

## CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

	REQUISITION NUMBER		DUE DATE <del>XXXXXXXXXX</del> <del>XXXXXXXXXX</del> <del>XXXXXXXXXX</del>
MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)	
DESCRIPTION			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL  Check the appropriate Tier in the box below		<b>CONSULTANT:</b> Provide only checked items below in proposal	
<input type="checkbox"/> <b>TIER I</b> (\$25,000-\$99,999)	<input type="checkbox"/> <b>TIER II</b> (\$100,000-\$250,000)	<input type="checkbox"/> <b>TIER III</b> (>\$250,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Understanding of Service
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Innovations</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	<input type="checkbox"/>	Quality Assurance/Quality Control
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site p=inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	<input type="checkbox"/>	Presentation
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) ( <b>No Resumes</b> )	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP <b>not including key personnel resumes.</b> Resumes limited to 2 pages per key staff personnel.

**PROPOSAL AND BID SHEET EMAIL ADDRESS** – [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov)

### GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

**5100D** – Request for Proposal Cover Sheet

**5100J** – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

**(These forms are not included in the proposal maximum page count.)**

**REQUEST FOR PROPOSAL**

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest (Consultant/Vendor Selection Guidelines for Services Contracts" and "Guideline for Completing a Low Bid Sheet(S)\*, if a low bid is involved as part of the selection process. **Reference Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services >Vendor/Consultant Selections.**

**RFP SPECIFIC INFORMATION**

BUREAU OF HIGHWAYS  BUREAU OF TRANSPORTATION PLANNING  OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO  YES DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

**Prequalified Services** – See page \_\_\_\_ of the attached Scope of Services for required Prequalification Classifications.

**Non-Prequalified Services** – If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **Form 5100J is required with Proposal for firms not currently prequalified with MDOT**

**Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**For a cost plus fixed fee contract**, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

**Qualification Review / Low Bid** – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

**Best Value** – Use Consultant/Vendor Selection Guidelines, See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

**Low Bid** (no qualifications review required – no proposal required.) See Bid Sheet Instructions below for additional instructions.

**BID SHEET INSTRUCTIONS**

Bid Sheet(s) must be submitted in accordance with the "Guidelines for Completing a Low Bid Sheet(s)\* (available on MDOT's website). Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the email address: [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov). Failure to comply with this procedure may result in your bid being rejected from consideration.

**NOTIFICATION  
MANDATORY ELECTRONIC SUBMITTAL**

**Proposals submitted for this project must be submitted electronically.**

**The following are changes to the Proposal Submittal Requirements:**

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section
  
- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

**The following are Requirements for Electronic Submittals:**

- Proposals must be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include “N/A” after the bookmark title.  
**Example:** Understanding of Service – N/A
- Proposals must be assembled and saved as a single PDF file
- PDF file must be 5 megabytes or smaller
- PDF file must be submitted via e-mail to [MDOT-RFP-Response@michigan.gov](mailto:MDOT-RFP-Response@michigan.gov)
- MDOT's requisition number and company name must be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX\_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals must be *received* by MDOT on or before the due date and time specified in each RFP

**If the submittals do not comply with the requirements, they may be determined unresponsive.**

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time.  
**Consultants are responsible for ensuring the MDOT receives the proposal on time.**

**\*\*Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response\*\***

**Required Bookmarking Format:**

- I. Request for Proposal Cover Sheet Form 5100D
  - A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
- II. Understanding of Service
  - A. Innovations
- III. Qualifications of Team
  - A. Structure of Project Team
    - 1. Role of Firms
    - 2. Role of Key Personnel
  - B. Organization Chart
  - C. Location
- IV. Quality Assurance / Quality Control Plan
- V. Resumes of Key Staff
- VI. Pricing Documents/Bid Sheet (if applicable)

**2/14/12**

**Michigan Department of Transportation**  
**SCOPE OF SERVICE**  
**FOR**  
**INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

**PROJECT 1**

**CONTROL SECTION:** 33014

**JOB NUMBERS:** 110451, 110452, and 110453

**LOCATION:** Van Wagoner Building, Lansing, MI

**PROJECT 2**

**CONTROL SECTION:** 84913

**JOB NUMBERS:** 116272, 116277, and TBD

**LOCATIONS:** Grand Region Office, Grand Rapids, MI

**PROJECT'S 1 & 2**

**PROJECT DESCRIPTION:** Provide qualified personnel to support the Statewide Transportation Operations Center (STOC) and West Michigan Transportation Operations Center (WMTOC) Control Room Operations core functions of high quality traffic monitoring, planned and unplanned incident management, traffic information collection and dissemination, operations improvement activities, data collection, and coordination with local agencies and organizations.

The Consultant Responsibilities, as outlined below, are intended to assist MDOT in the continuing development, advancement, and excellence of ITS operations in Michigan; and further the objectives of MDOT in meeting the overall goals and objectives of the MDOT ITS Strategic Plan, MDOT region-specific Strategic Plans, and the overall MDOT Strategic Plan.

**Up to two Consultants may be selected for this work.**

**PRIMARY PREQUALIFICATION CLASSIFICATION:**

ITS-Design & System Manager

**SECONDARY PREQUALIFICATION CLASSIFICATION:**

Safety Studies  
Simple Traffic Signal Operations

**ANTICIPATED SERVICE START DATE:** February 1, 2013

**ANTICIPATED SERVICE COMPLETION DATE:** November 30, 2015

**DBE REQUIREMENT:** N/A

**MDOT PROJECT MANAGERS:**

***Project 1 – Statewide TOC:***

Lee Nederveld  
ITS Operations Engineer  
P.O. Box 30050  
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Lansing, MI 48909  
Phone: 517-335-5317  
Fax: 517-335-2861  
E-mail: [NederveldL@michigan.gov](mailto:NederveldL@michigan.gov)

***Project 2 – West Michigan TOC:***

Suzette Peplinski  
Traffic Safety and Operations Engineer  
Grand Region Office  
1420 Front Ave., NW  
Grand Rapids, MI 49504  
Phone: 616-451-8448  
Fax: 616-451-0707  
E-mail: [peplinskis@michigan.gov](mailto:peplinskis@michigan.gov)

The Consultant shall contact each Project Manager prior to beginning any work on the project.

The Michigan Department of Transportation (MDOT) seeks a qualified Consultant to provide Control Room Operations support at the Statewide Transportation Operations Center (STOC), which is located in the Van Wagoner Building, 425 W. Ottawa St., Lansing, MI 48933; and at the West Michigan Transportation Operations Center (WMTOC), which is located at the Grand Region Office, 1420 Front Ave., NW, Grand Rapids, MI 49504.

## **GENERAL REQUIREMENTS:**

The Consultant shall furnish all services and labor necessary to conduct and complete the services described herein. The Consultant shall also furnish all materials, equipment, supplies, and incidentals necessary to perform the Services (other than those designated in writing to be furnished by the Department), and check and/or test the materials, equipment, supplies, and incidentals as necessary in carrying out this work. The Services shall be performed to the satisfaction of the Department consistent with applicable professional standards.

The Services described herein are financed with public funds. The Consultant shall comply with all applicable Federal and State laws, rules, and regulations. The Consultant shall perform field operations in accordance with MIOSHA regulations and accepted safety practices. The Consultant staff shall conduct themselves with professionalism in carrying out their duties.

The Consultant will notify the Project Manager, in writing, prior to any personnel changes from those specified in the Consultant's original approved proposal. Any personnel substitutions are subject to review and approval of the Project Manager.

At the request of the Department, the Consultant, during the progress of the Services, shall furnish information or data relating to the Services described herein that may be required by the Department to enable it to carry out or to proceed with related phases of the Project not described herein, or which may be necessary to enable the Department to furnish information to the Consultant upon which to proceed with further Services.

STOC and WMTOC control room operations are continually evolving to further improve the effectiveness of the operation to meet the needs of transportation users throughout Michigan. The Consultant shall incorporate processes and practices consistent with good engineering practice to continue these operational improvements over the duration of the contract.

## **GENERAL INFORMATION:**

STOC currently provides primary coverage for the Bay, North, Southwest, Superior, and University regions of MDOT. In addition, STOC serves as a backup operations center for SEMTOC and WMTOC, and provides primary coverage for the Grand Region when WMTOC is not open. The infrastructure is connected to the workstations at STOC via a variety of communications paths. The control room currently includes four computer workstations with monitors, a video wall, two 800 MHz emergency radios, and other audio/video equipment.

WMTOC currently provides coverage for the Grand Region of MDOT. WMTOC's existing field infrastructure includes 56 traffic cameras, 27 Dynamic Message Signs (DMS), 112 microwave vehicle detectors (MVD), and 4 Variable Speed Signs (VSS). The infrastructure is connected to the workstations at the TOC via a variety of communications paths. The control room currently includes four computer workstations with monitors, a vehicle detection system workstation, a laptop with connection to view the City of Grand Rapids signal control system, which also

controls MDOT trunkline signals, an 800 MHz emergency radio, police scanner, and other audio/video equipment. Annual reports and monthly performance reports from WMTOC are available at: [www.michigan.gov/its](http://www.michigan.gov/its) then click on “West Michigan.”

Telephone, in-person, and electronic communication with field personnel, public safety agencies, and other transportation facilities extend the reach of the MDOT control room operations. Equipment within the control room office will be provided by MDOT.

### **ADDITIONAL INFORMATION:**

MDOT is currently working on several projects/programs that will affect the TOC operations within the contractual timeframe.

MDOT is in the process of implementing statewide ATMS software. Additional devices are continually being added to the system, and as a result the number of devices managed by the TOCs continues to increase. Consultant staff will need to adjust to these changes as they occur, and may be requested to assist in testing of the software.

Daily coordination between STOC, WMTOC, and the Southeast Michigan TOC (SEMTOC) in Detroit is required and procedures will be updated as necessary. STOC provides after-hours backup to WMTOC, so effective communication between these centers is particularly vital.

Control Room coverage will continue to be evaluated for providing quality coverage for traffic operations. Operational hours and CRO staffing levels may be modified by MDOT as appropriate.

### **CONSULTANT RESPONSIBILITIES – STATEWIDE TOC (PROJECT 1):**

#### **Operations Schedule**

The STOC Control Room is operational 24 hours per day, 7 days per week, 365 days per year, including all holidays. The Consultant shall provide a minimum of one Control Room Operator (CRO) at all times, except as noted below.

During peak travel times, which are noted below, the Consultant shall provide a minimum of two CROs. One of the two operators can be the Operations Supervisor, provided that their primary task during these time periods is operations. Peak travel times shall be:

- Monday – Friday (excluding holidays): 6:30am – 9:00am
- Monday – Thursday (excluding holidays): 3:30pm – 6:00pm
- Friday (excluding holidays): 3:30pm – 8:00pm
- Sunday (or Monday of holiday weekends): 2:00pm – 8:00pm

In addition, the Consultant may be requested to provide additional staff for special events, inclement weather, or any other special situation as determined by MDOT.

MDOT reserves the right to operate the control room for any hours with its own personnel, or have personnel supplement the Consultant staff, at any time during the contract.

## **Staffing**

The Consultant shall have the responsibility to employ, train, schedule, and supervise all personnel. The Consultant shall ensure that all personnel have sufficient skill and expertise to properly perform the work assigned to them. The staffing descriptions and tasks given below are intended to give an overview of each position, but are in no way intended to be an exhaustive or complete list of the duties entailed.

### *Project Manager*

The Consultant shall provide a Consultant Project Manager (Consultant PM). The Consultant PM shall have excellent communication skills, and the ability and willingness to be flexible and responsive. The Consultant PM will have ultimate responsibility for all Consultant staff and for ensuring the overall success of the project.

### *Operations Manager*

The Consultant shall provide an Operations Manager (OM). This position is responsible for maintaining the day-to-day operations of STOC. The OM shall work closely with the MDOT Project Manager (MDOT PM), and will be the primary point of contact for MDOT. The OM shall be responsible for the timely and successful completion of all tasks assigned by the MDOT PM, including tasks assigned to the Operations Supervisor and other Consultant staff. The OM shall provide feedback to the MDOT PM on the status of the operation and make suggestions for improvement as appropriate. The OM and Consultant PM positions may be combined into one position, however, it must be mutually agreed by both the Consultant and MDOT that combining the positions is to the ultimate benefit of the operation.

### *Operations Supervisor*

The Consultant shall provide an Operations Supervisor (OS). This position will report to the OM, however may also accept tasks from the MDOT PM. The OS will maintain day-to-day oversight of control room activities, scheduling, and operations tasks. The OS will have the responsibility of general organization of control room activities and keeping appropriate personnel informed of such activities. The OS shall be fully trained as a Control Room Operator and be capable of performing all duties. In addition, the OS shall be responsible for the training of all new Consultant staff, whether such training occurs by the OS or is delegated to others.

### *Control Room Operators*

The Consultant shall provide Control Room Operators (CROs) to provide coverage for all required operational hours and staffing levels. The Consultant may utilize a combination of full-

time and part-time CROs in order to meet the needs of the operation. Staffing changes, including the exact number of full-time and part-time CROs, shall be approved in writing by the MDOT PM prior to implementation.

CROs will be responsible for performing the day-to-day tasks of STOC operations in a timely and accurate manner. This includes, but is not limited to, the following duties:

- Traffic monitoring and camera control.
- Incident and congestion detection and verification.
- Dynamic Message Sign (DMS) messaging.
- Variable Speed Sign (VSS) adjustments.
- High impact traffic advisory notifications.
- Traffic information dissemination via telephone, fax, and email.
- Entering incident data and maintaining incident records and documentation.
- Documenting daily activities, such as:
  - Call log updates.
  - DMS message logs.
  - Communication logs.
  - Shift reports.
- Providing summaries of activity logs, incident reporting, and other control room activity as needed.
- Reviewing and verification of traveler information posted on MDOT and local public websites, including travel time information.
- Monitoring media traffic broadcasts for applicable information.
- Monitoring police radio and 800 MHz radio traffic for applicable information.
- Communicating with the Michigan State Police (MSP), county and local police dispatches, and other public safety agencies for effective incident management.
- Communicating with MDOT personnel on a regular basis.
- Detecting, reporting, and tracking ITS infrastructure maintenance issues.
- Assisting with tracking and reporting ITS device issues during installation projects.
- Following up on incidents to help ensure safe and effective operation of the highway system.
- Advanced Traffic Management System (ATMS) system monitoring and operation.
- Monitoring and reporting on weather information as it affects roadway operations.
- Maintaining access control, facilitating tours, managing safety message schedule, and related duties.
- Other tasks as assigned by the OS, OM, or MDOT PM.

### Support Personnel

Support personnel, including specialists, subject matter experts, and trainers, may be provided at the request of MDOT by the Consultant in order to meet the needs of the operation. All hours charged to the project by support personnel shall be approved in writing by the MDOT PM in advance.

### Staff Requirements

All staff shall pass a pre-employment drug test and security background check. Staff provided by the Consultant must also meet the following minimum requirements:

- Operations Supervisor
  - Associate's Degree or equivalent.
  - 2 years of relevant experience in TOC and traffic operations, as approved by the MDOT PM.
- Control Room Operator
  - Associate's Degree or equivalent, OR, relevant experience in TOC operations, traffic operations, emergency dispatch, or a related field, as approved by the MDOT PM.
  - Proficient communication skills (oral and written), computer and interpersonal skills, and be capable of performing duties with minimum supervision.
- Support Personnel
  - Relevant experience as required for the tasks to be performed, as approved by the MDOT PM, prior to work being performed.

### Work Locations

The Consultant PM will primarily work from the Consultant's office location. Office space at the Van Wagoner Building will not be provided for the Consultant PM.

The OM, OS, and all CROs will work at the Van Wagoner Building in Lansing. These personnel may occasionally need to travel to other locations to attend scheduled meetings, coordinate efforts with other TOCs, substitute as a CRO at another TOC, or work from home. Except for on-call and emergency situations, these personnel shall not perform any work charged to this project at any location other than the Van Wagoner Building without providing prior notification and obtaining approval from the MDOT PM.

### Work Hours

The OM and OS are expected to work 40 hours per week on this project. The OM and OS shall develop a routine schedule that is consistent each week. The OM and OS may deviate from this schedule in order to attend meetings, meet with operators, conduct training, cover control room operations, respond to emergency situations or after-hours calls, or to meet other needs of the operation. However, the MDOT PM shall be notified, in advance when possible, of such deviations.

The OM and/or OS shall be available for contact in urgent situations inside and outside of control room hours. This contact may be to request operations information, to assist with emergency staffing situations, or to maintain other needs of the operation. An "on-call" schedule may be developed indicating whether the OM or OS is on-call, however, either the OM or OS should always be available to the MDOT PM and/or CROs.

CROs must be flexible in their availability and understanding of the needs of the operation. It is the responsibility of the Consultant to make sure that CROs are available to work at scheduled hours, reliable, and able to perform their required duties at any time of the day or night. However, the Consultant is also responsible for making sure that scheduling is sensible and allows for adequate rest for all CROs. The Consultant shall take reasonable steps to maintain adequate staffing levels and minimize overtime hours for CROs.

### Staffing Plan

The Consultant shall develop and maintain a Staffing Plan for all personnel provided on the contract. The Staffing Plan shall cover, at a minimum, employee qualifications, scheduling procedures, leave approval policies, operator absentee procedures, employee performance expectations, and acceptable employee conduct.

The Consultant shall maintain a schedule of control room operator coverage that is accessible to all of the CROs and the MDOT PM. All Consultant staff accessing MDOT facilities shall abide by the security protocol in place for the facility, as provided by MDOT.

The Consultant shall be prepared to supply additional personnel to MDOT, with appropriate notice. Growth planning and procedures shall be identified in the Staffing Plan.

### Operator Training

The Consultant shall be responsible for all training necessary to ensure fully competent and knowledgeable operations staff. Operator training updates shall be conducted quarterly, at a minimum. The Consultant shall maintain and deliver training documentation. Training shall incorporate relevant traffic engineering fundamentals for optimum performance of freeway and non-freeway operations.

The Consultant shall submit an Operator Training Plan for review and approval within 45 days of the start of the contract. The Training Plan shall include an Operator Certification program. MDOT will provide access to all existing STOC Operations manuals, guides, and training materials, from which the Training Plan can be developed.

Before any STOC contract employee provides control room services independently, they shall complete the training program defined in the Operator Training Plan. The Consultant is responsible to ensure that all STOC staff has the required training necessary to perform their assigned responsibilities, including any refresher training, or specific training based on individual employee needs. The Plan shall be updated annually and submitted to the MDOT PM for approval.

## **Meetings**

The OM shall meet with the MDOT PM on a weekly basis to discuss the day-to-day operations of STOC. This includes incident updates, staffing updates, a discussion of upcoming events, and anything else that may be pertinent to the success of the operation.

The Consultant PM, OM, and OS shall meet with the MDOT PM and other MDOT staff on a monthly basis to discuss the status of the STOC operation. This may include topics similar to the weekly meetings, but will also include a more general discussion of the overall progress of developing STOC and future initiatives. It may also include an update on the progress of tasks assigned to the Consultant, as applicable.

The Consultant may be requested, at the direction of the MDOT PM, to participate in additional meetings. These may include, but are not limited to:

- Internal and external stakeholder meetings
- Traffic Incident Management meetings
- Maintenance meetings
- Special event coordination meetings
- Communications coordination meetings
- Construction project meetings

Participation may include preparation of presentation and handout materials, scheduling and notification, and/or development and distribution of meeting agendas and minutes. In general, participation at these meetings will include only the on-site staff, as directed by the MDOT PM.

## **Performance Measures Reporting**

The Consultant shall provide monthly STOC Performance Measures reports that summarize control room activity, traveler information, incident management and construction management activity, and provide system reliability data, messaging accuracy, and other STOC operations data.

The Consultant shall provide incident logging and reporting support for statewide Traffic Incident Management initiatives. These tasks shall be completed in an accurate and timely manner. All efforts shall be closely coordinated with the MDOT PM and the MDOT Traffic Incident Management Engineer.

Currently, STOC activity tracking utilizes a Microsoft Access database. Some of this tracking will be replaced with new ATMS software installation. Experience with Microsoft Access and Crystal Reports is required.

## **Control Room Operations Manual**

In order to ensure effective control room operations and maintain consistent standards, the Consultant shall help maintain and update the STOC Control Room Operations Manual, training materials, quick reference sheets, and related documentation that communicate operating procedures to CROs and other partners.

Updates to procedures or policies in the Operations Manual shall be distributed to CROs as they are implemented, and shall be incorporated into the full version of the Operations Manual on a quarterly basis. Also, since the Operations Manual has been developed for use at multiple TOCs, all update efforts shall be coordinated with the other TOCs in Michigan. Quick reference sheets, contact lists, ITS infrastructure location lists, maps, summary procedure documents, and other documents shall be updated as needed, but at a minimum shall be reviewed for accurate and timely information at least annually.

## **Quality Control**

The Consultant shall implement and manage quality control processes that ensure a high quality of services provided by the control room. Quality control program shall review accuracy of traffic information and provide options for improvement. At a minimum, accuracy shall be tracked for the following conditions: incident messages, Mi Drive postings, construction activity messaging, all DMS messaging, incident records, and other advisories. The Consultant shall provide monthly quality control reports to MDOT.

## **Public Safety Coordination**

One of the key functions of STOC is optimum traffic operations through incident management, traffic information, and local coordination. To ensure optimal traffic operations during non-recurring incidents, close coordination with public safety agencies is required. Relationships are being developed and strengthened to ensure good communication, coordination, and collaboration with public safety partners, and it is a requirement that the Consultant work with MDOT to continue development for improvements in incident management. All outreach and coordination activities with other agencies shall be closely coordinated with the MDOT PM and the MDOT Traffic Incident Management Engineer.

## **Media Coordination**

MDOT media partners serve an important role in disseminating traffic information to the motoring public. All media outreach activities shall be closely coordinated with the MDOT PM.

The Consultant shall work with MDOT to ensure clear, effective, and accurate traffic information to the public, to help promote MDOT ITS program information, to ensure a positive

relationship between media partners and MDOT, and to promote dissemination of traffic and safety information through media partners. The Consultant shall not release any information to broadcast, print or internet media other than real time traffic information updates without prior MDOT approval. The Consultant will refer all media inquiries to the MDOT PM or the MDOT Office of Communications.

The Consultant shall periodically sample the quality and accuracy of the traffic broadcasts of media partners and provide appropriate reporting to the MDOT PM.

### **Stakeholder Coordination**

The Consultant shall coordinate with region and statewide ITS stakeholders, including other MDOT offices, Michigan State Police (MSP), Michigan Department of Technology, Management, and Budget (DTMB), and any other consultants working on MDOT ITS projects. All communication with these stakeholders shall be coordinated with the MDOT PM.

### **Traffic Management and Operations Studies**

The Consultant shall provide engineering and technical services on an as-directed basis by the MDOT PM to improve operations at STOC, to increase the effectiveness of ITS field devices, or to support projects and initiatives of the System Operations section and/or the ITS Program Office. Services that may be directed under this task could include, but not be limited to:

- Traffic Incident Management coordination support
  - Coordination of meetings, including agendas, minutes, research, and reporting.
  - Preparation of detailed after action report(s).
  - Development of alternate route maps or plans.
  - Research for, and development of, reports or presentations on incident management topics.
- Scan of best practices from other TMC/TOC programs.
- Traffic safety spot studies, including crash analysis.
- Signal operations analysis.
- Database tracking and maintenance.
- Updates to TOC concept of operations, business plan, or other operational documents.

### **WEST MICHIGAN TOC (PROJECT 2):**

#### **CONSULTANT RESPONSIBILITIES**

##### **Operations Schedule**

Below is the current control room schedule. Due to the evolving nature of the control room operations, the schedule may need to be adjusted to meet operational needs.

The Control Room is anticipated to operate with one operator coverage during the following hours:

<b>Day</b>	<b>Time of Day</b>
Mondays – Thursdays	6:00a.m. to 8:00p.m.
Fridays (May – September)	6:00a.m. to 9:00p.m.
Saturdays	12:00 pm to 8:00 pm
Sundays	12:00 to 8:00 pm
Fridays (October – April)	6:00a.m. to 8:00p.m.
Holidays*	As needed
Special Events	As needed

An additional Control Room Operator is anticipated to be necessary for at least 6 hours per weekday during peak traffic hours.

\* Holidays are defined as: New Years Day, Memorial Day, July 4<sup>th</sup>, Labor Day, Thanksgiving Days (Thursday and Friday), and Christmas Day. Holiday hours may be scheduled, if determined to be beneficial.

The control room may be operated during special or planned events. MDOT reserves the right to operate the control room for any hours with its own personnel, or have personnel supplement the consultant staff, at any time during the contract.

### **Project Requirements**

The Consultant shall have the responsibility to employ, train, schedule, and supervise all personnel. The Consultant shall ensure that all personnel have sufficient skill and expertise to properly perform the work assigned to them.

#### Meetings

Consultant shall participate in meetings with internal and external stakeholders. Participation may include preparation of presentation and handout materials, scheduling and notification, and/or development and distribution of meeting agendas and minutes.

Meetings may include, monthly ITS Operations meetings, local incident management meetings, MPO meetings, maintenance meetings, special event coordination, communications coordination, utility meetings, construction project meetings, and MDOT traffic safety & operations business meetings.

Additional meetings may be required to meet evolving operational needs.

#### Performance Measures Reporting

The Consultant shall provide monthly TOC Performance Measures reports that summarize control room activity, traveler information, incident management and construction management activity, and provide system reliability data, messaging accuracy, and other TOC operations data.

Currently, the TOC activity tracking utilizes a Microsoft Access database. Some of this tracking will be replaced with new ATMS software installation. Experience with Microsoft Access and Crystal Reports is required.

### Staffing Plan

The Consultant shall develop and maintain a Staffing Plan for all personnel provided on the contract. The Staffing Plan shall cover (at minimum): employee qualifications, scheduling procedures, leave approval policies, operator absentee procedures, employee performance expectations, and acceptable employee conduct.

The Consultant shall maintain a schedule of control room operator coverage that is accessible to all of the operators and the MDOT Project Manager.

All Consultant staff accessing MDOT facilities shall abide by the security protocol in place for the facility (provided by MDOT).

The Consultant shall be prepared to supply additional personnel to MDOT, with appropriate notice. Growth planning and procedures shall be identified in the Staffing Plan.

### Public Safety Coordination

One of the key functions of WMTOC is optimum traffic operations through incident management, traffic information, and local coordination. To ensure optimal traffic operations during non-recurring incidents, close coordination with public safety agencies is required. Relationships are being developed and strengthened to ensure good communication, coordination, and collaboration with public safety partners, and it is a requirement that the Consultant work with MDOT to continue development for improvements in incident management. All outreach and coordination activities with other agencies shall be closely coordinated with the MDOT Project Manager.

The Consultant shall provide outreach efforts to other public safety agencies consistent with the goals and objectives of the Region Operations team.

### Control Room Operations Manual

In order to ensure effective control room operations and maintain consistent standards, the Consultant shall help maintain and update the TOC control room Operations Manual, Operations Guide, training materials, quick reference sheets, and related documentation that communicate operating procedures to CROs and other partners.

On an ongoing basis, the Operations Manual and Operations Guide shall be updated manually, with updates posted as needed to communicate procedures to operators. The official electronic copy of the Operations Manual and the training materials shall be updated at least four (4) times a year, or more, to support training necessary to ensure effective control room operations. Quick reference sheets include, but are not limited to, contact lists, ITS infrastructure location lists, maps, summary procedure documents, and others. These shall be updated on an as needed basis, and consolidated in the Operations Manual & Guide as least annually. Updates to TOC procedures must be coordinated with STOC and Southeast Michigan TOC (SEMTOC) operations, and will be consistent with MDOT statewide guidance documents and policies.

## **Project Manager**

The Consultant Project Manager (PM) shall be an engineer licensed in the State of Michigan with relevant experience in traffic engineering, and freeway and non-freeway traffic operations. The PM shall have excellent communication skills, and the ability and willingness to be flexible and responsive.

### Quality Control

The Consultant shall implement and manage quality control processes that ensure a high quality of services provided by the control room. Quality control program shall review accuracy of traffic information and provide options for improvement. At a minimum, accuracy shall be tracked for the following conditions: incident messages, Mi Drive postings, construction activity messaging, all DMS messaging, incident records, and other advisories.

The Consultant shall provide summary quality control reports to MDOT monthly.

### Media Coordination

MDOT media partners serve an important role in disseminating traffic information to the motoring public. All media outreach activities shall be closely coordinated with the MDOT Project Manager.

The Consultant shall work with MDOT to ensure clear, effective, and accurate traffic information to the public, to help promote MDOT and Regional ITS program information, to ensure a positive relationship between media partners and MDOT, and to promote dissemination of traffic and safety information through our media partners. The Consultant shall not release any information to broadcast, print or internet media other than real time traffic information updates without prior MDOT approval. The consultant will refer all media inquiries to the MDOT Project Manager or Region Communications Representative.

The Consultant shall periodically sample the quality and accuracy of the traffic broadcasts of media partners and provide appropriate reporting to the MDOT Project Manager.

The Consultant shall maintain a media file, including recordings, of feature stories and highlights regarding ITS programs in the region. The Consultant shall bring to the attention of the MDOT Project Manager any incorrect or potentially negative reporting of MDOT information by media partners within 24 hours of such observation.

### Stakeholder Coordination

The Consultant shall coordinate with region and statewide ITS stakeholders including other MDOT offices, MSP, GRPD, Michigan Department of Information Technology, and any other consultants working on MDOT ITS projects. All communication with these stakeholders shall be coordinated with the MDOT Project Manager.

### TMC Pooled Fund Study

MDOT is a current member of the Traffic Management Center Pooled Fund Study (TMC PFS). The Consultant shall reference products developed by the TMC PFS for improvement to control room operations to benefit from practices at other TMCs in the country. Reference of TMC PFS products, along with other published national reference materials and resources, shall be expected to ensure continued improvement of TMC services.

## **Control Room Operations**

### Operator Duties

Control Room Operators (CROs) shall perform all control room duties, including but not limited to the following, for planned and unplanned events:

- Traffic monitoring and camera control
- Incident and congestion detection and verification, including areas within the Grand Region outside of the ITS device coverage area
- Dynamic Message Sign (DMS) messaging
- Variable Speed Sign (VSS) adjustments
- High impact traffic advisory notifications, including areas within the Grand Region outside of the ITS device coverage area
- Other traffic information dissemination, including telephone, fax, and email, communications, including areas within the Grand Region outside of the ITS device coverage area
- Enter incident data, and maintain incident records and documentation, including areas within the Grand Region outside of the ITS device coverage area
- Document daily activities, such as: call log updates, DMS message logs, communication logs, shift reports. Reporting to MDOT Project Manager.
- Provide monthly summaries of activity logs, incident reporting, and other control room activity.
- Estimate delay incurred due to incidents logged and due to routine congestion activity. Provide monthly reports as requested.
- Review and verification of traveler information posted on MDOT and local public websites, including travel time information.

- Monitor media traffic broadcasts for applicable information, including areas within the Grand Region outside of the ITS device coverage area
- Communicate with the Michigan State Police (MSP), City of Grand Rapids Police Department (GRPD), and other public safety agencies for effective incident management.
- Communication with MDOT personnel: Region ITS and Operations Staff, Region TS&O Engineer, Transportation Service Center (TSC) staff, field personnel, etc.
- Detect, report, and track ITS infrastructure maintenance issues.
- Assist with tracking and reporting ITS device issues during installation projects.
- Appropriate follow up on incidents to help ensure safe and effective operation of the highway system.
- Coordinate with MDOT Region and TSC staff to stay up-to-date with latest construction and maintenance project information.
- Communication and coordination with regional local agency contacts, such as the City of Grand Rapids, Kent County Road Commission and City of Grand Haven, regarding activities on or affecting state trunkline operations.
- Advanced Traffic Management System (ATMS) system monitoring and operation.
- Monitor signal system operations, as relates to congestion and incident and event management.
- Monitor and report on weather information as it affects roadway operations.

Other tasks performed by control room staff include: access control, facilitating tours, managing safety message schedule, and related duties.

### Operator Position Requirements

All CROs shall have an Associate's Degree or equivalent degree, or a minimum of two years of experience in a similar role (to be approved by MDOT Project Manager). Operators that are engineering majors, in a related field, in their junior or senior years are also acceptable.

All CROs shall pass a pre-employment drug test and security background check.

Operators should have proficient communication skills (oral and written), computer skills, and interpersonal skills, and be capable of performing duties with minimum supervision.

### Operator Training

The Consultant shall be responsible for all training necessary to ensure fully competent and knowledgeable operations staff. Operator training updates shall be conducted quarterly, at a minimum. The Consultant shall maintain and deliver training documentation. Training shall incorporate relevant traffic engineering fundamentals for optimum performance of freeway and non-freeway operations.

The Consultant shall submit an Operator Training Plan for review and approval within 45 days of the start of the contract. The Training Plan shall include an Operator Certification program.

MDOT will provide access to all existing TOC Operations manuals, guides, and training materials, from which the Training Plan can be developed.

Before any TOC contract employee provides control room services independently, they shall complete the training program defined in the Operator Training Plan. The Consultant is responsible to ensure that all TOC staff has the required training necessary to perform their assigned responsibilities, including any refresher training, or specific training based on individual employee needs. The Plan shall be updated annually and submitted to the MDOT Project Manager for approval.

MDOT may occasionally provide training for CROs specific to MDOT operations.

### Operations Supervisor

The Consultant shall provide an operations supervisor, which can be a lead operator, the PM, or another staff engineer, who has day-to-day oversight of control room activities, scheduling, and operations tasks. This person will have the responsibility of general organization of control room activities and keeping appropriate personnel informed of such. The supervisor shall be fully trained as an operator and be capable of performing all operator duties.

This person, or specific designee, will be available for contact in urgent situations inside and outside of control room hours. This contact may be to request operations information or to assist with emergency staffing situations.

### **Traffic Management and Operations Studies**

The Consultant shall provide engineering and technical services as directed by the MDOT Project Manager on an as-directed task basis to improve operations at the WMTOC control room. The level of effort anticipated for this effort is approximately 600-800 staff hours per year.

Other services that may be directed under this task could include:

- Incident Management coordination support:
  - coordinating regional incident management team meetings, including agenda, minutes, research, and reporting
  - preparation of detailed after action report(s)
  - development of alternate route maps or plans
  - research for and development of reports or presentations on incident management topics
- Scan of best practices from other TMC/TOC programs
- Traffic Safety spot studies, including crash analysis
- Signal operations analysis
- Database tracking and maintenance. Experience with Microsoft Access software is required.
- Review on MDOT's behalf products being developed for the TMC PFS

- Updates to TOC concept of operations, business plan, or other operational documents.

**CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.