

## **APPENDIX B. SAMPLE CVISN STATE PROGRAM PLAN OUTLINE**

This outline is provided as an indication of the breadth and depth of information that ideally is included in the CVISN State Program Plan. When finished, the plan will provide the overall direction needed by the team to achieve the program's objectives. Additional detailed planning must be accomplished as part of the phased development process.

### **Sign-Off Page**

*Not only does the sign-off page make a handsome first page, it also motivates the signatories to actually read the plan. You will want to get the signature of the heads of all appropriate state agencies, plus representatives of major stakeholders – especially anyone who could subvert successful deployment.*

*The CVISN Pilot States learned that signers often have one or two serious reservations and are therefore reluctant to sign. The states handled it by specifically acknowledging and documenting those concerns in an "Issues" chapter of the Plan. This technique is especially effective if a signer's objection is limited to only one area (say, a budget item) and he or she is comfortable with all other aspects of the plan.*

### **Cover Page**

### **Table of Contents**

#### **1. Program Executive Summary**

*Write this last, and constrain it to just a few pages. Imagine it is for the Governor. You might even want to print it on colored paper so it stands out.*

#### **2. Introduction**

*Help the reader fit CVISN into both historical and system context. For example, ITS/CVO had its roots in the Federal Intermodal Surface Transportation Efficiency Act (Public Law 102-240, 1991) – commonly called ISTEA; it is currently being funded through renewal legislation, the Transportation Equity Act for the 21<sup>st</sup> Century (Public Law 105-178, 1998) – commonly called TEA-21 [77]. Explain how CVISN fits into your state's existing systems and strategic plans.*

### 3. Program Objectives & Project Descriptions

*CVISN itself has the objectives of safety, simplicity, and savings. Your state will have additional objectives such as joining an existing electronic screening program along a major interstate route. This chapter should define high-level, easy-to-understand goals and objectives for your program.*

*This chapter should also list the initial projects under your CVISN program. Include brief descriptions so that the readers understand what the projects encompass.*

### 4. System Requirements and Design

- Narrative that summarizes the key features of your design.
- Current State System Design.
- Current Physical Design.
- Proposed State System Design.
- Proposed Physical Design.
- Reference your State CVISN System Design Description. (That document should include the filled-in tables from the COACH Parts 1, 3, and 4 [70]; top-level physical system design; system interface summaries; system change summaries; operational scenarios; and technical issues.)

*You do not want to bulk up the Project Plan with copies of material that is better packaged elsewhere, such as in the State CVISN System Design Description. Simply cite that document. You will however want to include a few key top-level diagrams and tables so that the Program Plan can stand reasonably well on its own. Be sure the differences between the current and planned diagrams are easy to notice. This can be accomplished by using different line types, fonts, shading, or colors that reproduce clearly in black and white.*

### 5. Program Work Breakdown Structure

- Top-level WBS elements, decomposed enough to give substantive insight. (For example: down to level 3 or 4.)
- Each project should appear at the second or third level of the WBS.
- Also at the second level: program management, system engineering, and other cross-project functions and services.
- Note that there is a special requirement for assessment and evaluation of federally-funded ITS projects [76], hence its inclusion as a separate top-level WBS element.

*On diagrams it is usually clearer to show two or three levels of detail on one page, then shift to separate pages for additional decomposition. Sufficient detail should be revealed to substantiate budget needs. Each project leader should develop a more detailed WBS starting from the applicable point of this over-all program WBS.*

## **6. Program Organization Structure**

- State Agency Organization Chart.
- State CVISN Program Organization Chart.
- (Optional) Project Organization Charts.

*In the State Agency Organization Chart, highlight the entities that are involved in the CVISN program and its projects.*

*In the State CVISN Program Organization Chart, show the key players for CVISN in the state, and how they relate to each other within the CVISN programmatic structure. Include roles, names, and the individual's home agency/office. If there is a Steering Committee, include it. Also show the configuration management teams.*

## **7. Program Work Assignments**

- Map the WBS tasks to the program organization.
- Each task should have a responsible entity (state agency or contractor) and, where possible, be assigned to a specific individual for execution.

*The result is a matrix in which each row represents a task, and the columns contain the name of the responsible agency and person.*

## **8. Procurement Strategy**

- Narrative and charts explaining the various contracting approaches; which items can be grouped together for procurement actions; procurement lead agency/personnel assignments; and the sources of funding (if known).

*The procurement strategy establishes the plan of attack for how the program will go about purchasing various goods and services. The strategy also identifies the stakeholders that should be involved with each procurement.*

## 9. Program Processes

Your program should have defined processes (i.e., descriptions about how you will do business) for the activities you want to be common across all projects. For instance, you may choose to enforce common practices for project planning, procurement, phase planning and tracking, and some aspects of configuration management. Clear and effective coordination and communication result when state agencies and contractors use common processes for activities where information must be shared.

The following are suggested processes to think about:

- Work Planning
- Progress Tracking and Status Reporting
- Budget Planning and Tracking
- Schedule Planning and Tracking
- Procurement
- Contracting and Contract Management
- Sponsor Liaison
- Funding
- Legislative Liaison
- Motor Carrier Liaison
- Inter-Agency Liaison
- Training
- Configuration Management
- System Development
- Information Systems
- Product Documentation
- Testing
- Program Library
- Team Meetings
- Team Communications
- Action Items
- Issue Resolution
- Collecting data for cost-benefit or cost savings analysis per FMCSA guidelines on self-evaluation of ITS projects [76]

*Where there are existing process descriptions, simply cite them. Where none already exist, we suggest you create them. Everyone on the program should have the same understanding of how they are going to get the job done.*

*The state's working copy of the COACH Part 2 Management Checklists [70] should either be included in this chapter or in an appendix. It is used to explain planning and management processes.*

## 10. Program Phases and Critical Milestones

- Major Milestones.
- Program Phase Charts.
- Build Summary Chart for each Project.

*At the end of each phase there should be some new or improved capability. Achieving this capability may require synchronized accomplishments in multiple projects. It should be possible to define one or two major measurable milestones for each phase.*

## 11. Funding Resources, Program Budget

- WBS element costs per unit time (probably fiscal year) indicating personnel, subcontract, procurement, and other direct costs.
- Funding: known resources for the program; planned or anticipated funding sources over time.
- Pie chart showing percentages of funding coming from different sources.

## 12. Program Products

- Table of significant hardware items for the program.
- Table of significant software components for the program. Do you have access to the source code?
- User and maintenance manuals.
- Table of significant deliverable design documents for the program as a whole. Also include major categories of documents for each project.

*Products should be inherent in the WBS as tasks so that they appear with assignments, costs, and schedules. Listing them separately in this plan is useful for visibility and as a crosscheck against the details of the project task lists. Be sure to address intellectual property rights, such as the state's ability to modify software source code.*

## 13. Program Issues to be Resolved

*There may not yet be any. However, we have found that often enough a signatory to the Program Plan won't sign off without reservations, and this is a place to document those reservations. If there are some high-risk items, note them here, along with your plans for risk mitigation. Keep track as the issues are settled.*

**Possible Appendixes:**

- Definitions of acronyms.
- State's working copy of the COACH Part 2 (Management Checklists) with columns filled in [70].
- State's working copy of the COACH Part 1 (State System Checklists) with columns filled in [70].
- Point-of-contact list with addresses, telephone numbers, e-mail.
- Previous, related plans and reports needed for ready reference.
- Any other information too detailed for the main body of the document, yet necessary in order to communicate fully.