



CITY OF URBANA, ILLINOIS

**REQUEST FOR PROPOSALS
RFP # 1011-05**

**SPECIFICATIONS AND GENERAL TERMS AND CONDITIONS FOR:
TRAFFIC SIGN MANAGEMENT SYSTEM**

SUBMISSION DATE
AND TIME:

December 28, 2010 – 1:30 p.m.

MANDATORY PRE-PROPOSAL
MEETING:

NONE

BID BOND:

NONE REQUIRED

CONTACT PERSON:

RICHARD COYNE
CITY OF URBANA, ILLINOIS
DEPARTMENT OF PUBLIC WORKS
706 S. GLOVER AVENUE
URBANA, ILLINOIS 61802
(217) 384-2318

1.00 PROJECT OVERVIEW

1.1 Scope of Project

The City of Urbana (hereinafter "City"), Illinois, is seeking proposals to procure a TRAFFIC SIGN MANAGEMENT SYSTEM. The City intends to enter into a contract with a qualified and responsible firm for the purchase of such a system. Any firm (hereinafter "Vendor") desiring to be considered to provide such a unit shall submit proposals in accordance with the instructions and format of the attached Request For Proposals (RFP) documents.

The City of Urbana has approximately 144 center line miles of streets. The Traffic Sign Management System provided shall consist of (but is not limited to) the following described principal components, attachments, and accessories necessary to meet the operational and performance requirements for the inventory of all signs within the City of Urbana, along with traffic signal and street light pole locations.

2.00 EVALUATION OF PROPOSALS

2.1 Requests For Proposals

A Request For Proposal is a method of procurement that permits discussions with responsible Vendors and revisions to proposals prior to award of a contract. The Evaluation Committee may conduct discussions with any Vendor who submits an acceptable or potentially acceptable proposal. Vendors shall be accorded fair and equal treatment with respect to any opportunity for discussion and revision of proposals. During the course of such discussions, the Evaluation Committee shall not disclose any information derived from one proposal to any other Vendor.

2.2 Negotiations

The City reserves the right to negotiate specifications, terms and conditions which may be necessary or appropriate to the accomplishment of the purpose of this RFP and to determine the acceptability or unacceptability of any and all proposals. The City shall unequivocally be the sole and final judge. Decisions are final and shall not be subject to recourse by any person, firm or corporation. The City may require the entire proposal be made an integral part of the resulting contract. This implies that all responses, supplemental information, and other submissions provided by the Vendor during discussions or negotiations will be held by the City as contractually binding on the successful Vendor.

2.3 Award

Proposals will be evaluated and negotiated by an Evaluation Committee. The Evaluation Committee shall have sole power and discretion to determine the qualifications, responsibility and capabilities of Vendors, the reasonableness of price, and other factors. Any decision in this respect shall be binding. Proposals will be evaluated in closed session.

3.00 INSTRUCTIONS TO VENDORS

3.1 Proposal Package

All sections and attachments of this RFP package are integral to the desired scope of services, and submitted proposals shall take into account the comprehensive nature of the work required. The specifications included in this package describe the services and equipment which the City feels are necessary to meet the performance requirements of the City, and shall be considered the minimum standards expected of the Vendor. The City shall require the successful Vendor to fully comply with the specifications.

3.2 Confidentiality

After award of a contract, all responses, documents, and materials submitted by the Vendor pertaining to this RFP will be considered public information and will be made available for inspection in accordance with the Illinois Freedom of Information Act. However, upon request from the Vendor, the City will determine the validity of written requests for nondisclosure of trade secrets and other proprietary data as identified.

3.3 Proposal Delivery Procedures

Sealed proposals shall be delivered to the Office of the Director of Public Works, 706 South Glover Avenue, Urbana, Illinois, 61802, by 1:30 p.m., local time, December 28, 2010. Sealed envelopes shall be clearly labeled "Proposal for Traffic Sign Management System, RFP # 1011-05 with the following information: Vendor's name and address; date and time of proposal opening.

3.4 Withdrawal of Proposals

A written request for the withdrawal of a proposal may be granted if the request is received by the Public Works Director prior to the specified time of proposal opening. However, after a proposal is opened, it will be binding for a period of ninety (90) calendar days.

3.5 Non-Acceptance of Proposals

No proposal shall be accepted from, or contract awarded to, any person, firm or corporation that is in arrears or is in default to the City upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to the City, or has failed to faithfully perform any previous contract with the City.

3.6 Proposal Opening Procedures

The opening of all proposals shall commence immediately after the stated delivery date and time in the second floor conference room of the Public Works Department, 706 South Glover Avenue, Urbana, Illinois, and the names of all Vendors submitting proposals shall be publicly read. All potential Vendors and the public may attend the proposal opening. The City shall then take all proposals under review.

3.7 Reserved Rights

The City reserves the right, at any time and for any reason, to cancel this RFP, to reject any or all proposals, or to accept an alternate proposal. The City reserves the right to waive any immaterial defect in any proposal. The City may seek clarification from a Vendor at any time and failure to respond promptly is cause for rejection.

4.00 TRAFFIC SIGN MANAGEMENT SYSTEM TECHNICAL REQUIREMENTS

4.1 General

It is the intent of these specifications to describe the minimum requirements for a Traffic Sign Management System. The expressed purpose of this system is to enable the City to:

- A. Collect, record, and make available information concerning traffic signs located on the roadways within the city limits of Urbana;
- B. Assessment of sign condition; and
- C. Sign fabrication and replacement of signs on a work order basis.

4.2 Inventory Attributes to Be Collected

4.2.1 Physical inventory of all signs and sign supports;

4.2.2 The Vendor will perform a field review of the project area to verify or collect existing sign inventory. The location of all signs shall be determined utilizing the Global Positioning System (GPS). All signs shall be located to ± 3 meters resolution. As a minimum, the following information will be recorded on the computerized inventory:

a) Sign type

a.1 Signs shall be classified by Manual of Uniform Traffic Control Devices (MUTCD) type/code.

b) Sign Location

b.1 Count and completeness of inventory. Allowable tolerance of $\pm 2\%$.

b.2 Sign locations are to be expressed in terms of latitude and longitude and Illinois State Plane Coordinates East Zone, NAD83 (97). These shall be provided in both tabular and map format. Allowable positional variation from actual sign location is 3 meters while maintaining relative positional accuracy between signs.

b.3 Placement - Left, Right, Overhead, Center

b.4 Sign orientation - Record direction sign face (N, S, E, W) and fraction thereof (NE, SE, SW, NW) allowable tolerance is ± 22.5 degrees.

c) Record inventory date (Month/Day/Year)

d) Record operator name (Last, First, Middle Initial)

e) Image

e.1 Record a digital image of each sign face with link to location. Image must be of sufficient quality to read sign text greater than 4 inches in height.

4.2.3 The scope of work includes all traffic signs located within the City's jurisdiction right-of-way excluding off-road, parks, or alleys. The following attribute data will be captured for the signs:

GPS Location: (± 3 meters) on the axis parallel to the roadway and ensuring correctness in both sequential order and position relative to the road. Data to be delivered in both Latitude/Longitude and Illinois State Plane Coordinates, East Zone NAD83 (97).

GPS Date: Date the GPS Coordinates were captured.

Post ID Unique Identifier: Each post location will be assigned a numeric identification.

Sign Type: MUTCD custom designation for specialized signs.

Post Type: Shoulder mount, u-channel, arm mast, etc.

Sign Photo: Digital image of each sign will be linked to the data set and geo-referenced for location.

Sign Panel Size: Based on current City standards.

Physical Condition: Each sign will be rated for physical condition (Pass/Fail) corresponding to visual standards agreed upon by the City and Vendor.

Reflectivity: Each sign will be assessed for night time reflectivity and assigned a condition rating using FHWA Comparison Panel Method.

Sign Substrate Type: Metal, wood, etc.

4.3 Sign Assessment Process and Data Collection

4.3.1 Method for Assessment

A visual night-time sign assessment method shall be used for conducting retro-reflectivity assessment for all signs located within or associated with the City street right-of-ways. The visual nighttime sign assessment method shall conform to FHWA Comparison Panel method guideline.

The data shall be gathered and collected in a field computer containing the sign inventory database. The inventory database shall be updated via a web-based interface utility program.

4.3.2 Rating Criteria

Visual inspection utilizes an inspector judgment call on the rating based on his/her training. It is preferable to maintain the same inspectors throughout the project if possible. The inspectors are trained to observe the signs at various levels of retro-reflectivity including signs at the minimum levels to acclimate the inspector to distinguish differences in retro-reflectivity levels.

The sign must have a retro-reflectivity level higher than the comparison standard panel in order for the sign to pass. The procedure can be done during daytime; although, it is preferable to conduct the assessment during nighttime drive through assessment.

Rating Criteria:

- a) CRITICAL–sign need immediate replacement

- b) FAIR—sign that may need replacement within 1-5 years
- c) GOOD—sign that may need replacement within 5 or more years

A daytime inspection shall be conducted to identify signs that have issues with post alignment, color fade, vandalism/damages, and obstruction. The data shall be gathered and collected in a field computer containing the sign inventory database. The inventory database shall be updated via a web-based interface utility program.

4.3.3 Data Requirements

The Vendor shall create a log for each inspection which establishes the name of the inspector, assessment method, route, date, time, weather conditions, vehicle model and year of manufacture.

A GPS track log of the inspection shall be made available to the City of all inspected routes in ESRI shape-file format.

4.3.4 Database Conversion

Optional service can be provided to the City to provide a utility programming code to convert the database to a compatible database that can be imported one-way into the existing City's Asset Management System (AMS). The City can import the sign data into the City's AMS at its own discretion after the Vendor delivers the initial converted database. The service requires the following information and participation from the City:

- a) Access to information on the database structure to determine the required fields;
- b) Access to information on the AMS system import utility or functionalities and requirements;
- c) Access to information on the unique identifier assigned to each loaded record to use in future record update; and
- d) Support of City IT and AMS application administrator.

The City and the Vendor shall agree on the scope of the database conversion utility program and the limit of its functions and operations before the Vendor takes on the development effort.

4.4 Electronic Traffic Sign Inventory System

This work shall consist of providing a web-based Traffic Sign Inventory site to the City that will allow tracking traffic signs. The site shall include all specific requirements outlined in this specification and shall be accessible by City designated individuals only (by use of an interactive password security system).

4.4.1 Site Components

The web-based Sign Inventory Database site shall consist of the following components:

The web-based Sign Inventory Database shall be constructed on a base map provided by the City, of the City jurisdiction. The base map shall indicate all applicable roadways within City right-of-way and shall designate such roadways by proper name.

The web-based Sign Inventory Database shall include navigation capabilities to pan and zoom different views at various locations and resolutions on the base map, allowing for viewing the project area and reported information.

The web-based Sign Inventory Database shall be a secure site, accessible from a typical personal computer, and shall be accessible by password only. Passwords shall be granted to individuals at the City's discretion.

4.5 Additional Requirements

Within the web-based Sign Inventory Database, there shall be the ability to link a photograph associated to that specific sign. Tabular data shall include the ability to sort the data in ascending or descending order based on the column heading. All tabular data (generated through query, search, or spatial select) shall be downloadable into a format consistent with Microsoft Excel or agency defined format.

The web-based Sign Inventory Database shall include a search function that queries the data by, but not limited to, MUTCD type, Sign ID, Post ID, Current Condition Assessment, Sign Age. The result of the search shall be plotted on the map and displayed in tabular data.

The web-based Sign Inventory Database shall have up to five custom text fields that the City deems necessary. The initial data included in the web-based Sign Inventory Database shall consist of:

- A Unique Identifier for each sign and for each post
- GPS Coordinates
- MUTCD Sign Type
- Sign Orientation
- Post Type
- Sign & Post Condition

The web-based Sign Inventory Database shall include a contact option to directly send an email to the Vendor to inquire or ask a question about any of the sign components, schedule for completion or other information included in the project.

The web-based Sign Inventory Database shall be fully functional within thirty (30) working days of the notice to proceed on the proposal and after receipt of the City's provided base map. Data on the site shall be updated on a regular basis to report progress of work on the contract.

At the termination of the contract the Vendor shall provide all City data in a format consistent with Microsoft Excel within ten (10) business days.

4.6 Field Assessment Tracking Tool Specification

The Field Assessment Tracking Tool shall be a GPS enabled data collection tool that allows the user to perform sign and post assessment from a moving vehicle via a touch screen interface on a field

computer. The computer software shall be a standalone desktop Geographic Information Systems (GIS) application (not connected to the internet for any functionality or data) to be used on a field computer with the following minimum specifications:

1. Minimum ten (10) inches or greater screen with touch interface
2. Intel Atom N-270 - 1.6 GHz processor
3. 1GB of RAM
4. Less than 3 pounds in weight

The Vendor shall provide one field computer loaded with the application to be used by the City. If additional units are needed the Vendor will be compensated separately for each additional unit.

The tool shall use GIS data files in both ESRI Shape-file format and ESRI Personal Geo-database format. Additionally the tool shall utilize the GPS to continually update the user's current location relative to the sign locations at a minimum of one second intervals.

The graphical user interface of the GIS application shall include:

1. A legend panel showing symbology information for each GIS layer;
2. A reference map showing the current map window in relation to the total project area;
3. A scale bar and cursor location information;
4. Basic pan/zoom navigational tools including selection tools; and
5. A feature attribute table showing attributes of selected signs.

The "signs" data file shall be editable by either assessment buttons and/or editing the feature attribute data table directly. The user making the edits and the time/date stamp when the edit was made will be logged in the data base for a minimum period of two years.

The "feature" attribute table shall include the ability to sort the data in ascending or descending order based on the column heading and to select which attribute fields are to be displayed for assessment.

The application shall allow a transfer utility program to connect (dock) with the web-based repository (master) signs database to extract a copy of the signs database that will be used by the field assessment tool. Additionally, after an assessment cycle, docking shall add updated/changed assessment records to the web-based repository (master) database in a separate assessment table.

The Vendor shall provide technical support for the field data collection tool throughout the contract term, in addition to providing unlimited data updates via automatic docking.

4.7 Data Verification

In order to assure the quality of the sign data collected, the City will be conducting audits on positional accuracy, sign count and attribute accuracy.

The City reserves the right to use City staff or a third party to audit the sign inventory prior to final payment. In the event of a dispute the Vendor will have the opportunity to perform an audit to

compare their information with that provided by the City. The City has final dispute resolution oversight.

The Vendor shall prepare a written report identifying all signs in need of maintenance. This report will include identification of defects and sign attributes in sufficient detail to generate a work order. The Vendor shall review the work plan with the City. Upon approval of the work plan, the City will perform the work until all items on the work plan have been completed. The City will be responsible for the cost of all materials to make such repairs.

5.00 OPTIONS

OPTION A Street Light Pole and Traffic Signal Inventory

In addition to signage the Vendor shall inventory all traffic signal and street light pole locations. The traffic signals and street light poles will be treated in the database similar to sign posts with customized "MUTCD" code along with up to five attributes. The following attributes for Traffic Signals and Light Poles shall be included:

Street Lights:

- Pole Location
- Pole Type (davit arm, post, etc.)
- Pole Height

Traffic Signals:

- Pole Location
- Pole Type (mast arm, post)
- Pole Height

All other issues within this contract that would pertain to the locations of the Traffic Signals and Street Light Pole will also be required under this option.

OPTION B Sign Replacement

The successful Vendor has the option to provide a cost for all sign materials and supports in need of replacement following initial inventory. The City maintains the right to purchase these materials and supports at a vendor of their choice and/or manufacture any materials in house. The City will perform all installation of the signs in need of replacement.

The Vendor shall prepare a written report identifying all signs in need of maintenance. This report will include identification of defects and sign attributes in sufficient detail to generate a work order. The Vendor shall review the work plan with the City. Upon approval of the work plan by the City, the Vendor shall initiate maintenance activities and work continuously until all items included in the work plan are completed.

The Vendor shall be paid at the unit price. Any additional hardware, structural supports, traffic control or miscellaneous items required to complete maintenance activities shall be deemed incidental and included in the unit price.

All parts used in constructing highway signs shall be new and shall conform to the requirements of these specifications, the plans and the latest edition of the ASTM Standards for Sign Supports for highway signs, luminaries and traffic signals. If any departures of materials and fabrication from the plans or specifications are deemed necessary by the Vendor, details of such departures and the reasons therefore, shall be submitted to the City's Engineer for approval. No such departure shall be made without the prior written approval of the Engineer. The Vendor shall furnish the City notarized certified copies of the chemical and physical properties of all materials incorporated in the structures and accessories that are required for this work.

Fabrication of all signs and supports shall be in accordance with the details shown on the specifications and be consistent with manufacturers' recommendations. Any departure from the plans shall be submitted in the form of shop drawings. Work shall be done in a uniform, workmanlike manner.

All signs shall be fabricated in a plant operated by a fabricator who has the necessary experience to manufacture quality signs meeting these specifications. The Vendor shall furnish the City the name of the fabricators of the signs before fabrication is started and, if requested by the City, information shall be furnished as to the fabricator's qualifications and experience. Certification by sheeting manufacturer is required.

OPTION C Video Capture

The successful Vendor shall supply a video capture of the sign inventory (along with any additional software, etc.) as needed to be compatible with the existing with City's AMS.

6.0 MISCELLANEOUS PROVISIONS

6.1 Warranty/Service

The RFP should fully detail any and all warranty terms and conditions. Additionally, the RFP should state the cost, terms, and conditions for any available service contracts that extend beyond the base warranty.

6.2 Training

The successful Vendor shall provide a qualified technician to provide complete training to city personnel at the City's Public Works Center. Training shall include complete operation of all services and equipment provided within the RFP specification for the Traffic Sign Management System.

6.3 References

The Vendor shall submit a list of two similar units sold in other local or state government agencies within the past three years, with name, address and telephone number of a contact person.

CITY OF URBANA TRAFFIC SIGN MANAGEMENT SYSTEM PROPOSAL

We hereby agree to furnish to the City of Urbana a Traffic Sign Management System in accordance with provisions, instructions, and specifications of the City of Urbana for the prices as follows:

Traffic Sign Management System being bid:

Total purchase price for Traffic Sign Management System:

\$ _____

Total purchase price for Option A - Street Light Pole and Traffic Signal Inventory:

\$ _____

Total purchase price for Option B – Sign Replacement:

\$ _____

Total purchase price for Option C – Video Capture:

\$ _____

Total purchase price for each additional Field Assessment Tracking Tool:

\$ _____

Annual Maintenance Fee:

\$ _____

Maintenance Start Date: _____

Maintenance End Date: _____

**CITY OF URBANA
TRAFFIC SIGN MANAGEMENT SYSTEM PROPOSAL
(CONTINUED)**

No additional charges over the total proposal price will be made during the specified Bid/Contract period. The City of Urbana is exempt from sales or federal tax; therefore, do not include in bid price.

Delivery of the item(s)/completion of work will be within _____ day(s) following notification of bid award.

State length and terms of warranty(s): _____

Is your proposal in compliance with specifications? ___ Yes ___ No
If answer is no, list deviations on the provided "Specification Deviation" Form.

Signed on this _____ day of _____, _____.

If an individual or partnership, all individual names of each partner shall be signed (attach additional sheet if required):

By.....: _____
Print Name: _____
Position/Title.....: _____
Company Name: _____
Address: _____
Address line 2: _____
Telephone.....: _____

If a corporation, an officer duly authorized should sign and attach corporate seal

PLACE CORPORATE SEAL HERE

By.....: _____
Print Name: _____
Position/Title.....: _____
Company Name: _____
Address: _____
Telephone.....: _____

CITY OF URBANA

**CITY OF URBANA
TRAFFIC SIGN MANAGEMENT SYSTEM PROPOSAL
(CONTINUED)
REFERENCES**

All bidders shall supply two names, addresses, telephone numbers and names of persons to contact as performance references, or current accounts.

Company Name:: _____
Address: _____
City & State.....: _____
Telephone Number.....: _____
Person to Contact: _____
Title/Position.....: _____

Company Name:: _____
Address: _____
City & State.....: _____
Telephone Number.....: _____
Person to Contact: _____
Title/Position.....: _____