Area Regional Transit Agency (PARTA), and 10,000-SF of leasable retail and office commercial space. TranSystems provided transit planning, traffic analysis, environmental services, programming, architecture, civil and structural engineering, security system design, grant writing, and tenant design guidelines for this new facility in downtown Kent, Ohio. Funding for the project came from a TIGER Grant, which TranSystems wrote and submitted on behalf of PARTA.









Jefferson City, MO - Transit (Jefftran) Richard Turner, Transit Division Director (573) 634-6477

## **JEFFTRAN - FEASIBILITY STUDY**

JeffTran has contracted with TranSystems to perform a Feasibility Study for a new downtown transit intermodal facility that will combine Administration, Operations, and Maintenance capabilities. This study will assist JeffTran in identifying a downtown location for the new facility, which could include a reconfiguration of their existing site. The study will include an environmental study to help secure a Categorical Exclusion as defined by NEPA. The study will involve civil, structural, architectural and planning expertise out of the Kansas City office as well as MEP assistance from GPW Engineers out of Lawrence, KS.





Clarksville Transit System
Arthur Bing, Director
(931) 553-2429

## CLARKSVILLE TRANSIT FACILITY FEASIBILITY STUDY

During development of the feasibility and needs analysis for this study, it was necessary to evaluate and capture both the physical and functional capabilities and liabilities presented of the existing CTS Transit and Fleet Service complex buildings. The specific goals of this evaluation process were as follows:

- Understand the current functional space utilization and identify critical areas where the existing space limitations pose challenges to meeting current and future transit operational needs.
- Understand how the physical layout and condition of existing facilities may be influencing the CTS staff's effectiveness and their ability to perform critical job functions.
- Evaluate the physical condition of all existing building components, and identify critical areas of concern such as compliance with the applicable building codes, including environmental and energy aspects of these codes, ADA compliance, and physical condition of the facility.
- Provide a cursory evaluation of properties surrounding the facility with respect to possible expansion of operations onto these properties.
- Determine if the existing facilities or specific portions thereof can successfully and feasibly be incorporated into a long term plan and help satisfy established goals of the organization as outlined in the Strategic Plan that was also developed by TranSystems, and as further identified in the evaluation process.

With these goals in mind, the general facility evaluations were conducted looking at both the physical and functional aspects of the CTS complex. The team visited the site on April 12-13, 2010. Visual inspections were conducted, photographs were taken of the different portions of the facility, existing plans of the facility were reviewed and selected staff members were interviewed concerning their work experiences. Visual observations were made during normal operating times to better observe an analyze bus movements and procedures at the complex. Particular attention was paid to identification of inherent operational challenges presented by physical arrangement, interaction condition of the various components of the facility, and condition and location of the various site components.



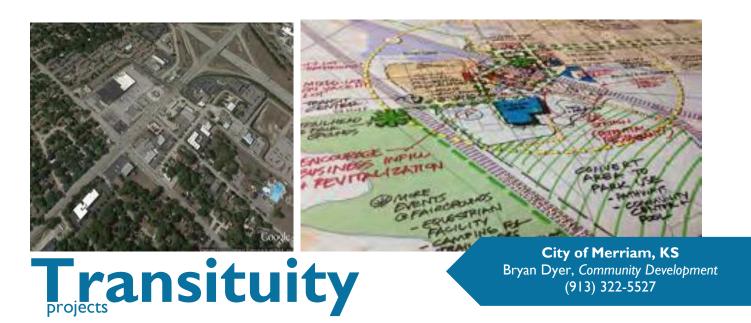
## **GATLINBURG TRANSIT SERVICE CENTER** – MASTER PLAN

A thorough review of Gatlinburg Transit's maintenance and storage functions was conducted and a complete functional and space program was developed identifying both existing conditions and future needs. The study concluded that the existing maintenance and storage facilities are inadequate and master plans were designed to accommodate the transit needs. The major findings included:

- Current storage space was inadequate to meet the needs of the current operation and does not address the future needs as the Gatlinburg's population and tourism base grows.
- A parking canopy was desired to eliminate open, uncovered vehicle storage which exposes the fleet to the elements. Currently, there is no fenced, secure area for storing fleet vehicles.
- The existing maintenance facility was crowded due to both City and Transit vehicles being serviced there and it is not readily expandable.
- The current site had inadequate wash facilities.

As part of the analysis, two potential sites within the Gatlinburg area were identified by Gatlinburg Transit as alternatives for the location of a storage facility and potential new maintenance facility.

Based on their needs, site layouts were developed for the two potential sites. The layouts were designed taking into consideration the ease of vehicle circulation, functional relationships of the buildings, efficient use of available space on the site, and ease of access onto and off the site. A master plan and a conceptual design were developed for a new maintenance facility with adjoining storage.



## SHAWNEE MISSION PARKWAY CORRIDOR STUDY

Mark Swope was part of a consulting team that was selected to develop and analyze several redevelopment scenarios centered around an area in the City of Merriam, Kansas located on either side of Shawnee Mission Parkway between I-35 and Antioch Road. The purpose of the development scenarios was to create something that would serve as a litmus test in evaluating development proposals for scale, type, intensity, and anticipated economic development performance. The project was primarily focused on evaluating the traffic impacts and identifying the appropriate transportation infrastructure necessary to support the various development scenarios

This project area has the potential to serve and be served by current and future transit service as a potential hub or as an access point on two major corridors (I-35 and Shawnee Mission Parkway). Mark led the effort to describe how transit from both I-35 and from Shawnee Mission Parkway would interact with and support new development and land use on Shawnee Mission Parkway and examine the feasibility and appropriateness of various levels of transit investment based on the development scenarios for the project area.





City of Lawrence, KS Robert "Bob" Nugent (785) 832-3464

## TRANSIT CENTER LOCATION ANALYSIS – LAWRENCE, KS

Mark Swope served as Project Manager on a study for the City of Lawrence, Kansas that was initiated to determine a candidate site, and conceptual costs, for a new transit center which would also serve as the major transfer hub for the city transit routes. The new location would replace the existing downtown transit center as the system hub, as the downtown transit center has been challenged with the small geographic area of downtown, continued developmental pressure, and impacts on businesses. This study first used a GIS process and various socioeconomic and transit-related geographic parameters, to identify a general geographical area to focus the study's attention. Multiple sites within this geographical area were further examined for suitability as a transit center, based off of their general development constraints, impact on the transit route structure, and opportunities for synergy with existing or potential land use and ridership patterns. After an evaluation and continued discussion with the study team and presentation to the City Commission, the project focused on evaluating two separate sites of 925 lowa, and 2021 Stewart Avenue.



**WICHITA TRANSIT COMMUNITY OUTREACH STUDY** 

Steve Spade, Transit Director (316) 352-4805

Mark Swope served as Project Manager on a project for the City of Wichita which was aimed at developing transit service concepts based specifically on feedback gathered through a unique community outreach program. The program aimed to create awareness, educate and engage targeted stakeholders and the traveling public, and motivate long-term behavioral changes related to transit services. Although it's important to inform citizens about general transit practices, it is sometimes not enough to initiate behavior change or to develop program support. To encourage and foster behavioral changes, the outreach strategy focused on addressing relevant and specific issues that affected citizens daily, and engaged the community to persuade and convince them that they could be a part of creating positive solutions. This is what made the program unique. The outreach strategy included the following steps:

- Educating the public on existing, specific situations
- Identifying alternative approaches to realize a positive change
- Evaluating those alternatives with the help of a large and diverse "public"
- Translating the outreach results into priority actions and policy considerations

The Wichita transit project was completed in three study phases. The first phase included engaging the public and stakeholders to identify key transportation needs and desired transit characteristics. The second phase involved working with Wichita Transit to develop transit scenarios that addressed the needs identified in phase one. And the third phase involved taking the concepts developed back to the public to validate the concept and gain support for the solutions. The three-phase process provided a great opportunity to educate the public on transit and the transit opportunities the community had available to them in the future.



## LEVEL OF EFFORT/COST

For the described Scope of Services, TranSystems has estimated the total fee including sub-consultants and expenses to not exceed \$49,946, over the project timeline. A full breakdown of hours and fee is illustrated below.

|  |    |          |              |     |          | Tra | nSystems |     |            |    |                 |           | Tran              | situit | ′        |     | Grou              | ındsv | well      | TO | TAL    |
|--|----|----------|--------------|-----|----------|-----|----------|-----|------------|----|-----------------|-----------|-------------------|--------|----------|-----|-------------------|-------|-----------|----|--------|
|  | Pr | rincipal | PM           | Pla | anner II | ,   | Arch II  | Eng | gineer III | Te | chnician<br>III | Sub-total | Senior<br>Planner | S      | ub-total |     | Senior<br>Planner |       | Sub-total |    |        |
| Task I: Data Collection                                      |    |          | 6            |     |          |     |          |     |            |    |                 | 6         | 4                 |        | 4        |     | 4                 |       | 4         | I  | 4      |
| Task 2: Public and Stakeholder Engagement                    |    | 2        | 24           |     | 4        |     |          |     |            |    |                 | 30        | 12                |        | 12       |     | 40                |       | 40        | 8  | 32     |
| Task 3: Site Goals and Characteristics                       |    |          | 8            |     | 4        |     |          |     |            |    |                 | 12        | 12                |        | 12       |     | 8                 |       | 8         | 3  | 32     |
| Task 4: Identify Candidate Sites                             |    |          | 8            |     | 4        |     |          |     |            |    |                 | 12        | 12                |        | 12       |     | 8                 |       | 8         | 3  | 32     |
| Task 5: Analysis of Candidate Sites                          |    |          | 8            |     | 4        |     |          |     | 8          |    |                 | 20        | 12                |        | 12       |     | 8                 |       | 8         | 4  | Ю      |
| Task 6: Conceptual Site Plan                                 |    | 2        | 6            |     |          |     | 16       |     |            |    | 28              | 52        | 12                |        | 12       |     | 8                 |       | 8         | 7  | 72     |
| Task 7: Conceptual Construction/Operations/Maintenance Costs |    |          |              |     |          |     | 16       |     |            |    |                 | 16        | 12                |        | 12       |     | 16                |       | 16        | 4  | 14     |
| Task 8: Prepare Study Report and Documentation               |    | 2        | 12           |     | 6        |     |          |     |            |    |                 | 20        | 8                 |        | 8        |     | 24                |       | 24        | 5  | 52     |
| Additional Meetings:   |    | 2        | 16           |     |          |     |          |     |            |    |                 | 18        | 16                |        | 16       |     | 16                |       | 16        | 5  | 50     |
| Labor  |    |          |              |     |          |     |          |     |            |    |                 |           |                   |        |          |     |                   |       |           |    |        |
| Hours  |    | 8        | 88           |     | 22       |     | 32       |     | 8          | 28 |                 | 186       | 100 100           |        | 100      | 132 |                   | 132   |           | 4  | 18     |
| Labor Rate   | \$ | 300      | \$<br>138    | \$  | 90       | \$  | 94       | \$  | 160        | \$ | 103             |           | \$ 115.50         |        |          |     | \$ 100            | )     |           |    |        |
| Overhead   |    |          |              |     |          |     |          |     |            |    |                 |           |                   |        |          |     |                   |       |           |    |        |
| Profit   |    |          |              |     |          |     |          |     |            |    |                 |           |                   |        |          |     |                   |       |           |    |        |
| Billable Rate  | \$ | 300.00   | \$<br>138.00 | \$  | 90.00    | \$  | 94.00    | \$  | 160.00     | \$ | 103.00          |           | \$ 115.50         |        |          |     | \$ 100.00         | 0     |           |    |        |
| Total labor cost   | \$ | 2,400    | \$<br>12,144 | \$  | 1,980    | \$  | 3,008    | \$  | 1,280      | \$ | 2,884           | \$ 23,696 | \$ 11,550         | \$     | 11,550   |     | \$ 13,200         | 0 5   | \$ 13,200 | \$ | 48,446 |
| Expenses   |    |          |              |     |          |     |          |     |            |    |                 | \$ 500    |                   | \$     | 500.00   |     |                   |       | \$ 500    | \$ | 1,500  |
| Total cost   |    |          |              |     |          |     |          |     |            |    |                 | \$ 24,196 |                   | \$     | 12,050   |     |                   | 9     | \$ 13,700 | \$ | 49,946 |

TranSystems – 49%
Transituity – 24%
Groundswell – 27%



| Appendix B   |  |                                    |
|--|--|------------------------------------|
| Project No   |  | 07-19-80-R12 (MPO)<br>Sheet 1 of 1 |
| REC  | QUIRED CONTRACT PROVISION<br>DBE CONTRACT GOAL |                                    |
| The total dollar goal to be subcont \$13,700   | racted to KDOT-Certified DBE fir               | ms on this contract is             |
| List all KDOT-Certified DBE subcon<br>the line item(s) of work from the U<br>subcontracted to the DBE. |  |                                    |
| IDENTI   | FICATION OF DBE PARTICIPATION                  | DN                                 |
| Name of KDOT-Certified<br>DBE Subcontractor  | Type of Work                                   | \$ Value of work                   |
| Groundswell Consulting   | Public Involvement/Planning                    | ş 13,700                           |
|  |  | \$                                 |
|  |  | \$                                 |
|  |  | \$                                 |
|  |  | \$                                 |
|  |  | ş                                  |
|  | Total KDOT-Certified DBE                       | \$ _13,700                         |
| TranSystems  |  |                                    |
| 2400 Pershing Rd., Suite 400   |  |                                    |
| Kansas City, MO 64108  |  |                                    |
| (Prime Bidding Consultant Name a   | nd Address)                                    |                                    |
| If \$ Value of Work is zero, please documentation.   | attached the Prime Bidding Con                 | nsultant's Good Faith Effort       |
| A list of KDOT-Certified DBEs can be f<br>KDOT's website:http://www.ksdot.o                            |  |                                    |



Rev. 06/11