

**Expanded CVISN Program Plan and
Top-Level Design**

For the State of (INSERT STATE)

Insert Date

EXECUTIVE SUMMARY

[The Executive Summary should provide readers with a high-level understanding of the mission/purpose of the state’s Expanded CVISN program. The summary should indicate the program’s relevance to the state, the role of the state’s agencies in program deployment, specific projects to be deployed, high-level budget and schedule information, and high-level system design. The Executive Summary also should note any other federal or state programs (e.g., PRISM, MCSAP, CDL, safety data improvement, border crossings) with which a state’s CVISN program will be coordinated.]

Optional high level diagrams and tables may be included at the state’s discretion, such as those shown in subsequent chapters.

Note: The System Design Diagram should represent the state systems that support the CVISN architecture in your state. All the system labels or names used on the System Design Diagram should also be found on the Network Diagram, and they should be consistent.]

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1. Introduction

[The introduction should orient the reader to the purpose, scope, and contents of the document, and provide an overview of the purpose of the state’s Expanded CVISN program. The introduction should be no more than 2-3 pages in length.]

1.1 Purpose and Scope of Document

[This subsection should describe the purpose of the document.]

1.2 Background

[This subsection should provide background information/context regarding the state’s Expanded CVISN program. Elements of this section should include:

- Brief statement describing the national CVISN program and the state’s commitment to deploying a program of projects to implement Expanded CVISN capabilities.
- Overview of the state’s Core CVISN deployment – including the date on which the state was certified as Core CVISN compliant.
- Overview of the state’s Expanded CVISN program goals and objectives.
- Description of project team (e.g., lead agency, member agencies, motor carrier association, FHWA/FMCSA Division Offices, key participants, and key responsibilities (e.g., contact for each CVISN agency, and key project responsibilities – coordination with other programs, project management, procurement).
- Reference to the relationship between the participating agencies (e.g., Memorandum of Understanding).
- Business case (rationale) for the state’s participation in the Expanded CVISN program – benefits that will be realized by motor carrier industry, by state agencies, and by the public through the state’s deployment of Expanded CVISN functionality and/or augmented Core CVISN capabilities.]

1.3 Organization of this Document

[This subsection should describe the remaining contents of the document. Each subsequent major section should be listed and described.]

2. Expanded CVISN Program

[This section should serve as a general introduction to the state’s Expanded CVISN program. The section should identify the focus of the state’s Expanded CVISN program (e.g., deploying Expanded CVISN capabilities, re-deploying Core CVISN capabilities, augmenting previously deployed Core CVISN capabilities).]

2.1 State Expanded CVISN Goals

[This section should list the state’s Expanded CVISN goals and objectives building upon the goals and objectives established in the state’s ITS/CVO Business Plan, Core CVISN Program Plan and Top-Level Design document(s).]

2.2 Current Expanded CVISN Related Activities/Projects

[If applicable, this subsection should describe ongoing projects that are part of the state’s Expanded CVISN program or projects that support the state’s Expanded CVISN program.]

2.3 Planned Expanded CVISN Deployment Projects

[This section should include a description of the Expanded CVISN projects that the state is planning to deploy. The description should include an overview of project objectives, expected benefits, lead agency, and high-level requirements for implementation. The description also should document how each project/operational scenario will operate from a user’s perspective (e.g., types of electronic payment accepted, how electronic credentialing systems will be accessed, how roadside personnel will query necessary data). Where applicable, the state also should identify key factors considered in the development of the project’s operational scenario (e.g., federal/state regulations, federal/state law, CVISN program requirements, customer service considerations).

The format suggested below in Table 2-1 lends itself to inclusion in deployment funding applications and also helps the state in defining the steps/phases required for project implementation.]

Table 2-1 Project Description #1 [Repeat for each project]

PROJECT NAME:	
<i>Project Objectives:</i>	
Project Benefits:	
<input type="checkbox"/>	Benefits to the State:
<input type="checkbox"/>	Benefits to the Motor Carrier Industry:

Project Description:	
<i>Operational Scenario:</i>	
<i>Lead (host) Agency:</i>	
<i>Participating Agencies:</i>	
Key Functions to be Provided by Project/System:	
	1.
	2.
	3.

3. System Design

[The System Design section should present the proposed system design for the state’s Expanded CVISN deployment. It is intended to provide an overview of the existing state and national systems/networks involved in the state’s Expanded CVISN deployment, new systems/connectivity to be implemented to complete deployment, and a summary of the system changes required to implement Expanded CVISN capabilities. This section also should define the interfaces required between/among systems and the interface documents (i.e., interface control documents) that will be followed and/or developed. This section is expected to be approximately 15 pages in length.

This section should define the interfaces required between/among state CVISN systems and national information systems to facilitate cost estimation/schedule planning. This section should be approximately 10-20 pages in length and should especially focus on:

- Interfaces to the National ITS Architecture;
- Interfaces to the national and state CVISN architectures; and
- Expanded CVISN guidelines (to be provided by FMCSA as additional detail is known about the Expanded CVISN capabilities).]

3.1 Architecture Overview

[This section should provide an overview of the state’s CVISN architecture. It should summarize the key concepts (e.g., single sign-on for enforcement officers to access any information they need) that shape the design. It should summarize key aspects (e.g., Web services) of the approach chosen to implement the state’s Expanded CVISN programs. It should include the System Design and State Computers and Networks diagrams (Figures 3-1 and 3-2), highlighting new and modified systems and networks. If the design proposed is not represented in or aligned with the National ITS Architecture and/or the CVISN Architecture, explain how and why. If

updates are needed to the National ITS Architecture and/or the CVISN Architecture to achieve nationwide interoperability, please describe them in this section.]

Figure 3-1. Expanded CVISN System Design Diagram

[This diagram should show the systems related to your Core CVISN and Expanded CVISN programs.]

Figure 3-2. State Computers and Networks Diagram

[This diagram should summarize the host computers and networks.]

3.2 Description of System Components

[This section should describe the state legacy systems involved in the Expanded CVISN deployment, including the platform (e.g., mainframe, Oracle), whether it is a state or vendor-owned system, host network, current functions/interfaces, and functions/interface requirements under the CVISN design. This information can be excerpted and incorporated into RFPs or work scopes for vendors, contractors, and in-house staff in the deployment phase. This section also should describe the network environment for each agency.]

3.3 Project Design Elements

[This section should include a subsection for each of the state’s planned Expanded CVISN deployment projects. For each project, a diagram showing the interface requirements (existing and planned) with other systems (state, national, and carrier) and the interface types that will be employed (where known) should be included. Identify where published standards apply. Identify other interface documents (e.g., interface control documents) that will be followed or developed. This section also should include a table indicating high-level system changes required, the magnitude of change (small, medium, large), and whether the state anticipates buying or “building” the change (See Table 3-1).]

Table 3-1 System Change Summary

System	Description of Modifications Required	No Change	Change (S,M,L)	Buy	Build

3.4 System Testing

[This section should present a high-level overview of the types of testing (e.g., system tests, interoperability tests, operational tests) that will be conducted as part of the state's Expanded CVISN program.]

4. Procurement Strategy/Products

[This section should document the products/services that the state may need to procure for each project. This section also should detail the state's planned procurement strategy for all identified products/services (e.g., where RFPs will be required, where state contract or existing contracts might be used, where in-house development resources may be required). This section could consist of a table with a format similar to Table 4-1. This section is expected to be no more than 3-5 pages in length.]

**State Expanded CVISN Program Plan / Top-Level Design
Template**

Table 4-1 Products/Procurement

Procurement Item Group	Description of Procurement	Procurement Item	Category	Contracting Approach		Procurement Leader	Earliest Date Procurement Anticipated
				Type	Method of Award		

5. Program Schedule

[This section should document the state’s planned deployment schedule. Where appropriate, a project should be segmented into its constituent “builds”, indicating the key milestones and sequence in which a project will be implemented. A graphic representing the proposed schedule also should be included. This section is expected to be no more than 3-5 pages in length.]

6. Program Budget

[This section should present an estimate of the total Expanded CVISN implementation budget and should indicate the amount of federal and non-federal funding sources. The budget also should identify the sources of matching funds that will be used in support of federal CVISN deployment funds. This section also should include the financial and state staff resources required to implement the state’s Expanded CVISN program. This section is expected to be no more than 1-2 pages in length.]

7. Design/Deployment Issues

[This section should highlight unresolved issues that have emerged during the state’s planning and design effort. The proposed method for addressing each issue also should be summarized. Issues could be project related, or related to resources, funding, or match capabilities. This section should serve as a placeholder for the state regarding issues in need of resolution prior to full deployment. It also serves as a means of notifying FMCSA reviewers of the fact that the state is actively considering these items and did not omit them in its design.]