US. Department
of Transportation

**Federal Highway
Administration**

FACT SHEET
ITS/CVO TECHNOLOGIES MODEL DEPLOYMENT

WHAT IS "CVISN" ?
Commercial Vehicle Information Systems and Networks (CVISN)

The ITS/CVO element of the ITS Program includes the ITS technologies which uniquely support Commercial Vehicle Operations (CVO). The scope of CVO includes the operations associated with the movement of goods and passengers -- via commercial vehicles -- throughout the North American highway systems, and the activities necessary to regulate these operations. The ITS/CVO Program is unique in its approach. The program is entirely voluntary, and relies on public sector agencies and the private sector to participate based on the recognition of the value of the technologies to public safety and private sector efficiency. The ITS/CVO Program includes activities related to safety assurance, commercial vehicle credentials and tax administration, roadside safety operations, freight and fleet management, and vehicle operation.

The term Commercial Vehicle Information Systems and Networks (CVISN) refers to the ITS information system elements that support CVO. CVISN is not a new information system, but rather a way for existing systems to electronically exchange information through the use of standards and the US commercially available communications infrastructure. CVISN includes information systems owned and operated by state/local governments, carriers, and other stakeholders. It does not include the sensor and control elements of ITS/CVO technologies.

The goal of CVISN is to foster a crash-free environment, and enhance performance-based safety management for both the public and private sectors. CVISN will enable electronic information exchange among authorized stakeholders via open standards, thus enhancing safety and increasing productivity....

The CVISN Core Infrastructure is a selected group of key CVO information systems that provide a mechanism for the exchange of safety information, registration, fuel tax, HAZMAT and commercial driver license information among states. The Core Infrastructure is also designed to provide the motor carrier industry with a methodology for obtaining the necessary credentials to operate legally, electronically. CVISN will result in the elimination of the need for numerous trips to various state agency offices -- by a motor carrier operator -- in order to purchase required credentials. CVISN deployment will evolve incrementally, starting with the prototype and piloting of various CVO technologies, and proceeding in practical and manageable steps with heavy end-user involvement.

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The CVISN Deployment Strategy is divided into 5 major steps. The first step develops the architecture, management plans and technical frameworks necessary to coordinate the subsequent phases. **Phase 1** is complete. **Phase 2** was to prototype the technology in a live environment using two states to demonstrate the operational concepts and validate the requirements. The states involved in the Prototype -- Maryland and Virginia -- are now field-testing the technologies connected with CVISN. The States will showcase various ITS/CVO technologies and document the "lessons learned' during the process and share those experiences with the states participating in the Pilot Phase of the effort.

Phase 3 in the deployment strategy is to Pilot the approach, in selected states, representing the seven truckshed regions of the U.S. The States selected for this Pilot effort are: Connecticut, Michigan, Kentucky, Minnesota, Colorado, California and the combined states of Washington/ Oregon. **Phase 4** is to expand from the Pilot states to an equal number of partner states in the same regions. The final phase then, allows for full deployment of CVISN to all interested states. By this time the technology, concepts, costs and benefits should be well understood and documented.   The end result should be deployment of the CVISN technologies in a straightforward manner with little unforseen risk to the public or private sector.

The Vision for the CVISN Program is that by the year 2005, trucking operations will have become extremely efficient "paperless" due to the availability of accurate information in an electronic format. For example, carriers will have their vehicles equipped with a variety of productivity and safety improvements such as: mobile communications systems, navigation and tracking systems, on-board vehicle monitors, engine efficiency monitoring systems, collision avoidance devices, crash restraints, and vision enhancement equipment.

As a result of the implementation of CVISN, carriers will be able to participate in programs designed to enhance en-route travel by virtually eliminating weigh station delays using electronic screening to check vehicles at mainline speeds. Carriers could voluntarily adopt driver alertness management programs and equipment, and will have the ability to maintain trip logs electronically. Carriers would be using electronic transactions such as payment of taxes and fees to support inter-modal interchange among trucks, railroads, ships and air freight lines, as well as using fleet management systems to optimize schedules, routing and maintenance. These same systems will be used to share information internationally across borders with our neighbors -- Canada and Mexico. Using integrated systems -- containing information coordinated by Transportation, Customs, and INS agencies -- motor carriers will be able to travel from one end of North America to the other with little or no stopping at the borders.

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