

## APPENDIX A

### SunGuide® ITS Checklist (SIC) Form

Submittal Date: December 9, 2013

Agency: Orange County

Agency Project Manager: Hazem El-Assar, P.E.

Project Description: Purchase equipment for adaptive signal system,  
Comm. upgrade/expansion, and video wall upgrade

Project Name:	Orange County Advance Traffic Management		
	System (ATMS) Phase 3 – Countywide		
Funding Profile	Total Cost	Federal	State
	\$3.3 M	\$3.3 M	\$0.0M

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.	Field/TMC equipment	
2. Key Agency / Provider Identification		
a) Identify all participating agencies and providers of services, and define their roles.	Orange County, FDOT D5, OOCEA	Marinating and owner agencies
b) Where will the system be used and who will be responsible for operations? Maintenance?	Orange County TMC	Orange County
3. Agreements		

Criteria / Question	Yes / No /Partially	Comments
a) Are there any agreements that must be implemented between users/agencies in order to implement the project?	No	
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	.
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	
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?	N/A	
d) Have interconnect diagrams or tables been developed to describe the data	Yes	

Criteria / Question	Yes / No /Partially	Comments
exchanged between subsystems?		
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?	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	
b) Have life-cycle costs been determined?	Yes	
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	Yes	
• 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		

Criteria / Question	Yes / No /Partially	Comments
a) Is the project using FDOT-approved ITS Standards (developed or under development)?	Yes	
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?)	Yes	
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.	OK	
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 \_\_\_\_\_

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Signature *Hazem El Assar*

Date 12/10/2013

Title Chief Engineer

## APPENDIX B

### RISK ASSESSMENT FORM

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

#### 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/LAPM071.pdf>]