#### ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of 2013. the between LEXINGTON-FAYETTE URBAN COUNTY **GOVERNMENT** (OWNER) **URS** CORPORATION, A NEVADA CORPORATION 525 Vine Street, Suite 1800, Cincinnati, Ohio, 45202, (CONSULTANT). OWNER intends to proceed with the Traffic Signal Timing Project as described in the attached Exhibit A, "RFP #7-2013 Request for Qualifications (RFQ) for Professional Engineering Services." The services are to include customary civil, engineering services as related to completion and submission of reports and deliverables as described in Exhibit A, detailing the findings of all field inspections, inventory and required analysis completed by the CONSULTANT. The services are hereinafter referred to as the **PROJECT**.

**OWNER** and **CONSULTANT** in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by **CONSULTANT** and the payment for those services by **OWNER** as set forth below.

**CONSULTANT** shall provide professional consulting services for **OWNER** in all phases of the **PROJECT** to which this Agreement applies, serve as **OWNER'S** professional engineering representative for the **PROJECT** as set forth below and shall give professional consultation and advice to **OWNER** during the performance of services hereunder.

#### **SECTION 1 - BASIC SERVICES OF CONSULTANT**

#### 1.1. General

**CONSULTANT** shall perform professional services as hereinafter stated that include customary civil, geotechnical, structural, mechanical, electrical and sanitary engineering services incidental thereto.

#### 1.2. Project Phase

After written authorization to proceed, **CONSULTANT** shall:

- **1.2.1.** Notify the **OWNER** in writing of its authorized representative who shall act as Project Engineer and liaison representative between the **CONSULTANT** and the **OWNER**.
- 1.2.2. The CONSULTANT <u>must perform all duties</u> necessary to fully complete the deliverables described in attached Exhibit A "RFP #7-2013 Request for Qualifications (RFQ) for Professional Engineering Services" (including No Appendices and one (1) Addendum), and attached Exhibit C the "Proposal of Engineering Services and Related Matters" (the CONSULTANT's response to RFP #7-2013), and amendments to the CONSULTANT'S proposal included in attached Exhibit D "Further Description of Basic Engineering Services and Related Matters."

To the extent of any conflict among the provisions of these documents and/or this Agreement, the provisions of this Agreement shall control, followed by the provisions of **EXHIBIT A**, then **EXHIBIT D**, and then **EXHIBIT C**.

- **1.2.3** The **CONSULTANT** shall provide written documentation of all meetings and be responsible for incorporating all comments and changes resulting therefrom in final work product.
- **1.2.4.** The **CONSULTANT** shall post all initial draft work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the CONSULTANT shall submit five (5) copies (hardcover) of all initial draft final work products for this **PROJECT**. The copies of the initial draft final reports are submitted for review and comment by the **OWNER**, and should be presented in person to the **OWNER**.
- 1.2.5. After the OWNER'S detailed review, the CONSULTANT will revise the initial draft final for all work products for this PROJECT, and the CONSULTANT shall post all draft final work products on the project document management portal. If the project document management portal is not functional on the draft posting date, the CONSULTANT shall five (5) copies (hardcover). One electronic copy of the all work products for this PROJECT, including all appendices, shall be provided and prepared in such a manner that it can readily be converted to a quick-link accessible form for the OWNER'S Website. The OWNER shall have ten (10) business days within which to accept or deny each such final draft. If is denied, the OWNER shall provide a detailed explanation in writing for the basis of such denial. Once the OWNER accepts the draft as final, a total of ten (10) final copies (hardcover) are required in addition to an electronic copy.
- 1.2.6 Immediately notify **OWNER** of any delay in the delivery of a work product or deliverable, regardless of cause. Give written notice to **OWNER** within five (5) business days whenever **CONSULTANT** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).

#### **SECTION 2 - EXTRA WORK BY CONSULTANT**

2.1. The OWNER may desire to have the CONSULTANT perform work or render services in connection with this PROJECT other than provided by the expressed intent of this Agreement. Such work shall be considered as "Extra Work", subject to a change order, supplemental to this Agreement, setting forth the character and scope thereof and the compensation therefore. Work under such change order shall not proceed until the OWNER gives written authorization. Should the OWNER find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised, the CONSULTANT shall make such revisions as directed, in writing, by the OWNER. This work shall be considered as "Extra Work" and shall be paid as such.

**2.2.** All "Extra Work" is subject to prior written authorization of **OWNER** and necessary appropriations made by the Urban County Council.

#### **SECTION 3 - OWNER'S RESPONSIBILITIES**

#### **OWNER shall:**

- **3.1.** Provide criteria and information as to **OWNER'S** requirements for the **PROJECT**, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.
- **3.2.** Assist **CONSULTANT** by placing at his disposal available information pertinent to the Project.
- **3.3.** Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by **CONSULTANT**, and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of **CONSULTANT**.
- 3.4. Designate in writing a person to act as **OWNER'S** representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret, and define **OWNER'S** policies and decisions with respect to materials, equipment, elements, and systems pertinent to **CONSULTANT'S** services.
- **3.5.** Give written notice to **CONSULTANT** whenever **OWNER** observes or otherwise becomes aware of any development that affects the scope or timing of **CONSULTANT'S** services, or any defect in the work of Contractor(s).
- **3.6.** Furnish or direct **CONSULTANT** to provide, necessary Extra Work as stipulated in Section Two (2) of this Agreement or other services as required.

#### **SECTION 4 - PERIOD OF SERVICES**

- **4.1.** Time is of the essence in the performance of this Agreement. See attached Exhibit D "Further Description of Basic Engineering Services and Related Matters" for the project schedule.
- **4.2.** The provisions of this Section Four (4) and the various rates of compensation for **CONSULTANT'S** services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the **PROJECT** through completion.
- **4.3.** If a delay results from the acts of **OWNER** or another entity that is required to permit or approve the work or services, an extension of time for such delay will be considered by **OWNER**.
  - **4.3.1.** If the above type of delay occurs and **CONSULTANT** wants an extension of time, it must, within ten (10) days from the date of the delay, apply in writing to **OWNER** for an extension of time for a reasonable period, which must be agreed upon by **OWNER**.

- **4.3.2.** If the extension of time is approved by **OWNER**, the **PROJECT** schedule/Final Task Order shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of **OWNER** of any of its other rights in the Agreement.
- **4.3.3**. If the above type of delay would prevent complete performance of the **PROJECT**/Final Task Order within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT**/Final Task Order or otherwise adjusting the scope of the services or work and any related fees.
- **4.3.4.** If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply.
- **4.4.** If delays result solely by reason of acts of the **CONSULTANT**, the **CONSULTANT** must immediately notify the **OWNER** in the event of such delay, and provide the **OWNER** a written action plan within five (5) business days on how it will reasonably attempt to resolve the delay. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 under "DISPUTES" of this Agreement shall apply. If the above type of delay would prevent complete performance of the **PROJECT**/Final Task Order within ninety (90) days of the time specified therein, **OWNER** shall have the option of cancelling the **PROJECT**/Final Task Order or otherwise adjusting the scope of the services or work and any related fees.

#### **SECTION 5 - PAYMENTS TO CONSULTANT**

#### 5.1. Methods of Payment for Services of CONSULTANT.

#### **5.1.1.** For Basic Services

**OWNER** shall issue individual task orders for each work assignment performed under this Agreement by **CONSULTANT** or its sub-consultant/s. Each task order shall contain scope of work, fee, and schedule for performance of the work. Individual task orders shall be of the form included in **EXHIBIT D**.

- **5.1.1.a** Fee payable to **CONSULTANT** under individual task order shall be developed using hourly rates included in **EXHIBIT D** or as amended in accordance with provisions therein.
- 5.1.1.b Terms of payment to **CONSULTANT** shall be specified in each task order. For assignments with defined scope, lump sum task orders shall be issued. Otherwise, task orders shall include time and materials payment terms.
- **5.1.1.c** Each task order issued shall receive prior written approval of **OWNER** prior to **CONSULTANT** proceeding with said work. The **OWNER's** designated agent in Section 8.1.1. shall be the only person authorized to provide such approval.

#### **5.2.** Times of Payment

**5.2.1. CONSULTANT** shall submit monthly statements for Basic Services and Extra Work rendered. The Statements will be based upon **CONSULTANT'S** estimate of the proportion of the total services actually completed at the time of billing. **OWNER** shall respond to **CONSULTANT'S** monthly statements within thirty (30) days, either denying payment or making payment.

#### **5.3.** Other Provisions Concerning Payments

- **5.3.1.** In the event the Agreement is terminated by the **OWNER** without fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid for the work performed or services rendered for which it has not already been paid as determined by mutual agreement between the **OWNER** and the **CONSULTANT**.
- **5.3.2.** In the event the services of the **CONSULTANT** are terminated by the **OWNER** for fault on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid reasonable value of the work performed or services rendered and delivered for which it has not already been paid, and the amount to be paid shall be determined by the **OWNER**.

#### **SECTION 6 - GENERAL CONSIDERATIONS**

#### **6.1.** Termination

- **6.1.1. CONSULTANT may only terminate this Agreement** due to **OWNER'S** material breach of the terms hereof which breach causes **CONSULTANT** to be unable to perform its duties and responsibilities under this Agreement and upon forty-five (45) days written advance notice to **OWNER**.
- **6.1.2.** The **OWNER** may terminate this Agreement for cause upon seven (7) business days written advance notice to the **CONSULTANT**. The **OWNER** reserves the right to terminate the Agreement for any reason whatsoever, with or without cause, at any time upon thirty (30) days written advance notice to the **CONSULTANT**.

#### 6.2. Ownership and Reuse of Documents

All documents, including raw data, reports, Drawings and Specifications, prepared by the **CONSULTANT** pursuant to this Agreement shall be delivered to and become the property of the **OWNER**. The **OWNER** shall have the right to reuse same without restriction or limitation, but without liability or legal exposure to **CONSULTANT**.

#### 6.3. Legal Responsibilities and Legal Relations

- **6.3.1.** The **CONSULTANT** shall familiarize himself with and shall at all times comply with all federal, state, and local laws, ordinances, and regulations that in any manner affect the services of this Agreement.
- 6.3.2. In performing the services hereunder, the CONSULTANT and its consultants, employees, agents and representatives shall not be deemed or construed to be employees of OWNER in any manner whatsoever. Except as otherwise provided in this Agreement, the CONSULTANT shall be acting as an independent contractor. The CONSULTANT shall not hold itself out as, nor claim to be, an officer or employee of OWNER by reason hereof and shall not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of OWNER. The CONSULTANT shall be solely responsible for any claims for wages or compensation by CONSULTANT'S employees, agents and representatives, including consultants, and shall save and hold OWNER harmless therefrom.
- **6.3.3.** The parties hereto agree that causes of actions between the parties shall be governed by applicable provisions of the Kentucky Revised Statues, and that venue of any legal action shall be a court of appropriate jurisdiction in Fayette County, Kentucky. The parties further agree that Kentucky law shall apply with respect to the interpretation of any provision of this Agreement.

#### 6.4. Successors and Assigns

- **6.4.1. CONSULTANT** binds itself and his partners, successors, executors, administrators, assigns and legal representatives to this Agreement in respect to all covenants, agreements, and obligations of this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement. **CONSULTANT** shall not assign any interest, obligation or benefit in this Agreement nor transfer any interest in the same, whether by assignment or novation, without prior written consent of **OWNER**.
- **6.4.2.** The **CONSULTANT** shall not subcontract more than fifty percent (50%) of the work, based upon dollar value of the work. The **CONSULTANT** shall obtain written approval prior to subletting or assigning any services contained in this Agreement, and consent to sublet or assign any part of this Agreement shall not be construed to relieve the **CONSULTANT** of any responsibility for compliance with the provisions of this Agreement.
- **6.4.3.** Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than **OWNER** and **CONSULTANT**.

#### 6.5. Disputes

Except as otherwise provided in this Agreement, any dispute hereunder may be resolved by agreement of the **OWNER'S** Agent (Section 8.1.1) and the **CONSULTANT.** In the absence of such an agreement, the dispute shall be submitted to the **OWNER'S** Commissioner, Department of Environmental Quality & Public Works, whose decision shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the **CONSULTANT** shall proceed diligently with the performance of the Agreement in accordance with the directions of the **OWNER**.

#### 6.6. Accuracy of CONSULTANT'S Work

The **CONSULTANT** shall be required to perform this Agreement in accordance with the degree of ordinary and reasonable skill and care usually exercised by professional engineers prevailing at the time, place and under similar conditions as the services hereunder are rendered.

The CONSULTANT shall be responsible for the accuracy of all work, even though raw data, reports, Drawings and Specifications have been accepted by the OWNER, and it shall make any necessary revisions or corrections resulting from its errors and/or omissions for no additional compensation. By submission of reports, soils and subsurface information, quantities estimates, calculations and Drawings and Specifications to the OWNER, the CONSULTANT has made an incontrovertible representation that the information is accurate within the appropriate standard of skill and care. Failure on the part of CONSULTANT to provide the expected level of accuracy may be grounds for the OWNER to terminate this Agreement.

#### 6.7. Security Clause

The **CONSULTANT** certifies that he shall not at any time release or divulge any information concerning the services covered by this Agreement to any person or any public or private organization except the **OWNER** without prior approval of the **OWNER** unless required by law

#### 6.8. Access to Records

The **CONSULTANT** and his sub-consultants shall maintain all books, documents, papers, and accounting records, and make such materials available at their respective offices at all reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement for inspection by the **OWNER**, and copies thereof shall be furnished if requested. Failure to maintain such records for three (3) years after the date of final payment may be grounds for the **OWNER** to disqualify the **CONSULTANT** from consideration for future consultant engineering Agreements.

#### 6.9. Risk Management Provisions, Insurance and Indemnification

#### 6.9.1. **DEFINITIONS**

The **CONSULTANT** understands and agrees that the Risk Management Provisions of this Agreement define the responsibilities of the **CONSULTANT** to the **OWNER**.

As used in these Risk Management Provisions, the terms "CONSULTANT" and "OWNER" shall be defined as follows:

- **a. CONSULTANT** means the consultant and its employees, agents, servants, owners, principals, licensees, assigns and subcontractors of any tier.
- **owner** means the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, boards, assigns, volunteers, and successors in interest.

#### 6.9.2. INDEMNIFICATION AND HOLD HARMLESS PROVISION

It is understood and agreed by the parties that Consultant hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Consultant or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "Consultant") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.

Consultant shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by Consultant's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the Consultant; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.

Notwithstanding, the foregoing, with respect to any professional services performed by Consultant hereunder (and to the fullest extent permitted by law), Consultant shall indemnify, save, hold harmless and defend LFUCG from and against any and all liability,

damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of Consultant in the performance of this agreement.

In the event LFUCG is alleged to be liable based upon the above, Consultant shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.

These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

#### 6.9.3. FINANCIAL RESPONSIBILITY

CONSULTANT understands and agrees that it shall, prior to final acceptance of its proposal and the commencement of any work or services, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

#### **6.9.4. INSURANCE REQUIREMENTS**

Coverage

#### **6.9.4.1.** Required Insurance Coverage

CONSULTANT shall procure and maintain for the duration of this Agreement the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to OWNER in order to protect OWNER against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT. The cost of such insurance shall be included in any proposal:

| Coverage  | Limits   |
|---|--|
| General Liability (Insurance Services Office Form CG 00 01)                 | \$1 million per<br>occurrence, \$2 million aggregate or<br>\$2 million combined single limit |
| Commercial Automobile Liability<br>(Insurance Services Office Form CA 0001) | combined single,<br>\$1 million per occurrence   |

Limits

Professional Liability \$1 million per occurrence, \$3 million

aggregate

Worker's Compensation Statutory

Employer's Liability \$500,000.00

The policies above shall contain the following conditions:

a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky. OWNER shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.

- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by OWNER.
- c. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions) for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by LFUCG.
- d. OWNER shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or nonrenewed.
- e. The Professional Liability policy shall be maintained for a minimum of three years beyond the completion date of the project, to the extent commercially available. If not commercially available, CONSULTANT shall notify OWNER and obtain similar insurance that is commercially available and acceptable to OWNER.
- f. Said coverage shall be written by insurers acceptable to OWNER and shall be in a form acceptable to OWNER. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

#### **6.9.4.2.** Renewals

After insurance has been approved by OWNER, evidence of renewal of an expiring policy must be submitted to OWNER, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

#### 6.9.4.3. Right to Review, Audit and Inspect

CONSULTANT understands and agrees that OWNER may review, audit and inspect any and all of CONSULTANT'S records and operations to insure compliance with these Insurance Requirements.

#### 6.9.5. SAFETY AND LOSS CONTROL

**CONSULTANT** understands and agrees that **OWNER** is in no way responsible for the safety and property of **CONSULTANT** or its personnel. **CONSULTANT** shall comply with all applicable federal, state, and local safety standards related to the performance of its work or services under this Agreement and take reasonably necessary action to protect the life, health and safety and property of its personnel, the public, and **OWNER** in the locations and areas in which **CONSULTANT** is performing services under the Agreement.

#### 6.9.6. DEFINITION OF DEFAULT

**CONSULTANT** understands and agrees that the failure to comply with any of these provisions shall constitute default under this Agreement. **CONSULTANT** also agrees that **OWNER** may elect as its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging **CONSULTANT** for any such insurance premiums purchased, or suspending or terminating this Agreement.

#### **SECTION 7 - EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Agreement, the **CONSULTANT** agrees as follows:

7.1. The CONSULTANT will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age, or handicap. The CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age, or handicap. Such action shall include, but not be limited to the following: employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. The **CONSULTANT** agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

**7.2.1.** The **CONSULTANT** will, in all solicitations or advertisements for employees placed by or on behalf of the **CONSULTANT**, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (between forty and seventy), or handicap.

#### SECTION 8 - SPECIAL PROVISIONS, EXHIBITS, AND SCHEDULES

- **8.1.** This Agreement is subject to the following provisions.
  - **8.1.1.** Pursuant to subparagraph 3.4 of this Agreement, **OWNER** has assigned Jim Woods, P.E., Director of the Division of Traffic (the "**OWNER'S** Agent"), as the authorized agent of **OWNER**, to monitor, direct and review the performance of work of the **CONSULTANT**. Documents, data, reports, and all matters associated with carrying out this Agreement shall be addressed to the **OWNER'S** Agent or his designee. Questions by the **CONSULTANT** regarding interpretations of the terms, provisions and requirements under this Agreement shall be addressed to the **OWNER'S** Agent or his designee. The **CONSULTANT** shall look only to the **OWNER'S** Agent or his designee for direction in its performance under this Agreement; no other direction shall be binding upon **OWNER**. **OWNER** shall respond to written requests by **CONSULTANT** within thirty (30) days.
- **8.2.** This Agreement, together with the Incorporated Documents (Section 1.2) constitutes the entire Agreement between **OWNER** and **CONSULTANT** and supersedes all prior written or oral understandings. This Agreement and **EXHIBITS A, B, C and D** and any related schedules or documents may only be amended, supplemented, modified or canceled by a duly executed written instrument.
- **8.3. NO THIRD PARTY RIGHTS.** This agreement does not create a contractual relationship with or right of action in favor of a third party against either **OWNER** or **CONSULTANT.**
- **8.4 UNENFORCEABLE TERMS/SURVIVABILITY**. If any term or provision of this Agreement shall be found to be illegal or unenforceable, this Agreement shall remain in full force and such term or provision shall be deemed stricken. The provisions of Section 6 of this Agreement shall survive its termination.
- **8.5. NON-WAIVER.** The failure of either party to enforce any right reserved to it in this Agreement shall not be a waiver of any such right to which the party is entitled.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written. OWNER: **CONSULTANT:** LEXINGTON-FAYETTE URBAN URS CORPORATION, A NEVADA **CORPORATION COUNTY GOVERNMENT** BY: \_\_\_\_\_ JIM GRAY, MAYOR ATTEST: URBAN COUNTY COUNCIL CLERK COMMONWEALTH OF KENTUCKY **COUNTY OF FAYETTE** The foregoing Agreement was subscribed, sworn to and acknowledged before me by \_\_\_\_\_\_, as the duly authorized representative for and on behalf of \_\_\_\_\_\_, on this the \_\_\_\_\_ day of \_\_\_\_\_\_, 2013. My commission expires:

**NOTARY PUBLIC** 

#### **EXHIBIT A**

RFP #7-2013

 ${\bf REQUEST\ FOR\ PROPOSAL\ (RFP)}$ 

TRAFFIC SIGNAL

TIMING PROJECT



# Lexington-Fayette Urban County Government

#### Request For Proposal

The Lexington-Fayette Urban County Government hereby requests proposals for RFP #7-2013 Traffic Signal Timing Project to be provided in accordance with terms, conditions and specifications established herein.

Sealed proposals will be received in the Division of Central Purchasing, Room 338, Government Center, 200 East Main Street, Lexington, KY, 40507, until **2:00 PM**, prevailing local time, on **March 25th, 2013**.

Proposals received after the date and time set for opening proposals will not be considered for award of a contract and will be returned unopened to the Proposer. It is the sole responsibility of the Proposer to assure that his/her proposal is received by the Division of Central Purchasing before the date and time set for opening proposals.

Proposals must be sealed in an envelope and the envelope prominently marked:

#### RFP #7-2013 Traffic Signal Timing Project

If mailed, the envelope must be addressed to:

Purchasing Director Lexington-Fayette Urban County Government Room 338, Government Center 200 East Main Street Lexington, KY 40507

Additional copies of this Request For Proposals are available from the Division of Central Purchasing, Room 338 Government Center, 200 East Main Street, Lexington, KY 40507, (859)-258-3320, at no charge.

Proposals, once submitted, may not be withdrawn for a period of sixty (60) calendar days.

The Proposer must submit one (1) master (hardcopy), (1) electronic version in PDF format on a flashdrive or CD and six (6) duplicates (hardcopies) of their proposal for evaluation purposes.

The Lexington-Fayette Urban County Government reserves the right to reject any or all proposals, and to waive technicalities and informalities when such waiver is determined by the Lexington-Fayette Urban County Government to be in its best interest.

Signature of this proposal by the Proposer constitutes acceptance by the Proposer of terms, conditions and requirements set forth herein.

Minor exceptions may not eliminate the proposal. Any exceptions to the specifications established herein shall be listed in detail on a separate sheet and attached hereto. The Lexington-Fayette Urban County Government shall determine whether any exception is minor.

The Lexington-Fayette Urban County Government encourages the participation of minority- and women-owned businesses in Lexington-Fayette Urban County Government contracts. This proposal is subject to Affirmative Action requirements attached hereto.

Please do not contact any City staff member or any other person involved in the selection process other than the designated contact person(s) regarding the project contemplated under this RFP while this RFP is open and a selection has not been finalized. Any attempt to do so may result in disqualification of the firm's submittal for consideration.

#### **Laws and Regulations**

All applicable state laws, municipal ordinances and regulations of all authorities having jurisdiction over the project shall apply to the contract, and shall be deemed to be incorporated herein by reference.

#### **Equal Employment Opportunity**

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its subcontracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

#### **Kentucky Equal Employment Opportunity Act**

The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any "county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly

publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

"During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, or national origin;
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, or national origin;
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provision of the nondiscrimination clauses required by this section; and
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses."

#### The Act further provides:

"KRS 45.610. Hiring minorities -- Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetables.
- (2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor -- Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job."

It is recommended that all of the provisions above quoted be included as <u>special conditions</u> in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his workforce in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

#### **Contention Process**

Vendors who respond to this invitation have the right to file a notice of contention associated with the RFP process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the RFP process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the RFP process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with RFP processes. If, based on this review, a RFP process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a RFP recommendation must be filed within 3 business days of the RFP recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

#### **SELECTION CRITERIA:**

- 1. Specialized experienced and technical competence of the person or firm (including a join venture or association) with the type of service required.
- 2. Capacity of the person or firm to perform the work, including any specialized services, within the time limitations.
- 3. Past record and performance on contracts with the LFUCG or other governmental agencies and private industry with respect to such factors as control of cost, quality of work and ability to meet scheduling.
- 4. Familiarity with the details of the project.
- 5. Degree of local employment to be provided by the person or firm.

Proposals shall contain the appropriate information necessary to evaluate based on these criteria. A committee composed of government employees as well as representatives of relevant user groups will evaluate the proposals.

#### Questions shall be addressed to:

Todd Slatin
Acting Director
Division of Central Purchasing
tslatin@lexingtonky.gov

#### Affirmative Action Plan

All vendors must submit as a part of the proposal package the following items to the Urban County Government:

- 1. Affirmative Action Plan for his/her firm;
- 2. Current Work Force Analysis Form;

Failure to submit these items as required may result in disqualification of the submitter from award of the contract. All submissions should be directed to:

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor Lexington, Kentucky 40507

All questions regarding this proposal must be directed to the Division of Central Purchasing, (859)-258-3320.

#### **AFFIDAVIT**

Comes the Affiant, <u>URS Corporation</u>, and after being first duly sworn, states under penalty of perjury as follows:

- 1. His/her name is <u>Gregory T. Groves, PE</u> and he/she is the individual submitting the proposal or is the authorized representative of <u>URS Corporation</u>, the entity submitting the proposal (hereinafter referred to as "Proposer").
- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the abovementioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- 6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

#### Continued on next page

that nature or that the circumstance exists.

Further, Affiant sayeth naught.

STATE OF KENTUCKY

COUNTY OF JEFFERSON

The foregoing instrument was subscribed, sworn to and acknowledged before me by \_\_\_\_\_\_\_ on this the \_\_\_\_\_\_ on this the \_\_\_\_\_\_ Aday of \_\_\_\_\_\_, 2013.

My Commission expires: \_\_\_\_\_\_

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of

#### **EQUAL OPPORTUNITY AGREEMENT**

#### The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment

because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

\*\*\*\*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

#### **Bidders**

| I/We agree to comply with the Civil Rights Lo<br>minorities, women, Vietnam veterans, handicapp | •                | n employment | rights of |
|---|------------------|--------------|-----------|
|   |                  |              |           |
| Signature Signature   | Name of Business |              |           |

#### **WORKFORCE ANALYSIS FORM**

Name of Organization: <u>URS Corporation</u> Date: <u>03/21/2013</u>

| Categories          | Total | White |      | Latino |     | Black |     | Other |     | Total |      |
|---------------------|-------|-------|------|--------|-----|-------|-----|-------|-----|-------|------|
|                     |       | М     | F    | М      | F   | М     | F   | M     | F   | М     | F    |
| Administrators      | 1962  | 1481  | 230  | 66     | 14  | 45    | 8   | 94    | 24  | 1686  | 276  |
| Professionals       | 6868  | 3624  | 1863 | 228    | 142 | 173   | 132 | 476   | 230 | 4501  | 2367 |
| Superintendents     | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Supervisors         | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Foremen             | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Technicians         | 2485  | 1577  | 351  | 159    | 35  | 167   | 57  | 115   | 24  | 2018  | 467  |
| Protective Service  | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Para-Professionals  | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Office/Clerical     | 1081  | 116   | 628  | 23     | 92  | 18    | 123 | 24    | 57  | 181   | 900  |
| Skilled Craft       | 113   | 56    | 0    | 51     | 0   | 2     | 0   | 4     | 0   | 113   | 0    |
| Service/Maintenance | N/A   | N/A   | N/A  | N/A    | N/A | N/A   | N/A | N/A   | N/A | N/A   | N/A  |
| Total:              | 12509 | 6854  | 3072 | 527    | 283 | 405   | 320 | 713   | 335 | 8499  | 4010 |

| Prepared for: |              |
|---------------|--------------|
|               | (            |
|               | Name & Title |

#### DIRECTOR, DIVISION OF CENTRAL PURCHASING LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 EAST MAIN STREET LEXINGTON, KENTUCKY 40507

## NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this contract be subcontracted to MBE/WBE's. The goal for the utilization of <u>certified</u> MBE/WBE's as subcontractors are recommended goals. Contractors who fail to meet such goals will be expected to <u>provide written explanations to the Director of the Division of Central Purchasing</u> of efforts they have made to accomplish the recommended goals and the extent to which they are successful in accomplishing the recommended goals will be a consideration in the procurement process.

For assistance in locating MBE/WBE Subcontractors contact Marilyn Clark at 859/258-3320 or by writing the address listed below:

Marilyn Clark, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street – Room 338 Lexington, Kentucky 40507

## Lexington-Fayette Urban County Government MBE/WBE Participation Goals

#### PART 1 - GENERAL

- 1.1 The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE) and Woman-Owned (WBE) Business Enterprises as subcontractors or suppliers in their proposals.
- 1.2 Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned and Woman-Owned Businesses on this contract.
- 1.3 It is therefore a request of each Submitter to include in its proposal, the same goal (10%) or for MBE/WBE participation and other requirements as outlined in this section.

#### PART 2 - PROCEDURES

- 2.1 The successful proposer will be required to report to the LFUCG, the dollar amounts of all purchase orders submitted to Minority-Owned or Woman-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2.2 Replacement of a Minority-Owned or Woman-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MBE/WBE Firm; this is subject to approval by the LFUCG. (See LFUCG MBE/WBE Substitution Form)
- 2.3 For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, submitters may contact:
  - A. The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 2.4 The LFUCG will make every effort to notify interested MBE/WBE subcontractors and suppliers of each RFP, including information on the scope of work, the pre-proposal meeting time and location, the proposal date, and all other pertinent information regarding the project.

#### PART 3 - DEFINITIONS

- 3.1 A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 3.2 A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.

#### PART 4 - OBLIGATION OF PROPOSER

- 4.1 The bidder shall make a Good Faith Effort to achieve the Participation Goal for MBE/WBE subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 4.2 Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 4.3 The Form of Proposal includes a section entitled "MBE/WBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4.4 Failure to submit this information as requested may be cause for rejection of the proposal.

#### PART 5 - DOCUMENTATION REQURIED

- 5.1 Proposers reaching the Goal are required to submit only the "MBE/WBE Participation Form." The form must be fully completed including names and telephone number of participating MBE/WBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Proposal Price. The form must be signed and dated, and is to be submitted with the proposal.
- 5.2 Proposers not reaching the Goal must submit the "MBE/WBE Participation Form", the "MBE Quote Summary Form" and a written statement documenting their Good Faith Effort to do so (If proposal includes no MBE/WBE participation, proposer shall enter "None" on the subcontractor / supplier form). In addition, the proposer may submit the following as proof of Good Faith Efforts to meet the Participation Goal:
  - A. Advertisement by the proposer of MBE/WBE Contracting opportunities associated with this proposal in at least two (2) of the following:
    - 1. A periodical in general circulation throughout the region
    - 2. A Minority-Focused periodical in general circulation throughout the region
    - 3. A Trade periodical aimed at the MBE/WBE community in general circulation throughout the region
    - 4. Proposer shall include copies of dated advertisement with his submittal
  - B. Evidence of written notice of contracting opportunities to at least five (5) MBE/WBE firms serving the construction industry at least seven (7) days prior to the proposal opening date.
  - C. Copies of quotations submitted by MBE/WBE firms which were not used due to uncompetitive pricing or other factors and/or copies of responses from firms that were contacted indicating that they would not be submitting a proposal.
  - D. Documentation of Proposer's utilization of the agencies identified to help locate potential MBE/WBE firms for inclusion on the contract including responses from agencies.
  - E. Failure to submit any of the documentation requested in this section may be cause for rejection of the proposal. Proposers may include any other

documentation deemed relevant to this requirement. "Record of MBE/WBE Solicitation" and other required documentation of Good Faith Efforts are to be submitted with the proposal, if participation Goal is not met.



#### MINORITY BUSINESS ENTERPRISE PROGRAM

Marilyn Clark
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
mclark@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented resolution 167-91—Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

"A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFUCG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFUCG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises..."

A Disadvantaged Business Enterprise is defined as a business at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female

We are very happy that you have decided to bid for a contract, request for proposal, submitted a quote or are interested in learning more about how to do business with Lexington-Fayette Urban County Government. We have compiled the list below to help you locate certified minority vendors.

LFUCG—Economic Engine Listings Marilyn Clark mclark@lexingtonky.gov

#### 859-258-3323

#### Commerce Lexington—

Tyrone Tyra, Minority Business Development <a href="mailto:ttyra@commercelexington.com">ttyra@commercelexington.com</a> 859-226-1625

#### Tri-State Minority Supplier Diversity Council

Sonya Brown
sbrown@tsmsdc.com
502-625-0137

#### **Small Business Development Council**

Dee Dee Harbut /UK SBDC

dharbut@uky.edu

Shawn Rogers, UK SBDC <a href="mailto:Shawn.rogers@uky.edu">Shawn.rogers@uky.edu</a>

Shiree Mack smack@uky.edu

#### **Community Ventures Corporation**

James Coles jcoles@cvcky.org 859-231-0054

#### Kentucky Department of Transportation

Shella Jarvis@ky.gov 502-564-3601

#### **KPAP**

Debbie McKnight

Debbie.McKnight@ky.gov

800-838-3266 or 502-564-4252

Bobbie Carlton@ky.gov

#### Ohio River Valley Women's Business Council

Rea Waldon rwaldon@gcul.org 513-487-6534

#### **Kentucky Small Business Connect**

Tom Back 800-626-2250 or 502-564-2064 https://secure.kentuckv.gov//sbc

### National Minority Supplier Development Council, Inc. (NMSDC)

www.nmsdc.org

| any substitution is made progress, it is understood   | ference #ontractors listed have de or the total value o | agreed to participate on the first the work is changed prior ations must be submitted to | or to or after the job is in |
|---|---|--|------------------------------|
| approval immediately.                                 |   |  |                              |
| MBE/WBE<br>Company, Name,<br>Address, Phone,<br>Email | Work to be<br>Performed                                 | Total Dollar Value<br>of the Work  | % Value of Total<br>Contract |
| 1.  |   |  |                              |
| 2.  |   |  |                              |
| 3.  |   |  |                              |
| 4.  |   |  |                              |
| used in accomplishing                                 | the work contained is                                   | ubmits the above list of MI<br>n this Bid/RFP/Quote. A<br>t and/or be subject to app     | any misrepresentation        |

| The undersigned company representativused in accomplishing the work contained may result in the termination of the contained laws concerning false statements and false | ed in this Bid/RFP/Q<br>tract and/or be subjec | uote. Any misrepresentation |
|---|--|-----------------------------|
| Company   | By   |                             |
| Date  | Title  |                             |
|   |  |                             |

| LFUCG MBE/WBE SUBSTITUTION FORM |  |
|---------------------------------|--|
| Bid/RFP/Quote Reference #       |  |

The substituted MBE/WBE subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project.

| company, we unde   |  |                         |                                   |                                      |                              |
|--|--|-------------------------|-----------------------------------|--------------------------------------|------------------------------|
| SUBSTITUTED<br>MBE/WBE Company<br>Name, Address, Phone,<br>Email | MBE/WBE<br>Formally<br>Contracted/ Name,<br>Address, Phone,<br>Email | Work to Be<br>Performed | Reason for<br>the<br>Substitution | Total Dollar<br>Value of the<br>Work | % Value of Total<br>Contract |
| 1.   |  |                         |                                   |                                      |                              |
|  |  |                         |                                   |                                      |                              |
| 2.   |  |                         |                                   |                                      |                              |
|  |  |                         |                                   |                                      |                              |
| 3.   |  |                         |                                   |                                      |                              |
|  |  |                         |                                   |                                      |                              |
| 4.   |  |                         |                                   |                                      |                              |
|  |  |                         |                                   |                                      |                              |
|  |  |                         |                                   |                                      |                              |
| The undersigned acknowled and State laws concerning fa           |  |                         | nination of the contr             | I<br>act and/or be subje             | ect to applicable Federal    |
| Company  |  |                         | Date                              |                                      |                              |
| Company Repres   | sentative  |                         | Title                             |                                      |                              |



#### MBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference #\_\_\_\_\_

The undersigned acknowledges that the minority subcontractors listed on this form did submit a quote to participate on this project.

| Company Name   |                      |  | Contac            | Contact Person                 |   |  |                          |  |
|--|----------------------|--|-------------------|--------------------------------|---|--|--------------------------|--|
| lress/Phone/Email  | ress/Phone/Email RFP |  |                   |                                | RFP Package / RFP Date  |  |                          |  |
| E/WBE Company<br>Iress   | Contact<br>Person    | Contact<br>Information<br>(work phone,<br>Email, cell) | Date<br>Contacted | Services<br>to be<br>performed | Method of<br>Communicatior<br>(email, phone<br>meeting, ad,<br>event etc) | Total dollars \$\$<br>Do Not Leave<br>Blank<br>(Attach<br>Documentation) | MBE * AA HA AS NA Female |  |
|  |                      |  |                   |                                |   |  |                          |  |
|  |                      |  |                   |                                |   |  |                          |  |
|  |                      |  |                   |                                |   |  |                          |  |
| (MBE designation American)  The undersigned ackreto applicable Federal | owledges that a      | ll information is acc                                  | curate. Any m     | isrepresentati                 |   |  |                          |  |
| Company  |                      |  |                   |                                | Com   | pany Representativ   |                          |  |



#### LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MBE/WBE vendors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

| Bid/RFP/<br>Total Con  |                        | nt Awarded                     | to Prime (  | Contractor f                               | or this Proje  | ct                                 |                                  |  |
|--|------------------------|--------------------------------|---|--|--|------------------------------------|----------------------------------|--|
| Project Name/  | Contract #             |                                |   | Work Period/ Fr                            | rom:   | То:                                |                                  |  |
| Company Nam  | e:                     |                                |   | Address:                                   |  |                                    |                                  |  |
| Federal Tax ID:  |                        |                                |   | Contact Person:                            |  |                                    |                                  |  |
| Subcontractor<br>Vendor ID<br>(name,<br>address,<br>phone, email | Description<br>of Work | Total<br>Subcontract<br>Amount | % of Total<br>Contract<br>Awarded to<br>Prime for<br>this Project | Total<br>Amount<br>Paid for this<br>Period | Purchase Order number for subcontractor work (please attach PO)  | Scheduled<br>Project<br>Start Date | Scheduled<br>Project<br>End Date |  |
|  |                        |                                |   |  |  |                                    |                                  |  |
|  |                        |                                |   |  |  |                                    |                                  |  |
|  |                        |                                |   |  |  |                                    |                                  |  |
| the representat  | ions set forth be      | elow is true. Any              | misrepresentat  | ions may result i                          | tt the information<br>in the termination<br>is and false claims. |                                    |                                  |  |
| Company  |                        |                                |   | Company Representative                     |  |                                    |                                  |  |
| Date   |                        |                                |   | Title                                      |  |                                    |                                  |  |

## LFUCG STATEMENT OF GOOD FAITH EFFORTS Bid/RFP/Quote #\_\_\_\_\_

| Date        |   | Title                                 |
|-------------|---|---------------------------------------|
| Comp        | npany   | Company Representative                |
| result      | undersigned acknowledges that all information t termination of the contract and/or be subjecterning false statements and claims.        | , <u>.</u>                            |
|             |   |                                       |
|             |   |                                       |
|             |   |                                       |
|             | Other Please list any other methods utilized that a   | ren't covered above.                  |
|             | Provided plans, specifications, and requirer subcontractors   | nents to interested MBE/WBE           |
|             | Provided copies of quotations submitted b and/or responses from firms indicating the  |                                       |
|             | Showed evidence of written notice of control MBE/WBE firms at least seven days prior  |                                       |
| ——<br>newsp | Advertised for MBE/WBE subcontractors spapers   | or suppliers in local or regional     |
| ——<br>Engin | Requested a list of MBE/WBE subcontractine  | tors or suppliers from LFUCG Economic |
|             | Sponsored Economic Inclusion event to pr  | ovide networking opportunities        |
|             | Attended LFUCG Central Purchasing Eco   | nomic Inclusion Outreach Event        |
| and w       | ted the following methods to obtain the maximum women owned business enterprises on the probably placing an X in the appropriate place. | 1 1 1 ,                               |

| Firm Submitting Proposal: _ |        |               |     |
|-----------------------------|--------|---------------|-----|
| Complete Address:           | Street | City          | Zip |
| Contact Name:               |        | Title:        |     |
| Telephone Number:           |        | _ Fax Number: |     |
| Email address:              |        |               |     |

#### **GENERAL PROVISIONS**

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

#### A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be

limited to:

- (a) Failure to perform the contract according to its terms, conditions and specifications;
- (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services;
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

#### B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary

right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

| Signature | Date |
|-----------|------|

## RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION

#### INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Consultant hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Consultant or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "Consultant") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- (2)Consultant shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by Consultant's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the Consultant; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) Notwithstanding, the foregoing, with respect to any professional services performed by Consultant hereunder (and to the fullest extent permitted by law), Consultant shall indemnify, save, hold harmless and defend LFUCG from and against any and all liability, damages and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees, for any damage due to death or injury to any person or injury to any property (including the loss of use resulting therefrom) to the extent arising out of, pertaining to or relating to the negligence, recklessness or willful misconduct of Consultant in the performance of this agreement.
- (4) In the event LFUCG is alleged to be liable based upon the above, Consultant shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.

(5) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

#### **FINANCIAL RESPONSIBILITY**

CONSULTANT understands and agrees that it shall, prior to final acceptance of its proposal and the commencement of any work or services, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

#### **INSURANCE REQUIREMENTS**

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AAND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

#### Required Insurance Coverage

Coverage

CONSULTANT shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work or services hereunder by CONSULTANT. The cost of such insurance shall be included in any bid:

I imits

| Coverage   | Lillits  |
|--|--|
| General Liability<br>million aggregate<br>(Insurance Services Office Form CG 00 01)<br>limit | \$1 million per occurrence, \$2 or \$2 million combined single |
| Commercial Automobile Liability occurrence (Insurance Services Office Form CA 0001)          | combined single, \$1 million per                               |
| Professional Liability million aggregate   | \$1 million per occurrence, \$3                                |
| Worker's Compensation  | Statutory  |
| Employer's Liability   | \$500,000.00   |

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky. LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall have a Professional Liability endorsement (including Errors and Omissions) for any services performed pursuant to the contract, and/or a separate Professional Liability Policy shall be obtained unless it is deemed not to apply by LFUCG.
- d. The Professional Liability policy shall be maintained for a minimum of three years beyond the completion date of the project, to the extent commercially available. If not commercially available, CONSULTANT shall notify LFUCG and obtain similar insurance that is commercially available and acceptable to LFUCG.
- e. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- f. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

#### Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

#### Deductibles and Self-Insured Programs

FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of CONSULTANT's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If CONSULTANT satisfies any portion of the insurance requirements

through deductibles, self-insurance programs, or self-insured retentions, CONSULTANT agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.
- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

#### Verification of Coverage

CONSULTANT agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

#### Right to Review, Audit and Inspect

CONSULANT understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

#### **DEFAULT**

CONSULTANT understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging CONSULTANT for any such insurance premiums purchased, or suspending or terminating the work.

00380964



## **Traffic Signal Retiming Project - 2013**

Georgetown Road (US25)
Versailles Road (US60)
Newtown Pike (KY922)
North Broadway (US68)

Lexington, KY

#### **Traffic Signal Timing Plans**

#### **General Project Description ...**

The Lexington-Fayette Urban County Government, Division of Traffic Engineering desires the development of twelve (12) new timing plans for each intersection along the specified corridors in Lexington so as to achieve optimized traffic flow, reduce emissions and enhance safety. The ideal schedule would have the new timing plans in full operation prior to the beginning of Fayette County Public Schools in August 2013.

#### Corridors/Intersections for Review ...

#### Georgetown Road (US25) Corridor – (12 intersections)

- Georgetown Road at Douglas Avenue
- Georgetown Road at Price Road
- Georgetown Road at New Circle Road Inner Loop
- Georgetown Road at New Circle Road Outer Loop
- Georgetown Road at Mercer Road
- Georgetown Road at Nandino Boulevard
- Georgetown Road at Briarwood Drive
- Georgetown Road at Oakwood Drive
- Georgetown Road at Sandersville Road
- Georgetown Road at Capstone Drive / Parallel Road
- Georgetown Road at Citation Boulevard
- Georgetown Road at Spurr Road

#### Versailles Road (US60) Corridor – (11 intersections)

- Versailles Road at Oliver Lewis Way / Pine Street
- Versailles Road at Robertson / Angliana Way
- Versailles Road at Bennett Avenue
- Versailles Road at Red Mile Road / Forbes Road
- Versailles Road at Delmont Drive
- Versailles Road at Hamilton Park / Terrace View Drive
- Versailles Road at Oxford Circle
- Versailles Road at Mason Headley Road
- Versailles Road at Village Drive
- Versailles Road at Alexandria Drive
- Versailles Road at Parkers Mill Road

#### Newtown Pike (KY922) Corridor – (8 intersections)

- Newtown Pike at Stanton Way
- Newtown Pike at I-75 NB Ramp
- Newtown Pike at Coleman Way
- Newtown Pike at Aristides / Marriott
- Newtown Pike at Sugar Maple Drive
- Newtown Pike at Citation Boulevard
- Newtown Pike at Nandino Boulevard
- Newtown Pike at Newtown Court / Newtown Circle

#### North Broadway (US68) Corridor – (4 intersections)

- North Broadway at Haggard Lane
- North Broadway at I-75 SB Ramp
- North Broadway at I-75 NB Ramp
- North Broadway at Old Paris Road

The contract for the signal timing plans is for a 120 (calendar) day period. The Consultant shall have 60 calendar days from the Notice to Proceed to submit proposed recommendations for the traffic signal timing plans. Within the final 30 calendar days of the contract period, the Consultant shall complete the data entry, in-field testing and modifications, and the final Bluetooth probe data collections. Once the project is satisfactorily completed and the new timing plans are in full operation, four (4) final hardcopy reports, including a DVD (or other memory device) with all of the Synchro runs in each report shall be submitted containing all information relative to the project (including all model data, Bluetooth data, traffic counts, etc.). Any exception taken with respect to the time designation should be noted on the submittal.

The LFUCG reserves the right to award the contract for this project on the basis of demonstrated experience with like projects by the Consultant(s) submitting the RFP. Furthermore, each route may be broken out and awarded independent of other routes. Therefore, each route should be broken out within the proposal such that the costs and action plans are clearly defined independently from one another.

#### General Information Required in Proposal ...

The Consultant shall provide all pertinent information relative to past and current work involving the optimization and coordination of traffic signals, with specific emphasis on 2070-type controllers and emphasis on the Centracs traffic control systems. The LFUCG reserves the right to weight experience based on similar component work as is used within our traffic signal system (e.g. familiarity with 2070 controllers, OASIS firmware).

#### **Specific Services Requested ...**

#### **Timing Plan Specifics**

The Consultant shall be responsible for recommending and providing the Division of Traffic Engineering twelve (12) new timing plans for each intersection from the aforementioned list to achieve optimized traffic flow along the specified routes. The general guidelines for the timing plans are to develop plans during the following times of day and days of week

```
Monday through Friday
Plan 1
      AM
               (6:30am to 9:00am)
               (9:00am to 10:30am)
                                               Monday through Friday
Plan 2
Plan 3 Midday (10:30am to 2:00pm)
                                               Monday through Friday
Plan 4
               (2:00pm to 3:00pm)
                                               Monday through Friday
Plan 5 PM
               (3:00pm to 6:30pm)
                                               Monday through Friday
Plan 6
               (6:30pm to 9:00pm)
                                               Monday through Friday
Plan 11 AM
               (8:00am to 1:00pm)
                                               Saturday
               (1:00pm to 6:00pm)
                                               Saturday
Plan 13 Midday
               (6:00pm to 9:00pm)
                                               Saturday
Plan 15 PM
Plan 21 AM
               (9:00am to 1:00pm)
                                               Sunday
Plan 23 Midday (1:00pm to 4:00pm)
                                               Sunday
Plan 25 PM
               (4:00pm to 9:00pm)
                                               Sunday
```

Of the plans defined above, the natural breaks in traffic volumes defined within the specific traffic counts for each route were weighed in determining the actual time

schedules for each respective timing plan. The times noted above were used as a guide and not viewed as absolutes, since the natural volume breaks in demands on the system may determine the schedule timing. Any deviation related to scheduling will require LFUCG approval.

#### Traffic Count Data Specifics ...

Traffic count data is to be obtained using a 15-minute interval and shall include volumes for each approach using either MioVision VCUs or manual counts. The counts shall be submitted in the final deliverables as ppd and pdf formats. The traffic count data may be conducted during a typical weekday Monday-Friday while Fayette County Public Schools are in session. All counts are to be conducted under normal conditions (i.e. no lane closures, no Holidays or other major traffic impacts). Data collected during the PM Rush times on Fridays are not be used to model PM traffic volumes for other days such as Monday through Thursday, as traffic patterns may differ greatly on Friday evenings. However, the data can be used for the Friday PM period. Weekday traffic data collection shall be conducted between the hours of 6:00am-9:00pm, while Saturday/Sunday traffic data collection shall be conducted between the hours of 9:00am-9:00pm. If Rupp Arena or other large events are scheduled (e.g. Keeneland, UK Football, UK Basketball, Sweet Sixteen), approval needs to be given from LFUCG prior to collecting such data.

The Consultant shall gather Bluetooth probe data showing existing conditions upon notice to proceed under contract. Following the implementation and adjustments to the new recommended timing plans, documentation during the same periods (i.e. same day of week and time of day) shall be recorded and provided in the same manner to show improvements in travel conditions and matched the final time/space diagrams submitted.

#### Traffic Analysis and Simulation Specifics...

The Consultant shall use Trafficware's Synchro 7 version or newer for the traffic analysis software in the creation of timing plans. Calculated and modified time/space diagrams for each timing plan shall be submitted. The Consultant shall measure the saturation flow rates of each arterial as outlined in the <u>Highway Capacity Manual</u>, so that a well calibrated model can be documented and used from the onset of the project. Existing timing plans shall modeled and used as a baseline for improvements using SimTraffic. The final product shall include all Synchro files and runs incorporated into our system, as well as the Synchro models in their entirety.

Each corridor has a Synchro 7 Base Model that will be provided by the LFUCG, as will all current timing tables as required to establish proper model calibration to existing conditions. Suitcase testers and a 2070 controller can be made available to the Consultant(s) to test timing parameters prior to implementation at the LFUCG Division of Traffic Engineering office.

The Consultant shall provide a plan of action that includes (at a minimum):

- 1) a licensed engineer in the Commonwealth of Kentucky as a project manager (with contact information)
- 2) a critical path schedule for each route individually
- 3) a detailed meeting schedule to ensure the project stays on task (e.g. as traffic counts are completed, as existing simulations are optimized, as recommendations are projected, etc.)
- 4) a detailed plan of action as to how the timing plans will be implemented and field adjusted
- 5) a description as to how the project will be invoiced (preferably incremental as work is completed with documentation)

The Consultant shall provide traffic signal timing information on two separate occasions: first, upon implementation and second, upon finalization of the contract. The data must include the direction of progression, cycle lengths, seconds per phase (splits), any variable phasing recommended, offsets, phase sequences and time/space diagrams on hardcopy during the implementation phase and on DVD (or other memory device) and hardcopy upon finalization of the contract.

All intersection clearance intervals (Yellow and All Red) shall be calculated based on most current KYTC standard of practice as defined in the KYTC Policy Manual.

All pedestrian clearance intervals shall be calculated based on a rate of 3.5 feet per second. Where splits fall below the calculated time required for proper ped cycling, High Priority Ped must be noted and used in the 2070.

Under no circumstances should the minimum split time for phases (G+Y+R) be less than 14 seconds for any movement. <u>Careful calculation should be made to make certain that pedestrian movements would not allow for the skipping of any phases</u>.

Every effort should be made such as to minimize cycle lengths whenever possible, with the cycles based on even 10 increments (e.g. 120, 130, 140, etc.). It is desired to have <u>cycle lengths no longer than 180 seconds</u>; however, longer ones may be necessary for Newtown Pike AM and PM Peaks.

The LFUCG is interested in the Consultant providing recommendations on variable phasing (Lead/Lead, Lead/Lag, Lag/Lead, Lag/Lag) on the mainlines as well as side streets (where applicable) so as to maximize progression bands and reduce travel times as much as possible. The variable phasing can fluctuate throughout different times of day and days of week. Signalized intersections with Flashing Yellow Arrows (FYAs) can be reviewed

so as to disable the protected left turn phase if volume warrants can show low enough cross-products during off-peak travel times to do so (LFUCG/KYTC approval would need to be sought for the time of day disabling of phases prior to moving forward to final design). Volume data may also be used to show where time of day protected only left turns are needed, without the permitted FYA (LFUCG/KYTC approval would need to be sought for the time of day disabling of phases prior to moving forward to final design).

#### **Implementation Specifics ...**

The Consultant shall provide a person on-site to aid (and work with Division of Traffic Engineering staff) in the data entry, the implementation and the in-field adjustments and modifications of the plans for a period of time (not to exceed 2 hours per arterial per timing plan) so as to achieve the most optimized plan(s). Each plan shall be field driven and adjusted by the Consultant with aid from the Division of Traffic Engineering staff to achieve the most optimized plan.

#### Documentation of Improvements Specifics / Deliverables ...

The Consultant shall provide Bluetooth probe data related to travel times showing existing conditions upon Notice to Proceed under contract. The Bluetooth probe data surveys of conditions must include coverage of each of the twelve (12) timing plans. Following the implementation and adjustments to the new recommended timing plans, documentation during the same periods (i.e. same day of week and time of day) must be recorded and provided in the same manner to show improvements in travel conditions and shall match the final time/space diagrams submitted. If improvements are not shown graphically, an explanation must be written into the final hardcopy report defining the reasoning for the results.

\*\*The Consultant shall provide a detailed description as to the methodology used in defining the recommended traffic signal timing plans. The Consultant shall be Pre-Qualified with the KYTC in Traffic Engineering Services.

#### Provided information ...

- 1) Current timing plan information for the aforementioned intersections will be provided to include the scheduler of when existing timing plans go into effect, phase sequences, splits, cycle lengths and offsets, as well as current clearance and pedestrian timing.
- 2) Example tables of the expected new tables for Phases Sequence, Scheduler, Timing Plan Numbering Scheme, etc.
- 3) A copy of the OASIS User's Manual, which explains the OASIS 2070 controller program and format.

- 4) Staffing from the Division of Traffic Engineering will be available to assist in input of the recommended traffic signal timing plans from the Consultant into the PC-Based computerized traffic signal control system.
- 5) Synchro 7 Base Models for each route (and any other existing/current models for other TOD plans in operation)

#### Selection Criteria ...

- 1. Specialized experienced and technical competence of the person or firm (including a join venture or association) with the type of service required.(20%)
- 2. Capacity of the person or firm to perform the work, including any specialized services, within the time limitations.(20%)
- 3. Past record and performance on contracts with the LFUCG or other governmental agencies and private industry with respect to such factors as control of cost, quality of work and ability to meet scheduling.(30%)
- 4. Familiarity with the details of the project.(20%)
- 5. Degree of local employment to be provided by the person or firm.(10%)

| RFP #7-2   | 013 - Traffic | Signal Timin    | g Project      |                   |   |
|--|---------------|-----------------|----------------|-------------------|---|
| Consultant/Vendor Name:  |               |                 |                |                   |   |
| Selection Criteria   | Notes         | Total<br>Points | Score(1-<br>5) | Weighted<br>Score | Comment   |
| Specialized experienced and technical competence of the person or firm (including a join venture or association) with the type of service required.  |               | 20              | 0              |                   | Weighted<br>Score=<br>(Total<br>Points/5<br>)xScore |
| Capacity of the staffing of the firm to perform the work, including any specialized services, within the time limitations.   |               | 20              | 0              |                   | Weighted<br>Score=<br>(Total<br>Points/5<br>)xScore |
| Past record and performance on contracts with the Urban County Government or other governmental agencies and private industry with respect to such factors as control of cost, quality of work, and ability to meet schedules; |               | 30              | 0              |                   | Weighted<br>Score=<br>(Total<br>Points/5<br>)xScore |
| Familiarity with the details of the project.   |               | 20              | 0              |                   | Weighted<br>Score=<br>(Total<br>Points/5<br>)xScore |
| Degree of local employment to be provided by the person or firm.   |               | 10              | 0              |                   | Weighted<br>Score=<br>(Total<br>Points/5<br>)xScore |
| Final Technical Score  |               | 100             | 0              | 0                 |   |

| DBE Participation(Name) | Evaluator: _ |  |
|-------------------------|--------------|--|
| DBE Portion(Percentage) |              |  |
| Comments:               |              |  |
|                         |              |  |

| Description                          | Adjective    | Numeric<br>Rating |
|--------------------------------------|--------------|-------------------|
| Fails to meet minimum                |              |                   |
| requirements; major deficiencies     |              |                   |
| which are not correctable            | Unacceptable | 1                 |
| Fails to meet requirements,          |              |                   |
| significant deficiencies that may be |              |                   |
| correctable                          | Poor         | 2                 |
| Meets requirements; only minor       |              |                   |
| deficiencies which can be clarified  | Acceptable   | 3                 |

| Meets requirements and exceeds some requirements; no |           |   |
|--|-----------|---|
| deficiencies   | Good      | 4 |
| Exceeds most, if not all                             |           |   |
| requirements; no deficiencies                        | Excellent | 5 |



## Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor William O'Mara Acting Commissioner

#### ADDENDUM #1

RFP Number: #7-2013 Date: March 4, 2013

Subject: Traffic Signal Timing Project

Address inquiries to: Todd Slatin (859) 258-3320

#### TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarifications to the above referenced RFP:

1. Traffic Count Data Specifics on page 35 of the RFP document have been revised.

Traffic count data is to be obtained using a 15-minute interval and shall include volumes for each approach using either MioVision VCUs or approved equivalent or manual counts. Firms using an alternative to MioVision must include information in their response describing their proposed method. The Division of Traffic Engineering will determine if alternative methods are acceptable when evaluating responses.

Todd Slatin, Acting Director Division of Central Purchasing

All other terms and conditions of the RFP/RFI and specifications are unchanged.

This letter should be signed, attached to and become a part of your proposal.

| PROPOSAL OF:            |  |  |
|-------------------------|--|--|
| ADDRESS:                |  |  |
| SIGNATURE OF SUBMITTER: |  |  |

200 East Main Street

Lexington, KY 40507 • (859) 425-2255 HORSE CAPITAL OF THE WORLD

www.lexingtonky.gov

#### **EXHIBIT B**

**CERTIFICATE OF INSURANCE** 



#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 05/24/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s)

| certificate florder in fled of sach endorsem | ciit(3).       |   |       |
|--|----------------|---|-------|
| PRODUCER                                     | 1-000-000-0000 | CONTACT<br>NAME:                                  |       |
| Marsh Risk and Insurance Services            |                | PHONE (A/C, No, Ext): 888-769-3873 FAX (A/C, No): |       |
| 345 California Street                        |                | E-MAIL<br>ADDRESS:                                |       |
| Suite 1300<br>San Francisco, CA 94104        |                | INSURER(S) AFFORDING COVERAGE                     | NAIC# |
|  |                | INSURER A: NATIONAL UNION FIRE INS CO OF PITTS    | 19445 |
| INSURED                                      |                | INSURER B: ZURICH AMER INS CO                     | 16535 |
| URS Corporation                              |                | INSURER C: SEE ATTACHED                           |       |
| 525 Vine Street, Suite 1800                  |                | INSURER D: LEXINGTON INS CO                       | 19437 |
| Cincinnati, OH 45202                         |                | INSURER E: Lloyd's of London & British Companies  |       |
|  |                | INSURER F:  |       |

#### COVERAGES CERTIFICATE NUMBER: 33757937 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR<br>LTR | TYPE OF INSURANCE   | ADDL  |       |              | POLICY EFF<br>(MM/DD/YYYY) | POLICY EXP | LIMITS  | <br>S                        |
|-------------|---|-------|-------|--------------|----------------------------|------------|---|------------------------------|
| A           | GENERAL LIABILITY  X COMMERCIAL GENERAL LIABILITY         | INCIR | ***** | GL 2491973   |                            | 09/01/13   | EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) | \$ 2,000,000<br>\$ 1,000,000 |
|             | CLAIMS-MADE X OCCUR                                       |       |       |              |                            |            |   | \$ 10,000                    |
|             | X XCU, BFPD   |       |       |              |                            |            | PERSONAL & ADV INJURY                                     | \$ 2,000,000                 |
|             | X Contractual Liability                                   |       |       |              |                            |            | GENERAL AGGREGATE   | \$ 2,000,000                 |
|             | GEN'L AGGREGATE LIMIT APPLIES PER:                        |       |       |              |                            |            | PRODUCTS - COMP/OP AGG                                    | \$ 2,000,000                 |
|             | POLICY X PRO-<br>JECT LOC                                 |       |       |              |                            |            |   | \$                           |
| В           | AUTOMOBILE LIABILITY                                      |       |       | BAP938521503 | 11/01/12                   | 09/01/13   | COMBINED SINGLE LIMIT (Ea accident)                       | \$ 2,000,000                 |
|             | X ANY AUTO  |       |       |              |                            |            | BODILY INJURY (Per person)                                | \$                           |
|             | ALL OWNED SCHEDULED AUTOS                                 |       |       |              |                            |            | BODILY INJURY (Per accident)                              | \$                           |
|             | HIRED AUTOS NON-OWNED AUTOS                               |       |       |              |                            |            | PROPERTY DAMAGE<br>(Per accident)                         | \$                           |
|             |   |       |       |              |                            |            |   | \$                           |
|             | UMBRELLA LIAB OCCUR                                       |       |       |              |                            |            | EACH OCCURRENCE   | \$                           |
|             | EXCESS LIAB CLAIMS-MADE                                   |       |       |              |                            |            | AGGREGATE   | \$                           |
|             | DED RETENTION \$  |       |       |              |                            |            |   | \$                           |
| С           | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY             |       |       | SEE ATTACHED | 01/01/13                   | 01/01/14   | X WC STATU- OTH-<br>TORY LIMITS ER                        |                              |
|             | ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? | N/A   |       |              |                            |            | E.L. EACH ACCIDENT  | \$ 2,000,000                 |
|             | (Mandatory in NH)   |       |       |              |                            |            | E.L. DISEASE - EA EMPLOYEE                                | \$ 2,000,000                 |
|             | If yes, describe under DESCRIPTION OF OPERATIONS below    |       |       |              |                            |            | E.L. DISEASE - POLICY LIMIT                               | \$ 2,000,000                 |
| D           | Prof Liab w/Lmtd Contract                                 |       |       | 015438088    | 11/01/12                   | 09/01/13   | Each Claim / Agg  |                              |
| E           | ClaimsMade Retro 11-17-38                                 |       |       | PP1205610    | 11/01/12                   | 09/01/13   |   |                              |
|             |   |       |       |              |                            |            |   | 3,000,000                    |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: Contract / Job Number: 15005462

Lexington-Fayette Urban County Government is included as Additional Insured as respects the General Liability and Auto Liability policies, where required by written contract. This insurance is Primary over any similar insurance available to any person or organization we have added to this policy as Additional Insured.

| CANCELLATION  |
|---|
| SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE                                  |
| THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. |
| AUTHORIZED REPRESENTATIVE   |
| Type M Daningh  |
|   |

© 1988-2010 ACORD CORPORATION. All rights reserved.

### **DATE** 05/24/2013

#### SUPPLEMENT TO CERTIFICATE OF INSURANCE

NAME OF INSURED: URS Corporation

Additional Description of Operations/Remarks from Page 1:

#### Additional Information:

```
The Workers' Compensation coverage shown does not apply in monopolistic states.
In the States of ND, OH, WA and WY Workers' Compensation coverage is provided by the State Fund.
In those States, the above-referenced policies provide Stop-Gap Employers' Liability only.
Workers Compensation policies apply as indicated below:
National Union Fire Ins Co Pittsburgh, PA NAIC# 19445100:
WC 035896656 - CA
Insurance Company Of The State Of PA NAIC# 19429100:
WC 035896661 - MA, WI (Stop Gap - ND, OH, WA, WY)
WC 035896662 - AK, AL, AR, AZ, CO, DE, GA, ID, KS, KY,
MD, ME, MO, MS, MT, NC, NH, NM, NV, OK,
OR, PA, RI, SC, SD, TN, UT, VA, VT, WV
WC 035896658 - MN
WC 035896659 - NY
Illinois National Ins Co NAIC# 23817001:
WC 035896657 - FL
WC 035896663 - CT, DC, HI, IA, IL, IN, LA, MI, NE, NJ
WC 035896660 - TX
```

# SUPPLEMENT TO CERTIFICATE OF INSURANCE 05/24/2013 NAME OF INSURED: URS Corporation This page intentionally left blank

DATE

#### **EXHIBIT C**

## PROPOSAL OF ENGINEERING SERVICES AND RELATED MATTERS



March 25, 2013

Purchasing Director
Lexington-Fayette Urban County Government
Room 338, Government Center
200 East Main Street
Lexington, KY 40507

Re: RFP #7-2013 Traffic Signal Timing Project

URS Corporation is pleased to submit our qualifications in response to RFP #7-2013 for the upcoming Traffic Signal Timing Project in Lexington. We appreciate the opportunity to respond for this project, and highly value our ongoing relationship with Lexington Fayette Urban County Government (LFUCG).

The enclosed submittal presents our qualifications for optimizing traffic signal timing and collecting traffic data. URS can mobilize the personnel and the technology to quickly and accurately collect any type of traffic data and program any type of signal controller, from turning movement counts for dozens of intersections to specialty studies involving wireless data capture. URS has both the staffing capacity and professional expertise to provide these services to LFUCG personnel on this project.

Our strength is in our Traffic Engineering team. Paul Slone, the Project Manager, is one of the top traffic operations engineers in Kentucky. Earlier in his career, Paul both lived in and worked for Lexington, supervising the day-to-day operation of several traffic signal systems. This experience gives him unique knowledge and familiarity with the challenges each corridor presents. In addition to Paul, team members Bill Madden and Vanessa Fritsch are registered Professional Traffic Operations Engineers. They bring a comprehensive knowledge of traffic signal technology, scientific principles of traffic flow, and signal system timing expertise to the team. Our team also provides a broad knowledge in traffic data collection technologies. Data collection will be performed by the local firm of Abbie Jones Consulting. The unique knowledge of the Lexington area by the entire team will provide an unmatched level of service and quality.

The URS Traffic Engineering team has been working in the Lexington area under the Traffic Engineering Services contract with the Kentucky Transportation Cabinet District 7 office since 2006. This same URS team was hired by LFUCG to retime several signal systems downtown in 2005-2006.

With the selection of URS, LFUCG will receive high quality timing plans. We are accustomed to working autonomously for our clients, relieving the stress and pressure of collecting significant amounts of field data and developing large numbers of customized signal timing plans. URS Corporation is committed to effective and efficient transportation, especially in Lexington.

Thank you for your consideration.

Sincerely,

Gregory T. Groves, PE

Vice President

Louisville, Kentucky 40202

Fax: 502.569.2304





#### **AFFIDAVIT**

Comes the Affiant, <u>URS Corporation</u>, and after being first duly sworn, states under penalty of perjury as follows:

- 1. His/her name is <u>Gregory T. Groves, PE</u> and he/she is the individual submitting the proposal or is the authorized representative of <u>URS Corporation</u>, the entity submitting the proposal (hereinafter referred to as "Proposer").
- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- 6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page



7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

STATE OF KENTUCKY

**COUNTY OF JEFFERSON** 

|    | The foregoir       | ng instrument   | was subscribed, sworn to and acknowle | ∍dged l | pefore | ; me |
|----|--------------------|-----------------|---------------------------------------|---------|--------|------|
| by | Brooke B           | rowder          |                                       | _ on    | this   | the  |
|    | <u>19</u> day of _ | March_          | <u>,</u> 2013.                        |         |        |      |
|    | My Commis          | sion expires: _ | 6/11/2016                             |         |        |      |

NOTARY PUBLIC. STATE AT LARGE



#### Lexington-Fayette Urban County Government DEPARTMENT OF FINANCE & ADMINISTRATION

Jim Gray Mayor

William O'Mara Acting Commissioner

#### ADDENDUM #1

RFP Number: #7-2013 Date: March 4, 2013

Subject: Traffic Signal Timing Project

Address inquiries to: Todd Slatin (859) 258-3320

#### TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarifications to the above referenced RFP:

Traffic Count Data Specifics on page 35 of the RFP document have been revised.

Traffic count data is to be obtained using a 15-minute interval and shall include volumes for each approach using either MioVision VCUs or approved equivalent or manual counts. Firms using an alternative to MioVision must include information in their response describing their proposed method. The Division of Traffic Engineering will determine if alternative methods are acceptable when evaluating responses.

> Todd Slatin, Acting Director Division of Central Purchasing

All other terms and conditions of the RFP/RFI and specifications are unchanged.

This letter should be signed, attached to and become a part of your proposal.

PROPOSAL OF: URS Corporation

325 West Main Street, Suite 1200 ADDRESS:

Louisville, KY 40202

Sleggy T. Seone SIGNATURE OF SUBMITTER:

200 East Main Street

Lexington, KY 40507 • (859) 425-2255 HORSE CAPITAL OF THE WORLD

www.lexingtonky.gov

3/19/2013 3:05 PM 1 of 1





**Lexington-Fayette Urban County Government** 



#### FIRM INFORMATION

Name of firm URS Corporation

Type of ownership Publicly Traded (NYSE: URS)

Complete mailing address 325 West Main Street, Suite 1200

Louisville, Kentucky 40202

Contract Contact Greg T. Groves, PE

Telephone number 502.569-2301 502.217-1509

Email address greg.groves@urs.com

Technical Contact Paul A. Slone, PE, PTOE

Telephone number 513.651.3440 513.419.3456

Email address paul.slone@urs.com

Fax number 877.660.7727

Firm website address www.urs.com



#### **QUALIFICATIONS**

#### **Team Qualifications**

The following KYTC prequalification are applicable to this project and the team has the ability to cover all necessary requirements.



| KYTC Prequalification                            | URS | Abbie Jones |
|--|-----|-------------|
| Advanced Traffic Engineering Design and Modeling | Χ   |             |
| Transportation Corridor & Systems Planning       | X   |             |
| Travel Demand and Simulation Modeling            | X   |             |
| Traffic Engineering Services                     | Χ   |             |
| Traffic Data Collection                          | X   | X           |
| Traffic Forecasting                              | Χ   |             |
| Electrical Engineering Traffic Signal Services   | X   |             |
| ITS/Concept Development Feasibility Studies      | Χ   |             |



**Lexington-Fayette Urban County Government** 

#### SPECIALIZED EXPERIENCE AND TECHNICAL COMPETENCE

URS is pleased to present the specialized experience and technical competence of the of the team on the following pages. The traffic engineers have the experience and skills to perform all types of traffic engineering projects within the Commonwealth of Kentucky. One page resumes are included for the staff later in the submittal.

#### Project Manager — Paul A. Slone, PE, PTOE

Paul is one of the top traffic operations engineers in the region. He is highly skilled at finding solutions to today complex transportation problems. His well rounded experience with multiple public agencies gives him a unique perspective of the issues faced at the state and local levels. He is familiar with Department of Transportation practices and policies, MPO operations, and transportation funding.

Paul has a total of 21 years of experience, all dedicated to the field of traffic engineering in Kentucky. The first nine of those years was spent with various public sector agencies, managing and performing day-to-day operations and maintenance of traffic signal systems. There is no one else in the private sector today that has more experience with coordinated signal systems in the Commonwealth. He has personally programming over 1,400 traffic signals.

A short list of career accomplishments include:

- Implementing two centralized signal systems in Kentucky (Louisville & Lexington)
- Testing system software, hardware and communications
- Designing traffic signals and closed loop signal systems
- Diagnosing communication and operational problems
- Working with and managing signal technicians and electrical contractors
- Managing large data collection efforts
- Leading the push to use alternative signal phasing

#### **Kentucky Transportation Cabinet (KYTC)**

As an Engineer-In-Training, Paul developed a program of funding, designing and constructing closed loop traffic signal systems in the KYTC's Six Year Plan. While at the Cabinet, he implemented new signal systems in four downtown areas and 17 arterial routes in addition to performing traffic signal warrant analysis, permit application review, and participating in project design team meetings. Paul also developed and taught a two-day inhouse training class for District Traffic Engineers and Signal Technicians about signal coordination.

#### City of Louisville

Paul was the initial operator of Louisville's Citywide Traffic Signal System. His primary duties were to monitor final communications network construction activities and prepare the new control equipment for system deployment. He also performed significant amounts of traffic signal programming that involved the conversion of the pretimed downtown grid to W4IKS, cleanup of hundreds of intersection files, and implementing and adjusting new timing plans with the new system.

#### Lexington- Fayette Urban County Government (LFUCG)

Paul was the Traffic Signal Systems Manager who began upgrading the old Computran UTCS based mainframe with modernized personal computer based system. During this process, he managed field and office personnel orchestrating the system change and updated numerous signal timing plans on many routes throughout Lexington.

With his public sector experience, Paul knows signal systems and what it takes to effectively operate them. Having performed these duties for three governmental agencies, he has the knowledge and experience to lead a smooth-running project on behalf of the Division of Traffic Engineering.





**Lexington-Fayette Urban County Government** 

#### 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 form 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.





**Lexington-Fayette Urban County Government** 

#### 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.

#### --00000---

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.





**Lexington-Fayette Urban County Government** 

#### **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.





**Lexington-Fayette Urban County Government** 

#### 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.

## **URS**

# RFP #7-2013 Traffic Signal Timing Project



**Lexington-Fayette Urban County Government** 



#### Location

Lexington, KY

#### **Services**

Traffic Signal Retiming

#### Client

Steve Cummins, PE

Traffic Signal
Systems Manager

(859) 258-3491

## Project Duration July through November 2006

#### 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
- High Street
- Newtown Pike
- North Broadway
- Loudon Avenue
- Euclid Avenue

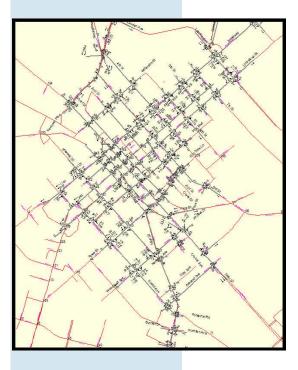
Signal timing plans are being developed using Synchro for the AM, midday and PM peak periods. Timing plans will be optimized and adjusted within the models and converted to Wapiti W4-IKS (traffic signal programming). Several advanced programming techniques utilizing Command Box were recommended and utilized.

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



**Lexington-Fayette Urban County Government** 

#### **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



| 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

# RFP #7-2013 Traffic Signal Timing Project

**Lexington-Fayette Urban County Government** 



#### 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

### **KYTC District 7 Traffic Engineering Services**

#### **Data Collection Services**

This contract is a two-year agreement to assist the KTYC District 7 office in Lexington, Kentucky. URS won the inaugural contract in 2007 and was reselected 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



# RFP #7-2013 Traffic Signal Timing Project



**Lexington-Fayette Urban County Government** 



### 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

#### 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



# RFP #7-2013 Traffic Signal Timing Project



**Lexington-Fayette Urban County Government** 



#### Location

Akron, Ohio **Services** 

Traffic Engineering
Traffic Data
Collection
Origin-Destination
Study

#### Client

Ohio Department of Transportation,
District 4

#### **Project Duration**

2012-2013

### 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

# RFP #7-2013 Traffic Signal Timing Project



**Lexington-Fayette Urban County Government** 



#### 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

### **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



### RFP #7-2013 Traffic Signal Timing Project

**Lexington-Fayette Urban County Government** 



#### Location

Lexington, KY

#### **Services**

Traffic Data
Collection
Trip Generation
Study
Access
Improvement

#### Client

Keeneland Association

John Howard, Project Manager

(859) 254-3412

Project Duration 2009

### **Keeneland Traffic Data Collection & Trip Generation**

URS was contracted by the Keeneland Association to perform specialized traffic data collection to determine a custom trip generation rate for the race course. This data was used by Keeneland and their sports venue consultant to improve internal circulation and develop a predictive parking model based upon daily attendance estimates.



Also, the data was desired to ascertain the potential need for additional access points or lengthening existing turn lanes into the race course.

Services included extensive traffic volume data collection during two weekends of the Fall 2009 meet. URS determined origin-destination data for each entrance, tracked drive-through betting window traffic, and developed a comprehensive traffic model.

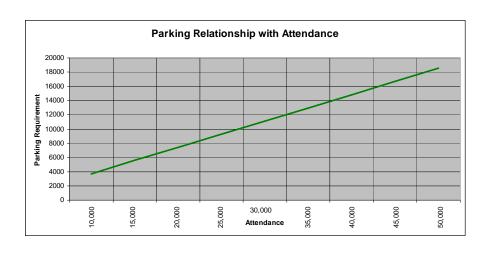
URS also performed a very basic parking study. The percent of the parking lot occupancy at particular times of the day were noted. In addition, vehicle occupancy for the parking vehicles was determined. An estimate was made on the number of race patrons that arrived by tour and shuttle busses, taxies, limousines, etc.

#### **URS Project Staff**

Paul Slone, PE, PTOE, Project Manager

William Madden, PE, PTOE, Traffic Engineer

Vanessa Fritsch, PE, PTOE, Traffic Engineer





**Lexington-Fayette Urban County Government** 



#### Location

Louisville, KY

#### **Services**

Traffic Data Collection Signal Optimization Signal Programming Field Support

#### Client

Dan O'Dea, PE,
Project Manager
(Currently
employed at
Louisville Metro
Government)

(502) 574-3777

Project Duration 2007-2009

#### **KYTC District 5 Traffic Services Contract**

**Project Description** 

This project was awarded to update coordinated traffic signal timing on several corridors in Jefferson County. URS was assigned a total of 59 intersections on the following corridors to update.

- Dixie Highway (US 31W)
- Poplar Level Road (KY 864)
- Preston Highway (KY 61)
- Outer Loop (KY 1065)

- US 42
- Blankenbaker Parkway (KY 913)
- Newburg Road (KY 1703)

URS is collecting peak hour traffic data at each intersection and developing Synchro models for each corridor. URS provided traffic signal database files for direct downloading into the controllers, and provided on-site implementation support and field adjustment. Before and after travel time runs were performed with a GPS unit and the KYTC's internally developed software to evaluate actual driving conditions.

#### **URS Project Staff**

Paul Slone, PE, PTOE, Project Manager

William Madden, PE, PTOE, Traffic Engineer

Vanessa Fritsch, PE, PTOE, Traffic Engineer



**Lexington-Fayette Urban County Government** 

### **Lexington Congestion Management System**

### Personal Experience of Paul Slone

#### **Project Description**

While working with his previous employer, Mr. Slone was the Project Manager for developing the Lexington MPO's Congestion Management System (CMS). A report published by the Lexington MPO in 2002 revealed that many routes through the Lexington area experienced high levels of congestion. This report was the beginning of the CMS for the Lexington area.

A CMS is a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods to levels that meet state and local needs. It is a tool to improve the planning and programming process and integrate with other programs that are part of an existing Transportation Management System.

Key tools used for this CMS include:

- Access Management
- Reversible Traffic Lanes
- Traffic Signal Improvements
- Intersection Improvements
- Increased Multimodalism

Phase I of the CMS process involved recommending policy framework and analytical methodologies through a decision matrix. In phase II of the process, an initial round of analysis on seven of the region's most congested routes was performed.

A study work group has been formed to provide direction and guidance during the CMS development process. Phase II of the CMS process identified conceptual projects to improve congested conditions and prioritized these projects based upon benefit/cost ratio, future funding availability, anticipated lifespan of project benefits, as well as geographical balance of projects.

Project recommendations included a list of numerous, small operational improvement projects as well as project concepts for consideration in the Transportation Improvement Program. Also as part of this project, one CMAQ grant was submitted and approved by the Kentucky Transportation Cabinet and one Six Year Plan project was revised saving millions of dollars. Analysis included interchanges along New Circle Road and Interstate 75.

Through the initial CMS, a project was identified to improve the bottleneck at the Harrodsburg Road/New Circle Road interchange. Today, that interchange is the site of Kentucky's Double Crossover Diamond interchange.

#### Location

Louisville, KY

#### **Services**

Traffic Data
Collection
Trip Generation
Study
Access
Improvement

#### Client

Max Conyers, Director Division of Planning

(859) 258-3167



**Lexington-Fayette Urban County Government** 

#### **Project Approach**

URS has developed the following Plan of Action to demonstrate our understanding of the project and planned level of effort, to complete the Scope of Services for all the routes to be awarded.

#### 1. Data Collection Plan

Every traffic signal optimization project begins with a thorough inventory of the existing field conditions. The detail in the part of the proposal is necessary to convey the amount of preplanning and detailed discussions that have taken place in preparation of this project. **Quality data collection is essential to the success of the project.** 

The data collection specification in the RFP require numerous hours of data collection for each intersection. The data collection times for a weekday plus Saturday and Sunday total up to 38 hours of data collection per intersection. Typically the traffic counting portion of a signal retiming project ranges from 20 to 25 percent of the project costs. Therefore, to help manage costs, the URS Team has developed a traffic counting plan that strategically identifies the critical intersections that should be fully counted and some less busy intersections where off-peak and weekend counting hours could be reduced.

Our DBE partner, is Abbie Jones Consulting, LLC (AJC). Abbie and her staff understand that the traffic data is the basis for the traffic signal optimization. URS has received multiple endorsements from other consulting firms recommending AJC for their responsiveness and the quality of the products they provide.

The URS Team proposes to have a kickoff meeting immediately following selection to refine the data collection plan. At this meeting, the URS Team would like clearly identify the expectations of the LFUCG and detail the exact hours of counting for each intersection. This must be decided up front for cost estimating purposes and cannot become an after thought after the project has started.

The number one consideration for the data collection program is the requirement to collect data while school is in session. Assuming a May 1, 2013 notice to proceed, there will be only three counting weeks available before the end of the school year and Memorial Day weekend (May 25th through 27th). Given that Versailles Road is currently undergoing a pavement rehabilitation project, we propose to work on the other three routes first.

If a notice to proceed is not received by May 1, 2013, an alternative project schedule, beginning when Fayette County Public Schools restart, is presented later in the schedule section.

#### **Turning Movement Counts**

Abbie Jones Consulting will perform the intersection movement counts manually by first recording video of the intersections and then manually counting traffic in the office with the COUNTcam system. AJC is prepared to collect intersection counts for one corridor per week. The largest corridors, in terms of number of signals, are Versailles Road, Georgetown Road, and Newtown Pike with 12, 11, and 8 signals, respectively. AJC can collect data up to 12 intersections at once. This is important for two reasons:

- We do not need to purchase or lease additional equipment for this project; keep project costs down.
- 2. We are able to collect all Saturday and Sunday counts per corridor on the same weekend; maintaining aggressive project schedule. There are multiple weekdays where data can be collected, but there's only one Saturday and one Sunday per week. Therefore, we will have no delays for needing multiple weekends to count any one corridor.





**Lexington-Fayette Urban County Government** 

The ideal data collection schedule is illustrated below.

| Sunday          | Monday   | Tuesday | Wednesday                    | Thursday        | Friday | Saturday        |
|-----------------|--|---------|------------------------------|-----------------|--------|-----------------|
|                 |  |         | Install<br>Equipment         | Record<br>Video |        | Record<br>Video |
| Record<br>Video | Pickup<br>Equipment,<br>begin re-<br>charging bat-<br>teries, begin<br>in office pro-<br>cessing |         | Repeat process on next route |                 |        |                 |

The video is recorded in the field using a weatherproof, battery powered camera assembly, shown at left. The video is then observed using a combination of the PC-TAS software and a specialized keypad. The count is collected manually while watching the video. PC-TAS is the industry leading video viewing/counting software that allows the user to toggle the video playback speed up to 20 times normal speed when traffic is light or slowed down to half-speed for heavy, congested conditions. This allows for maximum efficiency while always maintaining accuracy. Use the pause feature to take regular breaks through the workday and saving work for continuation the next day. Counts can be checked, even redone, if errors are suspected.



COUNTcam equipment
Video recorder
COUNTpad
PC-TAS





AJC recognizes that many of the routes will pass through major interchanges with New Circle Road and/or Interstate 75. Queuing and spillback between closely spaced intersections and interstate ramps is not ideal under any scenario. AJC workers are trained to note any such occurrences with specific details such as time and duration of the occurrence. By noting field observations during the count, the Consultant will be better prepared to address the "demand" volumes in their respective modeling, rather than just the "supply" volumes that are collected.

All respective intersection data collection will be merged into a single PetraPro (ppd) file for submittal. The data files will be reviewed for quality and accuracy prior to submittal. Space for field personnel to make notes associated with unusual events will be provided in the "Comments" portion of the (ppd) file.

In addition to the turning movement counts, URS will also collect the following supplemental data at various points in the network:

- Direct measurement of saturation flow rates per in the Highway Capacity Manual
- Percentage of heavy vehicles
- Number of busses, bus stop locations, and frequency of stops
- Travel time data
- Platoon length measurement





**Lexington-Fayette Urban County Government** 

This additional data will be collected in order to produce optimized signal timing and simulation models that are as realistic as possible.

Saturation flow rate will be field measured since it represents one of the most critical network calibration variables required for traffic model development. There is no other network variable that has a bigger impact on model results than saturation flow rate. The procedure for measuring this is outlined in the <u>Highway Capacity Manual</u> Appendix C of Chapter 16. The benefits of performing these measurements are that they will include any friction from narrow lanes and heavy congestion, pedestrian activity, road terrain, and heavy vehicles. URS has had great success on modeling projects this year using this model calibration methodology.

**Travel Time Studies** 

URS is on the cutting edge of transportation data collection. Our regional ITS engineers in the Indianapolis office are developing Bluetooth receivers 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 to a device (there are over 1 trillion possible addresses), this provides an anonymous hot spot for vehicle identification.

Our system is a collection of off-the-shelf equipment and not a trademarked. URS uses AirCable Bluetooth receivers attached to common netbook computers. Our ITS engineers have written a web based analysis tool specifically for determining arterial travel times and speeds. This same system was used for our Bluetooth pilot project on Versailles Road last year (highlighted in the similar projects section).

Our system is installed at the intersection signal cabinet due to the need for a power source. Our units are equipped to email status updates three times hourly and full data files twice daily, so that we can remotely monitor the quality of the data. This gives us the opportunity, if necessary to make adjustments to improve data capture.

Occasionally, we encounter unsignalized or midblock locations that are ideal for data capture, but lack a power source. Examples of these locations are the I-75 southbound ramps and the New Circle Road interchange on Newtown Pike. We will supplement our data collection units with equipment from BlueFax. BlueFax provides a battery powered option that provides eight to ten days of continuous data collection.

Please feel free to visit our data processing site at <u>bluetooth.ursconnect.com</u>

#### 2. Existing Conditions Analysis

URS will utilize existing Synchro 7 models as the basis for this project. Each route presently has models for all current timing plans that, with updated traffic data and some calibration checks, will serve as the existing conditions models.

URS will perform an intersection by intersection quality check of the model to confirm its accuracy. In order to deliver accurate intersection programming, we must check and recheck that our models are using the proper signal phasing and intersection geometry.

As part of model checking, the URS Team will use the LFUCG's online GIS resources to perform a variety of intersection measurements. These measurements will be used to adjust vehicular clearance intervals to meet the current KYTC policy. In additional the crosswalks will be measured to calculate pedestrian crossing times using the newer 3.5 feet/second criteria in the Manual on Uniform Traffic Control Devices.

We will extract system performance measures from the existing conditions, as determined by Synchro, to serve as a baseline for evaluating the potential improvements of the optimized timing plans.

Proper calibration produces a good end product





**Lexington-Fayette Urban County Government** 





#### 3. Development of New Timing Plans

URS will develop optimized timing for the advertised corridors. Each corridor has its set of unique set of challenges relative to traffic demands, signal spacing, variable travel speeds and number of heavy vehicles.

URS will present the optimized performance measures and animated simulation models to the Division of Traffic Engineering. The simulations will illustrate benefits of any recommended operational changes to the existing traffic signals as well as the overall improvements in traffic flow from the newly optimized plans. The simulation models will be presented during one of the scheduled project review meetings to demonstrate both the project status and gain concurrence on the proposed signal timing.

All optimized timing output will be input into a spreadsheet form similar to the coordination data table used by the OASIS controller firmware. The spreadsheet will automatically calculate forceoffs from the Synchro model output for implementation. Customized forms will be created for each intersection.

URS will work jointly with the Division of Traffic Engineering to program the new timing plans into Centracs, the central signal system database. This effort will be immediately scheduled after Traffic Engineering has reviewed and approved the proposed timing plans. We will provide phasing diagrams and any necessary controller programming for recommended signal phasing alterations.

#### **Project Specific Strategies**

With our familiarity of the project areas, we know there are unique circumstances and characteristics associated with each route. Due to the mix of commuter routes, office and medical buildings, factories, the airport, commercial and residential areas, each route will have its own identity and set of solutions.

Some basic strategies that will make each timing plan successful in reducing congestion and improving traffic flow through the various study areas include:

- Keep short blocks clear. There are multiple blocks where the distance between signals is less than optimal. Working to reduce congestion on these blocks will provide more storage space for vehicles turning from side streets. Also, smaller platoons queued at signals can accelerate more quickly and move more efficiently through intersections thereby improving vehicle progression.
- 2. When developing the new signal timing, we will do our best to account for near term traffic growth, planned developments adjacent to project intersections and the occasional random spike in traffic. To accomplish this, we will set a goal volume/capacity ratio (v/c) limit of 0.85 (or 85 percent capacity) every lane group at most intersections. At the higher volume, more congested intersections, this is not realistic without creating timing plans that are unnecessarily long.
- 3. Another strategy for improving capacity is using alternative phasing or phase rotation. The use of the "flashing yellow arrow," lead-lag left turn phasing and omitting phases by time of day give traffic engineers more tools to improve capacity and flow, without investing in physical roadway changes. We know that Traffic Engineering has the approval of the KYTC to begin implementing these creative signal timing congestion countermeasures.
  - a. We will evaluate the use of <u>lead/lag by time to day</u> to develop the best bidirectional fit of the progression bands for each timing plan.
  - b. Another operational tool to reduce left turn delay is a "<u>reservice phase</u>." This is where a movement is served twice in the same cycle provided certain minimums are satisfied for the other movements.







**Lexington-Fayette Urban County Government** 



- c. We will evaluate <u>changing the flashing yellow arrow mode</u> from protected only to protected and permitted based upon left turn cross products to minimize left turn delay during off-peak periods
- d. For early morning, mid-day off-peak, late evening and weekend periods, we will evaluate the need for left turn phases, to possibly <u>omit them on a time of day/</u> <u>day of week basis</u>. Reducing phases is a strategy to shorten cycles during times of low volume.
- 4. Finally, there are other capabilities of the 2070, such as <u>nested cycles</u>, where lesser volume intersections can operate with alternating cycles (i.e. 60 and 80 seconds) while congested adjacent intersections use longer cycles (i.e. 140 seconds). This greatly reduces delays and citizen complaints from these other intersections while maintain coordination in the corridor.

We will evaluate and present the merits of these plus any other recommendations we may discover to the Division of Traffic Engineering prior to finalizing the timing plans.

#### 4. Implementation and Field Adjustments for Timing Plans

URS will evaluate the newly implemented timing plans in the field immediately after downloading. We will drive with traffic and watch critical intersections from the roadside for any adjustments that may be deemed necessary. We will contact Traffic Engineering as soon as possible to discuss any necessary changes with the signal system operator(s) and/or signal technicians.

We will spend a considerable amount of our project time working in the field. The Synchro/SimTraffic optimization package provides a good starting point, but we believe that the best timing plans are made in the field. Our expert knowledge of controller programming, street operations and years of field experience enables us to produce the best possible timing plans.

All field adjustments will be entered into our Synchro models so that Traffic Engineering will have up to date models of the timing plans as they were implemented.

#### 5. Documentation of Results

We will perform a post implementation travel time study using Bluetooth technology. URS will use this before and after data to document the percent improvement in travel time and average travel speeds.



URS can produce one large report or smaller reports for each studied route. Because we are staggering the optimization and implementation to coincide with the data collection effort, it will be more time and cost effective to provide individual route reports. Each report will describe the step by step the methodologies, procedures, and results specific to each route. The reports will include final hardcopies of all required model output and a CD-ROM that contains the traffic modeling files for future LFUCG use. Three copies of each report will be provided.





**Lexington-Fayette Urban County Government** 

The proposed outline for each report is as follows:

Introduction

Project Area Description & Map

**Existing Conditions** 

Field observations

Existing travel time

Existing timing plans & schedule

Signal Timing Optimization

Recommended timing plans

Other recommended updates

Phasing

Vehicle & pedestrian clearances

**Evaluation of New Timing** 

After travel time study

Field observations

Summary

#### **Appendices**

Recommended Signal Timing (Wapiti Sheets) Synchro MOE Output Travel Time Data Traffic Count Diagrams

#### Schedule

We have a clear understanding that the LFUCG wants this project completed in a timely manner. 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.

The figure below outlines our proposed schedule for this project. It is important to note that the pavement rehabilitation project on Versailles Road from Man o' War Boulevard to New Circle Road is not scheduled for completion until December 1, 2013. Therefore, the above schedule pertains to the other routes. URS proposes to perform all work on the other three routes within the required 120 day period. We propose to wait for traffic to return to normal levels on Versailles Road before beginning work. Once started, we will complete the work on Versailles Road in 90 days.

For schedule alternative1 below, it is imperative that the selection of the consultant and negotiation of the contract proceed quickly so the data can be collected before schools are out for the summer. If this process cannot be completed on that expedited schedule, we offer the schedule alternative 2.

| Schedule <b>Alternative 1</b> (assumes notice to proceed by May 1, 2013) | Мау | June | July | August |
|--|-----|------|------|--------|
| Traffic Counts   |     | ,    | ŕ    |        |
| Existing Travel Time Study   |     |      |      |        |
| Signal Timing Optimization   |     |      |      |        |
| Controller Programming   |     |      |      |        |
| Implementation & Adjustments   |     |      |      |        |
| After Travel Time Study  |     |      |      |        |
| Documentation  |     |      |      |        |
|  |     |      |      |        |

Project duration May 1 to September 1, 2013

| Schedule <b>Alternative 2</b> (assumes notice to proceed by August 15, 2013) | August  | September | October | November | Jecember |
|--|---------|-----------|---------|----------|----------|
| Traffic Counts   | ⋖       | S         | 0       |          |          |
| Existing Travel Time Study   |         |           |         |          |          |
| Signal Timing Optimization   |         |           |         |          |          |
| Controller Programming   |         |           |         |          |          |
| Implementation & Adjustments   |         |           |         |          |          |
| After Travel Time Study  |         |           |         |          |          |
| Documentation  |         |           |         |          |          |
| Drainet duration August 15 to Decem  | h o u 1 | r 20      | 12      |          |          |



**Lexington-Fayette Urban County Government** 



### Why Select the URS Team?

- 1) We have the best Project Manager, Paul Slone, who
  - Is a leader in the field of on-street traffic operations
  - Has the most experience retiming signal systems
  - Is a former Traffic Signal Systems Manager for the LFUCG
  - Is knowledgeable about Lexington's current system and operations
  - Is well respected and trusted by Traffic Engineering
- 2) We have a team of highly experienced traffic engineers
- 3) We realize that our success is directly related to your success
- 4) We are invested in Lexington and Central Kentucky with our projects and involvement with the Congestion Management Committee

Thank you for your consideration of the URS Team





**Lexington-Fayette Urban County Government** 

### Local Employment

URS is pleased to team with Abbie Jones for this project. As a local DBE contractor 100% of the firm's involvement will produce local employment.

Similarly, proposed URS employees Paul Slone, Greg Groves, Vanessa Fritsch, and Bill Madden are residents of the Commonwealth living approximately 1.25 hours from the project areas.

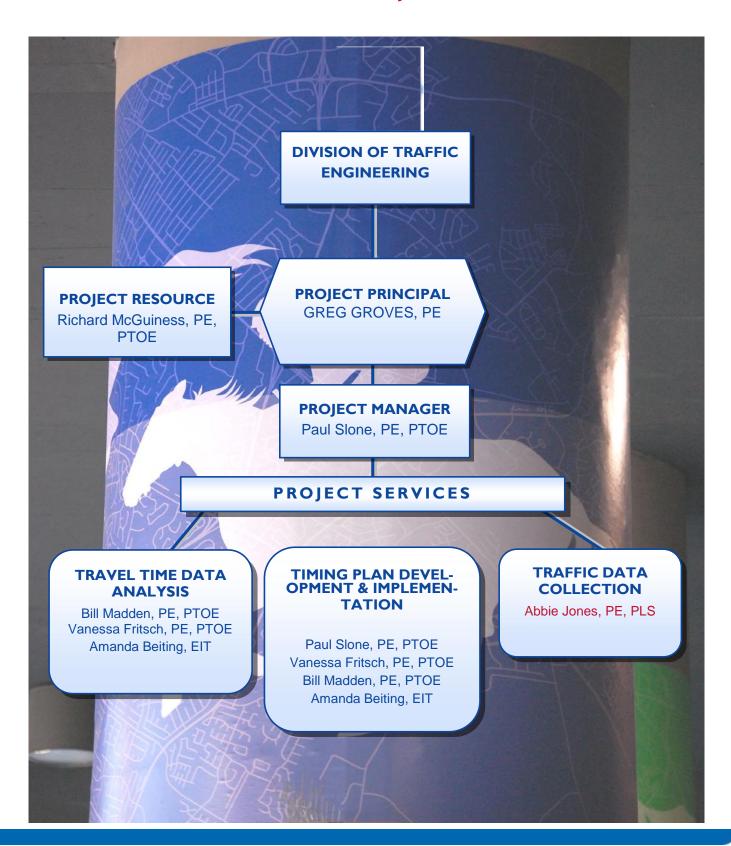
URS has offices in the Commonwealth in Louisville and Covington, as well as contract offices at Blue Grass Army Depot and Fort Knox. The Cincinnati, Ohio office has over 1/3 of its 90 employees living in the Commonwealth and providing income tax base and property taxes to the local communities.





**Lexington-Fayette Urban County Government** 

### PROJECT TEAM ORGANIZATIONAL CHART URS ABBIE JONES





**Lexington-Fayette Urban County Government** 





Paul A. Slone, PE, PTOE

**Project Manager** 

**Education** 

BS/1992/Civil Engineering/ University of Kentucky

**Registration/Certification** 

Professional Engineer, Kentucky – 19880 Professional Traffic Operations Engineer (PTOE) **Areas of Expertise** 

Traffic Operations & Analysis
Traffic Signal Design & Timing
Signal Timing Implementation
Congestion Management
Simulation Modeling
Intersection/Interchange Design
Traffic Impact Analysis

**Years of Experience** 21 Years, 7 with URS

Mr. Slone will serve as Project Manager. Mr. Slone is one of the top traffic operations engineers in the region.

He is highly skilled at finding solutions to today complex transportation problems. His well rounded experience with multiple public agencies gives him a unique perspective of the issues faced at the state and local levels. His attention to detail will serve this project well.

He is a former Traffic Signal Systems Manager for the LFUCG. He knows first hand the challenges of coordinating traffic signals in Lexington.

He is someone who is trusted by both the engineering and technician staffs to work inside of the signal equipment cabinets and work with the central system software, Centracs.

#### **Experience Relevant to this project:**

District 7 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Mr. Slone is the Program Manager for a staff augmentation contract for the KYTC District 7 Office (Lexington Area). Primary work activity is to assist on an as needed basis, with routine intersection studies to more specialized studies. Studies include traffic signal requests, speed studies plus various other traffic engineering studies, supervision of the district electrical contractor, and assisting with the day-to-day operation and management of the district's 277 traffic signals and 15 closed loop systems that are outside of Fayette County (Lexington maintains all state traffic signals in the county). Specialized services for this contract include the US 27 Access Management Study, and developing signal construction plans for Newtown Pike and US 25 (Berea Rd.). URS was reselected to maintain this contract in 2009 and 2011.

Statewide Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Project Manager for providing specialized traffic engineering services under this statewide task order contract. Services include review and management of assigned coordinated traffic signal systems, collecting travel time data, developing traffic simulation models, signal retiming, and intersection inventories. Under this two-year contract, four Letter Agreements were assigned to analyze and recommend improvements to six coordinated networks. Networks ranged from small rural towns (Irvine, West Liberty, Maysville & Radcliff) to urbanized areas (Owensboro & Ashland). Now into the second iteration of this contract, URS is assisting the KYTC with three systems totaling 26 intersections in Paducah (Kentucky Avenue, Hinkleville Road and 28<sup>th</sup> Street).

ARRA Traffic Signal Retiming, Louisville Metro Government (2010-2012): Project Manager for developing new traffic signal timing plans on three major arterial routes in Louisville. The study area includes Dixie Highway (US 31W), Bardstown Road (US 31E) and Fern Valley Road (KY 1737) totaling 67 intersections. Routes vary from 35,000 to 55,000 vehicles per day. This project involved an extensive data collection effort, development of new signal timing, signal programming using TransPHAT and Centrax, and field implementation. URS utilized a Bluetooth base data collection system to analyze the before and post implementation travel times in each corridor. This system enabled URS to average hundreds of travel time runs from everyday roadway users.

**District 5 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-2009):** Project Manager for this Six Year Highway Plan project to help the KYTC District 5 Office (Louisville Area) re-time traffic signal systems on eight arterial routes. In all, 63 intersections are included on some of Jefferson County's most heavily congested routes. Routes include Dixie Hwy (US 31W), Preston Hwy (KY 61), Outer Loop (KY 1065), Poplar Level Rd (KY 864), US 42 at I-264, Newburg Rd, and Blankenbaker Pkwy. Services included extensive traffic data collection, modeling and downloading signal timing directly to signal controllers and providing field support to adjust timing plans. As part of the modeling process, alternative signal phasing such as lead/lag, left turns and reversing order of split phased signals was evaluated.

# RFP #7-2013 Traffic Signal Timing Project

**Lexington-Fayette Urban County Government** 





### Gregory T. Groves, PE

#### **Project Principal**

**Education** 

BS/1989/Civil Engineering/ University of Kentucky

**Registration/Certification** 

Professional Engineer, Kentucky – 18066

#### **Areas of Expertise**

Project Management Transportation Planning Pre-Construction Management Roadway

Transportation
Decision Making

**Years of Experience** 

With URS: 7 Years With KYTC: 17 Years

Mr. Groves serves as the Director of Transportation for the Indianapolis. Louisville, and Cincinnati offices of URS as well as being the Louisville Office Manager; responsible for the operation of a 60+ person office that includes several engineering and environmental disciplines serving both public and private clients. Mr. Groves oversees all transportation projects including traffic projects and works with all project managers to assist them with the administrative tasks and allocation of personnel resources to make URS projects run efficiently and help to satisfy the demands of the schedule of the projects.

One of his key goals for the 2013 fiscal year is to serve **all communities** of the Commonwealth and to expand his working knowledge of the Lexington Metropolitan Area. **Experience Relevant to this project:** 

#### TRAFFIC PROJECTS

**Principal in Charge, Statewide Roadway Services Roundabout Policy Development, Kentucky Transportation Cabinet.** URS's role in this project was to provide a practitioner's perspective and technical input into the 2010 revision to the KYTC's Roundabout Policy. Project consisted to several regular meetings to discuss the evolving policy document being constructed the Kentucky Transportation Center.

Preconstruction Branch Manager, Jefferson County, US 42 at Seminary Drive. Mr. Groves was the Preconstruction Branch Manager during the development of this intersection reconstruction project which improved the traffic flow and safety by the addition of left turn lanes at each of the intersection legs. This project was completed on an accelerated schedule to aid in the development of a major housing complex in the area.

Principal in Charge, Statewide Roadway Services Rineyville Roundabout Independent Technical Review (QA/QC), Kentucky Transportation Cabinet. This project required the independent engineering review of the proposed roundabout at KY 1600 and KY 220 in Rineyville (Hardin County). URS checked traffic analysis comparing a traditional intersection and the proposed roundabout as well as developing a VISSIM simulation model of the recommended roundabout.

Statewide Roadway Services Roundabout Policy Development, Kentucky Transportation Cabinet: Principal in Charge where URS's role in this project was to provide a practitioner's perspective and technical input into the 2010 revision to the KYTC's Roundabout Policy. Project consisted to several regular meetings to discuss the evolving policy document being constructed the Kentucky Transportation Center.

Jefferson County, Eastern Parkway Safety Improvements: Principal in Charge of project consisted of improvements to Eastern Parkway from I-65 to 3rd Street near the University of Louisville Belknap Campus. The project included studying alternate alignments, grades, environmental constraints, traffic signal operations, pedestrian crossing patterns, public involvement, streetscape planning and cost estimates in order to select a preferred alignment. A bridge over CSX Railroad is within the limits of the project. This project has won several awards on both the state and national levels. The project was the recipient of the 2010 American Public Works Association – Kentucky Chapter (APWA) "Project of the Year" in the roadway category; the 2010 Kentuckiana Associated Builders and Contractors (ABC) "Award of Excellence"; the 2010 ABC/BKD CPAs and Advisors "BKD President's Award in Construction"; and the 2010 National ABC "Excellence in Construction – Eagle Award."

### RFP #7-2013 Traffic Signal Timing Project







Vanessa M. Fritsch, PE, PTOE

**Senior Traffic Engineer** 

Education

BS/2003/Civil Engineering/ University of Kentucky

**Registration/Certification** 

Professional Engineer, Kentucky – 26090 Professional Traffic Operations Engineer (PTOE) **Areas of Expertise** 

Traffic Operations & Analysis
Traffic Signal Design & Timing
Signal Timing Implementation
Congestion Management
Simulation Modeling
Traffic Impact Analysis

Years of Experience

With URS: 6.5 Years With Other Firms: 2.5 Years

Ms. Fritsch is a Senior Traffic Engineer with expertise in the fields of Signal Design, Signal System Timing, Traffic Control and Intersection Design. She has over 10 years of experience with consulting firms. Ms. Fritsch has experience in signal design, system timing, traffic studies, lighting, traffic control, signing, plan preparation, maintenance of traffic plans, quantity calculations, and construction cost estimates.

Ms. Fritsch has extensive experience in signal design and signal system timing. The majority of Ms. Fritsch's work has involved serving as an extension of local public agencies, such as the Kentucky Transportation Cabinet and the City of Cincinnati to assist in Traffic Engineering. She is a registered PE in both Kentucky and Ohio and a PTOE. She is a resident of Northern Kentucky and a proud alumni of the University of Kentucky.

**Experience Relevant to this project:** 

**District 7 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present):** Project Engineer providing staff augmentation to the KYTC District 7 Office Staff. Contractual duties include performing signal warrant studies, speed studies, performing signal installation inspections, managing 15 closed loop signal systems. In the first year of the contract, URS evaluated over 100 intersections. After renewal in 2009, the contract included traffic signal warrant studies, left turn evaluations, and a sign inventory that includes 65 miles of roadway. In 2011, the contract was renewed again. The services include and access management study on US 27 in Nicholasville, signal system retiming in Georgetown near the Toyota plant and continued intersection evaluations for left turn phases and signal warrants, and the US 27 Access Management study..

Statewide Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Project Engineer providing a broad range of traffic engineering services under this statewide contract. Services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. From 2007-2010, URS has worked on five signal systems: KY 52/89 in Irvine (3 intersections), US 31W in Radcliffe (3 intersections), US 431 in Owensboro (19 intersections), US 460 in West Liberty (3 intersections) and US 62X in Maysville (4 intersections). URS continued this work with a renew contract from 2010-13, and have received 3 new letter agreements including: 3 signal systems in Paducah totaling 28 intersections evaluated, the downtown Covington area was evaluated and retimed totaling 55 signals, and the downtown Grayson system with 6 signals on two routes.

ARRA Traffic Signal Retiming, Louisville Metro Government (2010-2012): The study area includes Dixie Highway (US 31W), Bardstown Road (US 31E) and Fern Valley Road (KY 1737) totaling 67 intersections. Routes vary from 35,000 to 55,000 vehicles per day. This project involved an extensive data collection effort, development of new signal timing, signal programming using TransPHAT and Centrax, and field implementation. URS utilized a Bluetooth base data collection system to analyze the before and post implementation travel times in each corridor.

**District 5 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-2009):** Project Engineer providing detailed corridor analyses. Services include evaluation of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models to optimize timing. The assigned signal systems include: Preston Highway (8 intersections), Poplar Level Road (8 intersections), Outer Loop Road (4 intersections) and Dixie Highway (21 intersections), US 42 (5 intersections), Newburg Road (5 intersections) and Blankenbaker Road (7 intersections).

**Specialty ITS Services, Kentucky Transportation Cabinet District 5:** Ms. Fritsch has been involved in the signal construction plans for the specialty systems designed for District 5 including the Over height warning system at the University of Louisville, Eastern Parkway improvements project and the 1-265 train crossing warning system. She has completed the training courses required and holds the prequalification for highway lighting with KYTC.



**Lexington-Fayette Urban County Government** 





### William F. Madden, PE, PTOE

#### **Senior Traffic Engineer**

**Education** 

BS/1984/Civil Engineering/ University of Kentucky

Registration/Certification

Professional Engineer, Kentucky – 15943 Professional Traffic Operations Engineer (PTOE) **Areas of Expertise** 

Traffic signal timing
Signal system timing
Signing, pavement marking
Trip generation

**Years of Experience** 

With URS: 5 Years With KYTC: 23 Years

Mr. Madden is a project engineer with URS after 23 years with Kentucky **Transportation Cabinet** (KYTC). He performs intersection studies and traffic engineering services for the projects within the Cincinnati office and consults with our offices in Indianapolis and Columbus for such work within the OKI area. He serves as the Quality Control officer for the entire transportation department of the Cincinnati office and has received a quarterly quality award for his work in streamlining detail checks and assuring the quality of our internal systems. He is experienced in several areas of traffic engineering. He is a **Northern Kentucky** resident, and a proud **Alumni of the University** of Kentucky and a UK Parent.

#### **Experience Relevant to this project:**

**District 7 Traffic Engineering Services Contract, KYTC (2007-Present):** Mr. Madden is the project engineer responsible for performing operational reviews of traffic signal installation and modification requests, safety studies, and signing inventories. Since inception, 160 intersections and eight signal systems have been reviewed. This is a multi-year contract that was renewed in 2009 and 2011. Under the current contract, URS has studied and made recommendations for 26 intersections, retimed a signal system in Georgetown (18 signals), provided traffic signal and lighting design for 3 intersections and performed an extensive access management plan for US 27.

Statewide Traffic Engineering Services Contract, KYTC (2007-Present): Project Engineer responsible for providing a broad range of traffic engineering services under this statewide contract. Services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models. To date, URS has worked on 11 signal systems: US 60 in Paducah, (26 intersections), Various Routes in Covington (38 intersections), Multiple Routes in Northern KY (16 intersections), US 431 in Owensboro (19 intersections), and smaller systems in West Liberty, Maysville, Irvine, Florence, Ludlow, Covington and Radcliffe. This contract was renewed in 2011.

ARRA Traffic Signal Retiming, Louisville Metro Government (2010-2012): Project Engineer for developing new traffic signal timing plans on three major arterial routes in Louisville. The study area includes Dixie Highway (US 31W), Bardstown Road (US 31E) and Fern Valley Road (KY 1737) totaling 67 intersections. Routes vary from 35,000 to 55,000 vehicles per day. This project involved an extensive data collection effort, development of new signal timing, signal programming using TransPHAT and Centrax, and field implementation. URS utilized a Bluetooth base data collection system to analyze the before and post implementation travel times in each corridor.

### Transportation Engineering Branch Manager, Traffic & Permits, KYTC, (2001-2007) Covington, KY:

- Investigated customer service requests relating to all aspects of traffic operations, including traffic signal timing, signal system timing, signing, and marking. Implemented solutions based on the results of these investigations.
- Investigated and approved encroachment permits for all utility and entrance encroachments on state right-of-way.
- Reviewed and provided input to other branches concerning traffic issues for all roadway design and construction projects.
- Provided written and verbal reports to all customers concerning the results of investigations into customer service complaints.

Served as KYTC's local representative to ARTIMIS, the freeway incident management system for the greater Cincinnati area.

# RFP #7-2013 Traffic Signal Timing Project

**Lexington-Fayette Urban County Government** 





Richard McGuinness, P.E., PTOE

Transportation Engineer, Roadway Design

Education

MBA/1981/Business Administration/
The Ohio State University

BS/1969/Civil Engineering/The Ohio State University

Registration/Certification
1972/Professional Engineer/OH/E-36341
Areas of Expertise
Maintenance of Traffic
Traffic Design

Mr. McGuinness' has spent nine years in consulting, involved in the preparation of designs, reports and the plans needed to get the project built. He also spent 26 years with the City of Columbus, where he served as head of Freeway Operations, Traffic Maintenance Manager and project engineer for the design and construction of centralized signal systems. It was here where he developed his true specialty of urban freeway operations and

urban freeway work zones, and a practical perspective of how things go together and how things get done in the real world.

Mr. McGuinness has completed the traffic engineering short course certificate from the Northwestern Traffic Institute. He is active in the Ohio Section of the Institute of Transportation Engineers and ITS Mid-America. He is registered as a PE in Ohio and New York, and ODOT prequalified in Interchange Justification Studies, Highway Lighting, Traffic Signal Design, Signs and Pavement Markings and Maintenance of Traffic.

#### **Experience Relevant to this project:**

**Delaware County CR10 South Old State Road Improvements, Delaware, OH**: Traffic engineer designated to assist with the transportation corridor study and widening project for a 9 mile section of a rapidly growing roadway in southern Delaware County. The project was administered through ODOT's LPA process and closely followed the Minor PDP. Environmental Services were performed on the entire corridor, however the project was broken up in to several phases to facilitate construction on the southern most critical section. Design plans for the southern 2 mile section of roadway adhered to MORPC's "Complete Streets" policy and included various pedestrian and bicyclist accommodations.



Amanda J. Beiting, EIT

Co-op

Education

Currently enrolled in BS/2013/Civil Engineering/ University of Cincinnati

AAS/2009/Civil Engineering Technology—Surveying/

Cincinnati State Technical and Community College

Years of Experience
With URS: 5.5 Years

Ms. Beiting is a senior in the Civil Engineering Program at the University of Cincinnati. Previously, she completed an Associates degree program in Civil Engineering Technology -Surveying at Cincinnati State Technical and Community College. She has worked with URS in the Traffic Department for over five years. She's involved in both office and field work.

#### **Experience Relevant to this project:**

District 7 Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Co-op providing staff augmentation to the KYTC District 7 Office (Lexington Area). Contractual duties include performing signal warrant studies, speed studies, performing signal installation inspections, managing 15 closed loop signal systems. In the first year of the contract URS has studied over 100 intersections.

Statewide Traffic Engineering Services, Kentucky Transportation Cabinet (2007-present): Co-op providing a broad range of data collection services under this statewide contract including surveying the signal systems. Contract services include annual review and management of assigned coordinated traffic signal systems, collecting travel time data, speed studies, performing capacity analysis and developing traffic simulation models.

#### **WORKFORCE ANALYSIS FORM**

Name of Organization: <u>URS Corporation</u> Date: <u>03/21/2013</u>

| Categories          | Total | Wh   | nite | Lat | ino | Bla | ack | Otl | her | То   | tal  |
|---------------------|-------|------|------|-----|-----|-----|-----|-----|-----|------|------|
|                     |       | М    | F    | M   | F   | M   | F   | M   | F   | M    | F    |
| Administrators      | 1962  | 1481 | 230  | 66  | 14  | 45  | 8   | 94  | 24  | 1686 | 276  |
| Professionals       | 6868  | 3624 | 1863 | 228 | 142 | 173 | 132 | 476 | 230 | 4501 | 2367 |
| Superintendents     | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Supervisors         | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Foremen             | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Technicians         | 2485  | 1577 | 351  | 159 | 35  | 167 | 57  | 115 | 24  | 2018 | 467  |
| Protective Service  | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Para-Professionals  | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Office/Clerical     | 1081  | 116  | 628  | 23  | 92  | 18  | 123 | 24  | 57  | 181  | 900  |
| Skilled Craft       | 113   | 56   | 0    | 51  | 0   | 2   | 0   | 4   | 0   | 113  | 0    |
| Service/Maintenance | N/A   | N/A  | N/A  | N/A | N/A | N/A | N/A | N/A | N/A | N/A  | N/A  |
| Total:              | 12509 | 6854 | 3072 | 527 | 283 | 405 | 320 | 713 | 335 | 8499 | 4010 |

Prepared for: <u>Greg T. Groves, Louisville Office Manager</u>
(by Pegi Yocom, Sr. Marketing Coordinator)

Name & Title

#### **EQUAL OPPORTUNITY AGREEMENT**

#### The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

T. Score

The Contractor will not discriminate against any employee or applicant for employment

because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

\*\*\*\*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

#### **Bidders**

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.

URS Corporation

Name of Business

### LFUCG MBE/WBE PARTICIPATION FORM Bid/RFP/Quote Reference # RFP #7-2013 Traffic Signal Timing Project

The MBE/WBE subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately.

| MBE/WBE<br>Company, Name,<br>Address, Phone,<br>Email   | Work to be<br>Performed                       | Total Dollar Value<br>of the Work | % Value of Total<br>Contract |
|---|---|-----------------------------------|------------------------------|
| Abbie Jones Consulting<br>1022 Fontaine Rd.<br>Lexington, KY 40502<br>859.559.3443<br>abbie@abbie-jones.com | Traffic Counting,<br>Intersection<br>counting |                                   | 20-25 %                      |
| 2.  |   |                                   |                              |
| 3.  |   |                                   |                              |
| 4.  |   |                                   |                              |

The undersigned company representative submits the above list of MBE/WBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

| URS Corporation |   |
|-----------------|---|
| Company         | By  |
| March 21, 2013  | Vice President, Louisville Office Manager |
| Date            | Title                                     |

#### **GENERAL PROVISIONS**

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

#### A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be

limited to:

- (a) Failure to perform the contract according to its terms, conditions and specifications;
- (b) Failure to make delivery within the time specified or according to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services;
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

#### B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary

right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

| Slegg T. Score |                |
|----------------|----------------|
| 00             | March 21, 2013 |
| Signature      | Date           |

1

#### **EXHIBIT D**

# FURTHER DESCRIPTION OF BASIC ENGINEERING SERVICES AND RELATED MATTERS

| Tasks   | PAUL            | VANESSA           | AMANDA            | JEFF                 |          | ABBIE JONES      |           | Total<br>Hours     | Raw<br>Average<br>Rate | Raw Billable<br>Labor      | Loaded<br>Average<br>Rate     | Loaded Billable<br>Labor            |
|---|-----------------|-------------------|-------------------|----------------------|----------|------------------|-----------|--------------------|------------------------|----------------------------|-------------------------------|-------------------------------------|
| 1 North Broadway (4 lintersections 12 plans) 2 Synchro Development (use LFUCG Models)   | 0               | 0                 | 0                 | 0                    |          |                  |           | 0                  | \$ -                   | \$ -                       | \$ -                          | \$ -                                |
| Basic accuracy checks (reds, yellows, peds, lanes, ex time)     Supplemental Field Data For Calibration                           |                 | 12<br>12          | 12                |                      |          |                  |           | 24<br>12           |                        | \$ 751.00<br>\$ 408.00     | \$ 78.86<br>\$ 85.68          | \$ 1,893.00<br>\$ 1,028.00          |
| 5 Data Entry (Counts 1 hrs/plan)  |                 | 6                 | 6                 |                      |          |                  |           | 12                 | \$ 34.00               | \$ 375.00                  | \$ 78.75                      | \$ 945.00                           |
| 6 Model Calibrations 7 Study Left Turn Phase X-Products (1 hr/int)  | 8               | 8                 | 4                 |                      |          |                  |           | 20<br>4            | \$ 41.70<br>\$ 56.00   | \$ 834.00<br>\$ 224.00     | \$ 105.08<br>\$ 141.12        | \$ 2,102.00<br>\$ 564.00            |
| 7 Study Left Turn Phase X-Products (1 hr/int) 8 Model Optimization (4 hrs/plan)   | 20              | 16                | 12                |                      |          |                  |           | 48                 | \$ 41.77               | \$ 2,005.00                |                               | \$ 5,053.00                         |
| 9 Timing Forms (2 per int)  10 System Programming/Controller Testing (Centracs)   | 8               | 8                 | 8                 |                      |          |                  |           | 8<br>24            | \$ 55.88<br>\$ 39.50   | \$ 447.00<br>\$ 948.00     | \$ 140.81<br>\$ 99.54         | \$ 1,126.00<br>\$ 2,389.00          |
| 11 System Implementation / Adjustments (weekday &weekends)  | 24              | 24                | 24                |                      |          |                  |           | 72                 | \$ 39.50               | \$ 2,844.00                | \$ 99.54                      | \$ 7,167.00                         |
| 12 Backfeed Field Adjustments to Synchro 13 Bluetooth Setup/Prep  | 4               | 4                 | 4                 |                      |          |                  |           | 8                  |                        | \$ 250.00<br>\$ 224.00     |                               | \$ 630.00<br>\$ 564.00              |
| 14 Bluetooth Trav Time Before (deployment/pickup)   | 8               | 8                 | 4                 |                      |          |                  |           | 20                 | \$ 41.70               | \$ 834.00                  | \$ 105.08                     | \$ 2,102.00                         |
| 15 Bluetooth Trav Time After (deployment/pickup) 16 Bluetooth Field Support (Abbie Jones)   |                 | 8                 | 12                |                      |          | 8                |           | 20<br>8            | \$ 30.75<br>\$ 50.00   |                            | \$ 77.49<br>\$ 126.00         | \$ 1,550.00<br>\$ 1,008.00          |
| 17 Travel Time Analysis (BT Processing 2 hr/plan)   |                 | 12                | 12                |                      |          | 0                |           | 24                 |                        | \$ 751.00                  |                               | \$ 1,893.00                         |
| 18 Newtown Pike (8 intersections 12 plans) 19 Synchro Development (use LFUCG Models)  | 0               | 0                 | 0                 | 0                    |          |                  |           | 0                  | \$ -                   | \$ -                       | \$ -                          | \$ -                                |
| 20 Basic accuracy checks (reds, yellows, peds, lanes, ex time)  | - U             | 12                | 12                | Ü                    |          |                  |           | 24                 | \$ 31.29               | \$ 751.00                  | \$ 78.86                      | \$ 1,893.00                         |
| 21 Supplemental Field Data For Calibration 22 Data Entry (Counts 2 hrs/plan)  |                 | 12<br>12          | 12                |                      |          |                  |           | 12<br>24           | \$ 34.00<br>\$ 31.29   | \$ 408.00<br>\$ 751.00     | \$ 85.68<br>\$ 78.86          | \$ 1,028.00<br>\$ 1,893.00          |
| 23 Model Calibrations   | 12              | 12                | 6                 |                      |          |                  |           | 30                 | \$ 41.67               | \$ 1,250.00                | \$ 105.00                     | \$ 3,150.00                         |
| 24 Study Left Turn Phase X-Products (1 hr/int) 25 Optimization (6 hrs/plan)   | 8<br>36         | 32                | 4<br>28           |                      |          |                  |           | 16<br>96           | \$ 43.63<br>\$ 40.64   | \$ 698.00<br>\$ 3,901.00   |                               | \$ 1,759.00<br>\$ 9,831.00          |
| 26 Timing Spreadsheets (2 per int)  | 16              | 16                | 16                |                      |          |                  |           | 48                 | \$ 39.50               | \$ 1,896.00                | \$ 99.54                      | \$ 4,778.00                         |
| <ul><li>27 System Programming (Centracs)</li><li>28 System Implementation / Adjustments (weekday &amp;weekends)</li></ul>         | 16<br>24        | 16<br>16          | 16                | 16                   |          |                  |           | 48<br>56           | \$ 48.63<br>\$ 41.84   | \$ 2,334.00<br>\$ 2,343.00 | \$ 122.54<br>\$ 105.44        | \$ 5,882.00<br>\$ 5,904.00          |
| 29 Backfeed Field Adjustments to Synchro  |                 | 8                 | 8                 |                      |          |                  |           | 16                 | \$ 31.25               | \$ 500.00                  | \$ 78.75                      | \$ 1,260.00                         |
| 30 Bluetooth Setup/Prep 31 Bluetooth Trav Time Before (deployment/pickup)   | 8               | 8                 | 4                 |                      |          |                  |           | 8<br>20            | \$ 55.88<br>\$ 41.70   | \$ 447.00<br>\$ 834.00     | \$ 140.81<br>\$ 105.08        | \$ 1,126.00<br>\$ 2,102.00          |
| 32 Bluetooth Trav Time After (deployment/pickup)  | - C             | 8                 | 12                |                      |          |                  |           | 20                 | \$ 30.75               | \$ 615.00                  | \$ 77.49                      | \$ 1,550.00                         |
| 33 Bluetooth Field Support (Abbie Jones) 34 Travel Time Analysis (BT Processing 2 hr/plan)  |                 | 12                | 16                |                      |          | 8                |           | 8<br>28            |                        | \$ 400.00<br>\$ 865.00     | \$ 126.00<br>\$ 77.85         | \$ 1,008.00<br>\$ 2,180.00          |
| 35 Georgetown Road (12 intersections 12 plans)  |                 |                   |                   |                      |          |                  |           |                    |                        | ·                          |                               | ,                                   |
| 36 Synchro Development (use LFUCG Models) 37 Basic accuracy checks (reds, yellows, peds, lanes, ex time)                          | 0               | 12                | 12                | 0                    |          |                  |           | 0<br>24            | \$ -<br>\$ 31.29       | \$ -<br>\$ 751.00          | \$ -<br>\$ 78.86              | \$ -<br>\$ 1,893.00                 |
| 38 Supplemental Field Data For Calibration  |                 |                   | 12                |                      |          |                  |           | 12                 |                        | \$ 343.00                  | \$ 72.03                      | \$ 864.00                           |
| <ul><li>39 Data Entry (Counts 2 hrs/plan)</li><li>40 Model Calibrations</li></ul>   | 12              | 12<br>12          | 12<br>6           |                      |          |                  |           | 24<br>30           | \$ 31.29<br>\$ 41.67   | \$ 751.00<br>\$ 1,250.00   | \$ 78.86<br>\$ 105.00         | \$ 1,893.00<br>\$ 3,150.00          |
| 41 Study Left Turn Phase X-Products (1 hr/int)  | 8               | 4                 | 4                 |                      |          |                  |           | 16                 | \$ 43.63               | \$ 698.00                  | \$ 109.94                     | \$ 1,759.00                         |
| 42 Optimization (8 hrs/plan) 43 Timing Spreadsheets (2 per int)   | 36<br>16        | 32<br>16          | 28<br>16          |                      |          |                  |           | 96<br>48           | \$ 40.64<br>\$ 39.50   |                            | \$ 102.40<br>\$ 99.54         | \$ 9,831.00<br>\$ 4,778.00          |
| 44 System Programming (Centracs)  | 16              | 16                |                   | 16                   |          |                  |           | 48                 | \$ 48.63               | \$ 2,334.00                | \$ 122.54                     | \$ 5,882.00                         |
| <ul><li>45 System Implementation / Adjustments (weekday &amp;weekends)</li><li>46 Backfeed Field Adjustments to Synchro</li></ul> | 24              | 24<br>8           | 24<br>8           |                      |          |                  |           | 72<br>16           | \$ 39.50<br>\$ 31.25   | \$ 2,844.00<br>\$ 500.00   |                               | \$ 7,167.00<br>\$ 1,260.00          |
| 47 Bluetooth Setup/Prep   | 8               | _                 |                   |                      |          |                  |           | 8                  | \$ 55.88               | \$ 447.00                  | \$ 140.81                     | \$ 1,126.00                         |
| 48 Bluetooth Trav Time Before (deployment/pickup) 49 Bluetooth Trav Time After (deployment/pickup)                                | 8               | 8                 | 12                |                      |          |                  |           | 20<br>20           | \$ 41.70<br>\$ 30.75   |                            | \$ 105.08<br>\$ 77.49         | \$ 2,102.00<br>\$ 1,550.00          |
| 50 Bluetooth Field Support (Abbie Jones) 51 Travel Time Analysis (BT Processing 2 hr/plan)  |                 | 12                | 16                |                      |          | 8                |           | 8<br>28            | \$ 50.00<br>\$ 30.89   |                            | \$ 126.00<br>\$ 77.85         | \$ 1,008.00<br>\$ 2,180.00          |
| 51 Travel Time Analysis (BT Processing 2 hr/plan) 52 Versailles Road (11 intersections 12 plans)                                  |                 | 12                | 16                |                      |          |                  |           | 20                 | φ 30.09                | ф 805.00                   | φ 77.65                       | φ 2,160.00                          |
| 53 Synchro Development (use LFUCG Models) 54 Basic accuracy checks (reds, yellows, peds, lanes, ex time)                          | 0               | 0<br>12           | 12                | 0                    |          |                  |           | 0<br>24            | \$ -<br>\$ 31.29       | \$ -<br>\$ 751.00          | \$ -<br>\$ 78.86              | \$ -<br>\$ 1,893.00                 |
| 55 Supplemental Field Data For Calibration  |                 | 12                | 12                |                      |          |                  |           | 12                 | \$ 28.58               | \$ 343.00                  | \$ 72.03                      | \$ 864.00                           |
| 56 Data Entry (Counts 2 hrs/plan) 57 Model Calibrations   | 12              | 12<br>12          | 12<br>6           |                      |          |                  |           | 24<br>30           |                        | \$ 751.00<br>\$ 1,250.00   | \$ 78.86<br>\$ 105.00         | \$ 1,893.00<br>\$ 3,150.00          |
| 58 Study Left Turn Phase X-Products (1 hr/int)  | 8               | 4                 | 4                 |                      |          |                  |           | 16                 | \$ 43.63               | \$ 698.00                  | \$ 109.94                     | \$ 1,759.00                         |
| 59 Optimization (8 hrs/plan) 60 Timing Spreadsheets (2 per int)   | 36<br>16        | 32<br>16          | 28<br>16          |                      |          |                  |           | 96<br>48           |                        | \$ 3,901.00<br>\$ 1,896.00 | \$ 102.40<br>\$ 99.54         | \$ 9,831.00<br>\$ 4,778.00          |
| 61 System Programming (Centracs)  | 16              | 16                |                   | 16                   |          |                  |           | 48                 | \$ 48.63               | \$ 2,334.00                | \$ 122.54                     | \$ 5,882.00                         |
| <ul><li>62 System Implementation / Adjustments (weekday &amp;weekends)</li><li>63 Backfeed Field Adjustments to Synchro</li></ul> | 24              | 24<br>8           | 24<br>8           |                      |          |                  |           | 72<br>16           | \$ 39.50<br>\$ 31.25   |                            |                               | \$ 7,167.00<br>\$ 1,260.00          |
| 64 Bluetooth Setup/Prep   | 8               |                   |                   |                      |          |                  |           | 8                  | \$ 55.88               | \$ 447.00                  | \$ 140.81                     | \$ 1,126.00                         |
| 65 Bluetooth Trav Time Before (deployment/pickup) 66 Bluetooth Trav Time After (deployment/pickup)                                | 8               | 8                 | 12                |                      |          |                  |           | 20<br>20           | \$ 41.70<br>\$ 30.75   |                            | \$ 105.08<br>\$ 77.49         | \$ 2,102.00<br>\$ 1,550.00          |
| 67 Bluetooth Field Support (Abbie Jones)  |                 |                   |                   |                      |          | 8                |           | 8                  | \$ 50.00               | \$ 400.00                  | \$ 126.00                     | \$ 1,008.00                         |
| 68 Travel Time Analysis (BT Processing 2 hr/plan) 69  |                 | 12                | 16                |                      |          |                  |           | 28                 | \$ 30.89               | φ 865.00                   | \$ 77.85                      | \$ 2,180.00                         |
| 70 Other Office Work 71 Contingency for recollecting BT on one before & one after   | 16              | 16                | 8                 |                      |          |                  |           | 0<br>40            | \$ -<br>\$ 41.68       | \$ -<br>\$ 1,667,00        | \$ -<br>\$ 105.02             | \$ -<br>\$ 4,201.00                 |
| 71 Contingency for reconlecting B1 on one before & one after 72 3 Timing review meetings + Preparation                            | 30              | 30                | 30                |                      |          |                  |           | 90                 | \$ 39.50               | \$ 3,555.00                | \$ 99.54                      | \$ 8,959.00                         |
| 73 Report Writing (50 hrs/route) 74 Report Graphics & Figures (16 hrs/ route)   | 40              | 60<br>16          | 60<br>32          | 40                   |          |                  |           | 200<br>52          |                        | \$ 8,228.00<br>\$ 1,682.00 |                               | \$ 20,735.00<br>\$ 4,239.00         |
| 75 Project Management (10% of project hrs)  | 240             | 10                | 32                |                      |          |                  |           | 240                | \$ 55.93               | \$ 13,422.00               | \$ 140.93                     | \$ 33,823.00                        |
| 76 QA-QC (Ave 12 hrs/section)  BILLING RATES (2011 KYTC rates Escallated)   | \$55.93         | \$33.99           | \$28.57           | 48<br><b>\$55.93</b> |          |                  |           | 48<br><b>2,372</b> | \$ 55.94<br>\$ 41.32   |                            | \$ 140.96<br><b>\$ 104.11</b> | \$ 6,766.00<br><b>\$ 246,960.00</b> |
| TOTAL HOURS   | 798             | 736               | 670               | 136                  | 0        | 32               | 0         | ĺ                  |                        |                            |                               |                                     |
| Other Direct Costs N Broadway (4 roundtrips + 200 vicinity miles)   | Miles<br>904    | Rate 0.56         | Total<br>5 \$ 506 |                      | Budae    | 2.52<br>eted Mul | tiplier   | LOADI              | ED TOTAL               | \$ 246,960.00              |                               |                                     |
| Newtown Pike  | 904             | 0.56              | \$ 506            |                      | - 3      |                  |           |                    | SUBS                   | ' '                        |                               |                                     |
| Georgetown Road<br>Versailles Road  | 904<br>904      |                   |                   |                      |          |                  |           |                    | ODC                    | \$ 5,464.00                |                               |                                     |
| Meetings (3 x 176 miles roundtrip)  | 528             | 0.56              | \$ 296            | •                    |          |                  | TOTA      | L FEE ES           | STIMATE                | \$ 349,599.00              |                               |                                     |
| Travel Expenses (\$100/day MEALS & LODGING)   | Total I<br>Days | Mileage<br>People | \$1,814           |                      |          |                  |           |                    |                        |                            |                               |                                     |
| N Broadway  | 2               | 2 2               | \$ 400            |                      |          |                  |           |                    | on FAR & K             | YTC audited 121.           | 12% overhe                    | ad rate                             |
| Newtown Pike<br>Georgetown Road   | 3               |                   | •                 |                      | 6        | and 15%          | profit ma | rgin.              |                        |                            |                               |                                     |
| Versailles Road   | 3               |                   | \$ 600            |                      |          |                  |           |                    |                        |                            |                               |                                     |
| Reproduction Data Plan (2 months) for BT Units Before Studies   |                 |                   | \$250<br>\$600    |                      |          |                  |           |                    |                        |                            |                               |                                     |
| Data Plan (2 months) for BT Units After Studies   | Traval          | Evnences          | \$600<br>\$3,650  | •                    |          |                  |           |                    |                        |                            |                               |                                     |
|   | rravert         | _xperises         | ψ0,030            | l                    |          |                  |           |                    |                        |                            |                               |                                     |
| Sub Costs ABBIE JONES (traffic counting portion)  | \$              |                   | 97.175            | DRE Pa               | rcentage | 28.9%            | I         |                    |                        |                            |                               |                                     |
| 53.125 (asing botton)   |                 |                   | ,,,,,             |                      |          | 010-70           | •         |                    |                        |                            |                               |                                     |

#### PROJECT SCHEUDLE

| Schedule (assumes contract approved by July 15, 2013) |     |    | Aug-13 |      |     | 0,000 | CT-dac |     |    |    | Oct-13 |  | Nov-13 | 1 |  | Dec-13 |  |
|---|-----|----|--------|------|-----|-------|--------|-----|----|----|--------|--|--------|---|--|--------|--|
| Traffic Counts  |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Existing Travel Time Study                            |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Signal Timing Optimization                            |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Controller Programming                                |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Implementation & Adjustments                          |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| After Travel Time Study                               |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Documentation   |     |    |        |      |     |       |        |     |    |    |        |  |        |   |  |        |  |
| Project duration August 15 to Dece                    | em  | be | r3     | 1, : | 201 | 13    |        |     |    |    |        |  |        |   |  |        |  |
| Prinicple field work to be complet                    | ted | b  | y N    | ov   | en  | nbe   | er 2   | 20, | 20 | 13 |        |  |        |   |  |        |  |

URS agrees to perform the services listed in Exhibit B (RFP 7-2013) 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 nonpayment 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.

#### LFUCG TASK ORDER NO. 1 UNDER LFUCG AGREEMENT WITH URS CORPORATION, A NEVADA CORPORATION FOR

#### TRAFFIC SIGNAL RETIMING ON MULTIPLE ROUTES

#### **CONSULTANT**

#### **OWNER**

| Name                  | URS Corporation, A Nevada Corpoation | Lexington Fayette Urban County<br>Government |
|-----------------------|--------------------------------------|--|
| <b>Street Address</b> | 525 Vine Street, Suite 1800          | 200 East Main Street                         |
| City, State, Zip      | Cincinnati, OH 45202                 | Lexington, KY 40507                          |
| <b>Contact Person</b> | Paul Slone                           |  |
| Telephone             | 513-419-3456                         | 859-425-2400                                 |
| Fax                   |                                      | 859-254-7787                                 |
| E-Mail                | paul.slone@urs.com                   |  |
| Task Order Date:      |                                      |  |
| Task Name:            | Traffic Signal Timing Project        |  |
| Task ID:              |                                      |  |

#### SCOPE OF WORK/DELIVERABLES

Collect necessary traffic data to develop, implement and adjust optimized traffic signal timing at 35 intersections on 4 routes listed below:

- North Broadway in vicinity of I-75
- Newtown Pike From Stanton to Newtown Court
- Georgetown Road From Douglas Ave to Spurr Road
- Versailles Road From Parkers Mill Rd to Oliver LewisWay

12 coordinated timing plans will be developed for each route for the approximate time frames listed in the RFP. Timing plans will explore a number of creative signal phasing schemes where possible to minimize stops and delays.

Timing plans will be developed and implemented through the LFUCG's centralized signal system. Consultant will provide personnel on-site to program and adjust proposed timing. Primary evaluation of field improvements will be performed through before and after travel time studies conducted by Bluetooth data capture.

Consultant will deliver Synchro models containing final adjusted timing and multiple copies of a written report for each route that documents the project methodology, collected data, timing plans, and improvements for motorists.

#### SCHEDULE OF WORK

| Schedule (assumes contract approved by July 15, 2013) |     | Aug-13 |       | Cen-13 | ł    |      |                | Oct-13 |     | Nov-13 | !    |   | Dec-13 |   |           |
|---|-----|--------|-------|--------|------|------|----------------|--------|-----|--------|------|---|--------|---|-----------|
| Traffic Counts  | П   |        |       |        |      |      |                |        |     |        |      | T |        |   | 1         |
| Existing Travel Time Study                            |     |        |       |        |      |      |                |        |     |        |      |   |        |   |           |
| Signal Timing Optimization                            |     |        |       |        |      |      |                |        |     |        |      |   |        |   | ٦         |
| Controller Programming                                |     |        |       |        | -    |      |                |        |     |        |      |   |        | Т | 1         |
| Implementation & Adjustments                          |     |        |       |        |      |      |                |        |     |        |      |   |        |   | 1         |
| After Travel Time Study                               |     |        |       |        |      |      |                |        |     |        |      |   |        |   |           |
| Documentation   |     |        |       |        |      |      |                |        | 411 |        |      |   |        |   |           |
| Project duration August 15 to Deco                    | emb | oer 31 | ., 20 | )13    |      |      | - Constitution |        |     |        | 77.7 |   |        |   | Minorhean |
| Prinicple field work to be complet                    | ted | by No  | ver   | mbe    | r 20 | , 20 | 13             |        |     |        |      |   |        |   | -         |

| Lump Sum amount of \$349,599.00  |  |
|--|--|
| ACCEPTED BY:   | AUTHORIZED BY:                                       |
| Consultant's Authorized Signature  | Owner's Authorized Signature                         |
| Date Signed  | Date Signed  |
| Two originals of this work order shall be execute will be returned to the Owner. | d by the Owner and returned to A fully executed copy |