

October 12, 2015

LPA On-Call Professional Services | Traffic Engineering and TEAP

AECOM Technical Services, Inc. (AECOM) is pleased to submit our qualifications for LPA On-Call Professional Services for Traffic Engineering and TEAP. Our transportation engineers and planners have provided their professional expertise for numerous traffic and corridor studies in Missouri. **AECOM has been involved in traffic data collection, studies and analysis and the design of roadways for many municipal, county and state agencies.**

General Experience of Firm

URS Corporation joined the AECOM family of companies on October 17, 2014. AECOM is a premier, fully integrated professional and technical services firm positioned to design, build, finance and operate infrastructure assets around the world for public- and private-sector clients. The firm's global staff — including architects, engineers, designers, planners, scientists and management and construction services professionals — serves clients in over 150 countries around the world, AECOM is ranked as the #1 engineering design firm by revenue in *Engineering News-Record* magazine's annual industry rankings, and has been recognized by *Fortune* magazine as a World's Most Admired Company. The firm is a leader in all of the key markets that it serves, including transportation, facilities, environmental, energy, oil and gas, water, high-rise buildings and government. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering customized and creative solutions that meet the needs of clients' projects. A *Fortune 500* firm, AECOM companies, including URS Corporation and Hunt Construction Group, had revenue of approximately \$19 billion during the 12 months ended June 30, 2015.

Missouri Services

With a presence in Missouri since 1958, our St. Louis and Kansas City offices as well as Overland Park, KS have been serving Missouri clients for over 50 years. The MO-KS offices are staffed with over 290 multi-disciplined professionals - engineers, planners, geologists, scientists, architects, construction managers, technicians, operations and maintenance specialists, and administrative personnel. Our experience covers a **broad range of services from planning studies to reconstruction, widening, upgrades, new construction, and all related specialties including: traffic, corridor safety, pedestrian/bike routes, parking and sign inventories.**

Past Performance

AECOM has effectively supported numerous communities with TEAP and LPA funded projects including the following: *All projects were completed by URS which became a part of the AECOM family of companies in October 2014.*



TRAFFIC ENGINEERING ASSISTANCE PROGRAM (TEAP) | CITY OF MEXICO, MO As a part of TEAP, the City of Mexico selected URS to analyze pedestrian and vehicle movements at the intersection of West Boulevard Street and South Morris Street and provide recommendations to improve safety and efficiency. Several factors created a difficult intersection for both pedestrian and vehicle safety. An offset on Morris, north and south of Boulevard, reduced visibility. Secondly, the intersection handled heavy pedestrian and vehicle traffic due to the location of the middle school in the southwest quadrant of the intersection. URS identified a number of alternatives including a roundabout and a realignment of the intersection to remove the offset. **Services provided: Data Collection | Synchro Analysis | Traffic Counts | Traffic Observations | Queue Delay Analysis | Pedestrian Counts | Traffic And Pedestrian Analysis | Signal Warrant Analysis | Construction Cost Estimate**

LONG RANGE TRANSPORTATION PLANS (L RTPS) | CITY OF ST. JOSEPH, MO URS worked with the City and their MPO, the St. Joseph Area Transportation and Study Organization (SJATSO) to complete their 2020, 2030, 2035 and 2040 L RTPs. As part of the study's Public Involvement Plan, URS managed, designed and facilitated focus group workshops and a Leadership Roundtable. Information gathered from both the workshops and roundtable, were used to help identify area transportation deficiencies and led to the development of a set of transportation improvement measures. Each of the plans included transportation issues, existing and future conditions, alternative analysis and the recommended transportation plan, which included action items and fiscally-constrained roadway priorities. **Services provided: Traffic Data Collection | Traffic Analysis | Public Involvement | Long Range Planning | Land Use Coordination | Travel Demand Modeling**

SIGNAL AND ITS UPDATES | CITY OF ST. LOUIS, MO URS designed upgrades at Lambert Airport for their traffic management system including signals, communications, fiber optic, video detection cameras and controllers. Improvements included emergency preemption and lightening protection. **Services provided: Traffic Equipment Inventory | Traffic Analysis | Signal Design | Preliminary and Final Design | Cost Estimating**

MUEGGE AND MEXICO ROADS INTERSECTION | CITY OF ST. CHARLES, MO The project included analysis and development of geometric and signal improvements to enhance safety for both motorists and pedestrians. **Services provided: Traffic Operations | Signal Design | Geometric Design | Cost Estimating**

CLARK LANE IMPROVEMENTS | CITY OF COLUMBIA, MO URS provided design services for the reconstruction of Clark Lane from Route PP to St. Charles Road, including roundabout, sidewalks, and bike paths. Traffic services included data collection, review of the MPO's regional model, future year forecasts, and intersection and roundabout capacity analysis using Synchro, VISSIM, and SIDRA software. *Services provided:* **Traffic Forecasting | Traffic Analysis | Permitting | Conceptual Planning | Public Involvement | Preliminary and Final Design | Utility Coordination | Preparation of Construction Bid Documents**

EAST PITMAN LOOP ROAD | ST. CHARLES COUNTY, MO This new two-lane highway expanded the existing roadway network and minimized adverse travel, by connecting Pitman Avenue to Highway A. This project included 800 feet of two-lane pavement and a new stop controlled intersection with Route A. *Services provided:* **Traffic Data Collection | Traffic Analysis | Intersection Geometrics | Preliminary and Final Design | Permitting | MoDOT Coordination**

HIGHWAY 79 CORRIDOR STUDY | CITY OF O'FALLON, MO The Highway 79 interchange at Salt River Road was experiencing high peak hour volumes with the completion of the Salt River Road Extension. URS completed data collection and analyzed potential connection routes between Route P and Salt River Road to determine the benefits of each of the potential routes on the Highway 79 and Salt River Road operations. *Services provided:* **Definition of Alternatives | Traffic Operations | Cost Estimating | Environmental and Socioeconomic Impacts**

ROUTE 60 AND BUSINESS 60 | CITY OF NEOSHO, MO In cooperation with the City and MoDOT, URS studied traffic along US 60 and Business 60, an area experiencing traffic delays and safety concerns from development and growth. URS completed a detailed traffic impact study and developed intersection and roadway geometrics to mitigate traffic impacts. *Services provided:* **Traffic Data Collection | Traffic Operations | Accident Analysis | Traffic Modeling | Signal Design | Geometric Design | Cost Estimating**

Qualifications of Personnel

The following are key AECOM personnel with demonstrated success in managing federally funded projects for a variety of municipal clients and the experience and technical expertise to successfully complete traffic and TEAP projects of all complexities. A majority of our project managers have received MoDOT certification for LPA projects.

Mike Brown, PE | LPA-Certified has 19 years of roadway engineering experience including 12 years with URS. He has led numerous projects for municipalities, counties and MoDOT, recently serving as Project Manager for the I-270/Route 364 (Page Avenue) Interchange, which included significant traffic modeling and analysis and an AJR. Mike led the Fee Fee Road project in Maryland Heights, which included traffic analysis and signals enhancing pedestrian access. He was also the Deputy Project Manager on the Clark Lane Improvements Project.

Renee Ducker has 11 years of experience in transportation planning projects including traffic, pedestrian, transit, multimodal and parking impact studies. She has performed data collection including signal timing, traffic and pedestrian counts, speed runs and intersection inventories. Analysis has included trip generation, level of service, traffic volume and parking capacity for alternatives analyses, environmental assessments, environmental impact statements and other environmental documents. Renee was a key team member for the City of Mexico TEAP project and the recently completed long range plan for Metro Transit in St. Louis.

Jo Emerick, PE | LPA-Certified has over 35 years of experience in transportation engineering encompassing planning, design and management responsibilities. Her traffic and TEAP experience includes crash analysis, traffic and pedestrian counts, inventory of existing geometrics and traffic control devices, origin and destination studies, operational analysis, traffic forecasting, circulation studies, pedestrian and vehicular signal design, development of intersection improvements, congestion mitigation, and parking studies. Jo has managed numerous roadway LPA projects. Jo served as Project Manager for the City of Mexico TEAP project and the Clark Lane Improvements project.

JC Murray, PE | LPA-Certified has been with the firm for 15 years and has extensive transportation engineering experience, including federally funded projects. His traffic experience includes intersection improvements, pedestrian and vehicular signal design, and traffic analysis. JC is currently managing the Muegge Road at Mexico Road intersection improvements project for the City of St. Charles, and was the Project Manager for the City of O'Fallon's Highway 79 Corridor Study.

TECHNICAL EXPERTISE	STL/KC
Pavement Markings	7
Traffic Signals and Lighting	2
LPA Certified	5
General Lighting	1
Operational Analysis	1
Intersection Safety Analysis	2
Speed Limit Review	1
TEAP Studies	3
Pedestrian and Bicycle Design	6
Parking Studies	4

In addition to the key personnel listed above left, the Missouri/Kansas offices in St. Louis (STL) and Kansas City area (OVP/KC) have staff available to support all traffic engineering and TEAP projects, as indicated in the technical expertise matrix, above.

Familiarity | Capability

AECOM (formerly URS) was selected by MoDOT to provide services to cities and counties through TEAP for the past four years. Our TEAP experience brings an understanding of the program which provides communities with assistance in addressing traffic engineering concerns. We understand the types of projects that are eligible through the TEAP program and offer success in preparing applications for funding. Our team members' experience includes accident analysis, speed surveys, traffic counts, parking studies, pedestrian and bicycle safety, signal design, geometric improvements, and lighting.

AECOM places great importance on maintaining our client partnerships. We are proud of our past record of performance for our Missouri local agencies and excited to demonstrate the opportunities TEAP provides. AECOM knows TEAP is a win-win situation for everyone involved. Our dedicated staff has built its reputation by providing Missouri clients with quality transportation planning and design services. Our clients know that outstanding service depends on more than good planning and design. With this in mind, we strive to understand the client's needs and objectives to provide the array of services that support their needs. URS applies a fully integrated approach built upon these building blocks:

- **Public Partnering:** AECOM works closely with the affected community. Gathering information, listening to concerns and issues, sharing information and answering questions early enhances future support.
- **Design:** URS has built a reputation on our attention to detail, beginning with our conceptual designs. We understand the importance of presenting implementable plans to the affected stakeholders.
- **Construction Cost Estimates:** Our team understands the importance of accurate cost estimates especially at the planning level. We know our estimates for any proposed improvements will be utilized by the community to obtain or set aside the funding for implementation.
- **Schedules:** Our experience and ability to identify potential problems early allows our team to establish reasonable schedules and meet deadlines.
- **Communication:** Our extensive municipal project experience has shown that a project's success depends upon the willingness to listen to stakeholder concerns. Our process includes honest, proactive communication and the ability to clearly communicate with clients and the public. By taking a genuine interest in the concerns of residents, we provide successful projects and a partnership that continues to grow.

Schedule and Cost Control

We have successfully designed and delivered numerous federally-funded projects for LPAs including for the cities of Clayton, Columbia, Maryland Heights and St. Charles. As a result we have built solid relationships with MoDOT LPA liaisons. We have hands-on knowledge of MoDOT's LPA Manual guidelines, East-West Gateway Council of Governments' Reasonable Progress Schedule, and other permitting requirements across the state which will enable us to efficiently progress through project development. Our LPA experience is useful in minimizing project delays and ensuring funding milestones are met and projects are implemented correctly.

Schedule and Cost Control

AECOM consistently provides projects to our clients that are on-time and under-budget. Our clients take comfort in knowing that AECOM commits the necessary personnel to satisfy all of their needs. We take client satisfaction seriously and are proud of our hard-earned reputation for ensuring projects are complete, within budget, and on schedule.

Quality Control

The principles of AECOM's stringent QA/QC policy include detail checking of plans and calculations at each step of the process, identification of Independent Technical Reviewers to examine plans and offer fresh perspectives, and extensive documentation to ensure that the highest quality products are delivered. The process includes review of the design and/or report by a well-qualified professional engineer (who is not directly involved with the project) prior to each submittal. All items in the plans or reports will be checked and verified using a two-person system of reviewing, checking, correcting and verifying. Using this two-person system (including the independent professional engineer) ensures a high-quality product.

Accessibility

AECOM has local and available staff that will serve each project in our Missouri/Kansas Operations. Depending on the project, regularly scheduled internal team meetings with task leads and critical staff will take place in the local office. The frequency and location of team meetings will be defined in AECOM's Project Execution Plan and distributed to all team members to define project and client expectations. AECOM has three offices in the states of Missouri and Kansas that can serve our clients with traffic engineering and TEAP services.

Thank you for reviewing our letter of interest. We look forward to discussing our capabilities in further detail with you.

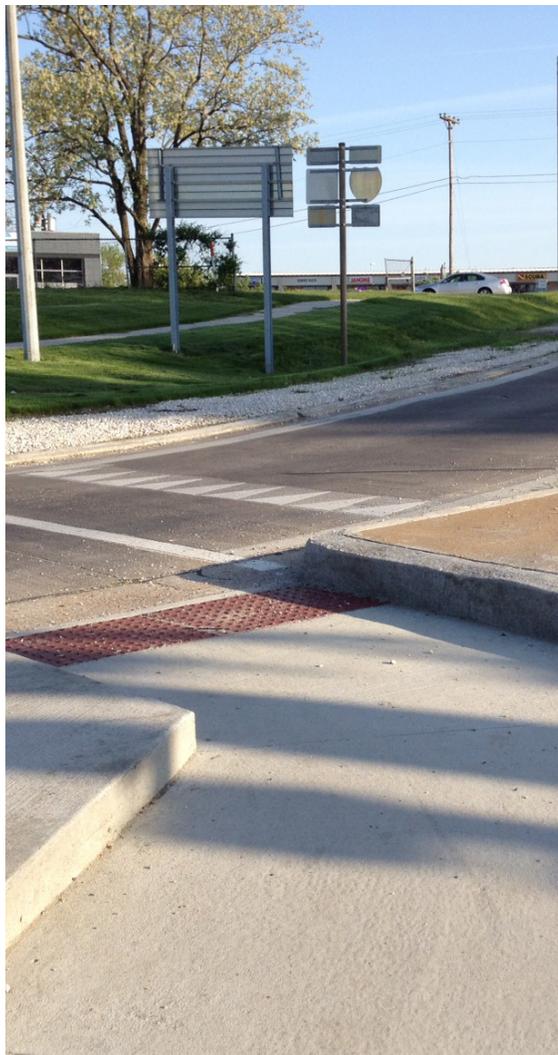
Sincerely,

AECOM



J.C. Murray, PE
Transportation Department Manager
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Transportation and Construction Services *for LPA projects*



Roadway Design

AECOM has prepared environmental assessments, design reports, locations studies, right-of-way plans, signing and pavement marking and construction plans for several hundred miles of arterial and urban highway improvements. In many instances, particularly in urban areas, the method of sequencing and extent of improvement is significantly influenced by the need to maintain traffic on existing facilities. Our staff has significant experience in the design and construction of projects in highly populated communities.



Capabilities

- Geometric Design
- Maintenance of Traffic
- Resurfacing
- Environmental Clearance
- Lighting
- Sidewalks
- Parking Lot Design
- Widening
- Hydraulics
- Cost Estimating
- Geotechnical
- Construction Services
- Environmental
- Utilities and Stormwater

Traffic/TEAP Operations

As traffic engineers, AECOM has prepared traffic studies and TEAP projects varying in size from detailed studies for City of Mexico, City of Maryland Heights, City of Columbia, and City of St. Charles. In addition to conventional street and highway traffic analysis and design, our staff has extensive experience in traffic safety studies, parking needs analysis and design of parking structures.



Capabilities

- TEAP Studies
- Traffic Analysis
- Traffic Signal Design
- Intersection Design
- Safety Studies
- Parking Needs Analysis
- Signage
- Lighting
- Cost Estimating
- Construction Traffic Handling

Transportation Planning

Planning of transportation systems is a critical infrastructure component for urban and rural areas. Transportation solutions for growing areas have to address complex needs, while maintaining the quality of life and natural resources of the community. In performing transportation planning for public and private clients, AECOM applies state-of-the-art methods within a planning process that responds to the specific needs of each client. AECOM has extensive experience in all aspects of transportation planning.

Capabilities

- Regional and Comprehensive Transportation Plans
- Noise and Air Quality Conformity Plans
- Travel Demand Mgt
- Corridor Studies
- Multimodal Studies
- Circulation Studies
- Pedestrian Studies
- Parking Studies
- Traffic Studies
- Transit Studies
- Toll Studies

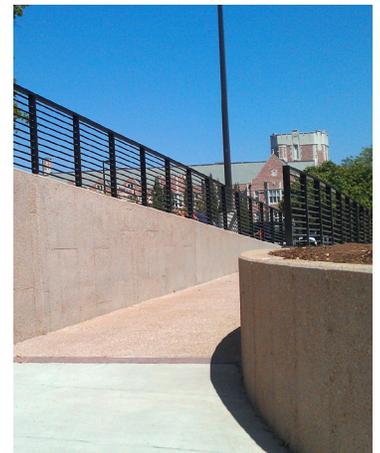


Structures

The staff of AECOM have designed numerous interstate, urban, local and rural bridges using steel plate girders, steel wide flange beams, reinforced concrete, and precast prestressed concrete deck beams and I-beams.

Capabilities

- Feasibility and Planning Studies
- Site Explorations
- Structural Design and Evaluation
- Geotechnical Engineering
- Environmental Clearance
- Hydraulics
- Construction Documents
- Cost Estimates and Schedules
- Construction Phase Services



2015 ENR RANKING

- #1 DESIGN FIRM
- #1 TRANSPORTATION
- #1 HIGHWAYS
- #1 GENERAL BUILDING
- #1 ARCHITECTURE
- #1 DESIGNER INTERNATIONAL MARKETS

AECOM was ranked #1 on the *Engineering-News Record* (ENR) Top 500 Design Firms. AECOM is consistently ranked among the top design and engineering firms worldwide.

Pedestrian and Bike Trails

For over many years, AECOM has been deeply rooted in meeting the nation's infrastructure, providing planning and design services for all types of urban and suburban cores, trails and greenways, and natural areas. We have expanded our services to meet the changing infrastructure needs of the nation and the world, while developing a solid reputation for designing within budget and on schedule, complementary to cultural and economic demands, and in harmony with natural features.



Capabilities

- Environmental Clearance
- Bikeway/Trail Design
- Sidewalks
- Landscape Design
- Rest Area Design
- Streetscapes and Complete Streets
- Surveying
- Agency Coordination

Geotechnical

The AECOM team brings over 50 years of geotechnical engineering experience. AECOM St. Louis is home to our Corporate Center of Excellence for Geological Services. Consequently, AECOM has extensive local knowledge and experience working throughout Missouri and understands the geology and challenges associated with transportation projects.



Capabilities

- Slope Stabilization
- Erosion/Sediment Control
- Foundation Engineering
- Groundwater Mgt
- Geotechnical Instrumentation
- Laboratory Testing
- Field Investigations
- Construction Monitoring
- Seismic Evaluations and Retrofits

Construction Inspection

AECOM provides flexibility and reliability to our LPA clients to deliver each construction inspection assigned project within what may be aggressive schedules. Our construction inspection staff provides the project controls, administration, and field oversight to manage work from the bid phase through closeout. AECOM verifies that contractor schedules have logical work sequences and appropriate resources and activities before we incorporate their data into our master schedule.



Capabilities

- Geotechnical Work
- Sampling and Testing
- Shop Drawings
- Construction Observation
- Contract Administration
- Scheduling
- Constructability Reviews

Community Involvement

A project's success often depends on the public's perception of it. AECOM helps build on existing community ties to enhance the public cooperation and dialogue that keep a project moving forward. We provide various levels of assistance, from rapid consultation to complete management and execution of the community relations effort, tailoring each program for the individual project.

Capabilities

- Open Houses
- Public Meetings
- Small Group
- Individual Meetings
- Advisory Committees
- Newsletters
- Fact Sheets
- Stakeholder Committees
- Surveys and Interviews
- Media Briefings
- Web Sites
- Toll-Free Numbers



Missouri/Kansas Locations

St. Louis, Missouri Office
1001 Highlands Plaza Drive West
Suite 300
St. Louis, MO 63110

Kansas City, Missouri Office
2380 McGee Street
Suite 200
Kansas City, MO 64108

Overland Park, Kansas Office
8300 College Boulevard
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For more information, please contact J.C. Murray, PE, Transportation Department Manager, 314.429.0100



About AECOM

AECOM is a premier, fully integrated professional and technical services firm positioned to design, build, finance and operate infrastructure assets around the world for public- and private-sector clients. The firm's global staff — including architects, engineers, designers, planners, scientists and management and construction services professionals — serves clients in over 150 countries around the world, AECOM is ranked as the #1 engineering design firm by revenue in *Engineering News-Record* magazine's annual industry rankings, and has been recognized by *Fortune* magazine as a World's Most Admired Company. The firm is a leader in all of the key markets that it serves, including transportation, facilities, environmental, energy, oil and gas, water, high-rise buildings and government. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering customized and creative solutions that meet the needs of clients' projects. A *Fortune 500* firm, AECOM companies, including URS Corporation and Hunt Construction Group, had revenue of approximately \$19 billion during the 12 months ended June 30, 2015.

More information on AECOM and its services can be found at www.aecom.com.

Contact

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