



Finance Department
General Services Division

**REQUEST FOR QUALIFICATIONS (RFQ)
Specification No. 19-11282-C
FOR
ON-CALL TRANSPORTATION AND PARKING SURVEY CONSULTING SERVICES
PROPOSALS WILL NOT BE OPENED AND READ PUBLICLY**

Dear Proposer:

The City of Berkeley is soliciting written proposals from qualified firms or individuals for On-Call Traffic Survey Consulting Services). As a Request for Qualifications (RFQ) this is not an invitation to bid.

The project scope, content of Statement of Qualifications (SOQ), and vendor selection process are summarized in the RFQ (attached). Responses must be received no later than 2:00 pm, on **Tuesday, January 8, 2019**. All responses must be in a sealed envelope and have “**On-Call Transportation and Parking Survey Consulting Services**” and **Specification No. 19-11282-C** clearly marked on the **outer most mailing envelope**. In a separate, sealed envelope, fill out and include Exhibit A that is marked as “**On-Call Transportation and Parking Survey Consulting Services Fee Schedule**” and **Specification No. 19-11282-C**. Please submit one (1) unbound original and three (3) unbound copies of the responses, along with an electronic copy of the submittal on a thumb drive, as follows:

Mail or Hand Deliver To:
City of Berkeley
Finance Department/General Services Division
2180 Milvia Street, 3rd Floor
Berkeley, CA 94704

Responses will not be accepted after the date and time stated above. Incomplete responses that do not conform to the requirements specified herein will not be considered. Issuance of the RFQ does not obligate the City to negotiate or award a contract, nor is the City liable for any costs incurred by the proposer in the preparation and submittal of responses for the subject work. The City retains the right to award all or parts of this contract to several firms or individuals, to not select any of the firms or individuals, and/or to re-solicit Statements of Qualifications. The act of submitting a response is a declaration that the proposer has read the RFQ and understands all the requirements and conditions.

For questions concerning the anticipated work, or scope of the project, please **contact Beth Thomas, Principal Planner**, via email at bathomas@CityofBerkeley.info no later than **December 13**. Answers to questions will **not** be provided by telephone or email. Rather, answers to all question or any addenda will be **posted** on the City of Berkeley site at <http://www.cityofberkeley.info/ContentDisplay.aspx?id=7128>. It is the vendor’s responsibility to this site. For general questions concerning the submittal process, contact purchasing at 510-981-7320.

We look forward to receiving and reviewing your response.

Sincerely,
Shari Hamilton
General Services Manager

I. INTRODUCTION

The City of Berkeley (the “City”) intends to hire up to two (2) firms or contractor teams to perform traffic speed surveys, volume counts, parking surveys, and other transportation and parking data collection at various citywide locations on an as-needed basis. Under the direct supervision of the City’s Public Works Transportation Division staff, the contractor will provide on-call traffic survey services to the City.

II. SCOPE OF SERVICES

A. **Project Term and Contract Amount:** The on-call traffic survey consulting service on-call would be for a three year period beginning May 15th, 2019 and ending May 14th, 2022, with an option for two one-year extensions. The sum of contracts will not exceed a total of \$240,000 (about \$80,000 per year).

B. **Transportation Data Collection:** Collect traffic data for locations throughout the City of Berkeley as requested, in a timely manner, to perform any or all of the following, according to a schedule to be approved by Transportation Division staff:

- Perform 24-hour traffic volume counts on an hourly basis in each direction separately, categorized under 13 classifications (Motor Bikes, Cars & Trailers, 2 Axle Long, Buses, 2 Axle 6 Tire, 3 Axle Single, 4 Axle Single, < 5 Axle Double, 5 Axle Double, >6 Axle Double, <6 Axle Multiple, 6 Axle Multiple, >6 Axle Multiple) and also indicate vehicles not classified;
- Perform 24-hour speed machine counts on an hourly basis in each direction separately, to be grouped under the following mph groups: 1-14, 15-16, 17-18, 19-20, 21-22, 23-24, 25-26, 27-28, 29-30, 31-32, 33-34, 35-36, 37-38 and 39-999 mph;
- Perform intersection counts that will include turning movement volumes for motor vehicles and bicycles in addition to crossing counts for pedestrians;
- Perform “before” and “after” studies of crosswalk warning systems (rectangular rapid flashing beacons (RRFB), pedestrian hybrid beacons, flashing beacons, and in-pavement crosswalk lighting, per guidelines in Exhibit B, attached.
- Complete engineering and traffic radar speed surveys in accordance with the California Vehicle Code (CVC), Section 627 and in dry conditions, to allow legal use of radar for speed enforcement (except accident data); and
- Gather roadway segment speeds, observed by use of radar, laser or similar device as needed.
- Perform mode specific counts at identified locations that may include additional data collection, such as helmet use, sidewalk riding, gender, etc.
- Perform in-vehicle data collection, such as floating car studies, parking search time, traffic or transit reliability studies, etc.
- Conduct other data collection as specified by Transportation Division project managers.

C. **Transportation Counting Standards:** Traffic counts will be conducted in Berkeley as follows:

- **24-Hour Counts:** Conduct for at least two full days (48 hours) on Tuesday, Wednesday, or Thursday in both directions unless otherwise specified by the Transportation Division project manager. Record each direction separately.
- **Weekday Count:** Conduct on Tuesday, Wednesday, or Thursday. Counts should not be conducted on a Monday or a Friday unless otherwise specified by the Transportation Division project manager.
- **Weekend Count:** Conduct on Saturday and/or Sunday. Saturday counts are preferred when the purpose is to estimate weekend and recreational activity impacts.

- **AM Peak Period Count:** Eight (8) consecutive 15-minute intervals for two (2) hour period between 7:00 AM to 9:00 AM unless otherwise specified by the Transportation Division project manager.
- **Midday Peak Period Count:** Eight (8) consecutive 15-minute intervals for two (2) hour period between 11:30 AM to 1:30 PM unless otherwise specified by the Transportation Division project manager.
- **PM Peak Period Count:** Eight (8) consecutive 15-minute intervals for two (2) hour period between 4:00 PM to 6:00 PM unless otherwise specified by the Transportation Division project manager.
- **Turning Movement Counts:** A minimum of two (2)-hour counts summarized for each turning movement or crossing movement by 15-minute intervals (estimates based on extrapolation of a shorter counting period are not acceptable).
- **Radar Speed Data Collection Survey:** The roadway segment speeds will be observed and recorded by using a radar device to fully satisfy the methodology described in Caltrans Traffic Manual/Manual of Uniform Traffic Control Devices. Free flow speeds will be measured (at-least 100 observation per direction) during off-peak hour on typical weekday (Tuesday through Thursday) not including holidays or the day before or after a holiday. Typical off-peak weekday hours are 9:00 AM to 11:30 AM, 1:30 PM to 3:30 PM, and 7:00 PM to 10 PM. Data should be provided per attached Exhibit C “Speed Radar Survey Sample Sheet”.

D. Parking Data Collection and Analysis: Parking data collection services will include the following data collection measures, per Transportation Division staff approved methods and standards:

- **Parking Supply/Inventory:** Inventory is defined as the number of metered parking spaces on each block face or in an off-street parking lot. A metered space is denoted by the following characteristics:
 - On a block face (i.e., one side of a street)
 - Presence of a single space parking meter and in some cases parking “tees” on the street
 - Presence of pay & display pay station(s), and in some cases parking “tees” on the street
 - Parking lot
 - Space may or may not be numbered
 - Space may or may not be marked by special signage (i.e. City staff parking, disabled placard space, merchant/business space, etc.)

If discrete parking spaces are not denoted with parking “tees,” as is the case in some pay & display parking areas, a minimum the length of the metered area in feet will need to be provided. The City typically defines a parking space as being 22 feet in length in areas of contiguous curb (i.e., without driveways or curb cuts), or 18 feet in areas located adjacent to driveways or intersections (typically in residential areas).

- **Parking Occupancy:** Defined as the number of cars observed occupying the total amount of parking spaces on each on-street block face or parking lot.
- **Parking Duration/Length of Stay:** Parking occupancy, as well as some car characteristics (e.g., last four digits of license plate number) will be recorded to determine length of stay. Data can be collected in a number of time intervals (i.e. every 15 minutes of the hour, every hour, etc.).

- **Characteristics of Parked Vehicles:** Defined as recording specific attributes, e.g., presence of residential parking permit on vehicle bumper, presence of disabled placard, etc.
- E. Exclusions for Data Collection: Data collection must exclude holidays, vacation periods, and special events, unless otherwise specified by the Transportation Division project managers.
- Vendor will avoid collecting data under any abnormal operating conditions until the road segment returns to normal operating conditions. When data are intended to represent average or typical conditions, vendor will not collect data during inclement weather, holidays or University of California, Berkeley (UCB) vacations or during the first and last two weeks of the University's academic semester. Vendor will also avoid data collection during major sports events, concerts, or other major trip generators. Refer to the schedule for the City of Berkeley and the University to determine specific dates to avoid. Information on City holidays is available from City Clerk at (510) 981-6900 or by going to https://www.cityofberkeley.info/IT/Holiday_and_Reduced_Service_Days.aspx. Public parking meters holidays are found at the following link: https://www.cityofberkeley.info/Public_Works/Transportation/Meter_Holidays.aspx. Event listings for the City of Berkeley is available through the visitor's bureau at (510) 549-7040 or <https://www.visitberkeley.com/>. Event listings and holidays for UCB are available through University's Public Ceremonies office at (510) 642-3687 or by searching the various UCB websites (<https://registrar.berkeley.edu/calendar>, www.calbears.com, <https://events.berkeley.edu/>, etc.)
- F. Analysis of Data: The collected data shall be evaluated using the standard analysis method described in the Caltrans Traffic Manual. Intersection turning movements should include the peak hour summary by mode and peak-hour factors for motor vehicles Speed data will be studied to determine the average speed, 50th (median) percentile speed, 85th percentile, 10-mph pace, tabular summation frequency of the speed observed, standard deviation, cumulative speed distribution curve, date, time started, time ended, weather, direction, and road surface condition. Traffic data will be summarized into 24-hour, AM peak hour, Midday peak hour and PM peak hour values. Parking data shall be evaluated under methodology specified by City staff at the outset of data collection efforts. Other analysis will be specified by the project manager.
- G. Delivery of Data: All traffic data must be provided to the City in electronic form. Hard copy traffic data may be requested. The data must be in Adobe Acrobat and Microsoft Excel formats, which can be saved as a database file, and must conform to City staff requirements, which shall be provided to contractor prior to beginning a data collection project. Data shall be delivered no more than seven (7) business days following the conclusion of each data collection project unless otherwise agreed to by the Transportation Division project manager.
- H. Documentation: All data and all reports using data must document the source of the data used and the dates, days of the week, and times of the day of data collection. Any special data collected (e.g., holiday data, event data) also must specify date, day of week, hours of day, weather conditions, and the nature of the event. Each sheet of data must clearly show the date of the count and the period of the count, and the location of the count.
- I. Lists of Locations and Response Times: The City will submit the data collection requests to the contractor as individual locations or lists. The contractor is required to identify the guaranteed maximum number of workdays within which the data will be presented to the City for five (5) or fewer locations per request, and for each additional five (5) or fewer locations in the same request, on Exhibit A.

- J. Project Locations: The project locations are in the city limits of the City of Berkeley at various locations citywide.

III. SUBMISSION REQUIREMENTS

All Statements of Qualifications shall include the following information, organized as separate sections of the SOQ. The SOQ should be concise and to the point and should not exceed 30 pages.

A. Contractor Identification:

Provide the name of the contractor or lead firm, the firm's principal place of business, the name and telephone number of the contact person and company tax identification number. Provide a summary of the subconsultants, if applicable.

B. Firm/Contractor Team and San Francisco Bay Area Experience:

Provide a description of the firm and/or contractor team's general experience in transportation and parking data collection, particularly in the San Francisco Bay Area.

Provide a chart showing the names and assignments of all key personnel. The chart should include proposed lines of communication with City staff. Any proposed subconsultants should be clearly identified on the chart.

Provide a summary of each key staff person in the firm or contractor team who will be assigned to the project and background information demonstrating their capabilities and qualifications to perform the assigned task. For each individual, provide current professional registrations, related experience, educational background, and years of experience with the firm or team.

Provide a listing of at least five (5) projects of similar scope, which have been completed by the firm or contractor team within the past three (3) years. Each project listing should include a work description; the location; completion date; the contractor team members who worked on the project, and their role.

C. Client References:

Provide a minimum of five (5) client references. References should be California cities (preferably San Francisco Bay Area cities) or other large public sector entities that were completed within the past five (5) years. Provide the designated person's name, title, organization, address, telephone number, and the project(s) that were completed under that client's direction.

D. Work Understanding, Approach, and Quality Control:

This section of the SOQ should include a clear description of the Contractor's understanding of the work identified and state the approaches and methodologies which the contractor proposes to undertake in order to meet the stated objectives of the City. It should describe the firm or contractor team's demonstrated track record in meeting budgetary and scheduling requirements. Describe the Quality Assurance/Quality Control program the proposer has established or proposes to establish and utilize throughout this on-call.

E. Work Samples:

Provide no more than five (5) pages of legible work samples that demonstrate the clarity and breadth of data collected and summarized.

F. Contract Terminations:

If your organization has had a contract terminated in the last five (5) years, describe such incident. Termination for default is defined as notice to stop performance due to the vendor's non-performance or poor performance and the issue of performance was either (a) not litigated due to inaction on the part of the vendor, or (b) litigated and such litigation determined that the vendor was in default.

Submit full details of the terms for default including the other party's name, address, and phone number. Present the vendor's position on the matter. The City will evaluate the facts and may, at its sole discretion, reject the SOQ on the grounds of the past experience.

If the firm has not experienced any such termination for default or early termination in the past five (5) years, so indicate.

G. Exhibit A - Fee Schedule for Transportation and Parking Data Collection in a separate, sealed envelope:

Fill out the fee schedule shown in Exhibit A and submit it in a sealed envelope that is marked as "On-Call Transportation and Parking Survey Consulting Services Fee Schedule" and "Specification No. 19-11282-C". Fees should be inclusive of preparation of Excel spreadsheets, processing of the collected data, travel time and expenses, roadway tolls, parking fees, printing, postage, supplies, communications, computer time, supervision, and other out-of-pocket expenses, as these are non-reimbursable items.

IV. CONTRACTOR SELECTION PROCESS

Evaluation will include, but is not limited to the criteria below:

- A. Firm/Contractor Team and San Francisco Bay Area Experience (30 points)
- B. Client References (25 points)
- C. Work Understanding, Approach, and Quality Control (25 points)
- D. Work Samples (10 points)
- E. Overall quality of the response and conformance with RFQ requirements for content (10 points)

After a review of the proposals from the short listed respondents, the City may ask the proposers to make an oral presentation to answer any questions the City may have and to clarify their proposal. The City will then rank the proposals and review fee schedule from sealed envelopes from the selected proposers and will attempt to negotiate satisfactory contracts with them. If the City is unable to reach agreement with the selected respondents, the City will repeat the negotiation process with the next highest ranked respondent, and so on, if necessary.

The City reserves the right to reject any and all submissions.

V. PAYMENT

Invoices: Invoices must be fully itemized, and provide sufficient information for approving payment and audit. Invoices must be accompanied by receipt for services in order for payment to be processed. Mail invoices to the Project Manager and reference the contract number.

City of Berkeley
Accounts Payable
PO Box 700
Berkeley, CA 94701
Attn: Beth Thomas

Payments: The City will make payment to the vendor within 30- days of receipt of a correct and complete invoice.

VI. CITY REQUIREMENTS

A. Non-Discrimination Requirements:

Ordinance No. 5876-N.S. codified in B.M.C. Chapter 13.26 states that, for contracts worth more than \$3,000 bids for supplies or bids or proposals for services shall include a completed Workforce Composition Form. Businesses with fewer than five employees are exempt from submitting this form. (See B.M.C. 13.26.030)

Under B.M.C. section 13.26.060, the City may require any bidder or vendor it believes may have discriminated to submit a Non-Discrimination Program. The Contract Compliance Officer will make this determination. This applies to all contracts and all consultants (contractors). Berkeley Municipal Code section 13.26.070 requires that all contracts with the City contain a non-discrimination clause, in which the contractor agrees not to discriminate and allows the City access to records necessary to monitor compliance. This section also applies to all contracts and all consultants. **Bidders must submit the attached Non-Discrimination Disclosure Form with their proposal**

B. Nuclear Free Berkeley Disclosure Form:

Berkeley Municipal Code section 12.90.070 prohibits the City from granting contracts to companies that knowingly engage in work for nuclear weapons. This contracting prohibition may be waived if the City Council determines that no reasonable alternative exists to doing business with a company that engages in nuclear weapons work. If your company engages in work for nuclear weapons, explain on the Disclosure Form the nature of such work. **Bidders must submit the attached Nuclear Free Disclosure Form with their proposal.**

C. Oppressive States:

The City of Berkeley prohibits granting of contracts to firms that knowingly provide personal services to specified Countries. This contracting prohibition may be waived if the City Council determines that no reasonable alternative exists to doing business with a company that is covered by City Council Resolution No. 59,853-N.S. If your company or any subsidiary is covered, explain on the Disclosure Form the nature of such work. **Bidders must submit the attached Oppressive States Disclosure Form with their proposal.**

D. Conflict of Interest:

In the sole judgment of the City, any and all proposals are subject to disqualification on the basis of a conflict of interest. The City may not contract with a vendor if the vendor or an employee, officer or director of the proposer's firm, or any immediate family member of the preceding, has served as an elected official, employee, board or commission member of the City who influences the making of the contract.

Furthermore, the City may not contract with any vendor whose income, investment, or real property interest may be affected by the contract. The City, at its sole option, may disqualify any proposal on the basis of such a conflict of interest. **Please identify any person associated with the firm that has a potential conflict of interest.**

E. Berkeley Living Wage Ordinance:

Chapter 13.27 of the Berkeley Municipal Code requires that contractors offer all eligible employees with City mandated minimum compensation during the term of any contract that may be awarded by the City. If the Contractor is not currently subject to the Living Wage Ordinance, cumulative contracts with the City within a one-year period may subject Contractor to the requirements under B.M.C. Chapter 13.27. A certification of compliance with this ordinance will be required upon execution of a contract. The Living Wage rate is currently \$14.97 (if medical benefits are provided) or \$17.45 (if medical benefits are not provided). The Living Wage rate is adjusted automatically effective June 30th of each year commensurate with the corresponding increase in the Consumer Price Index published in April of each year. If the Living Wage rate is adjusted during the term of your agreement, you must pay the new adjusted rate to all eligible employees, regardless of what the rate was when the contract was executed.

F. Berkeley Equal Benefits Ordinance:

Chapter 13.29 of the Berkeley Municipal Code requires that contractors offer domestic partners the same access to benefits that are available to spouses. A certification of compliance with this ordinance will be required upon execution of a contract.

G. Statement of Economic Interest:

The City's Conflict of Interest Code designates "consultants" as a category of persons who must complete Form 700, Statement of Economic Interest, at the beginning of the contract period and again at the termination of the contract. The selected contractor will be required to complete the Form 700 before work may begin.

VII. OTHER REQUIREMENTS

A. Insurance

The selected contractor will be required to maintain general liability insurance in the minimum amount of \$2,000,000, automobile liability insurance in the minimum amount of \$1,000,000 and a professional liability insurance policy in the amount of \$2,000,000 to cover any claims arising out of the performance of the contract. The general liability and automobile insurance must name the City, its officers, agents, volunteers and employees as additional insureds.

B. Worker's Compensation Insurance:

A selected contractor who employs any person shall maintain workers' compensation insurance in accordance with state requirements. Sole proprietors with no employees are not required to carry Worker's Compensation Insurance.

(Worker's Compensation Insurance cannot be waived for any person who employs others.)

C. Business License

Virtually every contractor that does business with the City must obtain a City business license as mandated by B.M.C. Ch. 9.04. The business license requirement applies whether or not the contractor has an office within the City limits. However, a "casual" or "isolated" business transaction (B.M.C. section 9.04.010) does not subject the contractor to the license tax. Warehousing businesses and charitable organizations are the only entities specifically exempted in the code from the license requirement (see B.M.C. sections, 9.04.295 and 9.04.300). Non-profit organizations are granted partial exemptions (see B.M.C. section 9.04.305). Persons who, by reason of physical infirmity, unavoidable misfortune, or unavoidable poverty, may be granted an exemption of one annual free license at the discretion of the Director of Finance. (see B.M.C. sections 9.04.290).

Vendor must apply for a City business license and show proof of application to Purchasing Manager within seven days of being selected as intended contractor.

The Customer Service Division of the Finance Department located at 1947 Center Street, Berkeley, CA 94704, issues business licenses. Contractors should contact this division for questions and/or information on obtaining a City business license, in person, or by calling 510-981-7200.

D. Recycled Paper

All reports to the City shall be on recycled paper that contains at least 50% recycled product when such paper is available at a cost of not greater than ten percent more than the cost of virgin paper, and when such paper is available at the time it is required. If recycled paper is not available the Contractor shall use white paper. Written reports or studies shall be *printed on both sides of the page* whenever practical.

E. State Prevailing Wage

Certain labor categories under this project may be subject to prevailing wages as identified in the State of California Labor Code commencing in Section 1770 et. seq. These labor categories, when employed for any “work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work,” constitute a “Public Work” within the definition of Section 1720(a)(1) of the California Labor Code requiring payment of prevailing wages.

Wage information is available through the California Division of Industrial Relations web site at: http://www.dir.ca.gov/OPRL/statistics_and_databases.html

VIII. SCHEDULE (dates are subject to change)

<input type="checkbox"/> Issue RFQ to potential bidders:	11/30/18
<input type="checkbox"/> Questions Due	12/13/18
<input type="checkbox"/> Proposals due from potential bidders	1/08/19
<input type="checkbox"/> Proposer interviews (if needed)	1/25/19
<input type="checkbox"/> Complete Selection Process	2/01/19
<input type="checkbox"/> Council Approval of Contract (over \$50k)	March 2019
<input type="checkbox"/> Award of Contract	March 2019
<input type="checkbox"/> Sign and Process Contract	May 2019
<input type="checkbox"/> Notice to proceed	May 2019

Thank you for your interest in working with the City of Berkeley for this service. We look forward to receiving your Statement of Qualifications.

Attachments:

• Check List of Required items for Submittal	Attachment A
• Non-Discrimination/Workforce Composition Form	Attachment B
• Nuclear Free Disclosure Form	Attachment C
• Oppressive States Form	Attachment D
• Living Wage Form	Attachment E
• Equal Benefits Disclosure Form	Attachment F
• Right to Audit Form	Attachment G
• Insurance Endorsement	Attachment H
• Equal Benefits Certification of Compliance	Attachment I

Exhibits:

• Fee Schedule for transportation and parking data collection	Exhibit A
• General considerations to conduct crosswalk warning system studies	Exhibit B
• Speed radar survey sample sheet	Exhibit C

ATTACHMENT A

CHECKLIST

- Proposal describing service (one unbound original, three (3) unbound copies, and one (1) electronic copy on a thumb drive)
- Contractor Identification and Company Information
- Client References
- Work Samples

- Exhibit A – Completed fee schedule in its own sealed envelope separate from the proposal, marked as “**On-Call Transportation and Parking Survey Consulting Services Fee Schedule**” and **Specification No. 19-11282-C**

- The following forms, completed and **signed in blue ink** (attached):
 - Non-Discrimination/Workforce Composition Form Attachment B
 - Nuclear Free Disclosure Form Attachment C
 - Oppressive States Form Attachment D
 - Living Wage Form (*may be optional*) Attachment E
 - Equal Benefits Disclosure Form (*may be optional*) Attachment F

ADDITIONAL SUBMITTALS REQUIRED FROM SELECTED VENDOR(S) AFTER COUNCIL APPROVAL TO AWARD CONTRACT.

- Provide **original-signed in blue ink** Evidence of Insurance
 - Auto
 - Liability
 - Worker’s Compensation

- Right to Audit Form Attachment G

- Commercial General & Automobile Liability Endorsement Form Attachment H

- Equal Benefits Ordinance Certification of Compliance (EBO-1) Attachment I

- Berkeley Business License

For informational purposes only: Sample of Professional Services Contract can be found on the City’s website on the current bid and proposal page at the top of the page.

NON-DISCRIMINATION/WORKFORCE COMPOSITION FORM FOR NON-CONSTRUCTION CONTRACTS

To assist the City of Berkeley in implementing its Non-Discrimination policy, it is requested that you furnish information regarding your personnel as requested below and return it to the City Department handling your contract:

Organization: _____
 Address: _____ Business Lic.
 #: _____

Occupational Category: _____ (See reverse side for explanation of terms)	Total Employees		White Employees		Black Employees		Asian Employees		Hispanic Employees		Other Employees	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Official/Administrators												
Professionals												
Technicians												
Protective Service Workers												
Para-Professionals												
Office/Clerical												
Skilled Craft Workers												
Service/Maintenance												
Other (specify)												
Totals:												

Is your business MBE/WBE/DBE certified? Yes _____ No _____ If yes, by what agency? _____

If yes, please specify: Male: _____ Female: _____ Indicate ethnic identifications: _____

Do you have a Non-Discrimination policy? Yes: _____ No: _____

Signed: _____ Date: _____

Verified by: _____ Date: _____

City of Berkeley Contract Compliance Officer

Occupational Categories

Officials and Administrators - Occupations in which employees set broad policies, exercise overall responsibility for execution of these policies, or provide specialized consultation on a regional, district or area basis. Includes: department heads, bureau chiefs, division chiefs, directors, deputy superintendents, unit supervisors and kindred workers.

Professionals - Occupations that require specialized and theoretical knowledge that is usually acquired through college training or through work experience and other training that provides comparable knowledge. Includes: personnel and labor relations workers, social workers, doctors, psychologists, registered nurses, economists, dietitians, lawyers, systems analysts, accountants, engineers, employment and vocational rehabilitation counselors, teachers or instructors, and kindred workers.

Technicians - Occupations that require a combination of basic scientific or technical knowledge and manual skill that can be obtained through specialized post-secondary school education or through equivalent on-the-job training. Includes: computer programmers and operators, technical illustrators, highway technicians, technicians (medical, dental, electronic, physical sciences) and kindred workers.

Protective Service Workers - Occupations in which workers are entrusted with public safety, security and protection from destructive forces. Includes: police officers, fire fighters, guards, sheriffs, bailiffs, correctional officers, detectives, marshals, harbor patrol officers, and kindred workers.

Para-Professionals - Occupations in which workers perform some of the duties of a professional or technician in a supportive role, which usually requires less formal training and/or experience normally required for professional or technical status. Such positions may fall within an identified pattern of a staff development and promotion under a "New Transporters" concept. Includes: library assistants, research assistants, medical aides, child support workers, police auxiliary, welfare service aides, recreation assistants, homemaker aides, home health aides, and kindred workers.

Office and Clerical - Occupations in which workers are responsible for internal and external communication, recording and retrieval of data and/or information and other paperwork required in an office. Includes: bookkeepers, messengers, office machine operators, clerk-typists, stenographers, court transcribers, hearings reporters, statistical clerks, dispatchers, license distributors, payroll clerks, and kindred workers.

Skilled Craft Workers - Occupations in which workers perform jobs which require special manual skill and a thorough and comprehensive knowledge of the processes involved in the work which is acquired through on-the-job training and experience or through apprenticeship or other formal training programs. Includes: mechanics and repairpersons, electricians, heavy equipment operators, stationary engineers, skilled machining occupations, carpenters, compositors and typesetters, and kindred workers.

Service/Maintenance - Occupations in which workers perform duties which result in or contribute to the comfort, convenience, hygiene or safety of the general public or which contribute to the upkeep and care of buildings, facilities or grounds of public property. Workers in this group may operate machinery. Includes: chauffeurs, laundry and dry cleaning operatives, truck drivers, bus drivers, garage laborers, custodial personnel, gardeners and groundskeepers, refuse collectors, and construction laborers.

CITY OF BERKELEY
Nuclear Free Zone Disclosure Form

I (we) certify that:

1. I am (we are) fully cognizant of any and all contracts held, products made or otherwise handled by this business entity, and of any such that are anticipated to be entered into, produced or handled for the duration of its contract(s) with the City of Berkeley. (To this end, more than one individual may sign this disclosure form, if a description of which type of contracts each individual is cognizant is attached.)
2. I (we) understand that Section 12.90.070 of the Nuclear Free Berkeley Act (Berkeley Municipal Code Ch. 12.90; Ordinance No. 5784-N.S.) prohibits the City of Berkeley from contracting with any person or business that knowingly engages in work for nuclear weapons.
3. I (we) understand the meaning of the following terms as set forth in Berkeley Municipal Code Section 12.90.130:

"Work for nuclear weapons" is any work the purpose of which is the development, testing, production, maintenance or storage of nuclear weapons or the components of nuclear weapons; or any secret or classified research or evaluation of nuclear weapons; or any operation, management or administration of such work.

"Nuclear weapon" is any device, the intended explosion of which results from the energy released by reactions involving atomic nuclei, either fission or fusion or both. This definition of nuclear weapons includes the means of transporting, guiding, propelling or triggering the weapon if and only if such means is destroyed or rendered useless in the normal propelling, triggering, or detonation of the weapon.

"Component of a nuclear weapon" is any device, radioactive or non-radioactive, the primary intended function of which is to contribute to the operation of a nuclear weapon (or be a part of a nuclear weapon).

4. Neither this business entity nor its parent nor any of its subsidiaries engages in work for nuclear weapons or anticipates entering into such work for the duration of its contract(s) with the City of Berkeley.

Based on the foregoing, the undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity: _____

Contract Description/Specification No: **On-Call Transportation and Parking Survey Consulting Services/
Specification No. 19-11282-C**

CITY OF BERKELEY
Oppressive States Compliance Statement for Personal Services

The undersigned, an authorized agent of _____ (hereafter "Vendor"), has had an opportunity to review the requirements of Berkeley City Council Resolution No. 59,853-N.S. (hereafter "Resolution"). Vendor understands and agrees that the City may choose with whom it will maintain business relations and may refrain from contracting with those Business Entities which maintain business relationships with morally repugnant regimes. Vendor understands the meaning of the following terms used in the Resolution:

"Business Entity" means "any individual, firm, partnership, corporation, association or any other commercial organization, including parent-entities and wholly-owned subsidiaries" (to the extent that their operations are related to the purpose of the contract with the City).

"Oppressive State" means: **Tibet Autonomous Region and the Provinces of Aho, Kham and U-Tsang**

"Personal Services" means "the performance of any work or labor and shall also include acting as an independent contractor or providing any consulting advice or assistance, or otherwise acting as an agent pursuant to a contractual relationship."

Contractor understands that it is not eligible to receive or retain a City contract if at the time the contract is executed, or at any time during the term of the contract it provides Personal Services to:

- a. The governing regime in any Oppressive State.
- b. Any business or corporation organized under the authority of the governing regime of any Oppressive State.
- c. Any person for the express purpose of assisting in business operations or trading with any public or private entity located in any Oppressive State.

Vendor further understands and agrees that Vendor's failure to comply with the Resolution shall constitute a default of the contract and the City Manager may terminate the contract and bar Vendor from bidding on future contracts with the City for five (5) years from the effective date of the contract termination.

The undersigned is familiar with, or has made a reasonable effort to become familiar with, Vendor's business structure and the geographic extent of its operations. By executing the Statement, Vendor certifies that it complies with the requirements of the Resolution and that if any time during the term of the contract it ceases to comply, Vendor will promptly notify the City Manager in writing.

Based on the foregoing, the undersigned declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity: _____

Contract Description/Specification No.: **On-Call Transportation and Parking Survey Consulting Services/ Specification No. 19-11282-C**

I am unable to execute this Statement; however, Vendor is exempt under Section VII of the Resolution. I have attached a separate statement explaining the reason(s) Vendor cannot comply and the basis for any requested exemption.

Signature: _____ Date: _____

CITY OF BERKELEY
Living Wage Certification for Providers of Personal Services

TO BE COMPLETED BY ALL PERSONS OR ENTITIES ENGAGING IN A CONTRACT FOR PERSONAL SERVICES WITH THE CITY OF BERKELEY.

The Berkeley Municipal Code Chapter 13.27, Berkeley's Living Wage Ordinance (LWO), provides that contractors who engage in a specified amount of business with the City (except where specifically exempted) under contracts which furnish services to or for the City in any twelve (12) month period of time shall comply with all provisions of this Ordinance. The LWO requires a City contractor to provide City mandated minimum compensation to all eligible employees, as defined in the Ordinance. In order to determine whether this contract is subject to the terms of the LWO, please respond to the questions below. Please note that the LWO applies to those contracts where the contractor has achieved a cumulative dollar contracting amount with the City. Therefore, even if the LWO is inapplicable to this contract, subsequent contracts may be subject to compliance with the LWO. Furthermore, the contract may become subject to the LWO if the status of the Contractor's employees change (i.e. additional employees are hired) so that Contractor falls within the scope of the Ordinance.

Section I.

1. IF YOU ARE A FOR-PROFIT BUSINESS, PLEASE ANSWER THE FOLLOWING QUESTIONS

a. During the previous twelve (12) months, have you entered into contracts, including the present contract, bid, or proposal, with the City of Berkeley for a cumulative amount of \$25,000.00 or more?

YES ____ **NO** ____

If **no**, this contract is NOT subject to the requirements of the LWO, and you may continue to Section II. If **yes**, please continue to question **1(b)**.

b. Do you have six (6) or more employees, including part-time and stipend workers?

YES ____ **NO** ____

If you have answered, "**YES**" to questions **1(a)** and **1(b)** this contract **IS** subject to the LWO. If you responded "NO" to **1(b)** this contract **IS NOT** subject to the LWO. **Please continue to Section II.**

2. IF YOU ARE A NON-PROFIT BUSINESS, AS DEFINED BY SECTION 501(C) OF THE INTERNAL REVENUE CODE OF 1954, PLEASE ANSWER THE FOLLOWING QUESTIONS.

a. During the previous twelve (12) months, have you entered into contracts, including the present contract, bid or proposal, with the City of Berkeley for a cumulative amount of \$100,000.00 or more?

YES ____ **NO** ____

If no, this Contract is NOT subject to the requirements of the LWO, and you may continue to Section II. If yes, please continue to question **2(b)**.

b. Do you have six (6) or more employees, including part-time and stipend workers?

YES ____ **NO** ____

If you have answered, "**YES**" to questions **2(a)** and **2(b)** this contract **IS** subject to the LWO. If you responded "NO" to **2(b)** this contract **IS NOT** subject to the LWO. **Please continue to Section II.**

Section II

Please read, complete, and sign the following:

THIS CONTRACT **IS** SUBJECT TO THE LIVING WAGE ORDINANCE.

THIS CONTRACT **IS NOT** SUBJECT TO THE LIVING WAGE ORDINANCE.

The undersigned, on behalf of himself or herself individually and on behalf of his or her business or organization, hereby certifies that he or she is fully aware of Berkeley's Living Wage Ordinance, and the applicability of the Living Wage Ordinance, and the applicability of the subject contract, as determined herein. The undersigned further agrees to be bound by all of the terms of the Living Wage Ordinance, as mandated in the Berkeley Municipal Code, Chapter 13.27. If, at any time during the term of the contract, the answers to the questions posed herein change so that Contractor would be subject to the LWO, Contractor will promptly notify the City Manager in writing. Contractor further understands and agrees that the failure to comply with the LWO, this certification, or the terms of the Contract as it applies to the LWO, shall constitute a default of the Contract and the City Manager may terminate the contract and bar Contractor from future contracts with the City for five (5) years from the effective date of the Contract termination. If the contractor is a for-profit business and the LWO is applicable to this contract, the contractor must pay a living wage to all employees who spend 25% or more of their compensated time engaged in work directly related to the contract with the City. If the contractor is a non-profit business and the LWO is applicable to this contract, the contractor must pay a living wage to all employees who spend 50% or more of their compensated time engaged in work directly related to the contract with the City.

These statements are made under penalty of perjury under the laws of the state of California.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity: _____

Contract Description/Specification No: **On-Call Transportation and Parking Survey Consulting Services/ Specification No. 19-11282-C**

Section III

-
- **** FOR ADMINISTRATIVE USE ONLY -- PLEASE PRINT CLEARLY ****

I have reviewed this Living Wage Certification form, in addition to verifying Contractor's total dollar amount contract commitments with the City in the past twelve (12) months, and determined that this Contract IS / IS NOT (circle one) subject to Berkeley's Living Wage Ordinance.

Department Name

Department Representative

CITY OF BERKELEY
Equal Benefits Ordinance Disclosure Form

As a condition of being awarded a contract with the City of Berkeley, the selected Contractor/Vendor (“Contractor”) may be required, during the performance of the contract, to comply with the City’s non-discrimination provisions of the Equal Benefits Ordinance (“EBO”) as set forth in Berkeley Municipal Code, Chapter 13.29. The EBO requires that during the performance of a contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include, but are not limited to, health benefits, bereavement leave, family medical leaves, membership and membership discounts, moving expenses, retirement benefits, and travel benefits. A cash equivalent payment is permitted if an employer has taken all reasonable efforts to provide domestic partner’s with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used is if the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$25,000 or more
- Non-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements, and other construction projects in the amount of \$100,000 or more
- Lessees of public property, licensees, concessionaires, and franchises that generate \$350,000 or more in annual gross receipts
- Entities which receive a grant agreement of \$100,000 or more

Contractors who are subject to the EBO must certify to the City before execution of the contract by completing form EBO-1 that they are in compliance with the EBO or have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the Ordinance.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following situations:

- (1) until the first effective date after the first open enrollment process following the contract execution date, not to exceed two years if the Contractor submits evidence of engaging in reasonable efforts to comply with the EBO;
- (2) until administrative steps can be taken to incorporate nondiscrimination in benefits in the contractor’s infrastructure, not to exceed three months, unless extended at the discretion of the City Manager; and
- (3) until the expiration of a Contractor’s current collective bargaining agreement(s)

Compliance with the EBO

If a Contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the City agreement. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of five years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor, and pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of B.M.C. Chapter 13.29, the Contractor shall comply with this provision.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

Business Entity: _____

CITY OF BERKELEY
Right to Audit Form

The contractor agrees that pursuant to Section 61 of the Berkeley City Charter, the City Auditor's office may conduct an audit of Contractor's financial, performance and compliance records maintained in connection with the operations and services performed under this contract.

In the event of such audit, Contractor agrees to provide the Auditor with reasonable access to Contractor's employees and make all such financial, performance and compliance records available to the Auditor's office. City agrees to provide Contractor an opportunity to discuss and respond to/any findings before a final audit report is filed.

Signed: _____ Date: _____

Print Name & Title: _____

Company: _____

Contract Description/Specification No: **On-Call Transportation and Parking Survey Consulting Services/
Specification No. 19-11282-C**

Please direct questions regarding this form to the Auditor's Office, at (510) 981-6750.

CITY OF BERKELEY
Commercial General and Automobile Liability Endorsement

The attached Certificates of Insurance are hereby certified to be a part of the following policies having the following expiration dates:

Policy No.	Company Providing Policy	Expir. Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The scope of the insurance afforded by the policies designated in the attached certificates is not less than that which is afforded by the Insurance Service Organization's or other "Standard Provisions" forms in use by the insurance company in the territory in which coverage is afforded.

Such Policies provide for or are hereby amended to provide for the following:

1. The named insured is _____.
2. CITY OF BERKELEY ("City") is hereby included as an additional insured with respect to liability arising out of the hazards or operations under or in connection with the following agreement:
_____.

The insurance provided applies as though separate policies are in effect for both the named insured and City, but does not increase the limits of liability set forth in said policies.

3. The limits of liability under the policies are not less than those shown on the certificate to which this endorsement is attached.
4. Cancellation or material reduction of this coverage will not be effective until thirty (30) days following written notice to Sean Rose, Manager of Engineering, Department of Public Works, 1947 Center street, 4th Floor, Berkeley, CA. 94704
5. This insurance is primary and insurer is not entitled to any contribution from insurance in effect for City.

The term "City" includes successors and assigns of City and the officers, employees, agents and volunteers.

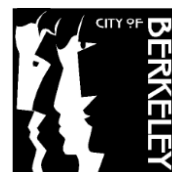
Insurance Company

Date: _____

By: _____
Signature of Underwriter's
Authorized Representative

To be completed by
 Contractor/Vendor

**Form EBO-1
 CITY OF BERKELEY**



CERTIFICATION OF COMPLIANCE WITH EQUAL BENEFITS ORDINANCE

If you are a **contractor**, return this form to the originating department/project manager. If you are a **vendor** (supplier of goods), return this form to the Purchasing Division of the Finance Dept.

SECTION 1. CONTRACTOR/VENDOR INFORMATION

Name:		Vendor No.:	
Address:	City:	State:	ZIP:
Contact Person:		Telephone:	
E-mail Address:		Fax No.:	

SECTION 2. COMPLIANCE QUESTIONS

- A. The EBO is inapplicable to this contract because the contractor/vendor has no employees.
 Yes No (If "Yes," proceed to Section 5; if "No," continue to the next question.)
- B. Does your company provide (or make available at the employees' expense) any employee benefits?
 Yes No
 If "Yes," continue to Question C.
 If "No," proceed to Section 5. (The EBO is not applicable to you.)
- C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee? Yes No
- D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee? Yes No
If you answered "No" to both Questions C and D, proceed to Section 5. (The EBO is not applicable to this contract.) If you answered "Yes" to both Questions C and D, please continue to Question E.
If you answered "Yes" to Question C and "No" to Question D, please continue to Section 3.
- E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of the employee? Yes No
If you answered "Yes," proceed to Section 4. (You are in compliance with the EBO.)
If you answered "No," continue to Section 3.

SECTION 3. PROVISIONAL COMPLIANCE

- A. Contractor/vendor is not in compliance with the EBO now but will comply by the following date:
 - By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor submits evidence of taking reasonable measures to comply with the EBO; or
 - At such time that administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor's infrastructure, not to exceed three months; or
 - Upon expiration of the contractor's current collective bargaining agreement(s).
- B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent?* Yes No

* The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.

SECTION 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statements, etc.) to verify that you do not discriminate in the provision of benefits.

SECTION 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Berkeley Municipal Code and in the terms of the contract or purchase order with the City.

Executed this _____ day of _____, in the year _____, at _____, _____
(City) (State)

Name (please print)

Signature

Title

Federal ID or Social Security Number

FOR CITY OF BERKELEY USE ONLY

- Non-Compliant (The City may not do business with this contractor/vendor)
- One-Person Contractor/Vendor Full Compliance Reasonable Measures
- Provisional Compliance Category, Full Compliance by Date: _____
- Staff Name(*Sign and Print*): _____ Date: _____

EXHIBIT A

Fee Schedule for Transportation and Parking Data Collection

Type of Data Collection	Cost/ Location or Hour (Weekdays)	Cost/ Location or Hour (Weekends/ Holidays/ After Hours)
Intersection Turning Movement with Pedestrian and Bicycle Counts		
Single 2-hour count – Manual per person		
Single 2-hour count – Camera		
Single 3-hour count – Manual per person		
Single 3-hour count – Camera		
Single 4-hour count – Manual per person		
Single 4-hour count – Camera		
Single 8-hour count – Manual per person		
Single 8-hour count – Camera		
2-hour AM & 2-hour PM count – Manual per person		
2-hour AM & 2-hour PM count – Camera		
2-hour AM, 2-hour MD & 2 hour PM count – Manual per person		
2-hour AM, 2-hour MD & 2 hour PM count – Camera		
2-hour manual bicycle only counts including helmet, gender, and sidewalk riding		
Radar Speed Survey (Two Directions, 100 Observations/location)		
Low Volume Roadway (Local Residential, Bike Blvd., and Bike Way)		
High Volume Roadway (Major, and Collector)		
Standard 24-hour ADT Machine Counts		
First day (two directions)		
Additional consecutive days (two directions)		
Speed Counts and Axle Classification Counts (Both)		
First day (two directions)		
Additional consecutive days (two directions)		
Pedestrian Crosswalk Survey/Driver Reaction Survey		
Per 50 observations at each location		
Parking Inventory, Occupancy, and Duration Counts		
Per manual observer by the observation hours		
Per camera by the observation hours		
Other Counts and Observations		
Per manual observer by the observation hours		
Per camera by the observation hours		
Guaranteed Data Collection and Report Response Times (in work days)		

NOTES:

- For manual intersection turning movement counts, a 2-person crew is required for any 4-way intersections with 12 combined lanes or more, or 8 combined lanes on T-intersections. Some intersections with less traffic may only require 1 person to complete.
- For manual pedestrian crosswalk survey/driver reaction survey, one observer is required for every 50 observations per location.
- No charge or additional fees for recounts.
- Electronic copy must accompany each hard copy of every count.
- Engineering and Traffic Surveys in Accordance with CVC Section 627.
- Radar Speed Survey includes field reconnaissance, collection of traffic data, preparation of Excel spreadsheet, data processing and data summation.
- It should be noted that the preparation of Excel spreadsheets, processing of the collected data, travel time and expenses, roadway tolls, parking fees, printing, postage, supplies, communications, computer time, supervision, and other out-of-pocket expenses are non-reimbursable items.

Signature

Company Name

Date

Print Name

EXHIBIT B

General Considerations to Conduct Crosswalk Warning System Studies

The data collection process requires two persons, a pedestrian and an observer/recorder. Supplies required include a distance-measuring wheel, one to two cans of spray chalk, a radar gun, two 2-way radios, and data collection worksheets.

Conjunction with Rectangular Rapid Flashing Beacon, Pedestrian Hybrid Beacon, In-Pavement Crosswalk Lighting, or Flashing Beacon Systems

Upon arriving at a site one of the field technicians uses the distance-measuring wheel and a can of spray chalk to mark lines on the roadway at 50-foot increments from the front edge of the crosswalk (use of an orange safety vest is recommended while in the street). The marked lines must be visible from the observer's location. The number of marks is location-dependent but there should be at least six (300 feet). Advance braking distance will vary with the prevailing vehicle speed and the proximity of adjacent signalized intersections.

The observer needs to be positioned at a location far enough back from the crosswalk to measure braking distance while still having full view of the crosswalk and pedestrian.

Step-Out Survey Procedure

The pseudo pedestrian and the recorder will communicate via radio in selecting a vehicle to survey.

The staged pedestrian never actually crosses the street (crosswalk). As a designated vehicle approaches the crosswalk, the pedestrian steps off the curb within five to six feet of the approaching vehicles' travel lane, making clear their desire to cross (without stepping into vehicle travel lanes). The driver's reaction is then recorded as described below. Driver reaction surveys should be conducted on random vehicles, typically the first vehicle in a platoon to ensure that there are no other conditions to react to other than the pedestrian. At locations with traffic signals at nearby intersections, it is not unusual to only obtain one or two data points per signal cycle. Alternatively, a team of three field technicians may be used with the third technician recording the pre-reaction speed of each vehicle tested during the step-out survey process.

In general, 100 separate data points should be collected for each direction of traffic at the crosswalk. The recommended number of sampling data points is a negotiable number and the city conducting the install should be given a free hand in determining a suitable base line sample appropriate for the city and the location.

A sample of a minimum number of radar speed surveys per direction should also be obtained at each location. The recommended number of speed survey data points is a negotiable number and the city conducting the install should be given a free hand in determining a suitable base line sample appropriate for the city and the location.

Goal: To reduce by ____% drivers who made "NO" reaction to the presence of pedestrians and had no visible speed change by _____(date).

Objective: To conduct a "Before" and "After" data collection study of the In-Pavement Crosswalk Lighting System installation site. These studies should include the pedestrian "Step-out" methodology.

NOTE: The "Before" and "After" studies will capture the following designations:

- "NO" = NO reaction or visible speed change with pedestrian "Step-off";
- "SL" = Driver SLowed without braking (let off of the accelerator) with "Step-off";
- "BR" = Driver applied BRakes with "Step-off";
- "ST" = Driver STopped with "Step-off."

The "Brake Distance" is the approximate distance in advance of the crosswalk that brake lights were first observed. The distance is between the front edge of the crosswalk and the front of the vehicle and is estimated using the chalk lines. Given the technique in estimating braking distance, there could be a 25-foot range (plus or minus) in tolerable errors. The "Brake Distance" should be recorded for either of the two "Driver Reaction" conditions (shown above) where brake lights were observable ("BR" and "ST." The "Brake Distance" was

averaged and presented only for the "ST" (yield to pedestrian) condition.

A "before and after" data collection and analysis process is employed to determine the impacts and effectiveness of the system. To ensure consistent data for conditions both before and after the installation of the Crosswalk Warning System, the surveys should be conducted under similar weather and lighting conditions as much as practical.

EXHIBIT C

Speed Radar Survey Sample Sheet

LOCATION NO: <input style="width: 50px;" type="text"/>																			
STREET <input style="width: 100%; height: 20px;" type="text"/>					DIRECTION <input style="width: 100%; height: 20px;" type="text"/>					WEATHER <input style="width: 100%; height: 20px;" type="text"/>									
CROSS-STREET <input style="width: 100%; height: 20px;" type="text"/>					DIRECTION FROM X-STREET: <input style="width: 100%; height: 20px;" type="text"/>														
OPERATOR <input style="width: 100%; height: 20px;" type="text"/>					DATE <input style="width: 100%; height: 20px;" type="text"/>					TIME BEGIN <input style="width: 100%; height: 20px;" type="text"/>					TIME END <input style="width: 100%; height: 20px;" type="text"/>				

	Number of Observations																														Observations	%	Cumul. Percent	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
>35																																0	0.0%	100.0%
35																																0	0.0%	100.0%
34																																0	0.0%	100.0%
33																																1	1.0%	100.0%
32																																0	0.0%	99.0%
31																																0	0.0%	99.0%
30																																2	2.0%	99.0%
29																																2	2.0%	97.0%
28																																5	5.0%	95.0%
27																																11	11.0%	90.0%
26																																6	6.0%	79.0%
25																																10	10.0%	73.0%
24																																9	9.0%	63.0%
23																																16	16.0%	54.0%
22																																10	10.0%	38.0%
21																																8	8.0%	28.0%
20																																9	9.0%	20.0%
19																																5	5.0%	11.0%
18																																5	5.0%	6.0%
17																																0	0.0%	1.0%
16																																0	0.0%	1.0%
15																																1	1.0%	1.0%
14																																0	0.0%	0.0%
13																																0	0.0%	0.0%
12																																0	0.0%	0.0%
11																																0	0.0%	0.0%
10																																0	0.0%	0.0%
>10																																0	0.0%	0.0%

85th Percentile Speed: 27	
Mean Speed: 23	
Median Speed: 23	
Mode Speed: 23	
10 mph Pace Speeds: 28-19	

Total	100
Max	16