

Attachment A

**(Expanded or Core) ITD Program Plan
and Top-Level Design (PP/TLD) Template**

For the State of Alaska

[Insert Date]

Executive Summary

[The Executive Summary should provide readers with a high-level understanding of the mission/purpose of the state's ITD 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 ITD program will be coordinated.]

Include a table of deployed and planned technology. Technology here refers to any device, equipment or system that promotes the efficiency and effectiveness of the inspection process and credentialing administration. The major technologies that pertain to the ITD program include information systems, e-screening devices and roadside imaging systems.

An example of such a table is shown below:

Technology	Physical Location: Address	Physical Location: Latitude; Longitude	Deployed/Planned*
LPR	I-90 – Eastbound – Worcester, mile marker 163	63°54; 165°123	Deployed
E-Credentialing System	DOT Headquarters 55 Broadway, Cambridge, MA 10241		Deployed
CVIEW	DMV 89 Main Street Boston, MA 02102		Deployed

* Deployed projects should be listed first in the table.

Note: High-level diagrams and tables, such as those shown in subsequent chapters, are optional and should be included at the state's discretion.

Note: The System Design Diagram should represent the state systems that support the ITD 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.]

Contents

Executive Summary	2
1. Introduction.....	4
1.1 Purpose and Scope of Document	4
1.2 Background.....	4
1.3 Organization of Document.....	4
2. State ITD Program	4
2.1 State ITD Goals.....	4
2.2 Current ITD-Related Activities/Projects.....	5
2.3 Planned ITD Deployment Projects	5
3. System Design	6
3.1 Architecture Overview	6
3.2 Description of System Components.....	6
3.3 Project Design Elements	7
3.4 System Testing.....	7
4. Procurement Strategy/Products.....	7
5. Program Schedule	9
6. Program Budget	9
7. Design/Deployment Issues.....	9

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 ITD 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 this document.]

1.2 Background

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

- Brief statement describing the national ITD program and the state's commitment to deploying a program of projects to implement Expanded or Core ITD capabilities.
- Overview of the state's Core ITD deployment – including the date on which the state was certified as Core ITD compliant. (This applies only to Core compliant states.)
- Overview of the state's ITD program goals and objectives.
- Description of state ITD program team. Include team entities (e.g., lead state ITD agency, other state ITD agencies, motor carrier association, FHWA/FMCSA Division Offices; key team participants their responsibilities (e.g., contact for each state ITD agency and their key project responsibilities, such as 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 ITD program – benefits that will be realized by motor carrier industry, by state agencies, and by the public through the state's deployment of Expanded or Core ITD functionality and/or augmented Expanded or Core ITD capabilities.]

1.3 Organization of Document

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

2. State ITD Program

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

2.1 State ITD Goals

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

2.2 Current ITD-Related Activities/Projects

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

2.3 Planned ITD Deployment Projects

[This section should include a description of each Expanded or Core ITD project that the state is planning to deploy. Each 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, ITD program requirements, and 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>Physical Location (Address and/or Latitude/Longitude):</i>
<i>Project Objectives:</i>
Project Benefits:
Benefits to the State:
Benefits to the Motor Carrier Industry:
Project Description:
<i>Operational Scenario:</i>
<i>Lead (host) Agency:</i>
<i>Participating Agencies:</i>
<i>Key Functions to be Provided by Project/System:</i>
1.
2.
3.

3. System Design

[The System Design section should present the proposed system design for the state's ITD deployment. It is intended to provide an overview of the existing state and national systems/networks involved in the state's Expanded or Core ITD deployment, new systems/connectivity to be implemented to complete deployment, and a summary of the system changes required to implement Expanded or Core ITD capabilities. This section also should define the interfaces required between/among systems and the interface control documents that will be followed and/or developed.]

This section should define the interfaces required between/among state ITD 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 ITD architectures
- ITD guidelines, which are provided by FMCSA as additional detail is known about the ITD capabilities).]

3.1 Architecture Overview

[This section should provide an overview of the state's ITD 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 ITD program. 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 ITD architecture, explain how and why. If updates are needed to the National ITS architecture and/or the ITD architecture to achieve nationwide interoperability, please describe them in this section.]

Note: The ITD System Design Diagram should represent the state systems that support the ITD 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.]

Figure 3-1. ITD System Design Diagram

[This diagram should show the systems related to your Core ITD and Expanded ITD deployments.]

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 Expanded or Core ITD deployments, 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 ITS 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 or Core Expanded ITD 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 example format in Table 3-1).]

Table 3-1. System Change Summary

System	Description of Changes Required	No Change	Magnitude of 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 or Core ITD deployment.]

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.]

Table 4-1. Products/Procurement

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

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 or Core ITD 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 ITD deployment funds. This section also should include the financial and state staff resources required (travel or contractual) to implement the state's ITD program. This section is expected to be no more than 1-2 pages in length.]

The example table (Table 6-1) indicates a total Expanded or Core ITD implementation budget and the amount of federal and non-federal funding sources.

Note: Identify the sources of matching funds in narrative form (not in a table).]

Table 6-1. Example Program Budget

Cost Categories	2013 Project 1	2013 Project 2	2015 Project 1	2015 Project 2	State Funds	Federal Funds	Total
Travel	\$ 0		\$ 0		\$ 0	\$ 0	\$ 0
Equipment	\$ 0	\$ 0			\$ 0	\$ 0	\$ 0
Contractual	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Other	\$ 0				\$ 0	\$ 0	\$ 0
<i>Total</i>	<i>\$ 0</i>	<i>\$ 0</i>	<i>\$ 0</i>	<i>\$ 0</i>	<i>\$ 0</i>	<i>\$ 0</i>	<i>\$ 0</i>
	<i>2013 Total \$ 1,970,000</i>		<i>2015 Total \$ 1,010,000</i>				

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.]