**APPENDIX A**

SunGuide® ITS Checklist (SIC) Form

Submittal Date: 11.20.2013

Agency: Florida Department of Transportation

Agency Project Manager: Loreen Bobo

Project Description: I-4 Manage Lane Project with Extensive ITS

EXAMPLE

|  |  |  |  |
| --- | --- | --- | --- |
| Project Name: | 432193-1 I-4 Managed Lanes from Kirkman to SR 434 | | |
| Funding Profile | Total Cost | Federal | State |
| DS | $ 0.290M | $0.0M | $0.290M |

| Criteria / Question | | Yes / No / Partially | | Comments |
| --- | --- | --- | --- | --- |
| 1. Architecture Scope and Region Description | | | | |
| a) Is the project in the regional architecture? | Yes | |  | |
| b) List the physical subsystems that are included. |  | | Fiber Network Modification and relocation of Emergency Vehicle Preemption | |
| 2. Key Agency / Provider Identification | | | | |
| a) Identify all participating agencies and providers of services, and define their roles. |  | | FDOT owns the system and | |
| b) Where will the system be used and who will be responsible for operations? Maintenance? |  | | The system will be maintained by | |
| 3. Agreements | | | | |
| a) Are there any agreements that must be implemented between users/agencies in order to implement the project? | | NO | | Existing Maintenance agreement will be utilized |
| b) Can existing agreements be used? | | YES | |  |
| 4. Concept of Operations (ConOps) | | | | |
| a) Has a project ConOps been described in sufficient detail to understand the roles and responsibilities (i.e., technical, financial, human resource, mutual relationship, and functional areas) of the primary users and the systems they operate in the region? | | YES | | It is included on the website with the D5 Regional ITS Architecture. |
| b) Is the project ConOps an integral part of the  District’s ITS ConOps? | | YES | |  |
| 5. Functional Requirements / Requirements Definition | | | | |
| a) Have high-level functional requirements been identified for the system(s) included in the project? Have all requirements contained in the ConOps been incorporated in the functional requirements? | | YES | |  |
| b) Have the detailed functional requirements of the project been listed by system or subsystem? | | YES | |  |
| c) Has a traceability matrix been developed for the requirements? | | YES | |  |
| d) Are the requirements unambiguously stated in terms of shall statements? | | YES | |  |
| 6. Interfaces / Information Flows | | | | |
| a) Have all interfaces for the project that cross agency boundaries been identified and defined? | | YES | | No cross agency boundaries exist for this project |
| b) Have all system and subsystem interfaces/ interconnections been identified? Are there interface control documents (ICD) for these interfaces? | | YES | |  |
| c) Have ICDs been developed for the identified interfaces that do not already have an ICD? | |  | |  |
| d) Have interconnect diagrams or tables been developed to describe the data exchanged between subsystems? | | YES | |  |
| e) Is enough supporting information provided to understand the information exchanged? Has it been clearly identified in an ICD? | | YES | |  |
| f) Are there any integration requirements that may have been overlooked? Are all integration requirements covered by an ICD? | | NO, YES | |  |
| 7. Analysis of Alternative Configuration and Technology Options that Meet the Requirements | | | | |
| a) Have users indicated their preferred solution?  If not, then identify the rationale for the selected solution. | | Yes | | FDOT already utilizes the technology being implemented |
| b) Have life-cycle costs been determined? | |  | |  |
| 8. Procurement Options (i.e., Contracting Options for Implementation) | | | | |
| a) Which option has been selected? | |  | |  |
| • Consultant Design / Low-Bid Contractor | |  | |  |
| • Design / Build | |  | |  |
| • Task Work Order | |  | |  |
| • Invitation to Negotiate | |  | |  |
| • Systems Integrator | |  | |  |
| • Systems Manager | |  | |  |
| • Other | |  | |  |
| 9. Project Schedule | | | | |
| a) Have opportunities to coordinate implementation schedules with other transportation improvements been investigated? | | YES | |  |
| 10. Standards Identification | | | | |
| a) Is the project using FDOT-approved ITS  standards (developed or under development)? | | YES | | The project will utilize equipment on the Approved Product List. |
| 11. Maintenance and Operations Plan | | | | |
| a) Is this project included in the District’s or  FDOT’s overall maintenance program? | | YES | |  |
| b) If this is a local or JPA project, is there a documented plan for maintaining the project? (If not, are there informal agreements for how the project will be maintained and by whom?) | | No | | This is a FDOT project |
| 12. Project Acceptance Test Plan | | | | |
| a) Is there a preliminary acceptance test plan outline? | | YES | |  |
| b) The final detailed acceptance test plan must be submitted prior to 90% completion of the project for approval. | | YES | |  |
| 13. Project Change Control Process | | | | |
| a) Is there a process in place to address project updates, and to resolve or address new requirements or initiatives, etc.? | | YES | |  |
| b) Is there a plan for communicating project changes to the user? | | YES | |  |

Other Comments

Signature Date

Title

APPENDIX B

RISK ASSESSMENT FORM

|  |  |  |
| --- | --- | --- |
| Question: | Yes | No |
| 1. Will the project depend on only your agency to implement and operate? | ◼ | 🞏 |
| 2. Will the project use only software proven elsewhere, with no new software writing? | ◼ | 🞏 |
| 3. Will the project use only hardware and communications proven elsewhere? | ◼ | 🞏 |
| 4. Will the project use only existing interfaces (no new interfaces to other systems)? | ◼ | 🞏 |
| 5. Will the project use only existing system requirements that are defined in writing? | ◼ | 🞏 |
| 6. Will the project use only existing operating procedures that are defined in writing? | ◼ | 🞏 |
| 7. Will the project use only technologies with service life longer than 2-4 years? | ◼ | 🞏 |

Notes:

1. If you are unsure about a question, please be conservative.
2. If all yes selected, then it is a low risk project. If there is even one “No” selected”, it is a high risk project.
3. Use Table 1: Risk assessment for ITS Projects within the document for additional details regarding each question.

[Source: California DOT’s Systems Engineering Review Form. Accessed on February 19, 2013 @ <http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/acrobat/LAPM07I.pdf>]

APPENDIX C

PROPRIETARY ACQUISITION CERTIFICATION

## Certification to comply with 23 CFR 635.411(a)(2)

FIN: FIN number

Project Description: Project Description Text

I (name of certifying official), (position title), of the (Name of contracting agency), do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), that the patented or proprietary items procured are essential for synchronization with existing facilities. This is based off of a Systems Engineering Analysis approach documented in:

* Identify the Concept of Operations, Requirements, Requirements Traceability Matrix, Verification Plan.

For devices not specified in the documents listed above, these were determined to be low risk items from the Systems Engineering Analysis. These are outlined in “Document Name” and are covered under the synchronization clause of 23 CFR 635.411(a)(2).

Furthermore, the scope of this project follows the synchronization guidance. The table below serves as a reference to show that the (Name of Contracting Agency) system falls under the synchronization clause in 23 CFR 635.411(a)(2):

|  |  |  |  |
| --- | --- | --- | --- |
| Device | No. of Existing | No. of Expanded | % Expanded |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(sign and date)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(name of certifying official) (position title)