

Regional ITS Architecture Assessment Checklist
Version 2.0 (3/04)

Architecture Name: Oregon Statewide ITS Architecture (Version 2006-2)

Type of Architecture (e.g. Regional, Statewide, etc): **Statewide**

Date Architecture Developed or Last Updated (mm/yyyy): **Developed in 2000**

Reviewers: Statewide ITS Architecture Committee:

- Nathaniel Price (FHWA)**
- Robert Fijol (FHWA)**
- Galen McGill (ODOT)**
- Patrick Hoke (ODOT)**
- Chuck Larsen (ODOT)**
- Hau Hagedorn (ODOT)**
- Doug Spencer (ODOT)**

Project Consulting Team:

- Jim Peters (DKS Associates)**
- Renee Hurtado (DKS Associates)**

Review Date: 06/01/06

This checklist represents elements of a regional ITS architecture, and includes the requirements of the FHWA Rule and FTA Policy on ITS Architecture and Standards Conformity. The checklist is a tool for assessing the completeness of and identifying improvements to the regional ITS architecture. The questions are listed by main topic area with an area for a reviewer to make an assessment. The “Comments” column allows a reviewer to document any suggestions, notes, strengths, or shortcomings. The “Regional ITS Architecture Guidance” Document (FHWA OP-02-024; EDL #13598) contains information on all the elements shown below, and should be used as a reference document for this checklist.

Criteria/Question	Yes/No/ Partly	Comments
1. Architecture Scope and Region Description		
a. Is the region defined geographically? Have boundaries been established such as counties, municipal boundaries, metropolitan areas, statewide, etc.?	Yes	State of Oregon is the boundary.
b. Has a timeframe for the architecture been defined? (For example, 5 or 10 years into the future, or the TIP/STIP planning period)?	Yes	10 Years (2006 – 2016)

Criteria/Question	Yes/No/ Partly	Comments
c. Has the scope of the regional architecture been defined (i.e. the range of services, institutions, or jurisdictions)? Does the scope seem appropriate given the circumstances?	Yes	Nine ITS service areas are included in the architecture.
2. Stakeholder Identification		
a. Are the stakeholders identified in sufficient detail to understand who the players are and for what they are responsible? Are they identified by name, responsibility, jurisdiction, and/or typical roles and activities?	Yes	Primary stakeholders: <ul style="list-style-type: none"> ▪ Transportation agencies ▪ Transit agencies ▪ Public safety agencies Expanded stakeholders: <ul style="list-style-type: none"> ▪ Other public agencies ▪ Private sector organizations ▪ Travelers/system users ▪ Etc.
b. Is the range of stakeholders commensurate with the defined scope of the regional architecture?	Yes	
c. Does the range represent a broad cross-section of all transportation related organizations in the region?	Yes	
d. Is there sufficient information to assess the degree of involvement of each critical stakeholder in the architecture development process?	Yes	
3. System Inventory		
a. Has a system inventory been defined?	Yes	A thorough review and update were conducted in 2006 for the entire state. Descriptions have been added to provide more information inventory elements where needed.
b. Does it include a list of applicable regional systems along with descriptions of each system and their functionality?	Yes	
c. Have National ITS Architecture subsystems and terminators been correctly linked to regional systems?	Yes	
d. Are user-defined entities described in sufficient detail to understand their function?	N/A	
4. Needs and Services		
a. Are needs and services defined and described?	Yes	A thorough review and update were conducted in 2006 for the entire state.
b. Are the needs and services adequately represented in the regional architecture?	Yes	

Criteria/Question	Yes/No/ Partly	Comments
5. Operational Concept		
a. Has an architecture operational concept been described in sufficient detail for the existing systems to understand the roles and responsibilities (technical, financial, human resource, mutual relationship and functional areas) of the primary stakeholders and the systems they operate in the region?	Yes	An operational concept has been added to the Turbo Architecture database. The architecture summary report also provides an overview of the operational concept as well as graphics that depict the high-level interactions between statewide systems for each ITS service area.
b. Has an architecture operational concept been described in sufficient detail for the future systems?	Yes	Anticipated systems through Year 2016 have been included.
6. Functional Requirements		
a. Have high-level functional requirements been identified for each regionally significant system that is included in the architecture? (“Regionally significant systems” are defined as those with interfaces that cross agency boundaries.)	No	The Statewide ITS Architecture Committee maintains their decision to identify functional requirements at the project level for significant statewide systems.
b. Are the requirements categorized by stakeholders?	No	
c. Are the requirements unambiguously stated in terms of shall statements?	No	
d. Is the architecture output presented in a way that is understandable to a variety of audiences, including the public and decision-makers?	No	
7. Interfaces/ Information Flows		
a. Are interconnections defined to indicate what subsystems are connected together? Has this been illustrated by diagrams or tables?	Yes	A thorough review and update were conducted in 2006 for the entire state.
b. Have information flow diagrams or tables been developed to illustrate the information flows that are exchanged between subsystems?	Yes	

Criteria/Question	Yes/No/ Partly	Comments
c. Is enough supporting information provided to understand the information exchanged?	Yes	
d. Does the architecture include appropriate linkages to overlapping or adjacent region architectures?	Yes	There are links to regional architectures within Oregon through the ODOT regional TOCs and links to neighboring states through external state TOCs, EOCs, and state police.
e. Is the connection status (existing or planned) identified for each link?	Yes	Status has been expanded to include existing, programmed, planned, and future.
f. Are there any important integration opportunities that may have been overlooked?	No	
8. Project Sequencing		
a. Has a plan been established by which projects would be defined and sequenced over time?	Yes	Project sequencing has been identified for the 2007 – 2009 and 2009 – 2011 bienniums. Additional projects have been identified for implementation after 2011. The sequencing for these projects will need to be revisited as part of the maintenance process.
b. Has an initial sequencing of currently defined projects been established?	Yes	
c. Does the sequencing adequately address the interdependencies among projects?	Partly	
d. Have opportunities to coordinate implementation schedules with other transportation improvements been investigated?	Yes	
9. Agreements		
a. Has a list of the agreements needed between key stakeholders in order to implement the projects that will come out of the regional ITS architecture been defined?	No	Many agreements exist, but are not documented in the architecture. These are typically defined at the project level.
b. Can existing agreements be used?	Yes	

Criteria/Question	Yes/No/ Partly	Comments
10. Standards Identification		
a. Are ITS standards described that are applicable to the development of projects coming out of the regional ITS architecture?	Yes	A thorough review and update were conducted in 2006 for the entire state. Standards currently under development will need to be monitored as part of the maintenance process to determine their applicability.
b. Are these standards associated with specific information flows or interconnects?	Yes	
c. Are there any important standards that may have been overlooked?	No	
11. Using the Regional ITS Architecture		
a. Is there a description for incorporating and using the regional ITS architecture in the region's planning process?	Yes	The architecture summary report includes a description of how the architecture is used as part of ODOT's systems engineering approach to project planning and development.
b. Will a regional stakeholder organization or committee monitor and manage the planning process and the architecture use? Are all important responsibilities addressed?	Yes	
c. Is there a description for using the regional ITS architecture in support of project implementation?	Yes	
12. Maintenance Plan		
a. Is there a documented plan for maintaining the architecture? (If not, are there informal agreements for how the regional architecture will be maintained?)	Yes	A maintenance plan has been included in the architecture summary report. The ODOT ITS Unit will update the architecture every two years or on an exception basis for larger projects.
b. Have the various reasons for updating the architecture been addressed (project updates, new requirements or initiatives, etc.)?	Yes	
c. Is there a plan for communicating changes in the architecture to stakeholders?	Yes	
d. Have the responsibilities of the various stakeholders or groups been well defined?	Yes	

Other comments: _____