

ODOT RESEARCH PROBLEM STATEMENT FORMAT

Select one of the following:

	A) This is a request for a standard research project being made during the regular biennial cycle.
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	B) This is a special/emergency project that needs to occur before the next biennial cycle. Provide explanation for the urgency of this study (e.g.: why this project cannot wait for the regular biennial cycle, etc.) in the comments section below.
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	Comments:
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	C) This is a request for a student study project. See Section 3.2.3 of the RD&T ² manual for more information. If you have a preferred university, complete the following:
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	Name of university:
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	Name of professor:
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	Reason why this university/professor is preferred:
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Indicate YES or NO for each question below and/or provide details as requested.

	1) Is this project being proposed by an office/division in Central Office? If YES, skip to question #5 and continue. If NO, answer questions 2, 3, & 4, skip question 5, and continue.
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	2) Is this project being proposed by a District?
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	3) Does it affect state policy or procedures?
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	4) If YES, has the appropriate office/division in Central Office been contacted? Provide the name(s) of those contacted.
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	5) Is this project included on your office/division strategic research plan?
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	If NO, explain why.
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	If YES, provide the date/year the project was added to your plan.
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	6) Does this project respond to one of the Department's strategic research focus areas or a strategic initiative?
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	If YES, state which one and briefly explain the applicability.
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	7) If you are submitting multiple problem statements, indicate the overall ranking order (e.g.: 1 st , 2 nd , 3 rd , 4 th , etc.) for your office/division of this project.
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	Comments:
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Research Title:

The title of the research study should be descriptive, but be brief (10 words or less). This will be the title of the study as stated on the contract.

Sponsoring Program Office Administrator:

Name:

Office:

Phone:

E-mail:

Technical Liaison(s)/Project Panel (list all individuals):

Name:

Office:

Phone:

E-mail:

Problem Statement:

Describe the present condition. State the problem/area to be addressed. Explain the need for this research and indicate if there are any consequences if not performed. Describe the need and urgency of the study.

Proposed Research:

Describe the scope of work for the research including methods and processes that might be used. Include a flow chart or other graphics, if needed, to better describe intricate processes or schedules. Provide enough detail to clearly state the need and expectations. If the project is to be conducted in phases, indicate so. Note any special restriction/limitations the researcher should be aware of (e.g.: lane restriction will not be available, test must be conducted at specific times, etc.).

NOTE: If this project includes the development or purchase of software for other than single user or local applications, DoIT must be contacted for review and approval. It is the responsibility of the sponsoring program office to make any and all necessary arrangements with DoIT.

Assistance from the Department:

List any special assistance that will be provided by the Department for this project. For example: provide data, traffic control, equipment, vehicles, samples, etc. Note any special contacts from the Districts or Central Office that have been established to provide the assistance.

Implementation:

Describe how the results of the research will be used to address the problem, i.e. new or revised processes, policies, standards, specifications, etc. The extent of involvement on behalf of the researcher in the implementation process should be clarified.

Benefits:

Describe the benefits anticipated from the research findings, e.g., money saved; improved quality, efficiency or safety; advancement of the state of technology, etc. Provide an enumerated list.

Success Criteria:

State how it is anticipated to measure the success of the project. For example: all objectives are addressed, project concluded on schedule, research completed within budget constraints, etc.

Deliverables:

State the expected deliverables. For example: recommendations for new or revised design methods, testing processes, policies, standards, specifications; hardware; software; equipment; etc. A final report of the project must be included in the list of deliverables. Provide an enumerated list.

Existing Research:

Cite any other research, completed or in-progress, where reports or findings may be obtained. Similarly, cite any studies with which the current research must be coordinated or sequenced. The following information of the preliminary literature search results from the ODOT library, TRIS, RIP, and/or other sources must be included in this section of the problem statement: report number, report title, author(s), agency who sponsored the work, and report date. **General comments on the results of this search to support the need for this research must also be provided.** If the existing research does not address the specific needs of this proposed study indicate the relevant shortcomings.

Additional Use:

Describe if and how the research could be used by other agencies.

Duration:

Provide the anticipated, or desired, duration of the study. Include the accomplishment of any intermediate milestones. List any known constraints. If this study is to be done in conjunction with a construction project, state so and include any known special dates that must be considered. Indicate the fiscal year in which this study should begin. Include the standard 4-month review for final reports in the

duration. NOTE: Student studies are limited to a duration of 16 months (which includes the 4-month review period for final reports).

Cost Estimate:

A cost estimate of the proposed research is required along with the problem statement. However, it is intended to be for the Department's internal use only. **This figure is not to be shared with potential researchers.** Provide the estimate along with an explanation as to how it was derived. As an alternative, you can request R&D to prepare this estimate. Please note any equipment, supplies, major travel, etc. that may be needed.

NOTE: Student studies are limited to \$20,000; therefore, a cost estimate is not required. Instead, for these requests, indicate whether or not travel and supplies will be necessary to complete the study.