

STATE OF MAINE

INTELLIGENT TRANSPORTATION

SYSTEMS -

COMMERCIAL VEHICLE OPERATIONS

BUSINESS PLAN

October 2003

MAINE ITS/CVO BUSINESS PLAN
TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Executive Summary.....	i - ii
Table of Acronyms Used in the Plan Document.....	iii
I. Introduction.....	1 - 2
II. Overview of the 1998 Business Plan Development Process.....	2 - 4
III. Accomplishments Since The 1998 Business Plan Issuance.....	4 - 7
IV. Description of Motor Carrier Activity In Maine.....	7 - 13
V. Strategic Overview.....	13 - 19
A. Mission Statement.....	13
B. Guiding Principles.....	14
C. Goals.....	14 - 15
D. Short Term Objectives.....	15 - 16
E. Long Term Objectives.....	17 - 19
VI. Business Plan Relationship To CVISN/I-95 Corridor Objectives.....	19
VII. Contact Names.....	20 - 21
Appendix: Matrix of Objectives, Projects and Strategies.....	22 and following

MAINE INTELLIGENT TRANSPORTATION SYSTEMS COMMERCIAL VEHICLE OPERATIONS BUSINESS PLAN

EXECUTIVE SUMMARY

The mission of the October 2003 Maine Intelligent Transportation Systems - Commercial Vehicle Operations (ITS/CVO) Business Plan is to promote and deploy intelligent transportation systems technology in Maine to improve the efficiency and safety of motor carrier operations and enhance motor carrier administration and enforcement capabilities. In 1996, representatives from Maine State government's commercial vehicle regulatory agencies, the U. S. Department of Transportation, and the motor carrier industry formed a working group to address ITS issues in commercial vehicle operations. The group issued a Maine ITS/CVO Business Plan in 1998 and subsequently completed a pilot project to consolidate motor carrier data for real time access by field enforcement. The group consulted with the I-95 Corridor Coalition, which provided funding for the pilot project. This business plan updates the 1998 ITS/CVO Business Plan in order to incorporate interim accomplishments, current conditions, and revised priorities in the use of ITS technology in commercial vehicle operations.

The Plan's guiding principles for ITS/CVO deployment and technological planning are that: 1) the public sector should take the lead in establishing a basic ITS infrastructure; 2) confidentiality shall be protected; 3) participation in ITS shall be voluntary; 4) process design for greater efficiency should be emphasized rather than just identifying technology to automate existing processes; 5) the lowest level of technology that will do the job should be employed; and, 6) PC level use on the Internet should be targeted, but other options should not be excluded.

The Business Plan's short term objectives, projects, and strategies, to be accomplished within one year of Business Plan issuance, are designed to enhance real-time links between field enforcement and motor carrier data bases. These include: 1) finalizing an implementation team to develop a Maine CVISN architecture for ITS/CVO systems; 2) expanding BMV's UMCAMS data base capabilities to utilize road/weather information for overlimit permit routing (CARS

program); 3) increasing the efficiency of motor carrier regulation and reducing needless paperwork; 4) preparing to implement automated vehicle clearance at the road side; 5) educating the public on ITS technologies; and, 6) integrating Maine's ITS/CVO activities with other regional and national ITS initiatives.

The Business Plan's long-term objectives and projects that will need more than one year to complete build upon the previously enhanced data base. These objectives include: 1) enhancing interagency and motor carrier industry coordination of ITS development in Maine; 2) improving the State's ability to relate crash and violations data with location; 3) implementing an automated vehicle clearance system; 4) further improving motor carrier administrative capabilities and reducing paper work in motor carrier regulation; 5) continuing the integration of Maine ITS/CVO activities with regional and national initiatives; and, 6) continuing to update and refine the ITS/CVO Business Plan.

Note: A strategic overview of The Plan, including its goals and its short term and long term objectives, projects, and strategies may be found beginning on Page 14 of this document.

TABLE OF ACRONYMS USED IN THE PLAN DOCUMENT

AAMVA	- American Association of Motor Vehicle Administrators
BIS	- Maine Bureau of Information Services
BMV	- Maine Bureau of Motor Vehicles
CARS	- Condition Acquisition and Reporting System
CODES	- Crash Outcome Data Evaluation System
CVEU	- Commercial Vehicle Enforcement Unit
CVISN	- Commercial Vehicle Information Systems Network
CVO	- Commercial Vehicle Operations
EMS	- Emergency Medical Services
FHWA	- Federal Highway Administration
FMCSA	- Federal Motor Carrier Safety Administration
GIS	- Geographic Information System
HCL	- High Crash Location
ICC	- Interstate Commerce Commission
IFTA	- Interstate Fuel Tax Agreement
IRP	- International Registration Plan
ITS	- Intelligent Transportation System
MCS	- Motor Carrier Services Office (Maine Bur. Of Motor Vehicles)
MCSAP	- Motor Carrier Safety Assistance Program
MDOT	- Maine Department of Transportation
MSP	- Maine State Police
NASTO	- Northeast Association of State Transportation Officials
NETC	- New England Transportation Consortium
PAR	- Police Accident Report
PRISM	- Performance and Registration Information Systems Management
SMS	- Safety Management System
SSRS	- Single State Registration System (operating authority)
TEA 21	- Transportation Equity Act for the 21st Century
TIDE	- Transportation Information for Decision Enhancement
TINIS	- Transportation Integrated Network Information System
TRIO	- TRaveler Information Online
UMCAMS	- Unified Motor Carrier Account Management System
USDOT	- United States Department of Transportation

**Maine Department of Transportation
Maine Bureau of Motor Vehicles
Maine State Police
Maine Revenue Services
Maine Bureau of Information Services**

October 2003

**Maine Intelligent Transportation Systems -
Commercial Vehicle Operations Business Plan**

I. Introduction

The overall purpose of Maine's "Intelligent Transportation Systems - Commercial Vehicle Operations (ITS/CVO) Business Plan" is to maintain a coordinated policy and implementation plan to deploy intelligent transportation systems technology in Maine commercial vehicle operations. This technology will be used to improve both the efficiency and safety of Maine commercial vehicle operations. The Maine ITS/CVO Business Plan is the product of a cooperative effort between Maine State Government agencies involved in motor carrier regulation, the Federal Highway Administration, the Federal Motor Carrier Safety Administration, and the motor carrier industry. Successful implementation of this plan will depend on continued cooperation among those entities.

Maine's process of developing and deploying ITS technology began with the ITS/CVO Institutional Issues Study, which was completed in October 1995. This federally funded study was conducted by a consultant under the direction of the Maine and New Hampshire Departments of Transportation and the Vermont Agency of Transportation, with the advice of motor carrier industry groups in the three states. The study explored the current operation of commercial vehicle operations programs in the three states and the institutional barriers preventing the use of ITS technologies to achieve "transparent borders" and improved safety enforcement in commercial vehicle operations. The study concluded that more efficient use of ITS technologies in the three states requires that: 1) common motor carrier identifiers are established; 2) access to motor carrier databases in each state be improved through database consolidation; and, 3) safety and weight enforcement clearance systems be upgraded. A key finding of the study was that interagency cooperation within each of the state's regulatory bureaucracies and

partnership with their state's motor `industry is critical to the successful deployment of ITS/CVO technologies.

After the Maine ITS/ CVO Business Plan Working Group was formed in August 1996, representatives of the Maine Department of Transportation, the Maine Bureau of Motor Vehicles, the Maine State Police, Maine Revenue Services and the Maine Bureau of Information Services signed a memorandum of understanding to cooperate in the development of a Maine ITS/CVO Business Plan. A Maine ITS-Commercial Vehicle Operations Business Plan was issued in January 1998.

II. Overview of the 1998 Business Plan Development Process

Maine's first ITS/CVO Business Plan, issued in January 1998, was developed in five phases, some of which occurred concurrently:

Phase 1- ITS/CVO Working Group Formation

MDOT chaired a working group, formed in accordance with the FHWA Mainstreaming Program Agreement and a memorandum of understanding among the relevant agencies. Group members were chosen from each agency where motor carrier credential and safety data either resides (Transportation, Motor Vehicles, Revenue Services) or is utilized for enforcement (State Police). FHWA was represented at Working Group meetings by staff from the Office of Motor Carriers Augusta division office. A motor carrier industry representative was also appointed and participated fully in the Working Group. Participation from the Maine Turnpike Authority and the Maine Court System was also encouraged through frequent contacts and mailings. Meetings were held monthly and feedback solicited from members between meetings.

Phase 2 - Formulation of Goals & Objectives

The Working Group's early efforts included the creation of a vision statement. This process took place both in meeting discussions and through feedback between meetings of the working group, with MDOT coordinating the discussions. Discussions later focused on concrete goals and objectives, both near term and long term. Technical staff in MDOT and the Court System was also involved in the discussions. (See Section V for details regarding the ITS/CVO mission statement, goals, objectives and strategies.)

Phase 3 - Internal Agreement on a Pilot Project

Discussions on goals and objectives for an ITS/CVO Business Plan resulted in an effort to define an ITS pilot project that would lay the groundwork for implementing ITS technologies both at desk side and at the roadside. Early in the Working Group's discussions of the Business Plan's goals and objectives, a consensus emerged that future deployment of ITS/CVO technologies in Maine would be greatly facilitated by using a common motor carrier identifier and having an interlinked, consolidated State motor carrier database. Agreement on the elements of a possible pilot project to accomplish this resulted from the Working Group's concurrent work on the ITS/CVO Business Plan. The ITS/CVO Pilot Project would have two components: 1) issuance and use of intrastate USDOT numbers as a common motor carrier identifier; and, 2) a data mapping and linkage project.

The group agreed that the Bureau of Motor Vehicles would coordinate the intrastate USDOT number collection component of the Pilot Project. An administrative rule was enacted to allow collection of the numbers from intrastate carriers, and work was begun on form development and training for issuance and collection of the number.

The Working Group approached the Bureau of Information Services to conduct a project initiation study pursuant to a project proposal for motor carrier data mapping and linkage. Working Group members and technical staff from MDOT, the State Police, and Motor Vehicles were consulted in the course of this "initiation study". The initiation study resulted in a proposal by BIS for a motor carrier data mapping and linkage project.

Phase 4 - Consultation With Regional Groups & FHWA

Funding was sought and obtained from the I-95 Corridor Coalition for the ITS/CVO Pilot Project through the I-95 Corridor's ITS/CVO Field Operational Test 10 on Safety Management. Technical guidance on ITS/CVO business plan completion was provided by the I-95 Corridor Regional Champions and FHWA.

Phase 5 - Preparation of the Business Plan

Results of the Working Group discussions on short and long term goals and vision for the Business Plan were compiled by MDOT. A draft of the Business Plan was distributed to all working group members and other interested parties for review and comment before a final version of the January 1998 Business Plan was submitted.

The process for updating the 1998 ITS/CVO Business Plan involved consultations within the Maine ITS/CVO Working Group on what changes needed to be made to the 1998 Plan to incorporate interim accomplishments, current conditions, and revised priorities. The update text was determined by consensus among Working Group members.

III. Accomplishments Since the 1998 Business Plan Issuance

Since the issuance of the 1998 ITS/CVO Business Plan, there have been a number of key accomplishments that have furthered the goals of the Plan.

To lay a foundation for strategies to achieve the 1998 Business Plan goals, it was necessary to inventory the State's current system of motor carrier databases and their linkages. The Maine Bureau of Information Services (BIS) performed an analysis of existing motor carrier databases and data linkages that mapped State commercial vehicle data, identified cross referencing mechanisms among CVO programs, and highlighted any inconsistencies in State government terminology that could detract from data linkage implementation. This analysis provided a road map for the development of an accessible motor carrier database.

Probably the most significant accomplishment following the issuance of the 1998 Business Plan was the development of the Unified Motor Carrier Account Management System (UMCAMS) at the Bureau of Motor Vehicles. This work was accomplished as the 1998 Plan's pilot project.

UMCAMS was implemented in October 2002 and has consolidated the State's methods of motor carrier identification and record keeping, enabling Maine to more efficiently use ITS technologies at desk side and roadside. This data consolidation was accomplished by: 1) establishing the USDOT number as a common identifier for all interstate and certain intrastate motor carriers registering motor vehicles in the state; and 2) linking the State's motor carrier databases to provide a single source of access to the State's motor carrier information.

Adoption of the USDOT number as the common motor carrier identifier was crucial to the development of UMCAMS. For interstate carriers, the USDOT number is now captured as part of the IRP registration process, added to the motor carrier's profile on the State's database, and printed on the IRP cab card for easy law enforcement reference. The USDOT number information is transmitted through the IRP clearinghouse and is capable of becoming linked to laptops at the roadside. For intrastate carriers, the State assigns Maine carriers intrastate USDOT numbers in cooperation with FMCSA and enters intrastate motor carrier information into the MCMIS and SAFER databases. The USDOT number information is also incorporated into the vehicle registration process and printed on the vehicle's registration certificate. Eligible intrastate carriers are those with vehicles that are registered for more than 26,000 pounds or that have vehicles with three or more axles on their power unit.

The State has modified its data collection devices and databases to accept the USDOT number as a basis for motor carrier database linkage. In addition to the registration documents the State has, in cooperation with the Maine court system, modified the uniform traffic complaint and summons and the associated violations database to better track motor carrier histories. Crash report forms and motor carrier safety inspection databases have also been modified to accept USDOT numbers.

To summarize, the UMCAMS development project has produced the following benefits:

- 1) An inventory and mapping of the current location and accessibility of State commercial vehicle operations data elements which allowed them to be pared down to the essential elements.
- 2) Administrative mechanisms (rule, forms, staff training, and publicity) to issue and use USDOT numbers from Maine intrastate carriers with vehicles registered for more than 26,000 pounds or that have vehicles with three or more axles on their power unit.
- 3) A meaningful evaluation of the quality and currency of motor carrier data sources in Maine State Government.
- 4) A process to integrate all eligible intrastate carrier data into the Safetynet System.

- 5) Identification of cross-referencing mechanisms among major CVO programs and subprograms, including vehicle registration, operating authority, insurance, fuel tax, over limit permits, crash history, violations, motor carrier safety audits, and possibly hazardous materials.
- 6) Standardized government and motor carrier terminology that corrects inconsistencies in State government motor carrier terminology that would have impaired data linkage and transfer.
- 7) A new capability to match drivers and vehicles to motor carriers using the USDOT number on both a current and historical basis in a manner consistent with confidentiality.
- 8) A single source access that links motor carrier fuel tax, registration, and safety inspection databases.
- 9) An accessible database that will enable commercial vehicle enforcement and other users to link crash history, violation history, registration, operating authority, and over limit permitting databases in the future.

Other concurrent accomplishments since 1998 that will enhance ITS utilization in CVO included:

- 1) Maine's participation in PRISM, which ties federal safety ratings to vehicle registration plate numbers. More and more states are joining this network, which could potentially become nationwide in the coming years. PRISM allows enforcement personnel to access federal safety ratings information for all participating states. PRISM is a component of the UMCAMS database connectivity. Maine has implemented most PRISM requirements.
- 2) Completion of MDOT's Transportation Information for Decision Enhancement (TIDE) project to develop a GIS-linked relational database tying crash data to system location.
- 3) Completion of the Crash Outcome Data Evaluation System (CODES) project linking Emergency Medical Services (EMS) data with hospital data and MDOT crash and location databases.

- 4) Bar coding of key data elements on both IRP and non-IRP registrations using AAMVA approved standards for two-dimensional bar codes. Maine prints a 2-D barcode on all IRP credentials.
- 5) Installation of laptop computers in all Maine State Police Commercial Vehicle Enforcement Unit (CVEU) vehicles. These computers will enable field enforcement units to more efficiently access motor carrier databases through UMCAMS link ups.
- 6) Electronic transmission of 75% of crash reports from all agencies in Maine to the PAR data base, thereby making the crash database both timelier and more accurate.
- 7) Electronic processing of IRP registrations.

Maine will soon be sending an interagency team to participate in FHWA sponsored workshops on the federally sponsored Commercial Vehicle Information Systems Network (CVISN). These workshops will enable Maine to participate in the national CVISN architecture for ITS, enabling us to eventually link with motor carrier data systems in other states. The Bureau of Motor Vehicles is also developing Internet based credentialing capabilities for interstate truck registrations, fuel tax filing, and oversize-overweight truck permitting. This updated Maine ITS/CVO Business Plan reflects the revised priorities produced by these initiatives.

IV. Description of Motor Carrier Activity In Maine

Motor carriers play a major role in the Maine economy. Maine has approximately 3,500 interstate carriers and 2,800 intrastate carriers. Most Maine truckers have small operations. The typical Maine IRP carrier has one or two trucks. In 1999, the motor carrier industry employed one out of every eleven Maine workers, 42,087 people, with a total payroll of \$1.3 billion, who earned an average annual wage of \$31,831. The motor carrier industry is also the predominant mode of freight transportation in Maine. Trucks carried 87% of Maine's manufactured freight tonnage in 1998, a share that has increased from 65% in 1982. These trucks move an average of more than 119,000 tons inbound and 136,000 tons outbound each day.

There are 34 intrastate bus companies authorized to operate for hire between points in Maine. Fifteen of the companies operating intrastate are also authorized to operate in interstate service. In addition, there are 18 companies which are federally subsidized to operate in local and rural service or those companies which operate exclusively in school bus service.

Currently, five State agencies are directly involved in motor carrier credentialing and enforcement. These agencies and their roles in motor carrier regulation are as follows:

Maine Bureau of Motor Vehicles

The Motor Carrier Services Office (MCS) of the Maine Bureau of Motor Vehicles (BMV) is the single point of contact for most motor carrier administrative functions. In conjunction with these functions, MCS is responsible for accepting and reviewing applications, issuing credentials to approved carriers, and collecting fees when required. MCS administers the following programs:

1) Commercial Vehicle Registrations.

Intrastate vehicles may be registered at many town or city offices or at BMV branch offices. Maine based interstate commercial vehicles must be registered under the International Registration Plan (IRP) at BMV's main office in Augusta.

The IRP is a base state commercial vehicle registration prorate agreement for trucks being operated in two or more member jurisdictions. Maine has approximately 2,500 active IRP accounts operating about 8,000 trucks.

A vendor-supplied system "COVERS" is used to process IRP transactions. Since April 2003, carriers have been able to use COVERSnet to process IRP transactions online. Approved carriers may update their demographic information, process renewals, add and delete vehicles, transfer registrations, add states, increase weights, receive their invoice and print temporary credentials. Several of the largest motor carrier accounts and one service provider are using this online application.

Maine is an IRP Clearinghouse participant. The IRPCH provides a means of electronically sharing carrier demographic information, vehicle registration information, financial information, and funds netting among the participating

jurisdictions. As a PRISM state, Maine issues and verifies USDOT numbers prior to issuing IRP or IFTA credentials.

2) Commercial Drivers Licenses.

Maine licenses approximately 66,000 thousand Commercial Driver License operators, including slightly more than 37,000 Class A CDL's, 28,500 Class B drivers, and a smaller number of commercial Class C operators maintaining a hazardous materials or passenger bus endorsement.

In 2002, 2,300 new Maine CDLs were issued, including nearly 600 people transferring their out-of-state CDL to Maine. During that year, Maine's 33 Driver License Examiners administered 16,136 written examinations (including endorsements for hazardous materials, tanker, double-triple trailers, passenger bus and school bus) and more than 4,300 skills and road tests to individuals seeking CDLs.

All applicants seeking to obtain a Maine CDL must first have their driving record status checked and cleared through the Commercial Driver License Information System (CDLIS) maintained by the American Association of Motor Vehicle Administrators (AAMVANET). After ten years of existence, the CDLIS database now contains ten million nationwide CDL records, about five percent of all licensed drivers.

The MCS enforces age and distance restrictions that apply to intrastate motor carriers. Enforcement of Federal Motor Carrier Safety Regulations effecting Maine's CDL operators is the responsibility of the Maine State Police's Commercial Vehicle Enforcement Unit.

3) Fuel Tax Licensing.

Motor carriers based in Maine who operate only intrastate vehicles may be required to obtain a Maine Fuel Use license from MCS. These carriers generally are exempt from fuel tax reporting.

Maine based interstate motor carriers must license with the International Fuel Tax Agreement (IFTA) through the MCS. The International Fuel Tax Agreement (IFTA) is a base state motor carrier fuel tax compact. Carriers license through their home state and make quarterly reports covering travel in all member jurisdictions. The base jurisdiction collects any net taxes due (or

refunds any net overpayment), distributes the information, and taxes to the appropriate jurisdictions.

BMV has approximately 2,300 active IFTA accounts and uses the Regional Processing Center's IFTA system. BMV currently provides tax forms in spreadsheet format upon request. Possible future use of the RPC's web-based tax report filing system is currently under consideration. Maine is also a participant in the IFTA Clearinghouse, which provides the electronic sharing of carrier demographic, status, and transmittal information.

4) Operating Authority.

All for-hire carriers operating in Maine must register with MCS and provide proof of insurance and a designated resident agent for service of process. Maine is a member of the Single State Registration System (SSRS) which allows certain Maine based interstate carriers to obtain operating authority in other SSRS states without having to obtain temporary authority in those states.

5) Over dimensional & Overweight Non-divisible Load Permits.

Motor carriers wishing to operate vehicles that exceed Maine dimensional and/or weight limits must obtain a permit from MCS. (Vehicles with extraordinary weights or dimensions may be subject to an MDOT engineering review before being granted a MCS permit.) Maine based carriers moving certain oversize-overweight loads through two or more states participating in the New England Transportation Consortium (NETC) may obtain a multi-state permit from MCS. Foreign carriers may also obtain NETC permits from MCS depending upon the vehicle's point of entry or exit from the NETC region. On-line processing of O & O permits is expected by the summer of 2003.

6) Motor Carrier Review Board.

MCS also provides staff support to the Motor Carrier Review Board. This advisory board, made up of representatives from the motor carrier industry, the insurance industry, and the general public reviews motor carrier violation records and makes recommendations to the Secretary of State concerning possible administrative actions against motor carriers with poor records.

Maine Department of Transportation

The Maine Department of Transportation provides policy oversight in commercial vehicle regulation administration, and is the custodian of state and

federal transportation funding used for motor carrier regulation. MDOT may, at its discretion, conduct engineering reviews for the movement of extraordinary vehicles. The Department is also the lead agency for ITS/CVO activities related to CVISN and the I-95 Corridor Coalition.

MDOT historically has been the single source data entry point for most of the data collected on the Police Accident Report (PAR) form. All motor vehicle crashes resulting in over \$1,000 damage, personal injury, or death must be reported to police agencies. When a commercial carrier is involved, a supplemental commercial vehicle crash report form is also filed. (The most recent 2001 data available indicates that there were 840 crashes in Maine involving trucks with five or more axles. Fourteen of these crashes resulted in a total of nineteen fatalities.)

MDOT enters PAR data for those crashes that occur on public roads into the TINIS database, which also includes data regarding all public roads and bridges, and railroad grade crossings. TINIS calculates crash rates and identifies High Crash Locations (HCLs). Access to the TINIS database is provided to the Maine State Police. Microfilms of PARs are provided to MSP and BMV/MCS. As of the Plan issuance, 75% of PARs are being provided electronically.

The Safety Management System (SMS) reviews crash data and road characteristics to identify safety problems, develop countermeasures, and measure the effectiveness of the selected countermeasures. In addition to being involved with CVISN, SMS is also currently involved in the other efforts listed below to help merge disparate databases involving transportation safety. The goal is to have the ability to relate vehicle crash data with data on highway location, road characteristics, enforcement, medical treatment of crash victims, violations, and adjudication.

- Transportation Information for Decision Enhancement (TIDE).
TIDE is a GIS-linked relational database for crash data, road inventory and use data, and Pavement Management System files. TIDE provides desktop access to crash and other data and allows users to map the results to GIS maps.
- Crash Outcome Data Evaluation System (CODES).

This project links Emergency Medical Services (EMS) data with hospital data and MDOT crash and location databases, while maintaining client confidentiality rights. It is anticipated that vehicle and driver files,

emergency room, outpatient and other relevant data files will be added in the near future. Maine received a NHTSA award for its CODES project in 2002 and recently received a 5-year NHTSA grant to study relevant topics of national interest.

A significant current issue remaining to be addressed is the inability to connect driver, vehicle, enforcement and adjudication file data to crashes and other safety performance measures.

Maine Revenue Services

The Audit Unit of Maine Revenue Services is responsible for the mileage auditing of the approximately 2,400 IFTA and IRP accounts that are administered by the BMV/MCS. When appropriate, the Audit Unit conducts combined IRP/IFTA audits. Deputy sheriffs assigned to Maine Revenue Services perform roadside enforcement of decal inspections and issue summonses for non-filers and those failing to show proper IRP and IFTA credentials. The sheriffs also conduct sample field-testing of commercial vehicle fuel tanks to apprehend those illegally using untaxed (dyed) fuel. Maine Revenue Services is concerned with obtaining timely roadside information on delinquent accounts and is in the process of upgrading field equipment such as laptop computers to gather information more efficiently.

Maine State Police

The Maine State Police is the only law enforcement agency authorized to enforce commercial vehicle size and weight laws, and safety laws and regulations. It is also the primary law enforcement agency for the enforcement of motor carrier credentialing. The Commercial Vehicle Enforcement Unit (CVEU) of the Maine State Police operates all fixed and mobile vehicle size and weight enforcement facilities in the State. CVEU Troopers work with an auxiliary force of motor carrier inspectors who perform safety inspections and assist with the weighing of vehicles. CVEU Troopers have the authority to issue citations and to place vehicles out-of-service for certain vehicle or driver safety violations, or for operating without the proper credentials. CVEU personnel are required by statute to assist in the investigation of all commercial vehicle crashes involving a fatality.

All MSP Troopers are responsible for collecting and reporting information on vehicle crashes in their assigned areas.

The Maine State Police is also responsible for administering the Motor Carrier Safety Assistance Program (MCSAP), which is funded by the Federal Motor Carrier Safety Administration (FMCSA). Maine's MCSAP funding continues to be reduced by 50% due to the state's exemption of certain motor carriers (operating within 100 air miles of their home base) from federal motor carrier safety regulations. Commercial Vehicle Enforcement Unit personnel conduct safety compliance reviews at motor carriers' place of business to determine compliance with both State and Federal Motor Carrier and Hazardous Material regulations, if applicable

The Maine State Police utilizes several data base systems and software to enhance its commercial vehicle enforcement capabilities. SAFETYNET is an Oracle based client/server database management system that allows entry and access of data from driver/vehicle inspections, crashes, compliance reviews, assignments, complaints, and enforcement cases. The system includes links to SAFER and MCMIS. ASPEN, a driver/vehicle inspection software, provides a printed inspection report at roadside and includes communication features to electronically transfer inspection data to both SAFER and SAFETYNET. CDLIS software is used to retrieve driver CDL status reports. It is contained within Query Central, a new intelligent mobile driver, carrier, vehicle database query system developed for roadside use.

Rapid access to credential information would greatly increase enforcement efficiency. A large number of trucks are screened at enforcement details with a small portion of them selected for in-depth inspection. Roadside access to linked databases will help minimize delays for carriers in compliance and increase enforcement efforts directed at non-compliant carriers. Vehicle-based laptops will provide mobile enforcement units with real-time data access in the field. MDOT is working with State Police to upgrade the Kittery-York weigh stations to allow for automated vehicle screening systems using weigh-in-motion and transponder technology. Compatibility with other State systems is planned.

Maine Turnpike Authority

The Maine Turnpike Authority is an independent state agency which operates the Maine Turnpike, one of the major north-south highways in the

southern section of the state. The Authority administers toll collection, oversize and overweight permits, maintenance, and operations on the Maine Turnpike. It also provides six rest stops for Turnpike users with twenty-four hour per day parking. Round the clock food and fuel services are also provided at five of these rest stops. The Authority fully funds Troop G of the Maine State Police, which patrols the Turnpike twenty-four hours per day.

In September 1997, the Authority instituted a state-of-the-art electronic toll collection system called “Transpass” which allows drivers to enter and exit the Turnpike without stopping, a major convenience for commercial users. A charge account program is offered with volume discounts for commercial users. The Maine Turnpike Authority advocates the development of a united electronic toll collection system for all of New England. Interoperability of toll collection systems is a vital component of a free flowing New England highway system for commercial vehicle travel.

The Authority recently installed an electronic message board system to communicate important traffic and weather condition information to Turnpike users. The Maine Turnpike Authority also serves on the ITS/CVO Committee of the I-95 Corridor Coalition, which addresses intelligent transportation systems issues of concern to the states along the Interstate 95 corridor.

V. Strategic Overview

A. Mission Statement

The mission of the Maine ITS/CVO Business Plan is to promote a coordinated program for deploying ITS technologies in Maine that will improve the efficiency and safety of motor carrier operations and enhance the effectiveness of motor carrier regulatory administration and enforcement.

B. Guiding Principles

The guiding principles of Maine’s ITS/CVO program are as follows:

- The public sector should take the lead in establishing a basic system infrastructure for ITS deployment.

- Motor carrier participation in an ITS program, or adoption of ITS technology, will be voluntary, not mandatory.
- Confidentiality rights of ITS participants shall be respected at all times.
- ITS deployment planning should identify technologies that will enhance process redesign for greater efficiency rather than just identifying technology to automate existing processes.
- ITS deployment planning should seek to employ the lowest level of technology that will support the desired function. Where higher levels of technology are needed, they should evolve gradually from lower forms of technology.
- ITS deployment planning should emphasize benefits to motor carriers and State administrative agencies in Maine.
- ITS deployment planning should foster and encourage regional/national linkages to the extent that they benefit Maine.
- ITS technological planning should target PC level use of the Internet in CVO activities, but should not exclude other options.

C. Goals

The overall goals of the Maine ITS/CVO program are to:

- Improve the efficiency and safety of motor carrier operations;
- Improve the efficiency and effectiveness of the motor carrier regulatory administration and enforcement processes; and
- Increase the awareness and understanding of ITS technologies, programs and services.

D. Short Term Objectives, Projects, and Strategies

The following are the objectives supporting the Plan's overall goals which are planned for completion within one year of Plan issuance. Also listed are the

projects and strategies related to attaining the objectives. The agencies and groups responsible for doing the project or strategy are shown in parentheses.

The relationship of the project or strategy to the I-95 Corridor Commercial Vehicle Operations Program's major components is also indicated. These program components are: Safety Assurance; Credentials Administration; Electronic Screening; Carrier Operations; and Regional Coordination.

Short Term Objective 1 - Finalize an ITS/CVO CVISN implementation team to develop CVISN architecture for the State of Maine.

a. Strategy - Assemble the CVISN team, verify top management support and participate in the FHWA CVISN workshops. (Working Group)
Corridor - Addresses all five components.

b. Strategy - Participate in the FHWA-sponsored CVISN workshops. (MDOT, Motor Vehicles, State Police)
Corridor - Addresses all five components.

Short Term Objective 2 - Expand the UMCAMS architecture to utilize road/weather database information for over limit permit routing.

a. Strategy - Utilize the CARS program developed by the State of Alaska for over limit permit routing and coordinate with the TRIO project.
Corridor - Safety Assurance; Credentials Administration, Carrier Operations, Regional Coordination.

Short Term Objective 3 - Improve motor carrier administrative efficiencies and capabilities and reduce or eliminate "paper work" processes in motor carrier regulation.

a. Strategy - Participate in PC electronic Internet fuel tax filing, including the capability to program against math errors in filing. (Motor Vehicles)
Corridor - Credentials Administration, Carrier Operations.

Short Term Objective 4 - Prepare to implement an automated vehicle clearance system at the Kittery/York weigh stations.

- a. Strategy - Monitor national and international efforts to standardize transponders. (Working Group)
Corridor - Regional Coordination.
- b. Strategy - Research automated fixed and mobile vehicle clearance systems in other states. (Working Group)
Corridor - Safety Assurance; Electronic Screening; Carrier Operations; Regional Coordination.
- c. Strategy - Research vehicle clearance systems such as HELP and NORPASS. (MDOT, State Police)
Corridor - Safety Assurance; Electronic Screening; Carrier Operations

Short Term Objective 5 - Educate the motor carrier industry and the general public about ITS/CVO technologies and services.

- a. Project - Provide public information on State WEB pages relating to the use of ITS technologies in motor carrier regulation. (These include standard transponder and vehicle clearance program information, electronic credentialing and tax filing opportunities.) (Motor Vehicles)
Corridor - Carrier Operations.
- b. Project - Institute annual training for motor carriers in relevant ITS technologies. (Motor Vehicles)
Corridor - Carrier Operations.

Short Term Objective 6 - Integrate Maine ITS/CVO activities with regional and national ITS/CVO initiatives such as the I-95 Corridor Coalition and regional data clearinghouses.

- a. Strategy - Participate in the I-95 ITS/CVO Working Group. (MDOT, Motor Vehicles)
Corridor - Regional Coordination.

E. Long Term Objectives, Projects and Strategies

The following are the objectives supporting the Plan's overall goals which are planned for completion more than one year after Plan issuance. The priority level and the technical approach for the long term projects will be developed as planning for these projects progresses.

Long Term Objective 1 - Maintain and enhance interagency and motor carrier industry coordination of ITS activities in the State.

a. Strategy - Continue the activities of the ITS/CVO Working Group in coordinating implementation of the ITS/CVO Business Plan.

Corridor - Addresses all five components.

Long Term Objective 2 - Enhance the State's ability to relate crash and violations data with location.

a. Project - Develop a link between the recently completed TIDE database and UMCAMS. (MDOT)

Corridor - Safety Assurance.

Long Term Objective 3 - Implement an automated vehicle clearance system.

a. Project - Establish a State standard for transponders consistent with national and international standards and with the Maine Turnpike's toll collection system. (Working Group)

Corridor - Electronic Screening; Carrier Operations; Regional Coordination.

b. Project - Implement an automated vehicle clearance system which is compatible with the standard transponder and with the Maine CVISN architecture, and which is coordinated with weigh-in-motion screening activities. (Working Group)

Corridor - Safety Assurance; Electronic Screening; Carrier Operations; Regional Coordination.

Long Term Objective 4 - Continue to improve motor carrier administrative efficiencies and capabilities and reduce or eliminate "paper work" processes in motor carrier regulation.

a. Project - Obtain the software or hardware necessary to produce violation summonses electronically with on line data transfer. (MDOT, State Police, Courts, BMV)

Corridor - Safety Assurance.

Long Term Objective 5 - Continue to integrate Maine ITS/CVO activities with regional and national ITS/CVO initiatives.

a. Strategy - Continue active participation in the I-95 Corridor ITS activities. (MDOT, Motor Vehicles)

Corridor - Regional Coordination.

b. Strategy - Work with the FHWA Office of Freight Management & Operations to ensure that Maine ITS/CVO projects are compatible with federal ITS/CVO objectives. (MDOT)

Corridor – Regional Coordination

c. Strategy - Coordinate Maine ITS/CVO activities with those in other states, regions, and nationally. (Working Group)

Corridor - Regional Coordination.

d. Strategy - Coordinate Maine ITS/CVO activities with border issues organizations such as the Eastern Borders Transportation Coalition and with the provincial governments of eastern Canada and the federal government in Ottawa. (MDOT)

Corridor - Regional Coordination.

e. Strategy - Participate in ITS planning for the new border crossing in Calais. (MDOT, State Police)

Corridor - Addresses all five components.

f. Strategy - Leverage additional ITS funding from FHWA, FMCSA, the I-95 Corridor Coalition, and other sources to fund Maine ITS/CVO initiatives. (Working Group)

Corridor - Addresses all five components.

g. Strategy - Work through the NASTO Highway Transport Committee to implement a NASTO-wide oversize-overweight permit system. (MDOT, Motor Vehicles)

Corridor - Credentials Administration; Carrier Operations.

Long Term Objective 6 - Continue to update and refine the ITS/CVO Business Plan

- a. Strategy – Update the Business Plan every two years and continue to assess the progress of the current ITS/CVO Business Plan, refine goals and objectives in the Plan, and define new projects to further those goals. (Working Group)
Corridor - Addresses all five components.

VI. Business Plan Relationship to CVISN & I-95 Corridor Objectives

The goals and objectives of the Maine ITS/CVO Business Plan are compatible with those of the Commercial Vehicle Information Systems & Networks (CVISN) and the I-95 Corridor CVO programs. These programs seek to establish information systems architecture for commercial vehicle operations which will:

- 1) Streamline credentials administration;
- 2) Focus safety enforcement on high risk carriers;
- 3) Reduce motor carrier congestion costs through automated CVO operations; and
- 4) Enhance intrastate and interstate information exchange.

Consolidation of State motor carrier databases provides Maine State Government with a basic systems architecture to achieve these goals using the USDOT number as a common motor carrier identifier. Implementation of the Maine CVISN architecture and projects to install automate vehicle clearance, electronic credentialing, crash reports and summonses will further these goals. Business Plan strategies to interact with and learn from regional and national ITS/CVO organizations are also in keeping with the Corridor and CVISN initiatives. The Maine ITS/CVO Business Plan's guiding principles on motor carrier confidentiality and the voluntary nature of ITS are consistent with those of the Corridor and CVISN.

VII. Contact Names

The following are principle contacts for the Maine ITS/CVO Business Plan, listed by organization. Each one is a member of the Maine ITS/CVO Working Group:

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APPENDIX

MAINE ITS/CVO BUSINESS PLAN MATRIX OF OBJECTIVES, PROJECTS, & STRATEGIES