Michigan Department
Of Transportation
5100B (05/12)

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

Research Administration University Use Only

Exhibit B

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Hilary Owen	n/a	n/a

DESCRIPTION
Balancing the Costs of Mobility Investments in Work Zones

MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED GRAY SHADING = OPTIONAL Check the appropriate Tier in the box below			**CONSULTANT:** Provide only checked items below in proposal
☐ **TIER 1 ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☒ **TIER III (>$250,000)**	
☐	☐	☒	Understanding of Service
☐	☐	☐	*Innovations*
☐	☐	☐	*Safety Program*
N/A	☐	☐	Organizational Chart
☐	☐	☒	Qualifications of Team
☐	☐	☒	Past Performance
☐	☐	☒	Quality Assurance/Quality Control
☐	☐	☒	**Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site 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	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)

The prime consultant/vendor is responsible for the successful completion of the service and is expected to perform at least 40 percent of the services, by dollar value. The basis of payment is Actual Costs as defined in standard MDOT contracts.

If your organization is interested in providing services, please indicate your interest by submitting a proposal following the research guidelines near the top of MDOT's Request for Proposals Web page at http://www.michigan.gov/mdot/0,1607,7-151-9625_32842---,00.html.

RFP SPECIFIC INFORMATION

Problem Title: Balancing the Costs of Mobility Investments in Work Zones

OR Number: OR13-004

This is Best Value Selection which means the budget amount submitted with the proposal is a component of the proposal score, not the determining factor of the selection.

PROPOSAL SUBMITTAL INFORMATION

PROPOSAL AND BID SHEET EMAIL ADDRESS –	PROPOSAL DUE DATE	TIME DUE
mdot-rfp-response@michigan.gov with a cc to: mdot-research@michigan.gov.	**11/13/12**	**Noon, EST**

GENERAL INFORMATION

Any questions relative to the Research Problem Statement must be submitted by e-mail to: mdot-research@michigan.gov. Questions must be received by 5 business days prior to the RFP due date at noon EST. All questions and answers will be placed on the MDOT RFP Web site as soon as possible after receipt of the questions and at least three (3) days prior to the due date listed above. The names of organizations 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 AND RESEARCH FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION:

5100D- Request for Proposal Cover Sheet

Schedule of Research Activities Form- Appendix B

Deliverables Table- Appendix A

Initial Implementation Plan Form- Appendix C

5100J- Consultant Data and Presignature sheet is required for signatory on this proposal

For universities: Two Research Proposal Budget Form Worksheets (Appendix D). One worksheet is required for part I and one for Part II.

or

For consultants: One Consultant Bid Sheets for Part I and one for Part II. Also, one Cost Derivation Sheets for Part I and one for part II.

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
- 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

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Michigan Department of Transportation

SCOPE OF SERVICE
FOR
RESEARCH SERVICES

TITLE: Balancing the Costs of Mobility Investments in Work Zones
OR#: 13-004

LOCATION: Statewide

WORK DESCRIPTION: Research on Balancing the Costs of Mobility Investments in Work Zones

ANTICIPATED START DATE: March 30, 2013

ANTICIPATED COMPLETION DATE: March 30, 2015

MDOT RESEARCH PROJECT ADMINISTRATION MANAGER:

Andre Clover, P.E.
8885 Ricks Road
Lansing, Michigan 48917
E-MAIL: mdot-research@michigan.gov

GENERAL INFORMATION:

1. PROBLEM TO ADDRESS:

Part 1:
Michigan, like most states nationwide, is faced with a funding challenge related to keeping our highway infrastructure in good condition. Given the financial constraints we are faced with, it is important that we ensure that the funding available is spent wisely. On one hand, the less money spent on temporary measures during construction, the more money available for finished pavement. On the other hand, maintaining mobility on a local, statewide and national level is imperative to sustaining a strong economy. Finding a balance between these two concepts is a challenge for all road agencies.

The Michigan Department of Transportation has a Work Zone Safety and Mobility Policy which establishes a threshold for significant delay. Any proposed work which is expected to exceed this threshold must go through additional levels of scrutiny to determine whether or not the project can be justified as is, or whether additional investment should be made to increase mobility during construction. However, there are no further guidelines in place to determine what level of investment is

reasonable for a given location or work type. The project review team uses engineering judgment and past experience to make the decision, which can lead to inconsistent results.

In addition, the implementation of the mobility policy is leading to an increase in certain types of mobility investments such as bridge/pavement widening, split-merge staging, contract towing, expedited schedules and restricted work hours. We would like to confirm that these types of strategies and increased investments are having the overall impact on mobility that we anticipated, and establish the point at which the benefits outweigh the costs for these strategies.

Part 2:
MDOT's LCCA procedures require that traffic control costs and user delay costs be a part of the analysis when determining the life cycle costs associated with various pavement type selections. However, the current methodology being used to predict these costs is fairly simplified and does not take into account the costs and benefits of various mobility strategies currently being used. While it is important to maintain consistency in how mobility costs are applied to different pavement types, it is also important to note that the construction operations for different pavement types enables the use of different strategies for maintaining mobility.

There are distinct affects to the capacity of the roadway based not only on the number and geometry of the lanes available for traffic, but also how the equipment and workers interact with and are perceived by travelers on the roadway. Also, the time required between construction operations and placing traffic on new pavement is different for different pavement types. The most cost effective method of maintaining mobility could potentially be very different based on the pavement type being analyzed. MDOT does not currently have a process to account for these differences, so mobility costs are often normalized to ensure the perception of fairness in the LCCA process.

2. RESEARCH OBJECTIVES:

Part 1:
• The objective of this study is to establish guidance on the appropriate level of investment in temporary measures to maintain mobility in work zones.

Part 2:
• Analyze how the type of work being performed and the equipment usage and placement affects driver behavior, traveler and worker safety, highway capacity and contractor efficiency.
• Use this information to develop a decision support tool to determine the appropriate mobility strategy for various pavement types and work types for use in the life-cycle cost analysis process.

3. IMPLEMENTATION BENEFIT TO MDOT:

Part 1:
MDOT will be able to make project mobility investment decisions based on cost/benefit analysis rather than professional judgment. All taxpayers and highway users will benefit from the study as it will lead to a better balance between transportation dollars spent and user delays.

Once this report is completed, the recommendations could be used by project staff in the scoping and design processes to determine the types of mobility strategies that would be appropriate for the proposed work, and account for those costs in the project development stage. The guidelines would also be used by the TMP peer review teams for all significant projects to determine whether or not an exception to the standard mobility threshold is justified for the proposed work, and to ensure that the proposed staging reflects the appropriate level of investment for the project.

Part 2:
Inclusion of realistic costs associated with maintaining mobility in work zones for various pavement types will ensure a fair apples to apples comparison when determining the most cost effective use for road funding in the state of Michigan.

The decision support tool will be used by designers and project staff to determine the appropriate staging and mobility strategies for use in the LCCA process.

4. RISKS OR OBSTACLES TO RESEARCH:

Part 1:
Many of the costs associated with mobility investments are hidden within other pay items. For example, a contractor may increase his unit cost for material items because he is limited in how many trucks can be brought in per day due to hourly restrictions. It will be difficult to ascertain how much additional cost is associated with the traffic restriction, and how much is normal fluctuation of material unit costs due to other factors such as project location, inflation rates, etc. The analysis will include a large number of past and current road projects where data is available in order to make the sample size large enough to be able to make appropriate overall project cost conclusions.

Part 2:
The concrete and asphalt paving industries will likely be very interested in the results of this study and any recommendation that is perceived to create a bias of one industry over the other will likely result in political difficulty with including the decision support tool in the process.

5. DESIRED QUALIFICATIONS IN AN INVESTIGATOR(S):

Knowledge of MDOT pay item estimating procedures. Extensive background in estimating and measuring traffic delays, including the ability to use Synchro software. An expert on developing and

executing public polls. Experience reviewing crash data and reading crash reports. Knowledge of construction activities and mobility strategies. Ability to complete surveys that include being present in work zones next to heavy traffic volumes.

CONSULTANT RESPONSIBILITIES:

Part 1:
1. Poll other states and coalitions
2. Literature Review
3. Public Survey regarding how much delay is acceptable. Results will be broken out to ascertain differences associated with: geographic location, work type, various work zone layouts, project duration, urban/rural, business corridor/freeway, etc.
4. Create list of which mobility strategies to analyze
5. Analyze Cost Data from past projects
6. Analyze Crash Data from past projects
7. Compare predicted diversion rates on past and current projects to field measured diversion rates
8. Compare predicted delay estimations on past and current projects to field measured delay
9. Complete analysis to determine recommendations
10. Draft final report

Upon completion of Part 1 the RAP will determine whether or not to proceed with Part 2. The team will take into account the thresholds established, the percentage of projects that would likely be eligible for implementing the listed mobility strategies given the thresholds established, and the statistical confidence of the recommended thresholds. Hours for Part 2 are subject to change based on the strategies evaluated and type of follow up necessary to define the distinctions in the decision support tool.

Part 2:
1. Poll other states regarding factors used in LCCA and how mobility enters into the process
2. Literature Search
3. Field Review and crash review for various work types to determine how equipment used and buffer space provided affects traffic mobility and driver safety
4. Cost comparison of various work zone layouts based on previously established procedures for estimating mobility costs.
5. Develop decision support tool for determining appropriate mobility strategies based on work type for use in the Life-cycle cost analysis process using previously established mobility investment thresholds.
6. Complete final report on methodology used in developing the decision support tool
7. Develop easy to use how-to document on using the decision support tool

Failure of any of the above will be found in noncompliance with the contract.

DELIVERABLES:

Part 1:
The project deliverable will be a final report which includes the following:

- Statewide acceptable delay matrix based on geographic location, road type and work type
- Methodology for determining the cost of various mobility investments
- Methodology for measuring and comparing predicted and actual user delay, including recommendations on how to estimate and verify diversion rates.
- Methodology for determining the actual capacity of a lane or lanes, taking into account lane width, shy distance, work operations, and traffic control devices.
- List of average costs associated with various mobility strategies. This includes construction item costs, staging related added costs due to affecting the contractor's efficiency, anticipated crash rate impacts, and other costs which may be qualitative in nature
- Recommended thresholds for Work Zone Safety & Mobility treatment costs vs. user costs for various work types
- Methodology for determining the dollar amount for incentive/disincentive clauses, and guidance on when their use would be appropriate

Part 2:

- Decision support tool
- Final report explaining process used to develop decision support tool
- How-to instructions on using the decision support tool

MDOT RESPONSIBILITIES:

MDOT will provide project documents, cost data and crash data for project sites selected for study. MDOT will provide access to historic NAVTEQ data (where available), RITIS software, CO3 spreadsheets and other information to analyze capacity of work zones. MDOT will provide reasonable site accommodations in existing work zones for field evaluations.

COORDINATION PROCEDURES

Work will be completed in compliance with the Research Implementation Manual

CONSULTANT PAYMENT

All billings for services must be directed to the Department and follow the current Research Implementation Manual. 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.

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 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 project manager.

Compensation for services will be reimbursed on actual cost basis.

PROPOSAL INFORMATION AND SCORING

Formal proposals are required and shall include the information as outlined in these Guidelines. This section is the information required in the proposal that will be used to score the qualifications of each consultant's proposal. The section numbering correlates to the score sheet. Therefore, the consultant should format their proposals consistent with the outline provided.

1. **UNDERSTANDING OF SERVICE: 40 POINTS**
   Describe understanding of the service intended to be proposed. This information is to be based on the scope of services.
   Problem Statement and Background Summary- demonstrates good understanding of problem, looks objectively at problem, specifies problem limits and restricts scope appropriately, and cites relevant literature.
   Research Plan- cites specific objectives clearly, technical approach responds to all written and implied requirements, difficult areas are identified and details to overcome are given, represents novel idea or technical approach, plan is feasible, and effort is consistent with scope of problem.
   Products and Implementation- proposal clearly defines products to be delivered at completion, includes practical, realistic implementation plan.
   MDOT Involvement- MDOT involvement is not excessive and is clearly defined and quantified.

2. **QUALIFICATIONS OF TEAM: 30 POINTS –**
   Describe the structure of the project team including the roles of all key personnel and subcontractors. For each subcontractor describe role in service and include what percent of the task that the subcontractor is expected to provide. Provide résumés for each of the key staff of the prime and subcontractor.
   Facilities- proposer has adequate access to equipment and/or laboratory required in study.
   Staffing- personnel availability is clearly defined, shows a depth of qualified personnel, proposer has ability to manage a project of this size an sufficient resources to complete study, qualifications

are directly related to the requirements of the project, plans for specific key personnel assignment included, and there is a reasonable balance between subcontractor and prime contractor.

Required Statistical Qualification- In general, MDOT's research is in the category of applied research. Regardless what is the primary field of an applied research project, statistical analysis tools are the typical ones for handling the data to conduct applied research. For this reason, the research team must have the needed statistical knowledge and experiences for conducting applied research. The required knowledge level for a research team in statistical analyses, if defined in the RFP under the heading possible investigators, is classified into one of the following four categories:

- Level I: Master Degree or higher in Statistics and working experience in statistical analyses is required
- Level II: Undergraduate degree in Statistics and working experience in statistical analyses is required
- Level III: At least one college series of statistics courses and working experience in statistical analyses is required
- Level IV: at least one college statistics course and working experiences under statisticians is required
- Level V: No statistical analysis

Proposals not documenting statistical training and experience levels required in the RFP may be classified as non-responsive.

3. RELEVANT PAST PERFORMANCE: 30 POINTS

The project manager will contact references and review relevant performance evaluations from the past 5 years.

Record of past accomplishment- proposer satisfactorily completed past projects, was cooperative and flexible, and ended past projects according to the original budget and time schedule.

4. QUALITY ASSURANCE/QUALITY CONTROL (QAQC) PLAN: 5 POINTS

The proposer provided an outline of a QA/QC process. The QA/QC Manager is experienced with MDOT standards and practices.

5. LOCATION: 5 POINTS

The percentage of work hours performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activity. The combination of location and percentage of work performed in Michigan should not exceed 5 points.

Percentage of Work To Be Done in Michigan	Score
95% to 100%	5

80% to 94%	4
50% to 79%	3
25% to 49%	2
10% to 24%	1
Less than 10%	0

6. PRICE: 40 POINTS

Cost score is based on the lowest cost proposed divided by the current proposer cost multiplied by 40. Lowest bid shall receive 40 points.

TOTAL POINTS: 150

Part 1
Consultant Bid Sheet

All entries on this page must be handwritten in ink or computer generated. This page provides for costs by payment category. This is provided as an example. Priced proposal costs will be required after selection, in accordance with the MDOT Priced Proposal Guidelines (Guidelines).

Employee Name	Project Role	(%) Time Working on Project	Total Hours	Hourly Rate	Total Cost
Eg. Mike Brown	Principal Consultant	10%	100	$85	$8500

TOTAL ESTIMATED LABOR: $_____

ESTIMATED SUBCONSULTANTS: $_____

ESTIMATED DIRECT EXPENSES: $_____
(Listed by item at estimated actual cost)

TOTAL BID PRICE: **$**_____

Part 1
COST DERIVATION SHEET

This is a sample cost derivation sheet.

All entries on this page must be handwritten in ink or computer generated. This page provides for costs by payment category. This is provided as an example. Priced proposal costs will be required after selection, in accordance with the MDOT Priced Proposal Guidelines (Guidelines).

PROJECT DESCRIPTION:

Classification	Person Hours	Hourly Rate	Labor Cost

TOTAL ESTIMATED LABOR: $_____

OVERHEAD: $_____
(Total Labor Cost x _____ %)

Facilities Capital Cost of Money: $_____

ESTIMATED SUBCONSULTANTS: $_____

ESTIMATED DIRECT EXPENSES: $_____
(Listed by item at estimated actual cost)

FIXED FEE: $_____
(Total Estimated Labor + Overhead) x XX%

TOTAL BID PRICE: $_____

(This bid price should be the same amount as the total bid price on page 1 of 2 of this document.)

Part 2
Consultant Bid Sheet

All entries on this page must be handwritten in ink or computer generated. This page provides for costs by payment category. This is provided as an example. Priced proposal costs will be required after selection, in accordance with the MDOT Priced Proposal Guidelines (Guidelines).

Employee Name	Project Role	(%) Time Working on Project	Total Hours	Hourly Rate	Total Cost
Eg. Mike Brown	Principal Consultant	10%	100	$85	$8500

TOTAL ESTIMATED LABOR: $_____

ESTIMATED SUBCONSULTANTS: $_____

ESTIMATED DIRECT EXPENSES: $_____
(Listed by item at estimated actual cost)

TOTAL BID PRICE: **$**_____

Part 2
COST DERIVATION SHEET

This is a sample cost derivation sheet.

All entries on this page must be handwritten in ink or computer generated. This page provides for costs by payment category. This is provided as an example. Priced proposal costs will be required after selection, in accordance with the MDOT Priced Proposal Guidelines (Guidelines).

PROJECT DESCRIPTION:

Classification	Person Hours	Hourly Rate	Labor Cost

TOTAL ESTIMATED LABOR: $_____

OVERHEAD: $_____
(Total Labor Cost x _____ %)

Facilities Capital Cost of Money: $_____

ESTIMATED SUBCONSULTANTS: $_____

ESTIMATED DIRECT EXPENSES: $_____
(Listed by item at estimated actual cost)

FIXED FEE: $_____
(Total Estimated Labor + Overhead) x XX%

TOTAL BID PRICE: $_____

(This bid price should be the same amount as the total bid price on page 1 of 2 of this document.)

Research Proposal Budget Form Worksheet

Project Title

Research Organization

Date

									FY1	FY2	FY3	FY4	TOTAL
SALARIES & WAGES -- MUST COMPLY WITH OMB CIRCULAR A-21													
Specify number of hours to be worked and hourly rate for each individual below:													
Examples of role of individual are Principal Investigator, Technician, Grad Student, etc. Annual wage increases must not exceed 2%													
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
(role of individual)													
Name of individual													
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs					
rate & hrs									$0.00	$0.00	$0.00	$0.00	$0.00
Sub-Total Salary & Wages									$0.00	$0.00	$0.00	$0.00	$0.00

FRINGE BENEFITS -- MUST COMPLY WITH OMB CIRCULAR A-21
Indicate Employee, appropriate negotiated rate for each and description of who the rate applies to.
(e.g. - Sam Smith, 25%, Summer Faculty. The rate is negotiated between the university and it's cognizant agency

Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Name												
(Rate Description)												
(% rate)	FY1		FY2		FY3		FY4		$0.00	$0.00	$0.00	$0.00	$0.00
Sub-Total Fringe Benefits									$0.00	$0.00	$0.00	$0.00	$0.00

SUBCONTRACTOR -- MUST COMPLY WITH OMB CIRCULAR A-21
A copy of the subcontractor's budget must be attached. An MDOT approved subcontract is required for subcontractor costs in excess of $25,000 prior to payment of invoices that contain subcontractor work. List all subcontractors on a separate line.

Subcontractor Name & Amt.						$0.00
Subcontractor Name & Amt.						$0.00
Sub-Total Subcontractor		$0.00	$0.00	$0.00	$0.00	$0.00

TRAVEL -- MUST COMPLY WITH OMB CIRCULAR A-21
Must be in accordance with IDS contract requirements.

In-State Travel (Destinations within Michigan) Provide a separate table itemizing costs.					$0.00
Out-of-State Travel (Prior approval required) Provide a separate table itemizing costs.					$0.00
Sub-Total Travel	$0.00	$0.00	$0.00	$0.00	$0.00

SUPPLIES -- MUST COMPLY WITH OMB CIRCULAR A-21 (Few items not allowed are: computers, printers, monitors, fax machines, printer paper, toner cartridges, pens, pencils, legal pads, clips, rubber bands, post-it notes, books, notebooks, binders, folders, diskettes, postage stamps, chairs, office furniture, calendars, paper punches, business cards, staplers, waste cans, etc.)						
Provide details if cost exceeds $2,000. Individual line items in excess of $1.000 require a detailed explanation regardless of total cost						
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
Sub-Total Supplies		$0.00	$0.00	$0.00	$0.00	$0.00
CAPITAL EQUIPMENT -- MUST COMPLY WITH OMB CIRCULAR A-21 - Purchased specifically for this project						
List items with a value in excess of $500. Equipment in excess of $5,000 requires prior approval.						
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
Sub-Total Equipment		$0.00	$0.00	$0.00	$0.00	$0.00
OTHER EXPENSES -- MUST COMPLY WITH OMB CIRCULAR A-21 (Few items not allowed are: memberships in professional & scientific organizations, local telephone lines, cell phones, etc.) Any project expense which does not fall into another category. Provide detailed explanation of the expense and applicable breakdown of costs (e.g. graduate student tuition).						
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
(Description)						$0.00
Sub-Total Other Expenses		$0.00	$0.00	$0.00	$0.00	$0.00
Total Sub-Totals		$0.00	$0.00	$0.00	$0.00	$0.00
INDIRECT COSTS -- MUST COMPLY WITH OMB CIRCULAR A-21						
Indirect cost rates are negotiated between the university and it's cognizant agency. Indicate the type of negotiated indirect rate used and the percentage (e.g. On Campus Research, 52%)						
(Type)	(%)					
	FY1	FY2	FY3	FY4		
Enter $ Amt per FY					$0.00	$0.00	$0.00	$0.00	$0.00
Total Indirect Costs		$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL PROJECT COSTS		$0.00	$0.00	$0.00	$0.00	$0.00
UNIVERSITY MATCHING FUNDS						$0.00
TOTAL MDOT PROJECT COSTS		$0.00	$0.00	$0.00	$0.00	$0.00