

SYSTEMS ENGINEERING REVIEW FORM (SERF)

Please provide the following background information. In most cases, two to three sentences are enough for each item.

PART 1 – GENERAL PROJECT INFORMATION

A. Project Contact:

NAME	POSITION
PHONE NUMBER	E-MAIL
AGENCY	JOB NUMBER
FISCAL YEAR	ANTICIPATED LETTING

B. Project Objectives: What is the purpose of the project? What needs (deficiencies) are being addressed?

C. Project Summary: What solutions will address the needs? What major elements will be installed? What major function(s) will be performed?

D. Work-to-date: Any preliminary planning, investigation of options, associated internal or external systems examined, etc.?

E. Is this project considered standard? Yes No

If this project is determined to be Standard as defined in the Guidance Document, complete the remainder of the SERF. If your project is determined to not be Standard by the Guidance Document, but you wish to provide justification as to why it should be considered, use the space below to describe.

F. Risk Assessment (RA) Guidance: Although this assessment is not a regulatory requirement, the answers to these questions will help in understanding the extent of risk involved in this project.

For each question, check **Yes**, **No**, or **Not Sure**

QUESTION	YES	NO	NOT SURE
1. Will the project depend on <i>only Owner</i> to implement and operate?			
2. Will the project use an existing system (Advanced Traffic Management System, etc.) with no or minor (under 120 hrs. estimate) enhancements?			
3. Will the project use only <i>proven</i> hardware and communications?			
4. Will the project use only <i>existing interfaces</i> (no new interfaces to other systems)?			
5. Will the project use only <i>existing system requirements</i> that are defined in writing?			
6. Will the project use only <i>existing operating procedures</i> that are defined in writing?			
7. Does this project conform to the applicable Regional ITS Architecture (or if a regional ITS architecture does not exist, the applicable portions of the National ITS Architecture)			
8. MDOT Use Only - Submit form 2560 (Regional ITS Architecture Conformance and Maintenance Documentation)			

*If all the above answers are **Yes**, this is a preliminary indication that your project is **Low-Risk**.*

PART 2 – REGULATORY COMPLIANCE INFORMATION

Please briefly answer each question. If the question cannot be fully answered now, but will be answered during the project implementation, please indicate the step at which it will be answered.

- A. Identification of Participating Agencies Roles and Responsibilities:** Can you identify all stakeholders that must participate in the design phase of this project? What are their roles/responsibilities? Have they committed to the responsibilities? If this will be defined in a later phase of the project (i.e., Concept of Operations).

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- B. Procedures and Resources Necessary for Operations, Maintenance and Management of the System:** Can you identify all stakeholders that must participate in operations, management and maintenance of the system throughout its life cycle? What are the roles, responsibilities, and resources required from each stakeholder? You should consider hardware, software, and communications issues. List any inter agency agreements existing or required. Who will maintain the proposed devices (ITS Maintenance, Electricians, Third-Party Contractor, etc.)?

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- C. Requirement Definitions:** Are the system requirements (functional and performance) already well-defined in writing?
Yes No

If yes, indicate where they can be found (i.e., Standard Specs). The focus is on **“what”** functions must be performed, not **“how”** the technology will be used to perform them.

D. Identification of Applicable ITS Specifications and Testing Procedures: Are any existing ITS specifications (Unique or FUSP) applicable to this project? Do any new specifications need to be created?

E. Analysis of Alternative System Configurations and Technology Options to Meet Requirements: Have alternative designs been considered? (i.e., System configurations, different organizational roles, alternative hardware, software, or communications technology.) If there is no alternative design at this time, this analysis will occur in the high-level design phase of the project.

F. Additional Information or Comments

MDOT Use Only:	Standard	Low-Risk	High-Risk	COMMENTS
APPROVAL	SIGNATURE			DATE

NOTE: Project classification as process for low- and high-risk will be determined by the MDOT ITS Program Office within 14 days of submission by the local agency. A review of the project classification by the FHWA Area Engineer can be requested by the submitter if the initial determination is challenged.