



Paul Slone, PE, PTOE Continued—Private Sector Experience

Jordan, Jones & Goulding, Inc. and URS Corporation

As a consultant, Paul has continued to practice Traffic Engineering performing a variety of transportation planning, congestion mitigation and traffic operations projects, especially in Lexington and Central Kentucky. These projects are highlighted in the resume section.

Professional Recommendations for Paul Slone

Dan O'Dea, PE, PTOE, Assistant Director of Public Works for the Louisville Metro Government Department of Public Works.

“Louisville Metro Traffic Engineering has had a longstanding relationship with URS. The traffic engineering services provided by project manager, Paul Slone, and his staff have been invaluable to our program and have consistently met the expectations of Louisville Metro. Contact me at dan.odea@louisvilleky.gov or 502-574-3777 for additional information.”

Logan Baker, PE of the KYTC District 7 office (Lexington) is the Project Manager for URS' Traffic Engineering Services contract.

“URS has always gone above and beyond what District 7 has expected of them. Not only do we get an excellent final product, we also get very good support. When we implemented a new signal system in Mount Sterling, Paul, Bill, and Vanessa were extremely helpful in teaching me how to build a system from the ground up. Not only that, but they showed me what steps they take to make sure the system is working, and any changes they may have to make. It has been very enjoyable working with them, and I know I can always expect the best end result.”

Martha Kelly, PE, Principal Engineer for the Transportation Planning Section of the City of Cincinnati Department of Transportation Engineering:

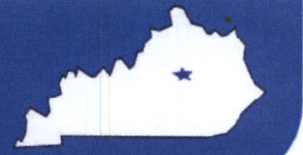
“I have had the pleasure of working with the staff of URS Corporation on a number of projects for the City of Cincinnati in my role as the Acting City Traffic Engineer and the Principal Engineer of Transportation Planning. They have provided a wide variety of engineering services relative to bridge design, freight studies, interchange modifications, roadway designs, light rail preliminary engineering, and traffic analysis and design.

Based on my current and past experiences, I would recommend URS for a wide range of engineering services. In particular, I am confident in recommending Paul Slone as Project Manager for traffic-engineering-related projects. Should you have any questions, or require additional information, feel free to contact me at 513-352-3648.”

Quality Assurance / Quality Control Officer – Dick McGuinness, PE, PTOE (URS)

Dick is retired from the City of Columbus (35 years of service) where he served as the project manager for the design of the city's second generation centralized traffic signal system.

Dick has been a true innovator and leader with more than 38 years of experience in traffic control design. As a Senior Traffic Engineer with URS, he is responsible for overseeing the design of traffic control systems - from construction area maintenance of traffic, to ongoing freeway operations, to signage and signaling. He conducts studies and seminars on user preferences regarding traffic maintenance strategies, capacity planning and traffic management techniques using both active and passive devices in Ohio, Indiana and Kentucky. He is an expert on future-focused traffic concepts such as intelligent roadways and intelligent work zones.



Principal In Charge – Greg Groves, PE (URS)

Mr. Groves worked with KYTC for 16 years before joining URS in 2006. During his KYTC career, he worked in numerous positions for the District, focusing in project development and management. He now serves as the Director of Transportation for the Louisville and Cincinnati offices of URS as well as being the Louisville Office Manager, responsible for the operation of a 40+ person office that includes several engineering and environmental disciplines serving both public and private clients.

Senior Traffic Engineer – Vanessa Fritsch, PE, PTOE (URS)

Ms. Fritsch has worked along side Paul for the last 6.5 years. She has gained significant experience on traffic signal retiming projects in Louisville, Lexington, and small communities in Ohio. She has significant experience in transportation analysis, especially simulation model development using Synchro and converting traffic model output into WAPITI. Vanessa is a Professional Engineer, Professional Traffic Operations Engineer and a certified URS Project Manager.

Senior Traffic Engineer – Bill Madden, PE, PTOE (URS)

Mr. Madden joined URS after 23 years with Kentucky Transportation Cabinet. He brings to URS significant field experience regarding intersection operations. Over the last 5.5 years with URS, Bill has become a versatile transportation engineer making the successful transition from a policy oriented position with the KTYC to an analytical position in the consulting world.

Data Collection — Abbie Jones, PE, PLS (Abbie Jones Consulting)

Ms. Abbie Jones is a registered professional engineer licensed in three states. As a former City Engineer, she is very interested in providing quality traffic data at a reasonable cost. Projects are only as good as the initial planning data, and if there are more hours to include in a study or model, a more accurate representation is possible. Abbie works with traffic engineers to develop a site specific scope appropriate to the purpose of a traffic study or model. By providing technology based solutions and clear scopes, she is able to provide more data for the cost of a traditional 2hr hand count. Ms. Jones is personally involved with the quality reviews and participates in counts herself.

In this proposal, we will demonstration that:

URS is a leader traffic signal optimization. Our project team has the most experience of any regional or local consulting firm for this very specialized work.

Experience with data collection technologies. The URS Team will the latest technology in data collection for both intersection counts and measuring travel time.

Creativity – URS will utilize all the entire toolbox that OASIS has to offer for improving traffic flow.

Quality – We promote a performance standard based on high quality professional services, where costs and scope are continuously managed.

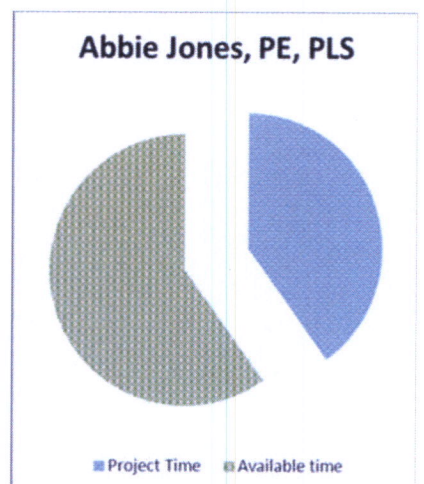
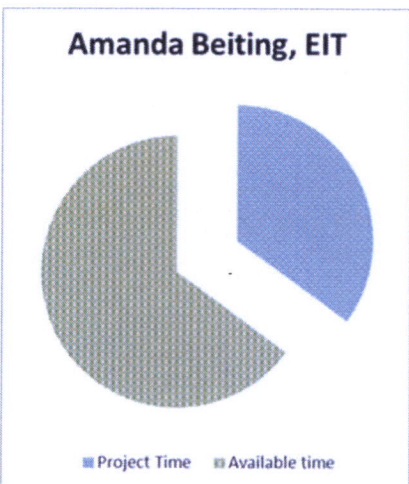
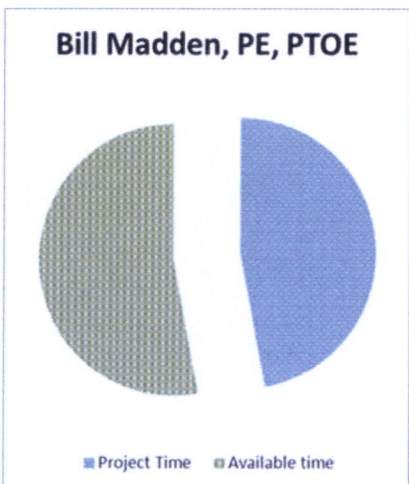
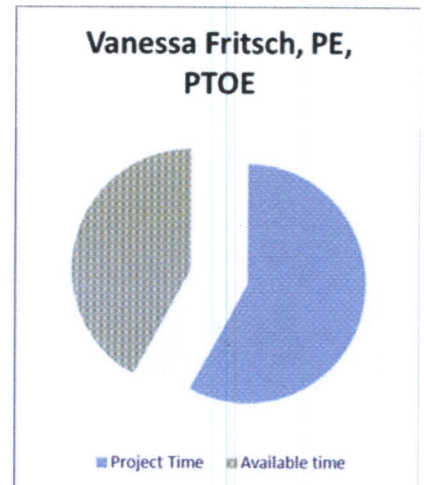
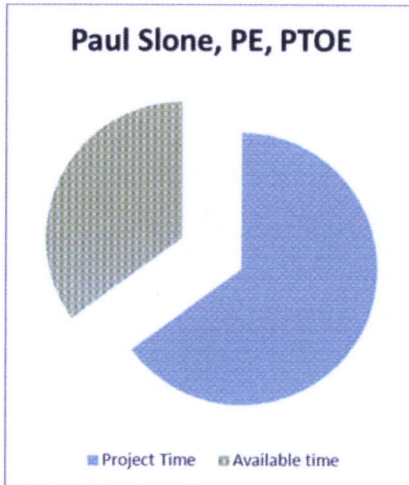
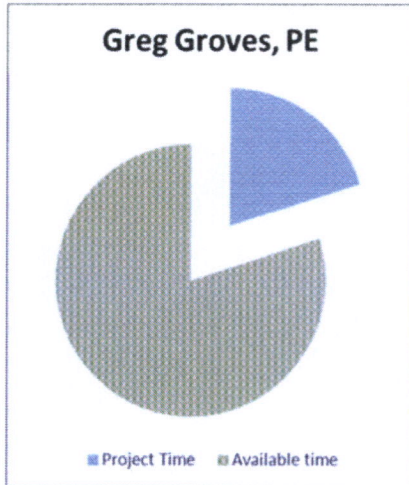
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URS agrees to perform the services in accordance with the industry standard of care based on the circumstances. Any obligation to "ensure" "insure" or "assure" will not require URS perform above the industry standard of care. With regard to the insurance coverage: (i) URS will provide 30 day advance notice of a canceled policy, unless the cancellation is caused by non-payment of the premium; (ii) The General Liability policy can provide professional liability coverage, but not an endorsement; (iii) subsections (b), (c), (d) and (e) under the Deductibles and Self-Insured Programs do not apply; and (iv) the verification of coverage may be executed by the URS insurance broker.



AVAILABLE TEAM WORKLOAD CAPACITY

Chart represents 640 work hours over the next 4-month period.



URS submits the above graphical representation of the team’s availability to demonstrate our capacity to perform this project in the timely manner anticipated by LFUCG.

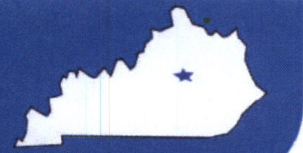
We have a clear understanding of the time constraints that LFUCG has placed upon this project. Looking forward, in the coming months, our traffic engineering staff has significant amounts of availability to aggressively tackle this project. We also have a firm understanding of the tasks associated with this project, which will lead to minimal schedule disruptions. A robust discussion of the schedule is presented in the technical approach section of this submittal. The two options for completion are due to the need to collect data based upon the school traffic.



Past Experience with LFUCG and Other Municipalities

URS is pleased to present the projects on the following pages as examples of our ability to meet the demands of schedules and budgets with both LFUCG and other municipalities. URS has a long standing contract with the Kentucky Transportation Cabinet in District 7. The URS Traffic Engineering team has completed over 23 letter agreements including 12 traffic signal systems. All of the projects highlighted were completed on schedule with no change orders for budgetary increases. The only change orders that the URS traffic engineering department processed on any of these jobs were due to client change requests or additional scope items after the original scope was determined.

The client recommendations highlighted earlier in this submittal stem from these completed projects.



Traffic Signal Retiming: Downtown Lexington, Kentucky

URS developed three new traffic signal timing plans for **89 intersections** in the Downtown area of Lexington, Kentucky. This area included the downtown grid and portions of these arterials:

- East Main Street
- North Broadway
- High Street
- Loudon Avenue
- Newtown Pike
- Euclid Avenue

Location

Lexington, KY

Services

Traffic Signal
Retiming

Client

Steve Cummins, PE

Traffic Signal
Systems Manager

(859) 258-3491

Project Duration

July through
November 2006

Signal timing plans are being developed using Synchro for the AM, midday and PM peak periods. Timing plans will be optimized and adjusted within the models and converted to Wapiti W4-IKS (traffic signal programming). Several advanced programming techniques utilizing Command Box were recommended and utilized.

Following delivery of the timing plans, URS assisted the LFUCG Division of Traffic Engineering entering the timing parameters into their centralize signal system, downloading to the field, and performing on-site adjustments.

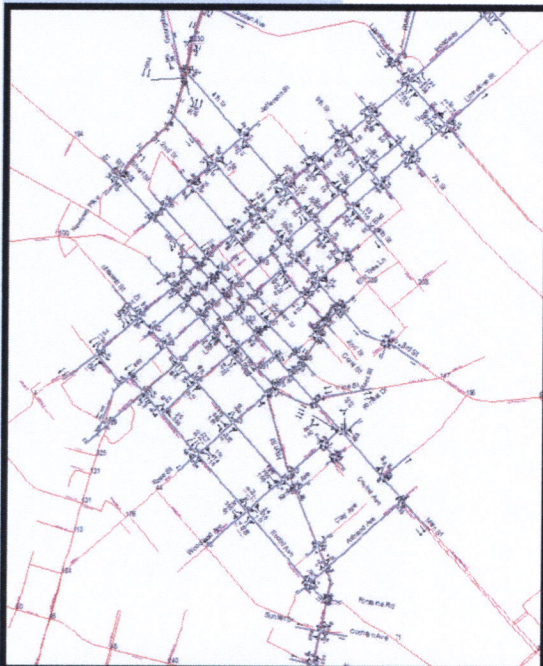
An extensive calibration effort accompanied simulation model development.

- URS performed many field checks including:
- Verifying roadway and intersection geometry,
- Verifying existing signal timing and phasing,
- Measuring saturation flow rates
- Collecting speed and travel time information on specified routes using a GPS unit.

URS Project Staff

Paul Slone, PE, PTOE, Project Manager

Vanessa Fritsch, PE, PTOE, Traffic Engineer





Versailles Road Bluetooth Data Collection

URS is a regular participant in the Lexington MPO's Congestion Management Committee (CMC). In June of 2012, URS offered to provide a pro-bono pilot project for transportation uses of Bluetooth data capture. At the time, the Urban County Government was in the process of procuring some Bluetooth data capture devices and the Transportation Center at University of Kentucky was also conducting an evaluation of Bluetooth technologies and probe based speed data provided by third parties.

Our offer was to collect Bluetooth data on one corridor in the Lexington area that would be of value to the committee. The CMC selected Versailles from Man o' War Boulevard to Pine Street. This was beneficial to the CMC on a number of fronts. First there was the evaluation of type and quantity of data that can be collected by Bluetooth data capture. Second was the application of that data for congestion management metrics. Finally, it interfaced with other projects at the UK Transportation Center, acting as an independent measure of travel speeds on Versailles Road.

This project exemplifies our commitment to our friends at the LFUCG, the Lexington MPO, and the UK Transportation Center.

URS Project Staff

Paul Slone, PE, PTOE

Versailles Road (US 60) Bluetooth Base Speed and Travel Time Demonstration Project



Segment	AM	NOON	PM	Sat/Sun	Overnite
MOW-Parkers Mill	50/52	51/51	50/48	52/51	51/53
Parkers Mill – Alexandria	23/27	27/32	18/28	25/31	27/36
Alexandria – Mason Headley	37/36	31/28	29/18	33/30	36/37
Mason Headley – Red Mile	32/35	32/35	30/31	36/36	35/40
Red Mile – Newtown Ext.	36/33	33/29	31/27	35/30	40/36

Speeds presented in MPH (rounded) and listed Eastbound/Westbound

Location

Lexington, Kentucky

Services

Data Collection

Client

Pro Bono Services provided for the Lexington MPO Congestion Management Committee

Project Duration

June 2012



KYTC District 7 Traffic Engineering Services

Data Collection Services

This contract is a two-year agreement to assist the KYTC District 7 office in Lexington, Kentucky. URS won the inaugural contract in 2007 and was re-selected to continue these services in 2009, 2011, and 2013 for additional two-year terms. URS is providing as needed services performing data collection, various traffic studies related to signalized intersections and traffic signal retiming.



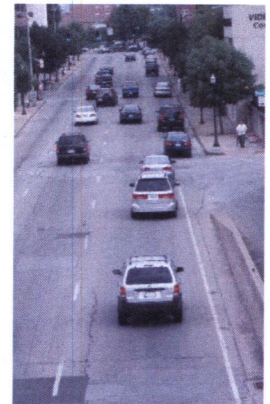
URS is working directly for the District Traffic Engineer working behind the scenes performing assigned tasks in a manner consistent with KYTC's internal processes. All tasks performed involve various types of studies where technical/professional recommendations are made.

In the first year of the inaugural contract URS cleared the backlog of traffic signal studies throughout the district, some of which dated back two years. Subsequently, URS continues to support data collection needs, field investigations and providing professional recommendations. More recently, URS has provided specialized site and access management studies as the District office supports requests from local governmental officials.

The URS Team has provided over **1,800 Data Collection hours** for the District since 2007.

URS Project Staff

- Paul Slone, PE, PTOE, Project Manager
- William Madden, PE, PTOE, Traffic Engineer
- Vanessa Fritsch, PE, PTOE, Traffic Engineer
- Amanda Beiting, EIT, CAD Technician



Location

Nicholasville and Lexington, KY

Services

Preliminary Design
Access
Management

Client

Logan Baker, PE,
Project Manager

Kelly Baker, PE,
Engineering
Support Branch
Manager

(859) 246-2355

Project Duration

2007 - ongoing





Location

Louisville, KY

Services

Traffic Engineering
Signal System Timing

Client

Dan O'Dea, PE,
Project Manager
601 W Jefferson St,
Room 2
Louisville, KY 40202
(502) 574-3777

Project Duration

2010- Ongoing



Louisville Metro ARRA Study

This project was awarded to update coordinated traffic signal timing on several corridors in Jefferson County. URS was assigned a total of **64 intersections** on the following corridors to update.

- Dixie Highway (US 31W)
- Fern Valley Road (KY 1747)
- Bardstown Road (US 31E)

URS is collecting peak hour traffic data at each intersection and developing Synchro models for each corridor. URS will provide traffic signal database files for direct downloading into the controllers, and provide on-site implementation support and field adjustment.

In order to collect before and after **travel time data**, URS proposed and was selected to employ a new strategy utilizing **Bluetooth technology**. URS deployed Bluetooth receivers on each route segment that collect a time stamped log of median access control (MAC) addresses from passing Bluetooth enable devices (i.e. cell phones, wireless ear pieces, car consoles, enabled GPS units, etc.). Because MAC addresses are unique, this provides an anonymous hot spot that can be used for several traffic engineering and transportation planning applications.

URS Project Staff

Paul Slone, PE, PTOE, Project Manager

Vanessa Fritsch, PE, PTOE, Traffic Engineer

Bill Madden, PE, PTOE, Traffic Engineer

Dick McGuinness, PE, PTOE, QA/QC

Amanda Beiting, EIT, Co-op



Akron Bluetooth Origination-Destination Study

The Purpose and Need for the redesign of the Central Interchange evolved from the I-76/80 Corridor Study completed in 2004. Previous design projects created large, expansive alternatives that are unfundable in today's economic climate.

In 2012, the Ohio Department of Transportation District 4 office commissioned this study to determine whether other, less invasive/costly options exist for the Central Interchange. Specifically, could rerouting I-77 across I-277 remove enough traffic from critical ramp movements in the Central Interchange so that smaller, incremental improvements to a series of interchanges? This approach would better distribute capital funds over the broader interstate network. This study was conducted to determine origins and destinations of drivers through the Akron freeway network inclusive of I-76, I-77, I-277, US 224 and SR 8.

Bluetooth data capture fundamentally changes the way Origination-Destination (O-D) and travel time studies are performed. Nine data collection stations were setup to determine the percentage of traffic on I-77 passing through the Central Interchange compared to I-277.

The study identified that approximately 30 percent of the interstate traffic travels through the network. The Bluetooth data capture was successful in identifying the paths motorists take through the network and will lead to the development of other alternatives.

URS Project Staff

Kevin Westbrooks, PE, Project Manager

Paul Slone, PE, PTOE, Traffic Engineer

Location

Akron, Ohio

Services

Traffic Engineering

Traffic Data

Collection

Origin-Destination

Study

Client

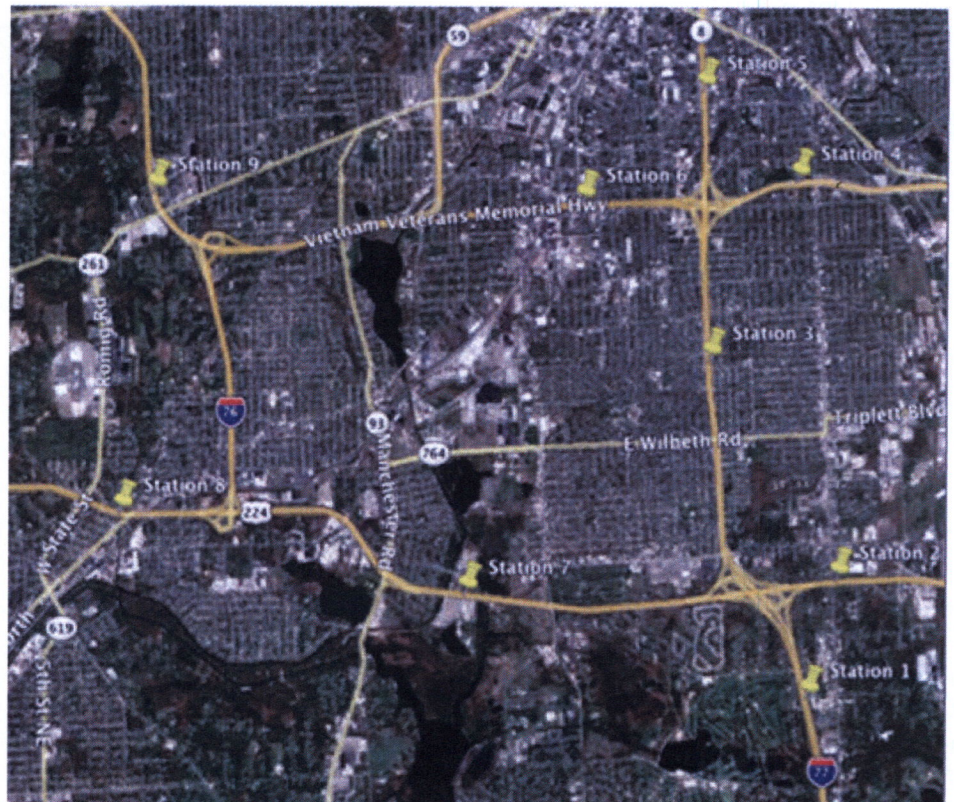
Ohio Department of

Transportation,

District 4

Project Duration

2012-2013





KYTC Statewide Traffic Engineering Services

URS has been **twice selected** to provide as needed traffic engineering services to the Kentucky Transportation Cabinet (KYTC) on a statewide level. Provided services on this contract primarily involve operational evaluation and upgrading signal timing, if necessary, of assigned closed loop traffic signal systems. During the last four years URS has evaluated and/or made recommendations for improvements to **11 different signal systems** in districts **1, 2, 4, 6 and 9**.

Most of the work performed involved evaluation of existing signal systems. URS provided value added services by making small recommendations for improving traffic flow without a major modeling effort and developing new timing plans. New timing plans were developed for three areas Radcliff, Ashland, Crestview Hills, Florence, Maysville and Covington.

URS is also implementing new technology for evaluating travel times on the latest Letter Agreement. We are capturing Bluetooth data from passing devices (phones, ear pieces, car consoles) to greatly increase our data sampling compared to limited and time intensive data from traditional float car methods.

URS Project Staff

- Paul Slone, PE, PTOE
- Vanessa Fritsch, PE, PTOE
- Bill Madden, PE, PTOE
- Amanda Beiting, EIT



Location

Statewide Kentucky Services

- Traffic Engineering
- Traffic Signal Timing
- Signal Systems Evaluation
- Intersection Inventories
- Data Collection
- Travel Time
- Traffic Volumes

Client

- Kentucky Transportation Cabinet
- Telma Lightfoot, EIT, Project Manager
- Staci Timol, PE
- Glenn Anderson, PE
- (502) 564-3020

Project Duration

2007 to Present