



BERNARDIN LOCHMUELLER & ASSOCIATES

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ONE SOURCE FOR A WORLD OF SOLUTIONS

November 15, 2013

Ms. Mary Ann Jacobs
Central Office-Local Programs Administrator
MaryAnn.Jacobs@modot.mo.gov

RE: Missouri's Local Program On-Call Services - Letter of Interest for Traffic Engineering & TEAP

Dear Ms. Jacobs:

For over 30 years, **Bernardin Lochmueller & Associate (BLA)** has established a reputation in transportation engineering throughout the Midwest. During the last three years, we have emphasized the capabilities of our Traffic Services group in our St. Louis office, which was formed to provide traffic engineering and transportation planning expertise to public and private clientele.

Our extensive experience with a wide variety of traffic studies as well as the design of improvements to relieve traffic problems make BLA an exceptional resource for on-call Traffic Engineering services and Traffic Engineering Assistance Program (TEAP) assignments for local agencies in the St. Louis, Northeast, Southeast and Central regions of our state.

General Experience of Firm

BLA's traffic engineering staff has completed hundreds of traffic studies and traffic engineering design projects throughout the State of Missouri, including projects administered through TEAP and the LPA program (some of which were completed while with other firms). This experience includes traffic impact studies, signal timing projects, corridor evaluations, safety studies, intersection and parking studies, sign inventories, speed limit reviews, bicycle and pedestrian route analyses, and many other studies for a variety of local agencies. Similarly, our traffic engineering staff's experience includes the design of traffic signal installations and modifications, ITS improvements, signing, lighting and pavement marking plans. A brief sample of our project experience includes:

Duello Road Phase III Improvement Project, St. Charles, Missouri for St. Charles County. BLA prepared a Traffic Circulation Report for the Duello Road Phase III corridor, including traffic operations analyses of the existing conditions and a Roadway Safety Audit (RSA), including documentation of crash history and roadside hazards. Based on the traffic operations and safety analyses, this Traffic Circulation Report recommended improvements such as roadway realignment, widening of the travel lanes, installation of dedicated turn lanes, and removal of fixed objects from the clear zone.

Lindbergh Access Management & Signalization Study, Sunset Hills, Missouri for Western Oil, Inc. This project consisted of a traffic study of Lindbergh Boulevard between Watson Road and I-44 in Sunset Hills. The impetus for this evaluation was the proposed redevelopment of a former restaurant site at Lindbergh and Monica/Sunset Office Drive. This project was tasked with developing a broad solution for improving traffic operations, safety and access to commercial properties throughout the study area. This required close collaboration between the developer, land owner, the City of Sunset Hills, and MoDOT.

Signal Optimization & Traffic Counts for Routes D and 115 for Missouri Department of Transportation, St. Louis County, MO. The project involved signal timing and optimization services for Missouri Route D and Route 115. Route D encompassed a complex 5.8-mile corridor with 14 signalized intersections; Route 115 encompassed a busy 3.9-mile corridor with 10 traffic signals. The primary objective of these projects was to provide for the efficient progression of through traffic without excessive intersection delays.

Jackson Avenue Pedestrian Signal Replacement LPA Project for the City of University City, Missouri. BLA completed the design of roadway, sidewalk, ADA, and traffic signal improvements pertaining to a signalized midblock pedestrian crossing. This project was funded through the Missouri Local Public Agency (LPA) Program and consisted of the replacement of an antiquated electro-mechanical pedestrian signal controller with a new hybrid beacon. The adjacent sidewalks and curb ramps were redesigned to meet ADA standards and a portion of Jackson Avenue is to be resurfaced to provide a smooth, pedestrian-friendly crossing. BLA is currently providing construction inspection and administration services for final phase of this project.

Traffic Signal & Intersection Lighting Design, St. Peters, Missouri for Menards, Inc. This project included the design of traffic signals and intersection lighting at two intersections in conjunction with the development of a new home improvement store. The project involved the installation of all new signal equipment, including video detection, flashing yellow left turn indications and illuminated LED street name signs. Modifications to the fiber optic interconnect system were required to integrate the new traffic signals into the City's existing network. Intersection lighting was designed utilizing bracket mounted luminaires on the mast arm poles. Additionally, decorative lighting was included along both roadways as part of the commercial development.



Missouri Route 340 (Clarkson Road) & Kehrs Mill Road Signal Design for Clarkson Kehrs Mill TDD. The project involved the design of the modification of an existing intersection and traffic signal to accommodate roadway improvements required for the development of a new grocery store. The signal was designed to MoDOT standards and included the provision of full ADA/pedestrian accommodations, video detection, and fiber-optic interconnect to adjacent signals. The project also included roadway lighting modifications and the provision of temporary traffic signals for use during construction.

As previously noted, BLA's staff also contains veterans of the TEAP program, having participated in dozens of projects for municipalities throughout Eastern Missouri. These projects have included **sign inventories, pavement marking inventories, safety studies, signal warrant analyses, school route studies and operational evaluations**. Our staff is familiar with the TEAP process and requirements and is experienced at working with the municipal and MoDOT representatives.

Past Performance

BLA's traffic engineering team prides itself on the completion of successful projects that delight our clients. The brief list below includes representative projects that have been completed by our staff recently and for which reference letters are provided.

<i>Project Name and Location</i>	<i>Client/Reference</i>	<i>Project Staff Involved</i>	<i>Project Description and Role of Firm</i>
Gateway Green Light Program, St. Charles County, Missouri 2013	John Greifzu Director of Transportation St. Charles, MO 636.949.7490 JGreifzu@sccmo.org	Steve Davis, PE, PTOE, Project Engineer Kelly Schaefer, EIT Traffic Specialist	The goal of this project is to reduce travel times, delays, fuel consumption, emissions and incidents while improving travel reliability in St. Charles County through the deployment of an Integrated Corridor Management (ICM) Plan (Gateway Green Light). BLA's ongoing involvement includes the design of upgraded communications infrastructure as well as the development of optimized traffic signal timing plans on major corridors. Additionally, diversion timing plans were developed for corridors that serve as alternate routes for incident management.
Traffic Engineering Master Service Agreement, City of Jackson, Missouri 2013	Rodney Bollinger Public Works Director Jackson, Missouri 573.243.2300, Ext. 31 Rbollinger@jacksonmo.org	Doug Shatto, PE, PTOE, Project Manager Dustin Riechmann, PE, PTOE, Project Engineer Kelly Schaefer, EIT Traffic Specialist	Various Traffic Engineering Services including 1) Review of Traffic Impact Study for Lacey Street Elementary School and 2) Evaluation of Intersection Configuration/Control at Main Street and Lacey Street. Also provided Liaison Services pertaining to proposed access to Route 34 and MoDOT Access Management Guidelines. Members of BLA's staff also previously performed a Comprehensive Traffic Study and an Evaluation of Recommended Intersection Improvements on Route 61 for the City.
Transit-Oriented Development Plan for CORTEX, St. Louis, Missouri 2013	Karin Hagaman Director of Project Development 4320 Forest Park Avenue, Suite 201 St. Louis, Missouri 314.531.4502 khagaman@cortexstl.com	Doug Shatto, PE, PTOE, Project Manager Chris Beard, PE, PTOE Project Engineer	Developed a Transit-Oriented Development (TOD) Plan for the Center of Research, Technology and Entrepreneurial Exchange (CORTEX) in St. Louis. BLA was responsible for applying the regional travel demand model to estimate daily transit boardings at a proposed light rail station. Other major elements of the plan included recommendations for improving connectivity to adjacent neighborhoods, developing a TOD plan, and engaging stakeholders.



Qualifications of Personnel

With more than 60 years of collective traffic engineering experience, the BLA Traffic Services group has the qualifications to serve any traffic-related need. The principal members of our team that would be assigned to this project are listed as follows:

Douglas S. Shatto, PE, PTOE has 28+ years of traffic engineering expertise throughout Missouri. Doug has performed hundreds of traffic impact studies and managed a number of major traffic signal design projects. Doug will serve as Principal-In-Charge, providing oversight and leadership to the team; administering the QA/QC measures; and monitoring the project accounting and schedule.

Dustin B. Riechmann, PE, PTOE has more than 12 years of experience in traffic engineering. He has been involved in many facets of transportation engineering and has completed dozens of traffic impact studies, signal timing projects, corridor studies, micro-modeling of roadway networks, operation improvement studies, traffic safety studies, parking studies and Access Justification Reports. He will serve as Project Manager with day-to-day management of all task orders associated with this On-Call contract.

Steven P. Davis, PE, PTOE has 8 years of experience in traffic engineering including signal coordination projects and the design of traffic signals and ITS networks. He has worked on numerous corridor studies and signal coordination projects and is proficient with SYNCHRO and experienced with the operation of Econolite and Siemens signal controllers and network management software such as ACTRA. He has provided direct oversight of signal operations along many major corridors, including the Route D and Route 115 corridors for MoDOT. Steve will serve as a Project Engineer on signal design, lighting design and timing tasks.

Christopher W. Beard, PE, PTOE has over 8 years of experience specializing in traffic engineering and transportation planning and is integral to the firm's traffic simulation modeling efforts. His experience includes corridor/location studies, traffic impact studies, VISSIM traffic simulation models, roundabout evaluations, site/campus circulation and accessibility analyses, conceptual design studies, and construction traffic mitigation plans. Chris will serve as a Project Engineer on traffic study tasks.

Kelly M. Schaefer, EIT has over 3 years of experience in many facets of traffic engineering and transportation planning. She has been involved in the optimization of signal timing, signal turn-ons, and operational analysis; as well as traffic impact studies, parking sufficiency studies, and transportation modeling.

Familiarity/Capability

BLA's team has completed many traffic engineering projects in the St. Louis, Northeast, Southeast and Central regions of our state and is familiar with the traffic issues in these areas. BLA has more than 160 professionals company-wide, including 10 team members in St. Louis who are solely devoted to traffic engineering, and our staff is very familiar with TEAP and LPA on-call protocol.

Accessibility

BLA has successfully completed many traffic engineering assignments within a 150-mile radius of our St. Louis office. Our staff is highly responsive, and we take pride in the level of accessibility we provide to the local agencies we serve.

By selecting BLA, local public agencies will enjoy:

- A local team of traffic engineering specialists ready and excited to work on your project;
- A dedicated team of professionals that take great pride in on-time delivery and quality deliverables without the need for client "hand holding". These projects will be of significant importance to us and we will treat them accordingly; and
- An experienced team with more than 60 years of cumulative traffic engineering experience in central and eastern Missouri.

Thank you for the opportunity to submit our qualifications. We trust you will find our credentials and interest in this type of work are an excellent fit for this project. We welcome any questions you may have by contacting me at (314) 621-3395, Ext. 2627.

Sincerely,

Bernardin Lochmueller & Associates

Douglas S. Shatto, PE, PTOE
Branch Manager – Transportation Services Manager

Attachments (Cover Sheet, Letter of Interest, 3 Company Reference Forms, Company Brochure)



In the 1960's, the nation was in the midst of building a great new highway system to connect America's major cities. The resulting efficient movement of goods and people ushered in a period of national prosperity.

Now, 50 years later, the nation's transportation system faces new challenges that require...

New Directions in TRAFFIC ENGINEERING

**Traffic Engineering & TEAP Services for the
Northeast, St. Louis, Southeast, & Central Regions of Missouri**



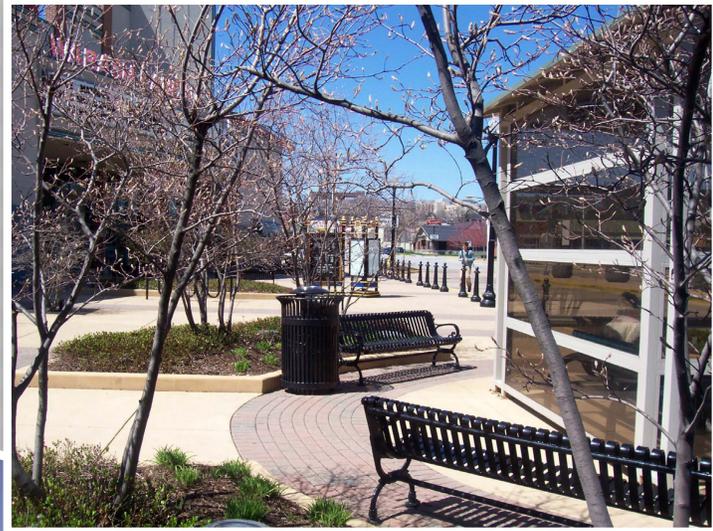
**BERNARDIN LOCHMUELLER
& ASSOCIATES**

... NEW CHALLENGES

Traffic congestion, crumbling infrastructure, greenhouse gases and changing demographics cost us productivity; endanger our health, safety, and the environment; and strain available funding.

In some cases, the solution may be as simple as building or expanding roads, but that's not always possible or desirable. Instead, thoughtful planning and design is needed to reduce congestion, improve livability, and stretch dollars.

Whatever your challenge, BLA's team of traffic engineers and planners can help. We understand how to assess impacts, plan for future needs, and customize solutions that combine practical and progressive approaches to meet your needs for today and tomorrow.



... NEW TRENDS

As we change the way we live, travel and work, our traffic networks must evolve to meet these trends:

Changing Demographics. Major shifts in how and where we live change travel patterns. The continuing migration of populations from rural communities to urban centers promises to increase congestion in heavily developed areas. Conversely, "disposable" development has contributed to sprawl and voids within urban cores. Understanding these trends and how they affect travel demand is vital to determining transportation needs.



Focus on Sustainable Quality of Life. These changes force us to reconsider how our communities have grown. Once it was desirable to segregate work and home, but today's trend is to move them closer together to reduce travel and vehicle emissions. This not only requires an understanding of transportation needs, but their relationship to land use.

Greater Need to Integrate Modes. Living closer to destinations makes alternative modes of travel more competitive. In turn, we must rethink how we manage the facilities serving drivers, pedestrians, cyclists and transit users to ensure they work together safely and efficiently.

Doing More with Less. As infrastructure needs grow and traditional funding sources change, there's increased pressure to meet demands with fewer resources. This requires a keen understanding of emerging funding sources and how they can best serve the public good. And it means identifying creative solutions to do more with the existing infrastructure.

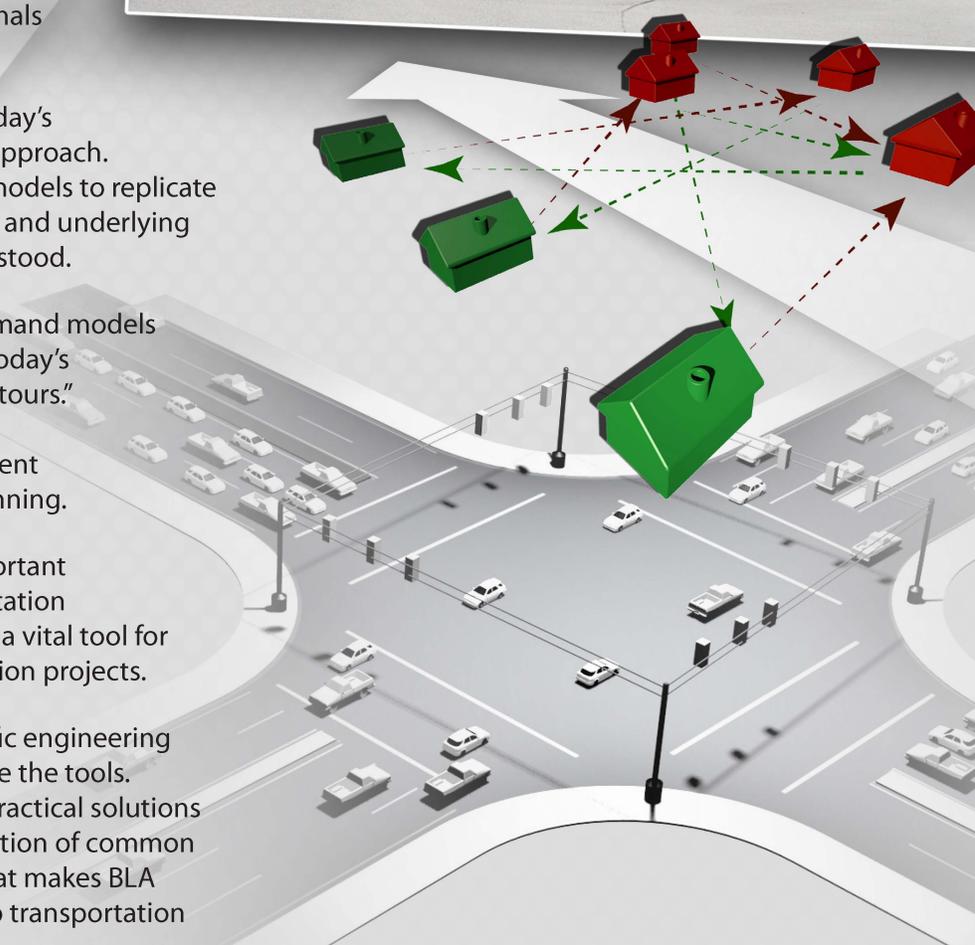
... NEW TOOLS

Ultimately, traffic engineering comes down to understanding behavior. How people make trip choices. How new developments affect route choice. How design affects drivers or mode choice. How signal management accommodates changing traffic flows throughout the day.

New tools paired with unparalleled experience allow BLA staff to better predict behaviors and evaluate their impacts to achieve more reliable solutions. Whether planning a new corridor or maximizing the safety and efficiency of an existing one, the use of innovative technology by seasoned professionals achieves solutions that work.

- **Microsimulation.** The complexities of today's transportation systems require a holistic approach. BLA engineers employ traffic simulation models to replicate these systems and explain the operations and underlying behavior in ways that can be easily understood.
- **Tour-Based & Hybrid Models.** Travel demand models originally depended upon trip data, but today's lifestyles result in more "trip chaining" or "tours." Models based on tours, rather than trips, provide a more accurate reflection of current and future travel patterns, and better planning.
- **Economic Analysis.** It's increasingly important to make wise decisions with our transportation investments. Economic analysis provides a vital tool for guiding funding decisions for transportation projects.

Nothing beats proven experience. Good traffic engineering ultimately comes down to the people who use the tools. BLA's staff has a proven record of delivering practical solutions that improve transportation. It's the combination of common sense with uncommon technical expertise that makes BLA uniquely qualified to find the right solution to transportation challenges of all kinds.



... SAME DEDICATION TO CLIENTS

No matter how times change, one thing is constant: BLA's commitment to serving clients. Founded by former MPO employees over 30 years ago, the firm is still shaped by a planning mentality that focuses on client's overall goals rather than simply completing the current assignment. BLA's ability to move projects from the earliest planning stages through construction engineering allows us to better understand and appreciate how today's decisions can impact the future.

COMPREHENSIVE RANGE OF TRANSPORTATION SERVICES

TRANSPORTATION PLANNING

- Long-Range Transportation Plans
- Corridor/Location Studies
- NEPA
- Transit Systems
- Pedestrian & Bicycle Transportation
- Context Sensitive Solutions
- Toll Feasibility Studies
- Street & Road Asset Management
- Innovative Financing
- Pavement Management Systems

LAND USE & COMMUNITY PLANNING

- Comprehensive Planning
- Thoroughfare Planning
- Capital Improvement Planning
- Zoning & Subdivision Ordinances
- Public Involvement
- Smart Growth
- Transit-Oriented Development
- Site/Campus Master Planning
- Community Visioning

TRAFFIC ENGINEERING

- Traffic Signal Warrants Evaluations
- Traffic Signal Timing/Optimization
- Safety Studies
- Parking Studies
- Intersection Design Studies
- Data Collection

TRAFFIC PLANNING

- Traffic Impact Studies
- Site Access Planning
- Feasibility Studies
- Access Justification Reports
- Access Management
- Transportation System Management
- Roundabout Analysis & Design
- Traffic Calming

TRAVEL DEMAND MODELING

- Statewide Travel Demand Modeling
- Regional Travel Demand Modeling
- Emissions & Air Quality Modeling
- Traffic/Transit Ridership Forecasting
- Land Use Modeling
- Life Cycle Cost Analysis
- Benefit/Cost Analysis
- Economic Analysis

TRAFFIC SIMULATION MODELING

- Traffic Operations
- Integrated Demand/Supply Modeling
- Freeway Corridor Modeling
- Pedestrian Modeling
- Dynamic Traffic Assignment
- Construction Maintenance of Traffic Modeling

DESIGN SERVICES

- Traffic Signals
- Urban/Residential Streets
- Highways/Freeways
- Interchanges
- Bridges & Overpasses
- Pedestrian, Bicycle, & Multi-Use Trails
- Structural Inspections & Load Ratings
- Signage Inventory & Design
- Pavement Markings

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