

**INVITATION TO BID
FOR
TRAFFIC COUNT SERVICES**

Notice is hereby given that the Berkshire Regional Planning Commission will receive bids for services to perform vehicle traffic counts.

All bids must be original and delivered by hand, Fed Ex, or mail to the offices of the Berkshire Regional Planning Commission, 1 Fenn Street, Suite 201, Pittsfield MA 01201
Attention: Transportation Program Manager

Or by email to: info@berkshireplanning.org

Bids must be received by 5:00pm, Friday, June 22, 2018. Bid submittals should be clearly labeled "**Traffic Count Services Bid.**" Bids received after the time set for the bid opening will be rejected.

BRPC reserves the right to waive irregularities in bids, to reject any or all bids with or without cause, and to award the bid that it determines to be in the best interest of BRPC. BRPC does not discriminate on the basis of race, color, national origin, sex, religion, age, or handicap status in employment or provision of service.

Questions concerning this request should be directed to (413) 442-1521 x20 or to info@berkshireplanning.org .

The Berkshire MPO fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities and conducts its programs, services and activities in a nondiscriminatory manner.

BERKSHIRE COUNTY TRAFFIC COUNT SERVICES

GENERAL PROJECT DESCRIPTION

Under this project, traffic count data will be collected to supplement and update the Berkshire Regional Planning Commission's (hereinafter CLIENT) traffic count database. Traffic count data is to be collected at a minimum of 29 locations within Berkshire County, Massachusetts. Information on the count locations is provided on page 4 of this document.

STATEMENT OF WORK

The Consultant/Contractor shall be responsible for providing the Client with traffic count data for locations identified by the client. Collection of the traffic data will be performed using an automated data collection method. Prior to conducting counts, counting equipment shall be tested in accordance with FHWA requirements and test data shall be submitted to MassDOT for certification/acceptance prior to count data collection activities. Counts shall not occur on a holiday or a Monday or Friday. All counts shall be taken in accordance with the RPA Traffic Counting Procedures prepared by MassDOT (see attached copy).

SCHEDULE

The anticipated date for contract award is July 13, 2018. All counts and work performed under this contract must be completed and invoiced prior to September 21, 2018. Deliverables include count data (raw and adjusted), calculations and formatting of data submitted in hard copy and electronic media. Additional, detailed information on deliverables is included in the RPA Traffic Counting Procedures.

ADDITIONAL INFORMATION

For the bidder's reference, a copy of MassDOT's 2018 Counting Procedures is attached. Unless otherwise noted below, the bidder shall assume responsibilities assigned to the RPA (BRPC) in the Counting Procedures document will be the responsibility of the bidder. Clarifications to the Counting Procedures document follow:

Section 2 – Counter Accuracy

In the first paragraph, 'recorder accuracy certification' refers to a traffic count simulation test offered by some counter manufacturers. If the traffic counters do not have this testing ability, the manual certification procedures in the paragraphs that follow need to be met. The Client may accept an alternative testing method to determine counter accuracy subject to review and approval of MassDOT.

Section 6 – Count intervals and Duration

In all instances, a valid count will require at least 48 hours of consecutive data (excluding partial days). For bid pricing purposes, assume all counters will be placed for 7 days.

Section 7 – Roadway Functional Class

BRPC will provide this information to the contractor for use in the count report header.

Section 11 – Data Review

BRPC will provide information on prior year count data, if available. In your bid, please specify unit prices for conducting counts at 29 count locations. Recounts, if required per MassDOT guidelines, should be shown as a separate cost item.

Sections 4 and 14 – Data Transmittal

The contractor must provide count data in digital format (TraxPRO preferred) for transmittal to BRPC. The format must be compatible for direct upload to Midwestern Software's website which hosts MassDOT's traffic count data.

Other Items

Once BRPC and the contractor have finalized the proposed count schedule, BRPC will transmit this schedule to the appropriate Police and Highway Departments along with the contractor's contact information. Local officials will be instructed to contact the contractor directly should the need arise to modify schedules.

BRPC will secure the necessary permit from MassDOT District 1 for counts to be conducted on state highways.

Bid Content

Please include in your bid price costs to complete the following tasks:

Per MassDOT specifications, complete traffic counts at 29 locations. For purpose of calculating the bid price, assume all 29 locations will require vehicle classification data and will be on two lane roadways.

Costs should include the time associated with equipment validation/testing and count report preparation and transmittal, though it is not necessary to itemize these costs in your bid.

Bids should specify costs associated with required recounts as a separate item.

For informational purposes, bids should contain unit costs for counts as they vary based on count type and roadway type. As an example, unit costs should be shown for:

- Classification counts for 4 lane facilities
- Classification counts for 2 lane facilities
- Standard two directional counts for 4 lane facilities
- Standard two directional counts for 2 lane facilities

2018 BRPC TRAFFIC COUNT LOCATIONS

City/Town	Route or Street	Location	Functional Classification	Surface Width (ft)
ADAMS	FISK ST	EAST OF WEST RD	U6	19
BECKET	ROUTE 20	AT CHESTER T.L.	R3	24
BECKET	RTE. 8 & 20	EAST OF MASS.PIKE	R3	24
CHESHIRE	STEWART WHITE RD	600 FT N OF ROUTE 116/ SAVOY RD	R0	10
CLARKSBURG	RTE. 8	AT VERMONT S.L.	R5	24
CLARKSBURG	RTE. 2/ MOHAWK TRAIL	AT NORTH ADAMS C.L.	R2	24
DALTON	ROUTE 9	AT WINDSOR T.L.	R2	36
DALTON	WASHINGTON MOUNTAIN RD	600 FT S OF ASHLEY WAY	U6	21
GREAT BARRINGTON	BROOKSIDE RD	EAST OF ROUTE 7	U0	17
HANCOCK	ROUTE 43	AT NEW YORK S.L.	R5	24
LEE	PARK ST	EAST OF MAIN ST	U2	26
LENOX	HOLMES RD	AT PITTSFIELD C.L.	U5	20
NORTH ADAMS	RTE. 8	AT ADAMS T.L.	U2	48
NORTH ADAMS	MASS.AVE	EAST OF ROBERTS DR.	U5	24
NORTH ADAMS	CHURCH ST	SOUTH OF DAVENPORT ST.	U6	22
NORTH ADAMS	MARSHALL ST	BTWN ST.ANTHONY & CENTER STREET	U6	24
OTIS	ROUTE 23	AT BLANFORD T.L.	R6	20
PERU	MIDDLEFIELD RD	AT MIDDLEFIELD T.L.	R6	20
PERU	ROUTE 143	AT WORTHINGTON T.L.	R5	24
PITTSFIELD	ROUTE 9	AT DALTON T.L.	U2	24
PITTSFIELD	ROUTE 9	NORTH OF ROUTE 20	U2	24
PITTSFIELD	WEST ST	WEST OF GOVERNMENT DR	U5	30
PITTSFIELD	GOVERNMENT DR	BETWEEN WEST ST AND DEWEY AVE	U6	26
PITTSFIELD	WEST ST	WEST OF HURLBUT ST	U5	40
WILLIAMSTOWN	RTE. 43	NORTH OF IDE RD.	U5	22
WILLIAMSTOWN	RTE. 2	EAST OF COLE AVE.	U2	24
WINDSOR	ROUTE 9	AT CUMMINGTON T.L.	R2	24
WINDSOR	RTE. 8A & 9	WEST OF DALTON RD.	R2	36
WINDSOR	RTE. 9	1.9km EAST OF RTE. 8A	R2	24

2018 RPA TRAFFIC COUNTING PROCEDURES

The following Traffic Counting procedures are to be followed by each Regional Planning Agency:

- 1) Each RPA shall contact the MassDOT District office in their region to obtain any required permits prior to installing traffic counting equipment on state owned roadways. Installed traffic recorders on all roadways shall be clearly labeled with the name of the equipment agency/owner (RPA/consultant) and a phone contact number.
- 2) The Federal Highway Administration (FHWA) requires that all equipment used to gather traffic data for the Traffic Monitoring System for Highways (TMS/H) shall be tested prior to commencing the yearly program. Data collected with equipment that does not meet the following test requirements will not be accepted. Submitted recorder accuracy certification with an approved traffic counter tester is an acceptable alternative to the below testing requirements.
 - Traffic recorder axle (not vehicle) volumes shall be tested against manual axle volumes for a minimum of two consecutive intervals per recorder. It is not necessary to set the recorder for a classification count.
 - Submit a spreadsheet to MassDOT at the start of the season showing the counter ID #, manual volume, recorder volume, and % error for each interval. $\% \text{ Error} = (\text{manual volume minus recorder volume}) / \text{Manual volume} \times 100$.
 - Recorders showing a difference in axle volumes < 10% compared to the manual axle volumes for each interval are acceptable. Recorders that fail the test shall be repaired and tested again. MassDOT must accept the test and retest results prior to that recorder being used to collect MassDOT traffic counts.
- 3) Exact field locations and the count install/removal dates are to be uploaded to the GIS Traffic Data map via a phone application. <http://massdot.maps.arcgis.com/home/index.html>
- 4) The data file for each collected traffic count should include the tested & accepted recorder ID number. A separate listing (kept on file in your agency) is acceptable if your traffic recorders & software does not have that option. Electronic data shall be in a format that can be submitted and uploaded to the Midwestern software website database (mhd.ms2soft.com).
- 5) Ensure that the MassDOT Station Number is used for the count data file name and is programmed into the recorder if possible. Stay as close to the MassDOT location description as possible. An explanation shall be submitted in writing (via email) if any MassDOT program location cannot be counted in the current season for some reason (construction, etc.) at the specified location. Any current season incomplete MassDOT program counts shall be counted in the following year after the issue (construction, etc.) has been resolved. Maps or sketches of count locations may be faxed to Statewide Traffic Data Collection for clarification.
- 6) 60-minute or shorter data collection intervals (15 min, etc) can be used for a minimum of 48 hours (consecutive preferred) of weekday (Tuesday thru Thursday preferred) directional data. Each direction should be counted during the same time period. All uploaded counts shall have only full 60-minute intervals and full 24 hour periods. Any first or last interval partial hour data should not be included in the uploaded data.
- 7) The RPA shall input the below listed **Federal** "Functional Class" code, the "SF Group" (seasonal factor group), the "AF Group" (axle factor group), and the "Rural/Urban" designation for any RPA city/town (non-MassDOT program) counts uploaded to MS2.
 - 1 = Interstate
 - 2 = Principal Arterial – Other Freeways & Expressways
 - 3 = Principal Arterial - Other
 - 4 = Minor Arterial
 - 5 = Major Collector
 - 6 = Minor Collector
 - 7 = Local

- 8) Route numbers and/or street names should be used in descriptions, whenever possible, for counts other than MassDOT coverage counts. One-way counts should be labeled as such and include the direction on the MS2 website.
- 9) Traffic counts should be evenly spaced throughout the counting season. Schedule the counts so they are not taken during an event that would affect the normal traffic flow (Legal holidays, local fairs, concerts, traffic detours, etc.). Recreational area counts should be taken during the same time frame as previous years for better historical comparisons and growth trends.
- 10) Classification counts shall be done at all MassDOT requested locations if possible. Class counts shall be done with a separate recorder & hose setup for each lane of traffic unless the recorder is specifically designed to accurately class multiple lanes. Class counts with less than 10 % “unidentified” vehicles are acceptable and the percentages for the FHWA 13 class typology categories shall be reviewed (each lane, each direction, and totals) for count location appropriateness. The recorder classification column headings shall be set up to agree with the attached 13 FHWA classification categories. Volume data shall be created from the classification data in the MS2 website.
- 11) Review the collected data (including MS2 upload QC checks) and conduct recounts of bad data as necessary. Compare the count data with prior year data at that location on the MS2 website (mhd.ms2soft.com). If the count varies significantly from previous years or has one direction significantly higher than the other, an explanation for the change should be furnished.
- 12) Contact MassDOT Traffic Data Collection (Steve O’Neill) if you believe a MassDOT program count needs to be edited (incorrect map location plot, description, FC, etc.) on MS2. MassDOT will review the location and make any appropriate edits since the RPA’s do not have administration privileges to modify the MassDOT location parameters.
- 13) Unfactored traffic counts shall be uploaded to MS2 on a regular basis during the counting season. All counts shall be uploaded to MS2 by the end of the year. This applies to both the MassDOT traffic program counts and other RPA city/town counts. Turning movement counts are to be uploaded via the “TMC” button located at the top of the “TCDS” home page.
- 14) A file naming convention was developed for non-MassDOT program counts to facilitate system searches and custom queries. The MS2 location ID should be your User Name (RPAxx), a dash, the city/town number, a dash, and then your own designation. The city/town designation numbers are in the attached excel listing. As an example, a count done by Old Colony (RPA09) in Abington (City # 001) for RPA count name/number xxxxxxxxxxxxxx would have the location ID in MS2 as RPA09-001-xxxxxxxxxxxx. Note that the file name can be up to a maximum of 25 characters.
- 15) Uploaded counts are QC checked with the results put in the “Count Group Assign List” on the MS2 Admin page. Data without errors can be “Auto Assigned” by the RPA to push them into the database. The RPA shall review and resolve any data with errors codes generated by MS2. This involves assigning data deemed good, deleting data deemed bad, renaming/re-uploading files to agree with the correct “location ID” (error code 1), etc..
- 16) At the completion of the yearly program, all MassDOT Traffic Count Program counts and other RPA City or Town counts should be archived electronically by the RPA (separately from the MS2 website www.ms2soft.com).

Below is the contact information (email preferred) for questions regarding the RPA traffic Counting program or procedures:

Steven O’Neill
Statewide Traffic Data Collection
Mass Department of Transportation - Highway Division
10 Park Plaza - Room 7410
Boston, Ma 02116 – 3973
Email: Steven.D.ONeill@dot.state.ma.us
Concord phone: (978) 287-6117 (Boston: 857-368-8919)
Concord fax: (978) 287-6118